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U.S. Army Corps of Engineers

Omaha District Offutt AFB, Nebraska

SENECA ARMY DEPOT ACTIVITY TIME SENSITIVE GEOPHYSICAL INVESTIGATION ROMULUS, NEW YORK

Contract No. DACA45-98-D-0004
Task Order No. 0037

FINAL SITE-SPECIFIC PROJECT REPORT SEAD 45/115 OPEN DETONATION GROUNDS ORDNANCE AND EXPLOSIVES REMOVAL PHASE I GEOPHYSICAL SURVEY AND COST ESTIMATE

March 2005





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Contract No. DACA45-98-D-0004 Task Order No. 0037

Prepared for:

U.S. ARMY CORPS OF ENGINEERS OMAHA DISTRICT

Offutt AFB, Nebraska

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March 2005

W.O. No. 20074.515.037



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LIST OF ACRONYMS

ACRs ammunition consumption reports

AOIs areas of investigation
bgs below ground surface
DID data item description
DQOs data quality objectives

EE/CA environmental evaluation/cost analysis

EM electromagnetic

EOTI Explosive Ordnance Technologies, Inc.

ft foot/feet

GPO geophysical prove-out
GPS global positioning system

MEC munitions and explosives of concern

mm millimeter

MOFBs miniature open front barricades

mV millivolts

ODG open detonation grounds

Parsons Engineering
QA quality assurance
QC quality control

RTK real time kinematics

SEDA Seneca Army Depot Activity

SOW scope of work
TO task order

USACE United States Army Corps of Engineers

UXO unexploded ordnance
WESTON® Weston Solutions, Inc.

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EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

A time-sensitive geophysical investigation was conducted at the Seneca Army Depot Activity, SEAD 45/115 Open Detonation Grounds (ODG) between 2 June 2003 and 27 August 2003. The primary objective of this project was to conduct a time-sensitive geophysical investigation and anomaly identification between the 1,000-foot (ft) and 2,500-ft radial limits of the ODG. The purpose for collecting this information was to generate mapping and database information that could be used to refine acreage estimates for the remedial zones outlined in the Environmental Evaluation/Cost Analysis (Parsons, 2001), and to develop a cost estimate for future munitions and explosives of concern (MEC) removal actions at the site. Activities required to accomplish these objectives included a MEC avoidance inspection, vegetation clearing, surveying, and both digital and manual geophysical mapping. Weston Solutions, Inc. (WESTON®) performed this work for the United States Army Corps of Engineers (USACE), Omaha District under Rapid Response Contract No. DACA-45-98-D-0004, Task Order No. 0037. Direct oversight was provided by USACE, New York District. Additional support was provided by USACE (Huntsville) and USACE (Baltimore) for quality assurance.

A Geonics, Ltd. EM-61 MK2TM towed-array system was used to collect digital geophysical mapping data in all non-wooded/open areas (213 acres) between the 1,000-ft and 2,500-ft radial limits of the ODG. A manual "mag & flag" approach using hand-held Schonstedt Magnetometers was used to locate subsurface anomalies in wooded/transect areas (9.65 acres). Results of the digital and manual geophysical surveys indicate that approximately 599 targets per acre exist in non-wooded areas between 1,000 feet (ft) and 1,500 ft from the ODG Center, approximately 139 targets per acre exist in non-wooded areas between 1,500 ft and 2,500 ft from the ODG Center, and approximately 208 targets per acre exist in wooded (transect) areas.

A total of 512 items were manually excavated from target anomaly locations identified using the EM-61 MK2 in non-wooded/open areas of the ODG. Approximately 97% of these items were found at a maximum depth of 12 inches below ground surface (bgs). No items were excavated from a depth exceeding 20 inches bgs.



Based on the results obtained from the Phase I geophysical mapping activities, WESTON has estimated a cost of \$126 per target for Phase II MEC removal and disposal. This unit cost will invariably increase or decrease based on the location of the target relative to the ODG center, vegetation conditions (i.e., wooded or non-wooded areas), and depth of the target. Phase II work began in September 2003, and is currently ongoing between the 1,500-ft and 2,500-ft radial limits of the ODG.

SECTION 1 INTRODUCTION

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1. INTRODUCTION

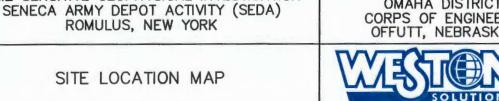
This Final Site-Specific Project Report describes the results of the Phase I time-sensitive geophysical investigation of potential munitions and explosives of concern (MEC) and munitions debris within the SEAD 45/115 Open Detonation Grounds (ODG) at the Seneca Army Depot Activity (SEDA). Weston Solutions, Inc. (WESTON®) performed this work for United States Army Corps of Engineers (USACE), Omaha District under Rapid Response Contract No. DACA-45-98-D-0004, Task Order (TO) No. 0037. Additional support was provided by USACE (Huntsville) and USACE (Baltimore) for quality assurance. This Final Project Report has been prepared in accordance with the *Final Scope of Work* (SOW) (USACE, 25 March 2003), Modifications No. 0002 and No. 0003 to the *Final SOW* (USACE, 12 June and 8 July 2003), and Data Item Description (DID) OE-030.01.

1.1 SITE DESCRIPTION AND BACKGROUND

The SEDA facility is located in Seneca County, Romulus, New York. It is a United States Army site that occupies approximately 10,600 acres. It is bounded to the west by State Route 96A and to the east by State Route 96. Geneva and Rochester are located to the northwest (14 and 50 miles, respectively), Syracuse is 50 miles to the northeast, and Ithaca is 31 miles to the south. The surrounding area outside the SEDA property is used mainly for agriculture. A Site Location Map is shown in Figure 1-1.

The SEDA facility was constructed in 1941, and was operated by the United States Army until its closure in July 2000. From 1941 to 1995, the site was used for receipt, storage, maintenance, and supply of military items including munitions and equipment. In 1989, SEDA was included on the Federal Facilities National Priorities List, which mandated that necessary remedial investigations and actions be completed for the site. Following a recommendation from USACE in 1998, Parsons Engineering (Parsons) conducted an *Environmental Evaluation/Cost Analysis* (*EE/CA*) to identify and develop response actions for specific areas of investigation (AOIs). The SEAD 45/115 ODG was one of eleven AOIs identified in the *EE/CA* (Parsons, 2001).

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SOURCE: USGS TOPOGRAPHY MAPS; GENEVA SOUTH, DRESDEN, OVID, & ROMULUS - NEW YORK QUADS

TIME SENSITIVE GEOPHYSICAL INVESTIGATION

APPROXIMATE SCALE IN MILES

DEPARTMENT OF THE ARMY OMAHA DISTRICT CORPS OF ENGINEERS OFFUTT, NEBRASKA



DRAWN

BEG

SEPT 2003 FIGURE NO.

HANCHESTER

NEW HAMPSHIRE

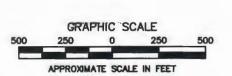


The ODG was formerly used for the disposal and detonation of military munitions, and consequently MEC and munitions debris are prevalent throughout this area. The ODG consists of a large open area located in the northwest corner of the SEDA property. It is comprised of approximately 450 acres of wooded and non-wooded areas. For the purposes of this project, the specific areas to be geophysically investigated were divided into an inner radius [0 feet (ft) to 1,000 ft] and an outer radius (1,000 ft to 2,500 ft) from the ODG Center as shown in Figure 1-2. Based on the *EE/CA* (Parsons, 2001), the inner 1,000-foot (ft) radius is considered saturated with potential MEC and munitions debris.

1.2 PROJECT OBJECTIVES

The primary objective of this project was to conduct a time-sensitive geophysical investigation and anomaly identification between the 1,000-ft and 2,500-ft radial limits of the ODG. The purpose for collecting this information was to generate mapping and database information that could be used to refine acreage estimates for the remedial zones outlined in the *EE/CA* (Parsons, 2001), and to develop a cost estimate for future MEC removal actions at the site. Activities required to accomplish these objectives included a MEC avoidance inspection, vegetation clearing, surveying, and both digital and manual geophysical mapping.

For tracking and reference purposes, a geospatial 125-ft by 125-ft grid system was established for the site using existing North American Datum 83 New York Central State Plane Coordinates (refer to Figure 1-2). Grids were numbered 1 through 44 from south to north, and lettered "A" through "RR" from west to east. In the field, the inner and outer radial limits of the ODG were identified using stakes and/or flagging.





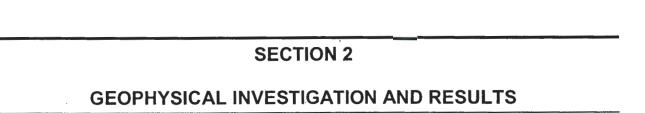
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TIME SENSITIVE GEOPHYSICAL INVESTIGATION SENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK

OPEN DETONATION GROUNDS SURVEY MISSION PLAN

DRAWN	BEG	SEPT 2003	FIGURE NO.
CHECKED		W.D. ND.	1-2





2. GEOPHYSICAL INVESTIGATION AND RESULTS

The following section describes implementation of the Phase I time-sensitive geophysical investigation including method/instrumentation selection, site preparation, digital mapping procedures, quality assurance (QA)/quality control (QC) measures, and final results. Information in this section is organized as follows:

- Subsection 2.1 Equipment Selection and Geophysical Prove-Out (GPO)
- Subsection 2.2 Site Preparation
- Subsection 2.3 Full-Scale Geophysical Investigation
- Subsection 2.4 Results
- Subsection 2.5 QA/QC
- Subsection 2.6 Demobilization

2.1 EQUIPMENT SELECTION AND GEOPHYSICAL PROVE-OUT

A *Geonics, Ltd.* EM-61 MK2TM towed-array system (Photos 1 and 2, Appendix A) was the digital mapping equipment selected for implementation of the geophysical investigation. The battery-powered EM-61 MK2 towed-array consists of three (3) EM-61 MK2 high-sensitivity metal detectors and operates at a maximum output of 10,000 millivolts (mV). The system generates a pulsed magnetic field that induces eddy currents in conductive objects within the subsurface. These currents are proportional to the conductive nature of the material below the instrument. When a conductive object is located below the instrument, the amplitude and decay time of the induced eddy currents vary in response to the size, mass, depth and orientation of the object. Using the amplitude and duration of response of the object with respect to different time gates, the relative size and depth of the object can be determined. The effective detection depth for the EM-61 MK2 towed-array is a function of target characteristic (i.e., composition, mass, and orientation) and local terrain noise.

The EM-61 MK2 towed-array system used for this project was constructed with fiberglass and plastic material to provide lightweight, rigid construction, and to prevent noise introduction during data collection. Each coil was separated by 3 ft and arranged in a pyramid-shaped geometry. The system was integrated with a Model 4700 Trimble Real Time Kinematics (RTK) Global Positioning System (GPS) to accurately position the data collected for each coil. The



logging system was set to record data at a rate of 12 Hertz (samples per second) while being towed.

Prior to initiating the full-scale investigation, WESTON's subcontractor (Parsons) demonstrated the MEC and munitions debris detection capabilities of the EM-61 MK2 towed-array by performing a series of three GPO surveys. The GPO surveys were performed on 24 April 2003 in accordance with USACE DID OE-005-05A.01 (Geophysical Prove-Out (GPO) Plan and Report). Under USACE instruction, WESTON established two non-contiguous GPO grids (West GPO and South GPO) and one pre-existing GPO grid (Q Area) to test the positioning capabilities, effectiveness, and accuracy of the equipment. Each GPO grid was less than one (1) acre in size and seeded with known ferrous items representative of the size, shape, and depth of MEC likely to be found within the ODG. Seed items were placed at depths up to 42 inches below ground surface (bgs). Results from the GPO investigations indicated that the EM-61 MK2 towed-array system was a suitable technology for conducting the full-scale geophysical survey. A copy of Parsons' Work Plan and GPO Letter Report are included in Appendices G and H, respectively of WESTON's Final Work Plan (July 2003). A copy of Parsons' Final GPO Report dated 10 October 2003 was approved by WESTON and submitted to USACE.

2.2 SITE PREPARATION: MEC AVOIDANCE AND BRUSH CLEARING

Prior to conducting the full-scale geophysical investigation, a team of unexploded ordnance (UXO) Technicians was mobilized to the site to provide support in removing surface MEC and munitions debris that could impede progress, effectiveness, or safety during site clearing and geophysical investigation activities. Explosive Ordnance Technologies, Inc. (EOTI) conducted the MEC avoidance inspections between 13 May and 28 May 2003. One surface MEC item [37-millimeter (mm) projectile, unfuzed] found on 5 June 2003 was explosively vented on 13 June 2003.

Following the MEC surface sweep, portions of the site were cleared of vegetation to increase accessibility and achieve maximum coverage during the full-scale geophysical investigation. Sessler Wrecking conducted site clearing activities, under direction from WESTON, between



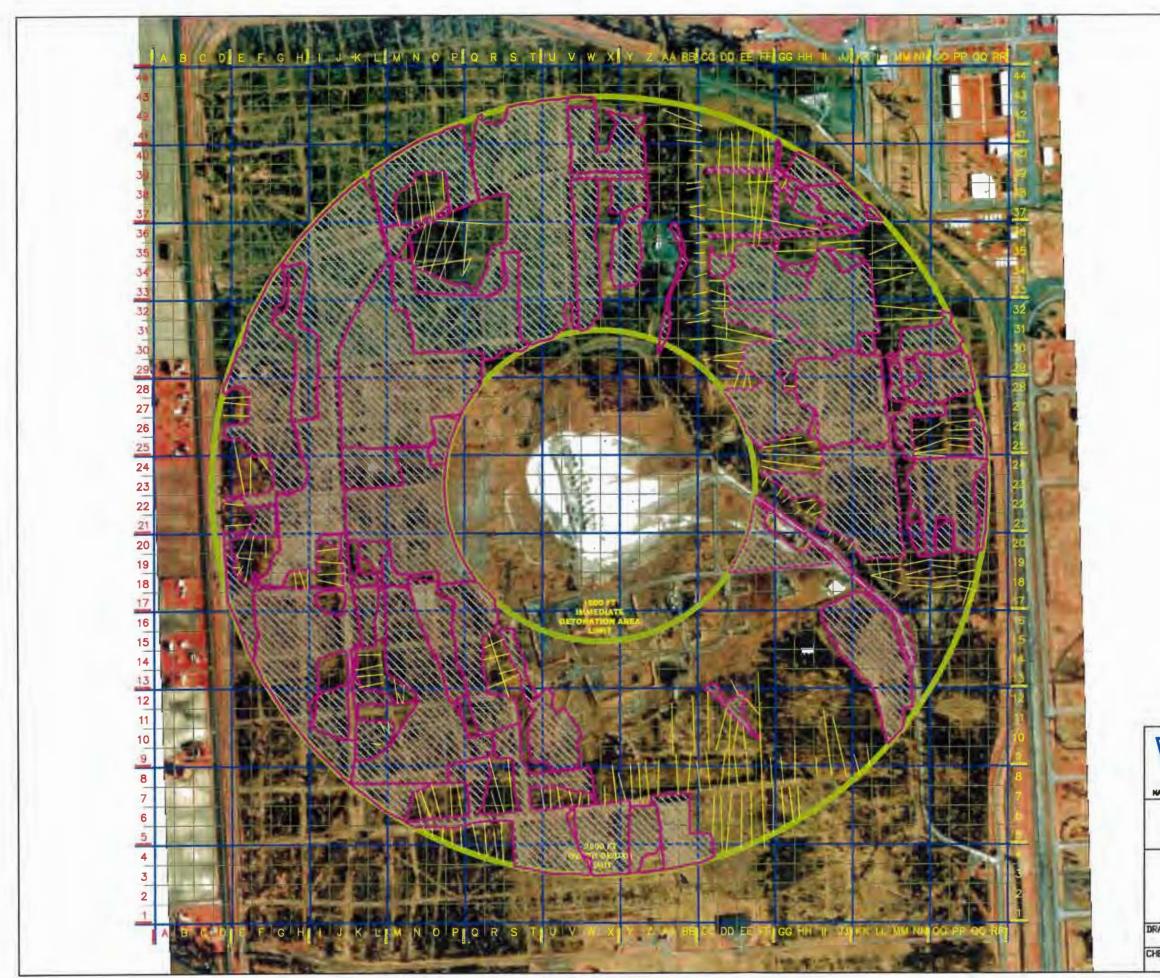
14 May and 23 June 2003. In non-wooded areas where vegetation consisted mainly of brush and small trees less than 6 inches in diameter, a total of 232.3 acres were cleared using mowers and/or a Hydra-Ax. In wooded areas where vegetation consisted of dense brush and large trees greater than 6 inches in diameter, 10-ft-wide transects (Photo 3, Appendix A) were cleared mechanically using tractor mowers and/or a Hydra-Ax, or manually by technicians as necessary. More than 220 10-ft-wide transects were cleared representing a total of 13.6 acres of wooded area. Clearing coverage and transect locations are shown in Figure 2-1. All vegetation was cut to a height of approximately 6 inches. WESTON used a Model 5700 Trimble RTK GPS (Photo 4, Appendix A) to confirm the total acreage cleared in wooded and non-wooded areas. Throughout the project, all location surveys and surface mapping that were required in conjunction with both site preparation and full-scale geophysical mapping were conducted using the Model 5700 Trimble RTK GPS in accordance with USACE DID OE.005.07.01 (Location Surveys and Mapping Plan).

2.3 FULL-SCALE GEOPHYSICAL INVESTIGATION

As previously stated, the geophysical investigation was conducted using the EM-61 MK2 towed-array system. A *John Deere*TM Diesel Gator 4x6 off-road vehicle was used to tow the array across the designated survey area. Each traverse was spaced approximately 10 ft apart (approximate width of the towed-array) to provide sufficient cross-line overlap between bi-directional swaths. The towed-array was navigated around obstructions such as wooded areas, trees (and tree clusters), standing water, man-made obstructions, and other miscellaneous obstacles.

As shown in Figure 2-2, a total of 213 acres within open and accessible areas between the 1,000-ft and 2,500-ft radial limits of the ODG were digitally mapped using the towed-array system. An additional 9.65 acres representing transects, hedgerows, and areas inaccessible to the towed-array were investigated manually using hand-held *Schonstedt* Magnetometers. As previously described, a total of 232.3 acres were cleared of vegetation to facilitate geophysical

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TRANSECT LOCATIONS



CLEARED BRUSH AREA





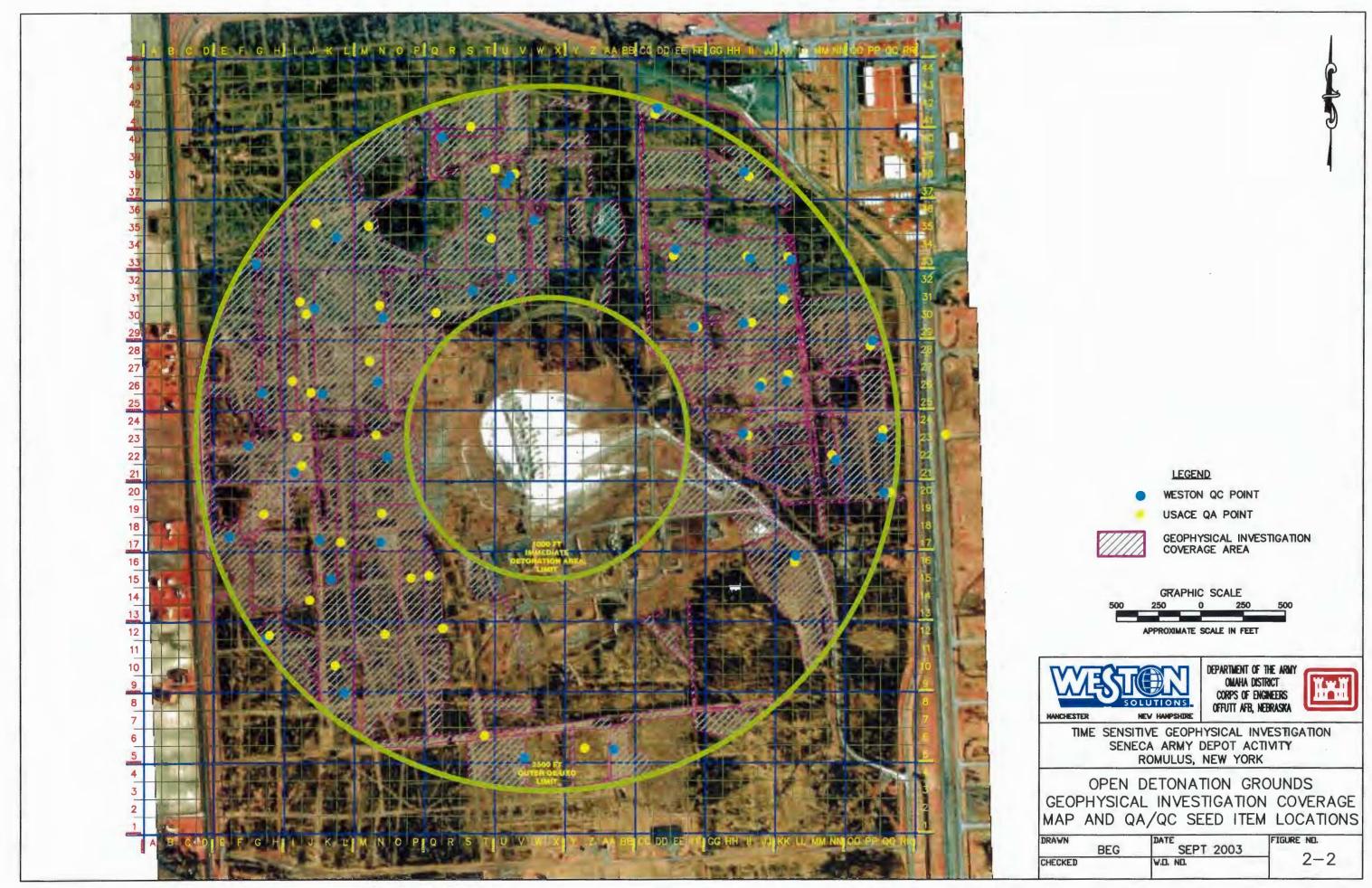
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TIME SENSITIVE GEOPHYSICAL INVESTIGATION SENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK

OPEN DETONATION GROUNDS SITE CLEARING AND TRANSECT LOCATIONS

DRAWN BEG	SEPT 2003	FIGURE NO.
CHECKED	V.D. NO.	2-1



Final Report Seneca Army Depot Open Detonation Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037

WESTERN.

mapping in the open areas. Actual survey coverage attained by the towed-array system was less than the cleared acreage due to rutted terrain and tree clusters that either created inaccessible areas to the towed-array system, or introduced significant noise in the collected data. In addition, 0.15 cumulative acres of data gaps exist in the mapping coverage due to spacing between survey lines; 0.25 acres were permitted per the Data Quality Objectives (DQOs) presented in Appendix B.

Upon completion of each daily survey, Parsons submitted raw data, digital records, and field notes to WESTON's on-site geophysicist for review. Datasets were reviewed for completeness, accuracy, and comprehensive coverage relative to the DQO metrics described in Appendix B. For datasets that did not meet the DQO requirements, one of the following response actions was taken.

- Data was recollected.
- Data was reprocessed.
- A root-cause analysis was performed and submitted to USACE.

Detailed data processing procedures are described in Appendix C.

Following analysis of the geophysical data, selected anomalies were labeled with a unique ID based on their location relative to the geospatial grid system. The coordinate position of these anomalies was entered into a database of target anomalies for future reacquisition. The target anomaly database information was entered into *UXOFast* data-logging software and uploaded to personal data assistants for locating the targets in the field.

2.4 RESULTS

The EM-61 MK2 towed-array detected a total of 52,700 anomaly targets in non-wooded/open areas between the 1,000-ft and 2,500-ft ODG limits. Of this total, 28,559 targets were located between 1,000 ft and 1,500 ft of the ODG Center (599 targets/acre) and 24,141 targets were located between 1,500 ft and 2,500 ft of the ODG Center (139 targets/acre). The target density distribution for non-wooded/open areas within the ODG is presented in Table 2-1.



Table 2-1
Target Distribution for Non-Wooded Areas

ODG Radius (ft)	No. of Targets	Area mapped (acres)	Targets/Acre
1000-1250	15,686	20.8	754
1250-1500	12,873	26.9	479
1000-1500	28,559	47.7	599
1500-1750	9,168	38.2	240
1750-2000	5,626	39.6	142
2000-2250	4,942	47.6	104
2250-2500	4,405	48.6	91
1500-2500	24,141	174	139

ft = feet

Target distribution by mV response for targets detected in non-wooded/open areas is presented in Table 2-2.

Table 2-2
Target Distribution by mV Response for Non-Wooded Areas

mV Response	Number of Targets			
	1,000 – 1,500 ft	1,500 – 2,500 ft	Total	
0 - 10	423	1,446	1,869	
10.1 – 20	5,384	10,974	16,358	
20.1 – 30	3,463	3,387	6,850	
30.1 – 40	2,604	1,822	4,426	
40.1 – 50	1,978	1,119	3,097	
> 50.1	14,707	5,393	20,100	
		Total	52,700	

ft = feet

mV = millivolts

In addition to the anomaly target locations identified using the towed-array, a total of 2,829 discrete targets were detected using hand-held magnetometers within 132 of the



220 transects. This survey encompassed approximately 9.65 acres of wooded area, which equates to a target density distribution of approximately 208 targets per wooded acre.

As shown in Figure 2-3, due to the high density of targets found outside the 1,000-ft radius, the area of the ODG that is considered saturated with MEC and munitions debris has been extended by USACE to a radial limit of 1,500 ft. Of the 380 total acres that required geophysical mapping within the ODG, it is estimated that a total of 153 acres of wooded and/or inaccessible areas remain that may require mapping or further investigative work.

To verify functionality and accuracy of the geophysical survey activities, Parsons performed data reacquisition using a single-coil EM-61 MK2 system in the wheel configuration (refer to Appendix E for procedures and results). In addition, WESTON and EOTI UXO technicians excavated a total of 1,248 of the target anomaly locations identified in the geophysical data (736 items within transects and 512 items within non-wooded/open areas). Of the 512 anomaly items reacquired from open areas during Phase I, approximately 97% were located at a maximum depth of 12 inches bgs. No items were excavated from a depth exceeding 20 inches bgs. A total of 14 target locations from non-wooded/open areas resulted in no contact, yielding a 97.3% detection rate for reacquired target locations. A summary of the dig results is presented in Table 2-3. Target reacquisition procedures, detailed results, ammunition consumption reports (ACRs), and daily inspection reports are included in Appendix F.

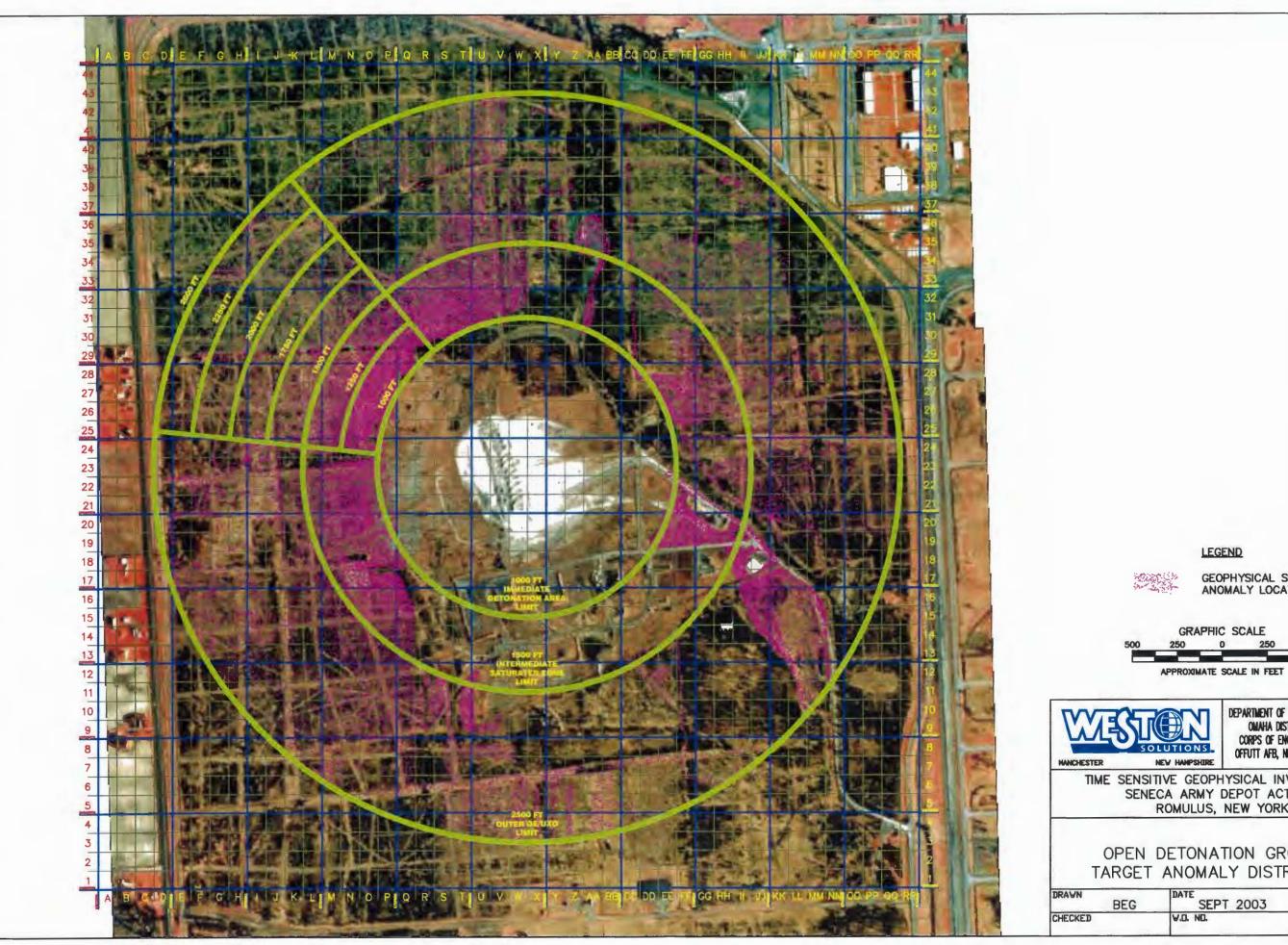
Table 2-3
Items Excavated During Phase I

Type	Transects	Open Areas	¹ Response (mV)
MEC	3	46	19.6 – 785.84
non-MEC	549	205	10.83 - 6403.79
Munitions Debris	184	247	15.31 – 2308.14
No Contact	0	14	14.92 – 116.82
Total:	736	512	10.83 - 6403.79

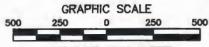
^{1.} Response applies to open area anomalies only. MEC = munitions and explosives of concern

mV = millivolts

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GEOPHYSICAL SURVEY ANOMALY LOCATIONS



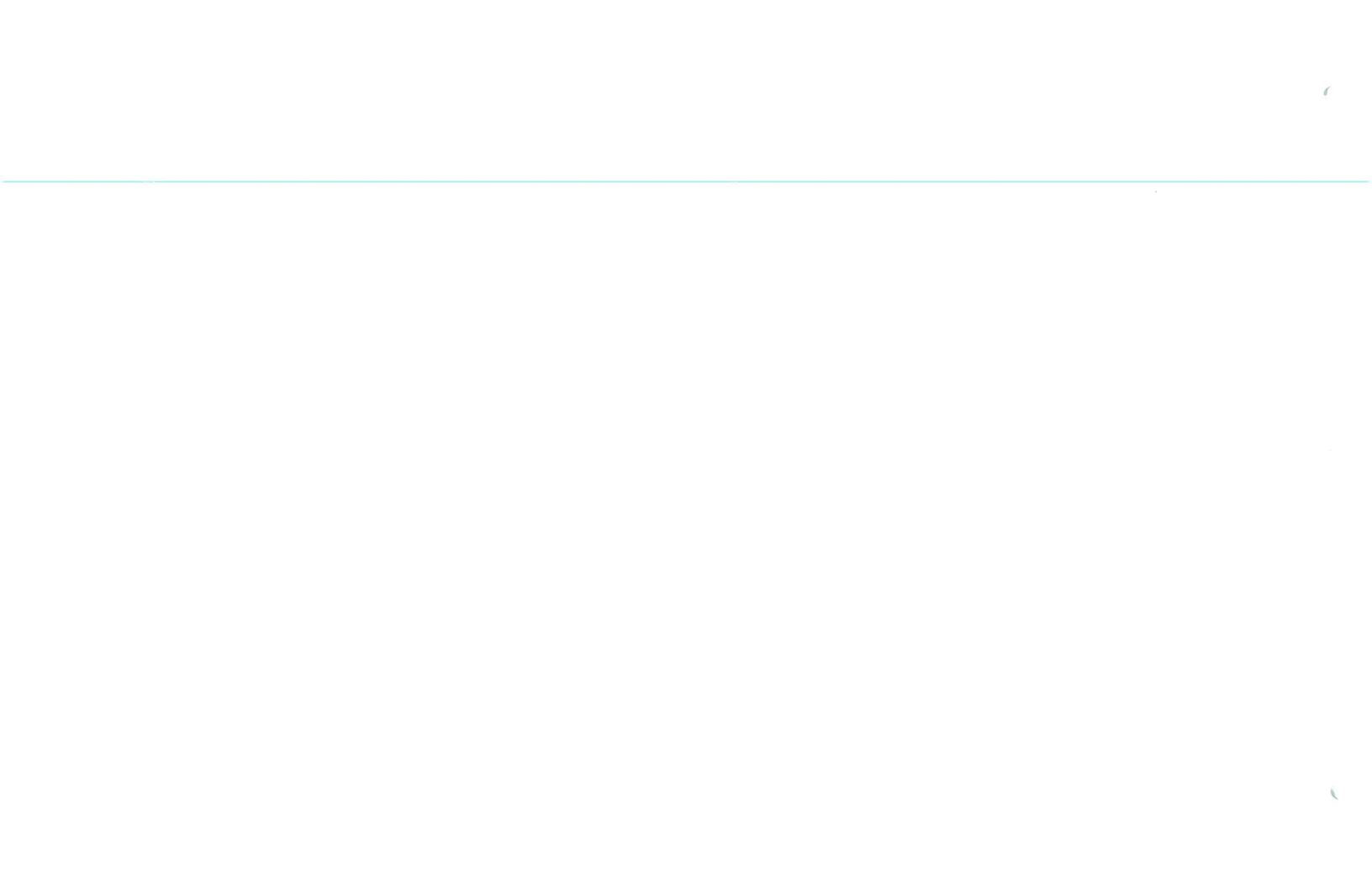
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TIME SENSITIVE GEOPHYSICAL INVESTIGATION SENECA ARMY DEPOT ACTIVITY ROMULUS, NEW YORK

OPEN DETONATION GROUNDS TARGET ANOMALY DISTRIBUTION

DRAWN	BEG	SEPT 2003	FIGURE ND.
CHECKED		W.D. ND.	-1 2-3





2.5 QUALITY CONTROL/QUALITY ASSURANCE

In accordance with USACE's *Final SOW* (25 March 2003) and Modifications No. 0002 (June 2003) and No. 0003 (July 2003), QA/QC measures for this project included the following:

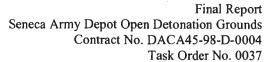
- Pre- and post-survey instrument function checks
- WESTON QC seed items
- USACE QA seed items
- Anomaly reacquisition for QA
- Target reacquisition

2.5.1 Quality Control

To verify instrument accuracy, Parsons performed daily pre- and post-survey QC function tests, which included: static; static spike; cable shake; and a three-point navigational test (Photo 5, Appendix A). When equipment failures, system repairs, or questionable results occurred during or between these tests, additional function checks were performed as necessary to quantify the identified failure. Parsons Engineering provided the results of each QC function test to WESTON as part of the daily field data submittal. A detailed description of each QC test is provided in Appendix D.

To verify navigational precision and data quality, WESTON seeded 41 QC items at a frequency of one item per 5-acre area. The QC items were known ferrous items placed securely on the ground surface and the position, type, and orientation of each QC seed item was recorded by WESTON. Prior to submittal to USACE, Parsons' data was reviewed by WESTON to confirm that the QC targets had been accurately detected by the EM-61 MK2 towed-array. A QC failure resulted if a QC seed item was not detected in a given dataset. The distribution of QC seed items is shown in Figure 2-2 and a complete summary of these items is presented in Table D-1 (Appendix D).

Upon acceptance of the data, WESTON developed a QC Summary Report that was uploaded to the *Teamlink* website for USACE's review. Raw and processed data packages were also submitted to USACE on a daily basis. A copy of WESTON's QC Tracking Log and a sample copy of a QC Summary Report are included in Appendix D. Following approval of all data





package submittals, WESTON submitted final QC Summary Reports to USACE on 21 April 2004.

2.5.2 Quality Assurance

As part of USACE's QA program, 48 known ferrous items were seeded below the ground surface "blind" to WESTON and geophysical subcontractor (Parsons). In a combined effort, USACE and WESTON seeded these items using either a mini-excavator (Photo 6, Appendix A) or by hand. The position, type, depth, and orientation of each QA seed item were recorded prior to burying the item. Approximately one QA item was seeded per 5-acre area. The distribution of QA seed items is shown in Figure 2-2 and a complete summary of these items is presented in Table D-2 (Appendix D).

The QA process mandated by USACE also required that data quality be verified by reacquiring 367 target locations in the field using a hand-pulled, single coil EM-61 MK2. The locations of selected targets were provided by USACE following review of the geophysical data previously collected using the EM-61 MK2 towed-array. Of the 367 target anomaly locations that were reacquired using the single coil EM-61 MK2, a total of 96 locations returned false positive results. Data reacquisition procedures and results are presented in detail in Appendix E.

To further verify functionality and accuracy of the geophysical data collected during Phase I, WESTON mobilized five UXO teams to excavate target locations in both open/non-wooded and transect areas pursuant to Modifications No. 0002 (June 2003) and No. 0003 (July 2003) to the *Final SOW* (USACE, 25 March 2003). From Parsons' geophysical data, USACE provided WESTON with specific target locations to reacquire, dig, identify, and remove anomaly targets. In addition to confirming select anomaly targets from the geophysical data, acquisition information including type, depth, and location were used for developing a level of effort and cost estimate for future Phase II MEC removal and disposal. During the course of anomaly reacquisition, WESTON and EOTI UXO Technicians investigated a total of 736 anomalies within wooded areas (transect locations), and a total of 512 anomalies within non-wooded/open areas. Target reacquisition procedures, dig results, ACRs, and daily inspection reports are included in Appendix F.



2.5.3 Quality Control/Quality Assurance Failures

Upon review of the geophysical investigation data using the QA/QC procedures described in Subsection 2.4.1 and 2.4.2, WESTON identified a total of five QC failures and nine QA failures. The most common failures were a result of the following:

- Latency corrections requiring refinement.
- Signal-to-noise ratio in excess of the 2.0 standard deviations.
- Failure to select the QC seed item within the 2.0 ft metric.
- Failure to select the blind QA seed item within the 2.0 ft metric.
- Failure to reacquire selected anomalies within the 2.0 ft metric.

The failures listed above were investigated through a comprehensive root-cause analysis conducted by WESTON (refer to Appendix B). Following USACE's acceptance of these root-cause analyses, each failure was corrected by WESTON and or Parsons, and the dataset was resubmitted.

2.6 DEMOBILIZATION

Following completion of the geophysical investigation and related activities on 27 August 2003, all equipment, temporary structures, and other items utilized during fieldwork were removed from the project site.

SECTION 3 CONCLUSIONS AND RECOMMENDATIONS



3. CONCLUSIONS AND RECOMMENDATIONS

An EM-61 MK2 towed-array system was used to collect digital geophysical mapping data for locating subsurface anomalies in all accessible areas (213 acres) between the 1,000-ft and 2,500-ft radial limits of the ODG. A manual "mag & flag" approach using hand-held magnetometers was used to locate subsurface anomalies in wooded/transect areas (9.65 acres). Results of the digital and manual geophysical surveys indicate that approximately 599 targets per acre exist between 1,000 ft and 1,500 ft of the ODG Center, and approximately 139 targets per acre exist between 1,500 ft and 2,500 ft of the ODG Center. These results confirm that the density of MEC and munitions debris within the ODG decreases further away from the ODG Center, as previously suggested in the *EE/CA* (Parsons, 2001). Due to the high-density of targets found outside the initial 1,000-ft inner radius, the area of the ODG that is considered saturated with MEC and munitions debris has been extended to a radial limit of 1,500 ft from the ODG Center.

To verify the accuracy of results obtained both digitally and manually, WESTON and EOTI UXO Technicians investigated and removed a total of 512 items from anomaly target locations within non-wooded/open areas and a total of 736 items from anomaly target locations within transects. Dig results within the open areas of the ODG revealed that approximately 97% of the excavated items were found at a maximum depth of 12 inches bgs. No items were excavated from a depth exceeding 20 inches bgs.

Future remedial actions at the site shall include Phase II MEC removal and disposal between 1,500 ft and 2,500 ft of the ODG Center, followed by Phase III MEC removal and disposal between the ODG Center and 1,500 ft. An estimated cost of \$126 per target has been projected for completion of Phase II activities. This estimate is based on the 1,248 anomalies reacquired during Phase I (736 items from transects and 512 items from non-wooded/open areas). A baseline cost estimate and financial breakdown for Phase II activities is included in Table G-1 (Appendix G). An estimate for level of effort and cost associated with Phase III activities will be developed based on results obtained following completion of Phase II. The potentially significant



concentration of MEC and munitions debris within the 1,500-ft inner radius will likely make it impractical to remove these items manually.

SECTION 4 SUMMARY



4. SUMMARY

The Phase I Geophysical Investigation of the ODG was conducted between 2 June and 27 August 2003. WESTON performed this work for USACE under Rapid Response Contract No. DACA-45-98-D-0004, TO No. 0037.

Prior to initiating the full-scale geophysical investigation, GPO surveys were conducted to demonstrate equipment capabilities, a site-wide MEC and munitions debris sweep was conducted to remove surface anomalies, and vegetation was cleared to facilitate data collection.

An EM-61 MK2 towed-array system was selected to perform the geophysical survey in all accessible areas between 1,000 ft and 2,500 ft of the ODG Center (213 acres), and the "mag & flag" approach using hand-held magnetometers was used in wooded/transect areas (9.65 acres). Results of the geophysical survey revealed that approximately 599 targets per acre exist in non-wooded areas between 1,000 ft and 1,500 ft of the ODG Center, approximately 139 targets per acre exist in non-wooded areas between 1,500 ft and 2,500 ft of the ODG Center, and approximately 208 targets per acre exist in wooded (transect) areas.

To verify the accuracy of results obtained both digitally and manually, WESTON and EOTI UXO Technicians removed a total of 512 items from anomaly target locations within the non-wooded/open areas, and a total of 736 items from anomaly target locations within the transects. Of the 512 target anomalies excavated from the non-wooded/open areas, approximately 97% of the items were found at a maximum depth of 12 inches bgs. No items were excavated from a depth exceeding 20 inches bgs. Fourteen of the target anomaly locations resulted in no contact, yielding a 97.3 % detection rate for the EM-61 MK2 towed-array system.

Using results obtained during Phase I, WESTON has estimated a cost of \$126 per target for Phase II MEC removal and disposal between the 1,500-ft and 2,500-ft radial limits of the ODG. This unit cost will invariably increase or decrease based on the location of the target relative to the ODG center, vegetation conditions (i.e., wooded or non-wooded areas), and depth of the target. Phase II activities began in September 2003, and are currently ongoing.

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SECTION 5 REFERENCES

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5. REFERENCES

Parsons Engineering. Engineering Evaluation/Cost Analysis, September 2001.

U.S. Army Engineering and Support Center, Huntsville, Alabama. Site Specific Project Report, USACE DID OE-030.01, revised 2001.

U.S. Army Engineering and Support Center, Huntsville, Alabama. *Geophysical Investigation Plan, USACE DID OE-005.05.01*, revised 2001.

U.S Army Corps of Engineers. Final Scope of Work for Rapid Response Action, 25 March 2003.

U.S Army Corps of Engineers. *Modification No. 0002 to Final Scope of Work for Rapid Response Action*, June 2003.

U.S Army Corps of Engineers. Modification No. 0003 to Final Scope of Work for Rapid Response Action, July 2003.

Weston Solutions, Inc. Final Work Plan, July 2003.

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APPENDIX A PHOTOS

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Photo No. 1: EM61-MK2 Towed-Array System (July 2003)



Photo No. 2: EM61-MK2 Towed-Array System (July 2003)

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Photo No. 3: Transect No. 168



Photo No. 4: RTK Setup



Photo No. 5: Three-point QC Function Test Track at West GPO (July 2003)





Photo No. 6: Placing USACE QA Seed Items Using a Mini-excavator



Photo No. 7: Anomaly reacquisition using a Schonstedt GA-52CXS ferrous metal locator and a miniature open front barricade (MOFB)





Photo No. 8: Anomaly reacquisition

APPENDIX B DATA QUALITY OBJECTIVES

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APPENDIX B - DATA QUALITY OBJECTIVES

Data quality objectives were developed during the project planning phase to serve as standards against which achievement of the project objectives could be measured. The DQOs are both qualitative and quantitative statements specifying the quality of data required to meet the intended goals of the project. Throughout implementation of both the GPO and full-scale geophysical investigation activities, USACE required that the following DQOs be met:

- Electromagnetic (EM) leveling: For any given dataset of EM data, all data channels will be leveled using the same routines and parameters.
- Processing: All leveling and/or filtering routines that are applied to datasets will be
 evaluated, on a dataset by dataset basis, to confirm that those routines do not alter the
 nature of the original measured response.
- Navigation: The sum of all data positioning errors in the final datasets will not exceed +/- 1.0 ft.
- Background Noise: Mean of the Sum Channel must be less than or equal to 3.25 mV with a standard deviation less than or equal to 2 mV. "Clip" anything that is well above the background noise being careful not to clip too low. Document the clipping value and what passes/fails.
- Mean Speed: Maintain mean speed less than or equal to 2.5 miles per hour.
 Document mean speed with standard deviation.
- Along Track Sampling: Less than or equal to 0.5 ft.
- Across Track Sampling: Lless than or equal to 3.0 ft.
- Latency Correction: No visible chevron effects in the data or plots.
- Data Leveling: Use consistent parameters and processing methods for all datasets.
- Signal Above Background: Processing not to alter signal above background by more than 5% or 5mV, whichever is less (i.e., the difference between background and peak response).
- Anomaly Selection: Verify that anomaly selections are reasonable for identifying all buried metal from 20 mm at 6 inches to 105 mm or larger at 48 inches.
- Positioning Errors: Positioning errors are not to exceed 1.0 ft.



- Reacquisition: USACE will notify WESTON/Parsons of which anomalies will be reacquired, and reacquisition must be within 2 ft of the interpreted location.
- Blind/Seeded QA Items: All blind/seeded items must be detected to within 2 ft.

The objective of the geophysical investigation was to accurately locate and record the location of potential MEC and munitions debris. For datasets that failed to meet the DQO criteria described above, WESTON performed a root-cause analysis of each failure and recommended appropriate corrective actions per USACE request. Following review of Parsons' data, the most common data failures were a result of one or more of the following:

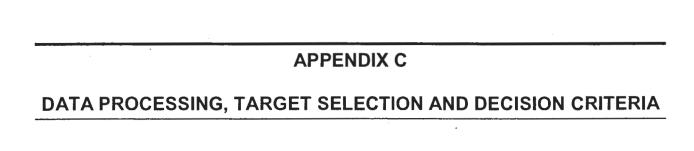
- Failure to reacquire selected anomalies within the 2.0 ft metric.
- Failure to select the WESTON QC seed item within the 2.0 ft metric.
- Failure to select the blind USACE QA seed item within the 2.0 ft metric.
- Latency corrections require refinement.
- Signal-to-Noise ratio standard deviations in excess of the 2.0 mV metric.

A list of the root-cause analyses performed during the full-scale geophysical survey is presented in Table B-1.

Table B-1
List of Root-Cause Analyses

Date	Problem Addressed			
9/8/2003	DQO failures for signal to noise ratio standard deviation of 6/17 dataset			
9/8/2003	DQO failure and alteration of response values by > 5%			
9/8/2003	DQO failure for signal to noise ratio standard deviation of 7/18 dataset			
9/12/2003	Noise related target picks within the 7/16 dataset			
9/18/2003	Noise DQO metric for 8/19 and 8/20 datasets			
9/23/2003	Determine extent of noise related target picks			
9/30/2003	Target reacquisition failures			
10/1/2003	Geophysical comparison of the Dig Team results (7/11-9/22)			
	Analysis of QC /QA seed item failures			

DOO = data quality objectives



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APPENDIX C – DATA PROCESSING, TARGET SELECTION AND DECISION CRITERIA

Following the initial pre-processing steps, all geophysical data was imported into an Oasis Montaj (GeosoftTM) database. Associated line profiles and maps were generated and anomaly selections were made based on the following post-processing procedure:

- 1. The data was leveled using the Geosoft UX-Detect Drift Correction GX, (script). The same GX parameters were used on all 4 channels of data (Time Gates 1 through 4).
- 2. A new channel was then created based on the sum of all 4-leveled channels.
- 3. A pseudo-color grid was generated for the sum channel using the gridding parameters established in the *Final Work Plan* (WESTON, July 2003). The grid was refined to minimize gridding artifacts such as over-shoot in high gradient areas. A symbols layer, showing location of all data points was generated to allow a Data Link with the shadow cursor.
- 4. A statistical report of background data for the sum channel was created to establish an upper background threshold for the auto picking routine. Based on the level of noise observed, this upper threshold was set between 2 mV and 5 mV above the highest background noise level observed. Once the background threshold was set, all data above this threshold was temporarily removed, and the automatic anomaly selection was performed on the remaining data.
- 5. The automatic anomaly selection was performed on the sum channel using the UX-Detect Blakely Test. As a starting point, the GX (threshold) Parameter was set to produce anomaly selections of signals above the mean plus 2.5 to 3 times the standard deviation of the background data.
- 6. Using the Shadow Cursor with Data Link, a visual review of anomaly picks and decay profile characteristics for suspect and/or low-amplitude anomalies was performed.
- 7. Using the merge GX (a simple search radius approach to find the peak response near each anomaly), anomaly selections were adjusted and/or merged where multiple targets were picked by the auto-routine.
- 8. Anomaly locations and all corrected geophysics data were exported to a database and a query of the database was performed to identify the peak response (in the sum channel) nearest to each selected anomaly location.

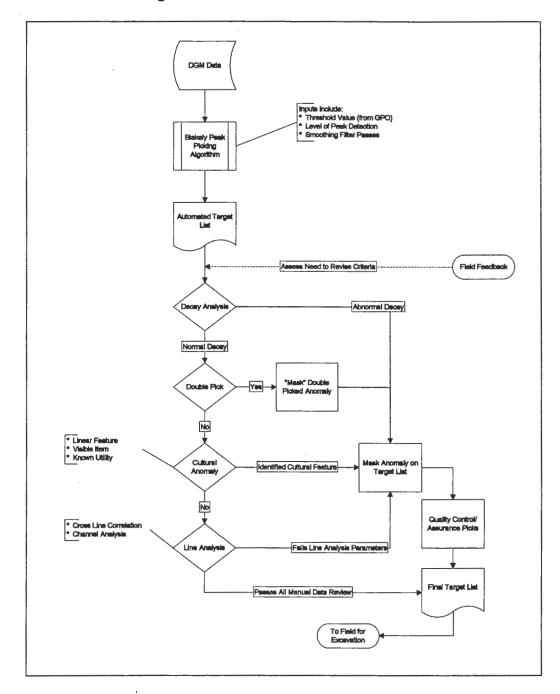


- 9. Prior to finalizing the target database, the anomaly selections in each dataset were refined as follows:
 - a. Duplicate targets on the same anomaly were deleted.
 - b. Targets deleted by the GX on anomalies where only one pick had been made were replaced.
 - c. A decay GX was run to examine decay characteristics typical of buried metals. (*Note*: The decay GX did not take into account Channel 1, as the inclusion of Channel 1 deleted a pick over an item in the GPO). After running the decay GX, Parsons' geophysicist examined each target eliminated by the decay GX and replaced those that might be actual targets (i.e., very close to passing the decay test and exhibiting large amplitude).
 - d. In some cases, especially in early data sets, where multiple picks were made by the auto-picking routine, duplicate picks that were separated by more than 3 ft for the same anomaly were hand deleted.
 - e. Generally, Parsons' geophysicist emphasized eliminating lower amplitude targets from the anomaly picks, and tried to leave a reasonable distance between them, so the metric would not be exceeded. In the case of large anomalies that have (or had) 4 or 5 picks on them it is reasonable to expect that reacquisition of any of the picks on these anomalies would result in the detection of the item. For example, looking for a 15 mV target picked on the edge of a 150 mV anomaly where the actual peak was 3.5 ft from the 15 mV pick would still almost certainly result in the detection of the peak in almost the same time. While the metric is exceeded, the overall goal is still achieved with little additional effort.

The target selection and review process for determining anomaly IDs is shown in Figure C-1.



Figure C-1
Target Selection and Review Flow Chart



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APPENDIX D QUALITY CONTROL



APPENDIX D - QUALITY CONTROL

Instrument Function Tests

To verify instrument accuracy, daily pre- and post-survey instrument function checks were

conducted, which included: static; static spike; cable shake; and a three-point navigational test.

When equipment failures, system repairs, or questionable results occurred during or between these

tests, additional function checks and/or root-cause analyses were performed as necessary to quantify

the identified failure.

Static Test

The purpose of the static test was to determine the ability of the EM-61 MK2 instrumentation to

collect stable readings consistently throughout the geophysical survey. Instrument functionality and

EM ambient cultural noise can lead to unstable, non-repeatable readings. If noise levels exceeded a

standard deviation of 2.0 during the static test, an analysis was performed to determine the cause of

increased noise levels.

Static Spike Test

The static spike test demonstrates the sensor's sensitivity to the target object. An 8-inch piece of

rebar was chosen to quantify the instrument response and document its ability to collect stable

readings. Where levels exceed a standard deviation of 2.0, an analysis was performed to determine

the cause of increased noise levels.

Cable Shake Test

The cable shake test was used to identify mechanical problems with the EM-61 MK2

instrumentation. Large anomalous spikes within the test data would indicate poor connectivity

between cables and the field data logger. Such spikes were not observed during the cable connection

tests confirming good connection between cables and the field logger.

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3 MARCH 2005



Three-Point Navigation Check

To confirm the precision of the navigational system and determine temporal time lags inherent to these specific instruments, a three-point navigation check was performed daily as part of the pre- and post-survey instrument function tests. Time delays of 0.2- to 0.8-seconds were often observed and applied to the survey data. This data was submitted to WESTON on a daily basis for comparison to the DQO objectives.

QC REPORTING FORMS





The following forms are an example of the QC forms used by WESTON to review the geophysical data submitted by Parsons.

QC Form 1 - Static Test

Coil #1

	Pre Survey			Post Survey				
	CH 1	CH 2	СНЗ	CH4	CH 1	CH 2	СНЗ	CH4
File Name	0728.gdb					0728.	gdb	
Line #:	L0:0				L20	:0		
Min:	-126.67	-21.04	-4.92	-6.1	-111.51	-20.74	-6.41	-7.25
Max:	-123.55	-19.68	-4.22	-5.62	-108.46	-19.38	-5.57	-6.7
Mean:	-125.35	-20.43	-4.58	-5.84	-109.93	-20.02	-5.99	-6.97
Std:	0.5	0.17	0.09	0.07	0.44	0.17	0.11	0.09

Comments:

Coil #2

	Pre Survey			Post Survey				
	CH 1	CH 2	СНЗ	CH4	CH 1	CH 2	СНЗ	CH4
File Name	0728.gdb					0728.	gdb	
Line #:	L0.1:0				L20.	1:0		
Min:	-149.91	-33.75	-10.24	-8.25	-140.92	-35.35	-12.17	-11.04
Max:	-146.92	-32.63	-9.42	-7.64	-138.64	-34.22	-11.2	-10.28
Mean:	-148.31	-33.21	-9.83	-7.94	-139.81	-34.82	-11.69	-10.69
Std:	0.45	0.17	0.12	0.1	0.35	0.19	0.15	0.12

Comments:

Coil #3

	Pre Survey			Post Survey				
	CH 1	CH 2	CH3	CH4	CH 1	CH 2	СНЗ	CH4
File Name	0728.gdb				0728.gdb			
Line #:	L0.2:0				L20.	2:0		
Min:	-126.01	-34.75	-12.59	-8.77	-122.12	-37.86	-14.3	-9.52
Max:	-123.51	-33.48	-11.88	-8.28	-119.86	-36.53	-13.66	-9.08
Mean:	-124.77	-34.11	-12.22	-8.46	-121.18	-37.17	-13.99	-9.28
Std:	0.34	0.2	0.11	0.08	0.34	0.17	· 0.1	0.08

Comments: _

Post Survey

Post Survey



QC Form 2 - Static Spike Test

Coil #1

	Pre Survey				Post Survey			
•	CH 1	CH 2	СН3	CH4	CH 1	CH 2	СН3	CH4
File Name	0728.gdb				0728.gdb			
Line #:	L1:0			L21:0				
Min:	348.54	269.24	146.83	55.12	376.38	281.8	155.14	59.64
Max:	352.49	272.24	148.42	55,82	380.78	285.04	156.98	60.5
Mean:	350.4	270.7	147.65	55.48	378.8	283.72	156.21	60.08
Std:	0.9	0.68	0.37	0.15	0.83	0.63	0.36	0.15

Comments:

Coil #2 Coil #2

Pre Survey

File Name Line #:

CH 2 CH3 CH4 CH₁ CH4 CH 1 CH 2 CH3 0728.gdb 0728.gdb L22.1:0 L2.1:0 345.99 269.26 150.93 Min: 347.73 273.27 151.52 56.14 54.88 Max: 351.42 275.68 153.18 56.95 349.7 271.69 152.5 55.9 Mean: 349.91 274.59 152.48 56.49 347.96 270.56 151.83 55.42 0.29 0.14 0.6 0.45 0.29 0.21 Std: 0.68 0.5

Comments:

Coil #3 Coil #3

Pre Survey

File Nam Line#

	CH 1	CH 2	CH3	CH4	CH 1	CH 2	CH3	CH4
le Name		0728	.gdb		0728.gdb			
Line #:	L3.2:0			L23.2:0				
Min:	330.06	247.47	134.18	50.39	367.05	271.49	150.86	59.17
Max:	333.42	249.33	135.28	50.89	369.59	273.42	152.01	59.83
Mean:	332.03	248.64	134.85	50.64	368.28	272.41	151.43	59.48
Std:	0.57	0.39	0.2	0.09	0.61	0.44	0.25	0.12

Comments:



QC Form 3 - Cable Shake Test

Coil #1

Pre Survey **Post Survey** CH 2 CH3 CH3 CH 1 CH4 CH 1 CH 2 CH4 0728.gdb 0728.gdb File Name L4:0 L24:0 Line #: Min: | -125.04 -20.86 -5.19 -6.26 -111.59 -20.94 -6.41 **-7**.25 Max: -121.83 -19.52 -4.07 -5.21 -109.57 -19.86 -5.85 -6.52 -123.77 -20.15 -4.51 -5.82 -110.54 -20.29 -6.08-6.96 Mean: 0.56 0.25 0.2 0.16 0.41 0.2 0.1 0.11 Std:

Comments:

Coil #2 Coil #2

Pre Survey **Post Survey** CH 1 CH 2 CH3 CH4 CH 1 CH 2 CH3 CH4 0728.gdb File Name 0728.gdb L4.1:0 L24.1:0 Line #: Min: -147.63 -33.58 -10.54 -8.45 -142.39 -35.68 -12.08-11.4 -32.44 -9.55 -7.6 -139.49 -34.3 -11.14 -144.9-10.32 Max: -33 -140.89 -35.11 -146.4 -10.04 -8.05 -11.6 -10.68 Mean: 0.56 0.23 0.19 0.49 0.23 0.18 0.17 0.16 Std:

Comments:

Coil #3 Coil #3

Pre Survey **Post Survey** CH 1 CH₁ CH 2 CH3 CH4 CH 2 CH3 CH4 0728.gdb 0728.gdb File Name L24.2:0 L4.2:0 Line #: -123.98 Min: | -126.81 -35.53 -12.93 -8.89 -38.44 -14.4 -9.65 -122.06 Max: -124.02 -34.27 -12.05 -8.19 -37.48 -13.85 -9 Mean: | -125.47 -34.82 -12.48 -8.5 -123.24 -37.98 -14.12 -9.31 0.14 0.12 0.29 0.15 0.09 0.09 Std: 0.5 0.22

Comments:



QC Form 4

QC Check

MDS by:

SEDA/ODG Project:

J20-24; I19-22; H19-

8/20/03 Date:

Location 21; G18-19; F18; i.d.: E18

Survey

Date: File name:

7/28/03 0728.gdb

3 pt Bi-Directional Navigation Test

	Pre St	irvey	P	ost Survey
	0728AM	Latency	0728	8PM_Latency
	Latency Correction	Distance Offset (ft)	Latency Correction	Distance Offset (ft)
Coil #1	0.5	1.44	0.5	0.37
Coil #2	0.5	1.36	0.5	0.41
Coil #3	0.5	1.67	0.4	0.45

Comments:

Blind Seeds Detected

Seed	The state of the s
No Weston Se	eded Items
Locat	ion .
Easting	NA
Northing	NA
Seed Desc	ription
Depth (ft)	NA
Orientation	NA

aly ID
NA .
NA
ation
NA
NA
nt. from Seed
NA
NA

Comments:

Data Sampling

Velocity	
Average (mph)	1.88
Along Track Across Ti	rack Sampling
*Along Track (ft)	0.22
**Across Track (ft)	NA
Total Area Surveye	ed (acres)
This Data Set	3.72
Cumulative	201.93
Total Data Gaps	(acres)
This Data Set	0.001
Cumulative	0.118

* metric: </= 0.5 ft

** metric: </= 3.0 ft

Comments:

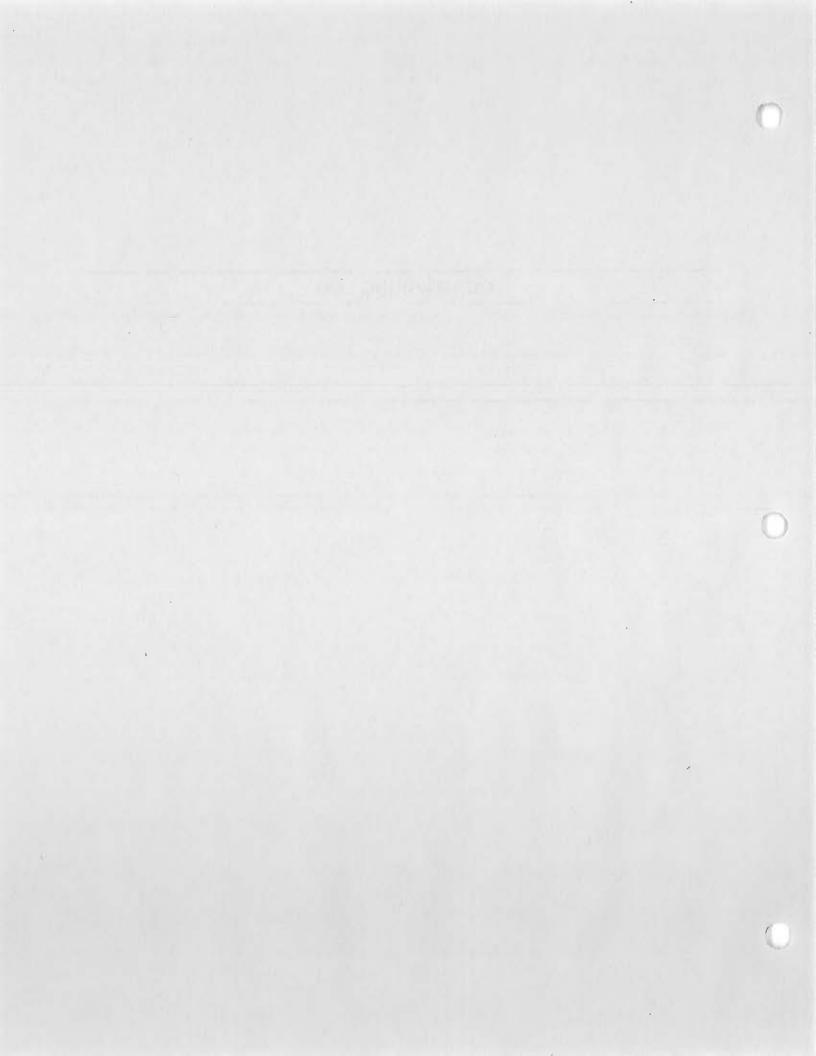


QC Form 5 - Processing QC

This data has been reviewed for the following functions: **Processing Functions:** File Name: 0728.gdb Leveling Performed: Yes **Latency Correction Performed:** (no visible chevron effects) 0728.rtf Audit Log File Name: 100.0% Anomaly Selection Verified on: % of data set SNR: sum clipped & Channel Analyzed: Weston_Noise Clipping Value: ____ - 5/7 Text Files Attached: Mean / Std.Dev.: Mean (mV) Std.Dev. (mV) 1.69 1.89 a.m. 1.82 1.94 p.m. </= 3.25 </= 2.0 Metric: **Drift:** % Lowest: ____ % Highest: Max Value per Block: ____ 200 **Verification of Anomalies:** 100 Anomalies < 100 Anomalies > (Metrics - not altered by 5% / 5mV 0 Anomalies) Certification that anomaly selections are reasonable: Target ID's >100 = 141, 543, 321Target ID's < 100 = 100, 6, 369Comments:

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QC TRACKING LOG



Open Detonation Grc Geophysical Mapping Quality Control Tracking Log

Seneca Army Depot Open Det. Grounds
Contract No. DACA45-98-D-0004
Task Order No. 0037

	ACRES	MAPPED	RAW	DATA		P	ROCESSED DA	ATA .			
125'x125' Grids Mapped	Date Mapped	per Parsons	¹ File Name (.gdb)	Received from Parsons	Received from Parsons	WESTON QC Completed	Pass / Fail	Draft Submitted to USACE	Final Submitted to USACE	QC Summary Uploaded to Teamlink	Comments
					10-Jun	10-Jun	Р	11-Jun			Processed data was rejected by USACE.
WGPO	6-Jun		0606	7-Jun	20-Jun	24-Jun	Р	23-Jun	10-Oct	23-Jun	Initial dataset failed due to target picking parameters. USACE provided suggestions and the data was reprocesssed and submitted.
N-P 25-32	7-Jun	5.6	0607	9-Jun							Across line spacing exceeded DQOs. Parsons to recollect data. Data was recollected on June 11 and 12.
M24-32, M-P 21, M-O 24	9-Jun	7.15	0609	10-Jun	24-Jun	24-Jun	Р	25-Jun	9-Sep	26-Jun	
M20-P20, M23-O23, M-P 17-19	10-Jun	6.5	0610	11-Jun	24-Jun	25-Jun	Р	25-Jun	9-Sep	8-Jul	
Q-S 32, *P25-32	11-Jun	1.27	0611	12-Jun	24-Jun	25-Jun	Р	25-Jun	2-Oct	8-Jul	* Part of failed data reacquired from 7-Jun.
*N-O 25-32, N-O 25-32, Q29, Q-T 30-31, T32	12-Jun	3.42	0612	12-Jun	24-Jun	25-Jun	Р	25-Jun	9-Sep	12-Jul	*Part of failed data reacquired from 7-Jun.
Q-R 33, R34, T-V 33-36	13-Jun	4.7	0613	14-Jun	25-Jun	9-Jul	Р	9-Jul	9-Sep	12-Jul	
Q33, R-S 33-34, U-V 33-36	14-Jun	4.2	0614	16-Jun	26-Jun	12-Jul	Р	12-Jul	9-Sep	12-Jul	
W33-W36	16-Jun	1.91	0616	17-Jun	28-Jun	11-Jul	Р	11-Jul	9-Sep	11-Jul	
R-T 38-40, S-T 37-38	17-Jun	4.6	0617	18-Jun	28-Jun	11-Jul	Р	11-Jul	9-Sep	11-Jul	
K-L 25-32	18-Jun	6.6	0618	19-Jun	23-Jun	25-Jun	Р	26-Jun	9-Sep	4-Jul	
J25-32	19-Jun	3.25	0619	20-Jun	23-Jun	25-Jun	Р	26-Jun	9-Sep	4-Jul	
H24-35	20-Jun	4.7	0620	23-Jun	24-Jun	25-Jun	Р	26-Jun	9-Sep	4-Jul	
E21, E25, E29, E33	23-Jun	1.3	0623	25-Jun	24-Jun	12-Jul	Р	12-Jul	9-Sep	12-Jul	No grids completed in full
l 24-32	24-Jun	2.17	0624	25-Jun	25-Jun	12-Jul	Р	12-Jul	9-Sep	15-Jul	
E25-31, F25-33, G23-34	25-Jun	6.93	0625	26-Jun	26-Jun	12-Jul	Р	14-Jul	9-Sep	15-Jul	
A17-28, J33-37, K33-38	26-Jun	8.67	0626	28-Jun	28-Jun	14-Jul	Р	14-Jul	9-Sep	16-Jul	
L33-39, M33-38, N33-36, O-Q 33-34, P8-16	27-Jun	8.61	0627	28-Jun	28-Jun	16-Jul	Р	16-Jui	9-Sep	17-Jul	
			0628	30-Jun	30-Jun	15-Jul	Р	12-Nov			Parsons to reprocess data; proper latency not applied to specific lines. Data reprocessed and sent to USACE on 11/12/03
M-O 7-16	28-Jun	9.29	0804a	11-Aug	11-Aug	14-Aug	Р				West edge of 06/28 data recollected as part of 0804a. Still some data of the 06/28 failed DQO so data was modified by applying a polygon mast to that noisy area and sending data to dig teams to manually mag and flag.

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al Report Seneca Army Depot Open Detoi. ... Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037

	ACRES	MAPPED	RAW	DATA	PROCESSED DATA						
125'x125' Grids Mapped	Date Mapped	per Parsons	¹ File Name (.gdb)	Received from Parsons	Received from Parsons	WESTON QC Completed	Pass / Fail	Draft Submitted to USACE	Final Submitted to USACE	QC Summary Uploaded to Teamlink	Comments
K7-14, L7-23	30-Jun	8.98	0630	3-Jul	3-Jul	17-Jul	Р	17-Jul	9-Sep	17-Jul	
E15-18, F13-18, K15-23	1-Jul	5.83	0701	3-Jul	3-Jul	17-Jul	Р	17-Jul	2-Oct	22-Jul	
G13-18, H14-18, I13-18, J14-15	2-Jul	4.69	0702	7-Jul	8-Jul	18-Jul	Р	18-Jul	2-Oct	22-Jul	
G12, H11-13, I10-12, J8-12, N P 5-6, Q-AA 6, W-GG 7, EE-GG 8	3-Jul	6.03	0703	7-Jul	7-Jul	18-Jul	Р	18-Jul	9-Sep	22-Jul	
*Q6-16, S14-16, T14-16, U13-15, V10-13, II-KK8	7-Jul	5.37	0707	8-Jul	8-Jul	21-Jul	Р	21-Jul	2-Oct	22-Jul	
S3-8, U3-8, T3-T8, V3-V8, W7-8, W-Z3, Y4-6	8-Jul	6.38	0708	9-Jul	9-Jul	21-Jul	Р	21-Jul	9-Sep	23-Jul	
II15-16; JJ14-16; KK13-16;LL10-16; MM10-17; NN11-15	9-Jul	7.35	0709	10-Jul	10-Jul	22-Jul	Р	22-Jul	9-Sep	23-Jul	
CC12-13; DD11-13; EE10-12; FF9-13; EE19-22; FF19-22; GG19-22; HH18-21; II17-20; JJ17-20; KK17-18; MM21-24; NN19-24	10-Jul	5.85	0710	11-Jul	11-Jul	22-Jul	Р	22-Jul	2-Oct	15-Aug	*Proper latency not applied to specific lines; however, upon discussion with USACE the data is acceptable.
KK-LL19; NN19-24; OO19-26; PP19-27; QQ19-27	11-Jul	7.7	0711	12-Jul	12-Jul	23-Jul	Р	23-Jul	2-Oct	24-Jul	
HH23; II23-24; KK24; KK33-34; LL24; LL28-34; MM18-31;	12-Jul	6.44	0712	15-Jul	15-Jul	23-Jul	F	23-Jul	2-Oct	31-Jul	Identified noise in 0712a and latency errors in 0712b. Parsons to refine latency error and resubmit data.
NN25-31; OO27-31; PP28-31					25-Jul	29-Jul	Р	29-Jul			
JJ24; EE-LL25; FF-LL26;	14-Jul	5.41	0714	15-Jul	15-Jul	24-Jul	F		2-Oct	15-Aug	Parsons to investigate anomalous reading leading to possible QC failures in 0714a and 0714b.
HH-LL27			0714 & 0804b	11-Aug	11-Aug	14-Aug	р	15-Aug			Portion recollected as part of 0804b.
DD-GG27; DD-LL28; EE-FF29; EE-FF30	15-Jul	3.78	0715	16-Jul	16-Jul	24-Jul	р	24-Jul	2-Oct	25-Jul	
GG-LL29; GG-LL30; GG-LL31	16-Jul	6.11	0716	17-Jul	17-Jul	25-Jul	Р	25-Jul	2-Oct	28-Jul	
DD-LL32; DD-LL33	17-Jul	4.6	0717	20-Jul	20-Jul	26-Jul	Р	26-Jul	9-Sep	28-Jul	
DD-KK34; II-KK35; JJ-KK36; GG-KK37; GG-KK38; FF-JJ39; CC-EE41; BB-EE42	18-Jul	4.48	0718	20-Jul	20-Jul	6-Aug	Р	11-Aug	2-Oct	11-Aug	

	ACRES	MAPPED	RAW	DATA		P	ROCESSED DA	TA.			
125'x125' Grids Mapped	Date Mapped	per Parsons	¹ File Name (.gdb)	Received from Parsons	Received from Parsons	WESTON QC Completed	Pass / Fail	Draft Submitted to USACE	Final Submitted to USACE	QC Summary Uploaded to Teamlink	Comments
Z30-31; Z34-36; AA30-36; BB34-36; CC28-31;	19-Jul	2.74	0719	20-Jul	20-Jul	28-Jul	Р	28-Jul	10-Oct	8-Aug	
WGPO			0719	23-Jul	24-Jul	29-Jul	Р	29-Jul			
			0721	23-Jul	24-Jul	pending					Lines 10, 11,12 and 13 Noise exceeded DQO. Lines are being recollected.
CC31-42; DD-GG37; DD-EE39	21-Jul	3.94	0805	5-Aug	11-Aug	pending			2-Oct		Failed data needs to be removed and data package resubmitted.
			0721 & 0805		11-Aug	18-Aug	Р	18-Aug		19-Aug	
LL23; II22-LL22; II-LL21	22-Jul	3.72	0722	23~Jul	24-Jul	30-Jul	F		2-Oct	1-Aug	Velocities need to be reviewed. Data will be reprocessed and resubmitted.
,					31-Jul	31-Jul	Р	31-Jul			
			0723	24-Jul	25-Jul	pending					Cracked coil. Parsons to reevaluate noise in data.
Q-U41; Q-U42; T-U43	23-Jul	3.42	0731	31-Jul	11-Aug	pending			2-Oct		Noise issues to be resolved.
			0723 & 0731		11-Aug	19-Aug	Р	19-Aug		27-Aug	
U-W39; V37-38; W37-38	25-Jul	2.7	0725a	26-Jul	26-Jul	1-Aug	P	1-Aug	2-Oct	4-Aug	
X33-36; X38-40; Y34-37; Y38-40; Z37-40; X-Z42	25-001		0725b	20 00.	20 001	, , , , ,					
K-L24; J20-24	26-Jul	2.04	0726a	28-Jul	28-Jul	7-Aug	Р	7-Aug	2-Oct	12-Aug	
WGPO			0726b								
J20-24; I19-22; H19-21; G18-19; F18; E18	28-Jul	3.72	0728	29-Jul	29-Jul	8-Aug	F		2-Oct		Latency errors. Parsons to resubmit data.
310-10,1 10, 210					11-Aug	20-Aug	Р	20-Aug		27-Aug	Resubmitted data passed QC
123-24; H22-23; G20-23;					1-Aug	5-Aug	F				Noise and processing errors. Parsons to resubmit data to Weston.
F21-22; E19-22; U40-43; V40	29-Jul	4.47	0729	1-Aug	11-Aug	withheld	F		2-Oct		Noise issues to be resolved
43					11-Aug	21-Aug	Р	21-Aug		27-Aug	Resubmitted data passed QC
No grids completed in full	30-Jul		0730	11-Aug	11-Aug	13-Aug	Р	15-Aug	2-Oct	15-Aug	Survey acreage counted in August 1, 2003
U37-38; V37-38	1-Aug	1.13	0801	11-Aug	11-Aug	15-Aug	Р	15-Aug	2-Oct	19-Aug	
W4-5; X4-5; Z4-5; GPO	19-Aug	2.17	0819	22-Aug	22-Aug		Р		2-Oct		Data exceeds Noise DQO established for project and new noise limits set following 08/19 and 08/20 GPO runs (refer to Root Cause Analysis). Excessive noise is due to uneven terrain.

	ACRES	MAPPED	RAW	DATA		P	ROCESSED DA	TA			
125'x125' Grids Mapped	Date Mapped	per Parsons	¹ File Name (.gdb)	Received from Parsons	Received from Parsons	WESTON QC Completed	Pass / Fail	Draft Submitted to USACE	Final Submitted to USACE	QC Summary Uploaded to Teamlink	Comments
GPO	20-Aug		0820a	22-Aug	22-Aug		Р		2-Oct		
R9-12; S9-12; T9-12; U9-12	20-Aug	1.55	0820b	22-Aug	22-Aug		Р		2-Oct		Data exceeds Noise DQO established for project and new noise limits set following 08/19 and 08/20 GPO runs (refer to Root Cause Analysis). Excessive noise is due to uneven terrain.
EE-FF 35	21-Aug	1.52	0821	22-Aug	22-Aug		Р		2-Oct		

Total Acres 212.99

Average per Day 4.63

Total Gaps 0.147

Notes:

1. Database contains multiple file types

* Recollected data from previous data

DQOs = data quality objectives

GPO = geophysical prove-out

QC = quality control

USACE = US Army Corps of Engineers

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TABLE D-1 – WESTON QC SEED ITEMS AND TABLE D-2 – USACE QC SEED ITEMS





Table D-1 WESTON Quality Control Seed Items

in A	Easting	Northing	Elevation (feet)	Description	Grid ID
WESTON 1	1012671.25	737230.91	622.43	2X24 PIPE	M21
WESTON 2	1013203.88	737164.66	620.65	1.5X7.5 PIPE	M25
WESTON 3	1013659.14	737198.90	617.33	1.5X5.5 PIPE	M26
WESTON 4	1012065.87	737186.99	619.99	1.5X5.5 PIPE	M17
WESTON 5	1013850.32	737835.49	619.17	1.5X5.5 PIPE	· Q29
WESTON 6	1013942.57	738113.16	617.37	1.5X5.5 PIPE	U29
WESTON 7	1014352.94	738273.68	613.92	1.5X7.5 PIPE	U33
WESTON 8	1014406.90	737931.30	617.52	1.5X7.5 PIPE	Q33
WESTON 9	1014942.38	737615.57	614.85	6X1.5 PIPE	Q37
WESTON 10	1014614.37	738070.05	614.79	5X1.25	U37
WESTON 11	1010594.12	738844.12	636.62	1.25X6 PIPE	Y5
WESTON 12	1010536.26	738209.35	636.88	1.25X5 PIPE	· U5
WESTON 13	1011801.67	736833.89	615.65	1.5X7 PIPE	I13
WESTON 14	1012081.82	736751.99	612.94	1.5X7 PIPE	I17
WESTON 15	1012561.73	736570.73	608.71	1.5X7 PIPE	I21
WESTON 16	1013118.93	736772.05	611.56	1.5X7 PIPE	125
WESTON 17	1013725.53	736714.61	607.58	1.5X7 PIPE	129
WESTON 18	1014232.42	736866.87	605.41	1.5X7 PIPE	133
WESTON 19	1013126.40	736340.41	603.58	7.5X1.5 PIPE	E25
WESTON 20	1014043.61	736296.47	598.39	7.5X1.5 PIPE	E29/E33
WESTON 21	1012750.86	736243.45	601.21	7.5X1.5 PIPE	E21
WESTON 23	1011384.99	736378.30	606.85	7.5X1.5 PIPE	E13
WESTON 24	1010994.19	736930.21	608.55	1.25X6 PIPE	19
WESTON 22	1012102.78	736109.98	600.16	1.25X5 PIPE	E17
WESTON 25	1015146.39	739146.98	611.43	1.5X7 PIPE	CC41
WESTON 26	1014147.80	739278.91	617.34	1.5X7.5 PIPE	CC33
WESTON 27	1013593.30	739414.94	617.53	1.5X7 PIPE	CC29
WESTON 28	1012836.23	739765.84	618.12	1.5X6.5 PIPE	GG21
WESTON 29	1013171.56	739886.29	619.08	1.5X7 PIPE	GG25
WESTON 30	1013620.21	739766.98	620.61	1.5X7 PIPE	GG29
WESTON 31	1014082.14	739810.49	625.33	1.5X7 PIPE	GG33
WESTON 32	1014696.54	739765.73	625.65	1.5X7 PIPE	GG37
WESTON 33	1014070.16	740104.49	627.00	1.5 6.5 PIPE	KK33
WESTON 34	1013867.45	740044.29	625.31	1.5X7 PIPE	KK29
WESTON 35	1011968.45	740144.86	619.52	1.5X7 PIPE	KK13
WESTON 36	1013209.02	740074.05	622.12	1.5X7 PIPE	KK25
WESTON 37	1012649.76	740429.38	621.28	1.5X6.5 PIPE	KK21
WESTON 38	1012805.87	740754.70	624.61	1.5X5.5	OO21
WESTON 39	1013495.68	740686.71	628.14	1.5X7 PIPE	OO25
WESTON 40	1012418.68	740769.94	624.61	1.5X7 PIPE	0017
WESTON 41	1014665.66	738101.60	613.97	1.5X7 PIPE	U37



Table D-2 **US Army Corps of Engineers Quality Assurance Seed Items**

Item ID	Description	Easting	Northing	Elevation
COE-EE	.5X3.5 PIPE	737104.535	1013351	619.437
COE-WW	1.25X5	737175.127	1013747	614.436
COE-UU	1.25X3.5 PIPE	737095.545	1014312	609.014
COE-QQ	1.25X4	736719.905	1014334	605.258
COE-LL	.5X3.5 PIPE	736652.782	1013688	607.06
COE-KK	1.25X5 PIPE	736688.375	1013128	609.09
COE-JJ	5X3.5 PIPE	736624.553	1012610	610.044
COE-II	1.25X5 PIPE	736901.373	1012067	616.847
СОЕ-НН	.5X3.5 PIPE	736682.194	1011654	612.158
COE-GG	1.25X5 PIPE	736862.805	1011188	610.766
COE-PP	75 MM	737402.601	1011811	625.96
COE-OO	75 MM	737194.094	1012271	618.716
COE-NN	105 HEAT	737153.429	1012827	620.776
COE-MM	75MM	737217.197	1011410	616.061
COE-FF	75 MM	737926.589	1010693	630.334
COE-SS	155 IN HALF	737628.579	1011453	632.145
COE-TT	STOKES MORTOR	737530.958	1011827	631.907
COE-VV	75 MM	737578.65	1013694	617.639
COE-XX	STOKES MORTOR	737968.901	1014225	614.89
COE-L	75 MM	737993.69	1014719	613.663
COE-M25	75MM	737819.926	1015018	613.03
COE AA	75MM	738637.593	1010605	635.168
COE CC	75MM	736394.8	1011404	606.519
COE BB	75MM	736354.515	1012266	602.944
COE DD	GRENADE	736589.37	1012815	607.374
COE 16	1.25X5 PIPE	736557.118	1013212	605.097
COE N	75MM	736609.721	1013773	605.185
COE D	2X17 PIPE	739129.145	1015107	608.949
COE G	2.5X24 PIPE	739263.133	1014099	612.759
COE C	2X8 PIPE	739438.723	1013594	616.046
COE H	2X17 PIPE	739800.932	1012824	615.865
COEI	2X24 PIPE	739899.334	1013196	616.519
COE J	1.5X7 PIPE	739823.722	1013625	619.342
COE P	1.5X7 PIPE	739789.329	1014097	624.055
COE R	2X17 PIPE	739800.961	1014664	622.631
COE T	2X24 PIPE	740080.009	1014094	623.636
COE U	2X24 PIPE	740050.587	1013788	620.349
COE V	1.5X7 PIPE	740134.592	1011925	618.053
COE X	2X24 PIPE	740085:277	1013256	619.289
COE Z	2X17 PIPE	740400.93	1012686	619.284
COE 01	2X17 PIPE	740761.833	1012863	621.555
COE 02	1.5X7 PIPE	740669.099	1013459	626.69
COE 03	2X17 PIPE	740815.735	1012419	622.857
COE 04	1.5X7.5 PIPE	738133.633	1014683	612.433

APPENDIX E DATA REACQUISITION



APPENDIX E - DATA REACQUISITION

One component of the QA requirements established by USACE included reacquisition of 367 target anomaly locations. The target anomaly locations were selected by USACE from the geophysical data and entered on Dig Sheets that were given to Parsons' reacquisition team. The reacquisition process involved locating and flagging the targeted anomaly in the field using the Trimble RTK GPS. The flagged location was then resurveyed using the same type of instrumentation used for the initial geophysical survey (EM-61 MK2). The operator scanned the area using a single-coil EM-61 MK2 sensor, in the wheel configuration, to detect the maximum response (using both audible and meter output) most closely associated with the flagged anomaly location. Once detected, the reacquisition team completed the appropriate columns of the Geophysical Dig Sheets and the information was entered into a database. Target reacquisition statistics and data are shown in Tables E -1 and E-2.

Following the 30 September 2003 Root Cause Analysis of Reacquisition Failures, a first order analysis of the reacquisition survey resulted in identification of the following issues: 1) target peak response values well above the original anomaly grid value (ranging from several hundred to an order of magnitude above grid values); 2) numerous false positive responses in the low millivolts range; and 3) isolated false positive responses on targets where the grid value for each target was well above background noise level (grid values ranging from 40+ to 2000+ mV). Response values for several reacquired anomalies show differences of up to three times the original target grid value. Based on a comparison of the data, it was determined that these differences can be attributed to incompatible data acquisition and processing techniques inherent to "dynamic" surveying and "static" reacquisition methods. The *Geosoft* drift correction routine was not applied as there was generally an insufficient number of data points that were part of a peak to determine a baseline value (reference: e-mail from Parsons, 16 September 2003). Dynamic versus static data acquisition has a direct effect on anomaly response.

Following the Root Cause Analysis dated 1 October 2003, it was recommended that targets exhibiting millivolt responses less than 13.0 mV should be deselected from the final target



database. As seen in Table C-1, there are 56 reacquired targets less than 13.0 mV that were false positives in the reacquired data, yielding 40 remaining targets greater than 13.0 mV as false positives. This is equivalent to 10.9% False Positive and an 89.1% detection rate. It is also evident from the dig results presented in Appendix F that anomalies reacquired at less than 13.0 mV have much lower detection probabilities. The results of the reacquisition data support the recommendation of a lower detection rate for targets below 13.0 mV.

TABLE E-1 – DATA REACQUISITION SUMMARY STATISTICS AND TABLE E-2 – DATA REACQUISITION RESULTS

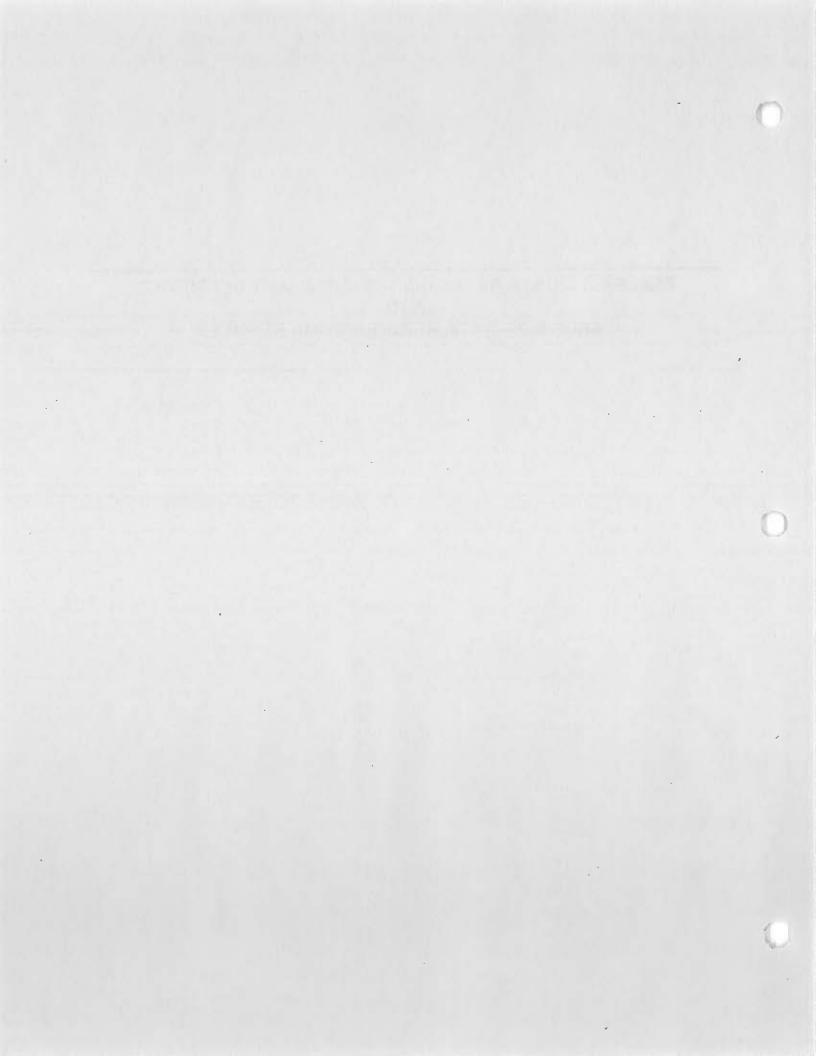




Table E-1 **Data Reacquisition Statistics**

Category	Number of Targets
Total number of targets	367
Number of False Positives	96
False Positives <13 mV	56
False Positives > 13 mV	40
Reacquisition target response (mV) > 100% of Grid Value (No FP)	67
Targets less than 1.0 ft	\$ 1.2°
Targets greater than 1.0 and less than equal to 2.0 ft	27
Targets greater than 2.0 and less than or equal to 3.0 ft	12
Targets greater than 3.0 ft	7
Reacquisition target response (mV) > 200% of Grid Value (No FP)	32
Targets less than 1.0 ft	6
Targets greater than 1.0 and less than equal to 2.0 ft	12
Targets greater than 2.0 and less than or equal to 3.0 ft	8
Targets greater than 3.0 ft	4
Reacquisition target response (mV) > 300% of Grid Value (No FP)	17
Targets less than 1.0 ft	3
Targets greater than 1.0 and less than equal to 2.0 ft	6
Targets greater than 2.0 and less than or equal to 3.0 ft	
Targets greater than 3.0 ft	2

FP = false positives

ft = feet

mV = millivolts

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Tat. _-2
Reacquisition Targets
Seneca Army Depot
Romulus, NY

al Report Seneca Army Depot Open Detonation Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037

		Re	eacquisition Target I	List			Reacquired An	omaly Statistics	
Data File	Anomaly ID	EASTING	NORTHING	Grid Value (mV)	EASTING	NORTHING	Peak Response (mV)	Distance Offset (US Feet)	Distance Offset (inches)
	N31-0001	737157.25	1013836.00	104.7	737156.126	1013835.78	192.5	1.14	13.74
	N32-0004	737153.75	1013954.25	35.8	737154,412	1013954.55	66.0	0.73	8.73
06_09a	M29-0053	737058.75	1013554.00	133,3	737056.723	1013553.32	354.8	2.14	25.66
1	M28-0108	737059.25	1013468.25	28.4	737058.811	1013468.37	62.5	0.46	5.48
	N29-0078	737233.75	1013615.50	36.8	737232.647	1013614.54	346.0	1.46	17.55
	M32-0047	737039.50	1013908.50	137.6	737039.375	1013908.34	168.6	0.20	2.41
	M21-0053	737076.50	1012554.25	17.1	737076,486	1012554.32	27.7	0.07	0.85
	M21-0039	737002.75	1012531.75	16.3	737003.453	1012531.06	19.1	0.99	11.83
	P21-0054	737402,75	1012575.00	81.0		1012001100	19.1	False Positive	False Positive
06 09b	P22-0007	737450.75	1012637.00	46.5				False Positive	False Positive
-	O22-0075	737357.25	1012660.00	30.3	737356,974	1012659.91	45.6	0.29	
	024-0126	737304.25	1012949.50	19.5	737298.517	1012950,93	738.6	5.91	3.50
	M20-0162	737053.75	1012432,25	39.6	737053.957	1012432.90	82.8	0.68	70.94
	N20-0056	737165.50	1012420,00	38.4	737165.505	1012419.79	56.3	0.08	8.14
	O19-0202	737333.50	1012366.50	19.2	737334,115	1012365.32	63.9	1.33	2.56
06 10a	M20-0108	737016.25	1012486.00	382.4	737016.684	1012484.86	526.7		15.95
	M19-0125	737083,50	1012355.75	10.4	737083.448	1012484.86	31.6	1.22 0.12	14.64
	019-0171	737253.00	1012341.75	14.3	157005.440	1012333.80	31.0	l .	1.45
	N19-0027	737168.25	1012291.00	10.9	737169.156	1012290.46	35.6	False Positive	False Positive
	N18-0109	737214.25	1012239.75	64.4	737213,373	1012238.40	78.6	1.05	12.66
	M17-0055	737029.50	1012007.25	50.0	737029.649	1012238.40	454.1	1.61	19.31
06_10b	P19-0019	737490.25	1012302.00	15.7	737029.049	1012007.98	434.1	0.74	8.93
00_100	P19-0092	737490.75	1012256.00	38.1	737490.76	1012256.23	47.6	False Positive	False Positive
	O19-0052	737373.50	1012321.50	10.7	737373.483	1012236.23		0.23	2.81
	O31-0043	737319.50	1013859.00	1688.2	131313,463	1012321,42	14.0	0.08	0.93
	O32-0002	737319.30	1013938.30	15.4				False Positive	False Positive
06 116	O32-0092	737342.50	1013895.30	10.1				False Positive	False Positive
00_110	O32-100	737342.30	1013995.50	10.1				False Positive	False Positive
	P30-0196	737475.00	1013665.50	2300.5				False Positive	False Positive
-	N28-0149	737473.00	1013496.80	10.7	737222,41	1013498.09	120.0	False Positive	False Positive
	029-0243	737222.80	1013512.80	21.2	737258.62		129.0	1.35	16.16
	N30-0119	737237.30	1013651.30	305.4	737214.72	1013512.02	33.6	1.36	16.37
06 12a	N31-0106	737214.80	1013759.30	10.9	/3/214./2	1013648.13	262.9	3.17	38.09
00_124	N31-0115	737248.30	1013739.30	75.3	737248.38	1012000 22	20.4	False Positive	False Positive
	N32-0087	737249.00	1013912.80	73.3 78.7	737249.65	1013809.22	89.6	1.92	23.03
	N32-0060	737249.00	1013912.80	39.6	737249.63	1013914.41	166.6	1.73	20.83
	T34-0005	737201.30		23.0		1013950.56	38.7	1.79	21.53
	T35-0046	737881.00	1014194.80 1014302.50	19.8	737918.68 737880.02	1014195.64	50.0	0.85	10.19
	S35-0098	737806.50	1			1014302.72	67.9	1.00	12.03
06_13b	T35-0111	737998.30	1014350.30	29.0	737805.75	1014349.87	79.5	0.87	10.42
	T35-0111	737923.30	1014370.00	278.4	737999.16	1014370.09	307.3	0.86	10.37
	1		1014374.50	78.5	737923.82	1014375.53	70.0	1.15	13.80
	S36-0028	737821.00	1014478.50	46.1	737820.57	1014478.23	100.9	0.51	6.13
06_14a	R34-0062	737721.50	1014186.50	15.3	737721.10	1014184.39	37.1	2.15	25.78
	R34-0073	737659.50	1014209.00	107.3	737659.11	1014209.32	148.7	0.50	6.06
	W35-0001	738255.00	1014269.30	56.0	738254.18	1014268.37	89.0	1.25	14.95
06_14b	1125 0055	738081.00	1014283.50	17.8	738080.13	1014283.93	49.1	0.97	11.67
	U35-0055	738010.30	1014335.50	16.2	738009.49	1014334.69	71.6	1.15	13.79
	U36-0014	738085.00	1014409.00	238.6	738084.16	1014408.39	342.7	1.04	12.49



Table E-2 Reacquisition Targets Seneca Army Depot Romulus, NY

		Re	eacquisition Target I	ist			Reacquired Ar	nomaly Statistics	
Data File	Anomaly ID	EASTING	NORTHING	Grid Value (mV)	EASTING	NORTHING	Peak Response (mV)	Distance Offset (US Feet)	Distance Offset (inches)
06 16a	W36-0027	738271.50	1014416.00	192.9	738271.91	1014416.79	231.3	0.89	10.72
	S40-0004	737755.00	1014971.50	27.4	737754.41	1014971.30	41.8	0.62	7.50
06_16b	U41-0003	738020.30	1015006.80	92.0	738019.87	1015006.57	96.5	0.49	5.90
	S37-0004	737867.50	1014557.30	45.2	737867.68	1014556.47	49.3	0.85	10.18
04 175	T37-0026	737973.50	1014565.30	11.4	737971.59	1014563.50	33.8	2.62	31.46
06_17b	T38-0040	737932.50	1014660.00	37.9				False Positive	False Positive
	R39-0025	737675.80	1014817.50	114.5	737675.19	1014816.92	157.1	0.85	10.15
	BB04-0010	738942.30	1010382.30	48.8	738941.76	1010382.47	59.4	0.56	6.76
06_17c	BB04-0027	738887.00	1010426.50	43.2	738888.49	1010425.59	44.0	1.74	20.92
06_170	BB05-0048	738937.00	1010619.50	21.0	738937.21	1010619.59	34.9	0.23	2.73
	BB06-0003	738940.30	1010630.80	33.5	738939.92	1010629.47	40.6	1.39	16.65
	K26-0005	736815.50	1013134.30	52.1	736815.27	1013135.60	53.6	1.32	15.89
	L26-0007	736885.30	1013145.50	11.8	736886.10	1013146.00	21.8	0.94	11.28
	1.26-0016	736942.80	1013151.50	10.7	736942.97	1013151.64	138.9	0.22	2.66
	K26-0024	736793.30	1013164.50	77.8	736794.87	1013162.64	75.0	2.43	29.15
06 18	L26-0011	736977.80	1013180.00	124.4	736977.81	1013178.12	126.9	1.88	22.55
00_18	K29-0061	736860.50	1013598.30	20.4	736860.40	1013599.40	35.8	1.10	13.24
	L29-0131	736928.50	1013602.30	97.0	736928.44	1013602.33		0.07	0.82
	L30-0006	736887.30	1013712.80	14.6	736884.59	1013710.07	30.8	3.84	46.13
	K30-0020	736765.00	1013733.30	15.7	736766.74	1013730.70	17.4	3.13	37.59
	K31-0023	736767.30	1013849.30	106.0	736767.67	1013850.57	244.6	1.32	15.84
	Masked	736627.50	1013229.30	13.4				False Positive	False Positive
	J27-0020	736706.00	1013316.50	96.8	736706.67	1013315.52	103.6	1.19	14.25
06_19	129-0011	736580.80	1013535.00	239.8	736581.58	1013535.43	355.7	0.89	10.68
	J31-0020	736680.80	1013833.00	155.2	736681.29	1013832.20	187.5	0.94	11.23
	J32-0023	736699.30	1013912.50	74.9	736699.47	1013913.31	79.4	0.83	9.96
	H25-0010	736378.80	1013008.30	62.4	736379.33	1013007.94	91.6	0.64	7.72
	G27-0007	736355.00	1013308.30	11.6				False Positive	False Positive
06_20	Masked	736367.80	1013469.80	10.7	736370.60	1013467.67	22.1	3.52	42.26
	G33-0042	736359.00	1014009.80	175.1	736359.90	1014009.28	189.6	1.04	12.50
	H34-0010	736442.30	1014189.80	27.9	736442.18	1014190.18	3.1	0.40	4.78
06 23	G26-0024	736339.80	1013190.30	114.2	736340.80	1013189.92	149.3	1.07	12.90
00_23	G30-0025	736322.80	1013718.00	51.8	736322.94	1013717.80	43.3	0.25	2.99
	H27-0014	736492.30	1013284.00	41.3	736492.87	1013283.91	61.3	0.57	6.88
06_24	130-0022	736502.30	1013662.00	14.7				False Positive	False Positive
00_27	H31-0024	736479.30	1013795.30	112.2	736480.15	1013793.16	152.6	2.30	27.61
	131-0014	736558.80	1013806.80	132.0	736557.82	1013807.11	201.3	1.02	12.28
	E26-0002	736123.80	1013147.50	13.5	736123.39	1013147.83	23.0	0.53	6.32
	E26-0013	736031.30	1013196.80	38.0	736033.55	1013195.93	38.3	2,41	28.97
	G26-0003	736272.80	1013212.00	113.5				False Positive	False Positive
06 25a	F27-0006	736175.80	1013322.50	35.0	736176.27	1013319.40	54.2	3.13	37.61
"-2"	G31-0001	736262.50	1013789.00	112.2				False Positive	False Positive
1	E31-0004	736112.50	1013809.80	117.2				False Positive	False Positive
	F32-0015	736160.00	1013941.30	9.8			<u>,</u>	False Positive	False Positive
	G33-0022	736278.80	1014095.30	27.8	736279.79	1014096.18	43.1	1.33	15.93
	134-0022	736520.50	1014151.30	9.8	1			False Positive	False Positive
06_25b	135-0038	736556.80	1014262.80	52.2	736556.68	1014262.16	103.0	0.65	7.77
	136-0055	736565.00	1014453.80	154.0	736561.20	1014456.18	187.8	4.48	53.83

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Tat. _-2
Reacquisition Targets
Seneca Army Depot
Romulus, NY

		R	eacquisition Target l	List			Reacquired An	omaly Statistics	
Data File	Anomaly ID	EASTING	NORTHING	Grid Value (mV)	EASTING	NORTHING	Peak Response (mV)	Distance Offset (US Feet)	Distance Offset (inches)
	K33-0013	736768.80	1014013.50	391.1				False Positive	False Positive
	J33-0003	736636.30	1014076.00	16.5	736637.87	1014076.95	37.1	1.83	22.03
	K33-0006	736841.00	1014112.50	9.9	736847.87	1014118.28		8.98	107.75
06 26	J34-0020	736673.30	1014228.30	14.6	736674.08	1014227.50	6.4	1.11	13.35
00_20	K35-0017	736841.30	1014363.30	10.9	736844.28	1014365.51	4.8	3.70	44,47
	136-0004	736578.00	1014383.00	89.6				False Positive	False Positive
	J36-0010	736657.50	1014384.00	76.1	1			False Positive	False Positive
	K36-0010	736867.50	1014409.00	111.8	736865.13	1014408.06	5.8	2.55	30.57
	O33-0073	737372.00	1014048.00	64.7	737371.87	1014046.42	2.8	1.59	19.07
	M33-0020	737064.30	1014061.00	83.1	737062.94	1014059.84	6.1	1.79	21.47
	N33-0020	737165.00	1014061.30	54.2	737164.89	1014061.28	5.4	0.11	1.35
06 27a	N33-0010	737147.30	1014086.30	126.7	737147.41	1014085.05	14.1	1.26	15.12
V	M34-0004	737010.00	1014146.00	12.8	737008.35	1014144,27	3.8	2.39	28.69
	N34-0010	737148.30	1014164.00	109.3	737148.73	1014163.74	6.0	0.50	6.00
	N34-0041	737195.50	1014168.50	19.0	737196.13	1014168.51	3.5	0.63	7.50
	P37-0002	737390.80	1014580.00	154.7	737391.14	1014580.16	5.3	0.37	4.44
	O09-0014	737343.50	1011008.80	10.7	737343.22	1011009.06	22.3	0.39	4.64
	P09-0076	737499.50	1011097.30	79.0	737498.91	1011097.52	107.1	0.63	7.56
	P09-0002	737381.00	1011102.00	84.5	737380.84	1011101.90	91.9	0.19	2.23
	P11-0054	737451.50	1011296.80	9.7	737452.34	1011296.04	30.2	1.14	13.65
06_27b	P11-0024	737408.30	1011309.80	371.7	737407.85	1011310.71	409.0	1.02	12.20
	P12-0049	737458.50	1011462.00	13.9				False Positive	False Positive
	O14-0011	737336.80	1011665.00	13.7	737336.67	1011665.10	39.3	0.16	1.93
	O14-0007	737332.00	1011736.80	171.1	737331.56	1011736.72	323.9	0.45	5.40
	P15-0069	737433.30	1011802.80	168.8	737433.02	1011802.31	244.7	0.57	6.83
	L08-0011	736907.80	1010988.50	100.7	736906.81	1010988.59	123.8	0.99	11.92
	L09-0028	736982.80	1011004.00	31.2	736982.64	1011003.84	38.6	0.22	2.69
	K09-0020	736812.50	1011066.80	29.0	736810.73	1011065.46	114.4	2.22	26.64
	K09-0016	736799.30	1011118.00	13.6				False Positive	False Positive
	K11-0019	736803.00	1011308.80	28.2	736803.98	1011308.15	83.3	1.18	14.15
06_30	K12-0015	736823.50	1011416.00	13.3	736821.23	1011417.15	59.6	2.55	30.55
	K14-0018	736792.30	1011724.30	49.6	736793.42	1011726.22	971.2	2.23	26.71
	L16-0038	736960.50	1011907.00	149.4	736959.27	1011906.27	231.0	1.43	17.17
	L18-0062	736978.80	1012168.50	14.1	736980.20	1012168.64	23.6	1.41	16.87
ļ	L19-0039	736927.80	1012343.50	141.0	736928.85	1012343.38		1.05	12.65
	L21-0100	736983.80	1012537.80	148.2	736984.33	1012538.54	260.5	0.91	10.94
	K16-0020	736857.00	1011922.30	27.1	736857.21	1011923.92	62.4	1.64	19.66
	K16-0044	736766.80	1011997.80	10.1				False Positive	False Positive
07_01a	K20-0022	736847.30	1012441.50	163.5	736846.32	1012440.98	280.0	1,11	13.33
	K22-0024	736817.50	1012667.80	108.7	736816.74	1012668.25	135.8	0.89	10.63
	K22-0044	736862.50	1012706.80	135.9	736861.48	1012707.11	217.7	1.07	12.82
	F14-0047	736199.50	1011729.00	59.8	736199.15	1011730.14	128.1	1.19	14.32
1	Masked	736178.30	1011802.80	10.3				False Positive	False Positive
07_01b	G15-0016	736297.80	1011867.00	20.7				False Positive	False Positive
	F17-0004	736139.30	1012006.50	14.8				False Positive	False Positive
	D18-0001	735992.80	1012137.50	36.4	735992.96	1012137.70	68.4	0.26	3.10



Table E-2 Reacquisition Targets Seneca Army Depot Romulus, NY

ınal Report Seneca Army Depot Open Detonation Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037

		Re	eacquisition Target	List		The state of the Styles of	Reacquired An	omaly Statistics	
Data File	Anomaly ID	EASTING	NORTHING	Grid Value (mV)	EASTING	NORTHING	Peak Response (mV)	Distance Offset (US Feet)	Distance Offset (inches)
	J08-0003	736702.80	1010952.30	22.5	736700.94	1010949.72	507.8	3.19	38.25
	109-0003	736618.50	1011029.50	157.8	736618.26	1011029.19	191.9	0.39	4.72
	J14-0014	736644.50	1011707.00	25.7	736644.78	1011707.51	41.0	0.58	6.93
0.77.00	H14-0001	736376.80	1011734.00	62.8	730074.70	1011707.51	41.0	False Positive	1
07_02	115-0072	736606.80	1011791.50	107.4					False Positive
	H15-0018	736436.50	1011845.00	10.6				False Positive	False Positive
	G16-0052	736360.50	1011923.30	10.2				False Positive	False Positive
	H17-0014	736447.80	1012002.00	21.6				False Positive	False Positive
	110-0006	736575.00	1011209.50	20.0	736573.35	1011208.82	19.2	False Positive	False Positive
	H10-0003	736499.00	1011242.50	18.3	736500.34	1 ' 1		1.78	21.41
07_03a	111-0017	736622,30	1011242.30	10.3	/30300.34	1011242.71	73.5	1.35	16.23
	H12-0018	736464.80	1011408.50	70.8			100 =	False Positive	False Positive
	RA06-0005	737727.30			727726	1010/50 00	108.7	False Positive	False Positive
	TA06-0013		1010653.00	65.0	737726.56	1010652.90	199.4	0.74	8.92
07_03ь	WA07-0002	737904.30	1010694.80	133.1	737903.57	1010694.92	249.6	0.74	8.91
		738295.50	1010751.50	260.9	738296.33	1010752.60	546.6	1.37	16.50
	CC07-0005	739090.80	1010838.00	53.6	739091.05	1010837.67	77.8	0.41	4.98
07.07	Masked	739784.00	1010875.00	9.8				False Positive	False Positive
07_07a	KK08-0005	740003.80	1010919.50	10.3				False Positive	False Positive
	1108-0008	739808.50	1010934.50	102.2	739807.47	1010934.92	227.7	1.11	13.38
	Q06-0003	737592.00	1010742.50	113.5	737592.00	1010742.98	108.5	0.48	5.71
07_07ь	Q10-0024	737587.50	1011175.80	70.6	737585.78	1011174.60	116.8	2.10	25.20
	Q10-0011	737607.00	1011194.30	91.8	737605.06	1011195.66	642.2	2.37	28.45
	V03-0006	738154.00	1010368.80	60.6				False Positive	False Positive
	S04-0005	737826.00	1010432.80	59.4	737824.01	1010431.65	76.1	2.30	27.60
07_08a	V04-0012	738170.80	1010489.30	11.8	738172.51	1010489.34	41.1	1.71	20.49
	T08-0046	737948.00	1010885.80	217.4	737948.38	1010886.27	277.8	0.61	7.32
	T08-0066	737998.50	1010932.00	11.5	737995.33	1010935.55	42.5	4.76	57.12
	FF06-0004	739477.50	1010737.80	130.1	739478.34	1010739.33	365.9	1.75	21.01
	HH06-0025	739731.00	1010748.00	120.4	739730.93	1010748.49	131.8	0.49	5.91
07_08ь	GG07-0007	739587.80	1010758.00	11.2				False Positive	False Positive
	1107-0021	739874.00	1010793.80	93.9	739873.89	1010791.33	100.1	2.48	29.74
	HH08-0008	739705.30	1010884.80	167.3	739703.95	1010885.87	289.4	1.72	20.65
	KK15-0097	740094.50	1011759.00	135.3	740094.48	1011759.05	133.3	0.05	0.65
	LL13-0018	740134.50	1011521.30	10.4	!			False Positive	False Positive
	LL13-0057	740190.50	1011539.80	31.9	740190.13	1011541.38	35.3	1.63	19.53
	LL13-0074	740227.50	1011620.80	21.1	740226.22	1011619.86	31.7	1.59	19.12
	LL15-0025	740191.30	1011788.00	13.5	740191.57	1011786.99	105.3	1.04	12.50
07 09	LL15-00444	740232.80	1011847.00	9.7	740232.87	1011846.71	18.1	0.30	3.57
_	LL16-0043	740190.30	1011969.80	48.8	740189.74	1011970.01	48.1	0.60	7.15
	LL17-0043	740175.80	1012067.50	176.6	740176.54	1012068.66	378.4	1.37	16.46
	MM13-0008	740281.50	1011617.00	28.3	740170.34	1012008.00	89.4	1.37	1
	MM14-0024	740297.00	1011736.50	142.6	, 10202,/1	1011017.07	07. 4	False Positive	14.58
	NN12-0062	740402.30	1011458.50	20.0	740403.76	1011459.24	69.5	1.64	False Positive
	07_10b-22	739418.30	1011062.80	301.7	739418.76	1011439.24	483.4	0.49	19.70
	EE10-0007	739308.30	1011250.00	20.3	739309.34	1011062.63	483.4 62.7	7	5.84
07 10b	07 10b-165	739224.00	1011321.30	496.3	739309.34	1011249.84	1022.1	1.05	12.61
0100	07_10b-163 07_10b-311	739224.00	1011321.30	11.4	739222.84			1.56	18.79
	07_10b-311 07_10b-396	739313.00	1			1011414.19	24.1	0.90	10.78
	1 07 100-390	/39313.00	1011453.00	116.6	739312.66	1011452.17	178.6	0.90	10.81



Tax... E-2
Reacquisition Targets
Seneca Army Depot
Romulus, NY

		R	eacquisition Target I	List			Reacquired An	omaly Statistics	
Data File	Anomaly ID	EASTING	NORTHING	Grid Value (mV)	EASTING	NORTHING	Peak Response (mV)	Distance Offset (US Feet)	Distance Offset (inches)
	NN20-0009	740452.50	1012466.00	68.0	740452.24	1012465.43	169.9	0.63	7.60
	MM21-0004	740372.50	1012501.00	145.9	740371.79	1012500.03	193.3	1.20	14.41
	NN21-0023	740405.50	1012559.80	114.0	740404.64	1012560.07	150.8	0.90	10.77
07_10c	NN21-0024	740395.50	1012561.50	11.8	740394.41	1012562.53	20.1	1.50	18.06
	NN22-0021	740386.00	1012684.30	13.6	740386.63	1012683.17	23.1	1.30	15.59
	NN23-0018	740399.80	1012750.50	10.1	740398.50	1012752.43	19.8	2.33	27.92
	NN23-0015	740412.30	1012752.50	24.1	740414.70	1012753.63	130.8	2.65	31.80
	OO20-0005	740507.50	1012376.00	65.1	740507.21	1012376.60	67.7	0.66	7.97
	PP20-0012	740705.80	1012432.50	242.1				False Positive	False Positive
	QQ21-0004	740823.80	1012540.80	83.7				False Positive	False Positive
	PP22-0005	740719.30	1012686.50	24.5	740719.44	1012686.35	44.9	0.21	2.47
	OO22-0005	740528.80	1012720.00	467.3				False Positive	False Positive
07_11	QQ24-0001	740868.80	1012890.30	78.2	740868.74	1012889.69	135.1	0.61	7.31
_	PP24-0010	740665.00	1012896.50	41.5	740665.06	1012896.09	51.5	0.42	5.02
1	QQ25-0011	740781.30	1013074.30	83.1	740781.09	1013074.27	9470.7	0.21	2.51
	MM27-0004	740297.80	1013264.00	83.4				False Positive	False Positive
	OO27-0003	740579.80	1013346.30	11.5				False Positive	False Positive
	PP28-0001	740707.30	1013402.80	43.8	740708.30	1013402.16	95.7	1.18	14.20
	PP28-0003	740653.50	1013437.50	11.0				False Positive	False Positive
	NN24-0010	740398.50	1012998.30	184.5	740397.80	1012999.72	293.9	1.59	19.08
	NN25-0004	740387.50	1013010.30	149.5	740388.03	1013008.43	45.5	1.94	23.32
07.12-	MM26-0030	740297.30	1013179.80	10.9	1			False Positive	False Positive
07_12a	NN28-0003	740474.00	1013403.50	17.2				False Positive	False Positive
	OO28-0006	740505.30	1013467.30	43.6	740506.16	1013468.09	34.6	1.17	14.03
	OO29-0004	740598.50	1013549.00	10.6	ļ			False Positive	False Positive
	OO29-0011	740504.50	1013612.30	35.5				False Positive	False Positive
	MM20-0004	740295.80	1012435.00	13.2				False Positive	False Positive
	MM23-0020	740250.80	1012841.80	13.7				False Positive	False Positive
07_12b	KK24-0075	740007.50	1012891.80	14.8	740007.15	1012892.64	31.3	0.91	10.86
	KK24-0029	740082.00	1012901.30	17.3	740081.54	1012901.67	26.5	0.59	7.08
	KK24-0018	740113.00	1012965.30	10.8	740113.15	1012964.46	30.9	0.85	10.22
	JJ25-0001	740247.50 739975.00	1013049.50	41.6 13.5	740247.79	1013049.62	52.4	0.31	3.69
	JJ25-0010 JJ25-0022	739975.00 739944.75	1013067.50 1013084.25	13.5 48.9	739976.33	1013069.09	116.7	2.07	24.88
	1125-0015	739780.00	1013084.25	48.9 27.4	739944.62	1013082.87	31.7	1.39	16.66
	HH26-0021	739780.00	1013116.00	299.6	739720.28	1012140.04	210.0	False Positive	False Positive
	JJ26-0038	739720.00	1013151.00	299.6 12.5	739720.28	1013149.96	319.8	1.08	12.95
07 14	LL26-0018	740176.50	1013100.23	37.9	740175.88	1013163.99	21.7	2.27	27.22
07_17	GG26-0012	739612.75	1013194.25	193.5	739612.53	1013195.37 1013229.62	48.2 259.1	1.28	15.38
	KK27-0003	740115.75	1013255.25	12.2	740115.50	1013229.62		1.15	13.80
	JJ27-0010	739982.50	1013283.75	53.9	739982.78	1013254.82	25.7	0.50	6.00
	KK27-0027	740032.25	1013283.75	60.4	740032.35		50.3	0.28	3.38
	KK27-0027	740032.23	1013328.23	10.9	/40032.33	1013328.89	96.0	0.65	7.78
	LL28-0005	740027.23	1013334.00	10.3		[False Positive	False Positive
	1 1140-0003	/70170./3	T 10155/0./5	10.3	l			False Positive	False Positive

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Tak E-2
Reacquisition Targets
Seneca Army Depot
Romulus, NY

		Re	eacquisition Target	List			Reacquired An	omaly Statistics	
Data File	Anomaly ID	EASTING	NORTHING	Grid Value (mV)	EASTING	NORTHING	Peak Response (mV)	Distance Offset (US Feet)	Distance Offset (inches)
	EE26-0140	739339.30	1013186.00	188.9	739340.07	1013185.23	254.1	1.09	13.04
	JJ28-0019	739926.30	1013485.00	66.2	739925.99	1013485.45	73.9	0.54	6.52
07 15	1129-0024	739790.00	1013520.30	175.8	739790.75	1013519.84	273.0	0.88	10.53
07_13	FF29-0048	739434.80	1013578.30	68.1	739434.66	1013578.34	83.1	0.15	1.80
	FF29-0004	739494.80	1013594.50	156.0	739495.03	1013594,98	131.1	0.53	6.32
	EE30-0023	739352.00	1013645.30	160.0	739351.85	1013645.52	178.1	0,26	3.17
	HH32-0008	739729.30	1013973.00	317.0	739729.22	1013972.08	591.8	0.92	11.05
	II32-0002	739767.00	1013988.80	9.6	739766.91	1013989.77	23.4	0.98	11.72
	HH33-0022	739700.50	1014067.50	57.3	739700.88	1014067.66	93.6	0.42	5.00
07_17	FF33-0034	739465.80	1014069.30	69.7	739464.78	1014071.35	77.7	2.29	27.43
	DD33-0032	739241.00	1014103.50	88.1				False Positive	False Positive
	FF34-0017	739477.80	1014146.50	26.1	739477.01	1014144.55	60.6	2.10	25.26
	EE34-0026	739332.50	1014171.00	72.6				False Positive	False Positive
	LL28-0019	740171.75	1013411.25	10.1				False Positive	False Positive
	LL31-0014	740132.75	1013755.00	10.1				False Positive	False Positive
	KK33-0029	740107.00	1014024.25	11.0				False Positive	False Positive
07_18a	EE34-0055	739293.50	1014177.25	9.7				False Positive	False Positive
	GG34-0034	739556.25	1014195.25	11.1				False Positive	False Positive
	II34-0039	739855.00	1014210.00	160.7	739853.27	1014209.75	242.9	1.75	21.00
	KK34-0024	740049.50	1014243.00	13.4				False Positive	False Positive
	EE34-0040	739359.50	1014247.25	9.7				False Positive	False Positive
	JJ36-0007	739972.50	1014485.00	16.7				False Positive	False Positive
	II37-0019	739812.00	1014604.00	99.0				False Positive	False Positive
	JJ37-0033	739930.50	1014623.00	9.8				False Positive	False Positive
07_18b	GG38-0007	739624.50	1014689.00	15.7				False Positive	False Positive
	FF39-0001	739495.75	1014824.25	9.6				False Positive	False Positive
	HH39-0015	739714.50	1014856.75	13.3				False Positive	False Positive
	CC41-0006	739034.50	1015089.25	9.5				False Positive	False Positive
	CC42-0012	739006.25	1015196.50	10.1				False Positive	False Positive
	AA35-0050	738817.50	1014266.80	19.8	738818.11	1014268.39	31.8	1.70	20.44
07 19a	BB35-0054	738878.00	1014268.80	46.1	738880.51	1014270.96	93.9	3.31	39.75
_	AA35-0117	738767.80	1014279.80	22.3	738767.77	1014280.82	18.9	1.02	12.23
	AA35-0014	738857.80	1014317.00	9.8	738856.81	1014318.84	13.3	2.09	25.12
	CC37-0005	739064.75	1014602.00	11.8				False Positive	False Positive
	GG37-0008	739503.50	1014605.25	9.6				False Positive	False Positive
	CC38-0002	739054.50	1014738.75	68.4	739054.86	1014738.80	78.0	0.36	4.37
	EE39-0007	739333.00	1014807.50	9.7	1			False Positive	False Positive
	DD39-0011	739189.00	1014811.50	10.0				False Positive	False Positive
07_21a	CC39-0005	739043.00	1014818.25	10.1	}			False Positive	False Positive
	EE39-0003	739273.50	1014823.75	63.1	739273.72	1014823.39	119.9	0.43	5.12
	CC39-0020	739067.50	1014825.75	10.1	-			False Positive	False Positive
	DD39-0016	739220.50	1014838.75	10.6				False Positive	False Positive
	DD39-0003	739132.50	1014846.75	12.9				False Positive	False Positive



Tal. _-2
Reacquisition Targets
Seneca Army Depot
Romulus, NY

		R	eacquisition Target	List			Reacquired An	omaly Statistics	
Data File	Anomaly ID	EASTING	NORTHING	Grid Value (mV)	EASTING	NORTHING	Peak Response (mV)	Distance Offset (US Feet)	Distance Offset (inches)
	Masked	740014.75	1012739.25	11.1				False Positive	False Positive
	Masked	740103.25	1012770.25	10.0				False Positive	False Positive
	II23-0180	739751.25	1012782.75	14.3	739754.25	1012779.29	48.1	4.58	54.97
07_21b	KK23-0087	740016.50	1012798.75	10.2	740016.09	1012799.67	19.7	1.01	12,09
	II23-0105	739873.25	1012816.50	10.2	ļ			False Positive	False Positive
	JJ23-0080	739947.50	1012850.25	29.9	739946.93	1012850.46	39.8	0.61	7.35
	MM24-0012	740261.00	1012892.00	10.1	740262.23	1012889.65	50.2	2.65	31.80
	LL24-0076	740184.00	1012919.50	12.2	1			False Positive	False Positive
	1121-0047	739865.00	1012516.30	148.2	739862.97	1012516.07	159.1	2.04	24.49
07 22a	1121-0096	739780.30	1012589.50	269.0	739780.91	1012589.40	337.2	0.62	7.42
07_224	JJ21-0034	739947.30	1012604.80	174.9	739947.41	1012606.31	211.5	1.51	18.15
	LL21-0025	740145.30	1012603.30	120,4	740145.80	1012603.25	148.9	0.50	5.97
	Q41-0001	737618.50	1015034.80	22.8	737617.70	1015035,05	36.5	0.84	10.11
07_22b	S42-0008	737834.50	1015132.00	33.9	737834.49	1015132.33	51.7	0.33	3.91
	S42-0009	737819.00	1015167.00	10.0	737819.00	1015167.19	30.5	0.19	2.28
	L38-0021	736911.00	1014709.75	13.2		1110		False Positive	False Positive
	M38-0015	737002.00	1014744.50	13.4				False Positive	False Positive
	M38-0020	737040.50	1014746.50	105.1	737040.17	1014745.89	99.5	0.69	8.32
	Masked	737448.75	1014769.00	78.8	737447.81	1014768.71	119.7	0.98	11.77
07_23	N39-0001	737132.75	1014769.00	135.0	737133.04	1014768.83	174.0	0.34	4.07
_	N39-0019	737222.75	1014824.00	12.7	1 707100101	1011700.03	174.0	False Positive	
	M39-0013	737072.75	1014827.75	11.6				False Positive	False Positive
	Masked	737405.25	1014862.00	11.2	1			False Positive	False Positive
	O40-0025	737351.50	1014980.00	47.4	737352.20	1014980.34	76.3	0.77	False Positive
	07_25a-56	738342.00	1014487.00	55.0	131332.20	1014200.54	70.5	False Positive	9.27
07 25a	07 25a-151	738273.50	1014613.30	107.0	738272.66	1014611.27	124.4	2.20	False Positive
_	07 25a-246	738272.80	1014769.00	159.7	738272.13	1014768.65	131.5	0.76	26.35 9.08
	07 25b-47	738548.50	1014264.00	122.5	738548.25	1014768.65	129.7	0.76	
07 25b	07 25b-210	738664.50	1014665.50	219.2	738663.40	1014264,80	425.0	1,49	10.72
	07_25b-253	738550.30	1014760.30	9.9	750005.40	1014000.51	423.0	,	17.85
	J22-0010	736726.00	1012736.00	12.2	736727.11	1012738,46	38.3	False Positive 2.70	False Positive
	J23-0010	736715.50	1012841,00	150.0	736716.34	1012738.40	223.3	0.85	32.44
07_26a	J24-0012	736716.50	1012919.80	142.6	736716.03	1012919.62	239.5	1	10.19
	L24-0086	736887.50	1012945.50	252.4	736887.15	1012919.02	296.3	0.50	6.02
	G18-0023	736252.50	1012247.25	11.5	730007.13	1012943.91	290.3		6.54
	G19-0012	736302.75	1012335.75	58.5	736303.31	1012336.80	94.2	False Positive	False Positive
	H20-0023	736382.75	1012333.73	9.6	/30303.31	1012330.80	86.2	1.18	14.20
	J21-0091	736640.00	1012502.50	181.6	736638.61	1012502,20	150.1	False Positive	False Positive
	H21-0020	736396.50	1012546.25	9.5	/30036.01	1012302,20	159.1	1.42	17.06
07 28	J21-0020	736734.75	1012546.25	10.3				False Positive	False Positive
07_20	I22-0010	736591.00	1012675.75	1	1			False Positive	False Positive
	I23-0056	736552.00		11.0	734553.00	1012750 72	222.0	False Positive	False Positive
	123-0056		1012752.50	135.0	736552.08	1012750.72	232.8	1.78	21.37
	1 1	736521.25	1012788.00	130.8	736521.96	1012787.71	153.0	0.77	9.19
	123-0016	736603.00	1012833.50	10.1				False Positive	False Positive
	J24-0075	736629.00	1012932.25	13,9				False Positive	False Positive
	124-0014	736624.00	1012979.00	14.4	L			False Positive	False Positive



		Ro	eacquisition Target l	List			Reacquired Ar	omaly Statistics	
Data File	Anomaly ID	EASTING	NORTHING	Grid Value (mV)	EASTING	NORTHING	Peak Response (mV)	Distance Offset (US Feet)	Distance Offset (inches)
	Masked	Not Found	Not Found						Distance Griser (inches)
	F22-0082	736164.75	1012681.00	78.4	736165.41	1012681.90	57.9	1.12	13.44
	H22-0041	736406.50	1012728.50	77.0	736406.20	1012728.28	80.7	0.38	4.52
	F23-0007	736195.50	1012753.75	9.9			5017	False Positive	False Positive
07-29a	G23-0033	736323.00	1012817.50	9.5				False Positive	False Positive
	G23-0059	736282.25	1012859.25	51.7				False Positive	
	H24-0052	736475.75	1012890.50	10.0				False Positive	False Positive
	Masked	Not Found	Not Found					raise rositive	False Positive
	U40-0015	738105.00	1014913.25	522.5	738103.80	1014912.24	596.0	1.57	18.85
	V41-0012	738203.75	1015068.00	10.3	1 100105.00	1011712.21	370.0	False Positive	
07_29ь	V41-0054	738151.25	1015075.00	10.6				False Positive	False Positive
_	U42-0057	738060.50	1015156.75	9.7				False Positive	False Positive
	U42-0038	738086.00	1015166.75	118.3	738084.40	1015166.66	160.0	1.61	False Positive
	Masked	Not Found	Not Found	110.5	750001.10	1015100.00	100.0	1.01	19.29
	U36-0109	738031.50	1014438.00	9.9				F-1 P	
	U36-0110	738029.00	1014494.75	123.9	738029.15	1014494.90	165.6	False Positive	False Positive
	U37-0005	738081.00	1014525.25	77.8	738029.13	1014525,25		0.21	2.50
07 30	U37-0038	738045.75	1014601.75	55.2	738075.20	1014601.73	105.7	1.02	12.20
07_50	U38-0048	738014.50	1014721.75	10.4	736043.20	1014001.73	59.5	0.55	6.57
	U39-0075	738076.00	1014721.75	17.3				False Positive	False Positive
	Q38-0028	737555.50	1014732.00	9.7			· · · · · · · · · · · · · · · · · · ·	False Positive	False Positive
	Q38-0028 Q39-0031	737548.25	1014747.00					False Positive	False Positive
	P39-0026	737409.00		12.1				False Positive	False Positive
07 31	P40-0004	737409.00	1014868.00	10.3				False Positive	False Positive
07_31	1		1014884.25	12.5				False Positive	False Positive
	Q40-0034 P40-0024	737501.75	1014897.75	10.3	#2# 40 4 00			False Positive	False Positive
		737400.50	1014903.25	41.8	737401.09	1014902.69	35.6	0.81	9.76
	Q40-0028	737522.25	1014961.25	28.5	737522.32	1014961.24	44.0	0.07	0.83
	V37-0018	738174.00	1014507.25	69.4	738173.88	1014508.01	53.5	0.77	9.24
	V37-0020	738161.75	1014589.75	41.2	738161.29	1014590.49	72.9	0.88	10.51
	V38-0032	738133.00	1014635.75	9.8	738132.70	1014636.10	16.9	0.46	5.57
00.01	U38-0094	738006.50	1014658.00	9.6				False Positive	False Positive
08_01	U38-0056	738119.00	1014684.50	11,9				False Positive	False Positive
	V38-0012	738186.25	1014705.00	10.1				False Positive	False Positive
	V38-0013	738185.75	1014729.25	32.8	738186.78	1014727.97	54.7	1.65	19.75
	U39-0091	738083.25	1014758.75	30.2	738083.94	1014758.52	35.8	0.73	8.73
	P40-0032	737392.50	1014877.75	10.5				False Positive	False Positive
	O40-0034	737358.50	1014988.25	82.1	737359.32	1014988.08	198.4	0.84	10.04
	P40-0034	737377.50	1014988.50	9.6				False Positive	False Positive
	HH27-0096	739631.75	1013317.00	9.5	739633.56	1013317.69	42.4	1.93	23.22
08_04	JJ27-0048	739917.25	1013357.75	10.0	739916.27	1013358.83	20.9	1.45	17.44
	HH27-0079	739665.25	1013367.75	10.6	[False Positive	False Positive
	JJ28-0044	739951.50	1013382.25	270.4	739952.65	1013382.78	375.6	1.27	15.23
	JJ22-0060	739888.25	1012676.25	10.0				False Positive	False Positive
	JJ22-0026	739949.50	1012683.00	10.5				False Positive	False Positive
08_05	1122-0081	739810.25	1012686.25	12.1				False Positive	False Positive
	KK22-0005	740113.50	1012705.00	69.2	740113.21	1012705.49	74.0	0.56	6.78
	1122-0088	739787.75	1012721.00	138.3	739787.86	1012721.12	231.5	0.16	1.91
	Total	367					AVG	1.23	14.81

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APPENDIX F TARGET REACQUISITION AND DIG RESULTS



APPENDIX F - TARGET REACQUISITION AND DIG RESULTS

During the Phase I Geophysical Investigation WESTON was tasked by USACE to reacquire, remove, and identify approximately 1,100 target anomalies from within the ODG wooded and non-wooded areas. The purpose of this investigation was to obtain pilot scale sample data representative of future Phase II MEC reacquisition and removal activities. Target anomaly reacquisition was conducted between 11 July and 30 July 2003, and consisted of removing a minimum of 600 anomalies within wooded areas (transect locations) and a minimum of 500 anomalies within non-wooded/open areas. Target data points were selected from the geophysical data and reacquired in the field using the Trimble RTK GPS. Upon reacquisition of a targeted anomaly position, the location was flagged and labeled with the grid number and primary anomaly ID (i.e., G10-0003-1). Additional anomaly IDs were assigned when multiple items were removed from one target location (i.e., G10-0003-2 etc.).

A total of 11 UXO Technicians (five two-man teams and one senior UXO supervisor) were mobilized to the site to dig the flagged locations. Each team consisted of one UXO Tech III Team Leader and one UXO Tech II Team Member. Three of the five UXO teams reacquired anomalies within the open areas, one UXO team reacquired anomalies within transects, and one UXO team continued with manual "mag & flag" operations within transects using Schonstedt GA-52CX ferrous metal detectors.

In accordance with USACE's Explosives Safety Submission, engineering controls were required when the UXO teams were working within 1,123 ft of the base boundary. Engineering controls consisted of USACE-approved Miniature Open Front Barricades (MOFBs) (Photos 7 and 8, Appendix A). The MOFBs were not required outside 1,123 ft of the base boundary. When the UXO teams were working within 200 ft of the property line, a safety observer was stationed outside the property fence to watch for vehicular and pedestrian traffic. When such traffic approached within 200 ft of the dig operation, the safety observer halted the dig team until the traffic had passed 200 ft from the operation.



During the course of anomaly reacquisition, WESTON and EOTI UXO Technicians investigated a total of 736 anomalies within wooded areas (transect locations). These anomalies included 3 MEC items, 184 munitions debris items, and 549 non-MEC items. A total of 512 anomalies were investigated within non-wooded/open areas. These anomalies included 46 MEC items, 247 munitions debris items, 205 non-MEC items, and 14 No Contacts. Dig sheet data is presented in Table F-1, and the ACRs and Daily Inspection Reports for anomaly reacquisition activities (11 July to 30 July 2003) are included as an attachment to this appendix.



Tabl Geophysical Dig She. Id Target History

Seneca Army Depot Open De Contract No. D/ Task

Final Report Grounds 9-D-0004 4 No. 0037

Project Name: Coen Ostonation Grounds
Project Location: Sanesa Arm Depot, Romulus NY
MASTER DIG SHEET
Coordinate System NY State Plane Contral NAD.63
Survey Area ID:
Sector: NA Grid NA
Field Book ID.

Geophysical Contractor: Project Geophysicist: WESTON UXO Salety

Parsons Engineering Bart Hoekstra John Baptiste

Frank Henderson Steffanie Warriner John Williams/Ryan Steigerwalt

Parsons Field Team Erich Stedman Jae Yun Peter Anderson Greg Nelson Melissa Nugent WESTON Field Team
George Payne (SUXOS)
Joe Kendall (TL) EOTI Field Tearr Carver Cobbins (TL) MartyHolmes (TL)
Don Koch (TL) Dan Dornell
Thomas Meeks Mike Tumer
Frank Montes
Shawn Quigly Brian Ditsch (TL)

Survey Area ID: Sector:	ALA.	Grid.	NA		_WESTON U	XO Safety roject Engineer		Frank Henderson				Frank M				Gre	g Nelson					
Field Book ID:	NA NA	Gnu.	MA		WESTON G	eophysicist:		Steffanie Warriner John Williams/Ryan Stelpenvalt				Shawn C	auigiy			Melis	sa Nugent					
					WESTON S	Reacquisition		Steve Kireiczyk						L								
	<u> </u>	Original Surve	ey			Reacquisition w/RTK			Dig Results	Neet .	Depth (in)				Post-Di	uxo oc	Results	Post-Dig G	eophysical C	c	Status of	OE
1			Channel ID (se	Amothuta						Direction	Coperfing	1	1	Team	Exemution	ихо ос		Agreement between Dig				
1 to 1 Towns 10	Easting Coord. (fl)	Northing Coord (ff)	C1 . C4, lop mension,	Response (mV)	Dete	Date	Anomaly	C	Distance	(N. NE.			Data	Leader	Hale	Spec.		Resulte & Geophysical Data? (Good, Average.	Geophysiciet			1
Unique Target ID		Coord, 110	oradent etc		Dete		Туре	Comments	(in)	etc.)	Top of Hern	Digital Photo Filename		Initials	Cleared?	Initials	Date	Poor, Poor)	QC Initials	Date	Current Status	Final Disposition
D26-0007	735966	1013190.3	Sum 1-4	62.09		7/10/2003	Non-OE	I-Beam	60	SE_	0	NA.	7/11/2003	JK	Yes	FJH	7/12/2003	Poor	JW	7/12/2003		_Disposed off-site
D26-0008	735968,5	1013173.3	Sum 1-4	115.07	 -	7/10/2003	Non-OE	Barb Wire Holder For Top of Fence	48	SE	-0	NA .	7/11/2003	JK	Yes	FJH	7/12/2003	Poor	JW	7/12/2003		Disposed off-site
D28-0010	735961,25	1013187,8	Sum 1-4	623 81		7/10/2003	Non-OE	I-Beam	48	SĘ	0_	NA .	7/11/2003	JK	Yes	FJH	7/12/2003	Poor	JW	7/12/2003		Disposed off-site
E25-0004	736082,5	1013102	Sum 1-4	72.84		7/10/2003	Non-OE	Round Stock	_24	w	0	NA .	7/11/2003	JK	Yes	FJH	7/12/2003	Average	WL	7/12/2003		Disposed off-site
138-0004	736578	1014383	Sum 1-4	89.64		7/10/2003	Non-OE	Horseshoe		w	4_	NA.	7/11/2003	JK	Yes	FJH	7/12/2003	Good	JW	7/12/2003		Disposed off-site
136-0011	736625	1014477	Sum 1-4	54.41		7/10/2003	Non-OE	Plow Toolh	20	s	5	NA	7/11/2003	JK	Yes	FJH	7/12/2003	Average	JW	7/12/2003		Disposed off-site
138-0013	736584	1014465.5	Sum 1-4	320 22		7/10/2003	Non-OE	Wire	e	w	0	NA	7/11/2003	JK	Yes	FJH	7/12/2003	Good	JW	7/12/2003		Disposed off-site
136-0018	736598.25	1014464.8	Sum 1-4	99		7/10/2003	Non-OE	Pick-Head	38	w	4	NA	7/11/2003	JK	Yes	FJH	7/12/2003	Poor	JW	7/12/2003		Disposed off-site
138-0019	736579.51	1014443.9	Sum 1-4	67.53		7/10/2003	Non-OE	Plow Tooth	18	sw	4	NA	7/11/2003	JK	Yes	FJH	7/12/2003	Average	JW	7/12/2003		Disposed off-site
137-0007	736589	1014528.5	Sum 1-4	184.92		7/10/2003	Non-OE	Strap	18	F	2	NA	7/11/2003	JK	Yes	FJH	7/12/2003	Average	JW	7/12/2003		Disposed off-site
J36-0024	736627.75			209.63		7/10/2003	Non-OE	Horseshoe	18		1	NA	7/11/2003	JK.	Yes	FJH	7/12/2003		JW	7/12/2003		
J37-0006	736742			92.84		7/10/2003	Non-OE	Strap	24	-	0.5	NA NA	7/11/2003	JK.	Yes	FJH		Average				Disposed off-alte
		1014379.3		138,62		7/10/2003	Non-OE			w	0.5			JK	ĺ .		7/12/2003	Average	JW	7/12/2003		Disposed off-site
K36-0002		T						Horseshoe	18	w	2	NA	7/11/2003	JK	Yes	FJH	7/12/2003	Average	JW	7/12/2003		Disposed off-site
K36-0010	736867,5		Sum 1-4	111.82	 	7/10/2003	Non-OE	Wrench	12	E	4	NA.	7/11/2003	JK_	Yes	FJH	7/12/2003	Good	JW	7/12/2003		Disposed off-site
K37-0016	736863,75	T	Sum 1-4	123,37		7/10/2003	Non-OE	Scrap Metal	4	s	6	NA	7/11/2003	JK	Yes	FJH_	7/12/2003	Good	JW	7/12/2003		Disposed off-site
K39-0002	736871.75	1014768	Sum 1-4	77.38		7/10/2003	Non-OE	Pipe Wrench Head - Piece Only	8	<u>E</u>	3	NA.	7/11/2003	Ж	Yes	FJH	7/12/2003	Good	JW	7/12/2003		Disposed off-site
L33-0012	736979,75	1014013.5	Sum 1-4	84.22	 	7/10/2003	Non-OE	Plow Tooth	_ 12	N	8	NA	7/11/2003	JK	Yes	FJH	7/12/2003	Good	JW	7/12/2003		Disposed off-site
L33-0021	736875.5	1014025.3	Sum 1-4	51.93		7/10/2003	Non-OE	Nail	8	N_	6	NA	7/11/2003	JK	Yes_	FJH	7/12/2003	Good	JW	7/12/2003		Disposed off-site
L33-0035	736960 25	1014078.8	Sum 1-4	102.12		7/10/2003	Non-OE	Plow Tooth	18	w	3	NA	7/11/2003	_JK	Yes	FJH_	7/12/2003	Average	JW	7/12/2003		Disposed off-site
L35-0003	738988.25	1014370,5	Sum 1-4	127.75		7/10/2003	Non-OE	Grounding Rod	12	NW	3	NA.	7/11/2003	JK	Yes	FJH_	7/12/2003	Good	JW_	7/12/2003		Disposed off-site
L35-0015	736985	1014307	Sum 1-4	243.51		7/10/2003	Non-OE	Steel Flat Stock	_12_	NW.	2	NA	7/11/2003	JK	Yes_	FJH	7/12/2003	Good	JW	7/12/2003		Disposed off-site
L36-0011	736879,75	1014435	Sum 1-4	60.15		7/10/2003	Non-OE	Horseshoe	18	E	6	NA	7/11/2003	JK	Yes	FJH	7/12/2003	Average	JW	7/12/2003		Disposed off-site
£36-0013	736945.75	1	Sum 1-4	139,13		7/10/2003	Non-OE	Round Stock	30	T w	3	NA	7/11/2003	JK	Yes	FJH	7/12/2003	Poor	JW	7/12/2003		Disposed off-site
L38-0020	738974.75	1	Sum 1-4	62.18		7/10/2003	Non-OE	Spike	18	w	7	NA.	7/11/2003	JK	Yes	FJH	7/12/2003	Average	JW	7/12/2003		Disposed off-site
L36-0021	736923	1014449,3	Sum 1-4	119.97		7/10/2003	Non-OE	Horseshoe	20	w	3	NA.	7/11/2003	JK	Yes	FJH	7/12/2003	Average	JW	7/12/2003		Disposed off-site
									18		1		7/11/2003	- JK		FJH	7/12/2003		JW			i 1
L36-0023	736952.5	1014449	Sum 1-4	120.49		7/10/2003	Non-OE	Hot Rock	18		1	NA		JK	Yes			Average		7/12/2003		Disposed off-site
L39-0001	738904	1014797	Sum 1-4	182.58		7/10/2003	Non-OE	Flat Slock	8	SW	1	NA M103	7/11/2003	JK	Yes	FJH	7/12/2003	Good	JW _	7/12/2003		Disposed off-site
J36-0010	736657.5	1014384	Sum 1-4	76.06	 	7/10/2003	OE	M-103 Fuze	12	SE	7	J36-0010	7/11/2003	JK	Yes	FJH	7/12/2003	Good	JW	7/12/2003	Demilled	Disposed off-site
_L33-0016	738979.75	1014007.8	Sum 1-4	72.8		7/10/2003	OE	20mm Unfuzed	8	N	1	L33-0016	7/11/2003	JK	Yes	FJH	7/12/2003	Good	JW	7/12/2003	Demilled	Disposed off-site
						74.010000	0.5		6	N		M103	2440000							74.00000		
L33-0025	736985.25	1014051	Sum 1-4	214.9	-	7/10/2003	OE	M-103 Fuze		N	2	L33-0025 M103	7/11/2003	JK_	Yes	FJH_	7/12/2003	Good	JW	7/12/2003	Demilled	Disposed off-site
L38-0007	736948.75	1014695.5	Surn 1-4	220.58		7/10/2003	OE_	M-103 Fuze Armed	3	_E_	3	L38-0007	7/11/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/18/2003	Demilled	Disposed off-site
K37-0013	736834,25	1014547.8	Sum 1-4	219,78		7/10/2003	ORS	Frag	18	NE	2	NA	7/11/2003	JK	Yes	FJH	7/12/2003	Average	JW	7/12/2003		Disposed off-site
L33-0002	736932.25	1014029.8	Sum 1-4	70.95	 	7/10/2003	ORS	M-51 Series (T-Bar) Fuze	30	w	4	NA.	7/11/2003	_JK	Yes	FJH	7/12/2003	Poor	JW	7/12/2003		Disposed off-site
L33-0017	736948.25	1014120.8	Sum 1-4	103.75		7/10/2003	ORS	57mm Base	8_	E	3	NA	7/11/2003	JK	Yes	FJH	7/12/2003	Good	JW	7/12/2003		Disposed off-site
L33-0018	736913.25	1014008.8	Sum 1-4	159.63	-	7/10/2003	ORS	Frag	. 24	s	3	NA.	7/11/2003	JK	Yes	FJH	7/12/2003	Average	JW	7/12/2003		Disposed off-site
L33-0052	736963	1014045.3	Sum 1-4	583.64	<u> </u>	7/10/2003	ORS	75mm Slug	18	N	6_	NA _	7/11/2003	JK	Yes	FJH	7/12/2003	Average	JW	7/12/2003		Disposed off-site
E29-0001	738020.25	1013564,3	Sum 1-4	82.21		7/11/2003	Non-OE	Multiple Pleces of Wire	20	w	0	NA	7/14/2003	JK	Yes	FJH	7/15/2005	Average	JW	7/15/2003		Disposed off-site
E29-0002	736041.25	1	Sum 1-4	197,86		7/11/2003	Non-OE	Multiple Pieces of Chain	20	.w.	4	NA	7/14/2003	JK	Yes	FJH	7/15/2005	Average	JW	7/15/2003		Disposed off-site
E31-0003	736117.25		Sum 1-4	116.82		7/11/2003	NA.	NO Contact				NA.	7/14/2003	JK	Yes	FJH	7/15/2005	NA .	JW	7/15/2003		
			1									M103									B	
E31-0004	736112.5	1013809.8	Sum 1-4	117.23	 	7/11/2003	OE	M-103 Fuze	18	SE	- 6	E31-0004 VT Fuze	7/14/2003	JK	Yes	FJH	7/15/2005	Average	JW	7/15/2005	Demilled	Disposed off-site
F29-0002	738153.75	1013619.5	Sum 1-4	168 14		7/11/2003	OE	Projectile Fuze VT (Armed)	12	N	3	F29-0002	7/14/2003	JK_	Yes	FJH	7/16/2003	Good	JW	7/16/2003	Demilled	Disposed off-site
F29-0007	736135	1013572.3	Sum 1-4	79,96		7/11/2003	Non-OE	Wire	99	_w	0	. NA	7/14/2003	JK	Yes	FJH.	7/15/2005	Good	JW	7/15/2003		Disposed off-site
F29-0018	736202,25	1013594.8	Sum 1-4	142,07	<u> </u>	7/11/2003	Non-OE	Horseshoe	12	E	_4_	NA	7/14/2003	JK	Yes	FJH	7/15/2005	Good	JW	7/15/2003		Disposed off-site



Final Report Seneca Army Depot Open Detonation Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037

Project Name: Coen Detonation Grounds
Project Location: Sensea Army Depot, Romulus NY
MASTER Dig SHIET
Coordinate System NY State Plane Central NAD 83
Survey Area ID:
Sector: NA Grid: NA
Field Book ID: NA

Geophysical Contractor: Project Geophysicist: Site Geophysicist;

Parsons Engineering Bart Hoekstra John Baptiste Frank Henderson Steffanie Warriner

WESTON Field Team George Payne (SUXOS) Joe Kendall (TL) Brian Ditsch (TL) EOTI Field Tear

Carver Cobbins (TL) MartyHolmes (TL) Erich Stedman
Don Koch (TL) Dan Dornell Jae Yun
Thomas Meeks Mike Turner Peter Anderson
Frank Montes Greg Netson
Shawn Quighy Melisse Nugent

Date: Coordinate System	MASTER DE NY State Pla		NAD 83		Site Geophy			John Baptiste		e Kendall dan Ditsch		Thomas			Dorrell Tumer	Peter	Anderson	1				
Survey Area ID: Sector:		Grld:	NA		WESTON U	IXO Safety roject Engines	ar:	Frank Henderson Steffanie Warriner				Frank M Shawn (lontes			Gre	g Nelson sa Nugent	}				
Field Book ID:	NA	4.14			WESTON S	eophysicist:	,,,	John Williams/Ryan Steigenwalt				- Torraini				IVICIA	Ou Transform					
		Original Surv	~		WESTONS	Reacquisition w/RTK	Т	Sieve Kireiczyk	ig Results			-			Don't Di	g UXO QC	Decite	Seed Die 6	December 1		O-1	
		Zingiriai Guiv	T			WHITE			O O	itse1	Depth (in)	4	T		POSI-DI	g uxu uc	Leanis		Beophysical C		Status of	JE
Unique Target ID	Easting Coord. (ft)	. Northing Coord. (ft)	Channel ID (le C1C4, lop sensor, gradient, etc)	Amplitude Response (mV)	Cate	Date	Anomaly Type	Comments	Distance (in)	Oirection (N, NE. etc.)	Top of ther	n Digital Photo Filename	Date	Team Leader Initials	Excavation Hole Cleared?	UXO QC Spec. Initials	Date	Agreement between Dig Results & Geophysical Data? (Good, Average, Poor, Poor)	Geophysicist .QC Initials	Date	Current Status	Finel Disposition
F29-0025	738162,25	1013525,8	Sum 1-4	387.15		7/11/2003	Non-OE	Spike	8	s	1	NA	7/14/2003	JK	Yes	FJH	7/15/2005	Good	JW	7/15/2003		Disposed off-site
G30-0002	736281	1013729.5	Sum 1-4	87.13		7/11/2003	ORS	Frag	8_	N	3	NA.	7/14/2003	JK	Yes_	FJH	7/15/2005	Good	JW	7/15/2003		Disposed off-site
G31-0001	738282.5	1013789	Sum 1-4	112.21		7/11/2003	Non-OE	Plow Tooth	30_	s	4	NA	7/14/2003	JK	Yes	FJH	7/15/2005	Poor	JW	7/15/2003		Disposed off-site
G31-0005	736298.25	1013847.5	Sum 1-4	72,6		7/11/2003	Non-OE	Round Stock	18	w	. 6	NA	7/14/2003	JK	Yes	FJH	7/15/2005	Average	JW	7/15/2003		Disposed off-site
G32-0002	736256.25	1013960	Sum 1-4	86.44		7/11/2003	Non-OE	Spike	18	SE	1	NA	7/14/2003	JK	Yes	FJH	7/15/2005	Average	WL	7/15/2003		Disposed off-site
G33-0007	738299,25	1014044.3	Sum 1-4	528.6		7/11/2003	Non-OE	Pipe 6" x 2" (QC Item)	20	sw		NA	7/14/2003	JK	Yes_	FJH	7/15/2005	Average	JW	7/15/2003		Disposed off-site
G33-0018	738287.25	1014095.3	Sum 1-4	63.87		7/11/2003	Non-OE	Pipe 6" x 1" (QC Item)	38	NE	1_	NA.	7/14/2003	JK	Yes	FJH_	7/15/2005	Poor	JW	7/15/2003		Disposed off-site
G34-0005	736297.5	1014135,3	Sum 1-4	71.18		7/11/2003	Non-OE	Plow Tooth	2	sw	1	NA_	7/14/2003	JK	Yes	FJH	7/15/2005	Good	JW	7/15/2003		Disposed off-site
133-0002	738591	1014117	Sum 1-4	86,36		7/11/2003	ORS	Frag	18	E		NA	7/14/2003	JK	Yes	FJH_	7/15/2005	Average	JW	7/15/2003		Disposed off-site
J33-0019	736658,5	1014025.3	Sum 1-4	80.38		7/11/2003	Non-OE	Plow Tooth.	20	s	1	. NA	7/14/2003	JK	Yes	FJH	7/15/2005	Average	JW_	7/15/2003		Disposed off-site
J33-0024	736670,25	1014089	Sum 1-4	98.42		7/11/2003	Non-OE	Horseshoe	20	_w	2	NA.	7/14/2003	JK	Yes	FJH	7/15/2005	Average	JW	7/15/2003		Disposed off-site
J34-0011	736747.25	1014236	Sum 1-4	66.53		7/11/2003	Non-OE	Nut	60	sw		NA .	7/14/2003	JK_	Yes	FJH	7/15/2005	Poor	JW	7/15/2003		Disposed off-site
J34-0014	736897.75	1014247.8	Sum 1-4	119.11		7/11/2003	ORS	Frag	12	sw	0	. NA	7/1,4/2003	JK	Yes	FJH	7/15/2005	Good	JW	7/15/2003		Disposed off-site
105 0005	700000 75					7440000	0.5	ASSESSED INTO THE SECOND	18			106mm Base	7// //0000						Jw.	7450005	0	
J35-0005		1014323.8		413.22		7/11/2003	OE	106mm HEAT Base Fuze		SW	4-	J35-0005	7/14/2003	JK	Yes	FJH	7/15/2005	Average		7/15/2005	Demilled	Disposed off-site
J35-0006		1014326.5	Sum 1-4	62.3		7/11/2003	Non-OE	Spring	12	E_		NA M103	7/14/2003	JK	Yes	FJH	7/15/2005	Good	JW	7/15/2003		Disposed off-site
K33-0013	736768.75	1014013.5	Sum 1-4	391.1		7/11/2003	OE	M-103 Fuze	2	sw	0	K33-0013	7/14/2003	JK	Yes	FJH	7/15/2005	Good	JW	7/15/2005	Demilled	Disposed off-site
K33-0014	736828.5	1014119.3	Sum 1-4	70,89		7/11/2003	ORS	Screw on Retaining Ring, 3 In	18	s	1	NA	7/14/2003	JK	Yes	FJH	7/15/2005	Average	JW	7/15/2003		Disposed off-site
K33-0019	736856,75	1014049	Sum 1-4	155,71		7/11/2003	ORS	57mm Base Plate	18	E	-	_NA	7/14/2003	JK	Yes	FJH	7/15/2005	Average	JW	7/15/2003		Disposed off-site
K33-0026	736753	1014017.8	Sum 1-4	1266,01		7/11/2003	ORS	Frag	36	s	1_1_	M103	7/14/2003	JK	Yes	FJH	7/15/2005	Poor	JW	7/15/2003		Disposed off-site
K34-0008	736855.5	1014239.8	Sum 1-4	82.75		7/11/2003	OE_	M-103 Fuze	30	w	2	K34-0008	7/14/2003	JK	Yes	FJH	7/15/2003	Poor	JW.	7/15/2003	Demilled	Disposed off-site
									1	w	١.	75mm Fuzed			۱							
K34-0019	736824.5	1014165		240.99		7/11/2003	OE	75mm APHE w/Base Fuze (Armed)	2	- W	1	K34-0019	7/14/2003	JK_	Yes	FJH	7/16/2003	Good	JW	7/16/2003	Demitted	Disposed off-site
K34-0021	736756.25			116.49		7/11/2003	Non-OE	Plow Tooth	18		4	NA.	7/14/2003	JK	Yes	FJH	7/15/2005	Average	JW	7/15/2003		Disposed off-site
K35-0003	736791.75	1014370.3	Sum 1-4	134.27		7/11/2003	ORS	Frag Piow Tooth	12	_ N	- 0	NA	7/14/2003	JK	Yes	FJH	7/15/2005 7/15/2005	Good	JW	7/15/2003 7/15/2003		Disposed off-site
K35-0013	736774.75	1014342.5	Sum 1-4	282.07 681.52		7/11/2003	Non-OE ORS	Frow toom	12		1 2	NA NA	7/14/2003	JK	Yes	FJH	7/15/2005	Good	JW	7/15/2003		Disposed off-site
K35-0021	736638.25	1014293,3		90.4			ORS		2	N	-	NA NA	7/14/2003	JK JK	Yes	FJH	7/15/2005	Good	JW	7/15/2003		Disposed off-site
K35-0025		l				7/10/2003		Frag	1			M103		JIK								Disposed off-site
£34-0015	736894.75	1014242.3		91.94		7/10/2003	OE	M-103 Fuze	12	E	2	L34-0015	7/14/2003	JK	Yes	FJH	7/15/2003	Good	JW	7/15/2003	Demilled	Disposed off-site
AA04-0030	738869.75	1010406.8	Sum 1-4	286.78		7/11/2003	ORS	2.36" Rocket Motor	2	s	.2	Rocket Motor	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
AA04-0038	738871.75	1010434	Sum 1-4	171.32		7/11/2003	OE	2.36" Rocket Motor Fuze	0	NA	3	w Fuze AA04-0038	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003	Demilled	Disposed off-site
AA04-0058	738860.25	1010497	Sum 1-4	64.68		7/11/2003	ORS	2.36" Rocket Motor	20	E	4	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-site
AA05-0034	738833.75	1010527	Sum 1-4	299.33		7/11/2003	ORS	Frag	18	5	2	NA.	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/18/2003		Disposed off-site
AA05-0084	738845.25	1010594.8	Sum 1-4	195.47		7/11/2003	Non-OE	Pipe	12	E	0_	NA	7/15/2003	JK	Yes	_FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
8804-0018	738913.75	1010408	Sum 1-4	24.35		7/11/2003	ORS	Frag	12	E	12	NA_	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
BB04-0020	738997.75	1010411.5	Sum 1-4	88.18		7/11/2003	ORS	Frag	12	E	4	NA.	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-sit∈
BB04-0032	738882	1010442.5		69.78		7/11/2003	ORS	Frag	12	s	12	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-alt∈
BB05-0026	738963	1010556.5		410.63		7/11/2003	ORS	Frag, Bomb, 20-lb	12	N	3	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
BB05-0035	738914.75		Sum 1-4			7/11/2003	ORS	2.36" Rocket Motor	18	SE	2	NA .	7/15/2003	_JK	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-site
8805-0036	738902.25		ı	359.01		7/11/2003	ORS	Frag	.20_	SE	3	NA .	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-site
BB05-0046	738915.5	1010608	Sum 1~4	275.29		7/11/2003	ORS	2,36° Rocket Motor	8	E	4	NA_	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
BB06-0015	738894.25	1010664.3		225.73		7/11/2003	ORS	2.38° Rocket Motor	12	w	3	NA.	7/15/2003	_JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
N17-0126	737183.5	1012110.8		1098.16		7/10/2003	ORS	Frag	20	w	4	NA.	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-site
N17-0168	737189.25		1	145.54		7/10/2003	ORS	Base Plate	14	w_	8	NA.	7/15/2003	JK	Yes	FJH		Average	JW	7/16/2003		Disposed off-site
1417-0108	1 , 01 100.20	1012000	1 30011 174	, ,,,,,,,,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1 0.10				· · · ·											U



Tai 1 Geophysical Dig Shec. and Target History

Seneca Army Depot Open I n Grounds
Contract No. L 98-D-0004
Task vder No. 0037

Project Name: Open Detonation Grounds
Project Location: Seneca Army Depot. Bornulus NY
Date: Seneca Army Depot. Bornulus NY
Date: NY State Plans Central NAD 83
Survey Area ID: Sector.
NA Grid: NA
Field Book ID: NA

Deficiation Grounds
as Army Depot I Bornulus NY
FR DIG SHEET
ste Plane Central NAD 83

Orid: NA WESTON Project Englineer:
WESTON Geophysicist:
WESTON Geophysicist:
WESTON Geophysicist:

Geophysical Contractor: Parsons Engineering
Project Geophysicist: Bart Hoekstra
Site Geophysicist: John Bartiste

John Baotiste

Erank Henderson
Steffante Warriner
John Williams/Ryan Stefoerwalt

WESTON Field Tearr EOTI Field Tearr Parsons Field Tearr George Payne (SUXOS) Carver Cobbins (TL) Many-holmes (TL) Erich Stadman Joe Kendell (TL) Don Koch (TL) Dan Dorrell Jas Yun Brian Ditsch (TL) Thomas Meeks Mike Turner Pater Anderson Frank Montes Shawn Gulgly Melissa Nugent

Field Book (D:	NA				WESTON G WESTON S	urvey Tech		John Williams/Ryan Steigerwalt Steve Kireiczyk														
		Original Surv	юу			Reacquisition w/RTK			ig Results						Post-Di	g UXO QC	Results	Post-Dig G	leophysical C	K	Status of 6	OE
Unique Yarget ID	Easting Coord, (ft)	Northing Coord. (ft)	Channel ID (le G1 G4, lop sensor, gradient, etc)	Amplitude Response (mV)	Date	Date	Anomely Type	Comments	Distance (In)	Direction (N, NE,	Depth (in)	Olgital Photo Filename	Date	Team Leader Initials	Excavation Hole Cleared?	UXO QC Spec.	Dete	Agreement between Dig Results & Ocophysical Data? (Good, Average, Poor, Poor)	Geophysicist QC Initials	Date	Current Status	Final Disposition
									1	****							Dotte		VV III		CONTON CHARGE	The Capaciton
N17-0183	737218.75		T-	765.84		7/10/2003	OE_	75mm Projectile	20	_w_	6	None Nose Fuze	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/16/2003	Demilled	Disposed off-site
N18-0015	737148.5	1012193.8	Sum 1-4	118.39		7/10/2003	. ÓE	Nose Fuze (Armed)	12	N	3	N18-0015	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003	Demilled	Disposed off-site
N18-0044	737142,75	1012171	Sum 1-4	107.33		7/10/2003	ORS	Nose Fuze Scrap	12	s	4	NA .	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
N18-0074	737240.25	1012179	Sum 1-4	613.46		7/10/2003	ORS	155mm RAP Round Tail (Empty)	20	E	.6_	NA NA	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/18/2003		Diaposed off-site
N18-0166	737163.5	1012144	Sum 1-4	475,68		7/10/2003	ORS	Base Plug	12	s	_5	NA .	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/18/2003		Disposed off-sit∈
O14-0069	737327.75	1011694	Sum 1-4	254.36		7/11/2003	ORS	2.36* Rocket Motor	12	_ N	-	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
O14-0097_	737373.25	1011667,5	Sum 1-4	210 02		7/11/2003	ORS	57mm Projectile (Wax Filled)	-6	SE	2	NA .	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
014-0102	737325.25	1011684.3		250.75		7/11/2003	ORS	Frag	-0	NA NA	1	NA NA	7/15/2003	JK .	Yes	FJH	7/16/2003	Good	JW _	7/16/2003		Disposed off-site
O14-0103		1011680.5	T	222.6	-	7/11/2003	ORS	Frag	0	NA.	4	NA	7/15/2003	JK	Yes	FJH_	7/16/2003	Good	JW	7/16/2003		Disposed off-site
017-0148	737322	1012068	Sum 1-4	88.51	-	7/10/2003	Non-OE	Hot Rock	12	Ε	4	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-sit∈
017-0148	737322	1012068	Sum 1-4	88.51		7/10/2003	ORS	Frag (5 Pleces)	12	w	4	NA.	7/15/2003	JK	Yes	FJH	7/18/2003	Good	JW	7/16/2003		Disposed off-site
017-0161	737264 75	1012108.8	Sum 1-4	484.19		7/10/2003	ORS	Fuze and Frag Pleces	20	S	6	VT Fuze	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW _	7/16/2003		Disposed off-site
017-0200	737273.75	1012084.8	Sum 1-4	226,14		7/10/2003	OE	VT Fuze (Armed)	8	w	12	017-0200	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003	Demilled	Disposed off-site
O18-0171	737303.5	1012130	Sum 1-4	173.29		7/10/2003	ORS	Frag	18	N.	.2	NA NA	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-site
P13-0004	737404.25	1011621	Sum 1-4	207,41		7/11/2003	ORS	75mm APHE Base Frag	0	. NA	_3	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
P13-0023	737488	1011588	Sum 1-4	123.4		7/11/2003	OE,	M-103 Fuze		NA.		M-103 Fuze P13-0023	7/15/2003	JK	Yes	FJH	7/16/2003	Good	Jw	7/16/2003	Demilled	Discount off site
						T						M-103 Fuze										Disposed off-site
P13-0025	737449.5	1011606.5		85.9	-	7/11/2003	OE	M-103 Fuze	0	NA	0	P13-0025	7/15/2003	JK	Yea	FJH	7/16/2003	Good	JW	7/16/2003	Demitted	Disposed off-site
P13-0053	737458	1011545		318,9		7/11/2003		Vehiçle Part	12	s	4	NA.	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
P13-0064	737471	1011578	Sum 1-4	76.87		7/11/2003	ORS	20mm Projectile (Empty)	12	N	1	NA NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
P13-0069	737495.75	1011564.5	Sum 1-4	264.34		7/11/2003	ORS	2.36* Rocket Motor	8	SE	0	NA Rocket Burster	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
P13-0072	737481.75	1011540.8	Sum 1-4	130.55		7/11/2003	OE	Rocket Bureter	12	N	1_	P13-0072	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003	Demitted	Disposed off-site
P14-0028	737418.5	1011627.5	Sum 1-4	611.25		7/11/2003	ORS	2.35* Rocket Motor	0	NA	2	NA.	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/18/2003		Disposed off-site
P14-0051	737416	1011537	Sum 1-4	133.16		7/11/2003	ORS	M-51 Series (T-Bar) Fuze	0	_NA	3	M-103 Fuze	7/15/2003	JK	Yes	FJH	7/15/2003	Good	JW	7/16/2003		Disposed off-site
P14-0113	737378.5	1011673.5	Sum 1-4	206.12		7/11/2003	OE	m-103 Fuze (Armed)	10	w	2_	P14-0113	7/15/2003	JK	Yes	FJH	7/18/2003	Good	JW	7/16/2003	Demilled	Disposed off-site
P17-0101	737402	1012013	Sum 1-4	1505.22		7/10/2003	Non-OE	Fire ExtInguisher	_12	E	8	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
P17-0160	737469.25	1012023	Sum 1-4	115.14		7/10/2003	OE	20mm Projectile	12	N	1	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003	Demilled	Disposed off-site
		İ	1			1						75mm APHE-T Fuze										1
P17-0180		1012023				7/10/2003	DE	75mm APHE-T Fuze (Armed)	12	S	22	P17-0180	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003	Demilled	Disposed off-site
P17-0208	737439.5		Т	1		7/10/2003	ORS.	Mini-Rocket	12	S	4	NA.	7/15/2003	JK	Yes	FJH_	7/16/2003	Good	JW	7/16/2003		Disposed off-site
Q13-0006	737501.75	101.1555.8	Sum 1-4	T I		7/11/2003	ORS	2,36* Rocket Motor	-	NA	1	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
Q17-0003	737510.25	1012048.3	Sum 1-4	151,33		7/10/2003	ORS	Frag	12	s	2	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
\$04-0010	737835	1010429.5	Sum 1-4	119.31		7/11/2003	ORS	Frag	12	s	2	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
S04-0022	737874.25	1010428	Sum 1-4	309.24		7/11/2003	ORS	Frag	12	w	3	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
\$05-0009	737826.25	1010616.3	Sum 1-4	339.19		7/11/2003	ORS	2.36* Rocket Motor	16	N	.0	NA .	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-site
S05-0024	737854.93	1010521.3	Sum 1-4	88.63		7/11/2003	ORS	2.36* Rocket Motor	4	E	2	NA .	7/15/2003	JK_	Yes	FJH	7/16/2003	Good	JW	7/18/2003_		Disposed off-sit∈
T03-0010	737958	1010380,3	Sum 1-4	74.8		7/11/2003	ORS	2.36* Rocket Motor	18_	w	2	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-site
T03-0011	737956,75	1010339.8	Sum 1-4	585,4		7/11/2003	ORS	Frag	12	s	4	NA .	7/15/2003	JK_	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
T03-0015	737999	1010335.3	Sum 1-4	592.65		7/11/2003	ORS	2,36* Rocket Motor	20	sw	0	NA	7/15/2003	JK	Yes	FJH_	7/16/2003	Average	JW	7/16/2003		Disposed off-site
T04-0001	737875.65	1010382	Sum 1-4	106.94		7/11/2003	ORS	2.36" Rocket Motor	20	s	2	NA .	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-site
T04-0004	737884.75	1010466	Sum 1-4	207,72		7/11/2003	ORS	2.36* Rocket Motor	12	s	11_	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
T04-0015	737907,5	1010431.8	Sum 1-4	296 99		7/11/2003	ORS	Frag	6	E	2	NA.	7/15/2003	JK	Yea	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
T04-0027	737952	10104463	Sum 1-4	49.38		7/11/2003	ORS	Frag	12	8	2	NA _	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
T04-0045	737990.94	1010435.1	Sum 1-4	388 52		7/11/2003	ORS	Frag	8	w	2	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site



Final Report Seneca Army Depot Open Detonation Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037

Project Name: Onen Detonation Grounds
Project Location: Sensea Army Decot, Romulus NY
Date: MASTER DIG SHEET
Coordinate System NY State Plane Central NAD 83
Survey Area ID:
Sector: MA Grid: MA

Geophysical Contractor, Project Geophysicist: Site Geophysicist: __WESTON UXO Safety WESTON Project Engineer. Parsons Engineering Bart Hoekstra John Baptiste WESTON Field Tearr
George Payne (SUXOS)

Carver Cobbins (TL)

MartyHolmes (TL)

Erich Stadman

Joe Kendall (TL)

Don Koch (TL)

Dan Dorrell

Brian Ditsch (TL)

Thomas Meeks

Mike Turner

Pater Anderson

Grag Notson

Shawn Quigly

Melissa Nugent

Coordinate System	NY State Pk	ne Central N	IAD 63		WESTON U	VO 0-1-1-		Secretary Secretary	Br	an Ditach	(TL)	Thomas M		Mike	Turner	Peter	Anderson g Nelson]				
	NA	Grid:	NA		WESTON Pr	roject Enginee	r.	Frank Henderson Steffanle Warriner				Shawn Q				Melis	sa Nugent	1				
Field Book ID:	NA				WESTON G	eophysicist: urvey Tech	-	John Williams/Rvan Stelgerwalt Steve Kirelczyk				<u> </u>										
		Original Surve	у			Reacquisition w/RTK		D	g Results						Post-Di	g uxo oc	Results	Post-Dig (Beophysical C	c	Status of 0	DE
			Channel ID 5e						Of	tset	Depth (in)	4						Agreement between Dig				
	Easting	Northing	C1C4, top sensor,	Amplitude Response			Anomaly		Distance	Direction (N, NE,				Team Leader	Excavation Hole	UXO QC Spec.		Results & Geophysical Data? (Good, Average,	Geophysicist			
Unique Target ID	Coord, (ft)	Coord. (ft)	gradient, etc)	(mV)	Date	Date	Туре	Comments	(in)	etc.)	Top of Item	Digital Photo Filename	Date	Initials	Cleared?	Initials	Date	Poor, Poor)	QC Initials	Date	Current Status	Final Disposition
T04-0046	737998	1010482.5	Sum 1-4	37.67		7/11/2003	ORS	Frag	4	w	2	NA.	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-sit∈
T04-0048	737999,5	1010431.8	Sum 1-4	15.31		7/11/2003	ORS	Frag	12	s	2	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-sit∈
T05-0007	737897.25	1010518	Sum 1-4	198.77		7/11/2003	ORS	Frag	4	_sw_	4	NA.	7/15/2003	JK	Yes	FJH	7/18/2003	Good	JW	7/16/2003		Disposed off-sit∈
T05-0012	737917.25	1010564	Sum 1-4	101.85		7/11/2003	ORS	2.36* Rocket Motor	8	w	3	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-sit∈
T05-0034	737968,75	1010577	Sum 1-4	555.16		7/11/2003	ORS	2.36* Rocket Motor	18	w	2	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-sit∈
T05-0035	737972.42	1010521.7	Sum 1-4	273.21		7/11/2003	ORS	Frag	10	N	4	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-sit∈
T05-0043	737990,75	1010564	Sum 1-4	686.31		7/11/2003	ORS	2,38° Rocket Motor	18	s	3	NA NA	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/18/2003		Disposed off-site
U03-0006	736055.25	1010332.5	Sum 1-4	240.69		7/11/2003	ORS	2.36° Rocket Motor	20	sw	3	NA NA	7/15/2003	JK	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-site
U04-0033	738081	1010457	Sum 1-4	493.81		7/11/2003	ORS	2.38* Rocket Motor	18	NW	0	NA	7/15/2003	JK	Yes	FJH .	7/16/2003	Average	JW	7/16/2003		Disposed off-site
U05-0008	738017.52	1010616	Sum 1-4	120.31		7/11/2003	ORS	2,36* Rocket Motor	12	E	2	NA NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW.	7/16/2003		Disposed off-sit∈
U05-0008	738017,52	1010616	Sum 1-4	120,31		7/11/2003	ORS	2,36* Rocket Motor	12	w	2	NA NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
U05-0022	738039	1010520.3	Sum 1-4	470.62		7/11/2003	ORS	2,36* Rocket Motor	12	w	3	NA NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
U05-0035	738073.75	1010546.8	Sum 1-4	165.13		7/11/2003	ORS	2.38* Rocket Motor	12	w	1	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
U05-0050	738105.75		Sum 1-4	94.74		7/11/2003	ORS	Frag	30	w	1	NA NA	7/15/2003	JK	Yes	FJH	7/16/2003	Poor	JW	7/16/2003		Disposed off-site
U05-0051	738108.25		Sum 1-4	304,04		7/11/2003	ORS	2.36* Rocket Motor	30	F	6	NA.	7/15/2003	JIC	Yes	FJH	7/16/2003	Poor	JW	7/16/2003	-	Disposed off-site
V03-0008	738154	1010358.8		60.58		7/11/2003	Non-OE	Spike	12	NW	В	NA	7/15/2003	.ik	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
V03-00011	738177.75	1010348	Sum 1-4	185.57		7/11/2003	ORS	2,36* Rocket Motor	A		1	NA NA	7/15/2003	.IK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-site
V04-0007	738149	1010488.3	Sum 1-4	523,17		7/11/2003	ORS	2.38* Rocket Motor	24	NF	10	NA NA	7/15/2003	JIC .	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-sit∈
	738208.25	1010488.3	Sum 1-4	410.73		7/11/2003	ORS	2.36* Rocket Motor	12	- 100	10	NA NA	7/15/2003	JK JK	Yes	FJH	7/16/2003	Good	JW _	7/16/2003		Disposed off-site
V04-0028	T			410.73		7/11/2003	Non-OE	Hot Rock	12	-	-	NA NA	7/15/2003	JK.	Yes	FJH	7/16/2003	Good	Jw	7/16/2003		Disposed off-site
V04-0028	738208.25	1010429	Sum 1-4			Ι'			18	-		NA NA	7/15/2003	- UV	Yes	FJH	7/16/2003	Average	JW	7/16/2003		Disposed off-site
V05-0014	738164.25	1010533	Sum 1-4	392.38		7/11/2003	ORS	2,36* Rocket Motor	20	NE				114	Yes	FJH	7/16/2003		JW	7/16/2003	-	Disposed off-site
V05-0023	738194	1010545,3	Sum 1-4	119.29		7/11/2003	ORS	Frag		NE NE	<u> </u>	NA NA	7/15/2003	- IK	Yes	FJH		Average	JW	7/16/2003		1
V05-0030	738208.25	1010579	Sum 1-4	109.15		7/11/2003	Non-OE	Vehicle Part	18		3	NA NA	7/15/2003	JK	- 100		7/16/2003	Average	JW			Disposed off-site
V05-0031	738209.5	1010537,3	Sum 1-4	289,89		7/11/2003	Non-OE	Plpe	0	NA	0	NA	7/15/2003	JK	Yes	FJH	7/16/2003	Good		7/18/2003		Disposed off-site
W03-0005	738284.25	1010309,8	Sum 1-4	285.3	-	7/11/2003	ORS	2,36" Rocket Motor	30	N	<u> </u>	NA NA	7/15/2003	JK	Yes	FJH	7/16/2003	Poor	JW	7/16/2003		Disposed off-site
Y03-0004	738535.75	1010318.8	Sum 1-4	576.81		7/11/2003	ORS	2.36" Rocket Motor	12	w		NA	7/15/2003	JK	Yes .	FJH_	7/16/2003	Good	JW	7/16/2003		Disposed off-site
Z03-0008	738688	1010339,5	Sum 1-4	87.41		7/11/2003	ORS	Frag	12	NW	6	M-2 Mortar Fuze	7/15/2003	JK	Yes	FJH	7/16/2003	Good	JW	7/16/2003		Disposed off-sit€
M18-0128	737032.75	1012239.5	Sum 1-4	181.45		7/10/2003	OE	4.2" Morter Fuze M-2	10	E	3	M18-0126	7/16/2003	JK	Yes	FJH	7/17/2003	Good	JW	7/17/2003	Demilled	Disposed off-site
M19-0090	737124,5	1012280.5	Sum 1-4	143.03		7/10/2003	ORS	Frag, Multiple Pieces	0	NA _	3	NA	7/16/2003	JK	Yes	FJH	7/17/2003	Good	JW	7/17/2003		Disposed off-site
N19-0020	737208.75	1012290.5	Sum 1-4	327.92		7/10/2003	ORS	Frag	18	s	6	NA Various Fuzes	7/16/2003	JK	Yes	FJH	7/17/2003	Average	JW	7/17/2003		Disposed off-site
N19-0084	737160.75	1012320	Sum 1-4	497.1		7/10/2003	OE.	Unknown Bomb Fuze	18	s	5	N19-0064	7/16/2003	JK	Yes	FJH	7/17/2003	Average	JW	7/17/2003	Demilled	Disposed off-site
N19-0064	737180.75	1012320	Sum 1-4	497.1		7/10/2003	OE	Fuze Burster	18	N	3	Various Fuzes N19-0064_	7/16/2003	JK	Yes	FJH	7/17/2003	Average	JW	7/17/2003	Demilled	Disposed off-site
N19-0064	737160.75	1012320	Sum 1-4	497.1		7/10/2003	OE	20mm HE Projectile	18	w	3	Various Fuzes N19-0064	7/18/2003	ЈК	Yes	FJH	7/17/2003	Average	JW	7/17/2003	Demilled	Disposed off-site
	T			T								M-51 Series Fuze				5			JW	7/17/2003	Dernilled	Disposed off-site
N19-0084	737217.75			125.82		7/10/2003	OE	M-51 Series (T-Bar) Fuze Armed	18	w	8	N19-0084	7/16/2003	JK_	Yes	FJH	7/17/2003	Average			Demiled	
O18-0137	737343.5	1012244	Sum 1-4	75.86		7/10/2003	ORS	20mm Projectile (Empty)	18	E	1	NA	7/16/2003	JK	Yes	FJH	7/17/2003	Average	JW	7/17/2003		Disposed off-site
O19-0048	737320		Sum 1-4			7/10/2003	ORS	RAP Round Base Plug	18	s	- 6	NA Dispenser Fuze	7/16/2003	JK.	Yes	FJH	7/17/2003	Average	JW	7/17/2003		Disposed off-site
P18-0037	737455.5	1012224.3	Sum 1-4	43,48		7/10/2003	OE	Dispenser Fuze	18	E	2	P18-0037	7/16/2003	JK	Yes	FJH	7/17/2003	Average	JW	7/17/2003	Demilled	Disposed off-site
P16-0120	737399.5	1012181.8	Sum 1-4	68	ļ <u> </u>	7/10/2003	OE	57mm Projectile (Unfuzed)	18	w	4	P18-0120	7/16/2003	JK	Yes	FJH	7/17/2003	Average	JW	7/17/2003	Demilled	Disposed off-site
P16-0170	737426	1012232.8	Sum 1-4	580.11		7/10/2003	OE	75mm HE Projectile (Unfuzed)	12	w	3	75mm Projo P18-0170	7/16/2003	JK	Yes	FJH	7/17/2003	Good	JW	7/17/2003	Demilled	Disposed off-site
P19-0022	737400.25	1012308.3	T	193,18		7/10/2003	ORS	Frag	0	NA	3	NA	7/16/2003	JK	Yes	FJH	7/17/2003	Good	JW	7/17/2003		Disposed off-site
P19-0043	737486	1012318.5		175.77		7/10/2003	OE	20mm HE Projectile	36	s	2	20mm Projo P19-0043	7/16/2003	JK	Yes	FJH	7/17/2003	Poor	Jw_	7/17/2003	Demitted	Disposed off-site
		1		201.00	1	7/10/2003	OE	20mm HE Projectile	18	w	1 2	20mm Projo Q18-0009	7/16/2003	,IK	Yes	FJH	7/17/2003	Average	JW	7/17/2003	Demilled	Disposed off-site
Q16-0009	737546.25		Sum 1-4	384.38						NA NA	1.	NA NA	7/17/2003	,IV	Yes	FJH	7/19/2003	Good	RS	7/16/2003	g-crisinos.	Disposed off-site
E29-0019	738011,25	1013549.5	Sum 1-4	758.66	L	7/11/2003	Non-OE	Fence Pleces/Wire	_ 0	NA.		NA NA	1.7/1/1/2003	_ JK	1 103		111312003	3000	na	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1 2-340-300 011-3110



Tał 1 Geophysical Dig Sh⊾ ⊿nd Target History

Seneca Army Depot Open (Contract No. (Ta.

Final Report on Grounds 98-D-0004 Jer No. 0037

Project Name: Open Datonation Grounds Geophysical Contractor: Parsons Engineering WESTON Field Team EOTI Field Team Parsons Field Team Project Location: Sensea Army Depoil, Romalus NY Project Geophysicist: Bart Hoekstra George Payne (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Joe Kendall (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Joe Kendall (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Joe Kendall (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Joe Kendall (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Joe Kendall (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Joe Kendall (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Joe Kendall (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Joe Kendall (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Joe Kendall (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Joe Kendall (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Joe Kendall (TL) Don Noch (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Jee Kendall (TL) Don Noch (TL) Dan Dorrell Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman Jee Yun (SUXOS): Carver Cobbins (TL) Marry-Holmes (TL) Erich Stedman

Field Book ID:	NA				WESTON &	eophysicist:		John Williams/Ryan Stelgenwajt Steve Kireiczyk														
		Original Surv	by .		WEGICITO	Reacquisition w/RTK		1 100 1100 0100	Ng Results						Post-Di	g UXO QC	Results	Post-Dig G	Reophysical C	oc .	Status of 6	OE
Unique Target ID	Easting Coord. (ft)	Northing Coord. (ft)	Charmel ID (le- C1 C4, top sensor, oradient, etc)	Amplitude Response (mV)	Date	Date	Anomaly Type	Comments		Direction (N. NE.	Depth (in)	Olgital Photo Filename	Date	Team Leader Initials	Excevation Hole Cleared?	UXO OC Spec. Initials	Date	Agreement between Dig Results & Geophysical Data? (Good, Average, Poor, Poor)	Geophysicist QC Initials	Date	Current Status	Final Disposition
F24-0003	736209.25	1012997.8	Sum 1-4	127.52		7/11/2003	Non-OE	Nails & Wire	0	NA	11	NA	11/17/2003	JK	Yes	FJH	7/19/2003	Good	RS	7/16/2003		Disposed off-site
F24-0004	736209.75	1012990.5	Sum 1-4	129.16		7/11/2003	Non-OE	Nails & Wire	0	NA	1	NA	11/17/2003	JK	Yes	FJH	7/19/2003	Good	RS	7/18/2003		Disposed off-site
F25-0001	736188.75	1013091.3	Sum 1-4	166.39		7/11/2003	Non-OE	Hot Rock	20	s	2	NA	11/17/2003	JK	Yes	_FJH_	7/19/2003	Average	RS	7/18/2003		Disposed off-site
F25-0005	736180.5	1013090.6	Sum 1-4	287.27		7/11/2003	ORS	12 Gauge Shotgun Shells	0	NA	0	NA.	11/17/2003	JK	Yes	FJH	7/19/2003	Good	RS	7/18/2003		Disposed off-site
F25-0005	736180.5	1013090.8	Sum 1-4	287.27		7/11/2003	OE	Bomb Fuze (Armed)	18	s	8	Bomb Fuze F25-0005	11/17/2003	JK	Yes	FJH	7/19/2003	Average	AS	7/18/2003	Dernilled	Disposed off-site
F25-0014	736127	1013055	Sum 1-4	612.89		7/11/2003	ORS	Base Plate	6	NW	4	. NA	11/17/2003	JK	Yes	FJH	7/19/2003	Good	RS	7/18/2003		Disposed off-site
F25-0022	735240	1013000.5	Sum 1-4	136.57		7/11/2003	Non-OE	Wire	20	N	2	NA.	11/17/2003	JK .	Yes	FJH	7/19/2003	Average	RS	7/18/2003		Disposed off-site
F25-0024	736209.75	1013008.5	Sum 1-4	68,32		7/11/2003	Non-QE	Nails & Wire	0	NA.	1	NA.	11/17/2003	JK	Yes	FJH	7/19/2003	Good	RS	7/18/2003		Disposed off-site
F26-0003	738182,25	1013143.3	Sum 1-4	137.34		7/11/2003	ORS	76mm Projectile (Empty)	18_	N	20	NA.	11/17/2003	JK	Yes	FJH	7/19/2003	Average	RS	7/18/2003		Disposed off-site
F26-0011	736178	1013158.5	Sum 1-4	72.05		7/11/2003	Non-OE	Flat Stock	18	w	3	NA.	11/17/2003	JK_	Yes	FJH	7/19/2003	Average	RS	7/18/2003		Disposed off-site
F26-0018	736178,75	1013175.8	Sum 1-4	172.91	-	7/11/2003	Non-OE	Flat Stock	30	w	3	NA NA	11/17/2003	JK	Yes	FJH	7/19/2003	Poor	RS	7/18/2003		Disposed off-site
F26-0019	736171.75	1013161,3	Sum 1-4	63.22		7/11/2003	NA.	No Contact	NA	NA	NA.	NA .	11/17/2003	JK_	Yes	FJH	7/19/2003	NA NA	RS_	7/18/2003		
F29-0008	736228.5	1013579.3	Sum 1-4	52.24		7/11/2003	Non-OE	Fence Pieces/Wire	0	NA	1	NA	11/17/2003	JK	Yes	FJH	7/19/2003	Good	RS	7/18/2003		Disposed off-site
F29-0011	736215	1013567.5	Sum 1-4	244.02	-	7/11/2003	Non-OE	Fence Pieces/Wire	. 12	S	1	NA	11/17/2003	JK	Yes	FJH	7/19/2003	Good	RS	7/18/2003		Disposed off-site
F29-0038	736192.75		Sum 1-4	180.47		7/11/2003	Non-OE	Fénce Pieces/Wire	18	S	1	NA	11/17/2003	JK	Yes	FJH	7/19/2003	Average	RS_	7/18/2003		Disposed off-site
G24-0010	738292	1012955.5		126.13	-	7/11/2003		Vehicle Part/Plow Tooth	18	w	10	NA	11/17/2003	JK	Yes_	FJH	7/19/2003	Average	RS	7/18/2003		Disposed off-site
G25-0012	736302.75	1		84,97		7/11/2003		Horseshoe	0	NA_	3	NA.	11/17/2003	JK	Yes	FJH	7/19/2003	Good	RS	7/18/2003		Disposed off-site
G26-0003	736272.75	1013212	Sum 1-4	113.48		7/11/2003	Non-OE	Plow Tooth	48	ş	В.	NA NA	11/17/2003	JK	Yes	FJH	7/19/2003	Poor	RS RS	7/18/2003		Disposed off-site
G27-0004	736273.5	1013340.3	Sum 1-4	86.06		7/11/2003	ORS	M-51 Series (T-Bar) Fuze	30	NA NA	3	NA NA	11/17/2003	JK IV	Yes	FJH	7/19/2003	Poor Good	BS BS	7/18/2003		Disposed off-site
G29-0019	736307,5	1013553.8	Sum 1-4	423.75		7/11/2003	Non-OE	Fance Pieces/Mrs	-	NA NA		NA NA	11/17/2003	- JK	Yes	FJH	7/19/2003	Good	RS	7/18/2003		Disposed off-site
G29-0020	736266.5	1013553.3	Sum 1-4	52.85		7/11/2003	ORS	Fence Pieces/Wire Bomb Fuze	-	E	- A	NA NA	11/17/2003	-JK	Yes	FJH	7/19/2003	Good	RS	7/18/2003		Disposed off-site
M17-0052	737065.5	1012005.3	Sum 1-4	263.86	 	7/10/2003	ORS	Frag	1 0	NA.	1	NA NA	11/17/2003		Yes	FJH	7/19/2003	Good	RS	7/18/2003		Disposed off-site
M17-0079	737068.25	Τ							1	NA NA		M-103 Fuze M17			Yes	FJH	7/19/2003	Good	RS	7/18/2003	Demilled	Disposed off-site
M17-0067	737038	1012118	Sum 1-4	121.66		7/10/2003	OE	M-103 Fuze (Armed)	0	W	1	NA	11/17/2003	JK IV	Yes	FJH	7/19/2003	Good	RS	7/18/2003	Dormied	Disposed off-site
N17-0097	737157.5	1012016.8	I	169.38		7/10/2003	ORS	75mm Projectile Body Frag	12	w	3	1		JK.		FJH	T	Good	RS.	7/16/2003		Disposed off-site
N17-0164	737130,75	1012074	Sum 1-4	143,72		7/10/2003	ORS	Frag	12	S	2	NA	11/17/2003	JK UV	Yes_	FJH	7/19/2003	Average	RS	7/22/2003		Disposed off-site
MM24-0005	740360	1012902	Sum 1-4	22.52	7/11/2003	7/19/2003	ORS	Frag	12	NW	3	NA NA	7/22/2003	JK.	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
WW56-0005	740263.75	1013247.3	Sum 1-4	18.03	7/11/2003	7/19/2003	ORS	Frag Frag	0	NA.	3	NA.	7/22/2003	JK JK	Yes	FJH	7/22/2003	Good	RS.	7/22/2003		Disposed off-site
MM27-0003_	740360,25	1013289,5	Sum 1-4	83.37	7/11/2003	7/19/2003	ORS	Frag	1 0	NA.	2	NA.	7/22/2003	JK	Yes	FJH	7/22/2003	Good	AS	7/22/2003		Disposed off-site
MM27-0004 MM27-0007	740297,75	1013264	Sum 1-4	68.9	7/11/2003	7/19/2003	ORS	Frag	10	NA NA	4	NA NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	as	7/22/2003		Disposed off-site
	740363,75	1012738.3	Sum 1-4	78.54	7/11/2003	7/19/2003	Non-OE	Pipe	10	w	3	NA NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS.	7/22/2003		Disposed off-site
NN22-0006	740441	1012747.3	Sum 1-4	94.68	7/11/2003	7/19/2003	ORS	Frag	12	w	1	NA NA	7/22/2003	.lk	Yes	FJH	7/22/2003	Good	AS	7/22/2003		Disposed off-site
NN22-0007	740420 25	1012747.3	Sum 1-4	46.55	7/11/2003	7/19/2003	Non-OE	Bolt	18	NW	3	NA NA	7/22/2003	JK	Yes	FJH	7/22/2003	Average	RS	7/22/2003		Disposed off-site
NN23-0002 NN23-0013	740438.5	1012805,5	Sum 1-4	26.37	7/11/2003	7/19/2003	ORS	Ftrag	18	w	3	NA.	7/22/2003	JK	Yes	FJH	7/22/2003	Average	RS	7/22/2003		Disposed off-site
NN24-0006	740458.5	1012686	Sum 1-4	75.77	7/11/2003	7/19/2003	ORS	Frag	12	s	3	NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
NN24-0007	7,40427	1012676,5	Sum 1-4	205.3	7/11/2003	7/19/2003	Non-OE	Tractor Part	12	NE	2	NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
NN27-0003	740447.25		Sum 1-4	34.12	7/11/2003	7/19/2003	ORS	Frag	12_	N	2	NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
OO20-0003	740528,25	1	Sum 1-4	31.73	7/11/2003	7/19/2003	Non-OE	Spike	16	s	5	NA	7/22/2003	JK	Yes	FJH_	7/22/2003	Average	RS	7/22/2003		Disposed off-site
0021-0001	740520,75	T	Sum 1-4	235 61	7/11/2003	7/19/2003	ORS	Frag	30	E	1	NA .	7/22/2003	JK	Yes	FJH	7/22/2003	Poor	RS	7/22/2003		Disposed off-site
0021-0004	740810.75	T	Sum 1-4		7/11/2003	7/19/2003	Non-OE	Rod	12	s	4	NA .	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
0022-0005	740528,75		Sum 1-4	1	7/11/2003	7/19/2003	ORS	Frag	0	NA	0	. NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
0023-0002	1	1012667.5	Sum 1-4	46.22	7/11/2003	7/19/2003	ORS	Frag	12	Ę.		·NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
0023-0015		1012755,5	Sum 1-4	55.58	7/11/2003	7/19/2003	Non-OE	Bolt		NA.	_1_	NA.	7/22/2003	JK_	Yes	FJH	7/22/2003	Good	AS	7/22/2003		Disposed off-site



Final Report Seneca Army Depot Open Delonation Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037

Project Name:
Project Location:
Seneca Army Desoit. Romulus NY
MASTER DIG SHEET
Coordinate System NY State Plans Central NAD 83
Survey Area ID:
Sactor.
NA Grid: NA
Field Book ID:
NA

Geophysical Contractor: Project Geophysicist: Site Geophysicist: Parsons Engineering Bart Hoekstra John Baptiste WESTON Field Team
George Payne (SUXOS)
Carver Cobbins (TL)
Marty-Holmes (TL)
Erich Stedman
Joe Kendall (TL)
Don Koch (TL)
Den Dorell
Brian Ditsch (TL)
Thomas Maeks
Mike Tumer
Peter Anderson
Frank Montes
Shawn Quigly
Melissa Nugent

Coordinate System Survey Area ID:	NY State Pi	ane Central I	VAD 83		WESTONU	VO Seletu		Frank Henderson	Br	lan Ditsch	(TL)	Thomas Frank M		Mike	Tumer		Anderson g Nelson					
Sector:	NA	Grld:	NA		WESTON P	roject Enginee	r.	Steffanie Warriner				Shawn C					sa Nugent	1				
Field Book ID:	NA				WESTON 6			John Williams/Rvan Stelperwalt Steve Kirejczyk														
1		Original Surv	еу			Reacgulation w/RTK			Dig Results		·		,		Post-Di	UXO QC	Results	Post-Dig G	eophysical C	<u> </u>	Status of	OE
			Channel ID (le						0	fisel	Depth (in)		ŀ			uxo oc	1	Agreement between Dig				
	Easting	Northing	C1C4, top sensor,	Response			Anomaly	G	Distance	(N, NE,				Leader	Excavation Hole	Spec.		Resulta & Geophysical Data? (Good, Average,	Geophysicist			
Unique Target 1D	Coord. (ft)	Coord. (ft)	gradient, etcl	(mV)	Date	Date	Туре	Comments	(in)	etc.}	Top of them	Digital Photo Filename	Date	Initials	Cleared?	Initials	Date	Poor, Poor)	OC Initials	Date	Current Status	Final Disposition
OO24-0002	740623,75	1012979.3	Sum 1-4	212.21	7/11/2003	7/19/2003	Non-OE	Stock	12	N	5	NA.	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
OO24-0005	740616.5	1012992,5	Sum 1-4	102,38	7/11/2003	7/19/2003	Non-OE	Tractor Part	12	S	6	NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
0028-0006	740577,25	1013241	Sum 1-4	133	7/11/2003	7/19/2003	Non-OE	Wire	12	NE	3	NA NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	AS	7/22/2003		Disposed off-site
PP20-0008	740852.25	1012420.3	Sum 1-4	101,98	7/11/2003	7/19/2003	Non-OE	Tractor Part	12	NW	7	NA NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
PP20-0010	740740.25	1012403	Sum 1-4	49,7	7/11/2003	7/19/2003	Non-OE	Ftat Steel	18	w	3	NA NA	7/22/2003	ЗK	Yes	FJH	7/22/2003	Average	_RS	7/22/2003		Disposed off-site
PP20-0012	740705.75	1012432.5	Sum 1-4	242.07	7/11/2003	7/19/2003	Non-OE	Hammerhead	20	w	22	NA	7/22/2003	JK	Yes	FJH	7/22/2003	Average	RS	7/22/2003		Disposed off-site
PP20-0022	740841.5	1012450	Sum 1-4	45.25	7/11/2003	7/19/2003	Non-OE	Strrl Stock	12	N_	3	NA NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
PP21-0005	740681.25	1012520.3	Sum 1-4	57,31	7/11/2003	7/19/2003	Non-OE	Horseshoe	12	w	3	NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
PP21-0008	740736	1012621.3	Sum 1-4	81.54	7/11/2003	7/19/2003	Non-OE	Bolt	24	sw.	4	NA NA	7/22/2003	JK	Yes	FJH_	7/22/2003	Good	RS	7/22/2003		Disposed off-site
PP21-0009	740662.25	1012614.5	Sum 1-4	196.31	7/11/2003	7/19/2003	ORS	Frag	12	NW	11_	NA NA	7/22/2003	JK	Yes	FJH_	7/22/2003	Average	RS	7/22/2003		Disposed off-site
PP21-0012	740671.25	1012580	Sum 1-4	1249.81	7/11/2003	7/19/2003	ORS	Frag	20	NE	1	. NA	7/22/2003	JK	Yes	FJH	7/22/2003	Average	RS	7/22/2003		Disposed off-site
PP21-0013	740740.25	1012598	Sum 1-4	62.53	7/11/2003	7/19/2003	ORS	78mm APHE Base Fuze	20	w	1	NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
PP22-0003	740657.75	1012660	Sum 1-4	107.65	7/11/2003	7/19/2003	ORS	Frag	12	\$	3	NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
PP22-0009	740675	1012743.8	Sum 1-4	19.35	7/11/2003	7/19/2003	Non-OE	Spike	25	SE	11_	NA NA	7/22/2003	JK	Yes	FJH	7/22/2003	Poor	RS	7/22/2003		Disposed off-site
PP23-0001	740656.25	1012863	Sum 1-4	295.7	7/11/2003	7/19/2003	ORS	Frag	0	NA	3	NA.	7/22/2003	JK	Yes	FJH_	7/22/2003	Good	RS.	7/22/2003		Disposed off-site
PP23-0008_	740878.75	1012795,3	Sum 1-4	58.47	7/11/2003	7/19/2003	Non-OE	Pitch Fork	18	E	1	NA.	7/22/2003	JK	Yes	FJH	7/22/2003	Average	RS	7/22/2003		Disposed off-site
PP24-0012	740659.75	1012921.3	Sum 1-4	29.12	7/11/2003	7/19/2003	NC	. NA	NA NA	NA	NA	NA.	7/22/2003	JK	Yes	FJH	7/22/2003	NA NA	RS	7/22/2003		
PP25-0004	740631	1013035	Sum 1-4	67,67	7/11/2003	7/19/2003	Non-OE	Wire	0	NA	2	NA.	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
PP28-0008	740738	1013394.8	Sum 1-4	87.74	7/11/2003	7/19/2003	Non-OE	Spike	12	w	5	NA.	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
QQ19-0003	740793	1012360	Sum 1-4	26,87	7/11/2003	7/19/2003	Non-OE	Barb Wire	0	NA	1	NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
QQ20-0004	740770.61	1012418.8	Sum 1-4	778,17	7/11/2003	7/19/2003	Non-OE	Pipe	6	E	0	NA.	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
QQ21-0004	740823.75	1012540.8	Sum 1-4	83.74	7/11/2003	7/19/2003	Non-OE	Hinge	A	5	,	. NA	7/22/2003	.lk	Yes	FJH	7/22/2003	Good	BS	7/22/2003		Disposed off-site
QQ21-0008	740829	1012524.5	Sum 1-4	73.79	7/11/2003	7/19/2003	Non-OE	S-Hook	0	NA.	1	NA NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
QQ21-0013	740848.5	1012582.8		32.98	7/11/2003	7/19/2003	Non-OE	Boil	0	NA NA		NA NA	7/22/2003	IK.	Yes	FJH	7/22/2003	Good	RS	7/22/2003	• .	Disposed off-site
		1012584.8	1	58.53	7/11/2003	7/19/2003	Non-OE	Spike	12	NE	-	NA NA	7/22/2003	JIK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
QQ21-0015											-	M-103 Fuze		- UK							_	
OQ22-0009	740812.5	1012707.3	Sum 1-4	112.05	7/11/2003	7/19/2003	OE	M-103 Fuze	50	sw	3	QQ22-0009	7/22/2003	JK	Yes	FJH	7/22/2003	Poor	RS	7/22/2003	Demilled	Disposed off-site
QQ23-0001	740760.5	1012861,5	Sum 1-4	58.77	7/11/2003	7/19/2003	Non-OE	Pipe 18* (QA Item)	0	NA_	38	NA NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
QQ23-0012	740758	1012807.3	Sum 1-4	427.59	7/11/2003	7/19/2003	Non-OE	Pipe 7" (QC Item)	12	s	0	NA NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
QQ24-0006	740881.25	1012949.8	Sum 1-4	251.84	7/11/2003	7/19/2003	Non-OE	Tractor Part	0	NA	1.	. NA	7/22/2003	JK	Yes	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
QQ24-0013	740858.25	1012925.8	Sum 1-4	282.67	7/11/2003	7/19/2003	ORS	Frag	6	N	6	NA NA	7/22/2003	JK	Yes_	FJH	7/22/2003	Good	RS	7/22/2003		Disposed off-site
QQ25-0003	740761.25	1013019.5	Sum 1-4	55.85	7/11/2003	7/19/2003	Non-OE	Wire and Nails	24	NE	2	NA NA	7/22/2003	JK	Yes _	FJH	7/22/2003	Average	RS	7/22/2003		Disposed off-site
QQ25-0021	740773.6	1013110.6	Sum 1-4	49.37	7/11/2003	7/19/2003	Non-OE	Bolt	20	w	5	. NA	7/22/2003	JK	Yes	FJH	7/22/2003	Average	RS	7/22/2003		Disposed off-site
G16-0015	736269.75	1011985	Sum 1-4	68,36	7/2/2003	7/24/2003	Non-OE	Rust Deposit	.0	NA_	- 6	NA NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
G16-0028	736273.5	1011981	Sum 1-4	14.96	7/2/2003	7/24/2003	Non-OE	Rust Deposit	0	NA	14	NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	AS	7/24/2003		Disposed off-site
G17-0038	736285.75	1012109	Sum 1-4	17.89	7/2/2003	7/24/2003	Non-OE	Flat Stock	4_	E	6	NA.	7/24/2003	JK	Yes	FJH	7/26/2003	Good	RS	7/24/2003		Disposed off-site
G17-0040	736287.5	1012027	Sum 1-4	37.88	7/2/2003	7/24/2003	Non-OE	Rust Deposit		NA.	8	NA NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
H17-0010	736438	1012002.3	Sum 1-4	29.11	7/2/2003	7/24/2003	Non-OE	Round Stock	12	w	6	NA	7/24/2003	JК	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
LL12-0044	740167.25	1011423,5	Sum 1-4	66.05	7/9/2003	7/24/2003	Non-OE	Rust Deposit	0	NA_	7	NA.	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
LL12-0069	740204.72	1011458.2	Sum 1-4	38.9	7/9/2003	7/24/2003	Non-OE	Crank Handle	8	N	3_	NA NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
LL12-0080	740248.5	1011444	Sum 1-4	24.32	7/9/2003	7/24/2003	Non-OE	Sake	18	Ε	12	NA NA	7/24/2003	JK	Yes	FJH	7/28/2003	Average	As	7/24/2003		Disposed off-site
LL13-0071	740224.75	T	Sum 1-4	1217.18	7/9/2003	7/24/2003	Non-OE	Engineer Stake	30	w	1	NA .	7/24/2003	JK	Yes	FJH	7/28/2003	Poor	RS	7/24/2003		Disposed off-site
MM10-0003		1011235.6		1307.03		7/24/2003	Non-OE	Explosive Limit Sign	0	NA	3	NA.	7/24/2003	JK.	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
MM10-0016		1011248.5	1	98.5	7/9/2003	7/24/2003	Non-OE	Wire	12	s	3	NA NA	7/24/2003	_JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
		1011278.5	1	276.46		7/24/2003	Non-OE		12	N	3	NA.	7/24/2003	JIK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
MM11-0013	140217.75	1.011278.5	J Sum I-4	1.6/0.40	risigods	, //2-W/2003	1 14041-05	AANG NUO MAGNI DOL	1 14	14		1 13/3	11242003	, vr	103		1 1/20/2003	3000	no no			



Ta 1 Geophysical Dig Sh... and Target History

Seneca Army Depot Open Contract No.

Final Report on on Grounds b. 3-98-D-0004 Tash order No. 0037

Project Name.
Project Location:
Seneca Army Depot, Romulus NY
Data:
MASTER DIG SHEET
Coordinate System NY State Plane Central NAQ. 83
Survey Area ID:
Sector:
MA. Grid: MA

Geophysical Contractor; Project Geophysicist: Site Geophysicist; Parsons Engineering Bart Hoekstra John Baptiste WESTON Field Tearr EOTI Field Tearr Parsons Field Tearr
George Payme (SUXOS) Carver Cobbins (TL) MarryHolmes (TL) Erich Stedman
Joe Kendell (TL) Don Koch (TL) Can Dorrell Jae Yun
Brian Ditsch (TL) Thomas Meeks Mike Turner Peter Anderson
Frank Montas Greg Nelson
Shawn Guighy Melissa Nugent

Coordinate System	MASTER DI NY State Pk		AD 83		Site Geophy			John Baptiste		e Kendall Ian Ditsch		Thomas 7	Vieeks		Tumer	Peter	Anderson					
	NA.	Grid:	NA		WESTON U	roject Enginee	r.	Frank Henderson Steffanie Warriner				Frank Me Shawn C					g Nelson sa Nugent					
Field Book ID:	NA				WESTON &	eophysiciet: urvey Tech		John Williams/Ryan Stelgerwalt Steve Kireiczyk														
		Original Surve	y			Reacquisition w/RTK	_	·	ig Results						Post-Di	g UXO QC	Results	Post-Dig G	eophysical Q	c	Status of 6	DE
			Channel ID (le-						. 01	tset	Depth (in)	-				uxo oc		Agreement between Dig				
Unique Yarget ID	Easting Coord. (ft)	Northing Coord, (ft)	C1 . C4, top sensor, predient, etcl	Amplitude Response (mV)	Date	Dele	Anomaly Type	Comments	Distance (in)	(N, NE, elc.)	Top of Hem	Digital Photo Filename	Date	Team Leader Initials	Excavation Hole Cleared?	Spec.	Date	Results & Geophysical Data? (Good, Average, Poor, Poor)	Geophysicist OC Initials	Date	Current Status	Final Disposition
MM11-0020	740298.25	1011256.8	Sum 1-4	101.54	7/9/2003	7/24/2003	Non-OE	Wire	0	NA.	111	. NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
MM12-0005	740265,75	1011427.8	Sum 1-4	158.21	7/9/2003	7/24/2003	Non-OE	Bolt	12	NE	0	NA.	7/24/2003	JK	Yes	FJH_	7/28/2003	Good	RS	7/24/2003		Disposed off-site
MM13-0003	740273_	1011583 5	Sum 1-4	5152,79	7/9/2003	7/24/2003	Non-OE	Metal Sign	8	E	0	NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
MM14-0012	740272.82	1011744.1	Sum 1-4	42.85	7/9/2003	7/24/2003	Non-OE	Nait	12	E	3	NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
MM14-0024	740297	1011736.5	Sum 1-4	142 58	7/9/2003	7/24/2003	Non-OE	Wire	0	NA_	0	NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
G16-0032	736283.25	1011955.3	Sum 1-4	48.32	7/2/2003	7/24/2003	ORS	Frag	12	w	10	NA.	7/24/2003	JK	Yes	FJH	7/28/2003	Good	AS	7/24/2003		Disposed off-site
G17-0005	736257,5	1012005,8	Sum 1-4	151.14	7/2/2003	7/24/2003	ORS	Frag	24	w	4	.NA	7/24/2003	JK	Yes	FJH	7/28/2003	Average	_ AS	7/24/2003		Disposed off-site
H16-0001	736379.5	1011945	Sum 1-4	33,73	7/2/2003	7/24/2003	ORS	Frag	12	w	4	NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
H16-0012	736421,75	1011879.3	Sum 1-4	77.75	7/2/2003	7/24/2003	ORS	Frag	12	E	2	· NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
H16-0019	738481	1011864.3	Sum 1-4	54.63	7/2/2003	7/24/2003	ORS	Frag	12	w	12	NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	AS_	7/24/2003		Disposed off-site
H18-0022	738492.75	1011972,8	Sum 1-4	323.79	7/2/2003	7/24/2003	ORS	Frag	16	w	4	NA	7/24/2003	JK	Yes	FJH	7/28/2003	Average	AS	7/24/2003		Disposed off-site
H17-0013	738443 25	1012115.8	Sum 1-4	27,9	7/2/2003	7/24/2003	ORS	Frag	8	SE_	6	NA	7/24/2003	JK_	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
H17-0018	736458	1012090	Sum 1-4	141.13	7/2/2003	7/24/2003	ORS	Frag	12	SE	_3	.NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
H17-0028	736493	1012099	Sum 1-4	84.12	7/2/2003	7/24/2003	ORS	Frag	12	N.	3	NA NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	AS_	7/24/2003		Disposed off-site
LL11-0038	740203,25	1011304,8	Sum 1-4	540 47	7/9/2003	7/24/2003	ORS	Frag	8	S	4	NA .	7/24/2003	JK	Yee	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
LL11-0057	740221.25	1011299.3	Sum 1-4	76.9	7/9/2003	7/24/2003	ORS	Fuze Safety Ring	0	NA	1	NA.	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
LL14-0023	740206,71	1011540,3	Sum 1-4	31.37	7/9/2003	7/24/2003	ORS	,50 Caliber Bullet	18	W	1	NA	7/24/2003	JK	Yes	FJH	7/28/2003	Average	RS	7/24/2003		Disposed off-site
LL14-0024	740207,25	1011629,6	Sum 1-4	569.87	7/9/2003	7/24/2003	ORS	Frag	12	SW	1	NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
LL14-0033	740222.5	1011651.5	Sum 1-4	55.21	7/9/2003	7/24/2003	ORS	Frag	12	E	2	NA.	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site .
MM14-0001	740250.25	1011674	Sum_1-4	109 44	7/9/2003	7/24/2003	ORS	Frag	12	E	2	NA _	7/24/2003	JK	Yes	FJH	7/28/2003_	Good	RS	7/24/2003	·	Disposed off-site
MM14-0008	740261.5	1011634.8	Sum 1-4	248.49	7/9/2003	7/24/2003	ORS	105mm Base Plate	18	E_	1	NA	7/24/2003	JK	Yes	FJH	7/28/2003	Average	RS	7/24/2003		Disposed off-site
MM14-0027	740305.25	1011744.8	Sum 1-4	322.1	7/9/2003	7/24/2003	ORS	Frag	- 8	Ε.	3	NA.	7/24/2003	JK	Yes	FJH	7/28/2003	Good	AS	7/24/2003		Disposed off-site
MM14-0031	740308	1011690.3	Sum 1-4	220.47	7/9/2003	7/24/2003	ORS	Frag	12	E	2	NA _	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
MM14-0042	740320.75	1011671,8	Sum 1-4	228.28	7/9/2003	7/24/2003	ORS	Frag	0	NA.	0	NA NA	7/24/2003	JK_	Yes	FJH	7/28/2003	Good	AS	7/24/2003		Disposed off-site
MM14-0042	740320.75	1011871,8	Sum 1-4	226 28	7/9/2003	7/24/2003	ORS	Frag	0	NA.	0	NA .	7/24/2003	JK	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
MM14-0042	740320.75	1	Sum 1-4	225.28	7/9/2003	7/24/2003	ORS	Freg	12	E	4	NA	7/24/2003	JK	Yes	FJH_	7/28/2003	Good	RS	7/24/2003		Disposed off-site
MM14-0045	740323.75	1011697	Sum 1-4	196.87	7/9/2003	7/24/2003	ORS	Frag	12	S	. 8	NA	7/24/2003	JK	Yes	FJH	7/28/2003	Good	AS	7/24/2003		Disposed off-site
HH37-0010		1014518.3	Sum 1-4	14 92	7/18/2003	7/23/2003	NC	NA NA	NA_	NA.	NA_	NA	7/24/2003	TM	Yes	FJH	7/28/2003	NA	AS .	7/24/2003		
HH37-0019	739742.75		Sum 1-4	32,96	7/18/2003	7/23/2003	ORS	Frag	30	E	8	_NA	7/24/2003	TM_	Yes	FJH	7/25/2003	Poor	RS	7/24/2003		Disposed off-site_
HH38-0052	739634	1014710.3	Sum 1~4	25.29	7/16/2003	7/23/2003	NC_	NA	NA.	NA .	NA.	NA	7/24/2003	TM	Yes	FJH	7/28/2003	_NA	AS AS	7/24/2003		Disposed off site
HH38-0071		1014626.8	Sum 1-4	21.68	7/18/2003	7/23/2003	ORS	Frag	18*	W	8	NA	7/24/2003	TM	Yes	FJH	7/28/2003	Average NA	RS RS	7/24/2003		Disposed off-site
HH38-0076		1014670.8	Sum 1-4	19,21	7/18/2003	7/23/2003	NC_	. NA	NA	NA.	NA .	NA NA	7/24/2003	TM	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
HH38-0077	739738.5	1014887.8	Sum 1-4	263.92	7/16/2003	7/23/2003	ORS	Frag	12	NA SW	16	NA .	7/24/2003		Yes	FJH	7/28/2003	Good	RS	7/24/2003		
1137-0010	739797,75	1014568.8	Sum 1-4	14.83	7/18/2003	7/23/2003	Non-OE	Wice		SW_	10	NA NA	7/24/2003	TM_	Yes	FJH	7/28/2003		AS	7/24/2003		Disposed off-site
1137-0018	739859 25	1014592.5	Sum 1-4	38.87	7/18/2003	7/23/2003	ORS	Frag	18	NW_ NE	1	NA NA	7/24/2003	TM	Yes	FJH	7/28/2003	Average Average	AS	7/24/2003		Disposed off-site
1 37-0019	739812	1014804	Sum 1-4	99.03	7/18/2003	7/23/2003		Frag	1	NA.	-	. NA	7/24/2003	TM	Yes	FJH	7/28/2003	NA NA	RS	7/24/2003		Disposed on site
1137-0024	739808.25	1014595	Sum 1-4	27.63	7/18/2003	7/23/2003	NC		NA 6	NA NF	NA_	NA NA	7/24/2003	TM	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
1137-0038	739823.75	1014518.3	Şum 1-4	19,77	7/18/2003	7/23/2003	ORS Non-OF	Frag	30	W	-	NA NA	7/24/2003	TM	Yes	FJH	7/28/2003	Poor	RS	7/24/2003		Disposed off-site
1(37-0041	739767.25	1014520	Sum 1-4		7/18/2003	7/23/2003	Non-OE Non-OE	Wire	24	SE	12	NA NA	7/24/2003	TM_	Yes	FJH	7/28/2003	Average	AS	7/24/2003		Disposed off-site
1137-0043	739797	1014580	Sum 1-4	19 04	7/18/2003	7/23/2003	ORS	Frag	28	W	- IZ	NA.	7/24/2003	TM	Yes	FJH	7/28/2003	Poor	RS	7/24/2003		Disposed off-site
1138-0002	739873.25 739812.75	1014748.5	Sum 1-4	15.37	7/18/2003		OE	76mm APHE Base Fuze	12	w	8	Base Fuze	7/24/2003	TM	Yes	FJH	7/28/2003	Good	8S	7/24/2003		Disposed off-site
1138-0049		1014641		65.5	7/18/2003	T	Non-OE	Pipe USACE QA itam # R	30	sw	36	NA NA	7/24/2003	TM	Yes	FJH	7/28/2003	Poor	RS	7/24/2003		Disposed off-site
1138-0078	739602	1		49 65	7/18/2003	7/23/2003	ORS	Frag	24		8	NA NA	7/24/2003		Yes	FJH	7/28/2003	Average	RS	7/24/2003		Disposed off-site
1139-0006	739637,5	1014848.5	Sum 1-4	49 65	1/18/2003	1/23/2003	URS		_ <4	3	- 0		1 115-45-003	1 (199		, , , , , , ,						- APPENDING STORY

Final Report Seneca Army Depot Open Detonation Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037

Project Name: Open Detonation Grounds Geophysical Contractor: Parsons Engineering WESTON Field Tear EOTI Field Tear Parsons Field Tear Parsons Field Tear Project Location: Sensoa Army Depoil, Bornships NY Project Geophysicist: Bart Hoskstra George Payres (SUXOS) Carver Cobbins (TL) MarryHolmes (TL) Erich Stedman Jae Kendall (TL) Don Koch (TL) Dan Dorrell Jae Yun Ont Koch (TL) Don Dorrell Jae Yun Ont Koch (TL) Don Dorrell Jae Yun Ont Koch (TL) Thomas Meeks Mike Tumer Peter Anderson Survey Area (ID: WESTON UXO Salety Frank Henderson Sector: NA Grid: NA WESTON Project Engineer: Steffanie Warriner Stefanie Warriner Stefa

eld Book ID:					WESTON	Geophysicist: Survey Tech		John Williams/Ryan Steigerwalt Steve Kirejczyk							<u> </u>							
		Original Surv	ву			Reacquisition w/RTK			Dig Results	fisel	I Down do		1		Post-Di	uxo oc	Results	Post-Dig G	eophysical C	oc	Status of	0E
Unique Target ID	Easting Coord. (ft)	Northing Coord. (ft)	Channel ID (C1 C4, to sersor, oradient, sic	Amplitude Response	Date	Dete	Anomely Type	Comments	Distance (in)	Direction (N, NE, etc.)	Depth (in)	Digital Photo Flienams	Date	Team Leader Initials	Excavation Hole Cleared?	UXO QC Spec. Initials	Date	Agreement between Dig Results & Geophysical Data? (Good, Average, Poor, Poor)	Geophysicist QC Initials	Date	Current Status	Final Disposition
JJ36-0001	739969.5	1014455	Sum 1-4	29.76	7/18/200	7/23/2003	NG	NA NA	NA	NA	NA	NA.	7/24/2003	ТМ	Yes	FJH	7/28/2003	NA.	RS	7/24/2003		
JJ38-0006	739677	1014499	Sum 1-4	1	7/18/200		ORS	Frag	12	w	6	NA.	7/24/2003	тм	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-site
JJ38-0009	739904.25	1014493	Sum 1-4	81.89	7/18/200	7/23/2003	ORS	Frag	18	w	8	NA.	7/24/2003	тм	Yes	FJH	7/28/2003	Average	RS	7/24/2003		Disposed off-sit
JJ37-0002	739930.25	1014575.5	Sum 1-4	36.9	7/18/200	7/23/2003	NC_	NA	NA	NA.	NA_	NA.	7/24/2003	ТМ	Yes	FJH	7/28/2003	NA ·	RS	7/24/2003		
JJ37-0012	739943.5	1014803	Sum 1-4	31,8	7/18/200	7/23/2003	NC_	NA NA	NA.	NA_	NA	NA NA	7/24/2003	TM	Yes	FJH	7/28/2003	NA NA	RS	7/24/2003		
JJ37-0013	739889	1014808	Sum 1-4	21.33	7/18/200	7/23/2003	ORS	Frag	12	E	6	NA :	7/24/2003	TM	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-si
JJ37-0028	739908.75	1014617	Sum 1-4	38.25	7/18/200	7/23/2003	ORS	Frag	30	w	12	NA .	7/24/2003	TM	Yes	FJH	7/28/2003	Poor	RS	7/24/2003		Disposed off-si
JJ38-0002	739882.75	1014740.5	Sum 1-4	21.3	7/18/200	7/23/2003	ons	Frag	12	s	6	NA	7/24/2003	ТМ	Yes	FJH	7/28/2003	Good	RS	7/24/2003		Disposed off-si
JJ38-0014	739958.75	1014719.5	Sum 1-4	31.62	7/16/200	7/23/2003	Non-OE	Bridle	24	E	8	NA.	7/24/2003	TM	Yes	FJH	7/28/2003	Average	RS	7/24/2003		Disposed off-si
JJ38-0019	739928.5	1014635.3	Sum 1-4	20.33	7/18/200	7/23/2003	Non-OE	Scrap	18	E	8	NA	7/24/2003	TM	Yas	FJH	7/28/2003	Average	RS	7/24/2003	<u> </u>	Disposed off-si
JJ39-0003	739908.25	1014779.5	Sum 1-4	80.05	7/18/200	7/23/2003	NC	NA	NA.	NA_	NA	NA NA	7/24/2003	TM	Yes	FJH	7/28/2003	NA	AS	7/24/2003		
KK38-0004	740028.25	1014480.3	Sum 1-4	28.85	7/18/200	7/23/2003	Non-OE	Na/l	18	w	8	NA	7/24/2003	TM	Yes	FJH	7/28/2003	Average	RS	7/24/2003		Disposed off-si
KK38-0001	740058	1014633	Sum 1-4	73.67	7/18/200	7/23/2003	ORS	Frag	12	E	В	NA	7/24/2003	TM	Yes	FJH	7/28/2003	Good	RS	7/24/2003	<u></u>	Disposed off-s
HH39-0012	739708	1014852.8	Sum 1-4	22.85	7/18/200	7/23/2003	Non-OE	Hot Rock	18	_s_	10	NA .	7/28/2003	ТМ	Yes	FJH	7/29/2003	Average	RS	7/28/2003		Disposed off-si
1138-0001	739805.75	1014748.3	Sum 1-4	14.76	7/18/200	7/23/2003	Non-OE	Hot Rock	24	s	8	NA.	7/28/2003	TM	Yes	FJH	7/29/2003	Average	RS	7/28/2003		Disposed off-si
II38-0015	739811	1014738.8	Sum 1-4	26.22	7/18/200	1	Non-OE	Hot Rock	18	S_	- 6	NA.	7/28/2003	TM	Yes	FJH	7/29/2003	Average	RS	7/28/2003		Disposed off-si
1139-0005	739822.25	1	Sum 1-4	1	7/18/2003		ORS	Frag	0	NA	8	NA NA	7/28/2003	TM	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-s
1140-0001	739771,5	1014881	Sum 1-4	1	7/18/200		ORS	Freg	36	NA.	8	NA	7/28/2003	ТМ	Yes	FJH	7/29/2003	Poor	RS	7/28/2003		Disposed off-s
KK33-0008	740034.25	1014062	Sum 1-4	T	1		Non-OE	Wire	18	NW	6	NA NA	7/28/2003	TM.	Yes	FJH	7/29/2003	Average	RS	7/26/2003		Disposed off-s
KK33-0013	740074.25		Sum 1-4		7/17/200		Non-OE	Spike	12	N	18	NA	7/28/2003	TM	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-s
KK33-0019	740093.75	1014087.3	Sum 1-4		1		ORS	Frag	12	w	10	. NA	7/28/2003	TM	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-s
KK33-0022	740102.75	1014070,8		539.92			Non-OE	Pipe (Weston Seed)	0_	NA_	0	NA	7/28/2003	TM	Yes	FJH_	7/29/2003	Good	RS	7/26/2003		Disposed off-s
JJ33-0015	739923	1014055,8	Sum 1-4	154.16	7/17/200		ORS	Frag	0_	NA .	12	NA NA	7/28/2003	TM.	Yes	FJH	7/29/2003	Good	RS RS	7/28/2003		Disposed off-s
JJ33-0023	739947.75	1014081	Sum 1-4	59.26 80.56	7/17/200	1	ORS	Frag Frag	12	-	-	NA NA	7/28/2003	TM	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-s
JJ33-0001	739810.25	1014094	Sum 1-4		i	1	Non-OE	Pipe (Weston Seed)	18	N	,	NA NA	7/28/2003	TM	Yes	FJH	7/29/2003	Average	RS.	7/28/2003		Disposed off-s
II33-0013 II33-0021	739823.25	1014087.3	Sum 1-4	129.46	7/17/200		ORS	Frag	0	NA NA	8	NA NA	7/28/2003	TM	Yes	FJH	7/29/2003	Good	AS	7/28/2003		Disposed off-s
1133-0027	739835.5	1014085	Sum 1-4	54.38	7/17/200		ORS	Frag	0	NA	8	NA	7/28/2003	TM	Yes	FJH	7/29/2003	Good	RS.	7/28/2003		Disposed off-s
JJ34-0007	739891	1014137.8	Sum 1-4	225.01	7/17/200		ORS	Frag	1 0	NA NA	8	NA NA	7/28/2003	TM	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-s
JJ34-0009	739900.75	1014203.3	Sum 1-4		7/17/200		ORS	Frag	12	E	1	NA	7/28/2003	TM	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-s
JJ34-0022	739976.5	1014172.3	Sum 1-4		7/17/200		Non-OE	Farm Equipment	0	NA.	6	NA.	7/28/2003	тм	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-s
1133-0008	739788.25	1014099.3		T	7/17/200		NA	USACE Seed Item (Not Dug)	NA	NA	NA	NA.	7/28/2003	TM	NO	FJH	7/29/2003	NA .	As	7/28/2003		Disposed off-s
HH33-0012	739648.5	1014113.8	ł	T .	7/17/200		ORS	Frag	12	s	6	. NA	7/28/2003	тм	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-s
HH34-0005	739680.25	1014185,5	Sum 1-4	148.44	7/17/200		OE	M-103 Fuze	18	-	3	M-103 Fuze HH34-0005	7/28/2003	тм	Yes	FJH	7/29/2003	Average	RS	7/28/2003	Demilled	Disposed off-s
	739674.5	1014145.3	·		7/17/200		ORS	Frag	18		1	NA NA	7/28/2003	TM	Yes	FJH	7/29/2003	Average	RS	7/28/2003	Dominos	Disposed off-s
HH34-0008	739719.02		Sum 1-4		7/17/200		ORS	Frag	24	a.		NA	7/28/2003	TM	Yes	FJH	7/29/2003	Average	RS.	7/28/2003		Disposed off-s
HH34-0017	T"				7/17/200	T .		Farm Equipment	18		12	NA NA	7/28/2003	TM	Yes	FJH	7/29/2003	Average	RS	7/28/2003		Disposed off-si
9G34-0017 9G33-0030	739604,25		Sum 1-4		7/17/200		Non-OE ORS	· Frag	18	5	B	NA NA	7/28/2003	TM	Yes	FJH	7/29/2003	Average	RS	7/28/2003		Disposed off-s
GG33-0030 GG33-0035	739598.75		Sum 1-4		1		ORS	Frag	0	NA.	l e	NA NA	7/28/2003	TM	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-si
GG33-0037	739801,25		Sum 1-4		7/17/200		Non-OE	Farm Equipment	18	s	8	NA	7/28/2003	TM	Yes	FJH	7/29/2003	Average	RS	7/28/2003		Disposed off-si
II16-0102	739843.5	1011906.8	Sum 1-4		7/9/2003	1	Non-OE	Plow Tooth	6	w	1	NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-si
II16-0102	739843.5	1011906.6	Sum 1-4	1	7/9/2003		Non-OE	Plow Bar	6	sw	1	. NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	AS	7/28/2003		Disposed off-sit
JJ14-0143	739993.5	1011683.8	Sum 1-4		T		ORS	Frag	12	E	2	NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	AS	7/28/2003		Disposed off-site
JJ15-0213		1011755.8			7/9/2003		ORS	155mm Projectile Lifting Lug	12	N	A .	NA NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003	-	Disposed off-site



Seneca Army Depot Ope Contract No.

` Final Report ition Grounds .45-98-D-0004 Task Order No. 0037

Project Name: Open Detonation Grounds
Project Location: Seneca Army Depot, Bornulus NY
Deta: MASTER DIG SHEET
Coordinate System NY. State Plane Central NAD. 63
Survey Area ID:
Section: A Grid: NA
NA Grid: NA

Geophysical Contractor: Project Geophysicist: Site Geophysicist: _WESTON UXO Safety WESTON Project Engineer; Parsons Engineering Bart Hoekstra John Baptiste Frank Henderson Steffanie Warriner

EOTI. Field Tearr

Carver Cabbins (TL) Marry-Holmes (TL) Erich Stedman
Don Koch (TL) Don Dorrell
Thomas Mesks Mike Turner Present Control Frank Montes
Frank Montes Mike Turner Gregor Meston
Sha wn Quigly Meliase Nugent WESTON Field Tearr
George Payne (SUXOS)
Joe Kendall (TL)
Brian Ditsch (TL)

Sector: Field Book ID:	NA NA	Grid:	MA		WESTON S WESTON S	roject Engines leophysicist:	er;	Steffante Warriner John Williams/Rvan Steigerwalt				Shawn C	Zuigły			Melis	sa Nugent					
	,	Original Surv	ey		WESTONS	Resoquisition w/RTK		Steve Kirelczyk	ig Results			L			Post-Dir	L LUXO OC	Besulte	Post-Dia G	eophysical O	,	Status of	ne
			Channel ID (le							fisel	Depth (In)	-			7 031-25		7 ROSUILS	Agreement between Dig	- Bopriyaicai C		Status of	JE
Unique Target ID	Easting Coord, (ft)	Northing Coord. (ft)	C1 C4, for sensor, oraclent stot	Amplitude Response (mV)	Date	Date	Anomaly Type	Comments	Distance	Direction (N, NE,	Top of item	Digital Photo Filename	Date	Team Leader Initials	Excavation Hole	UXO QC Spec, Initials	Date	Results & Geophysical Data? (Good, Average,	Geophysicist			
JJ15-0213	739974.75	1011755.8	Sum 1-4	65.1	7/9/2003	7/24/2003	Non-OE	Bott	A A	946.1	2	NA NA	7/28/2003	JK	Cleared? Yes	FJH	7/29/2003	Poor, Poor)	QC Initials	7/26/2003	Current Status	Final Disposition
JJ15-0217	739975.5	1011816.8	Sum 1-4	109.77	7/9/2003	7/24/2003		Wire	12	w	,	NA.	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS			Disposed off-site
JJ15-0265	740000	1011845.8	Sum 1-4	600.91	7/9/2003	7/24/2003		Frag	0	NA.	3	NA NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-site
JJ16-0085	I	1011890,3	Sum 1-4	162.24	7/9/2003	7/24/2003	1	,50 Caliber Ball Round	8	w		NA NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-site
JJ16-0085	739906.25	1011890.3	Sum 1-4	162.24	7/9/2003	7/24/2003		Tractor Plate	30	w	0	NA.	7/28/2003	JK	Yes	-FJH	7/29/2003	Poor	RS	7/28/2003 7/28/2003		Disposed off-site Disposed off-site
JJ16-0110	739915.5	1011881.5	Sum 1-4	646.15	7/9/2003	7/24/2003	ORS	Frag	0	NA.	4	NA NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003		1 1
JJ16-0138	739928.25	1011896.8	Sum 1-4	266,68	7/9/2003	7/24/2003	Non-OE	Wire	12	NE		NA.	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-site
JJ16-0138	739928,25	1011896,8	Sum 1-4	266.68	7/9/2003	7/24/2003	ORS	Mine, AP Bouncing Betty (Empty)	20	N	6	NA.	7/28/2003	JK	Yes	FJH	7/29/2003	Average	RS	7/28/2003		Disposed off-site
JJ16-0195	739959.25	1011925.5	Sum 1-4	1587,71	7/9/2003	7/24/2003	Non-OE	Chain 30 inch	4	s	,	NA.	7/26/2003	JK.	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-site
JJ16-0201	739962.25	1011903.5	Sum 1-4	159,13	7/9/2003	7/24/2003	ORS	Frag	12	w	6	NA.	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003		
KK14-0184	740104,5	1011670.8	Sum 1-4	64,07	7/9/2003	7/24/2003	ORS	Frag	18	w	3	NA NA	7/28/2003	JK	Yes	FJH	7/29/2003	Average	RS			Disposed off-site
KK15-0029	740014.25		Sum 1-4	471.98	7/9/2003	7/24/2003	ORS	Frag	8	w		NA NA	7/28/2003	IV.	Yes	FJH	7/29/2003		RS	7/28/2003		Disposed off-site
KK15-0044	740025	1011785,3	Sum 1-4	151.01_	7/9/2003	7/24/2003	ORS	Mortar Frag	12	sw	-	NA	7/28/2003	- JK	Yes	FJH	7/29/2003	Good		7/28/2003		Disposed off-site
KK16-0045	740042	1011985	Sum 1-4	1	7/9/2003	7/24/2003	ORS	Frag	10	5		NA NA	7/28/2003	JK	Yas	FJH		Good	RS	7/28/2003		Disposed off-site
KK18-0086	740088.5	1011898	Sum 1-4	429.51	7/9/2003	7/24/2003	1	Plow Tooth	10			NA NA	7/28/2003	314	Yes		7/29/2003	Good	RS	7/28/2003		Disposed off-site
LL13-0052	740184	1011575.8	Sum 1-4	8403.79	7/9/2003	7/24/2003		Sign	1 2	N	-	NA NA	1	JK.		FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-site
	740142.25			131.65			1		0	NA			7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-site
LL14-0007 LL14-0020	740189,75		Sum 1-4	1	7/9/2003	7/24/2003	ORS	Frag	-	N	4	NA.	7/28/2003	JK	Yes	_FJH	7/29/2003	Good	AS	7/28/2003		Disposed off-site
					1	1		Frag	В_	E	.6	NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-site
LL15-0029	740199.5	1011848.3			7/9/2003	7/24/2003	Non-OE	Tractor Blade	24	S	3	NA	7/28/2003	JK_	Yes	FJH	7/29/2003	Average	As	7/28/2003		Disposed off-site
LL15-0029 LL16-0005	740199,5	1011926	Sum 1-4		7/9/2003	7/24/2003		Wire	0	NA NA	NA NA	NA NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-site
					T	1	ORS	USACE Seed Item (Not Dug)	NA		NA.	NA	7/28/2003		NO	FJH	7/29/2003	NA NA	RS	7/28/2003		Disposed off-site
LL16-0014	740147	1011973.8	Sum 1-4	48.98	7/9/2003	7/24/2003		Frag	6	N	- 6	NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003	·	Disposed off-site
LL16-0032	740174 25	1011935.5	Sum 1-4	315.15	7/9/2003	7/24/2003	ORS	75mm Smoke Cartridge	6	<u>s</u>	4	NA	7/28/2003	JK	Yes	_FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-site
LL16-0079	740235	1011955.3	Sum 1-4	99.63	7/9/2003	7/24/2003	Non-OE	Round Stock	36	S	8	NA.	7/28/2003	JK	Yes	FJH	7/29/2003	Poor	RS	7/28/2003		Disposed off-site
LL16-0079	740235	1011955,3	Sum 1-4	99.63	7/9/2003	7/24/2003	Non-OE	Wire	6	N	14	NA NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	RS	7/28/2003		Disposed off-site
LL16-0079	740235	1011955.3	Sum 1-4	99.63	7/9/2003	7/24/2003	Non-OE	Wire	18	S	9	NA	7/28/2003	JK	Yes	FJH	7/29/2003	Average	RS	7/28/2003		_ Disposed off-site
DD42-0007	739215	1015135	Sum 1-4	16,68	7/18/2003	7/24/2003	Non-OE	Hot Rock	0	NA	1	NA NA	7/28/2003	JK .	Yes	FJH	7/29/2003	Good	RŞ	7/28/2003		Disposed off-site
EE41-0008	739256,25	1015075.8	Sum 1-4	375.49	7/18/2003	7/24/2003	ORS	Frag	0	NA.	1	NA NA	7/28/2003	JK	Yes	FJH	7/29/2003	Good	AS	7/28/2003		Disposed off-site
BB42-0003	738991,5	1015223.3	Sum 1-4	54.28	7/18/2003	7/23/2003	1	Handle	8	W	4	NA NA	7/29/2003	JK	Yes	FJH	7/30/2003_	Good	RS	7/30/2003		Disposed off-site
CC41-0005	739050	1015074.3	Sum 1-4	48.38	7/18/2003	7/23/2003	1	Horseshoe	6	N	- 6	NA NA	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
CC42-0003		1015131.5	Sum 1-4	16.88	7/18/2003	7/23/2003	1	Rust Pocket	0	NA	12	NA NA	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
CC42-0006	739040.5	1015203.3	Sum 1-4	18,47	7/18/2003	7/23/2003	Non-QE	Hot Rock	24	_sw_	11	NA NA	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
CC42-0007	739050.5	1015159	Sum 1-4	38.25	7/18/2003	7/23/2003	Non-OE	Bolt	10	E	3	NA	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
CC42-0009	739010,5	1015162.3	Sum 1-4	45,42	7/18/2003	7/23/2003	Non-OE	Bolt	20	E	2	NA NA	7/29/2003	JK	Yes	FJH	7/30/2003	Good	AS_	7/30/2003		Disposed off-site
DD41-0003	739175.25	1015095.8	Sum 1-4	63.6	7/18/2003	7/23/2003	ORS	78mm APHE Base Fuze (Empty)	12	E	2	NA NA	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
DD41-0005	739128.25	1015104.5	Sum 1-4	66.14	7/18/2003	7/23/2003	NA.	USACE Seed Item	NA.	NA.	NA_	NA	7/29/2003	JK	NO	FJH	7/30/2003	NA NA	AS	7/30/2003		Disposed off-site
DD41-0008	739130.75	1015111.5	Sum 1-4	18,95	7/18/2003	7/23/2003	NC.	NA NA	NA.	NA	NA	NA NA	7/29/2003	JK	Yes	FJH	7/30/2003	NA NA	RS	7/30/2003		
DD41-0007	739132.5	1015080,8	Sum 1-4	25,39	7/18/2003	7/23/2003	ORS	Frag	18	N	2	NA	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
DD41-0018	739185.75	1015088	Sum 1-4	251.67	7/18/2003	7/23/2003	Non-OE	Threaded Rod	8	E	2	NA.	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
DD42-0001	739147	1015146.8	Sum 1-4	619.25	7/18/2003	7/23/2003	Non-OE	Pipe 6" Weston Seed	<u>3</u>	sw	0	NA	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS_	7/30/2003		Disposed off-site
DD42-0005	739157,5	1015184,5	Sum 1-4	14.25	7/18/2003	7/23/2003	Non-OE	Rust Pocket	0	NA.	24	NA.	7/29/2003	JK	Yes	FJH	7/30/2003	Average	AS	7/30/2003		Disposed off-site
F14-0037	738181.25	1011701,5	Sum 1-4	175.44	7/1/2003	7/23/2003	Non-OE	Pipe 16° Seed	30	w	18	NA.	7/29/2003	JK	Yes	FJH	7/30/2003	Average	AS	7/30/2003		Disposed off-site
F14-0041	738188,55	1011709.9	Sum 1-4	154.73	7/1/2003	7/23/2003	Non-OE	Pipe 18* Seed	30	E	12	NA NA	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
F14-0052	736210.61	101 1701.6	Sum 1-4	47.69	7/1/2003	7/23/2003	NA .	USACE Seed Item	NA	NA	NA	NA NA	7/29/2003	JK	NO	FJH	7/30/2003	NA .	RS	7/30/2003		Disposed off-site

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Final Report Seneca Army Depot Open Detonation Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037

Geophysical Contractor: Project Geophysicist: Site Geophysicist:

Parsons Engineering Bart Hoekstra John Baptiste

Frank Henderson Steffanie Warriner John Williams/Ryan Steige

EOTI Field Tearr

Gerver Cobbins (TL) Menty-Holmes (TL) Erich Stedman
Don Koch (TL) Dan Dorrell Jas Yun
Thomas Meeks Mike Tumer Pater Anderson
Frank Montas
Shawn Quigty Melissa Nugent WESTON Field Team George Payne (SUXOS) Joe Kendall (TL) Brian Ottsch (TL)

Coordinate System	NY State Pla		AD 83		Site Geophy			John Babliste	Br	ian Ditsch	(tr)	Thomas	Meeks	Mike	Tumer		Anderson					
	NA .	Grid:	NA .		WESTON U	oject Enginee		Erank Henderson Steffanie Warriner				Frank M Shawn C					Nelson sa Nugent					
	NA				WESTON &	eophysicist:		John Williams/Ryan Steigenwalt Steve Kireiczyk														
		Inginal Surve	w			Resoquisition w/RTK			Ng Results						Post-Dig	uxo ac	Results	Post-Dig G	eophysical Q	c	Status of	OE
	Ì		Channel ID da						01	Msel	Depth (in)	1						Agreement between Dig				
	Easting	Northing	C1C4, lap	Amplitude Response			Anomaly		Distance	Direction (N, NE,				Team Leader	Excavation Hole	UXO QC Spec.		Results & Geophysical Data? (Good, Average,	Geophysicist		İ	
Unique Target ID	Coord, (ft)	Coord. (ft)	gradent, etcl	(mV)	Date	Date	Туре	Comments	(in)	elc.)	Top of Herr	Digital Photo Filename	Data	Initials	Cleared?	Initials	Date	Poor, Poor)	QC Initials	Date	Current Status	Final Disposition
F15-0038	736208	1011755.3	Sum 1-4	73.7	7/1/2003	7/23/2003	NA	USACE Seed Item	NA .	NA	NA	NA	7/29/2003	JK	NO_	FJH	7/30/2003	NA NA	AS	7/30/2003		Disposed off-site
G14-0022	736250.87	1011713.6	Sum 1-4	43,35	7/2/2003	7/23/2003	ORS	76mm APHE Projectile	30	w	20	NA.	7/29/2003	JK_	Yes	FJH .	7/30/2003	Average	RS	7/30/2003		Disposed off-site
G14-0022	738250.87	1011713.6	Sum 1-4	43.35	7/2/2003	7/23/2003	Non-OE	Hot Rock	25	w	18	NA	7/29/2003	JK	Yes	FJH_	7/30/2003	Average	RS	7/30/2003		Disposed off-site
G14-0022	738250.87	1011713,6	Sum 1-4	43.35	7/2/2003	7/23/2003	ORS	Fuze Pieces	22	w	15	NA	7/29/2003	JK	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site-
115-0051	736564.25	1011869.8	Sum 1-4	39.45	7/2/2003	7/23/2003	ORS	Frag	10	w	8	NA	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
115-0052	736584.75	1011657.8	Sum 1-4	260.36	7/2/2003	7/23/2003	ORS	Frag	18	N	2	NA.	7/29/2003	JK	Yes	FJH_	7/30/2003	Good	RS	7/30/2003		Disposed off-site
115-0056	738572	1011852.3	Sum 1-4	56.57	7/2/2003	7/23/2003	ORS	Frag	12	w	4	NA.	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
115-0067		1011874.5	Sum 1-4	135.51	7/2/2003	7/23/2003	ORS	Frag	20	s	4	NA	7/29/2003	ЛК	Yes	FJH	7/30/2003	Good	AS	7/30/2003		Disposed off-site
118-0001	736501	1011985.5	Sum 1-4	30,28	7/2/2003	7/23/2003	ORS	Frag	12	SF	-	NA.	7/29/2003	IK	Yes	FJH	7/30/2003	Good	RS_	7/30/2003		Disposed off-site
110-0001	/30301	1011865.5	Sum 1-4	30,20	112/2003	7723/2003			' <u>'</u>			Base Fuze		JK.								1
116-0002	736521.75	1011932	Sum 1-4	19.6	7/2/2003	7/23/2003	OE_	Base Fuze, 76mm APHE	0	NA.	6	116-0002 Base Fuze	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003	Demilled	Disposed off-site
116-0006	738531	1011935.5	Sum 1-4	38.04	7/2/2003	7/23/2003	OE	Base Fuze, 76mm APHE	0	NA	8	116-0006	7/29/2003	JĶ	Yes	FJH	7/30/2003	Good	RS	7/30/2003	Demilled	Disposed off-site
116-0010	736546.25	1011889.8	Sum 1-4	81.74	7/2/2003	7/23/2003	Non-OE	Hot Rock	18	w	10	NA	7/29/2003	JK	Yes	FJH	7/30/2003	Good	AS	7/30/2003		Disposed off-site
116-0047	736814.25	1011878.5	Sum 1-4	227.91	7/2/2003	7/23/2003	OE	M-103 Fuze	20	s	3	M-103 Fuze I18-0047	7/29/2003	Jĸ	Yes	FJH	7/30/2003	Good	RS	7/30/2003	Demilled	Disposed off-site
	700014.20		Out 1-4						Ι			M-103 Fuze									,	
KK15-0085	740069.75	1011824.5	Sum 1-4	154.72	7/9/2003	7/23/2003	OE	M-103 Fuze	12	NW	8	KK15-0085	7/29/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003	_ Demilled	Disposed off-site
DD32-0001	739221.25	1013992	668.16	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	12	s	8	NA	7/29/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
DD32-0001	739221.25	1013992	868,16	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	_12	E	12	NA NA	7/29/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
DD33-0021	739230,75	1014090,8	49.23	Sum 1-4	7/17/2003	7/23/2003	ORS_	Frag	6	s	8	NA.	7/29/2003	TM	Yes	FJH	7/30/2003	Good	85	7/30/2003		Disposed off-site
DD33-0032	739241	1014103.5	88.09	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	18	s	6	. NA	7/29/2003	TM	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
DD33-0032	739241	1014103.5	88.09	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	24	s	_12	NA.	7/29/2003	TM	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
DD34-0002	739128.75	1014191,3	95.08	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	36	w_	6	NA	7/29/2003	TM	_Yes	FJH	7/30/2003	Poor	RS_	7/30/2003		Disposed off-site
DD34-0002	739128.75	1014191,3	95.08	Sum 1-4	7/17/2003	7/23/2003	ORS	Frap	36	E_	6	NA	7/29/2003	TM	Yes	FJH	7/30/2003	Poor	RS	7/30/2003		Disposed off-site
DD34-0002	739128.75	1014191.3	95,08	Sum 1-4	7/17/2003	7/23/2003	ORS	36	36	sw	- 8	NA .	7/29/2003	TM	Yes	FJH	7/30/2003	Poor	RS	7/30/2003		Disposed off-site
DD34-0002	739128.75	1014191.3	95.08	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	18	NW_	8	NA	7/29/2003	TM	Yes	FJH	7/30/2003	Average	AS	7/30/2003		Disposed off-site_
DD34-0002	739128.75	1014191.3	95.08	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	30	s	. 8_	NA.	_7/29/2003	ТМ	Yes	FJH	7/30/2003	Poor	RS	7/30/2003		Disposed off-site
EE33-0011	739265.75	1014063.8	265.64	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	12	s	12	NA.	7/29/2003	ТМ	Yes_	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
EE33-0016	739275	1014085.3	38,34		7/17/2003	7/23/2003	ORS	Frag	12	E	6	NA	7/29/2003	TM_	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
EE33-0026	739282	1014053.8	474.21	Sum 1-4		7/23/2003	ORS	Frag	To	NA	12	NA	7/29/2003	тм	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
EE33-0030	739285.25	1014022.8	216.46	Sum 1-4		7/23/2003	Non-OE	Farm Equipment	24	SE	12	NA .	7/29/2003	TM	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
		1014041	469,87	Sum 1-4	1	7/23/2003	ORS	Frag	12	w	8	NA _	7/29/2003	тм	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
EE33-0038	739293.25			Sum 1-4		7/23/2003	ORS	Frag	1	NA.	A	NA.	7/29/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
FF32-0010	739407	1013952.3	112.44					Frag	1 20	sw	12	NA.	7/29/2003	ТМ	Yes	FJH	7/30/2003	Poor	RS	7/30/2003		Disposed off-site
FF32-0012	739418.75		85,19	Sum 1-4		7/23/2003	ORS		30_	SW	12			TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
FF32-0014	739435,75	1013968.5	332,26	Sum 1-4		7/23/2003	ORS	Frag	- 6	N N	- 6	NA.	7/29/2003									
FF33-0012	739412,25	1014008.5	198,46	Sum 1-4		7/23/2003	ORS	Frag	18	S	8	NA	7/29/2003	TM_	Yes	FJH_	7/30/2003	Average	RS	7/30/2003		Disposed off-site
FF33-0012	739412.25	1014008.5	198,46	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	18	N	8	NA NA	7/29/2003	TM.	Yes	FJH _	7/30/2003	Average	RS	7/30/2003		Disposed off-site
FF33-0018	739432.25	1014105.8	392.27	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	0	NA_	6	NA	7/29/2003	TM_	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
GG32-0005	739550.5	1014000	308.92	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	0	NA.	8	NA	7/28/2003	TM	Yes	FJH	7/30/2003	Good	AS	7/30/2003		Disposed off-site
GG32-0012	739586.25	1013988	118,87	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	0	NA	8	NA	7/29/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
GG33-0011	739527.5	1014002.6	131.63	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	6	NE_	12	NA .	7/29/2003	TM_	Yes	FJH_	7/30/2003	Good	RS_	7/30/2003		Disposed off-site
GG33-0011	739527.5	1014002.8	131.63	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	6_	N	6	NA	7/29/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
GG34-0002	739510	1014162.5	80.87	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	0_	NA	8	_NA	7/29/2003	TM	Yes	FJH	7/30/2003	Good	RS_	7/30/2003		Disposed off-site
li32-0011	739884.5	1013970.8	118.59	Sum 1-4	7/17/2003	7/23/2003	Non-OE	Barb Wire	12	NW	1	NA NA	7/29/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
II32-0013	739873.5	1013961.5	176.58	Sum 1-4	7/17/2003	7/23/2003	Non-OE	Barb Wire	12_	s	3_	NA NA	7/29/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
1133-0026	739834,75	1014003.3	2308.14	Sum 1-4	7/17/2003	7/23/2003	ORS	Frag	12	·s	12	NA	7/29/2003	TM	Yes	FJH	7/30/2003	Good	RS_	7/30/2003	L	Disposed off-site



Seneca Army Depot Open f Contract No. i

Final Report on Grounds 98-D-0004 Jer No. 0037

Project Name:	Open Dete	onation Grou	nds	Geophysical Contractor:	Parsons Engineering	Γ	WESTON Field Team	EOTI Field Te	arr	Parsons Field Team
			Romulus NY	Project Geophysicist:	Bart Hoekstra	1	George Payne (SUXOS)	Carver Cobbins (TL)	MartyHolmes (TL)	Erloh Stedman
Date:		DIG SHEET		Site Geophysicist:	John Saptiste	1	Joe Kendall (TL)	Don Koch (TL)	Dan Dorrell	Jae Yun
Coordinate System			I NAD 83	,		1	Brian Ditsoh (TL)	Thomas Meeks	Mike Tumer	Peter Anderson
Survey Area ID:	- Little Interes	70110		WESTON UXO Safety	Frank Henderson	1		Frank Montes		Greg Nelson
Sector:	NA	Grid:	NA.	WESTON Project Engineer:	Steffanie Warriner	1		Shawn Quigty		Melissa Nugent
Field Book ID:	NA			WESTON Geophysicist:	John Williams/Rvan Steigenwalt	[

Field Book ID:	CID: NA				WESTON S	leophysicist: Lurvey Tech		John Williams/Rvan Steigenwalt Steve Kirelczyk	<u> </u>													
	T	Original Surve	ay			Resoquisition w/RTK			ig Results						Post-Dig	UXO QC	Results	Post-Dig G	eophysical C	C	Status of (DE
	Easting	Northing	Charmel ID (le- C1 C4, top sensor,	Amplitude Response (mV)	Date	Date	Anomaly Type	Comments	Distance (In)	Direction (N. NE,	Oapth (in)	Digital Photo Filename	Cale	Team Leader	Excavation Hole	UXO QC Spec.	Date	Agreement between Dig Results & Geophysical Data? (Good, Average, Poor, Poor)	Geophysicist OC initials	Data	Current Status	Final Disposition
Unique Target II		Coord, (ft)	206.34			7/23/2003	ORS		100	NA NA	1 Op or next	NA NA	7/29/2003	ТМ	Yes	FJH	7/30/2003	Good	RS	7/30/2003	Out of the same	Disposed off-site
JJ32-0008	739978.75			Sum 1-4	7/17/2003	1		Frag	18	NA_	-		7/30/2003	TM	Yes	FJH			RS			Disposed off-site
D17-0007		1012077.8		16,97	7/1/2003	7/23/2003	Non-OE	Scrap		_=		57mm Projo					7/30/2003	Average		7/30/2003		
DD32-0005	739235.25			114,91	7/17/2003		OE	57mm Projectile (Unfuzed)	0	NA	- 6	DD32-0005	7/30/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003	Disposed of by Detonation	Disposed off-site
DD34-0031	739239.25	1014172	Sum 1-4	70.19	7/17/2003	7/23/2003	ORS	Frag	12	E	6	78mm APHE	7/30/2003	.TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-sit∈
DD34-0031	739239.25	1014172	Sum 1-4	70.19	7/17/2003	7/23/2003	OE	76mm APHE Base Fuze	36	NE	4	Fuze DD34-0031	7/30/2003	_TM	Yes	FJH	7/30/2003	Poor	RS	7/30/2003	Demilled	Disposed off-site
DD34-0031	739239,25	1014172	Sum 1-4	70.19	7/17/2003	7/23/2003	ORS	Frag	38	s	. 4	NA.	7/30/2003	TM	Yes	FJH	7/30/2003	Poor	RS	7/30/2003		Disposed off-site
E14-0005	736114.5	1011717.8	Sum 1-4	34.48	7/1/2003	7/23/2003	Non-OE	Rust Pocket	0	NA .	10	NA .	7/30/2003	JK_	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-sit∈
E16-0008	736011.25	1011987	Sum 1-4	219,7	7/1/2003	7/23/2003	Non-OE	Horseshoe	12	S	2	NA NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-sit∈
E16-0035	738071.75	1011995,5	Sum 1-4	20.78	7/1/2003	7/23/2003	Non-OE	Banding Wire	18	w		NA.	7/30/2003	JK	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-sit∈
E18-0050	738118,75	1011896.5	Sum 1-4	53,13	7/1/2003	7/23/2003	Non-OE	Hoe.	24	sw.	1	NA.	7/30/2003	JK	Yes	FJH	7/30/2003	Average	RS_	7/30/2003		Disposed off-sit∈
E17-0004	738004.25	1012002.3	Sum 1-4	186.57	7/1/2003	7/23/2003	Non-QE	Wire	12	W	0	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
E17-0008	736006.5	1012079.8	Sum 1-4	54.08	7/1/2003	7/23/2003	NC	NA NA	NA	NA_	NA	NA	7/30/2003	TM	Yes	FJH	7/30/2003	NA NA	RS	7/30/2003		
E17-0020	736015.5	1012115.8	Sum 1-4	193.59	7/1/2003	7/23/2003	Non-OE	Wire	12	w_	8	NA NA	7/30/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
E17-0021	736015,75	1012054.5	Sum 1-4	51.04	7/1/2003	7/23/2003	Non-OE	Rust Pooket	0	NA_	10	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
E17-0022	736016	1012101.3	Sum 1-4	133,75	7/1/2003	7/23/2003	Non-OE	Shotgun Shell	-	NA_	0	NA	7/30/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
E17-0022	736016	1012101.3	Sum 1-4	133,75	7/1/2003	7/23/2003	Non-OE	Wire/Rust	24	_s_	8	NA NA	7/30/2003	TM	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
E17-0029	736021,5	1012084	Sum 1-4	29.03	7/1/2003	7/23/2003	Non-OE	Rust Pocket	0	NA.	10	NA	7/30/2003	JK	Yea	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
E17-0031	738025	1012055.3	Sum 1-4	66.16	7/1/2003	7/23/2003	Non-OE	Wire	16	w	0.	NA NA	7/30/2003	JK	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
E17-0036	736029.75	1012103.3	Sum 1-4	132.97	7/1/2003	7/23/2003	ORS	Frag	24	E	6	NA	7/30/2003	ТМ	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
E17-0040	736036	1012041.3	Sum 1-4	218,26	7/1/2003	7/23/2003	Non-OE	Cheeze Wiz Can	12	E	0	NA.	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
E17-0069	736101	1012002	Sum 1-4	26.2	7/1/2003	7/23/2003	NC	NA	NA	NA	. NA	. NA	7/30/2003	JK	Yes	FJH	7/30/2003	NA	RS	7/30/2003		
E17-0079	736111.5	1012102.8	Sum 1-4	223.98	7/1/2003	7/23/2003	Non-OE	Seed Item	NA	NA.	NA	NA.	7/30/2003	JK	NO	FJH	7/30/2003	NA .	RS _	7/30/2003		Disposed off-site
E18-0024	736068	1012125.8	Sum 1-4	128.38	7/1/2003	7/23/2003	Non-OE	Fence Wire	8	s	_ 2	NA .	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
EE33-0032	739290	1014119.3	Sum 1-4	67.89	7/17/2003	7/23/2003	ORS	Fuze Body	8	NE	4	NA.	7/30/2003	.TM.	Yes	EJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
EE33-0046	739312.75		Sum 1-4	55.71	7/17/2003	T	ORS	Frag	6	NA	8	NA	7/30/2003	тм	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
EE33-0046	739312.75		Sum 1-4	55.71	7/17/2003	T	ORS	Frag	40	s	8	NA.	7/30/2003	TM.	Yes	FJH	7/30/2003	Poor	RS_	7/30/2003		Disposed off-sit∈
EE33-0061	739341.25		Sum 1-4	55.64	7/17/2003	7/23/2003	ORS	Freq	24	E	8	NA .	7/30/2003	TM	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
EE33-0061	739341.25		Sum 1-4	55.84	7/17/2003	1	ORS	Frag	30	w	6	NA.	7/30/2003	тм	Yes	FJH	7/30/2003	Poor	RS	7/30/2003		Disposed off-site
	739341.25		Sum 1-4	55.84	7/17/2003	1	ORS	Frag	18	SE	6	NA	7/30/2003	ТМ	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
EE33-0061			1		1	1	ORS	Frag	30	NW		NA	7/30/2003	тм	. Yes	FJH	7/30/2003	Poor	RS	7/30/2003		Disposed off-site
EE33-0069	3	1014113.5	T	289.38	7/17/2003		ORS	Frag	18	SE	1	NA NA	7/30/2003	ТМ	Yes	FJH	7/30/2003	Average	BS	7/30/2003		Disposed off-site
EE34-0002	739252	1014163			1		ORS	Frag	10	NW	1	NA NA	7/30/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
EE34-0002	739252	1014163	T	289,38			T		-		-	NA NA	7/30/2003	TM	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
EE34-0008	739258,34			71.78		1	ORS	Frag	12	-	-	NA NA		TM	Yes	FJH		Good	RS	7/30/2003		Disposed off-site
EE34-0024	739314.5			137.68	T		ORS	40mm Projectile (Empty)					7/30/2003	TM	T	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
EE34-0026	739332.5	T	Sum 1-4	T	7/17/2003		ORS	Frag	12	NE .	4	NA	7/30/2003	TM	Yes	FJH	7/30/2003	1	RS			T
EE34-0027	739334.5	T		73.15	7/17/2003	T	ORS	Frag	18	S	4	NA	7/30/2003	TM	Yes		7/30/2003	Average	RS	7/30/2003		Disposed off-site
F15-0002	736126.25		Sum 1-4	81,7	7/1/2003		ORS	76mm APHE Nose	12	w	12_	NA.	7/30/2003	JK	Yes	FJH	7/30/2003	Good	11.0	7/30/2003	 	Disposed off-site
F15-0003	736129.75			39.58	7/1/2003		Non-OE	Tractor Part	20	w	8	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Average	RS _	7/30/2003		Disposed off-site
F15-0017	736172.75		Sum 1-4	24.88	7/1/2003	1	Non-OE	Seed Item	NA	NA.	. NA	NA NA	7/30/2003	JK	NO	FJH	7/30/2003	NA		7/30/2003		Disposed off-site
F15-0048	736227.83	T	Sum 1-4	51,53	7/1/2003	7/23/2003	ORS	Freg	12	-w	4	NA NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
F15-0059	736239:25	1011777.3	Sum 1-4	168.44	7/1/2003	7/23/2003	Non-OE	Seed Item	NA	NA	NA	NA NA	7/30/2003	TM	NO_	FJH	7/30/2003	NA NA	RS	7/30/2003	 	Disposed off-site
F15-0080	738242.75	1011817.8	Sum 1-4	50.14	7/1/2003	7/23/2003	Non-OE	Seed Item	NA	NA.	NA	NA.	7/30/2003	TM	NO	FJH	7/30/2003	NA	RS	7/30/2003		Disposed off-site
F18-0008	738142,75	1011948.3	Sum 1-4	22.5	7/1/2003	7/23/2003	ORS	Frag	20	w	3	NA.	7/30/2003	ĴK_	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-sit∈
F16-0018	738173.75	1011955.8	Sum 1-4	82.54	7/1/2003	7/23/2003	Non-OE	Seed Item	NA	NA	NA_	NA NA	7/30/2003	JK	NO	FJH	7/30/2003	NA	RS	7/30/2003	L	Disposed off-site



Final Report Seneca Army Depot Open Detonation Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037

Project Name: Open <u>Detonation Grounds</u>
Project Location: Seneca Army Depoi. Romulus NY
Date: MASTER DIG SHEET
Coordinate System NY State Plane Central NAD 83
Survey Area ID:
Sector: NA Grid: NA
Field Book ID: NA

Geophysical Contractor, Project Geophysiciat: Site Geophysicist: WESTON UXO Safety WESTON Project Engineer. WESTON Geophysicist: WESTON Survey Tech

Parsons Engineering
Bart Hoekstra
John Baptiste
Frank Henderson
Staffanie Warriner
John Williams/Flyan Steigerwalt

WESTON Field Tearr Parsons Field Tearr George Payne (SUKOS) Carver Cobins (TL) Marry-Holmes (TL). Efich Stedman Jos (Rendall (TL)) Don Köch (TL) Dan Dornell Jae Yun Brian Ditsch (TL) Thomas Meeks Mike Turner Peter Anderson Frank Montes Shawn Quigly Malissa Nugent

					WESTON S			Steve Kireiczyk	J													
1		Original Surv	еу			Reacquisition w/RTK			ig Results						Post-Di	UXO QC	Results	Post-Dig G	Seophysical C	C	Status of	DE
Unique Target ID	Easting Coord. (ft)	Northing Coord. (ft)	Channel ID (le C1 , C4, top sensor, oraclent, etc)	Amplitude Response (mV)	Date	Date	Anomaly Type	Comments	Distance	Direction (N, NE, e1c.)	Top of Hen	Digital Photo Filename	Date	Team Leader Initials	Excavation Hole Cleared?	UXO QC Spec. Initials	Dale	Agreement between Dig Results & Geophysical Data? (Good, Average, Poor, Poor)	Geophysicist QC initiats	Date	Current Status	Final Disposition
F17-0011	738150.25	1012018	Sum 1-4	288.28	7/1/2003	7/23/2003	Non-OE	Seed Item	NA	NA	NA	NA	7/30/2003	JK	NO	FJH	7/30/2003	NA .	RS	7/30/2003		Disposed off-site
G13-0010	736266.5	1011509.8	Sum 1-4	39.25	7/1/2003	7/23/2003	Non-OE	Balt	12	ε	1	NA NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
G13-0015	736273.5	1011610,8	Sum 1-4	44	7/1/2003	7/23/2003	ORS	Frag	12	N	2	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
G14-0032	738274.75	1011667,5	Sum 1-4	65.27	7/2/2003	7/23/2003	ORS	76mm APHE Nose	12	NW	10	NA.	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS.	7/30/2003		Disposed off-site
G14-0038	736306.75	1011742.6	Sum 1-4	36.88	7/2/2003	7/23/2003	ORS	Frag	10	N.	8	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
G14-0040	738314,5	1011844,5	Sum 1-4	188.03	7/2/2003	7/23/2003	ORS	Frag	10	w.	4	NA.	7/30/2003	JK	Yes	FJH	7/30/2003	Good	AS	7/30/2003		Disposed off-site
G15-0001	738253	1011871.3	Sum 1-4	593.87	7/2/2003	7/23/2003	Non-OE	Seed Item	NA	ŅA	NA	NA M-103 Fuze	7/30/2003	JK	NO	FJH	7/30/2003	NA	RS	7/30/2003		Disposed off-site
G15-0031	736300.25	1011865.3	Sum 1-4	262.9	7/2/2003	7/23/2003	OE	M-103 Fuze	0	NA_	3	G15-0031	7/30/2003	JK	Yes	FJH	7/30/2003	Good	AS	7/30/2003	Demilled	Disposed off-site
G15-0040	736339.25	1011821,8	Sum 1-4	53.58	7/2/2003	7/23/2003	ORS	Frag	12	s	4	NA	7/30/2003	JK	Yes_	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
H13-0005	736399	1011814.3	Sum 1-4	57.54	7/2/2003	7/23/2003	ORS_	Frag	20	s	2	NA .	7/30/2003	JK	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
H14-0001	736376,75	1011734	Sum 1-4	62.79	7/2/2003	7/23/2003	ORS	Frag		NA	4	NA 76mm APHE	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Oisposed off-site
H14-0003	738385,5	1011705.3	Sum 1-4	23.08	7/2/2003	7/23/2003	OE	76mm APHE Base Fuze	18	E	6	Fuze H14-0003	7/30/2003	JK	Yes	FJH	7/30/2003	Average	RS	7/30/2003	Demilled	Disposed off-site
H14-0016	738432	1011837.3	Sum 1-4	131.66	7/2/2003	7/23/2003	ORS	Frag	18	QW	4	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
H14-0017	736433	1011626.8	Sum 1-4	21.67	7/2/2003	7/23/2003	Non-OE	Rust Pocket	0	NA.	12	NA NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
H14-0034	736481	1011670.5	Sum 1-4	35.28	7/2/2003	7/23/2003	Non-OE	Door Latch	16	s_	2	NA	7/30/2003	JK	Yes	FJH_	7/30/2003	Average	AS_	7/30/2003		Disposed off-site
H14-0035	736487	1011701.5	Sum 1-4	218.57	7/2/2003	7/23/2003	ORS	Frag		NA	1	NA	7/30/2003	JK	Yes	FJH_	7/30/2003	Good	RS	7/30/2003		Disposed off-site
H15-0035	736459,5	1011848.5	Sum 1-4	62.21	7/2/2003	7/23/2003	ORS	Frag	18	sw	11_	NA NA	7/30/2003	JK_	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
H15-0043	736474.25	1011837.5	Sum 1-4	10,83	7/2/2003	7/23/2003	Non-OE	Rust Pocket	8	w	8	NA NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS_	7/30/2003		Disposed off-site
H15-0048	736479,5	1011839.5	Sum 1-4	10.89	7/2/2003	7/23/2003	Non-OE	Rust Pocket	12	N	12	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
114-0009	736519,75	1011874.5	Sum 1-4	65,89	7/2/2003	7/23/2003	ORS	Frag	16	s	3	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Average	RS	7/30/2003		Disposed off-site
114-0048	738575.5	1011636	Sum 1-4	65.84	7/2/2003	7/23/2003	Non-OE	Pipe	0	NA.	4	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
114-0054	736584.25	1011724.8	Sum 1-4	61.91	7/2/2003	7/23/2003	ORS	Frag	0_	NA.	2	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
114-0055	736584.5	1011658.5	Sum 1-4	40.6	7/2/2003	7/23/2003	Non-OE	Tractor Latch	12	_ E	6	. NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
114-0063	736601,75	1011744,5	Sum 1-4	99,79	7/2/2003	7/23/2003	Non-OE	Wrench	30	s_	6	NA	7/30/2003	JK	Yes_	FJH	7/30/2003	Poor	RS_	7/30/2003		Disposed off-site
114-0064	738604.25	1011733.5	Sum 1-4	48.74	7/2/2003	7/23/2003	ORS	Frag	0	NA	4	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
114-0070	738821	1011879,8	Sum 1-4	60.52	7/2/2003	7/23/2003	Non-OE	Pliers	12	w	8	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
115-0071	736801.25	1011757.5	Sum 1-4	205.64	7/2/2003	7/23/2003	ORS	_Frag	12	N.	4	NA NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
(15-0072	738808.75	1011791.5	Sum 1-4	107.38	7/2/2003	7/23/2003	Non-OE	Trallor Latch		NA.	2	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS_	7/30/2003		Disposed off-site
J13-0004	736629.25	1011624.3	Sum 1-4	64,23	7/2/2003	7/23/2003	Non-OE	Lawnmower Blade	0	NA .	8	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS.	7/30/2003		Disposed off-site
J14-0015	738645	1011883.3	Sum 1-4	143.72	7/2/2003	7/23/2003	Non-OE	Plow Tooth	12	NW	3	NA NA	7/30/2003	JK	Yes	FJH.	7/30/2003	Good	RS	7/30/2003		Disposed off-sit∈
J15-0012	738642.25	1011828	Sum 1-4	107.74	7/2/2003	7/23/2003	Non-OE	Rust Pocket	0	NA	10	NA	7/30/2003	JK	Yas	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
J15-0014	736644.25	1011790.3	Sum 1-4	30.17	7/2/2003	7/23/2003	OE	2.36" Rocket Fuze	6	E_	3	2.38" Rocket Fuze J15-0014	7/30/2003	JK_	Yes	FJH	7/30/2003	Good	RS	7/30/2003	Demilled	Disposed off-site
J15-0015	736845.25	1011829.8	Sum 1-4	14.95	7/2/2003	7/23/2003	Non-OE	Rust Pocket	0	_NA_	8	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
J15-0021	738657	1011797.5	Sum 1-4	143.66	7/2/2003	7/23/2003	Non-OE	Wrench	0	NA .	6	NA	7/30/2003	JK_	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
J15-0022	736659,75	1011779	Sum 1-4	144.51	7/2/2003	7/23/2003	ORS	Frag		NA_	2	NA	7/30/2003	JK	Yes	FJH	7/30/2003	Good	RS	7/30/2003		Disposed off-site
J15-0034	736898.75	1011752.8	Sum 1-4	56.49	7/2/2003	7/23/2003	OE	Unknown Bomb Fuze	20	E	8	Unknown Fuze J15-0034	7/30/2003	JК	Yes	FJH	7/30/2003	Average	RS	7/30/2003	Demilled	Disposed off-site

See notes on next page.



.al Report Seneca Army Depot Open Detonation Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037

<u>Notes</u>

Bold indicates OE items

AP = armor-piercing

APHE = armor-piercing high-explosive

EOTI = Explosive Ordnance Technologies, Inc.

ft = feet

HE = high-explosive

in = inches

lb = pound

mm = millimeter

mV = millivolts

NA = not applicable NC = no contact

OE = ordnance and explosives

ORS = ordnance related scrap

QC = quality control

RAP = rocket assisted projectile

RTK = real time kinematics

SUXOS = Senior UXO supervisor

TL = team leader

USACE = US Army Corps of Engineers

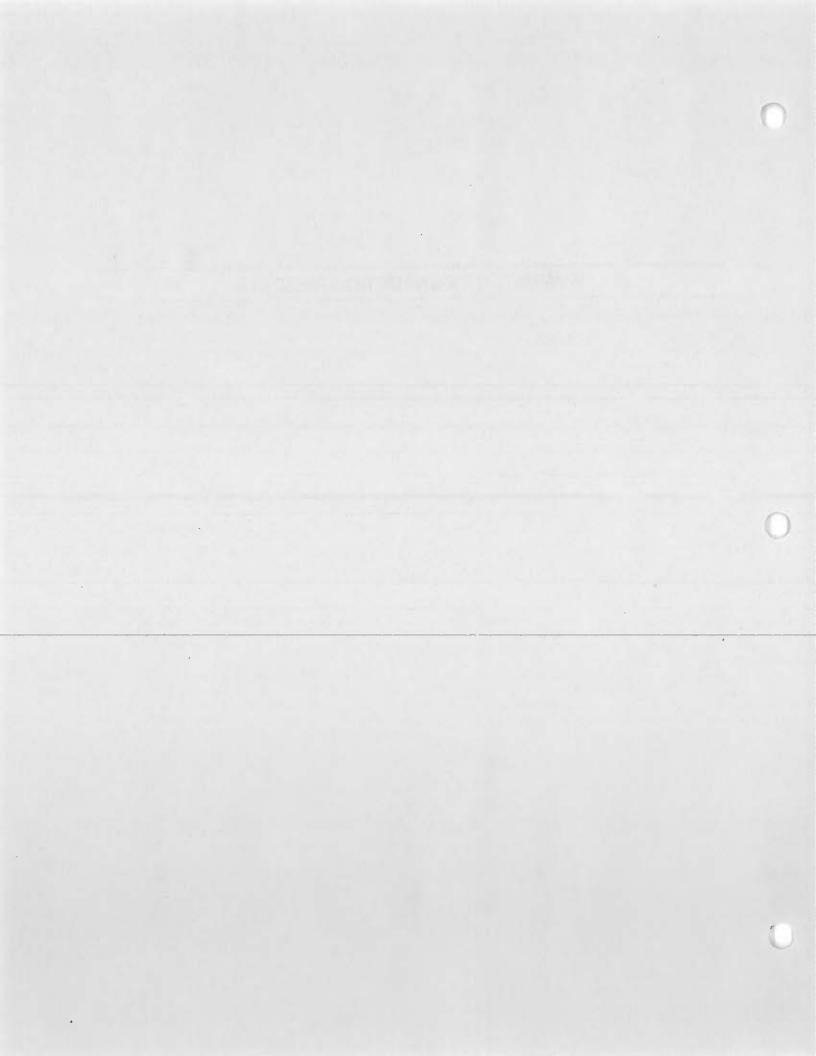
UXO = unexploded ordnance

VT = variable time

WESTON = Weston Solutions, Inc.

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AMMUNITION CONSUPTION REPORTS



		A BABAT	INITION CONSUMPT	ON CEPTICICATE				
	AMMUNITION CONSUMPTION CERTIFICATE ACR # 001-03							
Company	Name			Date	13-Jun-03			
li o mo	WESTON S	Solutions, In	c. omenclature	Lot Number	Quantity Consumed			
item	1		lasting Non-Electric	213	2ea			
2	1		e, Time Blasting	84F010-004	15ft			
3	1		Perforators	52220118	1ea			
4			Detonating 80 gr	142244D	8ft			
5			rs, Weatherproof	153	2ea			
	_							
<u> </u>								
	Suspect OE		Operation	Resu lts	Final Disposition			
 	Suspect OL	•	Operation	Results	Projectile Placed in 5			
				<u>-</u> .	Gallon Plastic Bucket			
37mn	n Projectile U	Infuzed	Explosive Venting	Projectile Empty Reclassified as ORS	Labeled OD Grounds			
	,				Within the Boundry of			
1					Mt. Mollie.			
			0.471	E-!-I				
L cortify th	at I saw the	ahove items	Certifying Of consumed during der		Date: June 13, 2003			
13 June 2					Date: Valle 10, 2003			
Name(Ty	Name(Typed or Printed) Frank Henderson Signature:							
Company	Company Name WESTON Solutions, Inc. Position: UXO Safety Officer							

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	AMM	UNITION CONSUMPT			
Company Name			ACR # Date	002-03 3-Jul-03	
				0 00.00	
WESTON Item	Solutions, I	nc. Iomenclature	Lot Number	Quantity Consumed	
1		Blasting Non-Electric	213	Quantity Consumed 2ea	
2		e, Time Blasting	84F010-004	15ft	
3		Perforators	52220118	2ea	
4		Detonating 80 gr	142244D	10ft	
5	lgnite	ers, Weatherproof	153	2ea	
Suspect OI		Operation	Results	Final Disposition	
75mm Projectile L	Infuzed	Explosive Venting	Projectile Demilled with Shaped Charges	Pending re-test of suspect explosive filler	
75mm Projectile prior		75mm Projectile with	Shape 75mm Pr	pjectile after detonation	
demolition		charges placed	of shaped	-	
		Certifying Of		·	
I certify that I saw the 3 July 2003	above item	s consumed during de	molition on	Date: July 3, 2003	
Name/Timed or Bring	ad) Frank	Handarson	Signature		
Name(Typed or Print Company Name WE	STON Solii	tions. Inc.	Signature Dosition: UXO Safe	ty Officer	
				,	

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	AMMUNITION CONSUMPT		003-03
Company Name		ACR # Date	17-Jul-03
Company Name		Date	11-501-05
	ON Solutions, Inc.		
tem	Nomenclature	Lot Number	Quantity Consumed
1	Caps, Blasting Non-Electric	213	6ea
2	Fuse, Time Blasting	84F010-004	50ft
3 4	Perforators Cord, Detonating 80 gr	52220118 142244D	1ea 34ft
5	Igniters, Weatherproof	153	7ea
6	Boosters 1/2lb	BRLU 012865	13ea
Suspect	OE Operation	Results	Disposition
	Disposal by Detonation		M-103 Destroyed Unknown Bomb Fuze Demilled
	Explosive Venting		Both 75mm Projectiles vented.
No.	Explosive Venting		Fuze Destroyed, Residual Explosive Filler cleaned out Round Demilled
I certify that I saw t 17 July 2003	Certifying O he above items consumed during de		Date: July 17, 2003
Name(Typed or P	rinted) Frank Henderson WESTON Solutions, Inc.	Signature Position: UXO Safe	ety Officer

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AMMUNITION CONSUMPTION CERTIFICATE 004-03 ACR# Company Name Date 31-Jul-03 WESTON Solutions, Inc. ltem Nomenclature Lot Number Quantity Consumed Caps, Blasting Non-Electric 213 2ea 2 Fuse, Time Blasting 84F010-004 20ft 3 Perforators 52220118 1ea Cord, Detonating 80 gr 142244D 4 6ft Igniters, Weatherproof 5 153 2ea Suspect OE Operation Results Disposition Explosive Disposal Functioned as Designed 57mm Projectile DD32-0005 Destroyed Projectile Set for Demo **Explosives Placed** After Detonation Certifying Official I certify that I saw the above items consumed during demolition on Date: July 31, 2003

Signature:

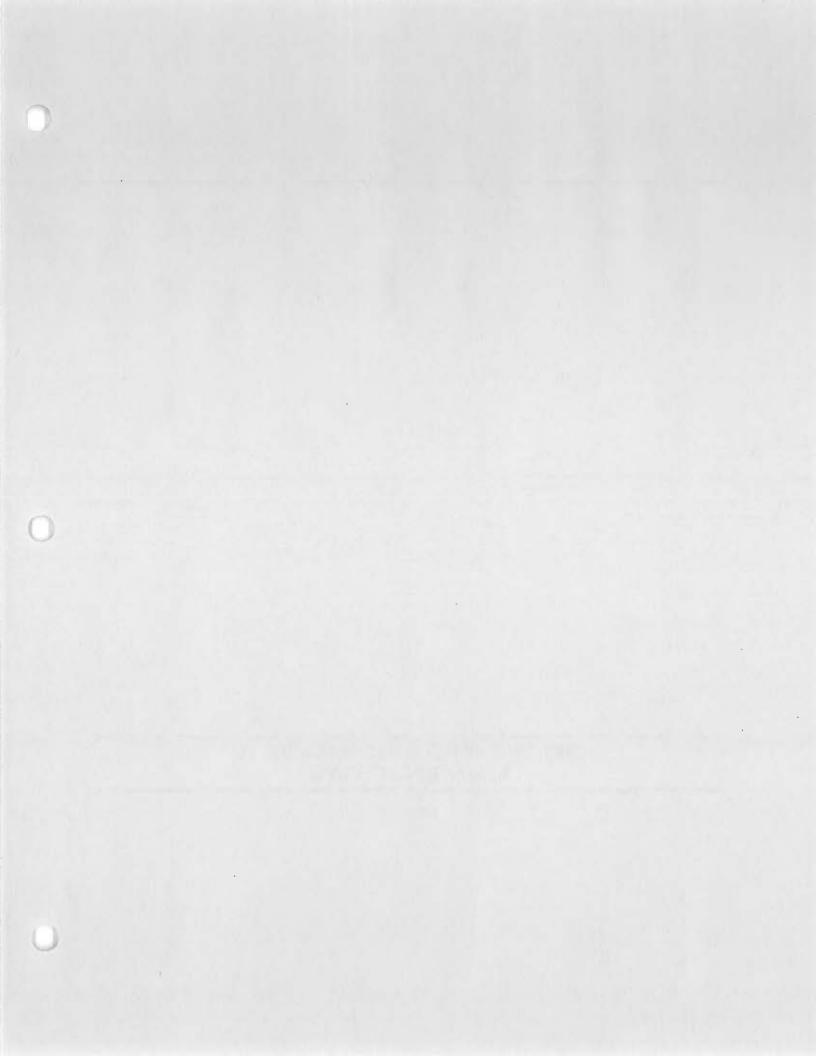
Position: UXO Safety Officer

31 July 2003

Name(Typed or Printed) Frank Henderson Company Name WESTON Solutions, Inc.

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DAILY UXO REPORTS 11 JULY 2003 THROUGH 30 JULY 2003



Final Report Seneca Army Depot Open Detonation Grounds Contract No. DACA45-98-D-0004 Task Order No. 0037



The following Daily Reports pertain to days when target reacquisition and anomaly excavation were preformed (11 July 2003 through 30 July 2003). Daily reports for all Phase 1 activities (2 June 2003 through 27 August 2003) have been previously submitted and reviewed by USACE. These reports are currently on file, and can be viewed upon request.

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DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS

DATE: July 11, 2003, Friday

V. K#13 REPORT#65 HOURS ON SITE: 0630-1800 WRITTEN BY: F. Henderson CONTRACT #: DACA45-98-D- 0004 TASK # 0037 WORK ORDER # 20074.515.037

WEATHER/TEMPERATURE: Low 65°, High 85° AM Cloudy/PM Sunny, Breezy

LOCATION OF WORK: Seneca Army Depot Activity	y, Romulus, NY			
WESTON PERSONNEL:	EQUIPMENT:	VISITORS/AFFILIATION:		
Site Manager/QC Officer: John Williams	ODG	T. Battaglia/CENAN		
Survey Technician: Steve Kirejczyk	Polaris UTV			
UXO QC/Safety: Frank Henderson	2 Case Tractors			
Project Engineer: Steffanie Warriner	2 mower decks/1 Rake			
Geophysicist: Ryan Steigerwalt	2 John Deere Gators w/ 1			
Senior UXO Supervisor: George Payne (Off Site)	EM-61 Towed Array			
UXO Tech III: Joe Kendall Brian Ditsch	3 Mini Open Front Barricades			
SUBCONTRACTOR:	MATERIALS DELIVERED (indicate size, type, and condition):			
(1) EOTI- 1 UXO Tech III & 2 UXO Tech IIs	Syracuse Supply removed r	Syracuse Supply removed mini-excavator.		
Parsons – 4 Surveyors				
(3)				
(4)				
WORK PERFORMED BY WESTON				

Provided UXO Safety oversight of subcontractors

Provided oversight for Full Scale Digital Geophysical Mapping (DGM) by subcontractors.

Completed pin flagging 125 anomalies provided by Parsons Engineering. In addition, started and completed pin flagging 65 anomalies within the southern area of the OD Grounds.

WESTON UXO technicians removed 36 anomalies.

Prepared QC reports for 06-14 and 06-24. Completed QC reports for 6-17 DGM file. Posted QC reports for 6-16, 6-17, and 6-20 to Team Link. Submitted CDs for files 6-16 and 6-17 to USACE.

WORK COMPLETED BY WESTON SUBCONTRACTORS

ODG:

EOTI: Provided construction support for geophysical mapping operations. Continued anomaly removal in transects # 170. Removed 31 pieces or non-oe from transect 170.

Parsons: Started DGM in grids OO-QQ 17-24. Delivered raw data from 7-10-03 and processed data from 7-10-03.

AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details)

Seived call from Seneca County Sheriff's Department confirming UXO technician outside fence is working for STON. I confirmed the information.

Page 2 of 2

			rage <u>z</u> or <u>z</u>
DAILY CONSTRUC DATE: 07-11-03	TION QUALITY CONTROL	REPORT	Restoring Resource Efficiency
QC OFFICER (Print Name):	.John Williams	QC OFFICER SIGNATURE:	
TYPE OF INSPECT	ION (Preparatory, Initial, Follo	w Up):	
CQC FINDINGS (Sa	tisfactory Work Completed and	Deficiencies; Attach Phase Inspec	ction Forms):
0401111211100 (04	moractory work completed and	Donorono, rikkaom maco mopol	sterry ermej.
RECOMMENDED C	CORRECTIVE ACTIONS		
		· · · · · · · · · · · · · · · · · · ·	
SAFETY OBSERVA	TIONS/VIOLATIONS/COM	MENTS	
		ps, and Falls, First Aid Procedu	res, Demolition Safety,
Ordnance Avoidance	e, Lifting Techniques, and R	adio Contact, Driving Speeds, I	Dehydration
UXO/OE INFORMA	TION		
		old) length, and number of anon	nalies; No transects magged and
flagged today	ote are neted by Harriser (se	na), rongan, and riambor of anon	Tanco, Tro transcero maggior and
		1 1005 11 11	
Total number of and	malies flagged to date in tra	insects is: 1395 discrete and 1 s	suspect trash pit.
Removed anomalies	s from transect # 170 results	were 31 Non-OE (not complete	9)
		nd west: results were 4 OE, 5 (

OE Uncovered during anomaly acquisition and removal



20mm Projectile without nose fuze. Anomaly # L33-0016



M-103 Fuze with cap in place. Anomaly # L33-0035



M-103 Fuze with Cap and Safety Blocks Removed. This Fuze is considered Armed Anomaly # L38-0007



M-103 Fuze with cap in place. Anomaly # J36-0010

·			

DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS DATE: July 12, 2003, Saturday

V .K # 13 REPORT # 66	0630-1800	F. Henders		DACA45-98-D- 0004 TASK # 0037		WORK ORDER # 20074.515.037	
WEATHER/TEMP	PERATURE: Low 61°, High	73° Sunny					
LOCATION OF W	/ORK: Seneca Army Depo	t Activity, Ro	mulus, N	Υ			
WESTON PERSO	ONNEL:		EQUIPA	MENT:	VISI	TORS/AFFILIATION:	
Site Manager/QC C	Officer: John Williams		ODG				
Survey Technician:	Steve Kirejczyk		Polaris I	JTV			
UXO QC/Safety: Fr	ank Henderson		2 Case	Tractors			
Project Engineer: S	teffanie Warriner		2 mowe	r decks/1 Rake			
Geophysicist: Ryai	n Steigerwalt		2 John [Deere Gators w/ 1			
Senior UXO Super	visor: George Payne (Off Site)	EM-61	owed Array			
UXO Tech III: Joe Briar	Kendall (Off Site) n Ditsch (Off Site)		3 Mini C Barricac	pen Front les			
SUBCONTRACT	OR:		MATERIALS DELIVERED (indicate size, type, and condition):				
(* EOTI- No T	echs On Site						
\	1 Surveyors						
(3)							
(4)	MED BY WESTON						
	afety oversight of subcontra	octore					
	nt for Full Scale Digital Geo		pping (D	GM) by subcontracto	rs.		
	sects and one unwooded a						
Performed QC in	spections of anomalies rem	noved on 7-1	1-03 both	n within transects and	d oper	n area.	
	ports for DGM File 06-14,						
	ts for DGM file 06-12, 06-1			4			
Submitted (VIa Fe	ed-Ex) CDs for DGM files 0	6-14, 06-23,	and ub-2	4.			
WORK COMPLE	TED BY WESTON SUBCO	ONTRACTOR	35				
ODG:	TED DI WEGI GIV GODG	71111010101					
EOTI: No Work F	Performed						
	Parsons: Completed DGM in grids OO-QQ 17-24. Started DGM in grids OO-QQ 25-29. Delivered raw data from 7-						
11-03 and proces	ssed data from 7-11-03.						
AGREEMENTS I	MADE/CONVERSATIONS	(Refer to teled	cons, spee	ed memos, phone reco	rds, ar	nd/or logbooks for details)	

Page 2 of 2

		· · · · · · · · · · · · · · · · · · ·	Paye <u>Z</u> 01 <u>Z</u>
DAILY CONSTRUCT DATE: 07-12-03	TION QUALITY CONTROL REPORT		Restoring Resource Efficiency
QC OFFICER (Print Name):	John Williams	QC OFFICER SIGNATURE:	
TYPE OF INSPECTI	ON (Preparatory, Initial, Follow Up):		
CQC FINDINGS (Sat	isfactory Work Completed and Deficiencie	es; Attach Phase Inspec	tion Forms):
QC inspections of an	omaly locations found no failures.		
RECOMMENDED C	ORRECTIVE ACTIONS		
	TIONS/VIOLATIONS/COMMENTS	alla First Aid Drassdu	roo Domolition Sofoty
Ordnance Avoidance	topics discussed: Slips, Trips, and Fa e, Lifting Techniques, and Radio Conta	act. Driving Speeds. D	es, Demonition Salety, Dehydration
Ordinarios / (Voludarios	, Enting Toomingdoo, and Ttadao Com	<u>g epocas, </u>	
UXO/OE INFORMAT			
	cts are listed by number (bold), length	, and number of anom	nalies; No transects magged and
flagged today			
Total number of anor	malies flagged to date in transects is:	1395 discrete and 1 s	uspect trash pit.

DAILY CONSTRUCTION QUALITY CONTROL REPORT
GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS
DATE: July 14, 2003, Monday



W_	_K#	14	
REP	ORT	Т#	67

HOURS ON SITE:

WRITTEN BY:

CONTRACT #: DACA45-98-D- 0004 WORK ORDER # 20074.515.037

KEP	OR1#07	0030-1000	r. nendersc)I I	TASK # 0037		20074.515.037
WEA	THER/TEMP	PERATURE: Low 61°, High	73° Sunny				
LOC	ATION OF W	/ORK: Seneca Army Depo	t Activity, Ron	nulus, N	Y		
WES	TON PERSO	ONNEL:		EQUIPN	IENT:	VIS	SITORS/AFFILIATION:
Site N	Manager/QC C	Officer: John Williams		ODG			Battaglia/CENAN
Surve	ey Technician:	Steve Kirejczyk		Polaris l			Magner/CENAB
UXO	QC/Safety: Fr	rank Henderson		2 Case		<i>T.</i> 1	Westenburg/CENWO
Proje	ct Engineer: S	Steffanie Warriner		2 mowe	r decks/1 Rake		
Geop	hysicist: Ryai	n Steigerwalt		2 John [Deere Gators w/ 1		
Senic	or UXO Supen	visor: George Payne		EM-61 7	owed Array		
UXO	Tech III: Joe				pen Front		
	Briar	Ditsch		Barricac	es	ļ	
						<u> </u>	
						ļ	
						ļ	
		<u> </u>				ļ	
SUB	CONTRACT	OR:		MATER	IALS DELIVERED (i	indica	ate size, type, and condition):
(O Tech IIIs/4 UXO Tech II:	S				
(4)	Parsons – 4	1 Surveyors					
(3)							
(4)		MED BY WESTON					
		afety oversight of subcontra	otoro				
Prov	ided OXO Sa	nt for Full Scale Digital Geo	onhysical Man	ping (D	GM) by subcontracto	ors.	
		echnicians removed 35 and		P.1.19 (2-1	J, 2 J 00.000		
Subr	mitted DGM o	data for 6-25 and 6-26 to U	SACE via Fe	d-Ex. Co	ompleted QC check	and	summary report for 6-26.
		c of 6-27 data; however cor			rification from Parso	ons r	egarding processing
Proc	edures and o	coverage maps. Started Q	C check of 6-	28 data.	L. O las Tatala		-1
Surveyed transects and one non-wooded area previously cleared by Sessler. Total acres cleared to date: 232.31						cleared to date: 232.31	
acres non-wooded and 13.62 wooded areas. WORK COMPLETED BY WESTON SUBCONTRACTORS							
ODG	· · · · · · · · · · · · · · · · · · ·	TED BY WESTON SUBCO	DIVIRACION	3			
		nd Flagged transects 99 1	00 101 102	103 10	4 105 106 107 10	8 10	09 110 111 112 113
114	EOTI: Magged and Flagged transects 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113,					120 122	
	114, 115, 116, and 117and 168 (not complete). Removed anomalies from transects 128, 129, 133						
,	110, 110, ar	id 117 and 100 (not comple	ite). Itemove	u anoma	lies ironi transects	120,	129, 133

AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details)

Parsons: Continued with geophysical mapping on the east side of Reeder Creek.

DAILY CONSTRUE DATE: 07-12-03	CTION QUALITY CONTROL REP	ORT	Restoring Resource Efficiency
QC OFFICER (Print Name):	John Williams	QC OFFICER SIGNATURE:	
TYPE OF INSPEC	TION (Preparatory, Initial, Follow Up):	•	
COC FINDINGS (S	atisfactory Work Completed and Defic	ciencies: Attach Phase Inspe	ection Forms)
	anomaly locations found no failures		outin Tormoj.
			· · · · · · · · · · · · · · · · · · ·
RECOMMENDED	CORRECTIVE ACTIONS		
		· · · · · · · · · · · · · · · · · · ·	
CAFETY ORCEDY	ATIONICATION ATIONIC/OOMANTNI	TO	
	ATIONS/VIOLATIONS/COMMENT I, topics discussed: Slips, Trips, ar		ures Demolition Safety
	ce, Lifting Techniques, and Radio (
UXO/OE INFORMA	·		
			malies; 99 is 119ft, 14 anomalies 100
	es- 101 is 201ft, 25 anomalies- 102		' is 161ft, 19 anomalies- 108 is 167ft,
	is 165ft, 5 anomalies- 110 is 151ft,		
			anomalies-116 is 108ft, 4 anomalies.
117 is 92ft, 0 anom	alies		
Total number of an	omalias flagged to data in transact	to io: 1620 disprets and 1	guanagt trach nit
Total number of an	omalies flagged to date in transect	s is. 1030 discrete and 1	suspect trasti pit.
			in L-34, an M-103 Fuze in K-34, a
		lase Fuze in J-35, an M-1	03 Fuze in K-33, an M-103 Fuze in
E-31, and a Project	tile VT Fuze (Armed) in F-29.		

OE found during removal activities 7-14-03



106mm HEAT Base Fuze J35-0005



76mm HEAP w/Base Fuze to be blown in place K34-0019



M-103 Fuze E31-0004, L34-0015, K34-0008, K33-0013,



Projectile VT Fuze (Armed) to be blown in place F29-0002

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			,

DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS

DATE: July 15, 2003, Tuesday

V .K # 14 REPORT # 68 HOURS ON SITE:

0630-1800

WRITTEN BY: F. Henderson

CONTRACT #: DACA45-98-D- 0004 TASK # 0037 WORK ORDER # 20074.515.037

WEATHER/TEMPERATURE: Low 61°, High 88° Sunny

LOCATION OF WORK: Seneca Army Depot Activi	ity, Romulus, NY	
WESTON PERSONNEL:	EQUIPMENT:	VISITORS/AFFILIATION:
Site Manager/QC Officer: John Williams	ODG	T. Battaglia/CENAN
Survey Technician: Steve Kirejczyk	Polaris UTV	F. Magner/CENAB
UXO QC/Safety: Frank Henderson	2 Case Tractors	T. Westenburg/CENWO
Project Engineer: Steffanie Warriner	2 mower decks/1 Rake	M. Herse/CENWO
Geophysicist: Ryan Steigerwalt	2 John Deere Gators w/ 1	G. Herring/CENWO
Senior UXO Supervisor: George Payne	EM-61 Towed Array	
UXO Tech III: Joe Kendall Brian Ditsch	3 Mini Open Front Barricades	
Project Manager: Chris Kane		
Program Manager: Chris Henry		
SUBCONTRACTOR:	MATERIALS DELIVERED	indicate size, type, and condition)
(*) EOTI- 4 UXO Tech IIIs/3 UXO Tech IIs		
. Parsons – 4 Surveyors		-

WORK PERFORMED BY WESTON

Provided UXO Safety oversight of subcontractors

Provided oversight for Full Scale Digital Geophysical Mapping (DGM) by subcontractors.

WESTON UXO technicians removed 80 anomalies.

Escorted USACE and Weston Management throughout the OD Grounds.

Continued QC check and summary for 06-28.

Submitted DGM data for 6-28 to USACE via Fed-Ex.

Conducted QC inspections of anomalies dug on 6-14-03.

WORK COMPLETED BY WESTON SUBCONTRACTORS

ODG:

(3) (4)

EOTI: Magged and Flagged transects 38, 39, 40, 41, 42, 43, 44, 45, 52, 53, 54, 55, and 56. Removed anomalies from transects 127, 128, 130, 131, 162, 164, 165, 166, and 168.

Parsons: Continued with geophysical mapping on the east side of Reeder Creek. Delivered raw and processed data for 7-12 and 7-14-03

AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details)
No complaints issued from any subcontractors during morning safety brief.

' with Parsons field crew; they had no complaints regarding terrain for geophysical mapping.

Conference call with on site USACE personnel and Andy Schwartz to discuss QA/QC data and process. Details Will be documented in the meeting minutes to be submitted.

Page <u>2</u> of <u>2</u>

DATE: 07-15-03	TION QUALITY CONTROL REPORT		Restoring Resource Efficier
QC OFFICER (Print Name):	John Williams	QC OFFICER SIGNATURE:	
TYPE OF INSPECT	TON (Preparatory, Initial, Follow Up):		
	ntisfactory Work Completed and Deficienc	ies; Attach Phase Inspectio	n Forms):
QC inspections of a	nomaly locations found no failures.		
RECOMMENDED O	CORRECTIVE ACTIONS		
RECOMMENDED	TOTAL CONTROLL		
			-
SAFETY OBSERVA	ATIONS/VIOLATIONS/COMMENTS		
	topics discussed: Slips, Trips, and F		
Ordnance Avoidance	e, Lifting Techniques, and Radio Con	tact, Driving Speeds, Der	iyaration
UXO/OE INFORMA			
The following transe	ects are listed by number (bold), lengt es- 40 is 181ft, 14 anomalies- 41 is 20	h, and number of anomal	ies; 38 is 203ft, 24 anomalies 39 210ft 11 anomalies - 43 is
	44 is 255ft, 19 anomalies-45 is 306ft,		
48 anomalies- 54 is	391ft, 24 anomalies- 55 is 136ft, 22 a	anomalies- 56 is 142ft, 10	anomalies.
T-t-l	malica flagged to data in transacto in	. 1996 discrete and 1 aug	neet trook nit
I otal number of and	omalies flagged to date in transects is	1886 discrete and 1 sus	pect trasm pit.
- 05:		DO - 0.00" De elect Meter	Fire in AAOA a 75 Projectile
in N-17, a Nose Fuz	located within the open area of the Oze in N-18, a VT Fuze in O-17, two M-	103 Fuzes in P-13, a Roc	cket Burster in P-13, an M-103
	nm Projectile in P-17, a 75mm Project		

OE Found on 7-15-03



75mm APHE-T Fuze P17-0180



M-103 Fuze P13-0023, P13-0025, P14-0113



Nose Fuze N18-0015



Rocket Burster P13-0072



2.36" Rocket Motor w/Fuze AA04-0038



VT Fuze O17-0200

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			·
		·	
·			

DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING. OPEN DETONATION GROUNDS DATE: July 16, 2003, Wednesday

WEATHER/TEMPERATURE: Low 66°, High 76° Partly Cloudy

LOCATION OF WORK: Seneca Army Depot Activity, Romulus, NY



EK # 14 REPORT # 69 HOURS ON SITE: 0630-1800

WRITTEN BY: F. Henderson

CONTRACT #: DACA45-98-D-0004 TASK # 0037

WORK ORDER # 20074.515.037

WESTON PERSONNEL: **EQUIPMENT**: VISITORS/AFFILIATION: **ODG** Site Manager/QC Officer: John Williams T. Battaglia/CENAN Polaris UTV F. Magner/CENAB Survey Technician: Steve Kirejczyk UXO QC/Safety: Frank Henderson 2 Case Tractors T. Westenburg/CENWO 2 mower decks/1 Rake Project Engineer: Steffanie Warriner 2 John Deere Gators w/ 1 Geophysicist: Ryan Steigerwalt Senior UXO Supervisor: George Payne EM-61 Towed Array UXO Tech III: Joe Kendall 3 Mini Open Front Brian Ditsch Barricades

SUBCONTRACTOR:

MATERIALS DELIVERED (indicate size, type, and condition):

- EOTI- 4 UXO Tech IIIs/4 UXO Tech IIs Parsons - 4 Surveyors
- (3)

(4)

WORK PERFORMED BY WESTON

Provided UXO Safety oversight of subcontractors

Provided oversight for Full Scale Digital Geophysical Mapping (DGM) by subcontractors.

WESTON UXO technicians removed 13 anomalies and collected all OE found to date.

Obtained sandbags for demolition operations.

Performed QC inspections on anomalies removed from open area and transects

Completed QC reports for DGM data 06-27 and sent CD to USACE via Fede-Ex.

WORK COMPLETED BY WESTON SUBCONTRACTORS

ODG:

EOTI: Magged and Flagged transects 33, 34, 35, 36, 37, 182, 184, 185, 186, 187, 197, 198, 199, 200, 201, 202, and 203. Removed anomalies from transects 112, 113, 115, 116, 169, 171.

Parsons: Continued with geophysical mapping on the east side of Reeder Creek. Delivered raw and processed data for 7-15-03. Also provided revised data on root cause analysis for failed signal to noise DQO.

AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details) No complaints issued from any subcontractors during morning safety brief.

Page 2 of 2

DAILY CONSTRUC DATE: 07-16-03	TION QUALITY CONTROL REPORT		Restoring Resource Efficier
QC OFFICER		QC OFFICER	
(Print Name):	John Williams	SIGNATURE:	
(, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0.0.0.0.0.0.	
TYPE OF INSPECT	ION (Preparatory, Initial, Follow Up):		
CQC FINDINGS (Sai	tisfactory Work Completed and Deficiencie	es; Attach Phase Inspecti	on Forms):
QC inspections of ar	nomaly locations found no failures.		
		,	
RECOMMENDED C	ORRECTIVE ACTIONS		
SAFETY OBSERVA	TIONS/VIOLATIONS/COMMENTS	<u> </u>	
Safety briefing held,	topics discussed: Slips, Trips, and Fa	Ills, First Aid Procedure	es, Demolition Safety,
Ordnance Avoidance	e, Lifting Techniques, and Radio Conta	act, Driving Speeds, De	ehydration
UXO/OE INFORMA			
	cts are listed by number (bold), length		
	ies- 35 is 232ft, 19 anomalies- 36 is 23		
	34 is 111ft, 5 anomalies-185 is 354ft, 2 s 143ft, 8 anomalies- 198 is 163ft, 3 ar		
	23ft, 5 anomalies- 202 is 126ft, 6 anom		
Allollialies 201 is 12	zort, o anomanes- zoz is 12oit, o anom	10103-200 13 1 1010, 4 0	Homaics
Total number of ano	malies flagged to date in transects is:	2128 discrete and 2 su	spect trash pit.
	ocated within the open area of the OD		
	e in N-18, a VT Fuze in O-17, two M-1		ocket Burster in P-13, an M-103
Fuze in P-14, a 20m	m Projectile in P-17, a 75mm Projectil	e ruze in P-17.	

OE Found on 7-16-03



20mm Projectile P19-0043, Q18-0009,



57mm Projectile Unfuzed P18-0120



75mm Projectile Unfuzed P18-0170



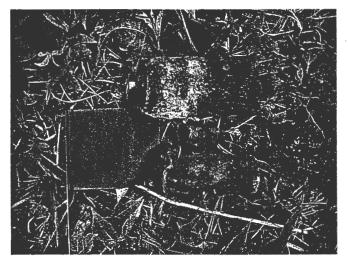
M-120 Bomb Fuze P18-0037



M-2 Mortar Fuze M18-0126



M-51 Series (T-Bar) Fuze N19-0084



Unknown Bomb Fuze 20mm Projectile, Fuze Burster, N19-0064

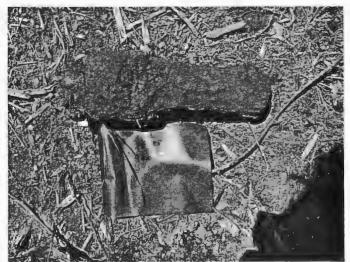
DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS DATE: July 17, 2003, Thursday

	K# 14 ORT # 70	0630-1800	F. Henders		CONTRACT #: DACA45-98-D- 0004 TASK # 0037		20074.515.037
WEA	THER/TEMP	PERATURE: Low 66°, High	76° Partly 0	Cloudy	Trioit ii door		
LOC	ATION OF W	ORK: Seneca Army Depo	t Activity, Ro	mulus, N	Υ		
WES	STON PERSO	ONNEL:		EQUIPN	MENT:	VIS	ITORS/AFFILIATION:
Site I	Manager/QC C	Officer: John Williams		ODG		Т. В	attaglia/CENAN
Surve	ey Technician:	Steve Kirejczyk		Polaris	JTV	F. N	flagner/CENAB
UXO	QC/Safety: Fr	ank Henderson		2 Case	Tractors		
Proje	ct Engineer: S	teffanie Warriner		2 mowe	r decks/1 Rake		
Geop	hysicist: Ryai	n Steigerwalt		2 John I	Deere Gators w/ 1		
Senio	or UXO Supen	visor: George Payne	×	EM-61	Towed Array		
UXO	Tech III: Joe Briar	Kendall n Ditsch		3 Mini C Barricad	pen Front les		
SUB	CONTRACT	OR:		MATER	IALS DELIVERED (i	ndicat	e size, type, and condition):
(1)	EOTI- 4 UX	O Tech IIIs/4 UXO Tech II	S				
	Parsons – 4	Surveyors					
(3)							
(4)	DV DEDEOD	MED BY WESTON					
_		afety oversight of subcontra	ectors				
		nt for Full Scale Digital Geo		ppina (De	GM) by subcontracto	rs.	
		echnicians removed 26 and		PP9 (2	Jiii) Dy Gallociii. Gallo		
		lition operations on OE fou					
Cond	ducted explos	sives inventory. All explosi	ves account	ed for wit	h no discrepancies.		
WOF	RK COMPLE	TED BY WESTON SUBC	ONTRACTO	RS			
ODG							
		nd Flagged transects 183,					
201,	202, 203. Fi	illed sandbags for demolitic	on operation	s, assiste	d in demolition opera	ations	
		ued with geophysical mapp	ing on the e	ast side c	f Reeder Creek. De	livere	d raw and processed
data	for 7-16-03.						
405	CEMENTO A	AADE/OONIVEDOATIONS	/Defent- 1-1-		-d	rde c	nd/or look ooks for deteit-1
		MADE/CONVERSATIONS					
rais	ons asked to	r a walk thru of open areas	casi ui ret	suei Cieel	. Steve Kilejczyk W	aireu	area with Falsons and

cut stumps as needed.

DAILY CONSTRU DATE: 07-17-03	CTION QUALITY CONTROL REF	PORT	Restoring Resource Efficien
QC OFFICER (Print Name):	Ryan Steigerwalt	QC OFFICER SIGNATURE:	
TYPE OF INSPEC	TION (Preparatory, Initial, Follow Up):	
	Satisfactory Work Completed and Defi		tion Forms):
CDs containing date Electronic files conto the Teamlink site	anomaly locations found no failure ta sets 6-30 and 7-01 were sent to staining QC reviews and summary e. Irrently under further review.	Rick Grabowski and Andy	
RECOMMENDED	CORRECTIVE ACTIONS		
Safety briefing held Ordnance Avoidan	/ATIONS/VIOLATIONS/COMMENd, topics discussed: Slips, Trips, and Radio	and Falls, First Aid Procedur	
		length, and number of anom	nalies; 183 is 332ft, 13 anomalies 188
Total number of ar	nomalies flagged to date in transec	cts is: 2190 discrete and 2 s	uspect trash pit.
In addition to the to	re located within the open area of two OE items a 76mm APHE round was located at a depth of 20 inche	d was found in grid F26. Th	M17,and a Bomb Fuze in F-25. is ORS item was within 250ft of the
			

OE Found on 7-17-03



Bomb Fuze F25-0005



M-103 Fuze M17-0087

			`

DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS DATE: July 18, 2003, Friday



EK # 14

HOURS ON SITE:

WRITTEN BY:

CONTRACT #:

WORK ORDER #

RĽ₽	ORT # 71	0630-1800	F. Henders	son	DACA45-98-D- 0004 TASK # 0037		20074.515.037	
WEA	WEATHER/TEMPERATURE: Low 61°, High 85° AM Early Morning Thunderstorms/PM Sunny							
LOCATION OF WORK: Seneca Army Depot Activity, Romulus, NY								
WESTON PERSONNEL:			EQUIPMENT:		VISITORS/AFFILIATION:			
Site N	Manager/QC C	Officer: Ryan Steigerwalt		ODG				
Survey Technician: Steve Kirejczyk				Polaris UTV				
UXO QC/Safety: Frank Henderson				2 Case Tractors				
Project Engineer: Steffanie Warriner				2 mower decks/1 Rake				
Senic	or UXO Supen	visor: George Payne (off Site)	2 John Deere Gators w/ 1				
UXO Tech III: Joe Kendall (Off Site) Brian Ditsch (Off Site)				EM-61 Towed Array				
				1	pen Front			
				Barrica	des			
						<u> </u>		
						ļ		
	 							
SUB	CONTRACT	OR:		MATERIALS DELIVERED (indicate size, type, and condition):				
	EOTI- None							
(2)	Parsons – 4	Surveyors		· ·				
(3) (4)				-				
	RK PERFOR	MED BY WESTON						
		afety oversight of subcontra	actors					
Prov	ided oversigl	nt for Full Scale Digital Geo	ophysical Ma					
Continued to cut Stumps and moved debris to assist Parsons Engineering in Geophysical Mapping Operations.								
Work was performed in grids bordered on the southwest by grids GG-33 and GG-37.								
WORK COMPLETED BY WESTON SUBCONTRACTORS								
ODG:								
EOTI: Mag and Flag Team requested day off and was given one.								
Parsons: Continued with geophysical mapping on the east side of Reeder Creek. No raw or processed data								
delivered.								
AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details)								
No complaints from subcontractor.								
1-0 Complainto Irom Gaboortiacio.								

DAILY CONSTRUC	TION QUALITY CONTROL REPORT		Page Z OI Z
DATE: 07-18-03	THON GOTELL CO.		Restoring Resource Efficier
QC OFFICER		QC OFFICER	
(Print Name):	Ryan Steigerwalt	SIGNATURE:	
TYPE OF INSPECT	TION (Preparatory, Initial, Follow Up):		
CQC FINDINGS (Sa	atisfactory Work Completed and Deficiencie	es; Attach Phase Inspec	tion Forms):
	07-0-3 were sent to Rick Grabowski a	and Andy Schwartz.	
	not include merged targets. s were observed in 07-03 data. Gaps	were digitized as way	points for field review
RECOMMENDED C	CORRECTIVE ACTIONS		
SAFETY OBSERVA	ATIONS/VIOLATIONS/COMMENTS		
Safety briefing held,	topics discussed: Slips, Trips, and Fa		
Ordnance Avoidanc	e, Lifting Techniques, and Radio Conta	act, Driving Speeds, D	ehydration
UXO/OE INFORMA	TION	· · · · · · · · · · · · · · · · · · ·	
	ects are listed by number (bold), length	ı, and number of anom	alies; No transects magged or
Total number of and	omalies flagged to date in transects is:	2190 discrete and 2 se	uspect trash pit.

DAILY CONSTRUCTION QUALITY CONTROL REPORT
GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS
DATE: July 19, 2003, Saturday

Restoring Resource Efficiency

V :K#14 REPORT#72 HOURS ON SITE:

WRITTEN BY: F. Henderson CONTRACT #: DACA45-98-D- 0004 WORK ORDER # 20074.515.037

REP	OR1#72	0630-1800	F. Henders	son	TASK # 0037		20074.515.037
WEA	THER/TEMP	PERATURE: Low 56°, High	78° Sunny				
LOC	ATION OF W	VORK: Seneca Army Depoi	t Activity, Ro	mulus, N	Υ		
WES	TON PERSO	ONNEL:		EQUIPN	MENT:	VISI	TORS/AFFILIATION:
Site N	/lanager/QC C	Officer: Ryan Steigerwalt		ODG			
Surve	y Technician:	Steve Kirejczyk		Polaris	JTV		
UXO	QC/Safety: Fr	rank Henderson		2 Case	Tractors		
Proje	ct Engineer: S	Steffanie Warriner		2 mowe	r decks/1 Rake		
	•	visor: George Payne (off Site)	2 John I	Deere Gators w/ 1		
UXO		Kendall (Off Site) n Ditsch (Off Site)		EM-61	Towed Array		
	_			I .	pen Front		
				Barricac	les		

-01.10	CONTRACT	0.0		MATER	M C DELIVEDED (
SUB	CONTRACT			MATERIALS DELIVERED (indicate size, type, and condition):			
, l	EOTI- None						
(<i>2)</i> (3)	Parsons – 4	Surveyors					
(4)							
	RK PERFOR	MED BY WESTON	· · · · · · · · · · · · · · · · · · ·				
		afety oversight of subcontra					
Prov	ided oversigh	nt for Full Scale Digital Geo	physical Ma	pping (Do	GM) by subcontracto	rs.	
		Stumps and moved debris				ical M	apping Operations
VVOI	c was periorn	ned in grids bordered on th	e southwest	by 0-37,	anu 1-37.		
Cond	ducted QC in	spections of anomalies du	on 7-17-03				
Read	equired and f	lagged 55 anomalies provide	ded by Parso	ons in the	southeast region of	the O	DG
		TED BY WESTON SUBCO	ONTRACTO	? S			
ODG		11-1					
EOT	I: No work p	erformed today					
Parsons: Continued with geophysical mapping on the east side of Reeder Creek. No raw or processed data							
deliv	delivered. Switched out one coil giving problems. Reran West GPO						
AGR	AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details)						
No c	No complaints from subcontractor.						

			1 ago <u>z oi z</u>					
DAILY CONSTRUCT	TION QUALITY CONTROL REPORT		Restoring Resource Efficier					
QC OFFICER		QC OFFICER	i					
(Print Name):	Ryan Steigerwalt	SIGNATURE:						
TYPE OF INSPECTI	ON (Preparatory, Initial, Follow Up):							
CQC FINDINGS (Sat	risfactory Work Completed and Deficienc	ies: Attach Phase Inspec	etion Forms):					
QC inspections found		ioo, rataon i nade mepee	Mon Como,					
	sent to Rick Grabowski and Andy Sch	nwartz.						
Cumulative area was	Cumulative area was calculated using grid target data provided by Parsons. A total of 137.62 acres as of 7-16-03							
	tilizing Oasis Montaj UX Area GX. D							
	K for in field review. Several individu							
	ement from geophysical data) was st	aked out in the field. T	wo small trees spaced 15 feet apart					
were found within the	e gap.							
RECOMMENDED C	ORRECTIVE ACTIONS							
SAFETY OBSERVA	TIONS/VIOLATIONS/COMMENTS							
	topics discussed: Slips, Trips, and F	alls. First Aid Procedu	res. Demolition Safety.					
	e, Lifting Techniques, and Radio Con							
UXO/OE INFORMAT	TION							
The following transe	cts are listed by number (bold), length	n, and number of anom	nalies; No transects magged or					
flagged today.								
Total number of ano	malies flagged to date in transects is:	2190 discrete and 2 s	uspect trash nit					
Total Hamber of allo	Trailes riagged to date in trailscots is.	2130 discrete and 23	depeter tradit pit.					
	· · · · · · · · · · · · · · · · · · ·							
•								

DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS DATE: July 21, 2003, Monday



EK # 15

HOURS ON SITE:

WRITTEN BY:

CONTRACT #:

WORK ORDER #

REP	ORT # 73	0630-1800	F. Henders	son	DACA45-98-D- 0004 TASK # 0037		20074.515.037
WEA	WEATHER/TEMPERATURE: Low 67°, High 75° Rain/Thunderstorms						
LOC	ATION OF W	ORK: Seneca Army Depo	t Activity, Ro	mulus, N	Υ		
WES	STON PERSO	DNNEL:		EQUIPA	MENT:	VIS	SITORS/AFFILIATION:
Site I	Manager/QC C	Officer: Ryan Steigerwalt		ODG		T. E	Battaglia/CENAN
Surve	ey Technician:	Steve Kirejczyk		Polaris (JTV	F. 1	Magner/CENAB
UXO	QC/Safety: Fr	ank Henderson		2 Case	Tractors		
		teffanie Warriner		2 mowe	r decks/1 Rake		
		visor: George Payne		I	Deere Gators w/ 1		
UXO	Tech III: Joe Briar	Kendall n Ditsch		EM-61 7	Towed Array		
					pen Front		
				Barricac	les		
SUB	CONTRACT			MATER	IALS DELIVERED (ii	ndica	te size, type, and condition):
		O Tech IIIs/4UXO Tech IIs	<u> </u>				
(2)	Parsons – 4	Surveyors					
(3) (4)							
	RK PERFORI	MED BY WESTON		1			
		fety oversight of subcontra	actors				
		nt for Full Scale Digital Geo		pping (D0	GM) by subcontracto	rs.	
Wes	ton UXO Tec	hnicians cleared 50 anoma					
		spections of Transects					
		ns geophysically map tran				(NA	to see what correlation
_can I	be drawn bet	ween the EM-61 and mage	ging and flag	ging oper	ations.		
WOF	RK COMPLE	TED BY WESTON SUBC	ONTRACTOR	RS			
ODG							
		nd Flagged transects: 31,	32, 46, 47, 4	8, 49, 50	, 176, 177, 178, 179,	180	, 181 and 190. Cleared
		ansects: 33, 34, 99, 100, 1					
	Parsons: Continued DGM operations east of Reeder Creek. Ran EM-61 thru transect 135,						
Deliv	Delivered raw and processed data for 7-17, 7-18, and 7-19-03.						
405							
	AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details) No complaints from subcontractor.						
- 1211 C	omplaints fro	m subcontractor.					

Page 2 of 2

DAILY CONSTRUCTION QUALITY CONTROL REPORT DATE: 07-21-03 QC OFFICER QC OFFICER Ryan Steigerwalt SIGNATURE: (Print Name): TYPE OF INSPECTION (Preparatory, Initial, Follow Up): CQC FINDINGS (Satisfactory Work Completed and Deficiencies; Attach Phase Inspection Forms): All transects passed QC inspections An in-field audit was performed to verify the size and extent of data gaps observed in datasets 0702 and 0703 to ensure the maximum geophysical coverage is being obtained in accessible areas. Waypoints marking the center of each gap were uploaded into the RTK GPS to correctly navigate to the potential/suggested inaccessible area Results of this review suggest slender-elongate gaps were often indicative of a primarily accessible area not fully surveyed. Single trees, with varying diameter often mark the center of these gaps. The toed-array operator appears to gradually turn around the obstruction, leaving slender-elongate data gaps evident in recently submitted data. Gaps measuring approximately 40 X 20 feet were observed around single trees or stumps. Gaps up to 70 feet were observed around several trees within a 15-foot radius. In addition, thinner-elongate gaps can be interpreted as areas not encompassing any obstructions. Its suggested Parsons rectify their data collection methods to better cover all. accessible areas of the ODG QC dataset 0708 was sent to Rick Grabowski and Andy Schwartz. RECOMMENDED CORRECTIVE ACTIONS SAFETY OBSERVATIONS/VIOLATIONS/COMMENTS Safety briefing held, topics discussed: Slips, Trips, and Falls, First Aid Procedures, Demolition Safety, Ordnance Avoidance, Lifting Techniques, and Radio Contact, Driving Speeds, Dehydration **UXO/OE INFORMATION** The following transects are listed by number (bold), length, and number of anomalies; 31 is 259ft, 52 anomalies 32 is 2501ft, 35 anomalies- 46 is 340ft, 14 anomalies- 47 is 360ft, 12 anomalies- 48 is 378ft, 31 anomalies- 49 is 357ft, 15 anomalies-50 is 260ft, 28 anomalies-176 is 92ft, 9 anomalies-177 is 2591ft, 4 anomalies-178 is 266ft, 4 anomalies- 179 is 290ft, 14 anomalies- 180 is 97ft, 2 anomalies- 181 is 179ft, 2 anomalies- 190 is 260ft, 15 anomalies. Total number of anomalies flagged to date in transects is: 2427 discrete and 2 suspect trash pit. Two OE items found; 1 M-103 Fuze in grid QQ22-0009 and 1 Bomb Fuze in Transect # 198.

PHOTOS

OE Found 7-21-03



M-103 Fuze QQ22-0009

		·		
	·			

DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS DATE: July 22, 2003, Tuesday V. K # 15 HOURS ON SITE: WRITTEN BY: REPORT # 74 0630-1800 F. Henderson



WRITTEN BY: CONTRACT #:

F. Henderson DACA45-98-D- 0004

TASK # 0037

WORK ORDER # 20074.515.037

NEI ONT		0000 1000	1.770774070		TASK # 0037		2007 110101001
WEATHER	R/TEMI	PERATURE: Low 67°, High	75° Rain/Th	understo	rms		
LOCATIO	N OF V	VORK: Seneca Army Depo	t Activity, Ro	mulus, N	Υ		
WESTON	PERS	ONNEL:		EQUIPA	IENT:	VIS	SITORS/AFFILIATION:
Site Manag	er/QC (Officer: Ryan Steigerwalt		ODG		T. E	Battaglia/CENAN
Survey Tec	hnician	Steve Kirejczyk		Polaris I	JTV	F. I	Magner/CENAB
UXO QC/Sa	afety: F	rank Henderson		2 Case	Tractors		
,	·	Steffanie Warriner		2 mowe	r decks/1 Rake		
	•	visor: George Payne		2 John [Deere Gators w/ 1		
UXO Tech		Kendall n Ditsch		EM-61 7	Towed Array		
				3 Mini C Barricac	pen Front les		
				24,,,,,,			
SUBCON	TRACT	OR:		MATER	IALS DELIVERED (indica	te size, type, and condition):
\ /		O Tech IIIs/4UXO Tech IIs					
' '	sons – 4	4 Surveyors					
(3)							
(4)	DEOD	MED BY WESTON					
_		afety oversight of subcontra	actors				
		ht for Full Scale Digital Geo		pping (Do	GM) by subcontracto	ors.	
Performed	QC in	spection of anomalies remo	oved from the	e East sic	le of the ODG.		
		s cleared anomalies from tr	ansect # 146	5.			
		UXO technicians.		N al 4 a 4l		<u></u>	
All teams	were c	alled off the ODG at approx	imately 1630	due to t	nunderstorms over t	ne ar	ea.
· · · · · · · · · · · · · · · · · · ·							
WORK CO	OMPL F	TED BY WESTON SUBCO	ONTRACTOR	7S			
ODG:							
		nd Flagged transects: 210	, 211, 212, 2	213, 214,	215, 216, 217, and	218.	Cleared anomalies
from trans	ects: 1	46, 103, 105, 35, and 36.					
Parsons: Continued DGM operations in the north and northeast quadrants.							
ACREMENTS MADE/CONVERSATIONS (Refer to telegons aread marries where records and/or lambacks for details)							
AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details) No complaints from subcontractor.							
	Conference call with Chris Kane (PM) and Tom Battaglia (CENAN), Tom B. directed WESTON to:						
Stop digai	ng in tr	ansects, Only dig in open a	reas, Stop n	nag and f	lag operations, Dem	iob U	IXO teams as needed
		vest of Pad J to determine					

DAILY CONSTRU DATE: 07-22-03	CTION QUALITY CONTROL REPORT		Restoring Resource Efficiency
QC OFFICER (Print Name):	Ryan Steigerwalt	QC OFFICER SIGNATURE:	
TYPE OF INSPEC	TION (Preparatory, Initial, Follow Up):		
	atisfactory Work Completed and Deficienci	es; Attach Phase Inspec	tion Forms):
QC inspections of a	anomaly locations found no failures.		
	a collected on 07-09 and 07-10 were set 7-10 was failed due to latency errors ob		
	CORRECTIVE ACTIONS ncy correction should be further refined	to better position dete	ected anomalies.
SAFETY OBSERV	ATIONS/VIOLATIONS/COMMENTS		
Safety briefing held	d, topics discussed: Slips, Trips, and Fa		
Ordnance Avoidan	ce, Lifting Techniques, and Radio Cont	act, Driving Speeds, D	enydration
is 187ft, 22 anoma	ATION ects are listed by number (bold), length lies- 212 is 232ft, 25 anomalies- 213 is s- 216 is 316ft, 66 anomalies-217 is 131	282ft, 50 anomalies- 2	214 is 372ft, 103 anomalies- 215 is
Total number of tra suspect trash pits.	insects and anomalies flagged to date i	s: Transects- 132 An	omalies-2829 discrete and 7
		······································	

DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS D^TE: July 23, 2003, Wednesday WRITTEN BY: WORK ORDER # _K # 15 **HOURS ON SITE:** CONTRACT #: DACA45-98-D- 0004 REPORT # 75 0630-1800 F. Henderson 20074.515.037 TASK # 0037 WEATHER/TEMPERATURE: Low 68°, High 76° AM Cloudy/PM Rain LOCATION OF WORK: Seneca Army Depot Activity, Romulus, NY VISITORS/AFFILIATION: WESTON PERSONNEL: **EQUIPMENT:** ODG T. Battaglia/CENAN Site Manager/QC Officer: Ryan Steigerwalt Polaris UTV Survey Technician: Steve Kirejczyk 1 Case Tractor UXO QC/Safety: Frank Henderson 1 mower deck/1 Rake Project Engineer: Steffanie Warriner Senior UXO Supervisor: George Payne 2 John Deere Gators w/ 1 UXO Tech III: Joe Kendall EM-61 Towed Array Brian Ditsch 3 Mini Open Front Barricades SUBCONTRACTOR: MATERIALS DELIVERED (indicate size, type, and condition): EOTI- 1 UXO Tech IIIs/2 UXO Tech IIs Parsons - 4 Surveyors (2)(3)(4)RK PERFORMED BY WESTON Frovided UXO Safety oversight of subcontractors Provided oversight for Full Scale Digital Geophysical Mapping (DGM) by subcontractors. UXO Technicians completed clearing anomalies from transect # 146 and 135. Reacquired and flagged 50 anomalies in the Northeast Quadrant. Assisted Parsons in getting them unstuck. WORK COMPLETED BY WESTON SUBCONTRACTORS ODG:

AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details)

Parsons: Continued DGM operations in the north quadrants. Delivered final 200 anomaly picks. Delivered raw data

No complaints from subcontractor.

EOTI: Cleared anomalies from transect: 135

For 7-21 and 7-22-03. Delivered processed data for 7-19-03.

Frank Magner (CENAB OE Safety) informed me that he would be off site to attend HAZWOPER refresher and would be available by cell phone.

	Page <u>2</u> of <u>2</u>
DAILY CONSTRUCTION QUALITY CONTROL REPORT DATE: 07-23-03	
QC OFFICER (Print Name): Ryan Steigerwalt	QC OFFICER SIGNATURE:
TYPE OF INSPECTION (Preparatory, Initial, Follow Up):	
CQC FINDINGS (Satisfactory Work Completed and Deficiencie	
CDs containing data collected on 07-11 and 07-12 were ser Target density map was produced to approximate potentia And 2500ft radius.	
RECOMMENDED CORRECTIVE ACTIONS	
SAFETY OBSERVATIONS/VIOLATIONS/COMMENTS Safety briefing held, topics discussed: Slips, Trips, and Fa Ordnance Avoidance, Lifting Techniques, and Radio Conta	
UXO/OE INFORMATION Total number of transects flagged and anomalies to date is suspect trash areas.	s: Transects- 132 Anomalies-2720 discrete and 7
No OE Found within transects 146 and 135.	
Total number of anomalies dug within the transects is: 73 Number of OE items found within the transects: 1	6
Total number of anomalies dug within the open area is: 24 Number of OE items found within the open area is: 34	46

DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING. OPEN DETONATION GROUNDS DATE: July 24, 2003, Thursday K# 15 HOURS ON SITE: WRITTEN BY: CONTRACT #: **WORK ORDER #** REPORT # 76 DACA45-98-D- 0004 0630-1800 F. Henderson 20074.515.037 TASK # 0037 WEATHER/TEMPERATURE: Low 63°, High 72° AM Rain Showers/PM Cloudy LOCATION OF WORK: Seneca Army Depot Activity, Romulus, NY WESTON PERSONNEL: **EQUIPMENT**: VISITORS/AFFILIATION: **ODG** Site Manager/QC Officer: Ryan Steigerwalt T. Battaglia/CENAN Polaris UTV F. Magner/CENAB Survey Technician: Steve Kirejczyk UXO QC/Safety: Frank Henderson 1 Case Tractor P. Welch/WESTON 2 mower decks/1 Rake Project Engineer: Steffanie Warriner Senior UXO Supervisor: George Payne 2 John Deere Gators w/ 1 UXO Tech III: Joe Kendall EM-61 Towed Array Brian Ditsch 3 Mini Open Front Barricades SUBCONTRACTOR: MATERIALS DELIVERED (indicate size, type, and condition): EOTI- 1 UXO Tech IIIs/2 UXO Tech IIs Parsons – 4 Surveyors (2)(3)(4) WORK PERFORMED BY WESTON vided UXO Safety oversight of subcontractors Provided oversight for Full Scale Digital Geophysical Mapping (DGM) by subcontractors. UXO Technicians clearing flagged anomalies in western quadrant. Reacquired and flagged 139 of 191 anomalies throughout the OD Grounds. Conducted explosives inventory. All explosives accounted for with no discrepancies. Escorted WESTON's QC Manager throughout the site WORK COMPLETED BY WESTON SUBCONTRACTORS ODG: EOTI: Cleared flagged anomalies from the northeastern guadrant. Parsons: Continued DGM operations in the north quadrants. Delivered processed data for 7-21 and 7-22. Delivered raw data for 7-23.

AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details)

No complaints from subcontractor.

DAILY CONSTRUCT DATE: 07-24-03	ION QUALITY CONTROL REPORT	Restoring Resource Efficiency			
QC OFFICER (Print Name):	Ryan Steigerwalt	QC OFFICER SIGNATURE:			
TYPE OF INSPECTIO	ON (Preparatory, Initial, Follow Up):				
CQC FINDINGS (Satis	sfactory Work Completed and Deficienci	es; Attach Phase Inspection Forms):			
CDs containing data of	collected on 07-15 were sent to Rick	Grabowski and Andy Schwartz.			
	LICACE CA 'L II II D	- L			
Located and removed	Tone USACE QA Item. Item # R was	s located at II38-077, 30" SW of pin flag and 36" deep.			
Discussed QC findings for 0712 data with John Williams. Identified noise in 0712a and latency errors in 0712b. Asked John Baptiste (Parsons) to refine latency values and resubmit the data. John B. agreed that increased noise was present in Coil 3 data. Also asked John B. to investigate anomalous readings leading to possible QC failures in Pre- and Post- survey QC tests on 0714 data.					
RECOMMENDED CO	DRRECTIVE ACTIONS				
KEGOWINIENDED OC	MINEOTIVE ACTIONS				
	TONS/VIOLATIONS/COMMENTS				
	opics discussed: Slips, Trips, and Fa Lifting Techniques, and Radio Cont	alls, First Aid Procedures, Demolition Safety,			
Ordnance Avoidance,	Litting Techniques, and Radio Cont.	act, Driving Speeds, Denydration			
UXO/OE INFORMATI	ION				
Total number of trans	ects and anomalies flagged to date is	s: Transects- 132 Anomalies-2829 discrete and 7			
suspect trash pits.					
	nalies dug within the transects is: 73	6			
Number of OE items f	found within the transects: 1				
One OF item found in	grid II38-0009. Item was a 76mm A	PHE Rase Fuze			
One OE Rem lound in	gila 1150-0009. Reni was a 7011111 A	I TIL DUGG I UZG			
Total number of anom	nalies dug within the open area is: 3	13			
Total number of anomalies dug within the open area is: 313 Number of OF items found within the open area is: 35					

				· · · · · · · · · · · · · · · · · · ·		Page 1 of <u>2</u>	
	UCTION QUALITY CONT MAPPING, OPEN DETON			∇	X /L	STUE N	
DATE: July 25, 2	-			15	estorir	SOLUTIONS ng Resource Efficience	¥.
I =K # 15	HOURS ON SITE:	WRITTEN	BY:	CONTRACT #:	1	NORK ORDER #	_
REPORT # 76	0630-1800	F. Henders		DACA45-98-D- 0004 TASK # 0037		20074.515.037	
WEATHER/TEMP	PERATURE: Low 63°, Higi	h 72° AM sur	nny/PM su	inny			
LOCATION OF W	/ORK: Seneca Army Depo	ot Activity, Ro	mulus, N	Υ			
WESTON PERSO	ONNEL:		EQUIP	MENT:	VISIT	ORS/AFFILIATION:	
Site Manager/QC C	Officer: Ryan Steigerwalt		ODG				
Survey Technician:	Steve Kirejczyk		Polaris	UTV			
UXO QC/Safety: Fr	ank Henderson (off-site)		1 Case	Tractor			
Project Engineer: S	Steffanie Warriner		2 mowe	r decks/1 Rake			
	visor: George Payne		2 John I	Deere Gators w/ 1			
UXO Tech III: Joe Briar	Kendall (off-site) n Ditsch (off-site)		EM-61	Towed Array			
			3 Mini C Barricac	pen Front les			
SUBCONTRACT	OR:		MATER	IAI S DELIVERED (i	ndicato	size, type, and condition)	
			WATEN	TALO DELIVERED (I	liulcate	size, type, and condition)	<u>. </u>
(1) Parsons – 4 (2)	Surveyors		ļ				
(3)			1				_
(4)						3-71	_
Y'ORK PERFORI	MED BY WESTON						
	fety oversight of subcontra						
Provided oversigh	nt for Full Scale Digital Geo	ophysical Ma	pping (Do	GM) by subcontracto	rs.		
	TED BY WESTON SUBC	ONTRACTO	RS				
ODG:							
	ed DGM operations in the	north quadr	ants.				
Delivered process	sed data for 7-23. B and 0712 for review.						
Resubilitied 0020	and or 12 tol feview.		-				
					-	,	

16:00 – 16:30 Conference call held between WESTON and USACE to discuss QA/QC and project status. Topics covered included: improved data deliverable status and data quality; scheduling of reacquisition; anomaly picking threshold and questionable data (06/13, 06/19, and 06/27); and acreage covered. Next project status meeting scheduled for Thurs. 07/31 at 10:00 EST.

AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details)

DAIL V CONSTRUCT	ION QUALITY CONTROL REPORT		
DATE: 07-25-03	TON QUALITY GONTROL KEYOKY		Restoring Resource Efficier
QC OFFICER		QC OFFICER	
(Print Name):	Ryan Steigerwalt	SIGNATURE:	
TYPE OF INSPECTION	ON (Preparatory, Initial, Follow Up):		
CQC FINDINGS (Sati	sfactory Work Completed and Deficiencie	s; Attach Phase Inspect	ion Forms):
CDs containing data	collected on 07-16 were sent to Rick (Grabowski and Andy S	chwartz.
Parsons requested a	dditional clearing of stumps and other	dobrie that may hinde	r accessibility (11-37)
	tumps and Parsons did not notify Wes		
	vare of QC deficiencies on datasets 0		
In 0712b data. He als	o noted increased noise levels in 071	2a data. This data is s	till under review. Anomalous
Readings were obser	ved in 0714 pre- and post-survey QC	tests. John B. was asl	ked to investigate these findings.
	at the end of day was removed do to i	ncreased noise. The re	emaining data is being reviewed for
additional increased r	noise levels.		
	<u> </u>		
RECOMMENDED CO	ORRECTIVE ACTIONS		
· · · · · · · · · · · · · · · · · · ·			
			
SAFETY OBSERVAT	TIONS/VIOLATIONS/COMMENTS		
	opics discussed: Slips, Trips, and Fa	lls, First Aid Procedure	es, Location of hospital route and
	Ordnance Avoidance, and Dehydration		
UXO/OE INFORMAT	TON		
Reacquired 51 anom	alies from Parsons' dig list for future d	ligging.	
No anomalies were d	lug today, and no OE items were foun	d	
Total number of arran	nalice due within the onen area in 24	2	
	nalies dug within the open area is: 31 found within the open area is: 35	3	
Number of OF Relifs	Tourid Within the open area is. 33		

DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS DATE: July 26, 2002, Seturday

DATE: July 26, 2003, Saturday

v :K#15 REPORT#75 HOURS ON SITE: 0630-1800 WRITTEN BY: S. Kirejczyk CONTRACT #: DACA45-98-D- 0004 TASK # 0037 WORK ORDER # 20074.515.037

WEATHER/TEMPERATURE: Low 68°, High 76° Partly Cloudy LOCATION OF WORK: Seneca Army Depot Activity, Romulus, NY VISITORS/AFFILIATION: WESTON PERSONNEL: **EQUIPMENT**: **ODG** None Site Manager/QC Officer: Ryan Steigerwalt Polaris UTV Survey Technician: Steve Kirejczyk 2 John Deere Gators w/ 1 UXO QC/Safety: Frank Henderson **EM-61 Towed Array** Project Engineer: Steffanie Warriner Senior UXO Supervisor: George Payne 3 Mini Open Front Barricades UXO Tech III: Joe Kendall 1 Trimble 5700 GPS Total Brian Ditsch Station RTK SUBCONTRACTOR: MATERIALS DELIVERED (indicate size, type, and condition): EOTI- None (1)Parsons - 3 Surveyors (2)(3)(4) RK PERFORMED BY WESTON Provided UXO Safety oversight of subcontractors Provided oversight for Full Scale Digital Geophysical Mapping (DGM) by subcontractors. WORK COMPLETED BY WESTON SUBCONTRACTORS ODG: EOTI: None Parsons: Fixed broken coil on towed array and calibrated the new coil on west GPO. Delivered raw data For 7-25. AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details) No complaints from subcontractor.

DAILY CONSTRUCT DATE: 07-26-03	ION QUALITY CONTROL REPORT	Restoring Resource Efficier
QC OFFICER (Print Name):	Ryan Steigerwalt	QC OFFICER SIGNATURE:
TYPE OF INSPECTIO	ON (Preparatory, Initial, Follow Up):	
	sfactory Work Completed and Deficienci	
CDs containing data c	collected on 07-17 were sent to Rick (Jradowski and Andy Schwartz.
		·
RECOMMENDED CO	ORRECTIVE ACTIONS	
	TIONS/VIOLATIONS/COMMENTS	H- Fint Aid Donald Day 196 - Onfet
	opics discussed: Slips, Trips, and Fa , Lifting Techniques, and Radio Conta	alls, First Aid Procedures, Demolition Safety, act, Driving Speeds, Dehydration
UXO/OE INFORMATI	ION	
Total number of trans		s: Transects- 132 Anomalies-2720 discrete and 7
suspect trash areas.		
•		
	nalies dug within the transects is: 73	6
	nalies dug within the open area is: 24 found within the open area is: 34	46
	· · · · · · · · · · · · · · · · · · ·	

DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS DATE: July 28, 2003, Monday

EK # 16 REPORT # 78

HOURS ON SITE: 0630-1800

WRITTEN BY: F. Henderson

CONTRACT #: DACA45-98-D- 0004 **WORK ORDER #** 20074.515.037

			TASK # 0037			
WEA	ATHER/TEMPERATURE: Low 63°, High	83° Cloudy				
LOC	ATION OF WORK: Seneca Army Depot	Activity, Romulus, N	ΙΥ			
WESTON PERSONNEL:			MENT:	VISITORS/AFFILIATION:		
Site Manager/QC Officer: Ryan Steigerwalt				F. Magner/CENAB		
			UTV			
UXO	QC/Safety: Frank Henderson	1 Case	Tractor			
Proje	ct Engineer: Steffanie Warriner	2 mowe	er decks/1 Rake			
Seni	or UXO Supervisor: George Payne	2 John	2 John Deere Gators w/ 1			
UXO	Tech III: Joe Kendall Brian Ditsch	EM-61	Towed Array			
		3 Mini (Barrica	Open Front des			
SUB	CONTRACTOR:	MATER	NALS DELIVERED (ii	ndicate size, type, and condition):		
(1)	EOTI – 1 UXO Tech III/2 UXO Tech IIs					
(2)	Parsons – 4 Surveyors					
(3)						
(4)	RK PERFORMED BY WESTON					
	ided UXO Safety oversight of subcontract	ctors				
	ided oversight for Full Scale Digital Geo		GM) by subcontracto	rs.		
	ducted QC inspection of anomalies previ					
	vated 25 pin-flagged anomalies.					
14/0/	RK COMPLETED BY WESTON SUBCO	NTDACTORS				
ODG		NIKACIOKS				
	I- Provided construction support for geop	nhysical manning on	erations excavated	27 nin-flagged anomalies		
	1-1 Tovided construction support for geof	priyalcal mapping op	erations, excavated i	27 pin-hagged anomalies.		
Pars	ons: Continued DGM operations in the	north quadrants.				
	REEMENTS MADE/CONVERSATIONS (
	Baptiste indicated that Parsons would be	e complete with DG	M by the end of this v	veek.		
No c	No complaints from subcontractors					

·	Page <u>2</u> of <u>3</u>
DAILY CONSTRUCTION QUALITY CONTROL REPORT DATE: 07-28-03	Restoring Resource Efficiency
QC OFFICER (Print Name): Ryan Steigerwalt QC OFFICER SIGNATURE:	
TYPE OF INSPECTION (Preparatory, Initial, Follow Up):	
CQC FINDINGS (Satisfactory Work Completed and Deficiencies; Attach Phase Inspec	ction Forms):
QC inspection of excavated anomalies resulted in no failures. Received 07-26 data. This includes WGPO collected Saturday. Cracks were of collected on 7-24 displays high levels of noise due to cracked coil 3. John Bapting relatively okay. They need to recollect line 7 data. WESTON observed low ample An in field review of potential data gaps was conducted on 7-11 data. Missed a 0.23 acres. John Baptiste was notified and will walk the site tomorrow. 07-19 dischwartz.	tiste indicates 07-23 data is plitude noise throughout the dataset.
RECOMMENDED CORRECTIVE ACTIONS	
SAFETY OBSERVATIONS/VIOLATIONS/COMMENTS Safety briefing held, topics discussed: Slips, Trips, and Falls, First Aid Procedu Ordnance Avoidance, and Dehydration	ıres, Radio Contact, heavy Lifting,
UXO/OE INFORMATION M-103 Fuze found in Grid HH34, Anomaly # 0005. Fuze was safe to move and	transported to OD Grounds
Total number of anomalies dug within the open area is: 365 Number of OE items found within the open area is: 36	

Restoring Resource Efficiency

PhOTOS

OE Located on 7-28-03



M-103 Fuze maly # HH34-0005

DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS

DATE: July 29, 2003, Tuesday

EK#16 REPORT # 79 **HOURS ON SITE:**

WRITTEN BY: F. Henderson

CONTRACT #: DACA45-98-D-0004

WORK ORDER # 20074.515.037

0630-1800 TASK # 0037 WEATHER/TEMPERATURE: Low 57°, High 87° Sunny LOCATION OF WORK: Seneca Army Depot Activity, Romulus, NY WESTON PERSONNEL: **EQUIPMENT**: VISITORS/AFFILIATION: ODG T. Battaglia/CENAN Site Manager/QC Officer: Ryan Steigerwalt Polaris UTV Survey Technician: Steve Kirejczyk F. Magner/CENAB 1 Case Tractor UXO QC/Safety: Frank Henderson Project Engineer: Steffanie Warriner 1 mower decks/1 Rake Senior UXO Supervisor: George Payne 2 John Deere Gators w/ 1 UXO Tech III: Joe Kendall EM-61 Towed Array Brian Ditsch 3 Mini Open Front Barricades SUBCONTRACTOR: MATERIALS DELIVERED (indicate size, type, and condition): EOTI - 1 UXO Tech III/2 UXO Tech IIs Parsons - 4 Surveyors (2)(3)(4) V'^RK PERFORMED BY WESTON vided UXO Safety oversight of subcontractors Provided oversight for Full Scale Digital Geophysical Mapping (DGM) by subcontractors. Conducted QC inspection of anomalies previously dug on 7-28-03 Excavated 28 pin-flagged anomalies. WORK COMPLETED BY WESTON SUBCONTRACTORS EOTI- Provided construction support for geophysical mapping operations, excavated 22 pin-flagged anomalies. Parsons: Continued DGM operations in the north quadrants. AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details) No complaints from subcontractors Notified Tom Battaglia that all current anomalies (500 provided by Parsons) would be dug by the end of the day on Thursday the 31st of July. All UXO technicians will be demobilized at that time.

DAILY CONSTRUCTION QUALITY CONTROL REPORT DATE: 07-29-03 QC OFFICER QC OFFICER SIGNATURE: (Print Name): Ryan Steigerwalt TYPE OF INSPECTION (Preparatory, Initial, Follow Up): CQC FINDINGS (Satisfactory Work Completed and Deficiencies; Attach Phase Inspection Forms): QC inspection of excavated anomalies resulted in no failures. Inspected previously observed data gaps on 7-11 data with John Baptiste (Parsons). He agreed some of these areas were accessible for survey. We also noted the long slender gaps around trees. John agreed these could have been tighter. A discussion on area calculation was held. Parsons is approximating area by polygoning the coverage of their coil tracking or path. Data gaps and inaccessible areas are included. WESTON is using an automated calculation which only includes usable geophysical data. A root cause analysis was performed to try to reduce potential power supply interferences in background noise. The negative battery terminal was grounded to the Gator frame while a static background test was rerun. 07-20 WGPO and 0712 resubmitted data was sent to Rick Grabowski and Andy Schwartz. John Baptiste agreed to resurvey areas initially considered inaccessible for data obtained on 7-11. No agreement was reached on how to track coverage. RECOMMENDED CORRECTIVE ACTIONS SAFETY OBSERVATIONS/VIOLATIONS/COMMENTS Safety briefing held, topics discussed: Slips, Trips, and Falls, First Aid Procedures, Radio Contact, heavy Lifting, Ordnance Avoidance, Dehydration, and Poison Ivy UXO/OE INFORMATION M-103 Fuze found in Grid KK15, Anomaly # 0085 and Grid I16 Anomaly # 0047. Fuzes were safe to move and transported to OD Grounds Total number of anomalies dug within the open area is: 415 Number of OE items found within the open area is: 40



ProTos

OE Located on 7-29-03



M-103 Fuze KK15-0085, and I16-0047



76mm APHE Base Fuze I16-0006



76mm APHE Base Fuze I16-0002



76mm APHE Projectile (Empty) G14-0022

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DAILY CONSTRUCTION QUALITY CONTROL REPORT GEOPHYSICAL MAPPING, OPEN DETONATION GROUNDS DATE: July 30, 2003, Wednesday WRITTEN BY: ⊆K # 16 **HOURS ON SITE:**

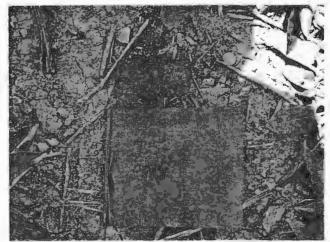


CONTRACT #: **WORK ORDER #** DACA45-98-D-0004 kcPORT # 80 0630-1800 F. Henderson 20074.515.037 TASK # 0037 WEATHER/TEMPERATURE: Low 60°, High 87° Sunny LOCATION OF WORK: Seneca Army Depot Activity, Romulus, NY WESTON PERSONNEL: VISITORS/AFFILIATION: **EQUIPMENT: ODG** T. Battaglia/CENAN Site Manager/QC Officer: Ryan Steigerwalt Survey Technician: Steve Kirejczyk Polaris UTV F. Magner/CENAB UXO QC/Safety: Frank Henderson 2 John Deere Gators w/ 1 Project Engineer: Steffanie Warriner EM-61 Towed Array Senior UXO Supervisor: George Payne UXO Tech III: Joe Kendall 3 Mini Open Front Brian Ditsch Barricades SUBCONTRACTOR: MATERIALS DELIVERED (indicate size, type, and condition): (1)EOTI - 1 UXO Tech III/2 UXO Tech IIs Parsons - 4 Surveyors (2) (3)(4)WORK PERFORMED BY WESTON vided UXO Safety oversight of subcontractors Provided oversight for Full Scale Digital Geophysical Mapping (DGM) by subcontractors. Conducted QC inspection of anomalies previously dug on 7-29-03 Excavated 54 pin-flagged anomalies. WORK COMPLETED BY WESTON SUBCONTRACTORS ODG: EOTI- Provided construction support for geophysical mapping operations, excavated 18 pin-flagged anomalies. Parsons: Continued DGM operations in the north quadrants. AGREEMENTS MADE/CONVERSATIONS (Refer to telecons, speed memos, phone records, and/or logbooks for details) No complaints from subcontractors Notified Tom Battaglia of a 57mm unfuzed projectile found in grid coordinates DD32-0005.

DAILY CONSTRUCTION QUALITY CONTROL REPORT DATE: 07-30-03 QC OFFICER QC OFFICER (Print Name): Ryan Steigerwalt SIGNATURE: TYPE OF INSPECTION (Preparatory, Initial, Follow Up): CQC FINDINGS (Satisfactory Work Completed and Deficiencies; Attach Phase Inspection Forms): QC inspection of excavated anomalies resulted in no failures. Using front end loader modified with forks, EOTI UXO technicians cleared 8 anomalies per hour. Parsons replaced the coil 2 electronic box on towed-array. The WGPO was rerun. Increased noise was evident during field review. 07-22 data was failed due to tracking discrepancies resulting in high velocities, most likely due to GPS error. The data were reprocessed to remove the high velocity areas. RECOMMENDED CORRECTIVE ACTIONS SAFETY OBSERVATIONS/VIOLATIONS/COMMENTS Safety briefing held, topics discussed: Slips, Trips, and Falls, First Aid Procedures, Radio Contact, heavy Lifting, Ordnance Avoidance, Dehydration, and Poison Ivy EOTI Supervisor complained of back strain. He was transported to local clinic. Ted Blackburn (WESTON Regional Safety Officer) and Chris Kane (Project Manager) notified. NOI completed UXO/OE INFORMATION 57mm Projectile found at DD32-0005, 76mm APHE Base Fuze found at DD34-0031 & H14-0003, M-103 Fuze found at G15-0031, 2.36" Rocket Fuze found at J15-0014, and an unknown bomb fuze was found at J15-0034. Total number of anomalies dug within the open area is: 487 Number of OE items found within the open area is: 46

PHOTOS

OE Located on 7-29-03



2.36" Rocket Fuze J15-0014



57mm Projectile (Unfuzed) DD32-0005



76mm APHE Fuze DD34-0031 and H14-0003



M-103 Fuze G15-0031

APPENDIX G FINANCIAL BREAKDOWN

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APPENDIX G - FINANCIAL BREAKDOWN

Table G-1 Financial Breakdown for Phase I and Cost Estimate for Phase II

Task Description	Phase I	Phase II (Costs to Date)
Site Visit & Document Review	\$8,150	\$2,500
Work Plan	\$9,250	\$6,500
Site Safety & Health Plan	\$1,960	\$1,000
Emergency Contingency Plan	\$920	\$250
Mobilization/Demobilization	\$103,870	\$31,690
Site Preparation & Clearing	\$57,650	
Brush Clearance (232 acres)	\$164,400	
Geophysical Test Plot	\$7,330	
Geophysical Investigation Mapping	\$279,690	
Anomaly Reacquisition	\$94,210	
Anomaly Reacquisition, Removal & Disposal	\$0.00	\$505,000
Location Surveys & Mapping	\$5,730	
Geographical Information Systems	\$35,890	
Site Security	\$0.00	
Project Reporting	\$25,550	\$10,100
Site Administration & Safety	\$440,290	\$182,550
Support Staff (Clearing & Quality Control)	\$0.00	
Lodging & Per Diem	\$41,380	
Project Support	\$142,380	\$95,920
Low Value Equipment	\$7,730	\$2,500
Cost Subtotal	\$1,426,380	\$838,010
Fee	\$99,850	\$58,660
Project Total	\$1,526,230	\$896,670