FINAL
REMEDIAL INVESTIGATION REPORT
RANGE COMPLEX 1 MRS; RANGE COMPLEX 2 MRS; NORTH CAROLINA ARMY NATIONAL GUARD MRS; HAND GRENADE RANGE MRS; AND FLAME THROWER RANGE MRS

FORMER CAMP BUTNER
GRANVILLE COUNTY, NORTH CAROLINA

Contract No. W912DY-10-D-0023
Delivery Order No. 0009
FUDS Project No. I04NC000902

Prepared for:



U.S. Army Corps of Engineers
U.S. Army Engineering and Support Center, Huntsville

March 2016

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March 2016

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ACRONYMS AND ABBREVIATIONS

AGM	analog geophysical method
AMEC	AMEC Earth and Environmental, Inc.
AR	Army Regulation
ARAR	applicable or relevant and appropriate requirements
ARNG	North Carolina Army National Guard
ASR	archives search report
ATF	Bureau of Alcohol, Tobacco, and Firearms
bgs	below ground surface
BIP	blown-in-place
BLRA	baseline risk assessment
Butner	former Camp Butner
CA	cost analysis
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COPC	chemical of potential concern
COPEC	chemical of potential ecological concern
CSM	conceptual site model
DD	Decision Document
DDESB	Department of Defense Explosives Safety Board
DERP	Defense Environmental Restoration Program
DGM	digital geophysical mapping
DID	data item description
DMM	discarded military munitions
DNT	dinitrotoluene
DoD	U.S. Department of Defense
DQO	data quality objective
DU	decision unit
Eco-SSL	ecological soil screening level
EE	engineering evaluation
EM	Engineer Manual
EMI	electromagnetic induction
EP	Engineer Pamphlet
EPC	exposure point concentration
ER	Engineer Regulation
ERA	ecological risk assessment
ESA	Endangered Species Act
ESL	ecological screening level
ESP	Explosives Site Plan

ESTCP	Environmental Security Technology Certification Program
EZ	exclusion zone
FDE	findings and determination of eligibility
FIR	food ingestion rate
FS	Feasibility Study
ft	foot/feet
FTP	File Transfer Protocol
FTR	Flame Thrower Range
FUDS	Formerly Used Defense Site
GIS	geographical information system
GPO	geophysical prove-out
GPS	global positioning system
GSV	geophysical system verification
HA	hazard assessment
HE	high explosive
HGL	HydroGeoLogic, Inc.
HGR	Hand Grenade Range
HHRA	Human Health Risk Assessment
HQ	hazard quotient
HSDB	Hazardous Substances Data Bank
ID	identification
INPR	Inventory Project Report
IS	incremental sampling
ISM	incremental sampling method
ISO	industry standard object
IVS	instrument verification strip
LANL	Los Alamos National Laboratory
LOAEL	lowest observed adverse effects level
LUC	land use control
MC	munitions constituents
MD	munitions debris
MDAS	material documented as safe
MEC	munitions and explosives of concern
MGFD	munition with greatest fragmentation distance
mg/kg	milligrams per kilogram
mm	millimeter
MMRP	Military Munitions Response Program

MPPEH	material potentially presenting an explosive hazard
MRA	munitions response area
MRS	munitions response site
MRSPP	Munitions Response Site Prioritization Protocol
MSD	minimum separation distance
mV	millivolts
NCDC	National Climatic Data Center
NCDENR	North Carolina Department of Environment and Natural Resources
NCNHP	North Carolina Natural Heritage Program
NFA	No Further Action
NOAEL	no observed adverse effects level
NRHP	Naitonal Register of Historic Places
OE	ordnance and explosives
OSWER	Office of Solid Waste and Emergency Response
Parsons	Parsons, Inc.
PDA	personal digital assistant
PDT	project delivery team
PPK	post-processed kinematic
PRG	preliminary remediation goal
PWS	performance work statement
QA	quality assurance
QC	quality control
QCP	quality control plan
RA	Removal Action
RAC	risk assessment code
RAGS	Risk Assessment Guidance for Superfund
RAIS	Risk Assessment Information System
RAO	Remedial Action Objective
RC1	Range Complex 1
RC2	Range Complex 2
RI	remedial investigation
RL	reporting limit
ROE	right-of-entry
RSL	regional screening level
RTK	real-time kinematic
SAP	sampling and analysis plan
SD	standard deviation

SI	site investigation
SLERA	Screening Level Ecological Risk Assessment
SOP	standard operating procedure
SUXOS	senior unexploded ordnance supervisor
TBC	to-be-considered
TBD	to be determined
TCRA	time critical removal action
TDEMI	time-domain EMI
TEC	Topographic Engineering Center
TNB	trinitrobenzene
TNT	trinitrotoluene
TP	technical paper
TPP	technical project planning
TEC	Topographic Engineering Center
UCL	upper confidence limit
UFP-QAPP	Uniform Federal Policy-Quality Assurance Project Plan
USA	USA Environmental, Inc.
USACE	U.S. Army Corps of Engineers
USAESCH	U. S. Army Engineering and Support Center – Huntsville
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UXO	unexploded ordnance
UXOQCS	unexploded ordnance quality control specialist
UXOSO	unexploded ordnance safety officer
VSP	Visual Sampling Plan
WAAS	wide area augmentation system
WERS	Worldwide Environmental Remediation Services

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FORMER CAMP BUTNER
GRANVILLE COUNTY, NORTH CAROLINA

1.0 EXECUTIVE SUMMARY

1.1 BACKGROUND

HydroGeoLogic, Inc. (HGL) conducted a Remedial Investigation (RI) at the former Camp Butner (Butner) located in Granville, Person, and Durham counties, North Carolina. Field activities from the RI were completed by HGL and its subcontractors from October 2012 through May 2013. The Work Plan outlined five munitions response sites (MRSs) within Butner for the focus of the RI:

1) Range Complex 1 (RC1), approximately 12,363 acres;
2) Range Complex 2 (RC2), approximately 11,529 acres;
3) North Carolina Army National Guard (ARNG), approximately 4,824 acres;
4) Hand Grenade Range (HGR), approximately 25 acres; and
5) Flame Thrower Range (FTR), approximately 5 acres.

The site location and MRS locations are shown on Figure 1.1 and 1.2, respectively. Various historical investigations have already been conducted on portions of Butner, as shown on Figure 1.3. During development of the work plan, a preliminary conceptual site model (CSM) was developed to provide an understanding of the site conditions and identify potential data needs. The preliminary CSMs indicated that MRSs HGR and FTR had been sufficiently characterized during historical investigations and required no further data collection efforts under this RI. The preliminary CSMs for MRSs RC1, RC2, and ARNG indicated that additional data were needed to sufficiently characterize the nature and extent of contamination at these sites, and determine potential risks. RI field activities were conducted at MRSs RC1, RC2, and ARNG in accordance with the approved September 2012 Final Work Plan (HGL, 2012b), and all approved fieldwork variances. There were departures from the planning documents. For instance, right-of-entry (ROE) refusals or verbal refusals for access from some landowners prevented HGL's geophysical investigation or intrusive investigation in some locations. Other variances from the approved work plan are discussed in Section 4.4. This RI report describes the investigation conducted at the sites listed above, collectively referred to as the "project site."

One objective of the RI is to confirm whether munitions and explosives of concern (MEC) are present and, if they are, to characterize their nature and extent. An additional objective is to determine if munitions constituents (MC) contamination is present and collect defensible analytical data to determine its nature and extent. The objectives of this RI will be considered complete when a MEC and MC investigation has been safely conducted to characterize the

project site in accordance with the approved data quality objectives (DQOs). This characterization will be sufficient to identify and evaluate potential MEC and MC contamination and these results will be used to support the Feasibility Study (FS) to identify appropriate remedial alternatives, if necessary.

To support these objectives, surface clearance, vegetation clearance, geophysical surveying, and intrusive investigations were conducted at the three project MRSs sampled during the RI. Soil samples also were collected from the project site and analyzed for MC. The field investigation was conducted under the Work Plan reviewed and approved by the technical project planning (TPP) Team, which includes the U. S. Army Engineering and Support Center – Huntsville (USAESCH), the U.S. Army Corps of Engineers (USACE), Wilmington District, North Carolina Department of Environment and Natural Resources (NCDENR), and ARNG.

1.2 MEC CHARACTERIZATION AND MEC HAZARD ASSESSMENT

To support MEC characterization at the project site, digital geophysical mapping (DGM) surveys, mag-and-dig, and intrusive investigation were planned throughout the project site. Geophysical mapping was not conducted within HGR or FTR because these sites were adequately characterized in previous investigations. Transects were brush cleared and investigated by geophysical surveys; the grids were setup, staked, brush cleared and investigated by geophysical survey (if applicable) and subsequent intrusive investigation; and the surface reconnaissance transects were completed. The grid locations were proposed to characterize the MEC and munitions debris (MD) present based on the density of anomalies identified in the geophysical transect surveys. Some areas proposed for investigation in the work plan at the RC1 MRS and RC2 MRS were not investigated because landowners refused ROE. The entire ARNG MRS was accessible and the overall totals for data collected are presented as follows:

Table 1.1
Completed RI Field Activities, Proposed and Actual Totals

Activity	Actuals			Proposed			% of Work Plan Proposed Coverage[1]
	RC1 MRS	RC2 MRS	ARNG MRS	RC1 MRS	RC2 MRS	ARNG MRS	
Reconnaissance Transects (miles)	40	48.7	29.2	67	85	29	73%
DGM Density Transects (miles)	68	69.4	49.3	110	98	52	76%
DGM Survey Grids	62	101	89	158	133	77	77%
DGM Grids Intrusive[2]	62	91	89	158	133	77	75%
Analog Intrusive Grids[3]	28	13	NA				
RI met applicable DQOs for areas where ROE were granted?[4]	Yes	Yes	Yes				

1 - Less than 100% due to ROE refusals from landowners
2 - DGM was conducted but not intrusively investigated in 10 RC2 MRS grids because access was refused by landowner.
3- The quantity of analog intrusive grids cannot be estimated during the work plan stage, prior to the field activities, as the specific landowner restrictions on brush cutting are unknown during the work plan stage.
4 – DQOs applicable to each MRS are listed in Table 3.4.

Based on the intrusive results within the MRSs and a combination of historical investigations and results from this RI, the current MRS boundaries were reconsidered to encompass the MEC-contaminated areas only. Based on the RI results, revised MRS boundaries should be defined to best characterize the MEC contamination present within Butner. In general, areas where MEC or significant amounts of MD were found were characterized as MEC contaminated within each MRS. This analysis resulted in the identification of MEC contaminated areas in RC1, RC2 and ARNG MRSs that are recommended for continuation forward to the FS phase. Additionally, a new ARNG HGR was identified during the RI investigation, located at Grid ARNG-082. This HGR is delineated and should be created as a new MRS within Butner. Depth ranges for MEC contamination were estimated using the mean and maximum depths at which MEC and/or MD items were recovered in the MEC-contaminated areas. Of the MEC items identified, all were found from the surface to 0.5 feet (ft) below ground surface (bgs). Only 2 items of MD were found at depths of 3 ft bgs or greater. Of the MD located during the intrusive effort, 83 percent was found from the surface to 1 ft bgs, 15 percent was found from 1 ft bgs to 2 ft bgs, and 2 percent was found at depths of greater than 2 ft bgs.

It should be noted that the areas outside the newly defined MRS boundaries may still contain MEC; however, the existence of concentrated MEC in these areas is considered highly unlikely and there is a lower potential for encountering MEC in these areas than near the impact area centers, within the MEC contaminated area boundaries. The MEC-contaminated area boundary (defined based on historical investigation locations where MEC was found and the current RI results) is shown on Figure 1.4.

Using the RI results, a MEC hazard assessment (HA) was conducted for the MRS project sites using the U.S. Environmental Protection Agency (USEPA) guidance *Interim Munitions and Explosives of Concern Hazard Assessment Methodology* dated 2008. This MEC HA evaluation calculated a total MEC HA score only for the MEC contaminated areas of the MRSs (based on the MEC contaminated areas of each MRS), as follows:

- ARNG MRS, 900 MEC HA score, Hazard Level 1;
- ARNG Hand Grenade Range, 900 MEC HA score, Hazard Level 1;
- RC1 MRS, 980 MEC HA score, Hazard Level 1;
- RC2 MRS, 980 MEC HA score, Hazard Level 1; and
- FTR MRS, 485 MEC HA score, Hazard Level 4.

A Hazard Level of 1 indicates an area with the highest protential for explosive conditions and a Hazard Level of 4 indicates a low potential for explosive conditions. Note that MEC HA scores are qualitative references only and should not be interpreted as quantitative measures of explosive hazard. Since no MEC was present at the HGR, no MEC HA was required.

1.3 MC CHARACTERIZATION AND RISK ASSESSMENT

During the RI/FS activities, incremental sampling methodology (ISM) soil samples were collected within the three MRSs and at background locations and were analyzed for explosives and metals (copper, lead, antimony and zinc). No MC was detected at levels constituting a risk

to human health or the environment, indicating there is no MC contamination. The baseline risk assessment (BLRA) was conducted in accordance with USACE and USEPA guidance, and included a Human Health Risk Assessment (HHRA) and a Screening Level Ecological Risk Assessment (SLERA).

The HHRA evaluated current and potential future receptors that may contact soil at ARNG, RC1, and RC2. The original round of sampling occurred in May 2013. The only metal present at concentrations that could pose a threat to human health, antimony, was determined to be naturally occurring. For explosive compounds, only concentrations of 2,6-dinitrotoluene (DNT) and the summed 2,4-DNT and 2,6-DNT concentrations from the May 2013 sampling conducted exceeded health-based screening values. Because the screening level risk estimates were in the middle or on the low end of the target risk range (1E-06 to 1E-04), and because the October 2013 re-sampling results did not replicate the original detections, it was concluded that explosives contamination at the three MRSs does not pose a threat to human health.

The SLERA evaluated exposure of terrestrial receptors (plants, soil invertebrates, birds, and mammals) to contaminants at each of the three MRSs. Exposure via the food web was also considered. The SLERA concluded that lead posed minimal threat to insectivorous birds and no threat to the other ecological receptors, and that the other site contaminants did not pose a threat to ecological receptors.

1.4 RI RESULTS AND RECOMMENDATIONS

The RI results are sufficient to characterize, identify and evaluate MEC hazards associated with the entire project site. Sufficient information was gathered from areas where ROE was granted during the RI performance, or from historical data, to characterize areas where ROE was refused. Notably, the RI results are used to define MEC-contaminated areas for revision to the current MRS boundaries and to support the development and execution of potential remedial alternatives as part of the recommended FS. The ARNG HGR was identified during the RI investigation, and recommended as a new MRS within Butner. The conclusions of this RI and the MEC HA show that MEC contamination is potentially present that poses an explosive hazard to current and future receptors. These sites are recommended for inclusion in an FS to develop potential remedial alternatives capable of reducing the site hazards to acceptable levels (Table 1.2). The BLRA for MC identified no actionable risk to human or ecological receptors at the project MRSs. The data collected and the associated characterization described in this report are considered sufficient to characterize the project MRSs, to identify and evaluate associated potential MEC hazards or MC risks, and to support the recommended FS.

Table 1.2
RI Recommendations by MRS

Munitions Response Site	RI Recommendation for Future MRS	Revised Acreage	Potential MEC Hazards	MC Risk Present	Recommendation
ARNG MRS	MEC-Contaminated Area	1,429	High	No	FS
	Five-Year Review Area	402	Low	No	FS
	Non MEC-Contaminated Area	3,395	Low	No	NFA
RC1 MRS	MEC-Contaminated Area	3,901	High	No	FS
	Five-Year Review Area	549	Low	No	FS
	Non MEC-Contaminated Area	8,462	Low	No	NFA
RC2 MRS	MEC-Contaminated Area	4,100	High	No	FS
	Five-Year Review Area	439	Low	No	FS
	Non MEC-Contaminated Area	7,429	Low	No	NFA
FTR MRS		20	Low	No	FS
HGR MRS		25	No	No	NFA
ARNG HGR		6	High	No	FS

NFA = No Further Action

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FIGURES

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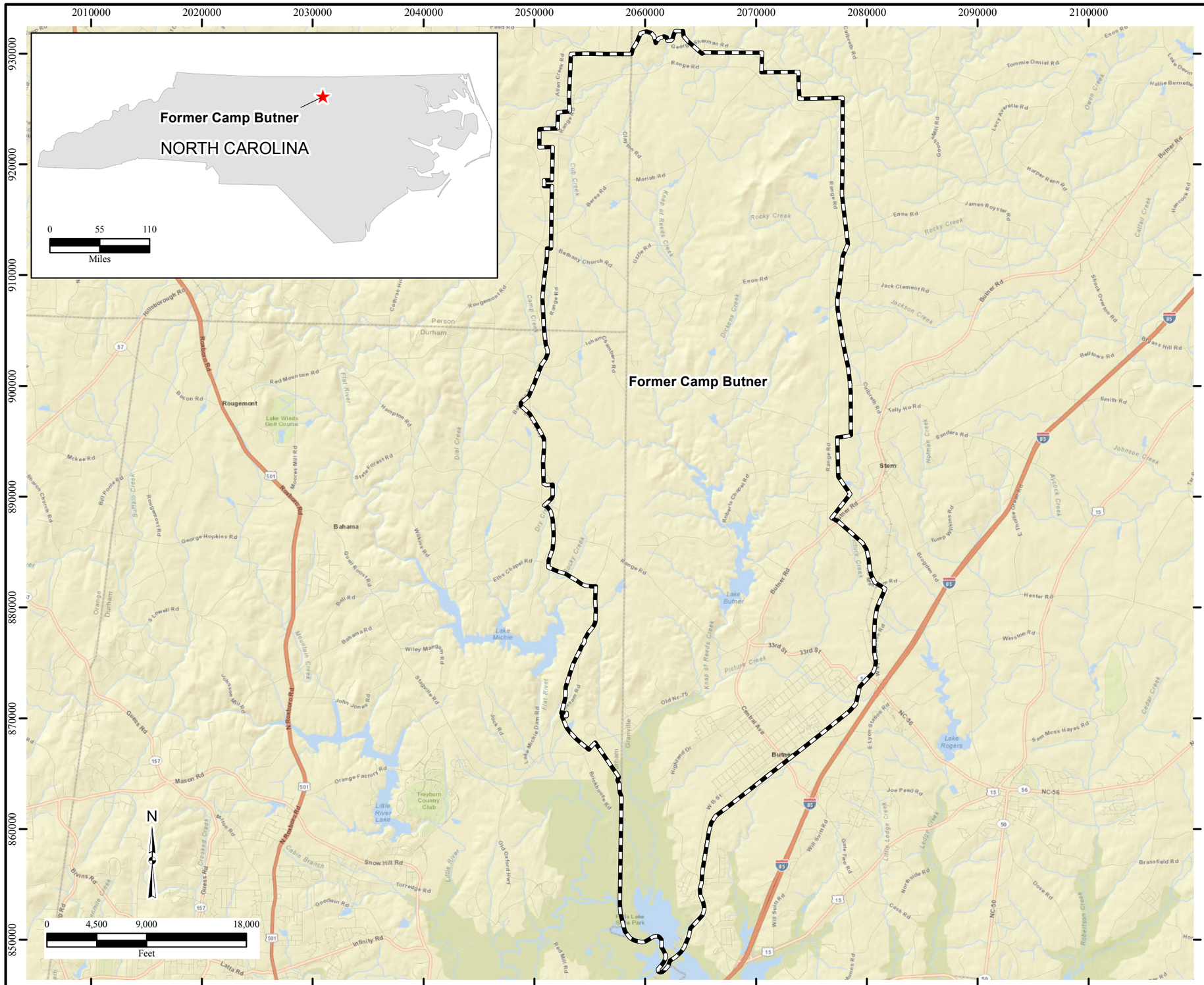
Figure 1.1
Site Location



Legend

Former Camp Butner

Notes:
FS=Feasibility Study
RI=Remedial Investigation

\\Gst-srv-01\HGLGIS\Camp_Butner_MSIW\RI_Report
(1-01)Gen_Loc.mxd
2/4/2014 JP, QC: 02/21/2012 TH
Source: HGL, USACE
ESRI Online Street Map

HGL HydroGeoLogic, Inc
MUNITIONS RESPONSE TEAM

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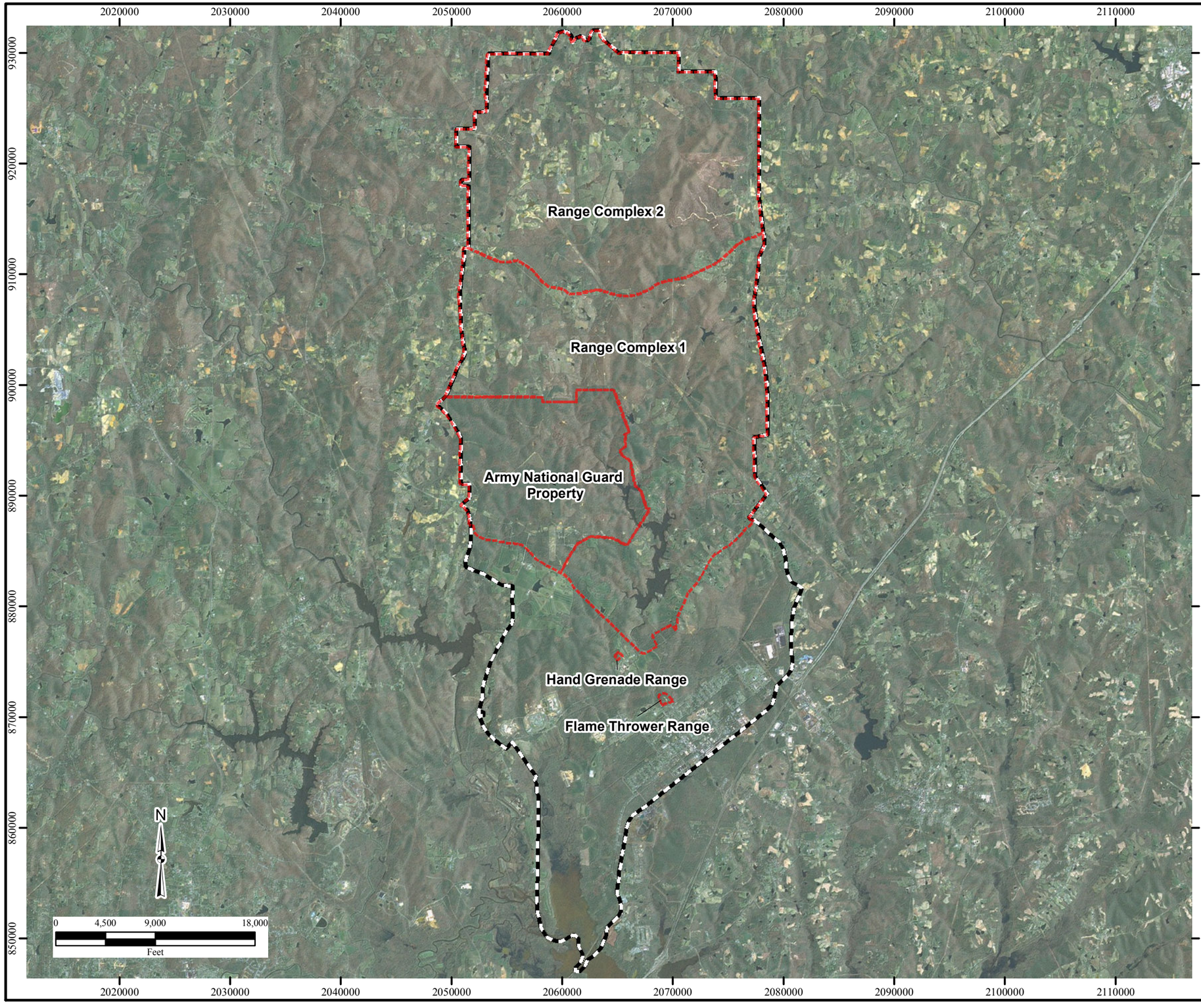
Figure 1.2
MRS Locations



Legend

MRS

Former Camp Butner

Notes:
MRS=Munitions Response Site
RI=Remedial Investigation

\\Gst-srv-01\HGLGIS\Camp_Butner_MSIW\RI_Report
(1-02)MRS_Areas.mxd
2/4/2014 JP
Source: HGL, USACE
ESRI Online Aerial Imagery

HGL HydroGeoLogic, Inc
MUNITIONS RESPONSE TEAM

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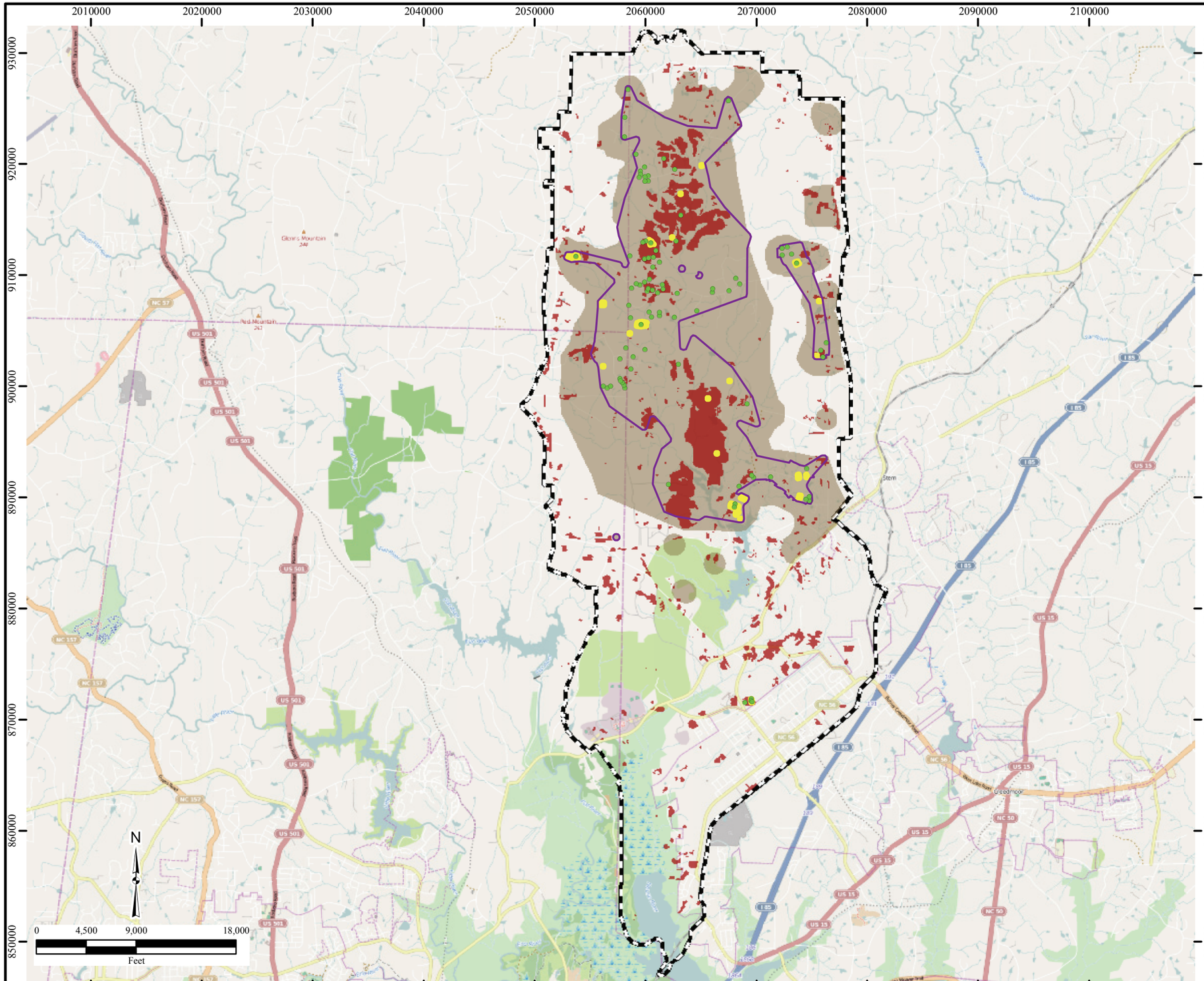
Figure 1.3
MRS Historical Investigation Results



Legend

- Historical MEC Findings
- MEC Area Based on Historical MEC Findings
- MEC Contamination
- Historical Analysis Area
- Suspected Munitions Use Area
- Former Camp Butner

Notes:
Historical results include the EE/CA data and various data from previous removal actions.

MRS=Munition Response Site
RI=Remedial Investigation

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5/1/2014 RB
Source: HGL, USACE
ESRI Online Street Map

HGL HydroGeoLogic, Inc. MUNITIONS RESPONSE TEAM

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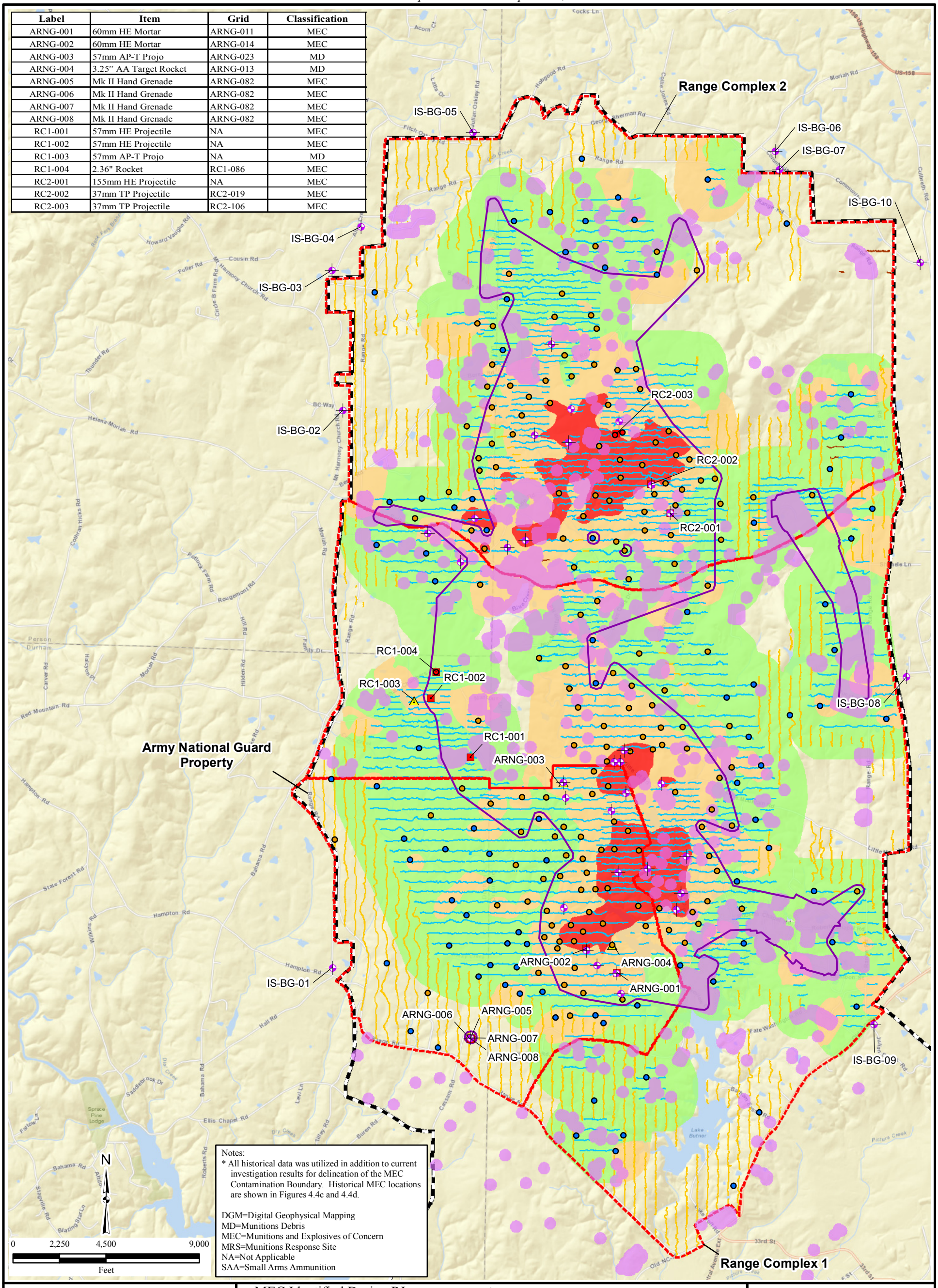
Label	Item	Grid	Classification
ARNG-001	60mm HE Mortar	ARNG-011	MEC
ARNG-002	60mm HE Mortar	ARNG-014	MEC
ARNG-003	57mm AP-T Projo	ARNG-023	MD
ARNG-004	3.25" AA Target Rocket	ARNG-013	MD
ARNG-005	Mk II Hand Grenade	ARNG-082	MEC
ARNG-006	Mk II Hand Grenade	ARNG-082	MEC
ARNG-007	Mk II Hand Grenade	ARNG-082	MEC
ARNG-008	Mk II Hand Grenade	ARNG-082	MEC
RC1-001	57mm HE Projectile	NA	MEC
RC1-002	57mm HE Projectile	NA	MEC
RC1-003	57mm AP-T Projo	NA	MD
RC1-004	2.36" Rocket	RC1-086	MEC
RC2-001	155mm HE Projectile	NA	MEC
RC2-002	37mm TP Projectile	RC2-019	MEC
RC2-003	37mm TP Projectile	RC2-106	MEC



\\gst-srv-01\HGLGIS\Camp_Butner_MSIW\RI_Report\(1-04)MEC_MD.mxd
1/7/2015 CNL
Source: HGL, ESRI Online Imagery

Legend

- MEC Identified During RI
- Munition Debris
- Background Sample Location

Grid Intrusive Results

- MEC
- Munition Debris
- Cultural Debris
- Other
- SAA, Other

- AnalogTransect
- DGM Transect
- Recon Transect
- MEC Contamination Boundary*
- MRS
- MEC Characterized Area
- Former Camp Butner

- High Anomaly Density
- Medium Anomaly Density
- Low Anomaly Density

HGL HydroGeoLogic, Inc

Figure 1.4 Current Investigation Results

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2.0 INTRODUCTION

HGL conducted this RI at Butner located in Granville, Person, and Durham counties, North Carolina (Figure 1.1). This work was executed under contract No. W912DY-10-D-0023 with USACE and USAESCH as Delivery Order No. 0009. The overall goal of this project is to execute the RI in compliance with the DQOs established in the Work Plan (HGL, 2012b); obtain stakeholder concurrence on the final RI report; and, if appropriate, provide sufficient data to facilitate development and screening of remedial alternatives in the FS. The objectives of the project will be met when the following tasks have been accomplished:

- Achieve acceptance of Decision Document (DD) in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and DoD, Army, and USACE Regulations and Guidance to include Interim Guidance and Data Item Descriptions (DIDs) at the referenced MRSs; and
- Conduct an RI in accordance with CERCLA, characterizing the nature and extent of MEC and MC contamination at the MRSs to meet the project DQOs as defined during the TPP process (Appendix E) and setout in the Final Work Plan.

This RI report has been prepared in accordance with the requirements of the performance work statement (PWS) dated August 25, 2011, and with USACE DID WERS-010.01. The purpose of the report is to document the methods employed during the RI, and present the results that will be used to support the FS and recommendation of remedial action alternatives. The RI Report was prepared in compliance with USACE Engineer Pamphlet (EP) 1110-1-18 and USEPA Guidance for Conducting RI/FS Under CERCLA EPA/540/G-89/004. This RI Report is a standalone document; it includes characterization of previously defined MRSs and recommendations for revised MRS boundaries that will be further addressed in a future standalone FS Report.

The RI report is organized as follows:

- **Executive Summary –** This section provides a summary of the purpose, scope, and objectives of the RI; site background information; RI data and interpretation; risk assessment information; and conclusions.
- **Section 2.0 Introduction –** The introduction to the RI report describes the purpose of the report, provides a description of and historical information about the property, and summarizes previous investigations.
- **Section 3.0 Project Remedial Response Objectives –** This section discusses the results of the TPP process, which addresses both MEC and MC. It includes the overall project remedial response objectives developed based on the planned or reasonably anticipated future use of the site property.
- **Section 4.0 Characterization of MEC and MC –** This section summarizes the approaches used for the RI field activities. The processes used for identifying and

characterizing MEC and MC contamination are detailed and departures from the work plan are discussed.

- **Section 5.0 Revised CSM and RI Results –** This section presents information on the nature and extent of MEC at the project site, MC contamination of environmental media, and physical characteristics of the project site determined from the field activities conducted as part of the RI.
- **Section 6.0 Contaminant Fate and Transport –** This section provides a discussion of fate and transport of contaminants detected at the project site.
- **Section 7.0 Baseline Risk Assessment for MC and HA for MEC –** This section details site-specific evaluations conducted for hazards posed by MEC and risks posed by MC to human and ecological receptors. MEC HA results are discussed and MC results are compared to screening levels to determine whether contamination is present at levels that pose unacceptable risk.
- **Section 8.0 Summary of Results –** This section summarizes the results of the RI including the following: nature and extent of MEC and MC at the project site; whether the findings are consistent with known sources; the magnitude, direction, and rate of contaminant migration; presents a summary of site risks; and presents conclusions.
- **Section 9.0 References –** Lists the documents and other materials used in the preparation of this RI.
- **Appendices:**
    - Appendix A – Documentation of Disposition of Material Potentially Presenting an Explosive Hazard (MPPEH), MD and Wastes
    - Appendix B – Analytical Results Tables and Quality Assurance (QA)/Quality Control (QC) Evaluations
    - Appendix C – Institutional Analysis and Institutional Analysis Report
    - Appendix D – Demolition Activity Summation Tables
    - Appendix E – TPP Memorandum
    - Appendix F – Geophysical Summary Reports and Instrument Verification Strip (IVS) Letter Report
    - Appendix G – Field Work Variances
    - Appendix H – Senior Unexploded Ordnance (UXO) Supervisor (SUXOS), UXO Safety Officer (UXOSO), UXO QC Specialist (UXOQCS) Reports, Logs, and Memoranda
    - Appendix I – Corrective Action Requests
    - Appendix J – Project Photographs

- Appendix K – Munitions Response Site Prioritization Protocol (MRSPP) Scoring Sheets
- Appendix L – Geographical Information System (GIS) Submittal

2.1 PURPOSE

The RI was conducted to characterize the nature and extent of potential MEC and MC contamination for the purpose of developing and evaluating effective remedial alternatives within five MRSs located at Butner. These five MRSs and the approximate areal extent of each at the initiation of this RI project (prior to the RI characterization) are:

1) ARNG MRS, 4,824 acres;
2) RC1 MRS, 12,363 acres;
3) RC2 MRS, 11,529 acres;
4) FTR MRS, 5 acres; and
5) HGR MRS, 25 acres.

The HGR and FTR MRSs were previously investigated during the 2004 Engineering Evaluation (EE)/Cost Analysis (CA). During the TPP process, the project delivery team (PDT) determined, that sufficient characterization data has been gathered to complete the FS for these two MRSs, if required. Therefore, additional investigation was not needed at these two MRSs during the RI field activities.

2.2 PROPERTY DESCRIPTION AND PROBLEM IDENTIFICATION

2.2.1 Project Location and Land Use

2.2.1.1 Project Location

Butner is located 15 miles north of Durham, North Carolina, and encompasses approximately 40,384 acres in Granville, Person, and Durham counties. The majority of the land is used for agricultural purposes, but also includes residential development. Of the approximately 1,100 separate parcels identified within Butner, there are approximately 750 landowners, with some landowners possessing multiple parcels. The majority of the landowners are individual citizens; about 50 landowners are corporations or governmental entitites. The majority of agricultural use land is used for timber forest cultivation. The land use is a combination of localized cropland clearings located within expanses of woodland and rural residential development. A site location map is provided as Figure 1.1. As indicated previously, the RI/FS is focused on the five MRSs. Figure 1.2 depicts the location of the five MRSs included in this RI/FS.

2.2.1.1.1 Army National Guard Property MRS

The ARNG is located in the west-central portion of Butner. The land is owned by the State of North Carolina Army National Guard and is a training center. Approximately 50 percent of the ARNG property is located within Durham County, and it accounts for the majority of the

Butner property within the county. The remaining portion of the ARNG property is located in Granville County.

2.2.1.1.2 Range Complex 1 and Range Complex 2 MRS

The two range complex MRSs comprise the remaining portion of Butner. The majority of the area is privately owned and is used for residential and agricultural purposes. Most parcels of land are less than 10 acres in size with about 134 parcels larger than 50 acres in size. A large portion of the land is undeveloped and forested, with private residences located throughout the area. Timber harvesting is a common practice across this portion of the Butner area. The majority of the area is located in Granville County; the remaining portion is located within Durham and Person counties.

2.2.1.1.3 Flame Thrower Range MRS

The FTR MRS is located in the southeast portion of Butner. This area is near the town of Butner, North Carolina, and two state hospitals: the John Umstead Hospital and the Murdock Center. Based on information previously gathered (see Section 2.4.), additional investigation was not warranted during the RI field activities.

2.2.1.1.4 Hand Grenade Range MRS

The HGR MRS is located in the south-central portion of Butner. The area is composed of pastureland owned by the state of North Carolina and managed as Umstead Farm, a North Carolina State University dairy research farm. Based on information previously gathered (see Section 2.4.), additional investigation was not warranted during the RI field activities.

2.2.1.2 Projected Land Use

The majority of Butner's 40,384-acres consist of undeveloped land used primarily for agricultural and residential purposes. This combination of land use is typified by local clearings for residential, agricultural, or commercial use located within expanses of woodland. Current land use within Butner includes residential, commercial, recreational, agricultural, and ARNG training. Since the transfer of ownership to private owners, numerous homes have been constructed and are located throughout RC1 and RC2 MRSs. The ARNG MRS is currently owned by the North Carolina Army National Guard, and is operated as the Camp Butner Training Center and does not contain privately owned parcels. It is anticipated that future land use within each MRS will remain the same.

2.2.2 Demographics

The majority of Butner is within Granville County, which includes the town of Butner. Granville County is located in the upper Piedmont plateau of North Carolina, north of the Raleigh-Durham research triangle area. Bordering rural Virginia to the north, it stretches 32 miles to the south where it adjoins metropolitan Durham and Wake counties. Granville County Borders Person County to the west and Franklin County to the southeast, both of which are rural counties. Vance County is directly to the east. The U.S. Census Bureau's 2012 estimated

population for Granville County is 60,436 with a population density of approximately 112.7 people per square mile (U.S. Census Bureau, 2014a).

Person County is located in the Northern Piedmont area of North Carolina, and is bounded by Durham and Orange counties to the south, Granville County to the east, and Caswell County to the west. Virginia's Halifax County lies to the north. The shape of Person County is almost a perfect square with each side being approximately 20 miles across and covering an area of 404 square miles. The U.S. Census Bureau's 2012 estimated population for Person County is 39,268 with a population density of approximately 100.6 people per square mile (U.S. Census Bureau, 2014b).

Durham County is bordered by Person County to the north, Granville County to the northeast, Wake County to the southeast, Chatham County to the south-southwest, and Orange County to the west. The U.S. Census Bureau's 2012 estimated population for Durham County is 279,641. The population density is approximately 935.7 people per square mile (U.S. Census Bureau, 2014c).

The town of Butner (at the southern boundary of Camp Butner) was incorporated into a town on July 27, 2007. The U.S. Census Bureau's 2012 estimated population for Butner is 7,647 (U.S. Census Bureau, 2014d).

2.2.3 Surface Features

The topography at the site is characterized by rolling hills with moderate to steep slopes ranging from a high elevation of approximately 550 ft above mean sea level to a low elevation of approximately 325 ft above mean sea level (Figure 2.1). Lake Butner, also called R. D. Holt Reservoir, is located in the south-central portion of Butner and stretches northeast into the Camp Butner Training Site. Holt Reservoir was impounded in 1965 by the USACE to supply water to local cities. The lake is approximately 385 acres in size and serves as the surface water drinking supply source for the South Granville Water and Sewer Authority, which in turn sells water to other municipalities such as the city of Creedmoor and the town of Butner (South Granville Water and Sewer Authority, 2011). The lake is currently owned and operated by the Town of Butner. The topography at Camp Butner, including Holt Reservoir, is shown on Figure 2.1. Butner is located within the Piedmont Plateau physiographic province.

2.2.4 Climate

The area incorporating the former Camp Butner has a humid, subtropical climate characterized by warm, humid summers and mild winters. The lowest average temperature of 36°F occurs in January, and the highest mean temperature of 90°F occurs in July. The annual average rainfall is approximately 47 inches, with an average monthly rainfall between 3 to 4 inches. The estimated maximum frost penetration for the general area is 4 inches (NCDC, 2013).

2.2.5 Geology and Soil

Butner is located within the Durham Sub-basin. The bedrock formation is predominantly Arkosic Sandstone. The sandstone is tan in color, is described as medium to very coarse grained, and contains mica. The soil is from the Triassic Age and is an acidic bedrock material. The site, located within the White Store-Creedmoor soil association, has gently sloping to moderately steep, moderately well drained (sandy loam) soils with a subsoil of firm clay (HGL, 2012b).

2.2.6 Hydrology and Groundwater Conditions

Butner contains a number of perennial streams with numerous intermittent tributaries. These streams generally drain from the hills to the southwest. The majority of the area drains into the Knap of Reeds Creek, which is part of the Nuese River watershed. A small portion of the western section of Butner drains to the west into the Flat River, which also drains into the Nuese River (USACE, 1993). The potable water supply for the town of Butner is from the Holt Reservoir (Figure 2.1).

2.2.7 Ecology

2.2.7.1 Vegetation

The vegetation at Butner varies based on land use. In the undeveloped areas, the vegetation is primarily moderate to dense forest with the understory comprising dogwood, poison ivy, Christmas fern, and Japanese honeysuckle. The wooded areas typically consist of hardwoods and pines located throughout the hillsides. The forested areas in the site are commercially logged as part of the local forestry industry. Agricultural use areas within Butner consist of multiple agricultural crops and a major resource for the local landowners is pine timber growth. Major areas of RC1 and RC2 MRSs are used by private landowners for timber forest growth, as observed during the RI field activities. These areas are logged and re-planted.

2.2.7.2 Sensitive Environmental Resources at the Project Site

The most currently available information regarding endangered, threatened, and protected species was compiled for Granville and Person Counties using the U.S. Fish and Wildlife Service (USFWS) Endangered Species Act (ESA) List (updated February 1, 2012) and the North Carolina Natural Heritage Program (NCNHP), Divisions of Parks and Recreation, Department of Environmental and Natural Resources List (updated September 2010). The information provided included six vertebrate animal species (one bird and five fish) and seven invertebrate animal species that potentially occur in the local area. Details on the species identified were included in the Final RI/FS Work Plan (HGL, 2012b), Section 6.3. No threatened or endangered species or critical habitat are documented to exist within Butner. Further evaluation of the ecological receptors is included in Section 7.2.3.

2.2.7.3 Wetlands

Based on information gathered about the jurisdictional wetlands existing at Butner, there are various types of wetlands present (Figure 2.2). As shown on Figure 2.2, there are freshwater emergent wetlands, freshwater forested/shrub wetlands, freshwater ponds, and the drinking water reservoir, Lake Butner (USFWS, 2014). This information was incorporated into the GIS deliverable, in accordance with the PWS and Worldwide Environmental Remediation Services (WERS) DID requirements.

2.2.7.4 Aquatic Habitats

As shown on Figure 2.2, streams and lakes are located on Camp Butner, including Lake Butner (also known as Holt Reservoir, the source of potable water for the town of Butner). Additionally, the site contains several streams and tributaries that are part of the Falls Lake watershed.

2.3 HISTORICAL INFORMATION

Camp Butner was primarily established to train infantry, artillery, and engineering combat troops for deployment and redeployment overseas during World War II. The installation was active from 1942 until 1946; however, training was only conducted through 1943. The installation included approximately 15 live-fire ammunition training ranges, a grenade range, a 1,000-inch range, a gas chamber, and a flame thrower training pad. Munitions used at the site included small arms, 2.36-inch rockets, rifle and hand grenades, 20 millimeter (mm) through 240mm high explosive (HE) projectiles, 60 and 81mm mortars, and antipersonnel practice mines. Training activities also included the use of demolition items such as trinitrotoluene (TNT) and various initiating and priming materials. Following World War II, the camp was closed, limited ordnance clearances were performed, and the property was conveyed to the ARNG, the State of North Carolina, local municipalities, and private owners. A brief summary of the site history for each of the MRS locations has been included below. This information was obtained from the Archives Search Report (ASR) Supplement (USACE, 2003) and other historical investigation summaries. Figure 1.3 illustrates areas investigated and the munitions use areas identified based on historical results since former Camp Butner closed.

2.3.1 ARNG MRS History

The ARNG MRS is located on the western-central area of Butner project site and contained an artillery impact area, two mortar ranges, and several small arms ranges. The range fan for the artillery impact area was confirmed using historical maps; however, the dimensions of the other range fans were established using standard range fans for the individual type of range. All range fans remain within site boundaries, and some range fans overlap with others within the complex. Munitions found or suspected at the ARNG MRS include small arms, 2.36-inch rockets; rifle grenades 60mm and 81mm mortars; and 37mm, 105mm, and 155mm projectiles. The North Carolina Army National Guard has never used munitions at this site, only small arms ammunition. The training that is conducted onsite is for small arms ammunition only, as documented by the memorandum for record dated June 14, 2012 (USACE, 2012).

2.3.2 RC1 MRS History

The RC1 MRS is most of the center of the site and contained an artillery impact area, two mortar ranges, and several small arms ranges. All range fans remain within site boundaries, and some range fans overlap with others within the complex. Munitions types identified at this MRS included small arms, 2.36-inch rockets; hand grenades; rifle grenades; 37mm, 40mm, 57mm, 105mm, and 155mm projectiles; and 60mm and 81mm mortars. Training ranges located inside this complex were:

- Central Artillery Impact Area
- Rifle Ranges
- Landscape 1000-inch .22 caliber Range
- AA 1000-inch .22 caliber Range
- Pistol Range
- AT 1000-inch .22 caliber Range
- MG 1000-inch .30 caliber Range
- 37mm Range
- 60mm/81mm Mortar Range 1
- 60mm/81mm Mortar Range 2

2.3.3 RC2 MRS History

The RC2 is located on the north side of the site and contained an artillery impact area, a mock village and two machine gun ranges. The range fan for the RC2 artillery impact area was also established using standard range fans for the individual type of ranges. The range fan for the artillery impact area was taken from historical maps, while the remaining range fans used were standard for the individual type of range. All range fans remain within site boundaries, and some range fans overlap with others within the complex. The entire complex is currently under private ownership. Munitions types identified at this MRS included small arms, 2.36-inch rockets; hand grenades; rifle grenades; 37mm, 40mm, 57mm, 105mm, and 155mm projectiles; and 60mm and 81mm mortars. Training ranges located inside this complex were:

- Central Artillery Impact Area
- Rifle Ranges
- Landscape 1000-inch .22 caliber Range
- 1000-inch .22 caliber Range
- Mock German Village

2.3.4 FTR MRS History

This range was used to conduct flame thrower training during World War II. The range was situated just north of the former cantonment area, but no information concerning the layout of the range has been located. The standard range fan for an FTR as given in TM 9-855, August 1944, was used for the range fan. The range fan does not extend beyond site boundaries or overlap other range fans. The 2003 ASR Supplement identifies the site as FTR MRS, with an

area of 5 acres (USACE, 2003). In 2006, a removal action (RA) was conducted at the FTR and cleared approximately 20 acres to depth of detection using analog detection and dig techniques. The RA activities identified and disposed of two MEC items and 530 pounds (lbs) of MD. Based on results of the RA, the report concluded that the nature and extent of MEC at the FTR had been adequately characterized. Therefore, no further characterization was required during the RI.

2.3.5 HGR MRS History

The HGR is believed to have been used during World War II for live hand grenade training. Therefore, the standard range fan for a live HGR as given in Army Regulation (AR) 750-10, January 1944, was used. The range fan does not extend beyond site boundaries or overlap with other range fans. There have been no reported incidents of MEC on the range. The ASR recommended investigation of Area 3, which was identified as Grenade Training Ranges, based on the "potential" presence of UXO. Ordnance and explosives (OE) were not discovered during the ASR reconnaissance, and no records of OE were found within Area 3 since the closure of the facility (USACE, 1993). The 2003 ASR Supplement identifies the site as HGR MRS, with an area of 25 acres (USACE, 2003). As part of the EE/CA, DGM was conducted on 8.5 acres in and around the 5-acre parcel designated for the investigation. During the investigation 71 percent of the anomalies were excavated and no MEC or MD were discovered. Therefore, based on the lack of ordnance-related findings, no further characterization was required during the RI.

2.4 PREVIOUS INVESTIGATIONS

This section summarizes detailed results, RAs, conclusions, and recommendations from the following reports:

- ASR (USACE, 1993);
- EE/CA (Parsons, 2004);
- ASR Supplement (USACE, 2003);
- Time Critical Removal Action (TCRA) – Lakeview Subdivision (Parsons, 2003);
- TCRA – Blalock and Riley Properties (USA, 2004);
- Groundwater Monitoring Well MC Sampling and Characterization (USACE, 2005);
- Soil and Sediment Sampling for MC (Parsons, 2006);
- RA FTR (USA, 2006); and
- RAs at Lakeview Subdivision and Residential Parcels conducted within RC1 and RC2 (USA, 2010 and 2011).

Upon completion of the EE/CA and RA activities, this RI was conducted to evaluate potential MEC and MC contamination remaining throughout the project site. This RI report considers the previous characterization and RAs and recommends areas to move forward to the FS stage

to address site contamination. Additional information on the previous investigations and other potentially relevant information are presented in the Final Community Relations Plan for the Butner RI/FS (HGL, 2012a).

2.4.1 Findings and Determination of Eligibility, 1990

Under the Defense Environmental Restoration Program (DERP), USACE, Wilmington District prepared a findings and determination of eligibility (FDE) for Butner in July 1990. The FDE report confirms that the camp was formerly used by the DoD and was eligible for DERP Formerly Used Defense Site (FUDS) consideration. A risk assessment code (RAC) score was assigned to the camp as a whole, and further action and completion of an Inventory Project Report (INPR) were recommended. The RAC score given to the camp was a 4 on a scale of 1 to 5, with 1 indicating a site having the highest explosive risk and 5 indicating a site having no explosive risk. In October 1990, the INPR was completed and the Military Munitions Response Program (MMRP) project was established (Parsons, 2004).

2.4.2 Archives Search Report, 1993 and 2003

In September 1993, the USACE, Rock Island District, conducted a records search and site inspection for Butner. The final ASR report summarizes the known nature and extent of MEC contamination, at that time. Butner was divided into several areas for evaluation purposes and four areas were found to have ordnance, including a cantonment area, ammunition storage area and dump, hand grenade ranges and rifle grenade ranges, ammunition training ranges, and impact areas. A RAC score for each area was developed based on best available information resulting from record searches, field observations, interviews, and measurements. This information was used to assess risk based on the potential MEC hazards identified at the site (USACE, 1993).

In 2003, USACE, Rock Island District, prepared a supplement to the 1993 ASR in support of preparing the Military Munitions Response Range Inventory. Butner was divided into the following five areas (encompassing multiple ranges):

- Gas Chamber
- FTR
- HGR
- RC1
- RC2

The Gas Chamber was not considered as a potential source of MEC contamination and was not included in the 2001 EE/CA. The remaining four areas were evaluated as part of the 2001 EE/CA investigation (Parsons, 2004).

2.4.3 EE/CA, 2001-2004

The EE/CA addressed the FTR, RC1, RC2, and HGR MRSs. At the RC1 and RC2, 77 acres were evaluated and divided into approximately 330 grids of 0.25 acres. Grids were distributed

throughout suspected former munitions use areas within RC1 and RC2. Intrusive results provided evidence that identified actual impact and munitions use areas. A total of 13 MEC and 1,485 MD items were recovered during the EE/CA. Munitions identified at these MRSs included:

- 37mm, 40mm, 57mm, 105mm, and 155mm projectiles;
- 60mm and 81mm mortars;
- 2.36-inch rockets; and
- Hand grenades and rifle grenades.

During the EE/CA investigation, findings made by a property owner at the Lakeview Subdivision, which is within RC1, resulted in the allocation of sampling grids at this location (Parsons, 2004). Based on the intrusive results, which included the demolition of a 37mm projectile, a TCRA was conducted at the Lakeview Subdivision (Parsons, 2003).

At the HGR, approximately 8.5 acres were mapped using geophysical techniques and intrusively investigated. No MEC or MD was identified during the HGR EE/CA. Based on these results; the EE/CA concluded that the nature and extent of MEC had been adequately characterized at the HGR (Parsons, 2004).

2.4.4 TCRA – Lakeview Subdivision, 2002/2003

A TCRA was conducted at the 26-acre Lakeview Subdivision (within RC1) in tandem with the 2001 EE/CA investigation to remove the immediate and imminent danger to public safety posed by the presence of UXO. The TCRA was conducted between November 2002 and March 2003 and included land survey, brush clearance, intrusive removal action, and post-removal DGM (Parsons, 2003). The TCRA included clearing of all metallic items comparable in mass or larger than a 37mm projectile in the top 6 inches of soil. During the clearance, six UXO items were recovered and destroyed:

- An electric blasting cap,
- Mk II hand grenade,
- 37mm HE projectile,
- Ml Al Mine fuze,
- 2.36-inch rocket motor with fuze, and
- 2.36-inch HE warhead.

The DGM survey indicated the potential for additional UXO contamination. As a result, the EE/CA report recommended an additional RA for the property (Parsons, 2004).

2.4.5 TCRA – Blalock and Riley Properties, 2003/2004

USACE conducted a second TCRA north of Enon Road between June 2003 and May 2004. Approximately 13 acres were cleared around a residential (Blalock) property where HE projectiles had been encountered. Although ordnance debris was prevalent, no UXO was recovered (USA, 2004).

2.4.6 Groundwater Monitoring Well MC Sampling and Characterization 2005

USACE Wilmington District conducted a drinking well sampling event in August 2004 (USACE, 2005). During the groundwater sampling event, perchlorate concentrations were detected at relatively shallow depths (between 15 and 78 ft) in 12 of 23 drinking water wells, including detected concentrations at one off-site well location. The off-site location was selected for comparison purposes because it was located outside the boundaries of the former Camp Butner. Perchlorate was detected at concentrations that exceed project screening criteria at two well locations, both of which were relatively shallow wells. One homeowner, whose drinking water well was sampled, confirmed the use of Bulldog Soda fertilizer at his residence. Bulldog Soda contains naturally occurring perchlorate concentrations.

Lead concentrations were detected at nine well locations during the groundwater sampling activities. Lead was detected at concentrations that exceeded the project screening criteria at one unfiltered sample location and at one filtered sample location. Lead typically adsorbs to sediment, and these detected concentrations could have been the result of elevated turbidity present in the samples. Other potential sources of lead at Camp Butner included munitions, water supply piping, gasoline, vehicle exhaust, and lead-based paint. Groundwater analytical results did not indicate that former DoD activities at Camp Butner had impacted the groundwater quality; however, perchlorate and lead concentrations detected in the groundwater warranted supplemental investigation.

2.4.7 Soil and Sediment Sampling for MC, 2006

In 2006 Camp Butner participated in an investigation to evaluate MC potentially present at World War I and World War II-era FUDS locations. The objective was to collect, sample, analyze, and evaluate soil and surface water samples from six different FUDS locations. Sampling was biased toward heavy use target/impact areas, firing point, and low order detonations/exposed explosives locations, etc. Soil samples were collected from HE impact craters. Thirteen soil samples (including one background) and three surface water samples were collected. Only lead was identified as a potential MC associated with former use. Lead was detected in soils at concentrations that exceed USEPA's Ecological Soil Screening Levels (Eco-SSLs) at 11 of the 13 sample locations, including the background sample location. The results of the study indicated that explosive compound concentrations were not detected in the soil or surface water.

2.4.8 Removal Action FTR, 2006

The 2006 RA conducted at the FTR cleared approximately 20 acres to depth of detection using analog detection and investigation techniques. These RA activities identified and disposed of two MEC items and 530 lbs of MD. Based on results of the RA, the report concluded that the nature and extent of MEC at the FTR had been adequately characterized. Two MEC items were destroyed during the RA conducted at the FTR MRS in February 2006. These included a M1 training land mine with smoke canister and a M15 white phosphorus grenade (USA, 2006).

2.4.9 Interim Removal Actions, 2008, 2009, and 2010

Portions of the Lakeview Subdivision that were previously only cleared to a depth of 6 inches were cleared to depth of detection. In addition, RA activities were completed at more than 250 parcels (average parcel was approximately 1.75 acres). Land parcel grids investigated were distributed throughout RC1 and RC2. RA activities were generally focused around existing residential dwellings. Intrusive results indicate the presence of former impact and munitions-use areas. MD recovered included 37mm, 40mm, 57mm, 105mm, and 155mm projectiles; 60mm and 81mm mortars; 2.36-inch rockets; and hand grenades and rifle grenades. MEC recovered during all RAs included: 60mm mortar, 81mm (M43) mortar, 2.36-inch rockets, Mk II hand grenade, M9 rifle grenade, and 155mm projectile.

2.4.10 Summary of Previous Investigations

An EE/CA was conducted that evaluated 77 acres investigating approximately 330 grids (0.25-acre each grid). Grids were distributed throughout suspected former munitions use areas within RC1 and RC2. Munitions types identified at these MRSs included 37mm, 40mm, 57mm, 105mm, and 155mm projectiles; 60mm and 81mm mortars; 2.36-inch rockets; and hand grenades and rifle grenades. RAs were completed during 2008, 2009, and 2010 at more than 250 parcels (average parcel was approximately 1.75 acres). Grids investigated were distributed throughout RC1 and RC2. Munitions recovered included 37mm, 40mm, 57mm, 105mm, and 155mm projectiles; 60mm and 81mm mortars; 2.36-inch rockets; and hand grenades and rifle grenades. Although historical records indicate that 240mm projectiles were used at Butner, MEC findings made during the EE/CA and subsequent RAs conducted in 2008, 2009, and 2010 and during the 2013 RI field activities indicate that no 240mm projectiles were found. Two MEC items were also located at the FTR MRS (USA, 2006). All historical findings included the following MEC items for each MRS:

- ARNG: 2.36-inch rocket, a 105mm HE projectile and a 155mm (shrapnel) projectile;
- RC1: 37mm, 57mm, 105mm and 155mm (M107) HE projectiles; 60mm mortars, 2.36-inch rockets, M9 rifle grenades and Mk II hand grenades, and live projectile fuzes; and
- RC2: 57mm, 105mm and 155mm (Mk I/III) HE projectiles, 2.36-inch rockets, and live projectile fuzes.
- FTR MRS: M1 training land mine with smoke canister and a M15 white phosphorus grenade.

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FIGURES

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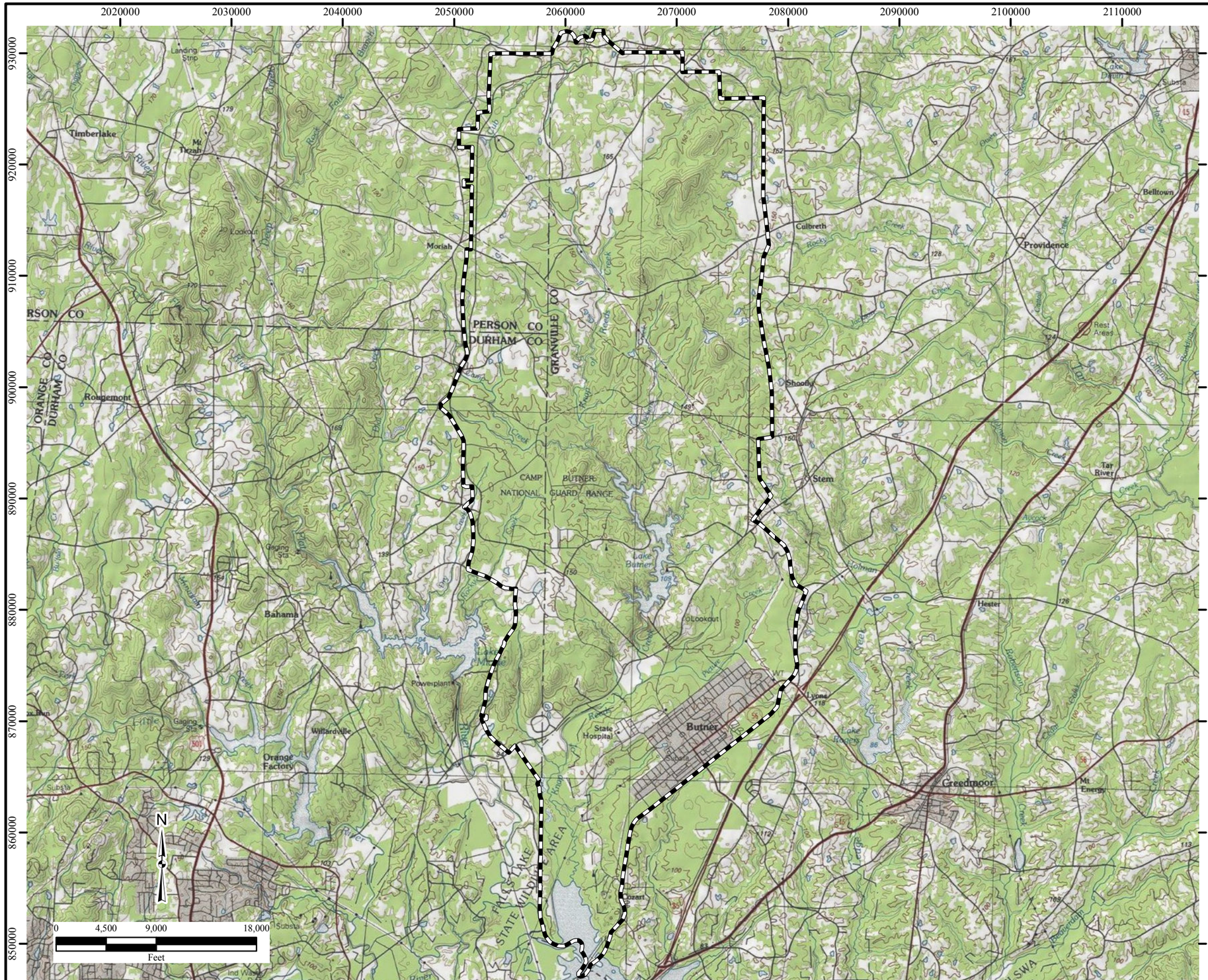
Figure 2.1
Topographic Map



Legend

Former Camp Butner

Note:
Elevation units are in meters.

\\Gst-srv-01\HGLGIS\Camp_Butner_MSIW\RI_Report
(2-01)Butner_Topo.mxd
2/4/2014 RB
Source: HGL, ESRI Online USGS Topographic Imagery

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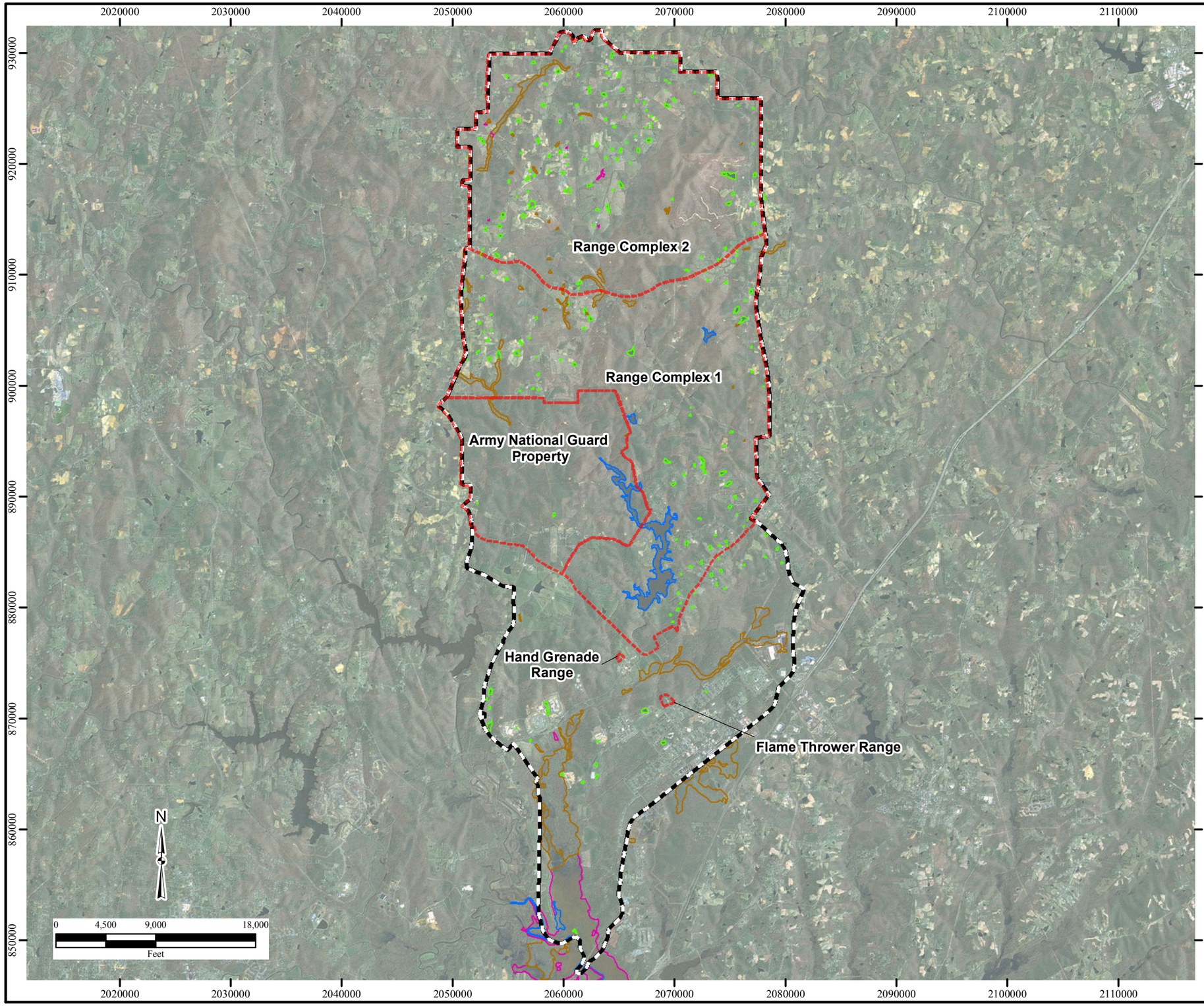
Figure 2.2
Wetlands



Legend

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- MRS
- Former Camp Butner

Notes:
MRS=Munitions Response Site
RI=Remedial Investigation

\\Gst-srv-01\HGLGIS\Camp_Butner_MSIW\RI_Report\(2-02)Wetlands.mxd
2/4/2014 RB
Source: HGL, USACE
ESRI Online Aerial Imagery, U.S. Fish & Wildlife

HGL HydroGeoLogic, Inc. MUNITIONS RESPONSE TEAM

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3.0 PROJECT REMEDIAL RESPONSE OBJECTIVES

This RI was conducted in accordance with the PWS dated August 25, 2011, and in accordance with the approved Final Work Plan (HGL, 2012b). The purpose of this RI is to determine the presence or absence of MEC and MC within the five MRSs at Butner. Further, if the presence of MEC and MC was identified, the RI determines the nature and extent of MEC and MC contamination. The overall goal of this process is to obtain stakeholder concurrence on a selected remedy, and if appropriate, provide sufficient data to facilitate the future remedial action. The preliminary remedial response objectives are presented in Section 3.2.

3.1 CONCEPTUAL SITE MODEL AND PROJECT APPROACH

3.1.1 Preliminary Conceptual Site Model

As part of the TPP process for the RI at Butner, preliminary CSMs were prepared for MEC and MC for the project site. The preliminary CSMs indicate the known or suspected MEC/MC contamination sources; the potential/suspected locations and distribution of contamination; the related source or exposure media; the current and future receptors; and the potentially complete exposure pathways in accordance with Engineer Manual (EM) 1110-1-1200. The CSMs prepared incorporate the presence of MEC and MC in the environment and the pathways by which the receptors may contact MEC or MC. These exposure pathways can vary based on site-specific conditions. The site-specific conditions are incorporated into the evaluation of risks posted to receptors, along with the current and future land use, for any contaminated media confirmed to be present onsite. The exposure pathways are considered incomplete unless all four of the following are present:

- A source for contamination
- An environmental transport and/or exposure medium
- A point of exposure where contaminants contact a receptor
- A likely route of exposure at the point of exposure.

If any single factor listed is not present, the pathway is considered incomplete. The incomplete exposure pathway; therefore, means that there is no means for a receptor to contact MEC or MC. If there is no completed exposure pathway, there is no risk present from exposure to MEC or MC. For instance, the receptors for the Butner MRSs are anticipated to include residential land users. The activities performed by residents at the site are primarily at the surface, with some activities involving subsurface land usage. In general, residential receptors are non-intrusive, resulting in exposure to surface soil. For maintenance workers (utility installation, etc.), it can be assumed activities may reach an intrusive depth of up to 15 ft, thus resulting in exposure to both surface and subsurface soil. The presence of a known/suspected source of MEC and possible receptors means that exposure pathway is complete. The identified current or future human receptors would be exposed to explosive hazards at the MRS.

Five MRSs (RC1, RC2, ARNG, HGR, and FTR) were evaluated including past investigations, previous land use, munitions found or suspected, current land use, and the MEC/MC

characterization approach associated with this RI. Based on the evaluation of data gathered from previous investigation, it was determined that further investigation activities were not required in either MRS HGR and or MRS FTR. Based on the historical investigation data available for all MRSs, transects shown on Figure 3.1a were proposed. Based on where ROE was granted, transects shown in Figure 3.1b were proposed for completion as part of the RI field investigation. The preliminary CSM information is provided in Table 3.1. The preliminary MEC CSM is presented on Figure 3.2 and the preliminary MC CSM is presented on Figure 3.3. These CSMs, as presented in the Final Work Plan, present the known or suspected MEC/MC exposure pathways and were developed based on the results of previous investigations and the RI investigation conducted at the site. Based on the RI results, the preliminary CSMs for MEC and MC for Camp Butner MRSs have been revised, incorporating all new information/data gathered on the project site (see Section 5.5).

Section 2.3 provides a summary of what was known about the site before the RI field activities with respect to former military use of the site, current and anticipated future land use, ways in which people may encounter UXO/discarded military munitions (DMM) or MC, and geological and environmental features that may have an impact on proposed activities and decisions.

Camp Butner was originally composed of approximately 40,384 acres. It was active from 1942 until 1946 and was excessed by the War Assets Administration over the next several years. Approximately 16,558 acres was excessed to the State of North Carolina of which 4,750 acres make up the Camp Butner National Guard Training Center, operated by ARNG, with the remaining 11,038 acres making up the town of Butner and state-operated farms. Approximately 23,056 acres reverted to the original owners who use the land for agriculture and forestry. Approximately 770 acres is used as a Federal Correctional Complex.

The findings from the previous investigations and field investigation activities during the RI phase are consistent with the reported historical use of the MRSs. Munitions recovered during the EE/CA phase and the RAs conducted consisted of: MkII hand grenades, rifle grenades; 37mm, 40mm, 57mm, 105mm, and 155mm projectiles; 60mm and 81mm mortars; and 2.36-inch rockets.

3.1.2 Current and Future Land Use

Current land use within Butner includes residential, recreational, agricultural, and national guard training. Homesteads are located throughout the land formerly occupied by Butner. It is anticipated that future land use will remain consistent with current land use, with anticipated future residential development. The presence of a known/suspected source of MEC and possible receptors means that potentially complete exposure pathways are present at the site that could result in current or future human receptors being exposed to explosive hazards at the project site. The MEC exposure pathways developed as part of this RI are presented in Section 5.5.2.

Table 3.1
Preliminary CSM Information

Area Name	Acreage	Previous Land-Use	Past Investigations, Munitions Found or Suspected	Current Land Use	Future Land Use
Army National Guard Property	4,824	ARNG Property is situated in the southwestern portion of RC1, which contained an artillery impact area, 2 mortar ranges and several small arms ranges. Existing range fans for the artillery impact area were taken from historical maps, while the remainder of the range fans used were standard range fans for the individual type of range. All range fans remain within site boundaries and some range fans overlap with others within the complex.	Munitions types expected and/or identified included small arms, 2.36-inch rockets; rifle grenades; 37mm, 57mm, 105mm, and 155mm projectiles; and 60mm and 81mm mortars. No known clearances.	Army National Guard Training	Army National Guard Training and Construction
Range Complex 1	12,363	RC1 (excluding ARNG Property) existed near the center of the site and contained an artillery impact area, two mortar ranges and several small arms ranges. Existing range fans for the artillery impact area were taken from historical maps, while the remainder of the range fans used were standard range fans for the individual type of range. All range fans remain within site boundaries and some range fans overlap with others within the complex.	Munitions types expected and/or identified included 37mm, 40mm, 57mm, 105mm, 155mm and 240mm projectiles; 60mm and 81mm mortars; 2.36-inch rockets; and hand grenades and rifle grenades. 1958-69 Annual Surface Inspections: Area B: 2.36-inch rockets and 81mm mortars Area C: 2.36-inch rockets, 81mm mortars, 37mm, 105mm, 155mm, and 240mm projectiles Area D: 2.36-inch rocket, and 37mm and 40mm projectiles Area E: 2.36-inch rocket Area F: No findings reported Other "Unrestricted" Areas: Hand grenades; 37mm, 40mm, 60mm, 81mm, 105mm, and 155mm projectiles; and 2.36-inch rockets 2001 EE/CA: The EE/CA evaluated 77 acres primarily utilizing DGM to investigate ¼-acre grids (approximate total of 330 grids). Grids were distributed throughout suspected former munition use areas within RC1 and RC2. Intrusive results provided an indication of actual impact/munitions use areas. A total of 13 MEC and 1,489 MD items were recovered during the EE/CA. 2003 Time Critical Removal Action: A TCRA was conducted at the Lakeview Residential Housing Subdivision within RC1 in 2003. Approximately 26 acres were intrusively investigated using analog techniques to a depth of 6-inches. MEC and MD were subsequently recovered. DGM was then conducted over areas previously investigated to a depth of 6 inches and identified additional anomalies. DGM was also conducted over portions of the properties in the Riley subdivision. A continuation of the TCRA was conducted in 2004 that included the investigation of anomalies identified at the Riley properties. MEC-like DGM anomalies were cleared to depth of detection. 2008, 2009, 2010 Non-Time Critical Removal Actions: Portions of the Lakeview Subdivision that were previously only cleared to a depth of 6 inches were cleared to depth of detection. In addition, RA activities were completed at more than 250 parcels (average parcel was approximately 1.75 acres). Land parcel grids investigated were distributed throughout RC1 and RC2. RA activities were generally focused around existing residential dwellings. Intrusive results indicate the presence of former impact and munitions-use areas. Munitions recovered included 37mm, 57mm, 105mm, and 155mm projectiles; 60mm and 81mm mortars; 2.36-inch rockets; and hand grenades and rifle grenades.	Recreational Residential-Single Family Undeveloped	Recreational Residential-Single Family Undeveloped

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Table 3.1 (continued)
Preliminary CSM Information

Area Name	Acreage	Previous Land-Use	Past Investigations, Munitions Found or Suspected	Current Land Use	Future Land Use
Range Complex 2	11,529	RC2 existed on the north side of the site and contained an artillery impact area, a mock village and two machine gun ranges. The range fan for the artillery impact area was taken from historical maps, while the remainder of the range fans used were standard range fans for the individual type of range. All range fans remain within site boundaries and some range fans overlap with others within the complex. The entire complex is currently under private ownership. West Artillery Impact Area Rifle/MG Range 1 Rifle/MG Range 2 Mock German Village	Munitions types expected and/or identified included 37mm, 40mm, 57mm, 105mm, 155mm and 240mm projectiles; 60mm and 81mm mortars; 2.36-inch rockets; and hand grenades and rifle grenades. 1958-69 Annual Inspections: Area A: Rifle grenade; 2.36-inch rockets; and 37mm, 40mm, 81mm mortar, 105mm, 155mm, and 240mm projectiles. 2001 EE/CA: The EE/CA evaluated 77 acres primarily utilizing DGM to investigate ¼-acre grids (approximate total of 330 grids). Grids were distributed throughout suspected former munition use areas within RC1 and RC2. Intrusive results provided an indication of actual impact/munitions use areas. A total of 13 MEC and 1489 MD items were recovered during the EE/CA. Munitions types identified at these MRSs included 37mm, 40mm, 57mm, 105mm, and 155mm projectiles, 60mm and 81mm mortars; 2.36-inch rockets; and hand grenades and rifle grenades. 2008, 2009, 2010 Non Time Critical Removal Actions: RA activities were completed at more than 250 parcels (average parcel was approximately 1.75ac). Land parcel grids investigated were distributed throughout RC1 and RC2. RA activities were generally focused around existing residential dwellings. Intrusive results indicate the presence of former impact and munitions-use areas. Munitions recovered included 37mm, 40mm, 57mm, 105mm, and 155mm projectiles; 60mm and 81mm mortars; 2.36-inch rockets; and hand grenades and rifle grenades.	Recreational Residential-Single Family Undeveloped	Recreational Residential-Single Family Undeveloped
Flame Thrower Range	5	This range was used to conduct flame thrower training during World War II. The layout of the range is unknown. It existed just north of the former cantonment area. The standard range fan for a FTR as given in TM 9-855, August 1944, was used for the range fan. The range fan does not extend beyond site boundaries or overlap other range fans.	RA: The 2006 RA conducted at the FTR cleared approximately 20 acres to depth of detection using analog techniques. The RA activities identified and disposed of two MEC items and 530 lbs of MD. Based on results of the RA, the nature and extent of MEC at the FTR has been adequately characterized.	Recreational Residential-Single Family Undeveloped	Recreational Residential-Single Family Undeveloped
Hand Grenade Range	25	The HGR is believed to have been used during World War II for live hand grenade training. Therefore, the standard range fan for a live hand grenade range as given in AR 750-10, January 1944, was used. The range fan does not extend beyond site boundaries or overlap with other range fans. There have been no reported incidents of OE on the range.	2001 EE/CA: Approximately 8.5 acres were geophysically mapped and intrusively investigated. No MEC or MD was identified at the HGR during the EE/CA. Based on EE/CA results, the nature and extent of MEC has been adequately characterized. Potential: Mk II, Hand Grenade	Recreational Residential-Single Family Undeveloped	Recreational Residential-Single Family Undeveloped

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The RI approach for determining MEC and MC contamination, and evaluating risk consisted of geophysical and intrusive investigation activities planned for the ARNG MRS, RC1 MRS, and RC2 MRS during the RI fieldwork. However, the actual investigation coverage was limited to properties where ROE was granted. Of the approximately 1,100 separate parcels identified within former Camp Butner, work was planned at approximately 800 parcels. Of these parcels, 750 are owned by invividuals, and about 50 are owned by corporations or governmental entitites. ROE was solicited for all parcels where work was originally planned, and approximately 250 landowners granted permission for work to be performed on 381 parcels. The acreages where ROE was granted constituted approximately 70 percent of the acres of proposed investigation for RC1 MRS and RC2 MRS. For the ARNG MRS, 100 percent ROE was granted and all proposed work was completed. The areas shown on Figure 3.1c were the areas where ROE was refused. In addition to ROE refused by the landowner, in some instances, landowners who had initially executed ROE verbally withdrew their permission for HGL field teams to access the land, during the RI field activities. After receiving a verbal communication from the landowner indicating the revocation of their ROE, HGL ceased attempts to access those parcels. Sufficient information was gathered from areas where ROE was granted during the RI performance, or from historical data, to characterize areas where ROE was refused.

3.1.3 Geological and Environmental Features

Based on previous studies at Camp Butner, the site is located within the Piedmont Province, which lies between the Coastal Plain and the Blue Ridge Mountains. The elevation ranges from approximately 325 to 550 ft above mean sea level. The Piedmont is characterized by gently rolling, well-rounded hills and long low ridges with only a few ft of elevation difference between hills and valleys, which is consistent with the site conditions observed by the RI field teams. Site geology is characterized by numerous rock formations of different materials and ages representing ancient eroded mountain chains. The soils are of high clay content. Additional information on the climate, geology, and hydrology is included in Section 2.2.4, 2.2.5, and 2.2.6. The HGL RI field team did not encounter any sensitive environmental features/habitats during the RI field activities. Section 2.2.7.2 provides additional details on the existing environmental conditions and natural resources believed to be present at Butner. Other than the ROE issue, the RI field team did not encounter any geological or environmental issues that impacted the proposed RI field activities. The RI data collection effort was successfully executed and met the planned project DQOs.

3.2 PRELIMINARY REMEDIATION GOALS

Preliminary remediation goals (PRGs) are concentrations of contaminants or standards for investigation, for each exposure pathway that are believed to be protective based on preliminary site information. As with the CSM, PRGs may be reevaluated and refined throughout the RI process as new information becomes available. The DQOs developed for the project are presented in Section 3.5, including the decision rules applicable for the potentially complete exposure pathways. The ARARs are presented in Section 3.3. The RI data will be used by the PDT to select appropropriate remedial alternatives for the five MRSs to be evaluated in the FS. Some of the alternatives may include surface removal, subsurface removal

to a specified depth, removal to depth of detection, and/or the implementation of land use controls (LUCs).

As agreed to by the PDT during the TPP process (Appendix E), the goal of this RI/FS is: "to manage the MEC and MC risk through a combination of characterization, administrative controls, remediation, and public education; thereby rendering the site as safe as reasonably possible to humans and the environment and conducive to the anticipated future land use." This site closeout statement developed during the TPP process is not confined specifically to this RI project. This site closeout statement should be viewed as the overall goal for the site in the future and following the RI project. The PRG for MEC is based on limiting interaction between any residual MEC and the likely receptors with site access. Thus, the MEC PRG is to to remove any MEC present to a depth of 4 feet, or to implement LUCs that will minimize the possibility of receptors coming into contact with MEC.

The PRG is to ensure that any identified MC contamination at the site determined to pose an unacceptable risk to human health or the environment is addressed to minimize or mitigate those risks. The PRG for MC is based on the screening values established in the work plan as protective to the receptors in the identified exposure pathways. Thus, the PRG for MC is the removal of soil with detections of MC above the November 2013 USEPA residential soil RSLs that may have contact with the identified receptors.

3.3 PRELIMINARY IDENTIFICATION OF ARARS AND TBC INFORMATION

Preliminary identification of potential chemical-specific and location-specific ARARs is conducted during the RI site characterization. Under federal and state laws, and as required by USACE Engineer Regulation (ER) 200-3-1, response actions must identify and attain or formally waive ARARs. ARARs are used as a starting point to determine the protectiveness of a site remedy. ARARs will guide the extent of site cleanup; help scope, formulate, and select appropriate remedial alternatives; and implementation and operation of the selected remedial alternative. As part of the future FS, primary consideration will be given to remedial alternatives that attain or exceed the requirements of the identified ARARs (Table 3.2). When ARARs do not exist for a particular chemical or remedial activity, other criteria, advisories, and guidance referred to as TBC are useful in designing and selecting a remedial alternative. The TBC information identified for this site is presented in Table 3.3.

Table 3.2
Potential Applicable, Relevant and Appropriate Requirements

ARAR	Description
Resource Conservation and Recovery Act (RCRA) (~~40 CFR 264~~ Subpart X 40 CFR 264.601).	Environmental performance standards for treatment of munitions using consolidated shots at a designated open burning or open detonation location. Waste material (such as deposition of explosives and metals in soil) resulting from disposal activities will be characterized by soil sampling in accordance with requirements.

Table 3.3
To-Be-Considered Information

TBC Information	Description
USEPA Regional Screening Values, updated as required.	Established preliminary screening values that are used to determine whether contamination is present. Values for human health screening levels and Ecological Screening Levels (ESLs) are presented in the Final Work Plan Uniform Federal Policy-Quality Assurance Project Plan (UFP-QAPP) Worksheets 15.1 through 15.8, and updated as necessary. These include: EPA Region 3 RSLs EPA Region 5 ESLs EPA Region 6 RSLs and ESLs EPA Region 9 RSLs EPA Eco-SSLs Los Alamos National Laboratory ECORISK Database Release 3.0 (2011); and Savannah River National Laboratory ESLs.

3.3.1 Chemical-Specific ARARs

Chemical-specific ARARs are promulgated health-based or risk-based numerical values that establish the acceptable amount or concentration of a chemical that may remain in, or be discharged to, the ambient environment. The risk-based screening levels (e.g., USEPA regional screening levels [RSLs]) are not considered chemical-specific ARARs because they are not promulgated. Additionally, the chemical-specific ARARs that may be applicable were evaluated based on the revised conceptual site model exposure pathways that are complete. Therefore, no potential chemical-specific ARARs have been identified for Butner for the exposure pathways that are complete, based on the RI-revised CSM.

3.3.2 Location-Specific ARARs

Location-specific ARARs generally are restrictions placed on the concentration of a hazardous substance or the conduct of activities solely because they are in special locations. There are no location-specific ARARs at Butner.

3.3.3 Action-Specific ARARs

Action-specific ARARs are usually technology or activity-based requirements or limitations placed on actions taken with respect to remedial actions, or requirements to conduct certain actions to address the conditions present at a site. The potential action-specific ARAR identified at Butner is ~~40 CFR 264~~ Subpart X 40 CFR 264.601.

3.4 SUMMARY OF INSTITUTIONAL ANALYSIS

Institutional analyses are prepared to support the development of institutional control strategies and plans of action as a munitions response alternative. These strategies rely on existing powers and authorities of government agencies to protect the public at large from potential MEC hazards and MC risks.

A review of government institutions and private entities that exercise jurisdiction and ownership of the project site indicated that ownership and control of land within the boundary of Butner is varied. Research during the ROE solicitation process indicates that of the approximately 1,100 separate parcels identified within Butner, there are approximately 750 unique landowners, with some landowners owning multiple parcels. About 90 percent of the landowners are private citizens and 10 percent are government, corporate or municipal entities. The institutional analysis identified the entities with jurisdiction over the project site with regard to institutional controls. The Institutional Analysis is provided as Appendix C of this RI report.

3.5 DATA NEEDS AND DATA QUALITY OBJECTIVES

3.5.1 Data Needs

Previous investigations at Butner (Section 2.4) were reviewed and evaluated during development of the Work Plan. DQOs were developed and included in the Final Work Plan (HGL, 2012b). The DQOs developed in the work plan are shown in Table 3.4. The methods used for the RI data collection included:

- Compiling existing information and data associated with previous investigations, RAs, and reports;
- Performing geophysical investigations to delineate the potential extent of MEC contamination to include;
    - Site preparation,
    - Geophysical system verification (GSV) using an IVS and blind seeding,
    - Instrument-assisted reconnaissance surveys along parallel transects,
    - Intrusively investigate a suspect 37mm projectile anomaly detected during the Environmental Security Technology Certification Program (ESTCP) Pilot Study,
    - DGM surveys along parallel transects,
    - DGM grid surveys in areas of high, medium, and low anomaly count densities,
    - Anomaly identification, investigation, and characterization within the grids to evaluate the types and depths of MEC present,
- Completing MRS-specific sampling and analysis to characterize MC concentrations present in site-specific media (surface and subsurface soil, sediment, and groundwater, as site-specific conditions dictate).

3.5.2 Data Quality Objectives

The DQOs are qualitative and quantitative statements that specify the data needs including type, amount, and quality required to support the decision-making processes for a project. The DQOs developed during the TPP process are provided in Table 3.4 and the associated Decision Rules are provided in Table 3.5. The overall project DQOs were developed to obtain

data to sufficiently characterize the nature and extent of any MEC and/or MC contamination present at the project site, and to evaluate any potential MEC hazards related to any identified contamination. The data obtained must also be sufficient to assess human health and ecological risks to facilitate development of a future FS, if required. The status of DQOs following the investigation is discussed in Subsection 5.3.

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Table 3.4
Site-Specific DQO Summary for MRSs ARNG, RC1 and RC2, Camp Butner, North Carolina

Criteria from USEPA [1]	Problem Statement / Problem Goals	Required Information Inputs			Input Boundaries	Analytical Approach	Performance Criteria	Plan for Obtaining Data	
Criteria from USACE	**Project Objectives Satisfied**	**Data User Perspectives**	**Contaminant or Characteristic of Interest**	**Media of Interest**	**Required Locations or Areas**	**Number of Samples Required**	**Reference Concentration of Interest or Other Performance Criteria**	**Sampling Method**	**Analytical Method**
UXO Characterization	Evaluate the nature and extent of UXO contamination and determine if further response actions are required to support current and future residential, commercial, agricultural, ARNG training, and recreational land use.[2]	Risk, Remedy	UXO, MD distribution/density	Surface and Subsurface soil	**ARNG** (4,824 acres) Anticipated munitions types: small arms, 2.36-inch rockets; rifle grenades; 37mm, 57mm, 105mm, and 155mm projectiles; also 60mm and 81mm mortars based on information from the National Guard and the ASR. **RC1** (12,363 acres) and **RC2** (11,529 acres) (Focus on areas not previously characterized in both range complexes.) Anticipated munitions types include 37mm, 40mm, 57mm, 105mm, 155mm, and 240mm projectiles; 60mm and 81mm mortars; 2.36-inch rockets, and hand grenades and rifle grenades.	Surface clearance, DGM surveys (transects and grids), surface reconnaissance, and intrusive investigations. See RI Approach detailed in the Work Plan.	All investigations shall be conducted in accordance with the performance and data quality metrics outline in the QC Plan (QCP) (Chapter 4). The investigation set out in the work plan will meet the performance standards of the PWS: • All areas with elevated anomaly density or with potential to contain UXO are traversed and that there is a 90 percent chance of detecting these areas; • The boundaries of all identified UXO contaminated areas have been delineated to an accuracy of at least 250 ft; • 90 percent confidence has been achieved for determining the potential depth of UXO; • 90 percent confidence in the nature (type and density) of UXO and munitions related debris, for each relatively homogeneous UXO contaminated area, has been achieved; • Portions of an MRS that are unlikely to contain UXO contamination may be omitted from the above statistical requirements; and • Demonstrate areas unlikely to contain a target with elevated anomaly density, but with the potential for UXO contamination (e.g., burial pits) and are capable of being located by the investigation approach.	Following surface clearance and DGM surveys, areas will be delineated into "elevated anomaly density" areas and areas unlikely to contain UXO contamination. The intrusive investigations will be placed accordingly based on the performance criteria and decision rule applied (see paragraph 3.5). Evaluations of the presence of MD, frag, and known high density anomaly areas will be used to indicate the likelihood of UXO contamination.	Not applicable.

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Table 3.4 (continued)
Site-Specific Data Quality Objective Summary for Munitions Response Sites ARNG, Range Complex 1 and Range Complex 2 Camp Butner, North Carolina

Criteria from USEPA [1]	Problem Statement / Problem Goals	Required Information Inputs			Input Boundaries	Analytical Approach	Performance Criteria	Plan for Obtaining Data	
Criteria from USACE	**Project Objectives Satisfied**	**Data User Perspectives**	**Contaminant or Characteristic of Interest**	**Media of Interest**	**Required Locations or Areas**	**Number of Samples Required**	**Reference Concentration of Interest or Other Performance Criteria**	**Sampling Method**	**Analytical Method**
MC Characterization	Evaluate and determine nature and extent of MC contamination [3]	Risk, Remedy	MC: Explosives, metals (copper, lead, antimony, and zinc) analysis for soil and sediment and Total lead and perchlorate analysis for groundwater.	Soil, sediment, and groundwater	MRSs: ARNG (4,824 acres) RC1 (12,363 acres) RC2 (11,529 acres) ISM soil samples will be conducted at locations selected based on historical information, DGM data, and intrusive investigative results.	Ten ISM surface soil samples will be collected in each MRS. See RI Approach detailed in the Work Plan.	If MC is detected, results will be compared against site-specific background levels and screening levels to determine if MC contamination is present. The screening levels as developed during the TPP process are set out in the work plan UFP-QAPP worksheets. Site-specific background samples will be used to assess metals concentrations. Based on evaluation of the ISM sample results, shallow subsurface soil samples may be collected. Dependent upon the results of the ISM samples, up to 10 sediment samples will be collected at each MRS. Dependent upon the results of the ISM samples, ten groundwater samples will be collected at off site locations for establishing background.	Includes collection of ISM soil samples, discrete shallow subsurface soil samples, and groundwater samples. Samples to be collected and analyzed in accordance with the work plan and to meet all quality requirements of the QCP, Chapter 4.	ISM samples will be analyzed for explosives (8330B) and select metals (6010B). Analysis of discrete samples will include explosives (8330A), select metals (6010B) and perchlorate (6850).

(1) This table provides a summary of the DQO development conducted during the TPP process (see Appendix E) and presents an overview of the DQO statements developed. This table provides a cross walk for each DQO element to the development steps from both the USEPA's *Guidance on Systematic Planning Using the Data Quality Objectives Process* USEPA, EPA QA/G-4, EPA/240/B-06/001, February 2006, and USACE's *Technical Project Planning Process*, EM 200-1-2, 31 August 1998. The data collected under the DQOs summarized in here will be continuously evaluated during field investigations against the appropriate decision rules shown in Table 3.5.

(2) For the RI/FS the preliminary remediation objective for UXO is based on limiting interaction between any residual UXO and any receptors accessing the site and is anticipated to be either removal of any UXO present to a depth at which they no longer present a hazard to the anticipated human receptors, or to implement land use controls that will minimize the possibility of receptors coming into contact with UXO at the site. The term UXO is utilized within Tables 3.4 and 3.5 since site histories indicate that DMM is not likely to be present.

(3) For the RI/FS the preliminary remediation objective for MC is based on the screening levels agreed to by the TPP Team as being protective of the identified exposure pathways shown in the CSM. The preliminary remediation objective is to ensure that any identified MC contamination at the site determined to pose an unacceptable risk to human health or the environment is addressed to minimize or mitigate those risks.

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Table 3.5
Decision Rules for MRSs ARNG, RC1 and RC2, Camp Butner, North Carolina

	Characterization (UXO/MC) and Preliminary Status	Investigation	Decision Rule	Intermediate Status	Decision Rule	Intermediate Status	Decision Rule	Final Status and Recommendation
1	UXO Characterization where UXO **contamination** is anticipated	Conduct surface clearance, mapping, DGM surveying and intrusive (visual inspection of surface and aboveground locations for UXO or MD).	If UXO and MD are located: Modify MRS boundaries to improve boundary accuracy. Expand investigations (if needed).	**UXO contamination** is anticipated	Following completion of geophysical surveys, the area will be identified as: 1) An area having **elevated anomaly density** or the potential to contain UXO or; 2) Areas **unlikely to contain UXO contamination**.	1) **Elevated Anomaly Density:** Demonstrate that a 90 percent confidence has been achieved for determining both the potential depth of UXO and the nature (type and density) of UXO	**UXO Contaminated:** Following intrusive investigation, if UXO or a significant amount of MD are found, the area will be characterized as UXO **contaminated**.	**UXO Contaminated –** Recommended for evaluation in FS
						2) **Unlikely to Contain UXO Contamination**: Demonstrate that the investigation approach was capable of locating potential UXO contamination	**Unlikely to Contain UXO Contamination:** If no MEC or MD are found, the area will be characterized as. **No Significant UXO Present**	**No significant UXO present –** No FS evaluation required, potential for NFA
2	UXO characterization where **No UXO contamination anticipated**(1)	Conduct surface reconnaissance using a Schonstedt magnetometer in non-MEC use areas.	If UXO and MD are located: Modify MRS boundaries to improve boundary accuracy. Expand investigations (if needed).	**UXO contamination**	If UXO contamination is anticipated, the decision rules in Row 1 will apply			
				Unlikely to contain UXO contamination	If no UXO or MD are found, the area will be characterized as. **No significant UXO present**	**No significant UXO present –** Recommended for ~~NDA~~ No Further Action		
3	MC Characterization	Sampling as outlined in the work plan.	MC is not detected or concentrations are less than screening levels and/or background (as defined in the work plan UFP-QAPP)	**No MC Contamination** Recommended for NFA				
			MC are detected at concentrations exceeding the screening levels and/or background	**MC contamination is present**	If MC contamination is present, additional evaluation of the nature and extent (soil sampling and/or a risk assessment) will be conducted	**MC contamination** Recommended for FS		

(1) Areas where no UXO contamination is anticipated from historical data or observed site conditions are omitted from the statistical requirements of the PWS Section 3.4.6 performance standards. The term UXO is utilized within Tables 3.4 and 3.5 since site histories indicate that DMM is not likely to be present.

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FIGURES

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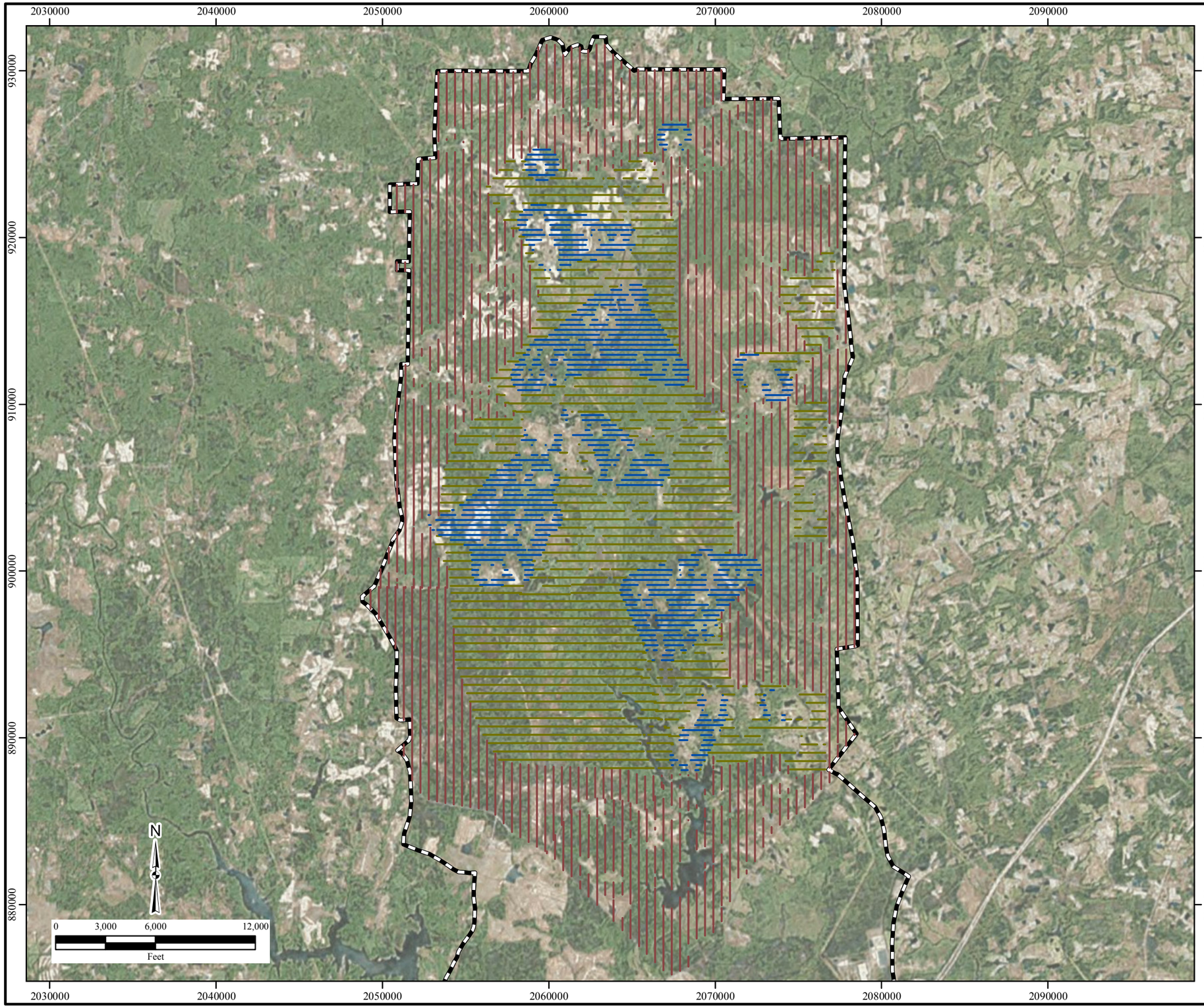
Figure 3.1a
Proposed Transect Paths
Work Plan



Legend

- 300 ft DGM Transect
- 500 ft DGM Transect
- 500 ft Recon Transect
- Former Camp Butner

Notes:
DGM=digital geophysical investigation
RI=remedial investigation

Transects are spaced at 300ft in areas where 37mm projectiles have been found. Transects are spaced at 500ft in all other areas. Non-intrusive DGM transects will be used to determine the extent of areas with elevated anomaly concentrations. After initial transect investigation, grids will be placed to define nature of anomalies. DGM Grids will placed at 20% of DGM Transect acreage and intrusively investigated. DGM Grids will also be placed in areas where TEC Historical Analysis is not covered by DGM Transects at rate of 3% of the TEC acreage. Reconnaissance Transects will be non-intrusive, instrument assisted transects to verify the absence of MEC use. Areas presently characterized will not be investigated.

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1/7/2015 CNL
Source: HGL, USACE
ESRI Online Aerial Imagery

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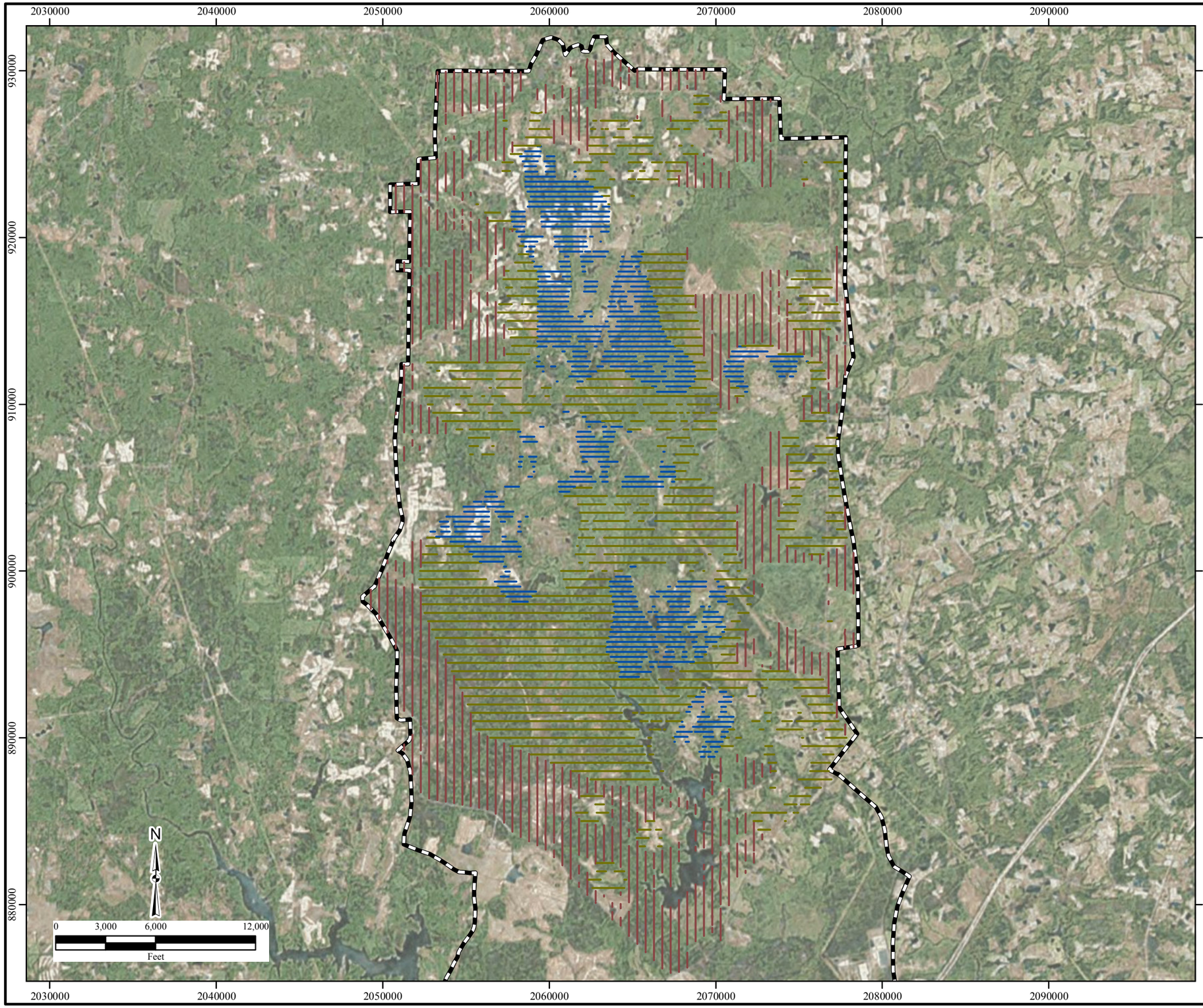
Figure 3.1b
Proposed Transect Paths
ROE Granted



Legend

- 300 ft DGM Transect
- 500 ft DGM Transect
- 500 ft Recon Transect
- Former Camp Butner

Notes:
DGM=digital geophysical investigation
RI=remedial investigation

Transects are spaced at 300ft in areas where 37mm projectiles have been found. Transects are spaced at 500ft in all other areas. Non-intrusive DGM transects will be used to determine the extent of areas with elevated anomaly concentrations. After initial transect investigation, grids will be placed to define nature of anomalies. DGM Grids will placed at 20% of DGM Transect acreage and intrusively investigated. DGM Grids will also be placed in areas where TEC Historical Analysis is not covered by DGM Transects at rate of 3% of the TEC acreage. Reconnaissance Transects will be non-intrusive, instrument assisted transects to verify the absence of MEC use. Areas presently characterized will not be investigated.

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Source: HGL, USACE
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HGL HydroGeoLogic, Inc MUNITIONS RESPONSE TEAM

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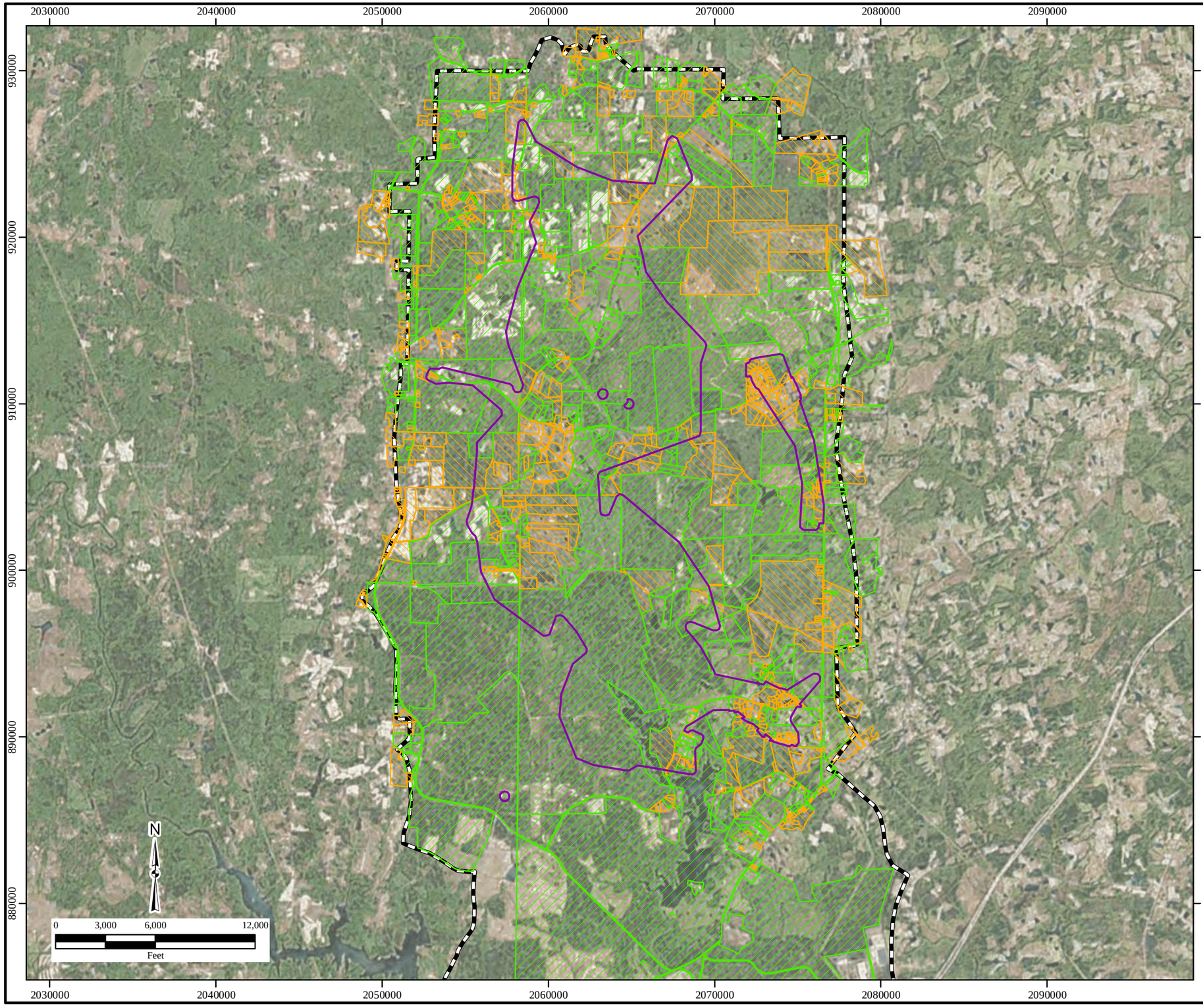
Figure 3.1c
ROE Status by Parcel



Legend

- ROE Granted
- ROE Refused
- Former Camp Butner
- MEC Contamination

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Source: HGL, USACE
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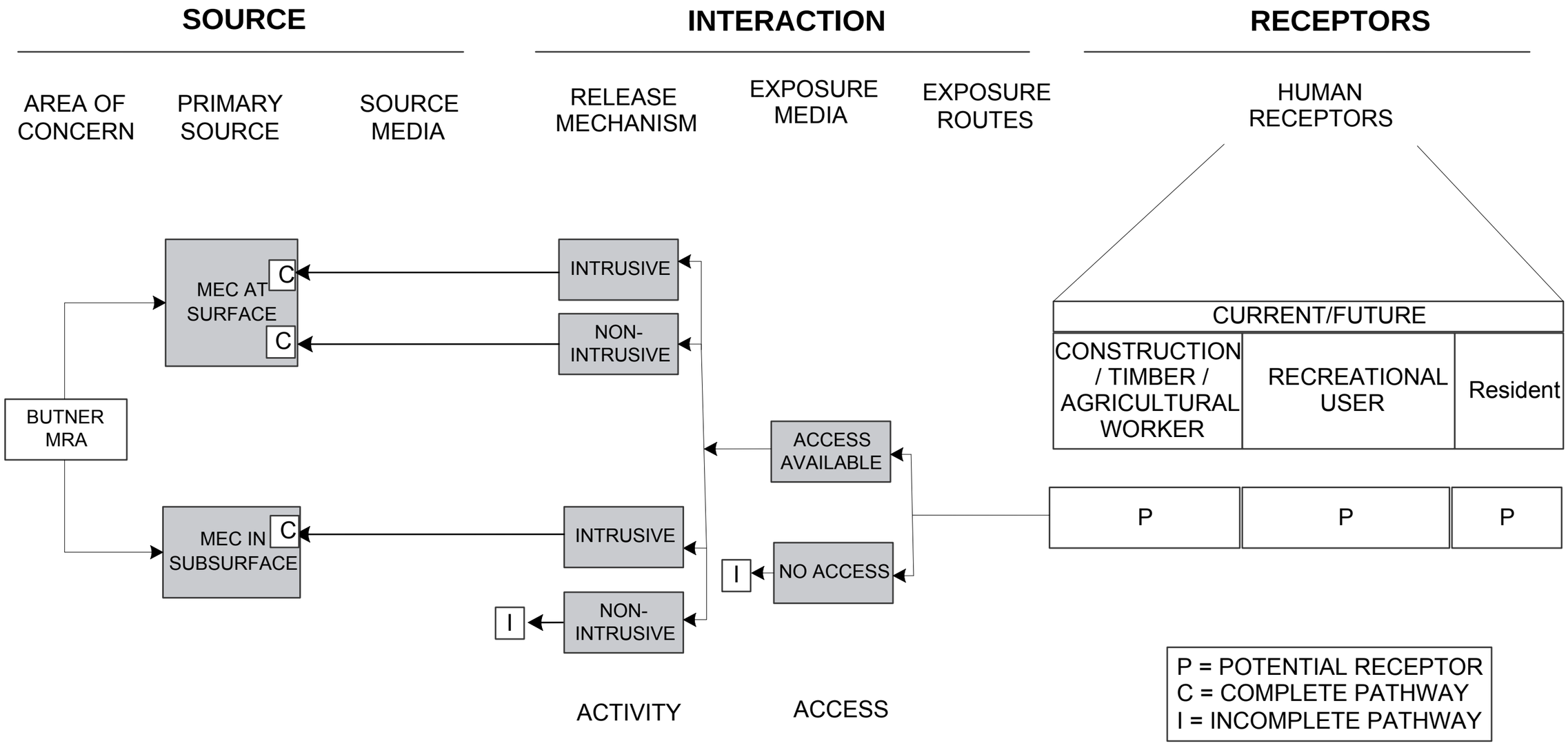

Figure 3.2 Preliminary MEC CSM

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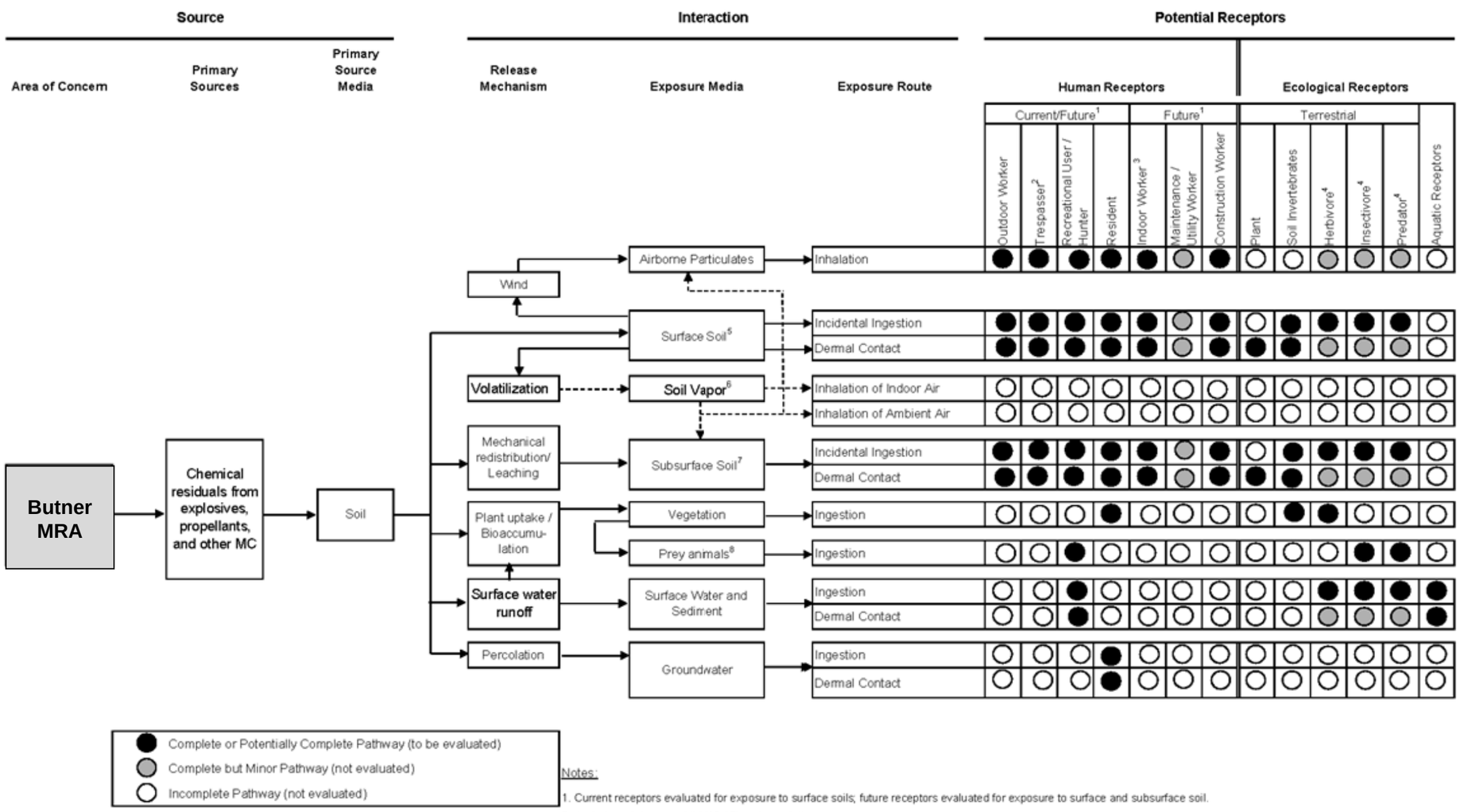

Notes:

1. Current receptors evaluated for exposure to surface soils; future receptors evaluated for exposure to surface and subsurface soil.
2. Includes adolescent child (10-17) and an adult
3. Indoor worker conservatively evaluated for ingestion, dermal contact and inhalation with soils
4. Will include a mammal and a bird as representative species of the trophic level.
5. Surface soil is represented by soil samples collected from 0 - <1 feet below ground surface (ft bgs)
6. Pathway is incomplete; no volatile compounds were identified in soil
7. Subsurface soil will be represented by soil samples collected below 1 ft bgs (to a maximum of 2 ft bgs for ecological receptors). Under future use scenarios for human receptors, it is assumed development activities will result in mixing surface and subsurface soil up to a maximum depth of 10 ft bgs.
8. Prey animals will include invertebrates for the insectivores and herbivorous mammals for the predators.

Note: The CSM will be updated with the results of the RI investigation. If constituents of interest for a historical munitions site are nondetect in all samples collected from a medium (e.g., groundwater), then there will be no potentially complete exposure pathways for that medium.

Figure 3.3 Preliminary MC CSM

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4.0 CHARACTERIZATION OF MEC AND MC

4.1 INTRODUCTION

HGL performed RI field activities at ARNG, RC1, and RC2 MRSs from October 2012 through May 2013. The RI field activities were conducted in accordance with the approved Work Plan (HGL, 2012b), including the established DQOs. To meet the established project DQOs, the HGL RI field team completed the RI activities summarized below. Sufficient information was gathered from areas where ROE was granted during the RI performance, or from historical data, to characterize areas where ROE was refused. A detailed description of the methods used for completion of the field activities is included in the approved Work Plan (HGL, 2012b).

Site Planning and Preparation:

- HGL identified the properties where ROE was granted based on ROEs received from USACE, cleared undergrowth in the areas of transects and grids to be surveyed, and conducted all fieldwork with properly trained UXO personnel.
- Conducted surface clearance including site preparation and visual inspection of transect surface locations for MEC or MD.
- Brush cleared 190 miles of transects
- Defined grid boundaries and conducted brush clearance and setup of 292 grids.

Geophysical Verification:

- Conducted DGM transect survey of 181 miles of transects (not including re-collected miles) in interpreted impact areas. The DGM transects were spaced 300 ft apart and located in the potential MEC use areas (interpreted impact areas).
- HGL and its subcontractor conducted DGM grid investigation of a total of 251 grids as follows: 25 (10-ft by 150-ft grids); 16 (10-ft x 250-ft grids); 22 (25-ft x 25-ft grids); and 188 (50-ft x 50-ft grids).
- Conducted analog grid investigation of a total of 41 grids as follows: 4 (25-ft x 25-ft grids); 3 (10-ft x 150-ft grids); five (10-ft x 250-ft grids); and 29 (50-ft x 50-ft grids). Analog methods were used for intrusive grid investigation if conditions at the grid precluded brush cutting (pine timber planting, etc.) or if the landowner refused to allow brush cutting.
- Processed geophysical data collected using Geosoft Oasis Montaj and UX-Detect modules, and generated anomaly density maps and prioritized target lists.
- Conducted surface reconnaissance of 118 miles of 3-ft-wide transects using a Schonstedt magnetometer to evaluate non-interpreted impact areas (potential non-MEC use areas). The reconnaissance transects were spaced 500 ft apart and located outside the interpreted impact areas, where DGM transect surveys were conducted.

Anomaly Reacquisition and Investigation:

- Selected and intrusively investigated 3,453 anomalies within the grids. A portion of the grids were not fully investigated due to refusal of site access by the landowner that executed the ROEs.
- Utilized a MEC team under the direct supervision of the SUXOS to evaluate identified anomalies. (All UXO personnel used on this project met the minimum qualifications outlined in the Department of Defense Explosives Safety Board [DDESB] Technical Paper [TP]-18.)

MC Sampling:

- Collected 31 ISM soil samples; 100-ft by 100-ft ISM decision units (DU), 36 increments each, based on results of the geophysical survey.
- Collected 10 ISM background soil samples; 100-ft by 100-ft ISM DUs, 36 increments each. Background samples were located in all compass directions, outside the munitions response area (MRA) boundary. Each increment was randomly selected in an initial grid cell and the remaining collected increments from the same relative location within each of the other grid cells.
- Analyzed ISM soil samples for explosives (Method 8330B), and select metals (method 6010B [copper, lead, antimony, and zinc]).
- The MC characterization methods are presented in Section 4.3, MC characterization results are presented in Section 5.2, and the BLRA is presented in Section 7.2. Based on the conclusion that no MC is present on site at levels that present a risk to human health or the environment, there is no MC contamination identified in surface soils. Therefore, no sampling of additional media such as sediment, surface water, subsurface soils, or groundwater was necessary.

Table 4.1 provides a summary of completed field activities broken down by MRS and additional detail for each MRS is included in the sections below. Figure 4.1 shows the transect paths and DGM grid locations, Figure 4.2 shows the ARNG HGR transects, Figure 4.3 shows trench features identified near the ARNG HGR, Figure 4.4a shows the grid intrusive results, and Figure 4.4b shows the DGM Anomaly Density layer developed. Additionally, Figures 4.4c, 4.4d, and 4.4e show the historical investigation results incorporated into the GIS by HGL for use in the RI evaluation, and the parcels where removal actions were conducted. Figure 4.4f shows the anomaly counts associated with the reconnaissance survey transects. Figure 4.5 shows the sample locations for environmental sampling and background sampling conducted at Butner.

Table 4.1
Summary of Field Activities Completed per MRS

Item Description	Unit	ARNG	ARNG HGR	RC1	RC2
Site Acreage	Acre	12636		11529	4824
Reconaissance Transects	Miles	29.2		40	48.7
Analog Transects	Miles	0.5		--	0.7
DGM Transects	Miles	49.3		68	69.4
Analog Grids Investigated	Grids	--		28	13
DGM Grids Investigated	Grids	89		62	91
Grids QA'd/QC'd	Grids	61		29	28
Grids where DGM was conducted but not intrusively investigated because access was refused by landowner	Grids	--		--	10
ISM soil sampling	Samples	11		10	10
Background ISM soil sampling	Samples		10		

4.1.1 ARNG MRS RI Field Activities

The DGM transects were used to develop anomaly densities for the interpreted impact area, within ARNG MRS. Full coverage grid surveys were completed in areas of high, medium, and low anomaly densities over 4.6 acres of the site. Eleven 25-ft x 25-ft grids were distributed throughout the high anomaly density areas to allow for more acreage coverage in the medium and low density areas, in agreement with the PDT. Twenty-eight 50-ft x 50-ft grids were placed within the medium density areas and 22 grids were placed in the low density areas. Seventeen of either 10-ft x 150-ft grids or 10-ft x 250-ft grids were located on the medium-high and low-medium density boundaries, respectively, oriented perpendicular to the anomaly density gradient.

Within the interpreted impact area, 78 grid locations summarized above were proposed, and the rationale was documented in a memorandum to the PDT. The memo summarized the analysis of anomaly density from the transect anomaly data using Pacific Northwest National Laboratory's Visual Sampling Plan (VSP) software. High density zones were set at a minimum of 900 anomalies per acre and the background estimated anomaly density is 225 anomalies per acre. These 78 grid locations were modified slightly based on vegetation or terrain within limits set forth in the grid location memo. Based on the results of the reconnaissance survey transects completed outside the interpreted impact area and historical MEC use areas, an additional 11 grids were placed outside the interpreted impact area. Of the eleven grids, eight were placed where relatively higher anomaly counts occurred, based on the reconnaissance survey transects. Of these eight grids, seven are characterized by relatively higher anomaly counts that occur over multiple adjacent 100 foot transect segments. The remaining three grids were distributed to gain geographic coverage within the project area and to evaluate areas with relatively lower anomaly counts for background verification. Six of the higher anomaly count area grids were placed in areas that correlate with potential munitions features identified from the aerial photo analysis and two of the higher anomaly count area grids were placed coincident with potential impact craters noted by the field team. Within the interpreted impact area, 78 grid locations summarized above were proposed, and the rationale was documented in a memorandum to the PDT. The memo summarized the analysis of anomaly density from the transect anomaly data using Pacific Northwest National Laboratory's VSP software. High

density zones were set at a minimum of 900 anomalies per acre and the background estimated anomaly density is 225 anomalies per acre. These 78 grid locations were modified slightly based on vegetation or terrain within limits set forth in the grid location memo. Based on the results of the reconnaissance survey transects completed outside the interpreted impact area and historical MEC use areas, an additional 11 grids were placed outside the interpreted impact area. Of the eleven grids, eight were placed where relatively higher anomaly counts occurred, based on the reconnaissance survey transects. The remaining three grids were distributed to gain geographic coverage within the project area and to evaluate areas with relatively lower anomaly counts for background verification. Six of the higher anomaly count area grids were placed in areas that correlate with potential munitions features identified from the aerial photo analysis and two of the higher anomaly count area grids were placed coincident with potential impact craters noted by the field team. The Grid Location Memos submitted to the PDT for the ARNG MRS are included in Appendix F. Figure 4.4f shows the anomaly counts associated with the reconnaissance survey transects.

4.1.2 Range Complex 1 MRS RI Field Activities

The DGM transects were used to develop anomaly densities for the interpreted impact area within the RC1 MRS, as documented in the grid location memo developed by HGL geophysicists (Appendix F). The full coverage grid surveys were then completed in areas of high, medium, and low anomaly densities over 3.4 acres of the site, with an additional 1.4 acres of grid coverage completed by analog methods. Where possible, grid locations were selected to gather additional data near data gaps caused by inaccessible property. Nine 25-ft x 25-ft grids were distributed throughout the high anomaly density areas to allow for more acreage coverage in the medium and low density areas, in agreement with the PDT. Of these nine grids, four could not be completed due to refusal to participate in the intrusive investigation by the landowner. Thirty-four 50-ft x 50-ft grids were placed across the medium density areas. Of these 34 medium density grids, 8 could not be completed due to refusal to continue participation by the landowner. Thirty-eight grids were placed within the low density areas; of which two could not be completed due to restricted access to the parcel. Sixteen of either 10-ft x 150-ft grids or 10-ft x 250-ft grids were located on the medium-high and low-medium density boundaries, respectively, oriented perpendicular to the anomaly density gradient and one was unable to be completed due to landowner refusal. When the landowner restricted site access and did not allow HGL to complete DGM of the grid locations; HGL negotiated access to the parcel for a shorter duration, to complete the grid intrusive investigation by analog methods. Therefore, a portion of the grids were investigated using analog methods instead of DGM; this minimized repetitive trips to the grid locations and reduced landowner's concerns. Other grids were investigated using analog methods because the areas were planted with timber for pine harvest, and the landowner refused to allow the pines to be cut.

Within the interpreted impact area, 97 grid locations summarized above were proposed, and the rationale was documented in a memorandum to the PDT. The memo summarized the analysis of anomaly density from the transect anomaly data using VSP. High density zones were set at a minimum of 900 anomalies per acre and the background estimated anomaly density is 225 anomalies per acre. These grid locations were modified slightly based on

vegetation or terrain within limits set forth in the grid location memo. Based on the results of the reconnaissance survey transects completed outside the interpreted impact area and historical MEC use areas, an additional seven grids were placed outside the interpreted impact area. Of the seven grids, five were placed where relatively higher anomaly counts occurred, based on the reconnaissance survey transects. The remaining two grids were placed in areas that correlate with potential munitions features identified from the aerial photo analysis (TEC, 2001). The Grid Location Memos submitted to the PDT for the RC1 MRS are included in Appendix F. Figure 4.4f shows the anomaly counts associated with the reconnaissance survey transects.

4.1.3 Range Complex 2 RI Field Activities

The DGM transects were used to develop anomaly densities for the interpreted impact area within the RC2 MRS, as documented in the grid location memo developed by HGL geophysicists. The full coverage grid surveys were then completed in areas of high, medium, and low anomaly densities over 5.3 acres of the site, with an additional 0.7 acres of grid coverage completed using analog methods. Where possible, grid locations were selected to gather additional data near data gaps caused by inaccessible property. Seventeen 25-ft x 25-ft grids were distributed throughout the high anomaly density areas to allow for more acreage coverage in the medium and low density areas, in agreement with the PDT. Of these 17 grids, 4 could not be intrusively investigated due to refusal to participate by the landowner; though DGM data was collected. Thirty-seven 50-ft x 50-ft grids were placed across the medium density areas. Of these 37 medium density grids, 4 could not be intrusively investigated; however, DGM data was collected. Thirty-two grids were placed within the low density areas; of which two could not be intrusively investigated due to the landowner revoking ROE; however, DGM data was gathered. Nineteen of either 10-ft x 150-ft grids or 10-ft x 250-ft grids were located on the medium-high and low-medium density boundaries, oriented perpendicular to the anomaly density gradient. Two of the grids were not completed due to landowner refusal of ROE, and 13 were not completed because the areas were either planted with timber for pine harvest or the landowner refused to allow vegetation to be cut.

Within the interpreted impact area, 105 grid locations summarized above were proposed, and the rationale was documented in a memorandum to the PDT. The memo summarized the analysis of anomaly density from the transect anomaly data using VSP. High density zones were set at a minimum of 900 anomalies per acre and the background estimated anomaly density is 225 anomalies per acre. These grid locations were modified slightly based on vegetation or terrain within limits set forth in the grid location memo. Based on the results of the reconnaissance survey transects completed outside the interpreted impact area and historical MEC use areas, an additional seven grids were placed outside the interpreted impact area. Of the seven grids, three were placed where relatively higher anomaly counts occurred, based on the reconnaissance survey transects. The remaining four grids were placed in areas that correlate with potential munitions features identified from the aerial photo analysis (TEC, 2001). The Grid Location Memos submitted to the PDT for the RC2 MRS are included in Appendix F. Figure 4.4f shows the anomaly counts associated with the reconnaissance survey transects.

4.2 MEC CHARACTERIZATION

The MEC (including UXO/DMM) characterization tasks described in Section 4.1 and performed during this RI included the field activities as summarized above. The characterization methods performed at the project site are described in the following subsections. Key project support equipment used for this project included office trailer, storage containers, explosives storage magazine, portable toilets, team vehicles, a truck mounted fuel tank, skidsteers (vegetation removal equipment), two-way handheld radios/repeater, personal digital assistant (PDA)/global positioning system (GPS), Whites's and Schonstedts, Geonics EM61-MK2, digital cameras, first aid kits, demo kit, remote firing device, miscellaneous team gear, site safety officer kit, computers, laptop, printer, copier, scanner, fax, and various telephones/cell phones.

4.2.1 Identification of MEC Contamination

The MRSs where geophysical investigations were conducted to address potential MEC contamination are contiguous within Butner; however, these sites are not completely accessible because they include parcels held by individual landowners. The RI investigation was focused on areas where MEC contamination was anticipated based on historical investigations. The investigation focused on two approaches, inside the interpreted impact areas and outside the interpreted impact areas, in order to determine areas where MEC (UXO) contamination occurs. Results of the MEC contamination delineation are provided in Chapter 4. During investigation outside the interpreted impact areas a potential new MRS (ARNG HGR) was identified. Additional discussion of the findings is included in Section 5.1.2.1, Figure 4.2 shows the ARNG HGR transects conducted, and Figure 4.3 shows trench features identified near the ARNG HGR.

4.2.2 Site Preparation and Cultural Surveys

4.2.2.1 Archeological and Paleontological Surveys

At least one previous cultural resources survey has been conducted at Camp Butner. In December 1994, Greiner, Inc., of Raleigh, North Carolina, conducted an archaeological survey of nine historic farm sites on Camp Butner that had been previously identified by ARNG (Parsons, 2004). This survey indicated that all nine of the resources were potentially eligible for inclusion on the National Register of Historic Places (NRHP). The sites were recorded and assigned state site numbers (31DH619 through 31DH624, 31GV204, 31GV205, and 31GV206). During the survey, two additional historic sites were identified but not assigned site numbers, as they required additional survey work. It is unknown if artifacts were collected. The nine registered archaeological sites, as well as the two sites that were not assigned state site numbers, are subject to Federal laws and regulations governing their evaluation and preservation, if necessary. World War II era structures were also noted during the archaeological survey at Camp Butner; however, there is no record of an architectural survey conducted for the facility.

4.2.2.2 Obtaining Right of Entry

Private parcels make up the majority of properties within RC1 and RC2, but ARNG is currently owned and operated as a training range for the Army National Guard. ROE was solicited by USACE for each property where investigation activities were conducted to complete performance of this RI. However, not all landowners executed ROE; thus restricting investigation activities. Investigations limited due to ROE restrictions are detailed in Section 5.4. Additionally, during the field investigations, some landowners withdrew their permission given in the written ROE process by providing verbal feedback to HGL teams. Based on verbal refusal by some landowners to allow site access, ten grids on the RC2 MRS were investigated using only DGM but could not be intrusively investigated. Additionally, access was refused for DGM purposes to 15 grids on the RC1 MRS. For these areas, HGL negotiated permission to conduct analog investigations on a portion of the originally planned grids, to mitigate the landowner's concerns regarding HGL's work on the site.

4.2.2.3 Location Surveys and Grid System Development

As provided for in the final work plan, post-processed kinematic (PPK) and wide area augmentation system (WAAS)-capable handheld GPS units were used to identify grid boundaries and record the tracks of the transects, respectively. Also, to identify target areas, geophysical data was collected over transects and used to categorize anomaly densities. Based on the transect data, grids were proposed in areas of high, medium, and low anomaly densities to collect intrusive investigation data to characterize the type (nature) and vertical extent of MEC. The grids included 251 varying size grids distributed throughout the MRSs. Grids were assigned alphanumeric identifications (IDs) and all production tracking was tied to grid IDs.

4.2.2.4 Brush Cutting

The HGL team cleared brush, as needed, in the areas of transects and grids that were surveyed during RI activities. Flags and survey stakes were left in places to mark transect paths and obstacles to collection of DGM data. Areas of heavy vegetation were avoided, where possible, to maximize the survey area. Trees greater than 4-inches in diameter were not removed without approval from the project management team.

4.2.2.5 Surface Clearance

Before conducting site activities, MPPEH avoidance procedures were used to identify potential surface hazards. A visual inspection was performed by a qualified UXO team to identify potential MPPEH. If possible, surface metallic debris encountered was removed from the pending survey area; otherwise, any targets or obstacles were clearly marked with flags. The location of these target features or obstacles were mapped with a GPS and incorporated into the GIS for data evaluation. No MEC items were located during surface clearance or brush cutting. However, several MD items and numerous other items were removed (including scrap metal and other debris).

4.2.3 Geophysical Investigation

The following methods and operational procedures were employed by HGL during the Butner RI for geophysical surveying and data processing. The geophysical investigation included the collection of DGM data with an EM61-MK2 using person-portable methods over transects and full coverage grids. Specifically, this subsection provides an overview of site preparation, geophysical equipment, GSV and blind seeding procedures and results, DGM and analog geophysical methods (AGM) and techniques, and QC activities conducted during the RI. The actual transect paths and grid locations completed during the RI are shown on Figure 4.1.

4.2.3.1 Site Preparation

Prior to geophysical field activities, a surface clearance of all grids and transects were conducted to identify potential MEC, MPPEH, MD, and metallic surface debris present. Vegetation clearance of grids and transects was performed where necessary. Transects were marked with flagging tape at regular intervals to facilitate navigation for the DGM teams.

The grid setup team measured the southwest corner coordinates of each full coverage grid using a Trimble Juno handheld GPS unit and a 9-inch survey nail marker was placed in the southwest corner. On grids where the Y axis diverted from the typical North direction, the southwest corner was identified by professional judgment as "closest to" southwest. Northwest, northeast, and southeast corners followed on a clockwise direction. "Grid North" is the direction parallel to the southwest-northwest grid boundary.

The responsibilities of the grid setup team also included placing a blind seed in each grid as required prior to DGM data collection. The blind seeding protocol is discussed further in Section 4.2.3.2.

4.2.3.1.1 Geophysical Equipment

The following sections identify DGM equipment utilized at Camp Butner.

4.2.3.1.2 Digital Geophysical Mapping

The digital geophysical sensor selected for DGM was the Geonics EM61-MK2A configured as a single coil person-portable system. The EM61 is a time domain electromagnetic induction (EMI) (TDEMI) metal detector that transmits a primary electromagnetic field that induces a secondary magnetic field in the ground and objects that are conductive. The EM61 receiver coil measures the voltage component of the secondary magnetic field in millivolts (mV) at four predefined time gates after shut-off of the primary field that are designed to measure the response from only metallic objects. When the measured voltage exceeds background responses, metallic objects, including military munitions and other conductive items, are identified as potential anomalies requiring further investigation. The EM61 system is composed of a 1-meter by 0.5-meter EM61 coil. The bottom coil, positioned 40 centimeters above ground surface, is mounted on wheels and serves as both a transmitter and receiver coil.

The top coil, positioned 82 centimeters above ground surface, was used as a mounting structure for the GPS antenna.

4.2.3.1.3 DGM Navigation and Positioning

The Hemisphere Crescent WAAS-capable GPS was integrated with the EM61 to provide positioning data for the DGM system along the transects. The GPS antenna was mounted on the cart at a known offset from the EM61 coil in a position where it did not adversely affect the EM61 measurements and the data were streamed directly into the data logger used to record the EM61 measurements. Line and fiducial methods were employed for full coverage DGM grids due to the lack of real-time kinematic (RTK) GPS coverage under the tree canopies. Fiberglass tape measures and traffic cones were used for navigation of each grid.

4.2.3.2 Geophysical System Verification Procedures

The GSV process was implemented as described in the Strategic Environmental Research and Development Program/ESTCP document entitled Final Report, Geophysical System Verification (GSV): a Physics Based Alternative to Geophysical Prove Outs for Munitions Responses (2009). GSV incorporates an IVS (test bed) and a survey area QC seeding program.

The GSV process was used to ensure that data collected during the geophysical investigation was obtained using methods and procedures that would satisfy required project DQOs. Specifically, the objectives of the GSV included the following:

- Document the capabilities and limitations of the EM61-MK2 systems deployed at the site;
- Document system functionality and reliability;
- Evaluate data collection, data transfer, and data QC method(s);
- Evaluate method(s) of data analysis and evaluation;
- Establish anomaly selection criteria;
- Provide verifiable target detection and positioning over the course of the DGM survey; and
- Provide a tool for evaluating the data collection, processing, and anomaly selection procedures and intrusive investigation performance criteria.

4.2.3.2.1 Instrument Verification Strip Procedures

IVS results are documented in the IVS letter report (Appendix F).

4.2.3.2.2 Blind Seeding

As part of the GSV process HGL placed 251 blind seeds within the DGM grids (1 per grid) at random locations to verify performance of the DGM equipment and to provide verifiable target detection and positioning capabilities over the course of the DGM survey. The blind

seeds were also used as a tool for evaluating specific data collection, processing, and anomaly selection procedures and intrusive investigation performance criteria.

Blind seed items were 1-inch inside-diameter by 3-inch-long black welded steel pipe nipples placed vertically into the ground with the tops flush with the surface. The position of each blind seed item within the grid was referenced to the southwest corner using fiberglass measuring tapes. The DGM survey team, processor, and data analyst did not have prior knowledge of placement locations of the blind seeds. Transects were not seeded.

4.2.3.3 Digital Geophysical Mapping Procedures

The DGM survey phase consisted of field data collection, data processing, anomaly identification, dig sheet development, and data QC review. Field activities were conducted by AMEC Earth and Environmental, Inc. (AMEC) in accordance with HGL's standard operating procedures (SOPs) for geophysical surveying presented in the RI Work Plan (HGL, 2012b). DGM performance metrics are presented in Table 4.2.

4.2.3.3.1 DGM Field Data Collection

DGM transect surveys were employed to determine anomaly density estimates across the MRSs. Each planned transect was surveyed in one pass with the EM61 with a swath width of 3 ft. The EM61 operator followed the brush cleared transect marked with flagging tape. Areas of visible cultural debris were either averted or noted where unavoidable. In some instances, where terrain was too steep or obstacles such as creeks prevented the team from following the planned transect path, data collection was paused until the planned path was regained. Areas of observed external EM61 interference such as power lines and electric fences were noted and, in some cases, a static test was performed to ensure the response was not a result of surficial or subsurface features. During the RI investigations, the data showed that approximately 6 percent of the anomalies investigated were caused by volcanic rock present on site. Removal of data thought to be related to "noise" was left to the discretion of the data processor rather than the field crew.

Full coverage DGM grids were performed to quantify the type, depth, and spatial density of potential MEC and other material related to munitions (e.g., MD). Different grid sizes of various orientations were used to characterize each MRS (see Appendix F – Grid Location Memos). Once the southwest corner of a grid was established with WASS-capable GPS, the remaining corners were measured with fiberglass tape measures and a compass to the appropriate dimensions and orientation. Wooden survey lathes were placed in each corner with the southwest corner marked as the grid origin.

The line and fiducial method was used to navigate and collect EM61 data within each grid. Fiberglass tape measures were stretched around the perimeter of the grid originating from the designated southwest corner. Additional fiducial lines were set up with tape measures or ropes approximately every 25 ft spanning the grid perpendicular to the survey directions to assist with navigation and to serve as known points on each survey line for positioning corrections.

Table 4.2
DGM Performance Metrics

Requirement	Applicability (Specific to Collection Method/Use)	Performance Standard	Frequency	Consequence of Failure[2]
Static Repeatability (Instrument Functionality)[3]	All	Response (mean static spike minus mean static background) +-10 percent of geophysical prove-out (GPO)/original value on all channels	Minimum of once daily	Day's data fails unless seed item is mapped that day with repeatable anomaly characteristics (see GSV Blind Seeding)
IVS[4]	All	Static response for each IVS seed ≥ 75 percent of value predicted by GSV calculator and/or Depth Response Curves as agreed to by PDT.	Minimum of once daily	Day's data fails unless GSV seed item is mapped that day with repeatable anomaly characteristics (see GSV Blind Seeding)
Along-Line Measurement Spacing	All	98 percent < =25cm along line[5]	By dataset	Dataset submittal fails
Speed	All	95 percent within max project design speed or demonstrated speed	By dataset	Dataset submittal fails unless new max speed successfully demonstrated at GPO or IVS.
GSV Blind Seeding	All	All blind coverage seeds detected within expected instrument response ranges.[6] Positional accuracies of GSV seed within 35cm +1/2-line spacing.	One or more industry standard objects (ISOs) per day per team.[7]	Dataset submittal fails
Coverage (*)	Grids	>90 percent coverage at project design line spacing.[8]	By dataset or grid[9]	Submittal fails unless gaps filled, additional data collected, or government refund for missing acreage.
Target Selection	All	All dig list targets are selected according to project design.	By grid or dataset[9]	Dataset submittal fails
Anomaly Resolution (*)[10]	Verification checking by DGM re-mapping[11] or Verification checking with original instrument of anomaly footprint after excavation[12]	If MEC[13]: 70 percent confidence <10 percent unresolved anomalies[14] If no MEC: 90 percent confidence <5 percent unresolved anomalies Accept on zero.	100 % of anomalies were investigated with the EM62-MK2.	Lot submittal fails

[1] These are the critical requirements for RI DGM methods. Contractors shall use additional methods/frequencies that they deem beneficial and as required in their SOPs.
[2] All failures also require a root cause analysis.
[3] Item should be placed on a jig that ensures consistent geometry between the sensor and item to ensure repeatability, response not to exceed 500 units, or optionally use the Geonics calibration coil. Duration of data collection needed to be determined (TBD) by the contractor. Must compare to original to ensure instrument is consistent throughout the project. It is recognized that this QC requirement may be redundant and could contradict results from seeding QC; however, in the event of seed failure, information from this test may aid in determining cause of failure, i.e., instrument or processing.
[4] IVS consists of at least one ISO but may also include other test items. IVS tests will be conducted at the start of fieldwork and a report will be submitted documenting error sources, background noise and expected response range for each item within the IVS.
[5] 25cm based on institutional knowledge and common instrument physical dimensions. Assumes speed used achieves detection. This requirement can be relaxed if supporting documentation is provided to the Government for concurrence.
[6] Responses should fall within ranges predicted during initial IVS testing and/or within depth response curves as agreed to by PDT.
[7] Coverage seeds/GSV blind seeds are a combination of ISO standard test items (small, medium, large) and other test items or stimulants as required by the PDT.
[8] Recommended default line spacing is 0.6m for items of interest the size of 40mm grenades and smaller, else 0.8m.
[9] The terms "grid" and "dataset" refer here to logical groupings of data or data collection event. Logical groupings of data are contiguous areas mapped by the same instrument and in the same relative time-frame. These can be grids, acres, or some other unit of area. A data collection event is similar to logical groupings of data but refers to data collected over a contiguous time frame, such as "morning," "afternoon," "battery life," or some other measure of contiguous time. It is recognized that physical marking of corners on the ground is not always beneficial to the government. Additionally, size and shape of the grid is not specified.
[10] Resolved is defined as 1) there is no geophysical signal remaining at the flagged/selected location, or 2) a signal remains but it is too low or too small to be associated with UXO/DMM, or 3) a signal remains but is associated with surface material which when moved results in low, or no signal at the interpreted location, or 4) a signal remains and a complete rationale for its presence exists.
[11] Mapping shall cover the required number of anomaly locations. This is used in-lieu of checking individual anomalies for those instances where it is quicker to re-map sections of land rather than return to individual anomalies. Only the data at the anomaly locations is reviewed for resolution.
[12] This may require leaving flags at excavated locations until QC is complete. It is up to the contractor to indicate which holes knowingly have metal left in them where the PDT has agreed such is acceptable. It is the contractor's responsibility to not put hot material back in the hole before QC is complete. As part of this requirement location accuracy must also be demonstrated (i.e. cleared location is within dynamic positioning error radius as described above). Contractor SOPs that incorporate post-excavation inspections using digital geophysical instruments can be used to meet the excavation verification need of this requirement provided appropriate QC protocols are in place to monitor and document the SOPs are followed. Acceptance sampling or alternative QC protocols to monitor and document the reacquisition SOP would be required to demonstrate the correct locations are excavated.
[13] If MEC (or intact or partial training or practice rounds) are not detected in a lot then the information from that lot may be used to support certain decisions where the confidence in the results must be greater than that for grids where MEC are detected.
[14] This is a statistical test number. It does not imply there are 10% bad units. It tests there are fewer than 10% bad units, including zero bad units. Values for confidence levels will be determined by the PDT and are dependent on the information needed. Stopping rules will take precedence over this standard (i.e. for high MEC density, decision could be made to stop because the team has enough data for characterization).

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EM61 data were collected in wheel mode at 0.20 meter intervals. The operator maneuvered the EM61 along parallel lines spaced 2.5 ft apart throughout the entire grid to ensure full coverage. Obstacles such as trees revealed gaps in the data where the EM61 data collection was paused just before the sensor was maneuvered up against the tree. Data collection was then resumed on the same line on the opposite side of the obstacle.

4.2.3.3.2 Data Processing

Data processing was performed by AMEC. For purposes of this project, raw data was defined as all field data logger files and resulting pre-processed files. The DGM data were downloaded and archived after collection each day to ensure data preservation, and transferred by the field team to the AMEC data processors. Downloaded files were screened for integrity prior to uploading for data processing, and the raw data was then delivered to HGL on a daily basis for review.

For transects, raw unprocessed data were used to create preliminary images exhibiting the line paths that were transferred to HGL's WebMap for a visual confirmation of surveyed transects. Upon completion of final processed and validated transect data, the preliminary maps were replaced (if necessary) with the final version of the line paths after processing.

Data processing was accomplished using a combination of GIS, geophysical, and off-the-shelf mapping software specific to the geophysical and positional instrumentation deployed including; Geonics DAT61MK2, ESRI ArcGIS; Geosoft Oasis Montaj; and Microsoft Excel, Word, and Access programs.

Upon receiving the daily EM61 data, the AMEC processors performed a number of pre-processing steps. Daily pre-processing of the field data included the following:

- Account for all field data and notes;
- Convert all EM61 data from the raw data logger format (R61 or P61 files) to an ASCII format (M61 files) using Geonics DAT61 and/or Geomar's TrackMaker61MK2 software;
- For line and fiducial data, adjust line ends and adjust markers to known points using DAT61MK2;
- Remove erroneous lines and data points as defined in the field notes;
- Separate repeat line data from grid data; and
- Create XYZ files for Geosoft import.

Upon completion of the pre-processing, all files were delivered to HGL for review. All raw files were posted to HGL's File Transfer Protocol (FTP) site within 24 hours of data collection.

Standard processing was performed with Geosoft Oasis Montaj. Once XYZ files were imported the data was checked for data spikes, external noise, and potential geologic responses, and then compared with field notes for consistency. The data were evaluated to determine the type(s) and extent of drift corrections (leveling) to be applied. Due to the responses measured from geological features and power lines in some areas of the site, several drift correction techniques were applied to the datasets. For areas where the data were significantly affected by noise from overhead power lines, the DGM data were not utilized for characterization purposes and the areas were reinvestigated using AGM.

For transects, a latency position correction was applied to the time channel as measured on the 6-line test performed at the commencement of DGM. The value of the latency correction was typically between 2 and 4 seconds initially measured on the 6-line test and verified daily on the IVS line. A non-systematic lag correction was applied to the grid data.

Once the latency correction was applied, the data analyst gridded the data to create color-coded images of all four time gates and the sum of time gates 1 through 4. The color scale used for display was representative of the changing response values across the area of interest and allowed the analyst to confidently assess the anomalies present within each survey area.

All final processed data were submitted to HGL within 7 days of data collection. HGL performed an evaluation of processed data to ensure the overall quality and usability of the data. The following checks were performed:

- Orientation of grid for line and fiducial data;
- Precision of navigational data;
- Evaluation of the spatial coverage to identify data gaps;
- Evaluation of noise levels to ensure that data was within acceptable limits;
- Identification of data spikes potentially associated with environmental or cultural features;
- Identification of areas with elevated velocities and/or data point separations;
- Evaluation of drift correction techniques to ensure they did not significantly suppress anomalies of interest.

All final processed data was posted on HGL's FTP site for distribution to the client.

4.2.3.3.3 Digital Geophysical Anomaly Identification

The final target list for each transect and grid was developed by HGL. The Geosoft Oasis Montaj "Pick Peaks Along Profile" tool was used to select anomalies of interest on transects. A threshold of 11.7 mV (sum of channels 1-4) was agreed to with the client during the initial IVS and was used as the primary criteria for anomaly selection. Due to elevated levels of geologic-like noise in some grids the anomaly selection was challenging. In order to ensure the anomalies selected for investigation were representative of the potential MEC and MD at the

site, the geophysicist manually selected some of the target selections along data profiles (when necessary) to reflect amplitudes above "true" local base level. Profiles of processed data versus unprocessed data were compared to ensure that anomalies of interest were not suppressed with the drift correction or de-spiking processes.

The Geosoft Oasis Montaj UX-Detect automatic target selection module was used to select anomalies of interest within each grid. A threshold of 11.7 mV (sum of channels 1-4) was agreed to with the client during the initial IVS and was used as the primary criteria for anomaly selection.

4.2.3.3.4 Dig Sheet Development

Dig sheets and color-coded images of each grid with the target selections superimposed were sent to the SUXOS at the site from the HGL processing center in Denver, Colorado. The number of targets within each MRS selected for investigation is provided in Table 4.3.

Table 4.3
Number of Anomalies Identified for Investigation

MRS	# of Grids	Targets Identified
ARNG	89	1,382
RC1	62	749
RC2	101	1,303

4.2.3.3.5 DGM QC Results

The QC review is summarized below and representative tables of the results are provided in Appendix F. No significant QC failures were noted for the DGM data.

Static Response Repeatability – All test files achieved the metric.

Along Line Spacing – Due to the accuracy level of WAAS-capable GPS, a 100-point mean rolling window was used to average the point separations over a larger distance on transects to reveal a more accurate along-line spacing. Transect datasets that failed this metric were determined to be the result of poor GPS coverage and were scheduled for re-collection. For line and fiducial grids, a 20-point mean rolling window was used to measure data point separations. All final transect and grid datasets passed the along line spacing metric.

Survey Speed – Due to the accuracy level of WAAS-capable GPS, a 100-point mean rolling window was used to average the velocities over a larger distance on transects to reveal more accurate velocities. Transect datasets that failed this metric were determined to be the result of poor GPS coverage and were scheduled for re-collection. For line and fiducial grids, a 20-point mean rolling window was used to measure velocities. All final datasets passed the speed metric.

Spatial Coverage of Grids – All field data for the full coverage DGM grids achieved the metric.

Dynamic Response Repeatability – Dynamic response repeatability for the IVS achieved the metric for all daily tests.

Dynamic Position Repeatability – The metric was achieved for all blind seed items. Dynamic positioning repeatability for the IVS items was also achieved for all datasets.

Geodetic Equipment Functionality – A cross position check was performed daily over the southeast corner of the IVS line to verify the GPS was functioning properly. The GPS antennae was positioned on the GPS mount over the center of the EM61 sensor such as when collecting transect data. The EM61 was then maneuvered over the southwest corner of the IVS (known point) in an X-like fashion clearing roughly 15 ft on all four sides. The position of the intersection of the GPS track was compared to the position of the southwest corner to measure the offset. All tests revealed positioning to be within 10 ft of the known location.

Geodetic Internal Consistency – All grids were setup with each leg within 30 centimeter accuracy, from corner to corner, as required. Wherever possible, the diagonals were also verified. Grids with vegetation occasionally limited the ability to measure diagonals. 100 percent of grids passed the metric.

Geodetic Repeatability – Measured locations for all transects ends were reoccupied by the DGM teams where accessible.

Geodetic Accuracy – Not Applicable.

Blind Seed Detection – 100 percent of the blind seeds were detected within 2.5 ft of the known location.

False Positives –The QC geophysicist reviewed the anomaly characteristics for the 29 anomalies (~5 percent) identified as "no finds" during the project and the anomalies were reinvestigated by the UXO QC team. The results of this procedure are documented in the intrusive database in Appendix F.

Target Selection – 100% of all MEC-like targets were selected on both transects and grids.

Intrusive Investigation – All unearthed items were within 3 ft of the mapped location as identified on the dig sheet.

Anomaly Resolution – Metric passes with less than 5 percent of anomalies unresolved for all lots.

4.2.4 Intrusive Investigation

The intrusive investigation was conducted by certified UXO technicians in accordance with the approved Work Plan (HGL, 2012b). The results of the intrusive investigation are summarized in Subsection 5.1 of this report and the findings of the intrusive investigations are presented in Appendix F.

4.2.4.1 Anomaly Reacquisition and Resolution

Prior to beginning intrusive activities, field teams navigated to the location of each DGM anomaly selected for intrusive investigation. The field team then intrusively investigated by starting at the location of the highest mV reading and extending to within a 1-meter search radius for excavation. Intrusive operations at each anomaly location were conducted by hand. Excavation teams dug at the location of the highest mV reading within the search radius until the source of the anomaly was found or a "no-find" could be determined. When no single point within the search radius was an anomaly, the dig result was recorded as "nothing found." Upon completing the investigation, 99 anomalies were revisited and reassessed using an EM61. When the anomaly was located, the intrusive team rechecked the location with both a Schonstedt GA-52Cx and a White's DFX-300 until all indication of metallic objects were removed. The intrusive team continued the intrusive investigation until the response was cleared.

4.2.4.2 Munitions with the Greatest Fragmentation Distance

The munition with greatest fragmentation distance (MGFD) for the area is the item that has the greatest fragmentation distance of any or all MEC items that are reasonably expected to be found within that area, based on research or site characterization. As presented in the approved Explosives Site Plan (ESP) (USACE, 2012), the MGFD applicable to each MRS was established based on historical investigations. HGL maintained the applicable MGFD during the investigations. No MEC was located during the RI field activities that required a change to the MGFD.

4.2.4.3 Minimum Separation Distance

The minumim separation distance (MSD) is the protective distance based on the characteristics of the selected MGFD. An MSD of for both intentional and unintentional detonations was established for nonessential personnel based on the hazardous fragment distance of the MGFD. MSDs for intentional detonations were also established for disposal operations and these were based on the appropriate MGFD. HGL maintained the applicable MSD during RI field activities.

4.2.4.4 Exclusion Zones

Exclusion zones (EZs) were established during the RI to protect the public and non-essential personnel from both intentional and unintentional detonations. The distance used was the MSD applicable to each MRS for unintentional detonations, and this EZ distance was enforced throughout the intrusive operations at the project site.

4.2.5 MPPEH Management

4.2.5.1 MEC Identification and Removal

Intrusive investigations were conducted by teams of varying size (minimum three-person teams) consisting of one UXO Technician III (team leader) and up to five qualified UXO Technician IIs or UXO Technicain Is. A reacquisition team conducted reacquisition and marking, and the intrusive team conducted intrusive investigation of reacquired and marked anomalies. Excavation procedures at each anomaly location were conducted in accordance with the Work Plan (HGL, 2012b).

4.2.5.2 Explosives Storage Magazine and MEC Storage

A Bureau of Alcohol, Tobacco, and Firearms (ATF) Type II magazine was used to store donor explosives, in accordance with the approved ESP (USACE, 2012). A double-lock system secured the magazine, with one key being controlled by the SUXOS and the other being controlled by the UXOQCS. In addition to the locks, the magazines were enclosed in chain link fence, which was also secured with a heavy duty lock. The key for this lock was also controlled by the UXOQCS. The magazine was located on the ARNG MRS.

4.2.5.3 MEC Disposal

Documentation of recovered MPPEH, MEC, or MD items was maintained during the RI. Each piece of recovered MEC or MPPEH was tracked from its identification through its final disposition. If the item was required to be blown-in-place (BIP) or was relocated for demolition, the demolition date and other pertinent details were also recorded in the MEC log. The SUXOS was responsible for the tracking and maintenance of all MPPEH/MEC recovered during the project.

4.2.5.4 Inspection of MPPEH

MPPEH items identified during intrusive operations were evaluated by the SUXOS and the UXOSO/UXOQCS. Items confirmed or suspected to be MEC were either BIP or, if they were determined to be acceptable-to-move and with the concurrence of both the UXOSO/UXOQCS and the USACE OE Safety Specialist, the item could be relocated to an alternative approved on-site location within the site for detonation.

Once demolition operations were complete, the SUXOS certified the explosively vented items and any remaining MPPEH were free of explosive hazards. This condition was verified by the UXOSO/UXOQCS. Once the MPPEH were determined to be free of explosive hazards, the SUXOS and UXOSO/UXOQCS both verified and signed the DD Form 1348-1A to certify the material as material documented as safe (MDAS). After inspection and certification, recovered MDAS items were containerized and stored in the secure storage area until appropriate disposition was arranged. The Records of MDAS inspection and certification, transportation, and smelting of the 1,078 pounds of MD are provided in Appendix A.

4.2.5.5 Intrusive Investigation QC

Following intrusive investigations, QC efforts included the UXOQCS revisiting anomalies classified as "no finds" to verify the results at each investigation location. In addition, the USACE Acceptance Sampling Table was used for reference and 99 anomalies were selected for reinvestigation by the Project Geophysicist. The Project Geophysicist also reviewed the reacquisition and dig results for all anomalies in the intrusive results database. Documentation for each of these QC elements is provided in the intrusive results tables in Appendix F.

4.3 MC CHARACTERIZATION

The MC characterization performed included surface soil sampling with analytical analyses and comparison of laboratory results to preliminary screening values. The characterization methods performed at the project site are described in the following subsections.

4.3.1 Purpose of MC Sampling Activities

The objective of the RI for potential MC contamination was to first determine if there was evidence of a release of MC to the environment and then to characterize the nature and extent of the release. The data obtained during the investigation is used to assess whether the MC present poses a potential risk to human health and the environment and, therefore, should be considered to be COPCs. Soil characterization was conducted to determine if a remedial response to MC-related contamination is required and, if so, to provide the required information for the development and evaluation of any necessary response alternatives. Successful execution of the sampling program achieves the sampling and analysis component of the PWS. To achieve these objectives, soil samples were collected from locations that were selected based on the confirmed presence of MEC or high concentrations of MD during RI field activities.

4.3.2 Field Sampling Activities Summary

The MC sampling and analysis was performed at the three sites within Butner where MEC investigation activities were conducted. Because only limited previous sampling had been conducted, the objective of this sampling was to determine if a MC release has occurred at the project site as a result of munitions-related activities, resulting in the confirmed presence of MC contamination. The samples collected were biased to areas where MEC and/or large quantities of MD were found during the MEC investigation at each site. Ten ISM soil samples each were collected from RC1 MRS and RC2 MRS. Eleven ISM soil samples were collected from the ARNG MRS. An additional ten ISM soil samples were collected from outside the MRA boundary, to be representative of ambient soil conditions.

Soil samples were analyzed for the following metals using EPA Method SW6010B:

- Antimony
- Copper
- Lead
- Zinc

Soil samples also were analyzed for the following explosives using EPA Method SW8330B:

- 1,3,5-Trinitrobenzene (TNB)
- 2,4,6-TNT
- 2,4-DNT
- 2,6-DNT
- 2-Amino-4,6-DNT
- 3,5-Dinitroaniline
- 4-Amino-2,6-DNT
- HMX
- Nitrobenzene
- Nitroglycerin
- PETN
- RDX
- Tetryl
- m-Dinitrobenzene
- m-Nitrotoluene
- o-Nitrotoluene
- p-Nitrotoluene

4.3.2.1 Surface Soil Sampling

The surface soil sampling approach comprised ISM soil samples collected at biased locations to determine the potential presence or absence of MC contamination. All ISM grids were 100-ft x 100-ft in size, and consisted of 36 increments. The sampling was conducted in accordance with the approved work plan, including the Field Sampling Plan and UFP-QAPP and the Implementation of Incremental Sampling (IS) of Soil for the Military Munitions Response Program (USACE, 2009). The results of the sampling within each MRS are presented in Table B.1, Appendix B.

4.3.2.1.1 ARNG MRS

Eleven ISM surface soil samples were collected from within the ARNG MRS as presented on Figure 4.5. In addition, a triplicate was collected from the ARNG MRS sample IS-ARNG-82(D,T). Locations were selected based on an evaluation of the anomaly density data, the intrusive results and historical results. Samples were collected in areas of high anomaly density concentrations (ARNG-01); the grids were MEC were found during intrusive investigations (ARNG-11, ARNG-14, and ARNG-82); where the highest MD counts were recorded (ARNG-26, ARNG-45, ARNG-19, ARNG-22); and where medium levels of MD counts were recorded (ARNG-49, ARNG-51, ARNG-23).

4.3.2.1.2 RC1 MRS

Ten ISM surface soil samples were collected from within the RC1 MRS as presented on Figure 4.5. In addition, a triplicate was collected from the RC1 MRS sample IS-RC1-06 (D,T). Locations were selected based on an evaluation of the anomaly density data, the intrusive results and historical results. Samples were collected in the highest anomaly density concentration area grids (RC1-01, RC1-05, RC1-06, RC1-08, RC1-14); and those grids where the highest concentrations of MD were recorded (RC1-13, RC1-11, RC1-10, RC1-34, RC1-43).

4.3.2.1.3 RC2 MRS

Ten ISM surface soil samples were collected from within the RC2 MRS as presented on Figure 4.5. In addition, a triplicate was collected from the RC2 MRS sample IS-RC2-02 (D,T). Locations were selected based on an evaluation of the anomaly density data, the intrusive results and historical results. A sample was collected where the MEC item RC2-001 was found (this was not located within a grid). Samples were also collected in the grids were

MEC were found during intrusive investigations (RC2-019); within the highest anomaly density areas (RC2-002, RC2-030, RC2-005, RC2-021, and RC2-004); and where medium levels of MD counts were recorded (RC2-064, RC2-034, RC2-052).

4.3.2.1.4 Background ISM Soil Samples

Additionally, ten background ISM locations (selected outside the three MRS boundaries), were collected to evaluate ambient concentrations for metals: IS-BG-01 (also a duplicate and triplicate sample), IS-BG-02, IS-BG-03, IS-BG-04, IS-BG-05, IS-BG-06, IS-BG-07, IS-BG-08, IS-BG-09, and IS-BG-10. The sampling locations selected, and the rationale for each, are included in Table 4.4. The sample locations are displayed on Figure 4.5. The results of the background sampling are summarized in Table B.2, Appendix B.

Table 4.4
Sampling Locations and Rationale

Sample ID	Sample Date	Rationale for ISM location:
IS-ARNG-01*	5/15/2013	High concentrations of MD, high anomaly density area.
IS-ARNG-11	5/14/2013	MEC item found in grid, high anomaly density area.
IS-ARNG-14	5/21/2013	MEC item found in grid, high anomaly density area.
IS-ARNG-19	5/15/2013	High concentrations of MD, high/medium anomaly density area boundary.
IS-ARNG-22	5/16/2013	High concentrations of MD, high/medium anomaly density area boundary.
IS-ARNG-23*	5/15/2013	Medium concentrations of MD, medium anomaly density area.
IS-ARNG-26	5/15/2013	High concentrations of MD, medium anomaly density area.
IS-ARNG-45	5/21/2013	High concentrations of MD, medium anomaly density area.
IS-ARNG-49	5/14/2013	Medium concentrations of MD, low/medium anomaly density area boundary.
IS-ARNG-51	5/15/2013	Medium concentrations of MD, low/medium anomaly density area boundary.
IS-ARNG-82 (D, T)	5/15/2013	MEC item found in grid. (New HGR MRS identified). Outside interpreted impact area.
IS-RC1-01*	5/21/2013	High anomaly density area.
IS-RC1-05	5/20/2013	Medium concentrations of MD; High anomaly density area.
IS-RC1-06 (D,T)*	5/21/2013	Analog grid, high MD counts; High anomaly density area.
IS-RC1-08	5/20/2013	High anomaly density area.
IS-RC1-10	5/21/2013	Analog grid, high MD counts; High/medium anomaly density area boundary.
IS-RC1-11	5/21/2013	High/medium anomaly density area boundary.
IS-RC1-13	5/20/2013	High concentration of MD; High/medium anomaly density area boundary.
IS-RC1-14	5/20/2013	High concentration of MD; High/medium anomaly density area boundary.
IS-RC1-34	5/20/2013	Medium anomaly density area.
IS-RC1-43	5/20/2013	Medium anomaly density area.
IS-RC2-01	5/16/2013	MEC item found, outside established grids or transects.
IS-RC2-02 (D, T)	5/17/2013	High anomaly density area.
IS-RC2-04	5/16/2013	High anomaly density area.
IS-RC2-05	5/16/2013	High anomaly density area; team observed impact craters in area.
IS-RC2-19	5/16/2013	MEC item found; High/medium anomaly density area boundary.
IS-RC2-21*	5/17/2013	High/medium anomaly density area boundary.
IS-RC2-30	5/17/2013	High/medium anomaly density area boundary.
IS-RC2-34	5/17/2013	Medium anomaly density area.
IS-RC2-52	5/17/2013	Medium anomaly density area.
IS-RC2-64*	5/16/2013	Medium anomaly density area.

**Sample re-collected in October 2013.*

4.3.2.1.5 Confirmation Sampling – All MRSs

May 2013 (original sampling) results:

Upon evaluation of the preliminary laboratory analytical results submitted by Microbac Laboratories, Inc. in Marietta, Ohio, the presence of two explosives analytes were reported in all the sample locations. Two explosives (2,4-DNT and 2,6-DNT) were detected in all samples, including the background samples. The results for 2,6-DNT and the 2,4/2,6-DNT mixture are above the updated USEPA residential soil RSL dated May 2013. The updated RSLs and the maximums for each MRS are shown in Table 4.5. Of the 31 samples collected on site, all exceed the RSL of 0.33 milligrams per kilogram (mg/kg) for 2,6-DNT and all also exceed the RSL for the 2,4/2,6-DNT mixture of 0.72 mg/kg. Additionally, the seven background samples analyzed for explosives by Method 8330B contained detections of 2,6-DNT and 2,4/2,6-DNT mixture at concentrations above the residential soil RSLs.

Table 4.5
Maximum MC Detections from May 2013 Sampling

Maximum detects only - MIS RESULTS (VALIDATED)				
Sample ID		ARNG	RC1	RC2
Sample Date		max	max	max
Sample Type	Residential Soil			
Parameter	May 2013 RSL (HQ=0.1)			
Total Metals (mg/kg)				
Antimony	3.1	0.744	4.18	47.30
Copper	310	75.70	15.20	16.40
Lead	400	94.70	70.60	28.90
Zinc	2300	168.00	46.50	49.00
Explosives (mg/kg)				
2,4-Dinitrotoluene	1.60	0.563	0.738	0.962
2,6-Dinitrotoluene	0.33	2.34	2.75	2.95
2,4/2,6-Dinitrotoluene mixture	0.72	2.90	3.49	3.91
RDX	5.6	--	--	0.118
mg/kg	milligrams per kilogram			

Upon review of the May 2013 Microbac 8330b ISM results, HGL concluded that the results were not necessarily representative of actual site conditions. Detections of 2,4-DNT and 2,6-DNT occurred in all samples. Detections occurred in samples within the MRS as well as the background soil samples located outside the MRA. These results were reviewed by the project team and determined to be suspect. These results are not likely to be representative of actual site conditions. These detections are more likely to indicate contamination of the sample from laboratory methods, packaging, shipping, or field sampling methods and procedures. Investigations of these methods were made during data evaluation and no documentable variances from standard sampling or analytical procedures or methods were determined to have occurred. In an attempt to confirm the May 2013 results, additional analyses of previously collected soil volume were conducted. Eight samples (of those shipped to the laboratory in May 2013) were selected for re-analyses by two different methods. Re-analyses of the previously collected soil were performed by both Microbac and by TestAmerica Denver. Four samples selected for re-analyses were from the lowest detections for each MRS or background sample, and four samples were from the highest detection from each MRS or

background sample. Based on the results of reanalysis of the same soil volume by TestAmerica Denver using methods 8330B and 8270C, HGL concluded and the PDT concurred that the analytes are present in the soil analyzed; however, these results are likely not indicative of actual site conditions. HGL also evaluated other sources for 2,4 or 2,6-DNT from both the sample collection efforts and the laboratory methods. Microbac completed the analyses in compliance with their SOP, per the approved UFP-QAPP. The presence of the analytes is likely due to another source, though no conclusions have been reached by the PDT for an alternate source. HGL has also evaluated soil and drinking well sampling conducted in the past at Butner. There were no detections of explosives during past sampling efforts in either soil or water. The prior investigation locations sampled were not in areas that would fully delineate nature and extent for all of Butner; however, the team concurred to conduct an additional sampling effort as confirmation. This sampling was conducted in October 2013 and is summarized below.

October 2013 Sampling Results:

Therefore, in coordination with the PDT and due to detections of 2,4-DNT and 2,6-DNT during the May 2013 sampling effort, confirmation ISM soil samples were collected in October 2013. The PDT determined to re-collect ISM DUs at the previously sampled locations to attempt to verify the presence of 2,4-DNT and 2,6-DNT. Ten additional background ISM samples were collected and two ISM samples were collected from each MRS at locations which had the highest reported concentration of 2,4-DNT or 2,6-DNT. Samples were submitted to TestAmerica laboratories in Denver, and results are summarized in Table B.2, Appendix B. The October 2013 confirmation soil samples results are discussed in Section 5.2 and 7.2.2.2. The confirmation samples results were treated as duplicate results of the original (May 2013) samples. Based on the evaluation of the analytical data, both datasets (May 2013 and October 2013) were deemed usable. The results were pooled, and the re-sampled results are used as additional samples, not duplicate samples, in the RI MC characterization. No 2,4-DNT or 2,6-DNT were reported above detection limits in the October 2013 confirmation sampling results for the ARNG MRS or the RC2 MRS. At RC1 MRS no results were reported in October 2013 confirmation sampling at values greater than the 2,6-DNT screening value (0.33 mg/kg) and DNT mixture screening value (0.72 mg/kg). Additional discussion of the results is provided in Section 5.2.

4.3.2.2 Sample Handling and Packaging

Soil sampling, handling, packaging, and shipping, were conducted in accordance with the approved Work Plan (HGL, 2012b). Sample locations were recorded using WAAS survey technology.

4.3.2.3 QC and QA

The soil sampling activities were conducted in accordance with the sampling and analysis plan (SAP) providing in the Work Plan. In addition, the UFP-QAPP submitted with the Work Plan addressed the DQOs, analytical methods, specific QA, and QC activities, laboratory requirements, and data assessment activities designed to achieve the data quality goals of the project.

4.3.2.4 Analytical Data Validation

Data validation reviews for laboratory data were performed by the HGL's data validator subcontractor (AMEC) for all sample results in accordance with the requirements contained in the UFP-QAPP. Laboratory results were assessed for compliance with required precision, accuracy, completeness, and representativeness. Field QC results were evaluated for compliance with required precision, accuracy, and representativeness. Based on this review, all sample data were considered usable for project decision-making. A summary of the analytical data and copies of the data validation reports are included as Appendix B.

4.3.3 Analytical Laboratory and Analyses

All samples were shipped to Microbac and TestAmerica Denver for analysis. Soil samples submitted were analyzed for explosives and metals. Analytical data were verified prior to being released by Microbac. Laboratory extraction, analysis methods, and target analytes were conducted in accordance with the approved Work Plan (HGL, 2012b). Project laboratories were accredited by the DoD Environmental Laboratory Accreditation Program for all analyses performed in support of this project.

Once finalized by the laboratories, analytical data generated during the sampling effort were validated by the HGL project chemist in accordance with the requirements identified in the SAP included in the work plan. The validation included requirements in DoD Quality Systems Manual for Environmental Laboratories, Version 4.2 (DoD, 2010), USEPA Method 8330B, and USEPA Method 6020. Data validation reports were generated by the project chemist for all data packages and are provided in Appendix B. The validation reports note that all data are usable.

4.4 DEPARTURES FROM PLANNING DOCUMENTS

Butner MRSs were investigated in accordance with the final RI/FS Work Plan (HGL, 2012b) with the following deviations:

- Areas where landowners refused to grant access to the parcel could not be investigated as proposed in the work plan.
- On February 13, 2013, an unfuzed 57mm HE projectile found in a residential area within MRC RC1 was moved to the adjacent ARNG MRS due to safety concerns associated with the unhindered access to the projectile. The ARNG MRS immediately adjacent is secured and fenced. The work plan states that munitions cannot be moved from the MRS where they are found. The future recommendations are that these two MRSs be combined into one MRS.
- The fieldwork variances are included in Appendix G.

FIGURES

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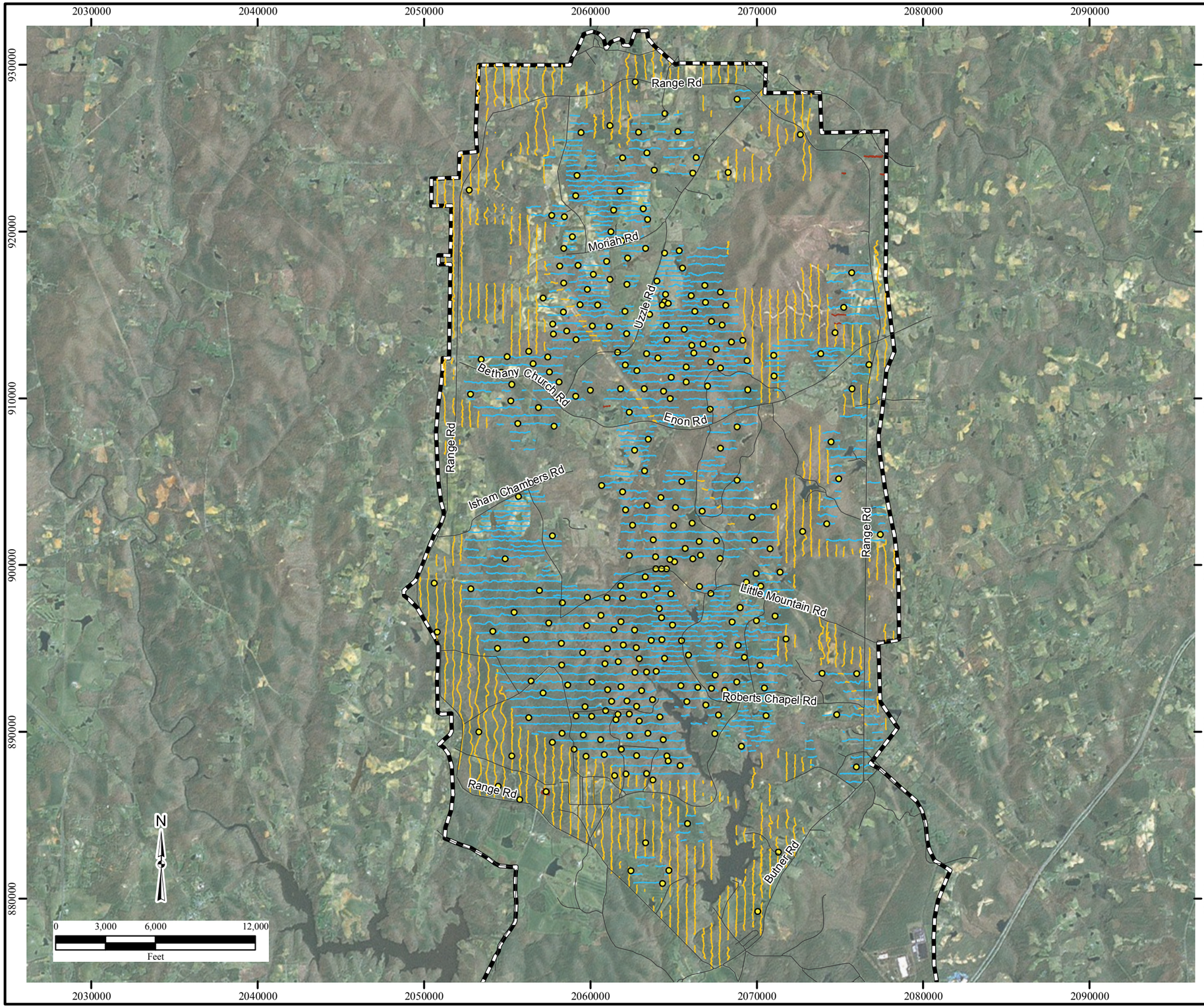
Figure 4.1
Actual Transect Paths and Grid Locations



Legend

- Grid
- AnalogTransect
- DGM Transect
- Recon Transect
- Road
- Former Camp Butner

Notes:
DGM=Digital Geophysical Mapping

Grid locations displayed are the southwest corner points.

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(4-01)Transects_Grids.mxd
5/1/2014 RB
Source: HGL, USACE
ESRI Online Aerial Imagery

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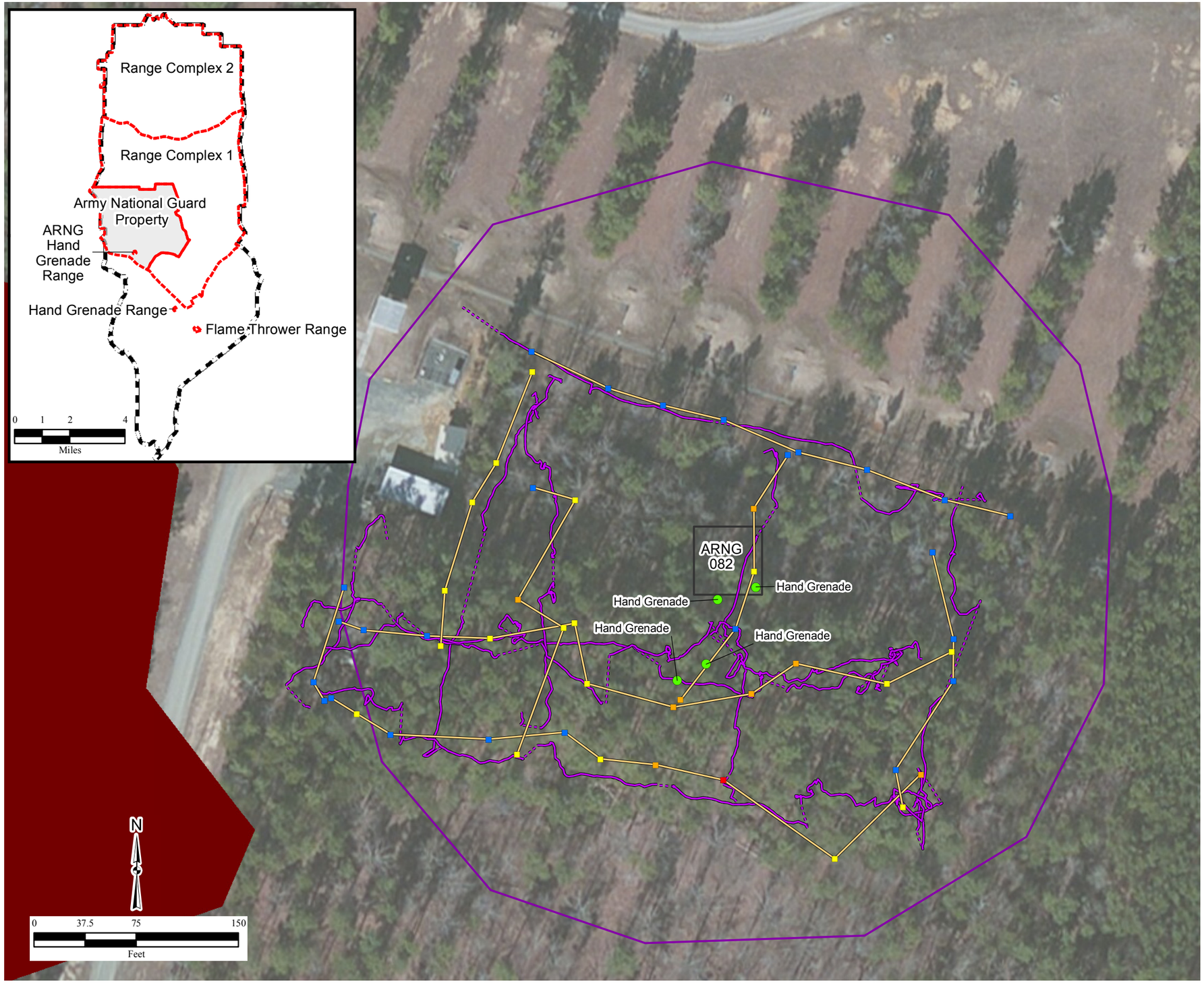
Figure 4.2
Army National Guard
Hand Grenade Range



Legend

- MEC

Anomaly Counts (Surface and Subsurface Counts)

- 0-10
- 10-20
- 20-30
- 30-40
- Approximate Analog Transect Based on GPS (dashed line indicates poor GPS signal)
- Inferred Approximate Analog Transect Path Based on Anomaly Count Locations
- Grid
- TEC Historical Analysis
- MEC Contamination
- MRS
- Former Camp Butner

Notes:
Transect locations are approximate. GPS precision was 5–10 meters.

GPS=Global Positioning System
MEC=munitions and explosives of concern
MRS=munitions response site

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3/27/2015 CNL
Source: HGL, USACE
ArcGIS Online Imagery
Coordinate System: NAD83, State Plane, North Carolina FIPS 3200, Feet

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Figure 4.3 ARNG Hand Grenade Range Trench Features

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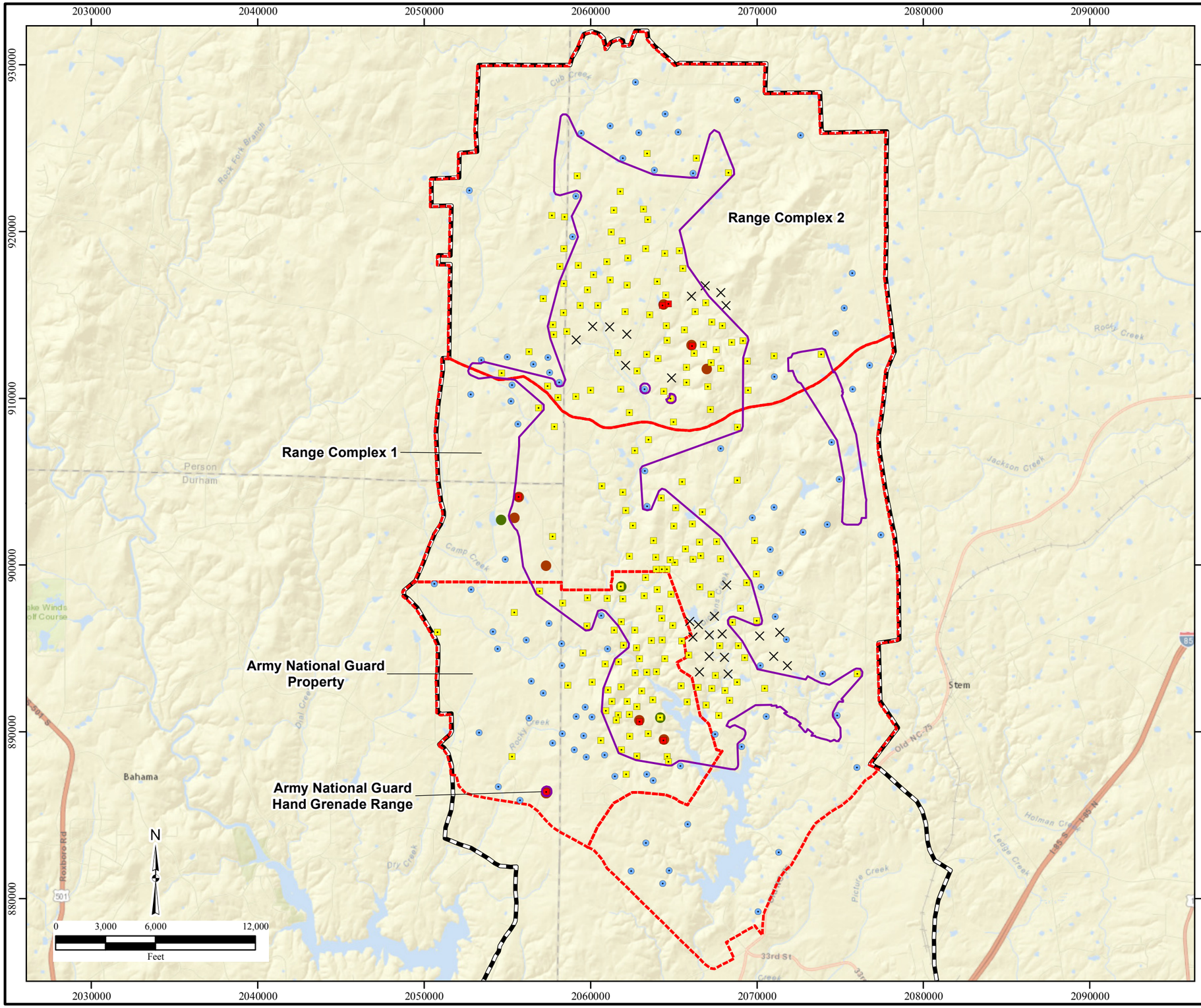
Figure 4.4a
Remedial Investigation
MEC Delineation



Legend

- MEC
- Munition Debris

Grid Intrusive Results

- MEC
- Munition Debris
- Cultural Debris
- Access Refused
- MEC Contamination
- MRS
- Former Camp Butner

Notes:
Grid locations displayed are the southwest corner points.
ARNG MEC contaminated area = 1428.88 acres
ARNG remaining land = 3395.58 acres
RC1 MEC contaminated area = 3835.56 acres
RC1 remaining land = 8527.45 acres
RC2 MEC contaminated area = 3742.93 acres
RC2 remaining land = 7786.46 acres

ARNG= Army National Guard Property
MRS=Munition Response Site
MEC=Munitions and Explosives of Concern
RC=range complex

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(4-04a)RI_MEC_Delineation.mxd
1/7/2015 CNL
Source: HGL, USACE
ESRI Online Aerial Imagery

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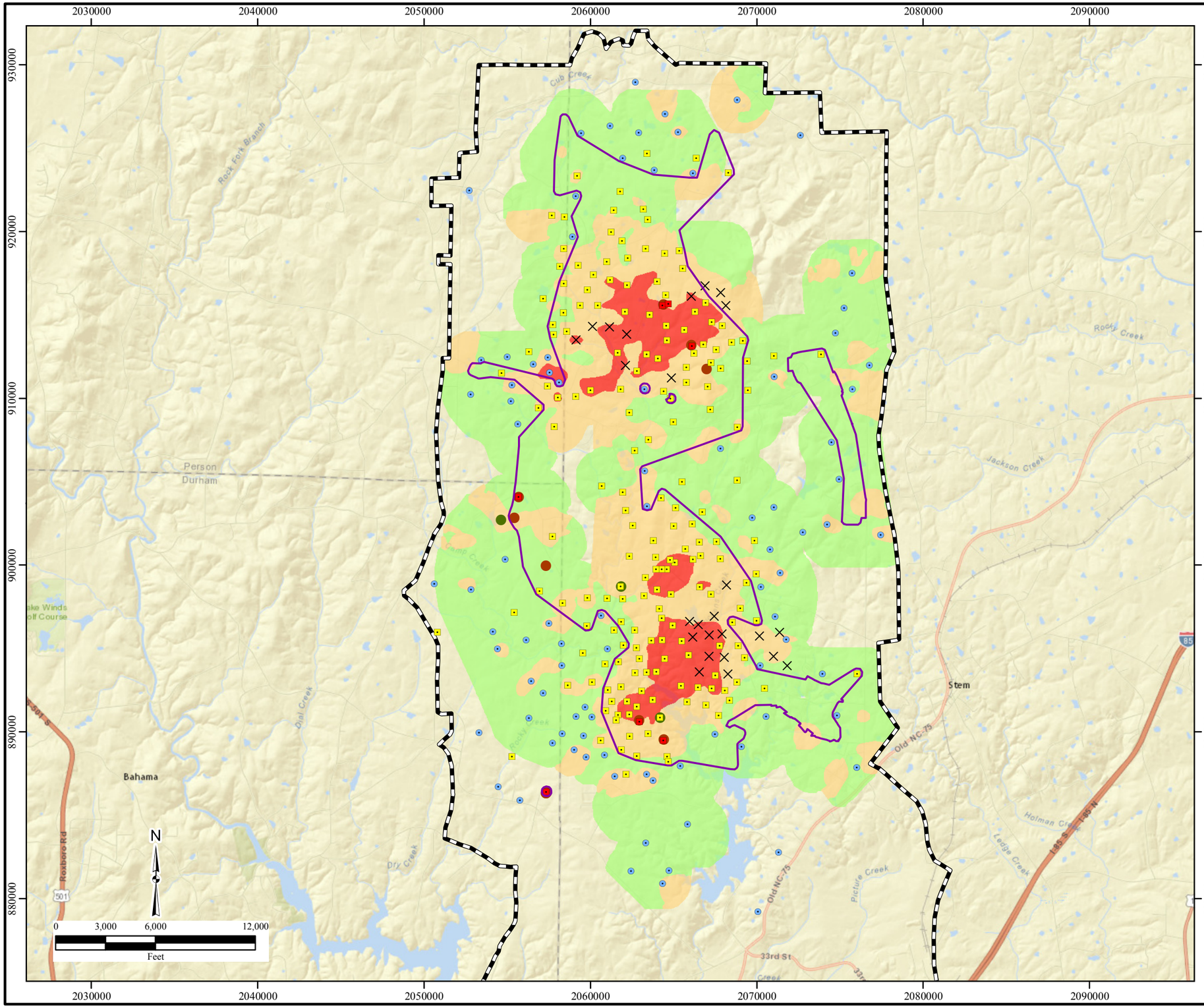
Figure 4.4b
Digital Geophysical Mapping
Anomaly Density



Legend

- MEC
- Munition Debris

Grid Intrusive Results

- MEC
- Munition Debris
- Cultural Debris
- Access Refused
- MEC Contamination
- High Anomaly Density
- Medium Anomaly Density
- Low Anomaly Density
- Former Camp Butner

Notes:
Grid locations displayed are the southwest corner points.

DGM=Digital Geophysical Mapping
MEC=Munitions and Explosives of Concern

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(4-04b)DGM_AnomDens.mxd
1/7/2015 CNL
Source: HGL, USACE
ESRI Online Aerial Imagery

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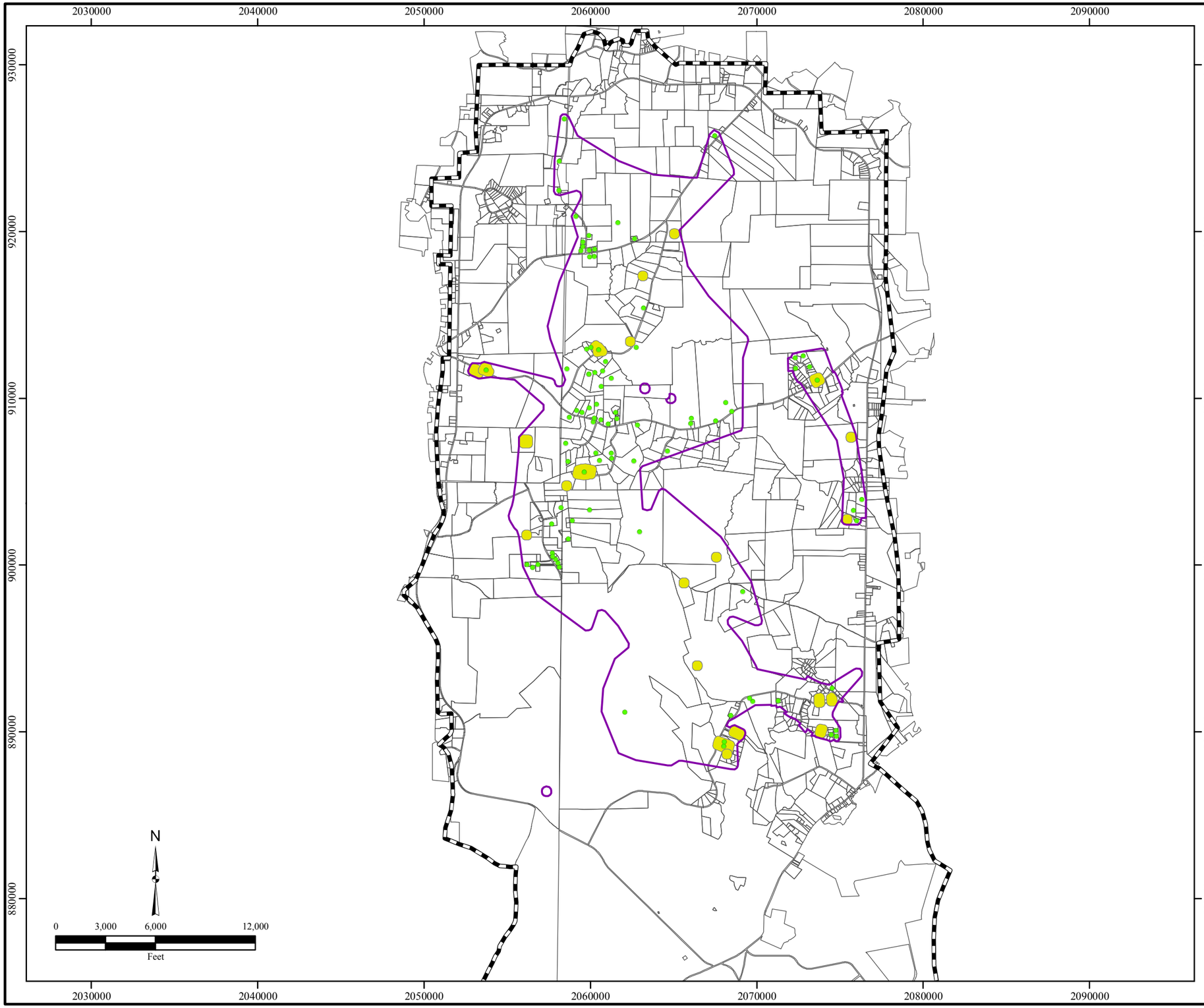
Figure 4.4c
Historical Investigation Results



Legend

- Historical MEC Findings
- MEC Area Based on Historical MEC Findings
- MEC Contamination
- Parcel
- Former Camp Butner

Notes:
Historical result include the EE/CA data and various data from previous removal actions.

MEC=Munitions and Explosives of Concern
mm=millimeter

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(4-04c)Historical_Results.mxd
1/7/2015 CNL
Source: HGL, USACE

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MUNITIONS RESPONSE TEAM

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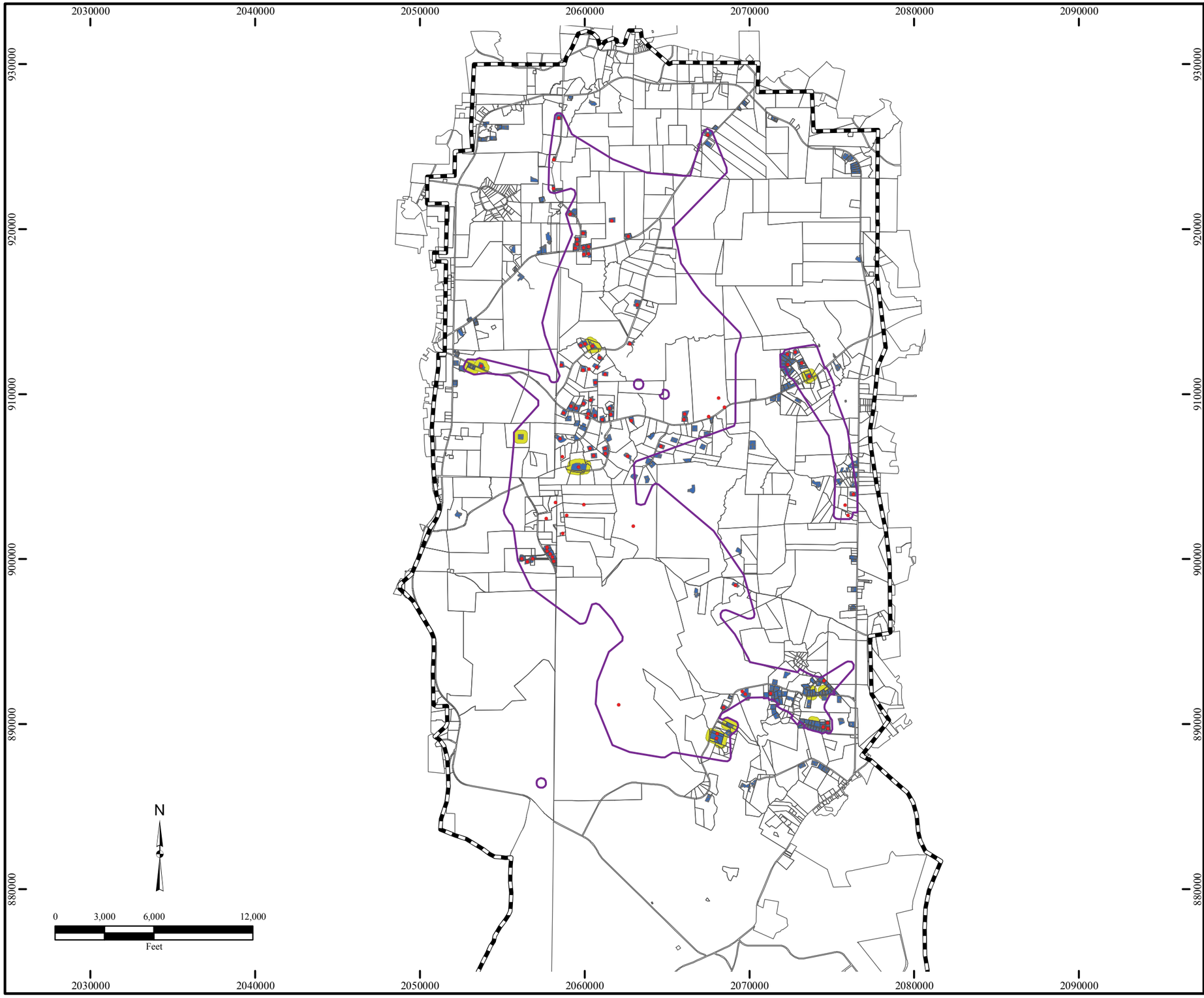
Figure 4.4d
Removal Action Investigation Results



Legend

- Historical MEC Findings
- MEC Area Based on Historical MEC Findings
- Clearance Areas
- MEC Contamination
- Parcel
- Former Camp Butner

Notes:
Historical result include the EE/CA data and various data from previous removal actions.
Data includes removal actions: Time Critical Removal Action (TCRA) - Lakeview Subdivision (Parsons, 2003), TCRA - Blalock and Riley Properties (USA, 2004), Removal Action Flame Trrower Range (USA, 2006); and Removal Actions at Lakeview Subdivision and other Residential Parcels conducted within RC1 and RC2 (USA, 2010 and 2011).

MEC=Munitions and Explosives of Concern
mm=millimeter

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5/1/2014 RB
Source: HGL, USACE
ESRI Online Aerial Imagery

HydroGeoLogic, Inc
MUNITIONS RESPONSE TEAM

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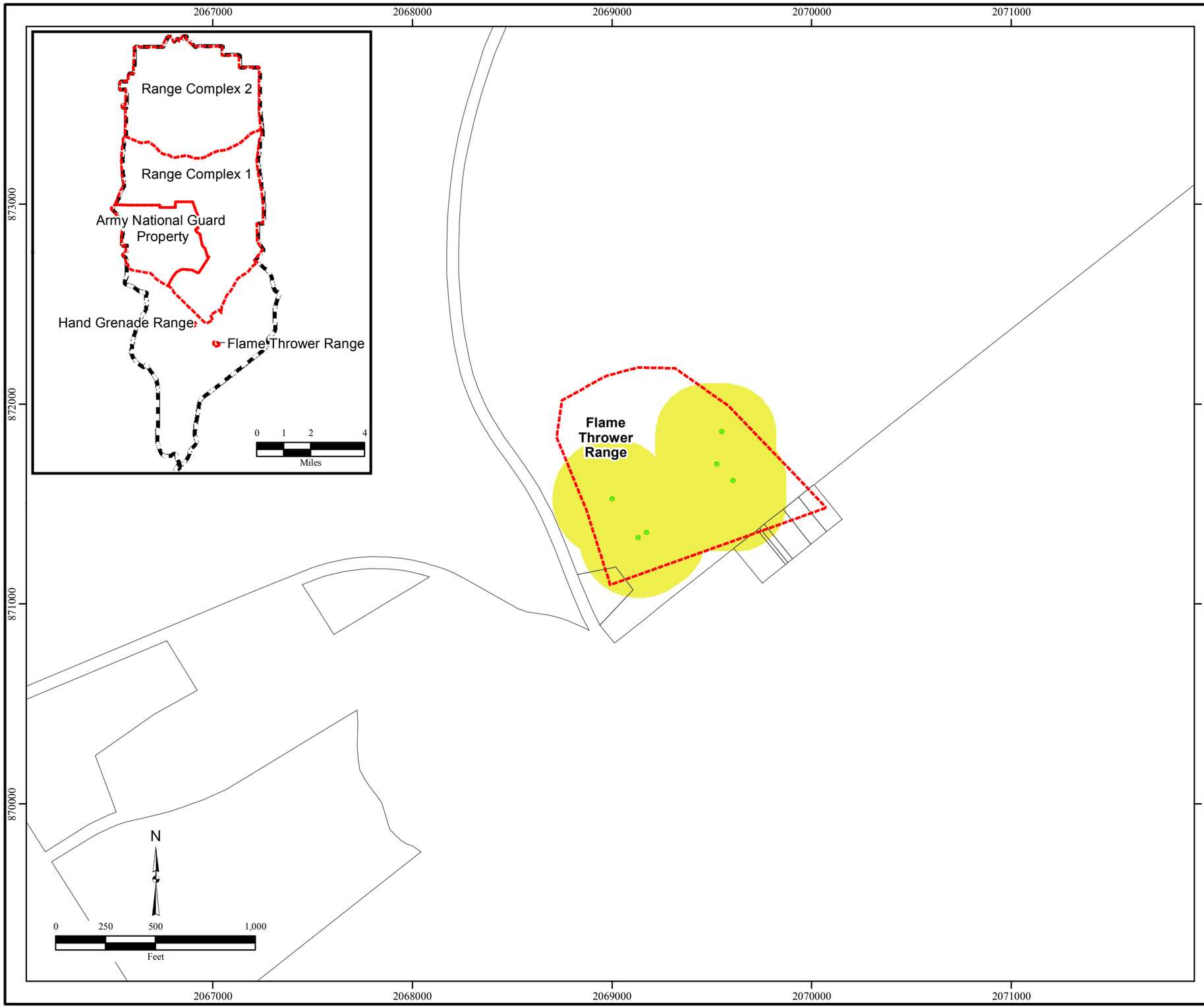
Figure 4.4e
Historical Investigation Results
Flame Thrower Range



Legend

- Historical MEC Findings
- MEC Area Based on Historical MEC Findings
- Parcel
- MRS
- Former Camp Butner

Notes:
Historical result include the EE/CA data and various data from previous removal actions.

MEC=Munitions and Explosives of Concern
MRS=Munitions Response Site
mm=millimeter

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1/9/2015 CNL
Source: HGL, USACE, USA Environmental

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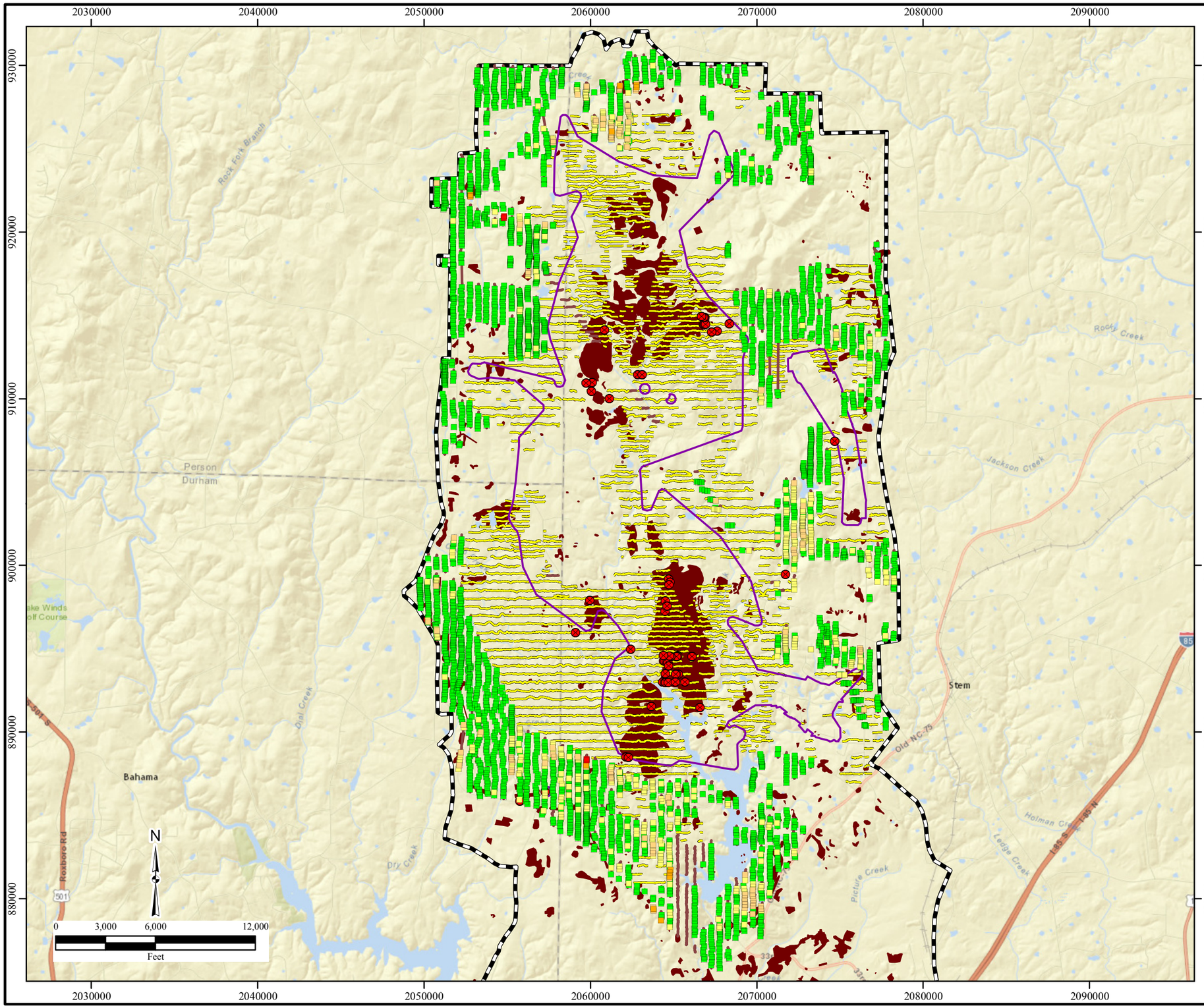
Figure 4.4f
Anomaly Counts of Reconnaissance Survey Transects



Legend

- Impact Crater

Anomaly Counts (Surface and Subsurface Counts):

- 0-4
- 5-12
- 13-30
- 31-50
- 51-125
- Recon
- DGM Transect
- TEC Historical Analysis
- MEC Contamination
- Former Camp Butner

Notes:
DGM=Digital Geophysical Mapping
MEC=Munitions and Explosives of Concern

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(4-04f)Recon_Count.mxd
1/14/2015 CNL
Source: HGL, USACE
ESRI Online Aerial Imagery

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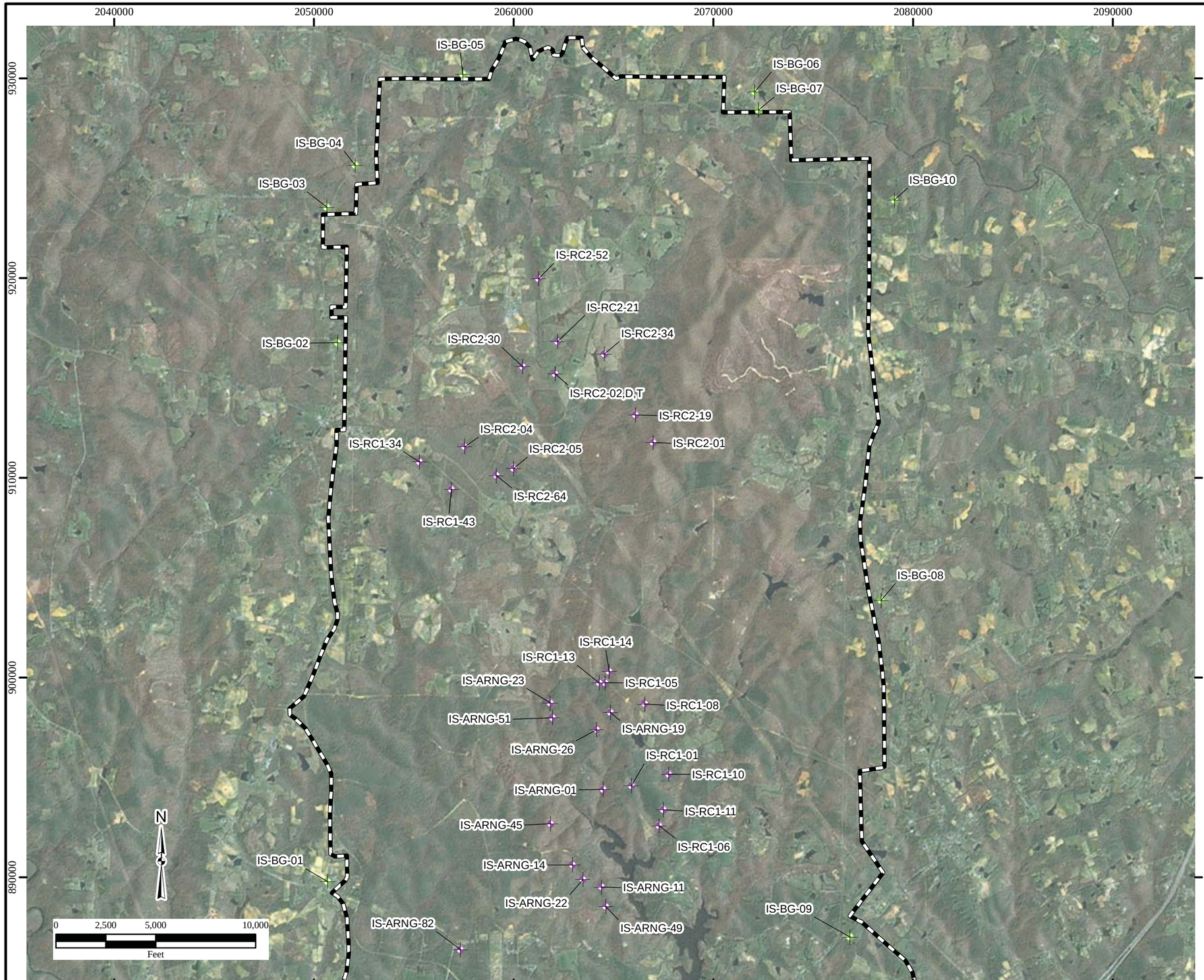
Figure 4.5
Sample Locations



Legend

- Incremental Sample
- Background Sample
- IS-RC2-01 Sample Identification
- Former Camp Butner

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(4-07)Sample_Locs.mxd
2/4/2014 RB
Source: HGL, USACE
ESRI Online Aerial Imagery

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5.0 REVISED CONCEPTUAL SITE MODEL AND RI RESULTS

This section describes the MEC and MC investigation results, the estimated extent of MEC and MC contamination at the site, and the revised CSM based on site characterization. The following subsections detail the results of the field investigation completed for each MRS.

5.1 MEC INVESTIGATION

5.1.1 Introduction

As described in Section 4.2, to meet the project DQOs for MEC (UXO) characterization, a combination of transects and grid investigation methods (either analog or DGM) were used for RI investigations at the ARNG, RC1, and RC2 MRSs. The disposal documentation for all activities performed at Camp Butner during this RI, including the signed DD Forms 1348-1A, is included in Appendix A and the demolition records for MEC are provided in Appendix D. The MPPEH tracking information is provided in the intrusive investigation results (Appendix F). All MD recovered during the investigation was also certified and verified, with the resulting MDAS being similarly containerized and stored pending disposal. Appendix F provides the geophysical summary report and various geophysical data appendices. The sections below include a summary of the MEC characterization developed for each MRS during the RI field activities.

5.1.2 ARNG MRS MEC Investigation

The ARNG MRS contains a total of 4,824 acres. Transect and grid DGM surveys were completed within the ARNG MRS. A total of 49.3 miles of geophysical transects, 29 miles of reconnaissance transects, and 89 intrusive investigation grids were completed within the ARNG MRS. There were no ROE refusals at this site. A total of 1,382 targets were selected for intrusive investigation; 6 targets resulted in MEC items, 657 were MD items, and 475 were miscellaneous farm debris. The remaining 144 targets were described by the field teams as “same as” another nearby target, or were noted as geology, false positives, or no finds. Table 5.1 summarizes the RI field activities completed, Table 5.2 summarizes the MEC found, and Table 5.3 provides details on the results of the RI field investigation at the ARNG MRS.

Table 5.1
Summary of RI Field Activities Completed - ARNG MRS

Activity Description	Basis	Qty
Site Acreage	Acres	4,824
Analog Transects	Miles	0.5
DGM Transects	Miles	49.3
Analog Grids Investigated	Grids	--
DGM Grids Investigated	Grids	89
Reconnaissance Transects	Miles	29.2
Grids QA'd by onsite OESS*	Grids	61
Grids not investigated (No ROE)	Grids	--

**All grids were QA/QC’d by the HGL project geophysicist in accordance with the work plan.*

Table 5.2
MEC Log – ARNG MRS

MEC ID	Anomaly ID (if applicable)	Nomen-clature	Type	Date Found	Date Destroyed	MEC	MPPEH
ARNG-001	ARNG 11-43	M48	60mm HE Mortar	3/22/13	3/22/13	X	
ARNG-002	ARNG 14-18	M49	60mm HE Mortar	4/2/13	4/2/13	X	
ARNG-003	NA	M70	57mm AP-T projectile	4/4/13	4/18/13		X
ARNG-004	ARNG 13-05	M2	3.25-inch AA Target Rocket	4/17/13	4/18/13		X
ARNG-005	ARNG 82-16	Mk II	Hand Grenade, HE	4/25/13	4/25/13	X	
ARNG-006	NA	Mk II	Hand Grenade, HE	4/25/13	4/25/13	X	
ARNG-007	NA	Mk II	Hand Grenade, HE	4/25/13	4/25/13	X	
ARNG-008	NA	Mk II	Hand Grenade, HE	4/25/13	4/25/13	X	

Table 5.3
Summary of Intrusive Investigation Results – ARNG MRS

Anom Type	# of Targets	# Items Found	Comments
Misc. Debris	475	514	Farm debris - Barbed wires, cans, bolts, wires, nails, chain links.
MD	657	670	Fragments
MEC	6	6	(4) Mk2 hand grendades and (2) 60mm Mortars
Blind Seed Items	89	89	DGM QC BSIs
Other	74	87	(60%) Geology, (25%) No Contacts, (15%) No Finds
Survey Point	8	8	Grid corner survey nails
Same As targets	70	70	Same as another adjacent DGM targets
Small Arms Ammo	3	5	Small Arms
Total:	**1382**	**1449**	

5.1.2.1 ARNG Hand Grenade MRS MEC Investigation

During investigations conducted outside the interpreted impact area of the ARNG MRS, intrusive investigations in ARNG-G082 resulted in the discovery of a previously unknown hand grenade range. The grid location was selected based on results of the reconnaissance transects and the historical analysis conducted by the Topographic Engineering Center (TEC) (TEC, 2001). During intrusive investigations, 39 anomalies were intrusively investigated and a total of five MkII hand grenades (all identified as MEC) were discovered on April 25, 2013. These were destroyed in accordance with the approved work plan on the same date. The MkII hand grenades were found at anomalies ARNG-082-16 and ARNG-082-020, within the grid. Based on the MEC discovered, the PDT determined that additional transects for delineation of this probable HGR be conducted. HGL conducted eight additional analog transects and identified the trenches shown in Figure 4.3. Based on the location of the trenches and the MEC found, the range was oriented so that the soldiers threw the grenades to the north. This HGR is bounded by the trenches across the south and the ARNG active training facility

constructed onsite to the north and to the west. During the analog transects, high surface anomaly densities related to dumping of cultural debris onsite were located. This HGR is delineated and should be created as a new MRS within Butner.

5.1.3 RC1 MEC Investigation

The RC1 MRS encompasses a total of 12,363 acres. Transect and grid DGM surveys were completed within the RC1 MRS. A total of 68 miles of geophysical transects, 40 miles of reconnaissance transects, 62 grids DGM surveyed and 28 analog intrusive grid investigations were completed within the RC1 MRS. A total of 749 targets were selected for intrusive investigation; 1 target resulted in a MEC item found (2.36-inch rocket warhead), 243 were MD items, and 283 were miscellaneous farm debris. The remaining 161 targets consisted of "same as" targets, geology, false positives, and no finds. One MEC item (57mm HE projectile, unfuzed) was identified during geophysical data collection on February 13, 2013. Two additional 57mm projectiles were located on February 14, 2013, while establishing the location for demolition operations for the MEC item found the day before. Table 5.4 summarizes the MEC found during all phases of the RI investigation, Table 5.5 summarizes the RI field activities completed and Table 5.6 provides details on the results of the RI field investigation at the RC1 MRS.

Table 5.4
MEC Log – RC1 MRS

MEC ID	Anomaly (if applicable)	Nomen-clature	Type	Date Found	Date Destroyed	MEC	MPPEH
RC1-001	NA	M306	57mm HE projectile	2/13/13	2/14/13	X	
RC1-002	NA	M306	57mm HE projectile	2/14/13	2/14/13	X	
RC1-003	NA	M70	57mm AP-T projectile	2/14/13	2/14/13		X
RC1-004	NA	M6	2.36-inch Rocket Warhead	5/16/13	5/16/13	X	

Table 5.5
Summary of RI Field Activities Completed – RC1 MRS

Activity Description	Unit	Qty
Site Acreage	Acres	12,363
Analog Transects	Miles	--
DGM Transects	Miles	68
Analog Grids Investigated	Grids	28
DGM Grids Investigated	Grids	62
Grids QA'd* by onsite OESS	Grids	29
Grids proposed but not investigated (No ROE)	Grids	15

**All grids were QA/QC'd by the HGL project geophysicist in accordance with the work plan*

Table 5.6
Summary of RI Intrusive Investigation Results – RC1 MRS

Anom Type	# of Targets	# Items Found	Comments
Cultural Debris	283	301	Barbed wires, cans, bolts, wires, nails, chain links, farm debris, etc.
MD	243	248	Frags
MEC	1	1	(1) 2.36" Rocket Warhead
Blind Seed Items	61	61	DGM QC BSIs
Other	142	151	(60%) Geology, (25%) No Contacts, (15%) No Finds
Survey Point	0	0	Grid corner survey nails
Same as targets	19	19	Same as another adjacent DGM targets
Small Arms Ammo	0	0	Small Arms
Total:	**749**	**781**	

5.1.4 RC2 MEC Investigation

The RC2 MRS contains a total of 11,529 acres. Transect and grid DGM surveys were completed within the RC2 MRS. A total of 69 miles of geophysical transects, 48.7 miles of reconnaissance transects, 0.7 miles of analog transects, 101 grids DGM surveyed (90 of the DGM'd grids were intrusively investigated) and 13 analog intrusive grid investigations were completed within the RC2 MRS. A total of 1,303 targets were selected for intrusive investigation; 2 targets resulted in a MEC item found (37mm practice projectile with M58 practice fuze), 818 were MD items, and 247 were cultural debris. The remaining 236 targets consisted of "same as" targets, seeds, geology, false positives, and no finds. Table 5.7 summarizes the MEC found, Table 5.8 summarizes the RI field activities completed and Table 5.9 provides details on the results of the RI field investigation at the RC1 MRS.

Table 5.7
MEC Log – RC2 MRS

MEC ID	Anomaly (if applicable)	Nomen-clature	Type	Date Found	Date Destroyed	MEC	MPPEH
RC2-001	NA	M107	155mm HE projectile	4/15/13	4/15/13	X	
RC2-002	RC2 019-16	M63 Mod 1	37mm Projectile, TP	5/1/13	5/1/13	X	
RC2-003	RC2 106-12	M63 Mod 1	37mm Projectile, TP	5/15/13	5/15/13	X	

Table 5.8
Summary of RI Field Activities Completed – RC2 MRS

Activity Description	Unit	Qty
Site Acreage	Acres	11,529
Analog Transects	Miles	0.7
DGM Transects	Miles	69.4
Analog Grids Investigated	Grids	13
DGM Grids Investigated	Grids	91
Grids QA'd by onsite OESS*	Grids	28
Grids DGM'd but not intrusively investigated (No ROE)	Grids	10

**All grids were QA/QC'd by the HGL project geophysicist in accordance with the work plan*

Table 5.9
Summary of RI Intrusive Investigation Results – RC2 MRS

Anom Type	# of Targets	# Items Found	Comments
Misc. Debris	242	284	Barbed wires, cans, bolts, wires, nails, chain links, farm debris, etc.
MD	793	815	Fragments
MEC	2	2	(2) 37mm Projectiles additionally, a 155mm projectile MEC item was located, but not as part of the Intrusive Investigation (not associated with a target)
Blind Seed Items	91	91	DGM QC blind seed items
Other	140	147	(60%) Geology, (25%) No Contacts, (15%) No Finds
Survey Point	2	2	Grid corner survey nails
Same as targets	33	33	Same as another adjacent DGM targets
Small Arms Ammo	0	0	Small Arms
Total:	**1303**	**1374**	

5.1.5 FTR MRS MEC Investigation

The EE/CA findings at the FTR MRS from 98 anomalies investigated included two UXO items (a Ml practice anti-tank landmine with spotting charge and fuze and a Mk II hand grenade) and five MD items (all expended and inert Ml5 smoke grenades) from 98 anomalies investigated (Parsons, 2004). The two UXO items were one Mk II hand grenade recovered at a depth of 1 inch and an Ml practice anti-tank landmine with spotting charge and fuze was recovered at a depth of 10 inches. All other anomalies were miscellaneous farm debris encountered within one foot of ground surface with the majority at depths less than six inches bgs. During the ASR site visit small arms ammunition casings (.30 caliber) were identified. Other findings include a 2.36-inch bazooka rocket reportedly found in unknown condition by a private citizen near the water tower concurrent to the EE/CA investigation. Historically this area was designated as a flame thrower/small arms range; however, the findings from the EE/CA suggest that this area was also used as a grenade training range.

Table 5.10
Summary of EE/CA Intrusive Investigation Results – FTR MRS

Description	Number of Anomalies
Designated MRS investigation area	5 acres
Number of Targets Selected	217
Total Number of Targets Investigated	98
MEC/MPPEH (from EE/CA)	2
MEC/MPPEH (found by private citizen)	1
MD	5
Other Debris (horse shoes, plow blades, leaf springs, hinges, an axe head, nails, wires, metal scrap, etc.	91
No Contact	0
Weight of MD	9 lbs
Weight of misc. farm debris	66 lbs

5.1.6 HGR MRS MEC Investigation

The former HGR MRS was reportedly located within the Umstead Farm, a dairy cattle research farm. The approximately 5-acre parcel designated for the EE/CA investigation is located in open pasture located approximately 0.25 miles west of the intersection of County Road 1004 and County Road 1121. Approximately 8.5 acres were geophysically mapped in and around the HGR MRS during the EE/CA. A total of 1173 anomalies were selected for intrusive investigation based on the anomaly ranking criteria and the approved anomaly selection strategy. Following the excavation of 829 (71 percent) of the selected anomalies, a review of the intrusive results found no MEC/MPPEH/MD items recovered from the approximately 6.4 acres investigated. Forty of the anomalies investigated (5 percent) were considered "false positives" as no discernible metallic debris was found. The EE/CA concluded that no further characterization was warranted in the HGR based on the lack of ordnance related findings (Parsons, 2004). No additional field data collection was performed under the current RI project.

Table 5.11
Summary of EE/CA Intrusive Investigation Results – HGR MRS

Description	Number of Anomalies
Designated MRS investigation area	25 acres
Area geophysically mapped	8.5 acres
Number of Targets Selected	1173
Total Number of Targets Investigated	829
MEC/MPPEH	0
MD	0
Other Debris (horse shoes, plow blades, leaf springs, hinges, an axe head, nails, wires, metal scrap, etc.	789
No Contact	40
Weight of MD	0
Weight of misc. farm debris	1,057 lbs

5.2 MC INVESTIGATION

This section describes the analytical results for MC samples collected during the RI field task and the rationale for the samples collected during these field tasks. The MC characterization strategy and data collection methods for the RI are presented in Subsection 4.3.

The analytical results of surface soil samples collected from the project site are presented in Appendix B. For data QC, select sample locations from each MRS and background areas were re-collected as confirmation samples and re-analyzed for explosives using an alternate laboratory (TestAmerica) from the laboratory used in the analyses conducted in July and August 2013 (Microbac). The re-analyzed results were treated as duplicate results of the original samples. Because of anomalous 2,4-DNT and 2,6-DNT results in the background soil samples, all ten background locations and select sample locations from each MRS were re-sampled for explosives analysis in October 2013. Based on the evaluation of all analytical data packages, it was determined that both the initial and re-sampled explosives results were usable.

Both sets of results were pooled, and the re-sampled results were treated as additional samples, not duplicate samples. Based on the analytical results and risk assessment presented in this report, no MC are present in soil at levels that pose a threat to human health or ecological receptors.

5.3 STATUS OF DATA QUALITY OBJECTIVES

The RI DQOs are described in Subsection 3.5. The overall project DQOs are structured to obtain data to sufficiently characterize the nature and extent of any MEC and/or MC contamination present at the project sites. Specific DQOs were established for both the MEC and MC investigations and are presented in Table 3.4. This subsection addresses the status of each of these DQOs at the completion of the RI.

5.3.1 MEC Characterization

As shown in Table 3.4, the MEC (including UXO) DQOs for the project site included conducting surface clearance, DGM surveys (both transects and grids), surface reconnaissance, and intrusive investigations. The DGM surveys were followed by an intrusive investigation of individual anomalies to fully characterize the nature and extent of identified anomalies. The MEC characterization activities were conducted in accordance with the performance requirements for RI reports as provided in the Work Plan. To achieve these MEC DQOs, DGM surveys and intrusive investigations were conducted across the project site, with the exception of parcels where ROE was refused. Based on the summary provided above and other information presented elsewhere in this report, the data obtained during this RI is considered sufficient to characterize the nature and extent of MEC contamination at the project site and the MEC DQOs for this RI are determined to have been achieved.

5.3.2 MC Characterization

As shown in Table 3.4, the MC DQOs for evaluating the presence or absence of MC contamination at the MRSs included the collection and analysis of ISM soil samples from each MRS and development of background concentrations for metals. To achieve this DQO for MC, 31 ISM soil samples were collected from the MRSs and 10 ISM background soil samples were collected. These samples were analyzed for MC as defined in the approved Work Plan (HGL, 2012b) and the results were compared to screening values to evaluate the presence or absence of MC. Conclusions regarding the presence or absence of MC were to be made based on the comparison of detected concentrations to screening values. The analytes detected were compared to screening values and COPCs were developed. The BLRA conducted is presented in Section 7.2. Based on the conclusion that no MC is present on site at levels that present a risk to human health or the environment, there is no MC contamination identified. The data obtained during this RI are sufficient to evaluate the presence or absence of MC contamination at the project site and the MC DQOs for this RI have been achieved.

5.4 EXTENT OF MEC AND MC CONTAMINATION

5.4.1 Extent of MEC Contamination

Using the RI data, an evaluation was performed to estimate the extent of any MEC contamination identified. The two primary objectives of this process are: (1) to achieve one of the RI goals, which is to characterize the extent of contamination, and (2) to define areas that will be evaluated in the subsequent FS.

5.4.1.1 ARNG MRS MEC Delineation

An estimate of the horizontal extent of MEC within the ARNG MRS was conducted by evaluating the anomaly density developed based on data collected inside the interpreted impact area, the intrusive results from grid investigations, and data collected during surface reconnaissance transects. Based on these data, the MEC contaminated area within the ARNG MRS was determined, as shown on Figure 4.4a and Figure 4.4b. The placement of the MEC contamination boundary was designed to have an accuracy of at least 250 ft; for example, at all times the boundary was drawn to be plus or minus 250 ft from a known RI data point; whether from density transect data, grid intrusive results, or reconnaissance transect data. An estimate of the vertical extent of MEC was provided by an evaluation of all intrusive results obtained. The deepest anomaly investigation during the ARNG intrusive was 26-inches bgs and located a piece of MD. The majority of MD found was located less than 1-ft bgs.

The area outside this MEC contamination boundary may still contain MEC; however, the existence of an elevated anomaly density area in these remaining lands is highly unlikely and the potential for encountering MEC in these areas is low based on the results of the RI. There were no prior investigations conducted on the ARNG MRS, so there was no historical investigation data to be incorporated into the RI conclusions. The MEC and MD found within the ARNG MEC-contaminated area includes the MEC and MD listed in Tables 5.1 and 5.3. In all of the ARNG remaining lands there were 68 pieces of MD found during the RI. This MD was: 90 percent unidentifiable fragments, 2 pieces of rifle grenade, 1 piece of slap flare, and 1 piece of 60mm mortar tail boom. If a grid included less than 2 pieces of MD based on the intrusive results, that grid was considered representative of non-elevated anomaly density areas. The ARNG MEC-contaminated area is 1,267 acres and the ARNG remaining lands is 3,557 acres. These two assessment areas are recommended for evaluation in the FS.

5.4.1.2 RC1 MRS MEC Delineation

An estimate of the horizontal extent of MEC within the RC1 MRS was conducted by evaluating the anomaly density developed based on data collected inside the interpreted impact area, the intrusive results from grid investigations, and data collected during surface reconnaissance transects. Based on these data, the MEC contaminated area within the RC1 MRS was determined, as shown on Figures 4.4a and Figure 4.4b. The placement of the MEC contamination boundary was designed to have an accuracy of at least 250 ft; for example, at all times the boundary was drawn to be plus or minus 250 ft from a known RI data point; whether from density transect data, grid intrusive results, or reconnaissance transect data

and/or a known historical investigation data point. An estimate of the vertical extent of MEC was provided by an evaluation of all intrusive results obtained. The deepest anomaly investigation during the RC1 intrusive was 28-inches bgs and located a piece of MD. The majority of MD found (82 percent) was located less than 2-ft bgs.

The area outside this MEC contamination boundary may still contain MEC; however, the existence of an elevated anomaly density area in these remaining lands is highly unlikely and the potential for encountering MEC in these areas is low based on the results of the RI. The prior investigations conducted on the RC1 MRS were incorporated in the MEC contamination boundary delineation. Based on the TCRA conducted at Lakeview Subdivision (Parsons, 2003) that clearance was conducted in the top 6 inches of soil. As MEC is anticipated to be present up to 28-inches bgs, the Lakeview subdivision parcels are included within the MEC contamination boundary, as MEC may remain in the subsurface. Additionally, prior investigations included non-TCRA removal actions conducted by USA Environmental, Inc. (USA). These findings cleared acreages around individual residences, and confirmed that MEC was present in some locations. However, as a clearance was conducted to depth of detection for these parcels, these ares were not included within the MEC contamination boundary; as a clearance has been conducted to depth. Where EE/CA data existed that confirmed MEC presence that area was included within the MEC contaminated boundary; as the EE/CA data confirms MEC presence but not MEC removal. Some residents did not participate in those non-TCRA removal actions, and the FS should potentially evaluate those parcels as a separate assessment area. The MEC and MD found within the RC1 MEC contaminated area includes the MEC and MD listed in Tables 5.4 and 5.6. In all of the RC1 remaining lands there are no MD found in the intrusive results. The RC1 MEC contaminated area is 5,221 acres and the RC1 remaining lands is 7,142 acres. These two assessment areas are recommended for evaluation in the FS.

5.4.1.3 RC2 MEC Contamination Delineation

An estimate of the horizontal extent of MEC within the RC2 MRS was conducted by evaluating the anomaly density developed based on data collected inside the interpreted impact area, the intrusive results from grid investigations, and data collected during surface reconnaissance transects. Based on these data, the MEC contaminated area within the RC2 MRS was determined, as shown on Figures 4.4a and 4.4b. The placement of the MEC contamination boundary was designed to have an accuracy of at least 250-ft; for example, at all times the boundary was drawn to be plus or minus 250-ft from a known RI data point; whether that be density transect data, grid intrusive results, or reconnaissance transect data or a known historical investigation data point. An estimate of the vertical extent of MEC was provided by an evaluation of all intrusive results obtained. The deepest anomaly investigation during the RC2 intrusive effort was 40-inches bgs and located a piece of MD. The majority of MD found (85 percent) was located at less than 1-ft bgs and 98 percent was located less than 2-ft bgs. A 250-ft buffer around two grids within the RC2 MRS (RC2 Grid 84 and RC2 Grid 55) where only cultural debris was found was applied, as showin in Figures 4.4a and 4.4b. As the grids had only cultural debris located, they were excluded from the MEC contaminated area.

The area outside this MEC contamination boundary may still contain MEC; however, the existence of an elevated anomaly density area in these remaining lands is highly unlikely and the potential for encountering MEC in these areas is low based on the results of the RI. The prior investigations conducted on the RC2 MRS were incorporated in the MEC contamination boundary delineation. The previous investigations included the non-TCRA RAs conducted by USA and the EE/CA conducted by Parsons. These findings cleared acreages around individual residences, and confirmed that MEC was present in some locations. However, as a clearance was conducted to depth of detection for these parcels, these RA areas were not included within the MEC contamination boundary; as a clearance has been conducted to depth. Some residents did not participate in those non-TCRA RAs, and the FS should potentially evaluate those parcels as a separate assessment area. Where EE/CA data existed that confirmed MEC presence, that area was included within the MEC contaminated boundary because while the EE/CA data confirms MEC presence, it does not confirm MEC removal. The MEC and MD found within the RC2 MEC contaminated area includes the MEC and MD listed in Tables 5.7 and 5.9. In the RC2 remaining lands there were some MD (unidentified fragments only) found in the intrusive results. If a grid included less than 2 pieces of MD based on the intrusive results, that grid was considered representative of non-elevated anomaly density areas. The RC2 MEC contaminated area is 4,298 acres and the RC2 remaining lands is 7,231 acres. These two assessment areas are recommended for evaluation in the FS.

5.4.2 Extent of MC Contamination

Based on the information provided in Subsection 4.3 and Section 7.2, MC sampling performed did not indicate a release of MC at the project site and MC contamination was not identified.

5.5 REVISED CONCEPTUAL SITE MODEL

5.5.1 Summary

The preliminary CSMs described in Subsection 3.1 were compared to the most current information from the RI results. The preliminary MC CSM required revision to reflect the conclusion of RI results that no MC contamination was identified in soil. Therefore, the revised MC CSM has no complete exposure pathways. The preliminary MEC CSM was also revised to reflect the current exposure pathways for MEC at the MRSs. The current MEC exposure pathways described in the revised CSMs are discussed in the following subsections.

5.5.2 MEC Exposure Pathways

The preliminary MEC CSM for the project site indicated potentially complete MEC exposure pathways at the project site for construction workers, trespassers, and authorized land users. Three critical elements are required for a complete MEC exposure pathway: a source of MEC; a receptor; and the potential for interaction between the source and the receptor (human or ecological). The RI results confirmed the presence of MEC contamination at project sites ARNG, RC1, and RC2 MRSs. The maximum suspected depth of MEC contamination is approximately 3.5 feet bgs, based on the intrusive investigation results. Additionally, the maximum expected intrusive activities associated with the site is 15 feet bgs, with maintenance

and utility workers potentially conducting trenching activities for underground utilities. The revised CSM has been completed for the MEC-contaminated areas delineated during the RI (Figure 5.1).

5.5.3 MC Exposure Pathways

An exposure assessment includes identification of potential exposure pathways, receptors, and exposure scenarios, as well as quantification of exposure. Characterization of the exposure setting and identification of all potentially exposed receptors and exposure pathways are discussed in Sections 3.1 and 7.2. Based on the determination that no MC contamination exists at the three MRSs at levels that pose unacceptable risk, the revised CSM for MC is included in Figure 5.2. Based on the RI conclusions, there are no complete exposure pathways identified for MC at these sites.

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FIGURES

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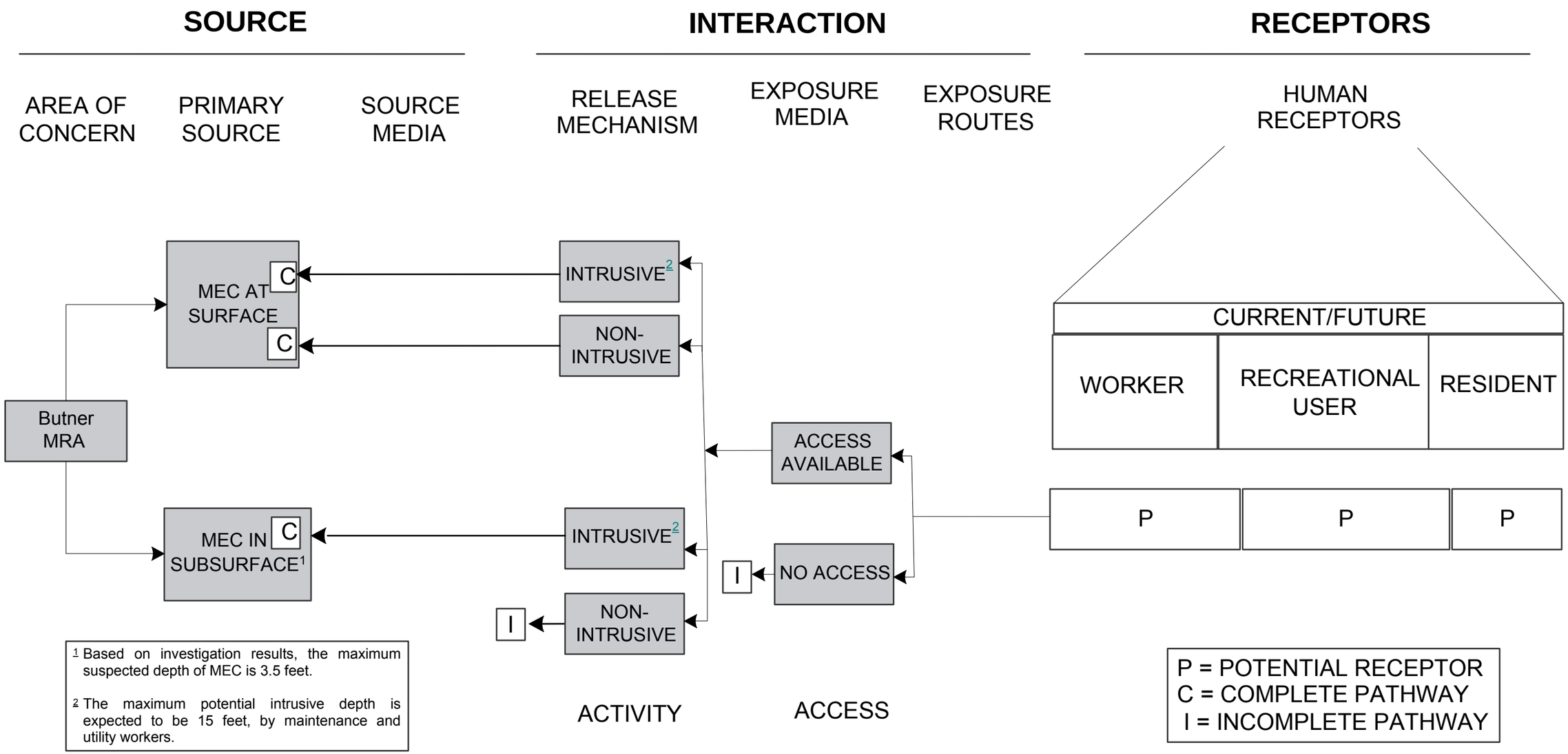

Figure 5.1 Revised MEC CSM

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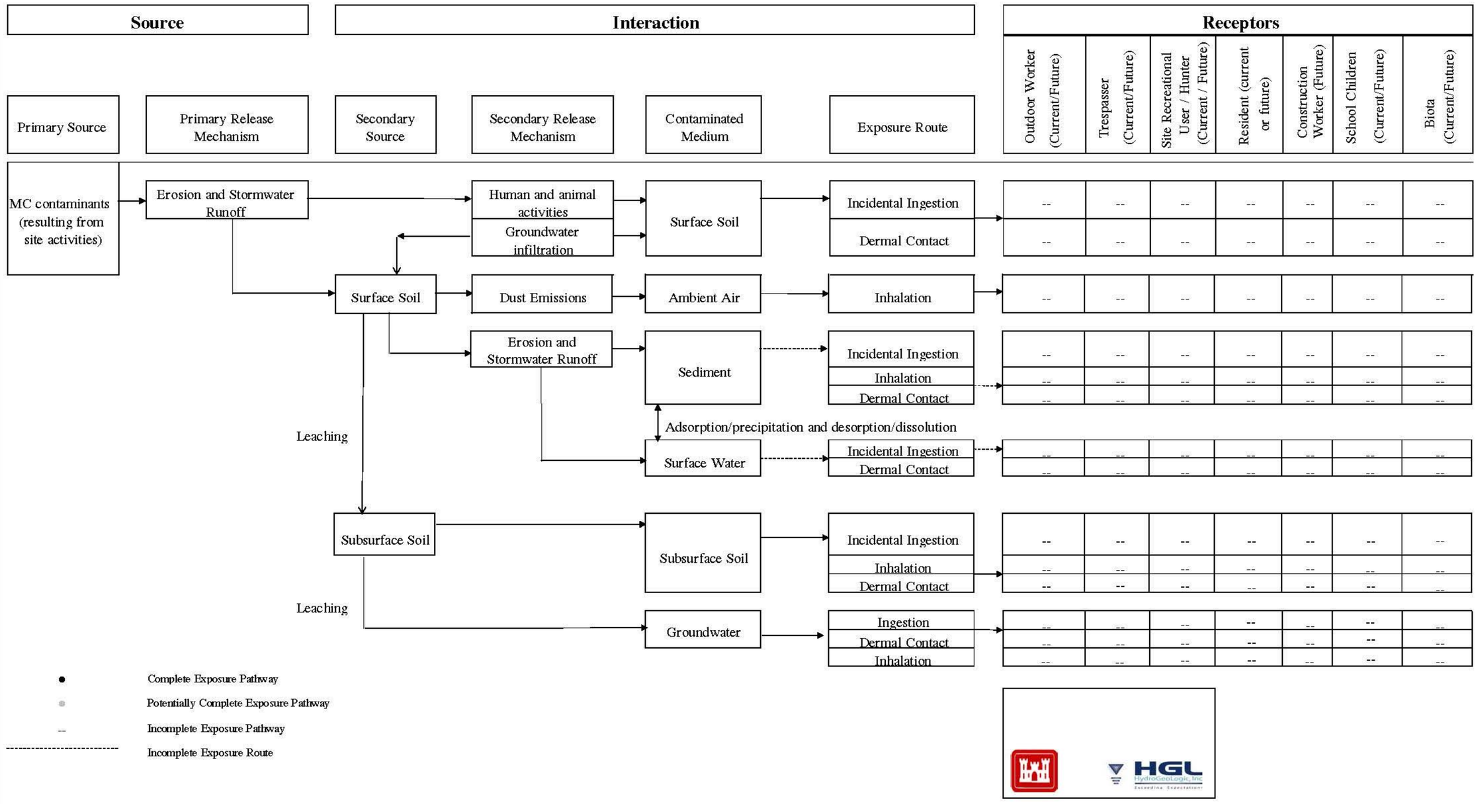

Figure 5.2 Revised MC CSM

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6.0 CONTAMINANT FATE AND TRANSPORT FOR UXO/DMM/MC

Contaminant release and migration is evaluated for MC contamination, if present, due to the risk posed to receptors from exposure to contaminated media and the migration of chemicals through environmental media. The presence of MEC may result in a release of MC to a site and migration of MC may occur due to releases by normal detonation, low order detonations, demolition, or where deterioration of the MEC item exposes MC to climate. MC may include the filler, secondary explosives, propellants of the munitions, or components of the munitions cases. If a release of MC is documented, the fate and transport of MC contaminants present in or released to the environment must be evaluated to support the overall evaluation of human health and/or the environment risks. As described in Section 4.3 and Section 7.2, no MC were identified within the MRSs at concentrations posing a risk to human health or ecological receptors. For this reason, the fate and transport of MC is not evaluated for Butner.

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7.0 BASELINE RISK ASSESSMENT FOR MC AND HA FOR UXO/DMM/MC

The BLRA is performed to evaluate adverse health effects due to hazards present on site. In addition, the HA is used to evaluate the magnitude and primary causes of the hazards at the site. The results of the HA are used to aid in the development, evaluation, and selection of appropriate response alternatives.

7.1 MEC HA

7.1.1 Introduction

A MEC HA was developed for each MRS, in accordance with the interim guidance document Munitions and Explosives of Concern Hazard Assessment Methodology (USEPA, 2008). This MEC HA interim guidance was developed by the Technical Working Group for Hazard Assessment, which included representatives from DoD, the U.S. Department of the Interior, USEPA, and various states and tribes. Input data was developed from historical documentation, field observations, previous investigation results, and the results of the RI. The The MEC HA qualitatively evaluates the potential hazards from MEC at a site and the primary causes of those potential hazards. The MEC HA method evaluates hazards to human receptors, but does not account for environmental or ecological concerns.

The MEC HA organizes site information in a consistent manner for the stakeholder decision-making process. However, the MEC HA does not provide a quantitative assessment of MEC hazards and is not used to determine whether further action is necessary at a site.

7.1.2 Conceptual Site Model

The updated MEC CSM was used to populate the input factors into the MEC HA. The CSM indicates the known or suspected MEC (i.e., energetic material type)/ MC sources, the potential/suspected locations and distribution of contamination, the related source or exposure media, the current and future receptors, and the potentially complete exposure pathways at the MRS. These items are discussed in the MEC exposure pathway analysis (Section 5.5.2).

7.1.3 MEC HA Input Factors Summary

The MEC HA evaluates the site based three primary factors: severity, accessibility, and sensitivity. Severity relates to the potential consequences to a human receptor if MEC were to detonate; accessibility is the likelihood that a human receptor will come into contact with a MEC item; and sensitivity is the likelihood that a MEC item will detonate if disturbed.

Each MEC HA input factor is assigned a score for the different input factors contributing to the overall MEC hazard. Scores for the input factor are in multiples of five, with a minimum possible score for all factors of 125 and a total maximum possible score of 1,000. These MEC HA scores are qualitative references only and should not be interpreted as quantitative measures of explosive hazard. These factors and their associated scores for the current site conditions, or baseline conditions, are are provided in Appendix K.

Table 7.1
Input Factors for the MEC HA

Input Factor
Energetic Material Type
Location of Additional Human Receptors
Site Accessibility
Potential Contact Hours
Amount of MEC
Minimum MEC Depth Relative to the Maximum Receptor Intrusive Depth
Migration Potential
MEC Classification
MEC Size

7.1.4 MEC HA Output Factors Summary

Once the categories and scores for all input factors are defined for a site, the scores for each category are totaled to calculate an overall MEC HA score. The total maximum possible MEC HA score ranges from 125 to 1,000. The MEC HA method identifies the associated hazard levels for these scores, which range from 1 to 4. A hazard level of 1 indicates the highest potential explosive hazard conditions and a hazard level of 4 indicates low potential explosive hazard conditions. The basis for these hazard levels is detailed in the MEC HA interim guidance document (USEPA, 2008). A summary of the hazard levels and their related MEC HA scores is presented in Table 7.2.

Table 7.2
Summary of MEC HA Hazard Level Scoring Rankings

Hazard Level	Maximum MEC HA Score	Minimum MEC HA Score	Associated Relative Explosive Hazard
1	1,000	840	Highest potential explosive hazard conditions
2	835	725	High potential explosive hazard conditions
3	720	530	Moderate potential explosive hazard conditions
4	525	125	Low potential explosive hazard conditions

Source: MEC HA interim guidance document (USEPA, 2008).

7.1.5 MEC HA Results Summary

MEC has been confirmed in the surface and subsurface at the ARNG, RC1, RC2, and FTR MRSs. The potential explosive safety risks using the MEC HA method for each site are summarized in Table 7.3. Hazard levels for each of these sites have the highest potential for explosive hazards. The FTR MRS has a lower hazard level, primarily due to the "amount of MEC" and "Minimum MEC Depth Relative to Maximum Receptor Intrusive Depth" input factors. The 5-acre site has undergone a clearance action from 2 to 3 ft deep and intrusive activities performed by current receptors and current land use are unlikely to expose additional MEC. As result, the hazard level indicates low potential explosive hazard conditions. This

information will provide the baseline for the assessment of response alternatives to be conducted in the FS. Since no MEC was present at the HGR, no MEC HA was required.

Table 7.3
Summary of MEC HA Baseline Scores for Camp Butner MRSs

MEC HA Input Factor	MRS					
	ARNG	ARNG Hand Grenade Range	RC1	RC2	FTR	HGR
Energetic Material Type	100	100	100	100	70	NA
Location of Additional Human Receptors	0	0	30	30	30	NA
Site Accessibility	80	80	80	80	80	NA
Potential Contact Hours	70	70	120	120	20	NA
Amount of MEC	180	180	180	180	30	NA
Minimum MEC Depth Relative to Maximum Receptor Intrusive Depth	240	240	240	240	25	NA
Migration Potential	10	10	10	10	10	NA
MEC Classification	180	180	180	180	180	NA
MEC Size	40	40	40	40	40	NA
TOTAL SCORE	900	900	980	980	485	NA
HAZARD LEVEL	1	1	1	1	4	NA

NA: Not applicable

7.2 RISK ASSESSMENT FOR MC

The BLRA is performed to evaluate adverse health effects due to hazards present onsite. The BLRA includes a quantitative HHRA and SLERA. The HHRA and SLERA were prepared in accordance with USACE and USEPA guidance. The risk assessment approach and results are discussed below.

7.2.1 Data used in the BLRA

The BLRA included only the data from areas investigated during the 2013 RI field investigation. The 2006 soil and sediment sampling included several discrete surface soil samples at Camp Butner, but the sampling location was limited to a small area within RC1. Because the historical samples would not reflect site conditions and would not provide delineation, their results were not incorporated into the BLRA dataset.

ISM soil samples were collected from ARNG, RC1, and RC2. Background soil samples were also collected using the ISM sampling approach. No discrete soil samples were collected during the RI. The soil datasets used in the BLRA were:

- ARNG: 11 surface soil samples collected in May 2013 (explosives and select metals analysis) and two samples collected in October 2013 (explosives analysis);
- RC1: 10 surface soil sample collected in May 2013 (explosives and select metals analysis) and five samples collected in October 2013 (explosives analysis);

- RC2: 10 surface soil samples collected in May 2013 (explosives and select metals analysis) and two samples collected in October 2013 (explosives analysis); and
- Background: 10 surface soil samples collected in May 2013 (explosives and select metals analysis) and 10 samples collected in October 2013 (explosives analysis).

The metals selected for analysis were antimony, copper, lead, and zinc. For data QC, select sample locations from each MRS and background areas were re-analyzed for explosives using an alternate laboratory from the laboratory used in the analyses conducted in July and August 2013. The re-analyzed results were treated as duplicate results of the original sample. Because of anomalous 2,4-DNT and 2,6-DNT results in the background soil samples, all background locations and select sample locations from each MRS were re-sampled for explosives analysis in October 2013. Based on the evaluation of the analytical data packages, it was determined that both the initial and re-sampled explosives results were usable. Both sets of results were pooled, and re-sampled results were treated as additional samples, not duplicate samples. No groundwater, surface water, or sediment samples were collected during the 2013 RI field investigation. The risk assessment did not evaluate exposure to these media.

7.2.2 Human Health Evaluation

7.2.2.1 Exposure Assessment

7.2.2.1.1 Exposure Setting and Conceptual Site Model

Section 2.2 describes the current demographics and land use at Camp Butner. Based on this information, the potential exposure routes for each MRS were selected. Because the investigation did not include volatile compounds, the inhalation of volatilized compounds was not identified as a complete exposure pathway. For all MRSs, the potential exposure media and associated exposure routes are listed below.

- Soil: direct contact with surface soil (ingestion, dermal contact);
- Soil: inhalation of fugitive dust emissions from surface soil;
- Soil: food consumption via soil uptake of chemicals in prey animals; and
- Soil: food consumption via soil uptake of chemical in foraged plants or crops grown on the site.

7.2.2.1.2 Receptors

Current and future land use at Camp Butner is residential, commercial, recreational, agricultural, and National Guard training. It is assumed that all of the investigation areas could be re-developed for future residential use or commercial-type use. Based on these land use assumptions, the following receptors were identified:

- Adult and child resident;
- Outdoor worker (represents workers who spends the majority of his/her time in the area on foot such as those involved in site maintenance activities at ARNG or those involved with agricultural or logging activities at RC1 and RC2);
- Maintenance/utility worker (represents a worker involved with trenching activities for subsurface utility lines);
- Construction worker;
- Adult and adolescent recreational user/hunter;
- Adult and adolescent trespasser; and
- Indoor worker.

The different receptors and potential exposure routes are summarized in Risk Assessment Guidance for Superfund (RAGS) Part D Table 1 format, shown in Table 7.4.

7.2.2.1.3 Screening to Identify COPCs

Analytes not detected in any of the surface soil samples were not identified as COPCs. The potential uncertainty associated with this approach was evaluated as part of the uncertainty analysis (see Section 7.2.2.3). In accordance with USEPA guidance, COPCs were identified through comparison of maximum detected concentrations to risk-based screening levels. Screening levels were obtained from the November 2013 USEPA RSLs. The COPCs were identified by comparing the maximum detected concentration to the USEPA residential soil RSLs (cancer risk = 1E-06, non-cancer hazard quotient [HQ] = 0.1). For a given analyte, if the maximum detected concentration was greater than either of these screening values, the chemical was identified as a COPC. The COPC screening for the three MRSs is presented in RAGS Part D Tables 2 format, shown in Tables 7.5a, 7.5b, and 7.5c.

Cancer risk represents the incremental probability of incurring cancer over a receptor's lifetime due to exposure to the site COPCs. This increased risk is in addition to the background probability of developing cancer. Screening level cancer risks were calculated by dividing the detected concentration by the cancer-based RSL and multiplying the quotient by 1E-06.

The non-cancer HQ is the ratio of the chronic daily intake to an intake protective of human health, including sensitive sub-populations such as children or the elderly. Screening level HQs were calculated by multiplying the non-cancer based screening value by 10, then dividing the detected concentration by the product.

7.2.2.1.4 Evaluation of Background Data

After screening to identify COPCs, the results were compared to the background data collected at Camp Butner during the RI. Background data were collected using the ISM, and are evaluated based on 95 percent upper confidence limit (UCL) calculation. According to

recent guidance from the Interstate Technology & Regulatory Council, calculation of a 95 percent UCL for ISM data requires a minimum of three ISM samples, and with ISM data, the 95 percent UCL is used as the exposure point concentration (EPC) even if it exceeds the maximum reported concentration. Two statistical methods, the Student's-t and Chebyshev, are considered appropriate for calculating the 95 percent UCL for ISM data. These methods were used to calculate the 95 percent UCL for each ISM dataset as needed. The background UCL values are presented in Table 7.6.

7.2.2.2 Risk Characterization

In accordance with the RI Work Plan (HGL, 2012b), the risk characterization is a qualitative evaluation of potential risk associated with Butner. The risks for each MRS are discussed in the subsections below.

7.2.2.2.1 ARNG

The maximum concentrations of antimony, copper, lead, and zinc detected at ARNG were less than risk-based screening levels. Therefore, no metals were identified as soil COPCs at ARNG. Metals in the ARNG soil do not pose a threat to human health.

DNT mixture (2,4-DNT and 2,6-DNT) were identified as COPCs in soil at ARNG. The maximum concentration of 2,6-DNT, 2.34 mg/kg, was greater than the screening value of 0.33 mg/kg based on a cancer risk of 1E-06. The estimated cancer risk associated with this maximum detection, based on a screening level risk calculation using the residential soil RSL, is 7.1E-06. The maximum concentration of the DNT mixture, 2.9 mg/kg, was greater than the screening value of 0.72 mg/kg based on a cancer risk of 1E-06. The estimated cancer risk associated with this maximum detection, based on a screening level risk calculation, is 4.0E-06. Both risk estimates are on the lower end of the target risk range.

Because of anomalous DNT results for the background samples, all the background locations and the ARNG locations with the two highest DNT results, ARNG-01 and ARNG-23, were re-sampled in October 2013. Neither 2,6-DNT nor 2,4-DNT was detected in the October 2013 ARNG samples. These results suggest that the data for the remaining ARNG sample locations may be biased high and may overestimate potential risks. Given that the maximum May 2013 detections resulted in cancer risks on the low end of the target risk range, explosives in the ARNG soil do not pose a threat to human health.

Table 7.4
Selection of Exposure Pathways, ARNG, RC1, and RC2, Camp Butner

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current/ Future	Surface Soil	Surface Soil	Direct Soil Contact	Resident	Adult and child	Ingestion	Qual.	In the absence of LUCs, the ARNG may be re-developed for residential use. The majority of RC1 and RC2 is privately owned and encompasses private residences.
						Dermal	Qual.	
				Outdoor Worker	Adult	Ingestion	Qual.	An individual involved in site maintenance activities may contact soil at the ARNG site. At RC1 and RC2, individuals involved in agricultural or logging activities may contact site soil.
						Dermal	Qual.	
				Maintenance/Utility Worker	Adult	Ingestion	Qual.	Trenching activities for subsurface utility lines may occur at all three sites.
						Dermal	Qual.	
				Construction Worker	Adult	Ingestion	Qual.	Construction or land development activities may occur at all three sites.
						Dermal	Qual.	
				Recreational User/Hunter	Adult and adolescent	Ingestion	Qual.	Currently, the majority of RC1 and RC2 is privately owned, and hunting may occur on these sites. The ARNG site could be used for hunting in the future.
						Dermal	Qual.	
				Trespasser	Adult and adolescent	Ingestion	Qual.	Under current and potential future site conditions, trespassers could be exposed to soil at all three sites.
						Dermal	Qual.	
				Indoor Worker	Adult	Ingestion Dermal	Qual.	The training center on the ARNG property may have indoor workers. The privately owned land encompassed by RC1 and RC2 could be developed for industrial/commerical use.
		Air	Fugitive Dust Emissions from Surface Soil at Site	Resident	Adult and child	Inhalation	Qual.	Current residents on RC1 and RC2 and potential future residents at ARNG could be exposed to fugitive dust emissions from surface soil.
				Outdoor Worker	Adult	Inhalation	Qual.	Current and potential future outdoor workers could be exposed to fugitive dust emissions.
				Maintenance/Utility Worker	Adult	Inhalation	Qual.	Excavation of utility trenches can generate dust.
				Construction Worker	Adult	Inhalation	Qual.	Construction activities can generate dust.
				Recreational User/Hunter	Adult and adolescent	Inhalation	Qual.	Current and potential future recreational uses and hunters may be exposed to fugitive dust.
				Trespasser	Adult and adolescent	Inhalation	Qual.	Current and potential future trespassers may be exposed to fugitive dust.
				Indoor Worker	Adult	Inhalation	None	Indoor workers are unlikely to be exposed to fugitive dust emissions.
		Prey Animals	Uptake by prey animals of chemicals in the site soil	Resident	Adult and child	Ingestion	Qual.	Current and potential future residents may hunt deer and consume the meat.
				Outdoor Worker	Adult	Ingestion	None	The outdoor worker is unlikely to hunt at the sites.
				Maintenance/Utility Worker	Adult	Ingestion	None	The maintenance/utility worker is unlikely to hunt at the sites.
				Construction Worker	Adult	Ingestion	None	The construction worker is unlikely to hunt at the sites.
				Recreational User/Hunter	Adult and adolescent	Ingestion	Qual.	Currently, individuals may hunt on the privately owned portions of RC1 and RC2. In the future, people could hunt at the ARNG site.
				Trespasser	Adult and adolescent	Ingestion	None	The tresapsser is assumed not to hunt at the sites.
				Indoor Worker	Adult	Ingestion	None	The indoor worker is unlikely to hunt at the sites.
		Plant Tissue	Soil uptake in wild berries foraged from site or crops grown on the site	Resident	Adult and child	Ingestion	Qual.	Current residents on RC1 and RC2 and potential future residents at ARNG could grow vegetables or fruit for consumption.
				Outdoor Worker	Adult	Ingestion	None	The outdoor worker is unlikely to gather fruit or grow crops at the sites.
				Maintenance/Utility Worker	Adult	Ingestion	None	The maintenance/utility worker is unlikely to gather fruit or grow crops at the sites.
				Construction Worker	Adult	Ingestion	None	The construction worker is unlikely to gather fruit or grow crops at the sites.
				Recreational User/Hunter	Adult and adolescent	Ingestion	Qual.	The recreational user may forage for wild berries at RC1 or RC2 or, in the future, the ARNG.
				Trespasser	Adult and adolescent	Ingestion	None	The trespasser is assumed not to gather wild berries at the sites.
				Indoor Worker	Adult	Ingestion	None	The indoor worker is unlikely to gather wild fruit at the sites.
	Groundwater	Groundwater	Use of groundwater for drinking water	All	All	All	None	Under current site condition, this exposure pathway is still incomplete. There is no evidence that soil contaminants are leaching to groundwater.
	Surface Water	Surface water	Direct contact with impacted surface water	All	All	All	None	Under current site condition, this exposure pathway is still incomplete. No evidence that contaminated soil has migrated to surface water bodies.
	Sediment	Sediment	Direct contact with impacted sediment	All	All	All	None	Under current site condition, this exposure pathway is still incomplete. No evidence that contaminated soil has migrated to surface water bodies.

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Table 7.5a
Soil Occurrence, Distribution and Selection of COPCs for Detected Analytes, ARNG, Camp Butner

Scenario Timeframe: Currnet/Future
Medium: Surface Soil
Exposure Medium: Surface Soil
Exposure Point: Direct Soil Contact

CAS Number	Chemical	Minimum Concentration[1]	Minimum Qualifier	Maximum Concentration[1]	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Limit of Detection	Concentration Used for Screening[2]	Background Value[3]		Screening Toxicity Value[4]		COPC Flag	Rationale for Selection or Deletion[5]
Metals																
	Antimony, Total	0.177		0.744		mg/kg	IS-ARNG-82	11/11		0.744	29.0	[a]	3.1	n	NO	BSL
	Copper, Total	3.24		75.7	J	mg/kg	IS-ARNG-82T	11/11		75.7	32.4	[a]	310	n	NO	BSL
	Lead, Total	11.6		83.0	J	mg/kg	IS-ARNG-82	11/11		83.0	17.9	[b]	400		NO	BSL
	Zinc, Total	5.8	J	168	J	mg/kg	IS-ARNG-82D	11/11		168	58.2	[a]	2300	n	NO	BSL
Explosives																
	1,3,5-TNB	0.46	MJ	0.46	MJ	mg/kg	IS-ARNG-01	1/13	0.038 - 0.0996	0.46	0.5	[c]	220	n	NO	BSL
	1,3-Dinitrobenzene	0.025		0.049	J	mg/kg	IS-ARNG-01	2/13	0.038 - 0.0996	0.049	no detects		0.61	n	NO	BSL
	2,4,6-TNT	0.0051		0.0051		mg/kg	IS-ARNG-01	2/13	0.038 - 0.0996	0.0051	no detects		3.6	n	NO	BSL
	2,4-DNT	0.23		0.68		mg/kg	IS-ARNG-01	11/13	0.038	0.68	NC	[d]	1.60	c	NO	BSL
	2,6-DNT	0.83		2.34	J	mg/kg	IS-ARNG-01	11/13	0.038	2.34	NC	[d]	0.33	c	YES	ASL
	2,4 and 2,6 mixture	1.06		2.90		mg/kg	IS-ARNG-01	11/13	--	2.90	NC	[d]	0.72	c	YES	ASL
	2-Nitrotoluene	0.032		0.032		mg/kg	IS-ARNG-01	1/13	0.076 - 0.0996	0.032	0.023	[c]	2.9	c	NO	BSL
	3-Nitrotoluene	0.032		0.032		mg/kg	IS-ARNG-01	1/13	0.076 - 0.0996	0.032	0.025	[c]	0.61	n	NO	BSL
	4-Nitrotoluene	0.015		0.015		mg/kg	IS-ARNG-01	1/13	0.091 - 0.0996	0.015	0.012	[c]	24	n	NO	BSL
	Nitrobenzene	0.096	JQ	0.096	JQ	mg/kg	IS-ARNG-23	1/13	0.0913 - 0.0996	0.096	0.180	[c]	4.8	c	NO	BSL

[1] Minimum/Maximum detected concentrations.
[2] Maximum detected concentration is used for screening.
[3] Background UCL = 95% upper confidence limit for analyte concentrations from background dataset
[4] Risk-Based Concentration Table, November 2013, USEPA (Residential Soil; Cancer risk = 1E-06, Noncancer Hazard = 0.1)
[5] Rationale Codes: Above Screening Level (ASL), Below Screening Level (BSL)
[a] Use of Chebyshev 95% UCL due to skewness of dataset.
[b] Use of Student's-t 95% UCL; data appear normally distributed
[c] Use of maximum value; limited number of detections (4 or fewer) for calculating a background value
[d] There is too much uncertainty over the reliability of the original sample results to support calculation of a background value.

Additional Notes: Screening level for lead is the safe level for residential use as recommended by the USEPA Office of Solid Waste and Emergency Response (OSWER)

COPC = Chemical of Potential Concern
c = Carcinogenic value used
n = Noncarcinogenic value used
J = Estimated Value
UCL = upper confidence limit
NC = not calculated
mg/kg = milligrams per kilogram
Limit of detection is the estimate of the minimum concentration that the analytical process can reliably detect

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Table 7.5b
Soil Occurrence, Distribution and Selection of COPCs for Detected Analytes, RC1, Camp Butner

Scenario Timeframe: Currnet/Future
Medium: Surface Soil
Exposure Medium: Surface Soil
Exposure Point: Direct Soil Contact

CAS Number	Chemical	Minimum Concentration[1]	Minimum Qualifier	Maximum Concentration[1]	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Limit of Detection	Concentration Used for Screening[2]	Background Value[3]		Screening Toxicity Value[4]		COPC Flag	Rationale for Selection or Deletion[5]
Metals																
	Antimony, Total	0.198		4.18		mg/kg	IS-RC1-13	10/10		4.18	29.0	[a]	3.1	n	YES	ASL
	Copper, Total	3.07	J	15.2	J	mg/kg	IS-RC1-10	10/10		15.2	32.4	[a]	310	n	NO	BSL
	Lead, Total	7.74		70.6		mg/kg	IS-RC1-13	10/10		70.6	17.9	[b]	400		NO	BSL
	Zinc, Total	11.2	J	46.5	J	mg/kg	IS-RC1-10	10/10		46.5	58.2	[a]	2300	n	NO	BSL
Explosives																
	1,3,5-TNB	0.076	QJ	0.076	QJ	mg/kg	IS-RC1-10	1/15	0.037 - 0.1	0.076	0.5	[c]	220	n	NO	BSL
	2,4,6-TNT	0.0057		0.0057		mg/kg	IS-RC1-08	1/15	0.037 - 0.1	0.0057	no detects		3.6	n	NO	BSL
	2,4-DNT	0.331		0.98		mg/kg	IS-RC1-08	10/15	0.037 - 0.039	0.98	NC	[d]	1.60	c	NO	BSL
	2,6-DNT	0.053	J	3.8		mg/kg	IS-RC1-08	13/15	0.038 - 0.039	3.8	NC	[d]	0.33	c	YES	ASL
	2,4 and 2,6 mixture	0.053		4.78		mg/kg	IS-RC1-08	13/15	--	4.78	NC	[d]	0.72	c	YES	ASL
	2-Amino-4,6-DNT	0.047	J	0.047	J	mg/kg	IS-RC1-08	1/15	0.038 - 0.1	0.047	no detects		15	n	NO	BSL
	2-Nitrotoluene	0.039		0.039		mg/kg	IS-RC1-08	1/15	0.074 - 0.1	0.039	0.023	[c]	2.9	c	NO	BSL
	3-Nitrotoluene	0.039		0.039		mg/kg	IS-RC1-08	1/15	0.074 - 0.1	0.039	0.025	[c]	0.61	n	NO	BSL
	4-Nitrotoluene	0.019		0.048	J	mg/kg	IS-RC1-01	2/15	0.093 - 0.1	0.048	0.012	[c]	24	n	NO	BSL

[1] Minimum/Maximum detected concentrations.
[2] Maximum detected concentration is used for screening.
[3] Background UCL = 95% upper confidence limit for analyte concentrations from background dataset
[4] Risk-Based Concentration Table, November 2013, USEPA (Residential Soil; Cancer risk = 1E-06, Noncancer Hazard = 0.1)
[5] Rationale Codes: Above Screening Levels (ASL), Essential Nutrient (NUT), Below Screening Level (BSL)
[a] Use of Chebyshev 95% UCL due to skewness of dataset.
[b] Use of Student's-t 95% UCL; data appear normally distributed
[c] Use of maximum value; limited number of detections (4 or fewer) for calculating a background value
[d] There is too much uncertainty over the reliability of the original sample results to support calculation of a background value.

Additional Notes: Screening level for lead is the safe level for residential use as recommended by the USEPA OSWER.

COPC = Chemical of Potential Concern
c = Carcinogenic value used
n = Noncarcinogenic value used
J = Estimated Value
UCL = upper confidence limit
NC = not calculated
mg/kg = milligrams per kilogram
Limit of detection is the estimate of the minimum concentration that the analytical process can reliably detect

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Table 7.5c
Soil Occurrence, Distribution and Selection of COPCs for Detected Analytes, RC2, Camp Butner

Scenario Timeframe: Currnet/Future
Medium: Surface Soil
Exposure Medium: Surface Soil
Exposure Point: Direct Soil Contact

CAS Number	Chemical	Minimum Concentration[1]	Minimum Qualifier	Maximum Concentration[1]	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Limit of Detection	Concentration Used for Screening[2]	Background Value[3]		Screening Toxicity Value[4]		COPC Flag	Rationale for Selection or Deletion[5]
Metals																
	Antimony, Total	0.217		47.3		mg/kg	IS-RC2-02	10/10		47.3	29.0	[a]	3.1	n	YES	ASL
	Copper, Total	3.56	J	16.4	J	mg/kg	IS-RC2-64	10/10		16.4	32.4	[a]	310	n	NO	BSL
	Lead, Total	10.4	J	28.9	J	mg/kg	IS-RC2-04	10/10		28.9	17.9	[b]	400		NO	BSL
	Zinc, Total	5.62	J	49	J	mg/kg	IS-RC2-21	10/10		49	58.2	[a]	2300	n	NO	BSL
Explosives																
	1,3,5-TNB	0.16	J	0.16	J	mg/kg	IS-RC2-64	1/12	0.038 - 0.0996	0.16	0.5	[c]	220	n	NO	BSL
	2,4,6-TNT	0.0064		0.047	J	mg/kg	IS-RC2-64	2/12	0.038 - 0.0996	0.047	no detects		3.6	n	NO	BSL
	2,4-DNT	0.269	J	1.18		mg/kg	IS-RC2-21	10/12	0.038	1.18	NC	[d]	1.60	c	NO	BSL
	2,6-DNT	0.88		3.9		mg/kg	IS-RC2-21	10/12	0.038	3.9	NC	[d]	0.33	c	YES	ASL
	2,4 and 2,6 mixture	1.149		5.08		mg/kg	IS-RC2-21	10/12	--	5	NC	[d]	0.72	c	YES	ASL
	2-Nitrotoluene	0.016		0.02		mg/kg	IS-RC2-21	2/12	0.075 - 0.0996	0.02	0.023	[c]	2.9	c	NO	BSL
	3-Nitrotoluene	0.016		0.026		mg/kg	IS-RC2-21	2/12	0.075 - 0.0996	0.026	0.025	[c]	0.61	n	NO	BSL
	4-Nitrotoluene	0.01		0.014		mg/kg	IS-RC2-21	2/12	0.094 - 0.0996	0.014	0.012	[c]	24	n	NO	BSL
	RDX	0.118	J	0.118	J	mg/kg	IS-RC2-64	1/12	0.075 - 0.0996	0.12	0.048	[c]	5.60	c	NO	BSL

Unfiltered data are shown.
[1] Minimum/Maximum detected concentrations.
[2] Maximum detected concentration is used for screening.
[3] Background UCL = 95% upper confidence limit for analyte concentrations from background dataset
[4] Risk-Based Concentration Table, November 2013, USEPA (Residential Soil; Cancer risk = 1E-06, Noncancer Hazard = 0.1)
[5] Rationale Codes: Above Screening Levels (ASL), Essential Nutrient (NUT), Below Screening Level (BSL)
[a] Use of Chebyshev 95% UCL due to skewness of dataset.
[b] Use of Student's-t 95% UCL; data appear normally distributed
[c] Use of maximum value; limited number of detections (4 or fewer) for calculating a background value
[d] There is too much uncertainty over the reliability of the original sample results to support calculation of a background value.

Additional Notes: Screening level for lead is the safe level for residential use as recommended by the USEPA OSWER.

COPC = Chemical of Potential Concern
c = Carcinogenic value used
n = Noncarcinogenic value used
J = Estimated Value
UCL = upper confidence limit
NC = not calculated
mg/kg = milligrams per kilogram
Limit of detection is the estimate of the minimum concentration that the analytical process can reliably detect

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Table 7.6
Background UCL Values

ISM Calculator for 1-sided Upper Confidence Limit (UCL) for the Mean

Note on Selecting a UCL Method. This worksheet can be used to calculate a 95 percent UCL from ISM data using both the Chebyshev and Student's-t methods. If you have discrete data or other knowledge that indicates the variability in contaminant concentrations within the DU is low, use the Student's t method. If discrete data or other knowledge suggests that the variability may be high or the variability is unknown, use the Chebyshev method. Because the Chebyshev method tends to yield higher UCL values for the same data set, it's statistical performance is desirable - it achieves the desired 95 percent coverage of the mean under conditions when the variability of concentrations throughout the DU are moderate or high (See Table 4-4). One drawback of this performance is that the Chebyshev will tend to more severely overestimate the true mean than Student's t. Nevertheless, if no discrete data are available to estimate this variability, then Chebyshev is generally preferred over Student's t. Do not mistake the standard deviation (SD) of replicates as a measure of this variability. The SD of replicates is a measure of consistency in estimates of the mean - this is considered a reliable indicator of the laboratory processing steps, but not an indicator of the degree of variability in the distribution of concentrations throughout the DU.

	Replicate Results															Summary Statistics		
Replicate Number	**Antimony**	**Copper**	**Lead**	**Zinc**	**135TNB**	**24DNT**	**26DNT**	**24/26**	**2NT**	**3NT**	**4NT**	**HMX**	**NB**	**RDX**	**35DNA**	**Stats A**	**Stats B**	**Notes**
Rep 1	0.154	2.160	7.220	5.230	0.014	0.037	0.037	0.0740	0.0160	0.0240	0.0120	0.0370	0.0920	0.0480	0.0370	--	--	If you have replicate ISM results, enter data in the first section "Replicate Results"
Rep 2	0.178	2.480	10.900	9.010	0.037	0.037	0.037	0.0740	0.0230	0.0250	0.0770	0.0370	0.0920	0.0740	0.0370	--	--	If you have summary statistics, enter data in the second section "Summary Statistics"
Rep 3	0.222	2.620	12.200	10.400	0.037	0.037	0.037	0.0740	0.0470	0.0740	0.0920	0.0380	0.0940	0.0740	0.0370	--	--	
Rep 4	0.260	3.070	13.000	11.400	0.038	0.038	0.038	0.0760	0.0740	0.0740	0.0920	0.0380	0.0940	0.0750	0.0380	--	--	
Rep 5	0.274	3.490	15.500	11.600	0.038	0.038	0.038	0.0760	0.0740	0.0750	0.0940	0.0380	0.0950	0.0750	0.0380	--	--	
Rep 6	0.304	4.000	16.400	11.700	0.039	0.038	0.038	0.0760	0.0750	0.0750	0.0940	0.0380	0.0960	0.0760	0.0380	--	--	
Rep 7	0.316	4.880	16.400	16.500	0.039	0.038	0.039	0.0780	0.0760	0.0760	0.0950	0.0390	0.0970	0.0780	0.0390	--	--	
Rep 8	0.325	8.640	17.200	26.300	0.048	0.039	0.039	0.0780	0.0760	0.0760	0.0950	0.0390	0.0970	0.0780	0.0390	--	--	
Rep 9	0.662	16.100	20.900	29.100	0.097	0.039	0.039	0.0780	0.0770	0.0770	0.0970	0.0390	0.0970	0.0790	0.0390	--	--	
Rep 10	53.900	54.500	22.600	93.000	0.097	0.039	0.450	0.4880	0.0780	0.0780	0.0970	0.0610	0.0973	0.0790	0.0610			
Rep 11					0.097	0.150	0.586	0.7430	0.0780	0.0780	0.0973	0.0970	0.0974	0.0970				
Rep 12					0.098	0.176	0.593	0.7620	0.0790	0.0790	0.0974	0.0973	0.0980	0.0973				
Rep 13					0.099	0.264	1.040	1.3040	0.0973	0.0973	0.0980	0.0974	0.0983	0.0974				
Rep 14					0.099	0.300	1.100	1.4000	0.0974	0.0974	0.0983	0.0983	0.0985	0.0983				
Rep 15					0.100	0.396	1.420	1.8160	0.0985	0.0985	0.0985	0.0985	0.0985	0.0985				
Rep 16					0.490	0.459	1.640	2.0990	0.0985	0.0985	0.0985	0.0985	0.1000	0.0985				
Rep 17					0.500	0.490	1.900	2.3900	0.1000	0.1000	0.1000	0.1000	0.1800	0.1000		--	--	
arithmetic mean	5.660	10.194	15.232	22.424	0.116	0.154	0.534	0.687	0.074	0.077	0.090	0.064	0.101	0.084	0.040			sample mean of replicate results
standard deviation	16.951	16.138	4.597	25.926	0.146	0.165	0.646	0.809	0.025	0.022	0.021	0.030	0.020	0.014	0.007			sample standard deviation of replicate results
CV = SD / mean	2.995	1.583	0.302	1.156	1.262	1.069	1.211	1.177	0.332	0.289	0.231	0.464	0.201	0.170	0.182			CV gives a measure of spread of the replicates, which is different from CV of underlying distribution
count (r)	10	10	10	10	17	17	17	17	17	17	17	17	17	17	10			For ISM, the sample size in the UCL calculation is the number of replicates, not the number of increments.
alpha (95% = 0.05)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	standard choice is alpha = 0.05
t(alpha, df=r-1)	1.83	1.83	1.83	1.83	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.83			from Student's t distribution
Student's t UCL	15.485	19.549	17.897	37.453	0.178	0.223	0.807	1.03	0.08	0.09	0.10	0.08	0.11	0.09	0.04			Note that the UCL for these relatively small sample sizes will typically exceed the maximum.
Chebychev UCL	29.024	32.439	21.569	58.161	0.270	0.328	1.217	1.54	0.10	0.10	0.11	0.10	0.12	0.10	0.05			The calculated UCL should be used (do not use the maximum).

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7.2.2.2.2 RC1

The maximum concentrations of copper, lead, and zinc detected at RC1 were less than risk-based screening levels. These metals do not pose a threat to human health.

Antimony was identified as a COPC in soil at RC1. The maximum antimony concentration, 4.18 mg/kg, was greater than the screening value of 3.1 mg/kg based on an HQ of 0.1. Because of the conservatism in the screening values, a concentration greater than the screening value does not necessarily pose a health threat. Based on a HQ of 1.0, which is a more appropriate screening value given that no other analytes have the same target effects as antimony (blood and longevity), comparison of the maximum detection to the residential soil RSL results in a screening level HQ of 0.1. Because this HQ is less than the target value of 1.0, antimony in the soil at RC1 does not pose a threat to human health. In addition, the maximum antimony detection was less than the 95 percent UCL of the background soil samples, 29 mg/kg, indicating that antimony concentrations at RC1 reflect natural site conditions.

2,6-DNT and DNT mixture (summed concentrations of 2,4-DNT and 2,6-DNT) were identified as COPCs in soil at RC1. The maximum concentration of 2,6-DNT, 3.8 mg/kg, was greater than the screening value of 0.33 mg/kg based on a cancer risk of 1E-06. The estimated cancer risk associated with this maximum detection, based on a screening level risk calculation, is 1.2E-05. The maximum concentration of the DNT mixture, 4.78 mg/kg, was greater than the screening value of 0.72 mg/kg based on a cancer risk of 1E-06. The estimated cancer risk associated with this maximum detection, based on a screening level risk calculation, is 6.6E-06.

As described above for ARNG, the May 2013 background samples had anomalous 2,4-DNT and 2,6-DNT that resulted in re-sampling of all background locations and select site locations in October 2013. At RC1, five of the ten May 2013 locations were re-sampled. At two of the re-sampled locations, DNTs were not detected. At the remaining three re-sampled locations, 2,6-DNT was detected with a maximum concentration of 0.16 mg/kg reported for RC1-11. This result is less than both the 2,6-DNT screening value (0.33 mg/kg) and DNT mixture screening value (0.72 mg/kg). At the locations that were not re-sampled, the DNT mixture concentration ranged from 1.42 to 1.97 mg/kg, which correspond to cancer risks of 2.0E-06 to 2.7E-06. The 2,6-DNT concentrations were 1.1 – 1.55 mg/kg, which correspond to cancer risks of 3.3E-06 to 4.7E-06. These risks are on the low end of the target risk range. Based on the low risks for the locations that were not re-sampled and the lack of screening value exceedances for the locations that were re-sampled, explosives contamination at RC1 does not pose a threat to human health.

7.2.2.2.3 RC2

The maximum concentrations of copper, lead, and zinc detected at RC2 were less than risk-based screening levels. Therefore, these metals were not identified as soil COPCs.

Antimony was identified as a COPC in soil at RC2. The maximum antimony concentration, 47.3 mg/kg, was greater than the residential soil RSL of 3.1 mg/kg associated with a HQ of 0.1. The HQ associated with the maximum detection, based on a screening level risk calculation, is 1.5, which is greater than the target value of 1.0. The maximum detection of 47.3 mg/kg was greater than the 95 percent UCL of 29 mg/kg. However, comparison of the histogram for the RC2 data to the histogram for the background data (Figure 7.1) indicates that the antimony results for RC2 are consistent with background conditions. The 95 percent Chebyshev UCL of the RC2 antimony results, 27 mg/kg, is less than the background UCL of 29 mg/kg. Based on the histograms and UCL calculations, antimony at RC2 was determined to be a naturally occurring background constituent, and the only potential risks posed by the site soil at RC2 are those associated with background conditions.

2,6-DNT and DNT mixture (2,4- and 2,6-DNT) were identified as COPCs in soil at RC2. The maximum concentration of 2,6-DNT, 3.9 mg/kg, was greater than the screening value of 0.33 mg/kg based on a cancer risk of 1E-06. The estimated cancer risk associated with this maximum detection, based on a screening level risk calculation, is 1.2E-05. The maximum concentration of the DNT mixture, 5.0 mg/kg, was greater than the screening value of 0.72 mg/kg based on a cancer risk of 1E-06. The estimated cancer risk associated with this maximum detection, based on a screening level risk calculation, is 6.9E-06.

As described in Section 7.2.2.2.1, select sample locations were re-sampled in October 2013. At RC2, the re-sampled locations were RC2-21 and RC2-64. The highest DNT results were reported for the May 2013 samples from these locations. Neither 2,6-DNT nor 2,4-DNT was detected in the October 2013 samples. Of the eight locations that were not re-sampled, the maximum 2,6-DNT concentration and DNT mixture concentration were 2.49 mg/kg and 3.27 mg/kg, respectively. These concentrations correspond to cancer risks of 7.3E-06 for 2,6-DNT and 4.5E-06 for DNT. These risks are on the low end of the target risk ranged. Based on the re-sampled results for the two locations with the maximum detections and the screening level risks for the locations that were not re-sampled, explosives in the RC2 soil do not pose a threat to human health.

7.2.2.3 Uncertainty Analysis

Conducting a risk assessment requires making a number of assumptions that introduce uncertainty to the risk and hazard estimates. The following sections discuss the uncertainties from chemical analysis, re-sampling, and background data.

7.2.2.3.1 Chemical Analysis

At any site, it is possible that there are more chemicals present than identified in the sampling and analysis effort. To minimize this potential uncertainty, the analytical suites included all potential contaminants associated with historical operations. In addition, the sample locations were biased to those areas with the greatest potential for contamination as indicated by historical information and the geophysical survey. For these reasons, it is unlikely that significant chemical contamination went undetected. Further, the application of QC throughout the sampling, analysis, and data validation phases reduced uncertainty in the results.

Therefore, the chemical identification phase of the risk assessment does not appear to have introduced substantial uncertainty.

While there is limited uncertainty associated with the analytical data, it is possible that the analytical method was not sufficiently sensitive to detect potential contaminants at concentrations that could pose a threat to human health. This potential uncertainty is evaluated by comparison of the reporting limits (RLs) for nondetect analytes to health-based screening values. This comparison is presented below.

Six explosives were not detected in any of the MRS samples. As indicated below, their RLs were less than the available November 2013 residential soil RSLs (cancer risk = 1E-06; non-cancer HQ = 0.1). Accordingly, analytical sensitivity is not a significant source of uncertainty.

Table 7.7
RLs and Screening Value Comparison

Analyte	Range of RLs (mg/kg)	Screening Value (mg/kg)
4-Amino-2,6-DNT	0.037 – 0.1	15
HMX	0.037 – 0.1	380
Tetryl	0.074 – 0.1	12
Nitroglycerin	0.0913 – 0.39	0.61
PETN	0.0913 – 0.99	12
3,5-Dinitroaniline	0.037 – 0.038	None available

Select sample locations from each MRS were re-analyzed for explosives using alternate analytical methods in July and August 2013. The results of the re-analysis are presented in Table B.3, Appendix B. There was some variability among the different analytical methods. To ensure a conservative analysis, the highest detections were used as the results for any given sample.

7.2.2.3.2 Re-sampling

The analytical results for the locations re-sampled in October 2013 are presented in Table B.3, Appendix B. The original and re-sampled results were pooled into one dataset. Given the variability in location and the number of discrete "increments" that comprise a sample at each DU under the ISM approach, each re-sampled location was considered a separate sample instead of a duplicate sample in the pooled dataset.

Comparison of the October 2013 results to the May 2013 results indicates that re-sampling was unable to replicate the relatively high DNT concentrations reported for the original samples. At six of the nine re-sampled locations, 2,4-DNT and 2,6-DNT were not detected. At the remaining three locations, the October 2013 DNT results were substantially lower than the May 2013 results. Data validation identified no reason for the anomalously high DNT concentrations reported for the May 2013 results. For this reason, the May 2013 and October

2013 datasets were pooled for use in the risk assessment. This approach is conservative and likely overestimated the potential risks.

7.2.2.3.3 Background Data

In May 2013, seven of the ten background samples were analyzed for explosives. In all seven samples, 2,4-DNT and 2,6-DNT were detected. No other explosives were detected in any sample. The detection of DNT in all 7 background samples with no detections of other common constituents of solid propellants such as nitroglycerin was unusual. Because of this anomaly, all ten background locations were re-sampled for explosives analysis in October 2013. All results are presented in Tables B.1 and B.2, Appendix B. For DNT, the results of the background re-sampling were not consistent with the initial sampling. 2,4-DNT was not detected in all 10 background samples, and 2,6-DNT was not detected in 9 of the 10 background samples. In the initial background sampling, DNT was consistently detected in all samples. Because the initial sampling and re-sampled DNT results were inconsistent, the dataset could not be used to determine a background value for DNT. Instead, the dataset was used qualitatively to assess the potential for DNT contamination. This approach introduces uncertainty into the risk characterization.

7.2.2.4 HHRA Summary and Conclusions

No metals were found at levels that pose an unacceptable risk to human health at the ARNG MRS or the RC1 MRS. Antimony, with an associated HQ of 1.5, was found to pose an unacceptable risk to human health at the RC2 MRS. However, antimony was determined to be a naturally occurring background constituent at RC2, and the only potential risks posed by the site soil at RC2 are those associated with background conditions.

Only 2,6-DNT and the combined 2,6/2,4-DNT concentrations exceeded health-based screening values Screening level risk estimates based on the maximum detections were in the middle to low end of the target risk range (1E-06 to 1E-04). In addition, none of the re-sampled locations showed DNT concentrations greater than the residential RSLs. Explosives contamination at the three MRSs does not pose a threat to human health.

7.2.3 Ecological Evaluation

7.2.3.1 Problem Formulation

The problem formulation lays the foundation for the SLERA. In the problem formulation, the potentially affected environment is defined and preliminary constituents of concern are identified. The following sections describe the components included in the problem formulation.

7.2.3.1.1 Ecological Setting and CSM

Geographically, former Camp Butner is situated in the Piedmont Province, an area characterized by rolling topography with rounded hills and long, low ridges. The elevation ranges from approximately 280 ft to 500 ft above mean sea level. The climate includes

relatively mild winters and warm, humid summers. Average low temperature is approximately 41ºF in January with the mean daily low of 28ºF. The average high temperature is approximately 78ºF in July with a mean daily high of 90ºF. Annual rainfall averages approximately 47 inches and is well distributed over the year, with an average monthly rainfall of between 3 to 4 inches. The first freeze generally occurs around October 27 and the last freeze occurs around April 11 (NCDC, 2014).

The area contains several perennial streams with numerous intermittent tributaries. These streams generally flow to the southwest. The majority of the area drains into the Knap of Reeds Creek, which is part of the Nuese River watershed. A small portion of the western section of this facility drains to the west into the Flat River. The Flat River also drains into Nuese River. The source of potable water for the town of Butner is the Holt Reservoir (also known as Lake Butner), with a storage capacity of approximately 10 billion gallons. The water system was constructed in 1942 to support 50,000 soldiers at Camp Butner (USACE, 1993).

The undeveloped hills within the area are forested with various hardwoods including oaks (*Quercus* spp.), flowering dogwood (*Cornus florida*), beech (*Fagus* spp.), sweetgum (*Liquidamber styraciflua*), holly (*Ilex* spp.), hickory (*Carya* spp.), and red maple (*Acer rubrum*). Stands and individuals of evergreens, including loblolly and Virginia pines (*Pinus taeda* and *P. virginiana*, respectively) and eastern redcedar (*Juniperus virginiana*), are mixed with the deciduous hardwoods previously mentioned. The evergreens tend to be found on ridges and south-facing slopes. Hilltops are generally vegetated with hardwoods. The canopy of the forested areas is dense. Species in the sparse understory include highbush berry (*Vaccinium* spp.), dogwood (*Cornus* spp.), poison ivy (*Toxicodendron radicans*), Christmas fern (*Polystichum acrostichoides*), and Japanese honeysuckle (*Lonicera japonica*) (Parsons, 2004).

Because no biological reconnaissance or survey of the MRSs has been conducted specifically for the ecological risk assessment (ERA), the ecological site descriptions are based on existing information of the habitats and biological communities of Butner combined with information garnered from the open literature and internet sources. No threatened or endangered species or critical habitat, however, is documented to exist within Butner.

The ecological habitat at ARNG, RC1, and RC2 is predominantly a mixed pine and hardwood forest ecosystem. Areas that are still recovering from historical deforestation for agricultural production are characterized by denser undergrowth. The forest habitat is fragmented by roads, and residential, industrial, and agricultural development. Residential and agricultural development is widespread in RC1 and RC2. Typical agricultural development in the area consists of land used to grow crops, such as tobacco, and as pasture for livestock. The aquatic habitat at ARNG, RC1, and RC2 is limited to perennial and intermittent streams that generally flow south into Holt Reservoir (Lake Butner), an artificial water impoundment. These Piedmont streams are characterized by high velocity waters in rapids and boulder fields alternating with stretches of calm low to moderate velocity waters, moderate floodplain development, and a heavy silt load. Dams associated with artificial water impoundments are impediments to anadramous and resident fish migration. The ecological habitat supports a wide

variety of terrestrial and aquatic plants and wildlife, including various mammals, reptiles, amphibians, and invertebrates.

Surface soil is the principal medium of concern for MC residues at each of the sites. Ecological receptors include terrestrial plants, soil invertebrates, and terrestrial wildlife (birds and mammals). The SLERA evaluated both direct contact and, for birds and mammals, exposure to contaminants through uptake in the food chain.

7.2.3.1.2 Potential Contaminants of Ecological Concern

Based on site history, the potential contaminants of ecological concern include antimony, copper, lead, zinc, and explosives. The information on metals presented below was obtained from the USEPA's Eco-SSLs.

In nature, antimony is associated with sulfur as stibnite. Antimony also occurs in ores with arsenic, and the two metals share similar chemical and physical properties. Antimony has multiple valence states, but the trivalent form is the most toxic to ecological receptors (USEPA, 2005a). Antimony tends to be absorbed slowly through the gastrointestinal tract, and the rate of absorption depends on the valence state (USEPA, 2005a). Antimony exerts toxicity on the cardiovascular system of mammals (USEPA, 2005a).

Copper is a micronutrient for both plants and animals. In plants, copper is involved in photosynthesis and protein and carbohydrate metabolism. Too much copper, however, can affect the chlorophyll and damage roots. In animals, copper plays a role in hemoglobin formation, carbohydrate metabolism, catecholamine biosynthesis, and cross-linking of collagen, elastin, and hair keratin (USEPA, 2007a). Similar to plants, too much copper can exert toxic effects in animals. Acute copper toxicity in mammals includes sporadic fever, tachycardia, hypotension, oliguria, uremia, coma, cardiovascular collapse, and death. Chronic copper poisoning in mammals may induce nausea, vomiting, epigastric pain, dizziness, jaundice, and general debility (USEPA, 2007a).

In soil, lead is relatively immobile. Its greatest leaching potential occurs in acidic soils with little organic matter and a low clay content. In plants, lead affects a number of processes including growth, photosynthesis, respiration, transpiration, and cell division (USEPA, 2005b). In animals, lead affects the brain, the gastrointestinal tract, and heme synthesis (USEPA, 2005b). Lead poisoning symptoms include odd behavior (anxiety, belligerence, lack of coordination, etc.), rapid and labored breathing, anorexia, dehydration, general weakness, fetal death, reduced pregnancy rate, and increased susceptibility to infectious disease (USEPA, 2005b).

Zinc is relatively immobile in soil and shows increased leaching potential, and thus increased bioavailability, at lower pH values. Zinc is an essential trace element for higher plants and animals. In plants, zinc is involved in carbohydrate and protein metablolism and is required for the synthesis of indoleacetic acid (USEPA, 2007b). Zinc phytotoxicity can occur, and is exhibited through reduced growth, poor germination, wilting, and chlorosis. In animals, zinc is an essential nutrient for regulating a number of metalloenzymes (USEPA, 2007b). In birds,

too much zinc can cause decreased body weight, gizzard and pancreatic lesions, and biochemical changes (USEPA, 2007b). Mammalian studies have shown vomiting, depressed growth rate, purgation, and ataxia (USEPA, 2007b).

The DNTs are absorbed through the gastrointestinal tract, respiratory tract, and skin in most species. Subchronic and chronic oral toxicity studies with experimental animals indicate that the blood, liver, nervous system, and reproductive system are targets affected by 2,4-DNT. (Source: Risk Assessment Information System [RAIS] website)

Studies of the chronic toxic effects of 1,3,5-TNB in rats have shown clear evidence of toxicity of the hematopoietic system (formation of blood cellular components), as has been reported for other nitroaroniatics such as dinitrobenzene and TNT. Susceptible organs for sub-chronic TNB toxicity were kidney, spleen, brain, and testes (Source: Hazardous Substances Data Bank [HSDB] website).

7.2.3.1.3 Assessment and Measurement Endpoints

Preliminary assessment and measurement endpoints for the MRSs are listed in Table 7.8. Assessment endpoints represent an explicit expression of the actual environmental values to be protected at the site. Measurement endpoints represent quantifiable ecological characteristics that can be measured, interpreted, and related to the valued ecological component(s) chosen as the assessment endpoints. For each measurement endpoint, there is an explicit relationship between it and the assessment endpoint (that is, value to be protected) to which it is linked.

Table 7.8
Assessment and Measurement Endpoints, SLERA MRS, Camp Butner, North Carolina

Assessment Endpoint	Measurement Endpoint	Key Ecological Receptor(s)
Growth, reproduction, and survival of terrestrial plant populations	Comparison of MC concentrations in surface and subsurface soil to plant-based soil screening levels.	Terrestrial plants (generic)
Growth, reproduction, and survival of soil invertebrate populations	Comparison of MC concentrations in surface and subsurface soil to earthworm-based soil screening levels.	Earthworms
Growth, reproduction, and survival of avian wildlife populations	Comparison of MC concentrations in surface and subsurface soil to avian-based soil screening levels.	Mourning dove (bird) American woodcock (bird) Red-tailed hawk (bird)
Growth, reproduction, and survival of mammalian wildlife populations	Comparison of MC concentrations in surface and subsurface soil to mammalian-based soil screening levels.	Eastern cottontail (mammal) Southern short-tailed shrew (mammal) Long-tailed weasel (mammal)

For each of the assessment and measurement endpoint pair, a key ecological receptor or receptor group (for example, terrestrial plants) is identified. Specific receptor species are selected to represent a group of species that fill a specific niche in the ecosystem (for example, the American robin to represent avian insectivores). The key receptors for each of the assessment and measurement endpoints in this SLERA are listed in Table 7.9. The criteria for the selection of representative wildlife receptor species include three factors: (1) they are

known or suspected to occur in the local ecological communities and are species likely to be exposed to chemical concentrations in the exposure media, (2) they represent functional groups considered to be essential to, or indicative of, the normal functioning of the affected habitat, and (3) they may represent federal or state threatened or endangered species or other protected or valued species in the local ecosystem.

Table 7.9
Exposure Factors for Terrestrial Wildlife Receptors MRS, Camp Butner, North Carolina

Common Name	Scientific Name	Trophic Level[1]	Body Weight[2] (kg)	Food Ingestion Rate (FIR)[3] (kg[dw]/day)	Soil Ingestion Rate[4] (percent of FIR)	Home Range[5] (acres)
Mourning dove	*Zenaida macroura*	Herbivore	0.115	0.0219	13.9	28.3
American woodcock	*Scolopax minor*	Insectivore	0.176	0.0377	16.4	11.1
Red-tailed hawk	*Buteo jamaicensis*	Carnivore	1.03	0.0364	5.7	941
Eastern cottontail	*Sylvilagus floridanus*	Herbivore	1.11	0.0944	6.3	7.23
Southern short-tailed shrew	*Blarina carolinensis*	Insectivore	0.0050	0.00105	3.0	0.963
Long-tailed weasel	*Mustela frenata*	Carnivore	0.085	0.0111	4.3	6.68

[1]In the SLERA, trophic level will determine the diet of the receptor: herbivore = diet of plant material; insectivore = diet of earthworms; carnivore = diet of small mammals. Mixed diets will not be evaluated at the screening level.
[2]Body weights are from Dunning (1993) and Silva and Downing (1995).
[3]Food ingestion rates based on data for equivalent species used by USEPA to derive Eco-SSLs (USEPA, 2005a) or, in the case of the eastern cottontail, on the allometric equation for mammalian herbivores presented in USEPA (1993).
[4]Soil ingestion rates based on data for equivalent species used by USEPA to derive Eco-SSLs (USEPA, 2005a) or, in the case of the eastern cottontail, on data presented in USEPA (1993) for jackrabbits.
[5]Home ranges for American woodcock, red-tailed hawk, eastern cottontail, and southern short-tailed shrew from data in USEPA (1993). Home range for mourning dove and long-tailed weasel based on allometric equations from Schoener (1968) and Jetz et al. (2004), respectively.

7.2.3.2 Initial Screening

The initial screening for the SLERA was performed by comparing the maximum detected concentrations to the benchmark values. For the metals, the lowest USEPA Eco-SSL was selected as the benchmark value. Eco-SSLs are not available for explosive compounds. For these analytes, benchmark values were obtained from USEPA regions, such as Regions 4 and 5, and national laboratories, such as the Oak Ridge National Laboratory or Los Alamos National Laboratory. The results of this initial benchmark screening are presented below.

7.2.3.2.1 ARNG MRS

As shown in Table 7.10, antimony, copper, lead, zinc, 1,3,5-TNB, and 2,6-DNT were identified as chemicals of potential ecological concern (COPECs) in soil at ARNG. Each COPEC is discussed in detail below.

The maximum antimony concentration, 0.744 mg/kg, is greater than the mammal Eco-SSL of 0.27 mg/kg but less than the 95 percent UCL of the background soil samples, 29 mg/kg. Based on comparison to the background value, antimony at ARNG was determined to be a naturally occurring background constituent, and the only potential ecological risks posed by antimony in the site soil at ARNG are those associated with background conditions.

Table 7.10
Initial Screening of Soil Results Against Ecological Benchmark Values, ARNG, Camp Butner

CAS Number	Chemical	Maximum Concentration	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Ecological Screening Value	Source	COPEC Flag	Background Value	
	Metals										
	Antimony, Total	0.744		mg/kg	IS-ARNG-82	11/11	0.27	EPA Eco-SSL for mammals	YES	29.0	[a]
	Copper, Total	75.7	J	mg/kg	IS-ARNG-82	11/11	28	EPA Eco-SSL for birds	YES	32.4	[a]
	Lead, Total	83	J	mg/kg	IS-ARNG-82	11/11	11	EPA Eco-SSL for birds	YES	17.9	[b]
	Zinc, Total	168	J	mg/kg	IS-ARNG-82	11/11	46	EPA Eco-SSL for birds	YES	58.2	[a]
	Explosives										
	1,3,5-TNB	0.46	MJ	mg/kg	IS-ARNG-01	1/13	0.376	EPA R5 ESL	YES	0.5	[c]
	1,3-Dinitrobenzene	0.049	J	mg/kg	IS-ARNG-01	2/13	0.655	EPA R5 ESL	NO	no detects	
	2,4,6-TNT	0.0051		mg/kg	IS-ARNG-01	1/13	6.4	LANL	NO	no detects	
	2,4-DNT	0.68		mg/kg	IS-ARNG-01	11/13	1.28	EPA R5 ESL	NO	NC	[d]
	2,6-DNT	2.34	J	mg/kg	IS-ARNG-01	11/13	0.0328	EPA R5 ESL	YES	NC	[d]
	2-Nitrotoluene	0.032		mg/kg	IS-ARNG-01	1/13	9.9	LANL	NO	0.023	[c]
	3-Nitrotoluene	0.032		mg/kg	IS-ARNG-01	1/13	12	LANL	NO	0.025	[c]
	4-Nitrotoluene	0.015		mg/kg	IS-ARNG-01	1/13	22	LANL	NO	0.012	[c]
	Nitrobenzene	0.096	JQ	mg/kg	IS-ARNG-23	1/13	1.31	EPA R5 ESL	NO	0.18	[c]

[a] Use of Chebyshev 95% UCL due to skewness of data set.
[b] Use of Student's-t 95% UCL; data appear normally distributed
[c] Use of maximum value; limited number of detections (4 or fewer) for calculating a background value
[d] There is too much uncertainty over the reliability of the original sample results to support calculation of a background value.
LANL = Los Alamos National Laboratory ECORISK Database, release 3.1, No Effects screening value, lowest of terrestrial receptors
USEPA R5 ESL = U.S. Environmental Protection Agency Region 5 Ecological Screening Levels, August 2003
NC = not calculated
J = Estimated Value
M = matrix interference

The maximum copper concentration, 75.7 mg/kg, is greater than the bird Eco-SSL (28 mg/kg), mammal Eco-SSL (49 mg/kg), and plant Eco-SSL (70 mg/kg), but less than the invertebrate Eco-SSL of 80 mg/kg. Based on the low ratio, 1.08, by which the maximum detection exceeds the plant Eco-SSL, copper in the site soil is unlikely to pose a threat to terrestrial plants. The 95 percent Chebyshev UCL of the ARNG copper results, 40.8 mg/kg, is greater than the background UCL of 32.4 mg/kg. This comparison indicates the presence of copper contamination. Accordingly, copper was retained for further evaluation with respect to exposure by birds and mammals via the food web.

The maximum lead concentration, 83 mg/kg, is greater than the Eco-SSL for birds (11 mg/kg) and mammals (56 mg/kg), but less than the Eco-SSL for plants (120 mg/kg) and invertebrates (1,700 mg/kg). The 95 percent Chebyshev UCL of the ARNG lead results, 50.7 mg/kg, exceeds the background UCL of 17.9 mg/kg. This comparison suggests the presence of lead contamination. Accordingly, lead was retained for further evaluation with respect to exposure by birds and mammals via the food web.

The maximum zinc concentration, 168 mg/kg, is greater than the Eco-SSLs for birds (46 mg/kg), mammals (79 mg/kg), invertebrates (120 mg/kg), and plants (160 mg/kg). Based on the low ratios by which the maximum detection exceeds the plant Eco-SSL (ratio of 1.05) and invertebrate Eco-SSL (1.4), it is unlikely that zinc contamination poses a threat to these receptors. This conclusion is supported by the observation that the 95 percent Chebyshev UCL of the ARNG zinc results, 91.7 mg/kg, is less than both screening values. The ARNG zinc UCL is greater than the background UCL of 58.2 mg/kg. Accordingly, zinc was identified as a soil contaminant and this metal was retained for further evaluation with respect to birds and mammals via the food web.

The maximum concentration of 1,3,5-TNB, 0.46 mg/kg, is greater than its ecological benchmark value of 0.376 mg/kg by a ratio of 1.2. This explosive was detected in only one of 13 ARNG soil samples. In addition, the detection was less than the maximum concentration of 0.5 mg/kg reported for the background soil samples, suggesting that the single ARNG detection is consistent with background conditions. Based on the limited detection frequency and low ratio by which the screening value was exceeded, 1,3,5-TNB was not retained as a COPEC.

The maximum concentration of 2,6-DNT, 2.34 mg/kg, is greater than the screening value of 0.0328 mg/kg. As discussed in Section 7.2.2.2.1, the re-sampling of the ARNG locations with the two highest 2,6-DNT detections yielded non-detect results. In addition, the detections reported for the locations that were not re-sampled are consistent with the May 2013 results reported for the background samples. The similarity between the majority of the May 2013 ARNG results with the background results combined with the non-detect results for the October 2013 samples suggests that there is no DNT contamination in the ARNG soil. For this reason, 2,6-DNT was not retained as a COPEC for the ARNG soil.

In summary, copper, lead, and zinc in the ARNG soil were retained for further evaluation with respect to birds and mammals.

7.2.3.2.2 RC1MRS

The initial screening for the RC1 soil data is presented in Table 7.11. Antimony, lead, zinc, and 2,6-DNT were identified as COPECs. Each COPEC is discussed in detail below.

The maximum antimony concentration, 4.18 mg/kg, is greater than the mammal Eco-SSL of 0.27 mg/kg but less than the invertebrate Eco-SSL of 78 mg/kg. Eco-SSLs for birds and plants are not available. Because the maximum antimony detection is less than the 95 percent UCL of the background soil samples, 29 mg/kg, this metal was identified as a natural background constituent. The only potential risks posed by antimony in the site soil at RC1 are those associated with background conditions. Accordingly, antimony was not retained as a COPEC.

The maximum lead concentration, 70.6 mg/kg, is greater than the Eco-SSL for birds (11 mg/kg) and mammals (56 mg/kg), but less than the Eco-SSL for plants (120 mg/kg) and invertebrates (1,700 mg/kg). The 95 percent Chebyshev UCL of the RC1 lead results, 53.4 mg/kg, is greater than the background UCL of 17.9 mg/kg. This comparison indicates that lead is a soil contaminant at RC1. Accordingly, lead was retained for further evaluation with respect to birds and mammals.

The maximum zinc concentration, 46.5 mg/kg, is slightly greater than the Eco-SSL for birds (46 mg/kg), but less than the Eco-SSLs for mammals (79 mg/kg), invertebrates (120 mg/kg), and plants (160 mg/kg). In addition, the maximum zinc detection is less than the 95 percent UCL of the background soil samples, 58.2 mg/kg. Based on this comparison, zinc at RC1 was determined to be a naturally occurring background constituent, and the only potential risks posed by zinc in the site soil at RC1 are those associated with background conditions. Zinc was not retained as a COPEC.

The maximum concentration of 2,6-DNT, 3.8 mg/kg, was greater than the screening value of 0.0328 mg/kg. As described in Section 7.2.2.2.2, the maximum detection was associated with the May 2013 results. In October 2013, five of the ten RC1 May 2013 locations were re-sampled. The five locations that were not re-sampled had DNT detections consistent with the May 2013 background results, providing no evidence of contamination at these locations. At two of the re-sampled locations, DNTs were not detected. At the remaining three re-sampled locations, 2,6-DNT was detected with a maximum concentration of 0.16 mg/kg reported for RC1-11. This detection is 4.9 times the ecological benchmark value. The benchmark value was obtained from USEPA Region 5 Ecological Screening Levels and is based on exposure by the masked shrew (USEPA, 2003). The Los Alamos National Laboratory (LANL) ECORISK database lists screening values for four mammalian receptors, including the montane shrew. These screening values range from 1.8 mg/kg for the deer mouse to 580 mg/kg for the red fox. The October 2013 detections were less than the LANL screening values. Based on the low ratio by which the USEPA Region 5 screening value was exceeded and comparison to the LANL screening values, 2,6-DNT was not retained as a COPEC.

In summary, only lead was retained as a COPEC after the initial screening of the RC1 soil data.

Table 7.11
RC1 Soil Data

CAS Number	Chemical	Maximum Concentration	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Ecological Screening Value	Source	COPEC Flag	Background Value	
	Metals										
	Antimony, Total	4.18		mg/kg	IS-RC1-13	10/10	0.27	USEPA Eco-SSL for mammals	YES	29.0	[a]
	Copper, Total	15.2	J	mg/kg	IS-RC1-10	10/10	28	USEPA Eco-SSL for birds	NO	32.4	[a]
	Lead, Total	70.6		mg/kg	IS-RC1-13	10/10	11	USEPA Eco-SSL for birds	YES	17.9	[b]
	Zinc, Total	46.5	J	mg/kg	IS-RC1-10	10/10	46	USEPA Eco-SSL for birds	YES	58.2	[a]
	Explosives										
	1,3,5-TNB	0.076	QJ	mg/kg	IS-RC1-10	1/15	0.376	USEPA R5 ESL	NO	0.5	[c]
	2,4,6-TNT	0.0057		mg/kg	IS-RC1-08	1/15	6.4	LANL	NO	no detects	
	2,4-DNT	0.98		mg/kg	IS-RC1-08	10/15	1.28	USEPA R5 ESL	NO	NC	[d]
	2,6-DNT	3.8		mg/kg	IS-RC1-08	13/15	0.0328	USEPA R5 ESL	YES	NC	[d]
	2-Amino-4,6-DNT	0.047	J	mg/kg	IS-RC1-08	1/15	10	LANL	NO	no detects	
	2-Nitrotoluene	0.039		mg/kg	IS-RC1-08	1/15	9.9	LANL	NO	0.023	[c]
	3-Nitrotoluene	0.039		mg/kg	IS-RC1-08	1/15	12	LANL	NO	0.025	[c]
	4-Nitrotoluene	0.048	J	mg/kg	IS-RC1-01	2/15	22	LANL	NO	0.012	[c]

[a] Use of Chebyshev 95% UCL due to skewness of data set. Q are lab qualifiers J = Estimated Value
[b] Use of Student's t 95% UCL; data appear normally distributed
[c] Use of maximum value; limited number of detections (4 or fewer) for calculating a background value
[d] There is too much uncertainty over the reliability of the original sample results to support calculation of a background value.
LANL = Los Alamos National Laboratory ECORISK Database, release 3.1, No Effects screening value, lowest of terrestrial receptors
EPA R5 ESL = U.S. Environmental Protection Agency Region 5 Ecological Screening Levels, August 2003
NC = not calculated

7.2.3.2.3 RC2 MRS

The initial screening of the RC2 soil data is presented in Table 7.12. Antimony, lead, zinc, and 2,6-DNT were identified as COPECs in soil at RC2.

The maximum antimony concentration, 47.3 mg/kg, is greater than the mammal Eco-SSL of 0.27 mg/kg but less than the soil invertebrate Eco-SSL of 78 mg/kg. Eco-SSLs for birds and plants are not available. The maximum detection was greater than the 95 percent UCL of 29 mg/kg. However, comparison of the histogram for the RC2 data to the histogram for the background data (Figure 7.1) indicates that the antimony results for RC2 are consistent with background conditions. The 95 percent Chebyshev UCL of the RC2 antimony results, 27 mg/kg, is less than the background UCL of 29 mg/kg. Based on the histograms and UCL calculations, antimony at RC2 was determined to be a naturally occurring background constituent, and the only potential risks posed by the site soil at RC2 are those associated with background conditions. Antimony was not retained as a COPEC.

The maximum lead concentration, 28.9 mg/kg, is greater than the Eco-SSL for birds but less than the Eco-SSLs for mammals (56 mg/kg), plants (120 mg/kg), and invertebrates (1,700 mg/kg). The 95 percent Chebyshev UCL of the RC2 lead results, 27.7 mg/kg, is greater than the the background UCL of 17.9 mg/kg, which suggests the presence of lead contamination. Lead was retained as a COPEC for further evaluation with respect to birds.

The maximum zinc concentration, 49.0 mg/kg, is slightly greater than the Eco-SSL for birds (46 mg/kg), but less than the Eco-SSLs for mammals (79 mg/kg), invertebrates (120 mg/kg), and plants (160 mg/kg). Because the maximum zinc detection is less than the 95 percent UCL of the background soil samples, 58.2 mg/kg, zinc at RC2 was identified as naturally occurring. The only potential risks posed by zinc in the soil at RC2 are those associated with background conditions. Zinc was not retained as a COPEC.

The maximum concentration of 2,6-DNT, 3.9 mg/kg, was greater than the ecological screening value of 0.0328 mg/kg. The relatively high 2,6-DNT results were reported for the May 2013 samples. As described in Section 7.2.2.2.3, locations RC2-21 and RC2-64 were re-sampled in October 2013. These two locations had the highest May 2013 DNT results. Neither 2,6-DNT nor 2,4-DNT was detected in the October 2013 samples. Of the eight locations that were not re-sampled, six had DNT results consistent with the May 2013 background sample results. The remaining two May 2013 samples had DNT results that were slightly greater than the range of concentrations reported for the background samples. However, the inability of the October 2013 re-sampling to replicate the detections at the sample locations with the highest DNT results indicates limited potential for DNT contamination at RC2. For this reason, 2,6-DNT was not retained as a COPEC.

Table 7.12
RC2 Soil Data

CAS Number	Chemical	Maximum Concentration	Maximum Qualifier	Units	Location of Maximum Concentration	Detection Frequency	Ecological Screening Value	Source	COPEC Flag	Background Value	
	Metals										
	Antimony, Total	47.3		mg/kg	IS-RC2-02	10/10	0.27	EPA Eco-SSL for mammals	YES	29.0	[a]
	Copper, Total	16.4	J	mg/kg	IS-RC2-64	10/10	28	EPA Eco-SSL for birds	NO	32.4	[a]
	Lead, Total	28.9	J	mg/kg	IS-RC2-04	10/10	11	EPA Eco-SSL for birds	YES	17.9	[b]
	Zinc, Total	49	J	mg/kg	IS-RC2-21	10/10	46	EPA Eco-SSL for birds	YES	58.2	[a]
	Explosives										
	1,3,5-TNB	0.16	J	mg/kg	IS-RC2-64	1/12	0.376	EPA R5 ESL	NO	0.5	[c]
	2,4,6-TNT	0.047	J	mg/kg	IS-RC2-64	2/12	6.4	LANL	NO	no detects	
	2,4-DNT	1.18		mg/kg	IS-RC2-21	10/12	1.28	EPA R5 ESL	NO	NC	[d]
	2,6-DNT	3.9		mg/kg	IS-RC2-21	10/12	0.0328	EPA R5 ESL	YES	NC	[d]
	2-Nitrotoluene	0.02		mg/kg	IS-RC2-21	2/12	9.9	LANL	NO	0.023	[c]
	3-Nitrotoluene	0.026		mg/kg	IS-RC2-21	2/12	12	LANL	NO	0.025	[c]
	4-Nitrotoluene	0.014		mg/kg	IS-RC2-21	2/12	22	LANL	NO	0.012	[c]
	RDX	0.12	J	mg/kg	IS-RC2-64	1/12	7.5	LANL	NO	0.0480	[c]

[a] Use of Chebyshev 95% UCL due to skewness of data set.
[b] Use of Student's t 95% UCL; data appear normally distributed
[c] Use of maximum value; limited number of detections (4 or fewer) for calculating a background value
[d] There is too much uncertainty over the reliability of the original sample results to support calculation of a background value.
LANL = Los Alamos National Laboratory ECORISK Database, release 3.1, No Effects screening value, lowest of terrestrial receptors
EPA R5 ESL = U.S. Environmental Protection Agency Region 5 Ecological Screening Levels, August 2003
NC = not calculated
J = Estimated Value

7.2.3.3 Food Web Evaluation

The following COPECs were retained for further evaluation of exposure by mammals and/or birds via the food web:

- ARNG: copper (birds and mammals), lead (birds and mammals), and zinc (birds and mammals);
- RC1: lead (birds and mammals); and
- RC2: lead (birds).

The representative mammalian and avian species and their exposure parameters (ingestion rate, etc) are listed in Table 7.13. Contaminant concentrations in the dietary components were estimated using the equations listed in the Eco-SSL documents (USEPA, 2005b; USEPA, 2007a; and USEPA, 2007b). The no observed adverse effects levels (NOAELs) were obtained from the Eco-SSL documents, and the lowest observed adverse effects levels (LOAELs) were calculated as the geometric mean of the LOAELs for survival, growth, and reproduction identified in each Eco-SSL document (USEPA, 2005b; USEPA, 2007a; and USEPA, 2007b). The food web calculations are presented in Table 7.14. For each COPEC, the UCL was used as the EPC.

Table 7.13
Receptor Exposure Parameters for Food Web Analysis

Receptor	Food Ingestion Rate (kg-dw/day)	Plants, Diet Fraction	Inverte-brates, Diet Fraction	Mammals Fraction of Diet	Soil Ingestion Rate	Body weight (kg)
Mourning Dove	0.0219	1	0	0	13.90%	0.115
American woodcock	0.0377	0	1	0	16.40%	0.176
Red-tailed hawk	0.0364	0	0	1	5.70%	1.03
Eastern cottontail	0.0944	1	0	0	6.30%	1.11
Southern short-tailed shrew	0.00105	0	1	0	3.00%	0.005
Long-tailed weasel	0.0111	0	0	1	4.30%	0.085

kg = kilograms
kg-dw/day = kilograms, dry weight basis per day

As shown on Table 7.14, the NOAEL ecological quotients for exposure of all wildlife receptors to copper and zinc in the ARNG soil were equal to or less than 1. No threats to wildlife receptors are expected from these contaminants. The NOAEL ecological quotient for exposure of the American woodcock to lead was 4. The corresponding LOAEL ecological quotient was less than 1, indicating that insectivorous birds would not be exposed to lead levels associated with an observable adverse effect. The NOAEL ecological quotients for the other wildlife receptors did not exceed 1. These calculations indicate that contamination in the ARNG soil poses minimal threat to wildlife receptors.

Similar to ARNG, the 95 percent UCL of lead concentrations in the RC1 soil resulted in NOAEL ecological quotients less than or equal to 1 for all receptors but the American woodcock. For this receptor, the NOAEL ecological quotient is 4 and the LOAEL ecological quotient is 0.1. Because the average daily dose is less than the LOAEL, it is concluded that lead contamination at RC1 poses minimal threat to insectivorous birds.

Lead in the RC2 soil was retained as a COPEC only for birds. The 95 percent UCL resulted in NOAEL ecological quotients less than or equal to 1 for the mourning dove and red-tailed hawk, but an ecological quotient of 2 for the American woodcock. The LOAEL ecological quotient for the American woodcock, 0.07, indicates that the average daily dose is less than the level associated with observable adverse effects. Accordingly, it is concluded that lead contamination at RC2 poses minimal threat to insectivorous birds.

7.2.3.4 Uncertainty Analysis

As with the HHRA, the ERA requires making a number of assumptions that introduce uncertainty to the risk and hazard estimates. The same uncertainties from chemical analysis, re-sampling, and background data were encountered during the ERA as in the HHRA. Refer to Section 7.2.2.3 for a detailed discussion of these uncertainties.

7.2.3.5 ERA Summary and Conclusions

The SLERA evaluated potential threats from exposure of plants, soil invertebrates, mammals, and birds to contaminants at the three MRSs: ARNG, RC1, and RC2. This evaluation considered exposure of upper trophic level receptors through the food web. Lead contamination in the soil at ARNG, RC1, and RC2 poses minimal threat to insectivorous birds and no threat to herbivorous birds, carnivorous birds, and mammals. Lead does not pose a threat to plants or soil invertebrates. The remaining contaminants identified at these sites do not pose a threat to ecological receptors. No actionable ecological risk was identified for any of the three MRSs.

Table 7.14
Food Web Analysis – ARNG, RC1 and RC2, Camp Butner

Analyte	Receptor	Food Ingestion Rate (kg dw/day)	Plants, diet fract.	Invert., diet fract.	Mammals fraction of diet	Soil Ingestion Rate	Exposure Point Concentration (mg/kg)	Plant Tissue Concentration (mg/kg-dw)	Earthworm Tissue Concentration (mg/kg-dw)	Mammal Tissue Concentration (mg/kg-dw)	Body Weight (kg)	Chemical Intake Rate (mg/kg-day)	NOAEL (mg/kg-day)	NOAEL Ecological Quotient	LOAEL (mg/kg-day)	LOAEL Ecological Quotient
ARNG Soil																
Copper	Mourning Dove	0.0219	1	0	0	13.90%	40.8	8.578171167	21.012	13.16463006	0.115	2.7E+00	4.05	0.7	37.05	0.07
	American woodcock	0.0377	0	1	0	16.40%	40.8	8.578171167	21.012	13.16463006	0.176	5.9E+00	4.05	1	37.05	0.2
	Red-tailed hawk	0.0364	0	0	1	5.70%	40.8	8.578171167	21.012	13.16463006	1.03	5.5E-01	4.05	0.1	37.05	0.01
	Eastern cottontail	0.0944	1	0	0	6.30%	40.8	8.578171167	21.012	13.16463006	1.11	9.5E-01	5.6	0.2	73.29	0.01
	Southern short-tailed shrew	0.00105	0	1	0	3.00%	40.8	8.578171167	21.012	13.16463006	0.005	4.7E+00	5.6	0.8	73.29	0.06
	Long-tailed weasel	0.0111	0	0	1	4.30%	40.8	8.578171167	21.012	13.16463006	0.085	1.9E+00	5.6	0.3	73.29	0.03
Lead	Mourning Dove	0.0219	1	0	0	13.90%	50.7	2.397542935	19.11019973	6.123564966	0.115	1.8E+00	1.63	1	51.7	0.03
	American woodcock	0.0377	0	1	0	16.40%	50.7	2.397542935	19.11019973	6.123564966	0.176	5.9E+00	1.63	4	51.7	0.1
	Red-tailed hawk	0.0364	0	0	1	5.70%	50.7	2.397542935	19.11019973	6.123564966	1.03	3.2E-01	1.63	0.2	51.7	0.006
	Eastern cottontail	0.0944	1	0	0	6.30%	50.7	2.397542935	19.11019973	6.123564966	1.11	4.8E-01	4.7	0.1	165	0.003
	Southern short-tailed shrew	0.00105	0	1	0	3.00%	50.7	2.397542935	19.11019973	6.123564966	0.005	4.3E+00	4.7	0.9	165	0.03
	Long-tailed weasel	0.0111	0	0	1	4.30%	50.7	2.397542935	19.11019973	6.123564966	0.085	1.1E+00	4.7	0.2	165	0.007
Zinc	Mourning Dove	0.0219	1	0	0	13.90%	91.6	59.007050	376.4244854	107.9999	0.115	1.4E+01	66.1	0.2	187	0.07
	American woodcock	0.0377	0	1	0	16.40%	91.6	59.007050	376.4244854	107.9999	0.176	8.4E+01	66.1	1	187	0.4
	Red-tailed hawk	0.0364	0	0	1	5.70%	91.6	59.007050	376.4244854	107.9999	1.03	4.0E+00	66.1	0.06	187	0.02
	Eastern cottontail	0.0944	1	0	0	6.30%	91.6	59.007050	376.4244854	107.9999	1.11	5.5E+00	75.4	0.07	292	0.02
	Southern short-tailed shrew	0.00105	0	1	0	3.00%	91.6	59.007050	376.4244854	107.9999	0.005	8.0E+01	75.4	1	292	0.3
	Long-tailed weasel	0.0111	0	0	1	4.30%	91.6	59.007050	376.4244854	107.9999	0.085	1.5E+01	75.4	0.2	292	0.05
RC1 Soil																
Lead	Mourning Dove	0.0219	1	0	0	13.90%	53.4	2.468354732	19.92735223	6.265684949	0.115	1.9E+00	1.63	1	51.7	0.04
	American woodcock	0.0377	0	1	0	16.40%	53.4	2.468354732	19.92735223	6.265684949	0.176	6.1E+00	1.63	4	51.7	0.1
	Red-tailed hawk	0.0364	0	0	1	5.70%	53.4	2.468354732	19.92735223	6.265684949	1.03	3.3E-01	1.63	0.2	51.7	0.006
	Eastern cottontail	0.0944	1	0	0	6.30%	53.4	2.468354732	19.92735223	6.265684949	1.11	5.0E-01	4.7	0.1	165	0.003
	Southern short-tailed shrew	0.00105	0	1	0	3.00%	53.4	2.468354732	19.92735223	6.265684949	0.005	4.5E+00	4.7	1	165	0.03
	Long-tailed weasel	0.0111	0	0	1	4.30%	53.4	2.468354732	19.92735223	6.265684949	0.085	1.1E+00	4.7	0.2	165	0.007
RC2 Soil																
Lead	Mourning Dove	0.0219	1	0	0	13.90%	27.7	1.708000834	11.73288939	4.687209486	0.115	1.1E+00	1.63	1	51.7	0.02
	American woodcock	0.0377	0	1	0	16.40%	27.7	1.708000834	11.73288939	4.687209486	0.176	3.5E+00	1.63	2	51.7	0.07
	Red-tailed hawk	0.0364	0	0	1	5.70%	27.7	1.708000834	11.73288939	4.687209486	1.03	2.2E-01	1.63	0.1	51.7	0.004

Notes:
Bioaccumulation Equations (USEPA 2005; USEPA 2007a; USEPA 2007b)

Copper: ln(plant) = 0.394 x ln(soil) + 0.688
worm = 0.515(soil)
ln(mammal) = 0.1444 x ln(soil) + 2.042

Lead: ln(plant) = 0.561 x ln(soil) - 1.328
ln(worm) = 0.807 x ln(soil) -0.218
ln(mammal) = 0.4422 x ln(soil) + 0l0761

Zinc: ln(plant) = 0.554 x ln(soil) + 1.575
ln(worm) = 0.328 x ln(soil) + 4.449
ln(mammal) = 0.0706 x ln(soil) + 4.3632

kg = kilogram
mg/kg = milligrams per kilogram
kg dw/day = kilograms, dry weight basis per day
mg/kg-dw = milligrams per kilogram-dry weight basis
mg/kg-day = milligrams per kilogram per day
Shaded value indicates exceedance of target ecological quotient of 1

USEPA, 2005. Eco-SSL for Lead, Interim Final, OSWER Directive 9285.7-70, March 2005.
USEPA, 2007a. Eco-SSL for Copper, Interim Final, OSWER Directive 9285.7-68, February 2007.
USEPA, 2007b. Eco-SSL for Zinc, Interim Final, OSWER Directive 9285.7-73, June 2007.

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FIGURES

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Figure 7.1 Quantile Plots Background

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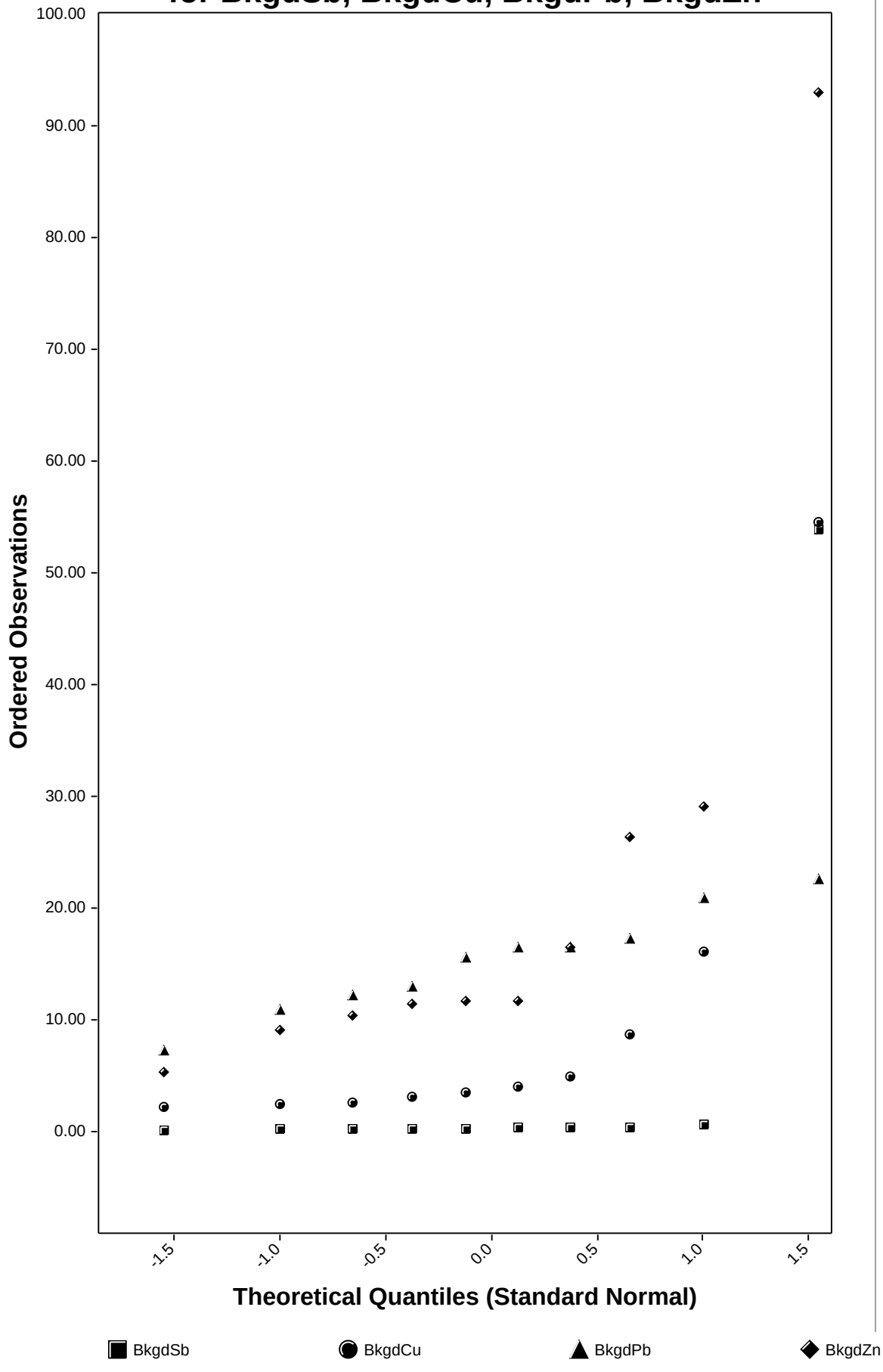
Multiple Q-Q Plots
for BkgdSb, BkgdCu, BkgdPb, BkgdZn



BkgdSb
- N = 10
- Mean = 5.6595
- Sd = 16.9506
- Slope = 10.5189
- Intercept = 5.6595
- Correlation, R = 0.5835

BkgdCu
- N = 10
- Mean = 10.1940
- Sd = 16.1384
- Slope = 12.4748
- Intercept = 10.1940
- Correlation, R = 0.7268

BkgdPb
- N = 10
- Mean = 15.2320
- Sd = 4.5973
- Slope = 4.8328
- Intercept = 15.2320
- Correlation, R = 0.9885

BkgdZn
- N = 10
- Mean = 22.4240
- Sd = 25.9262
- Slope = 21.1374
- Intercept = 22.4240
- Correlation, R = 0.7666

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Figure 7.2 Histograms for Background Sb, RC2 MRS

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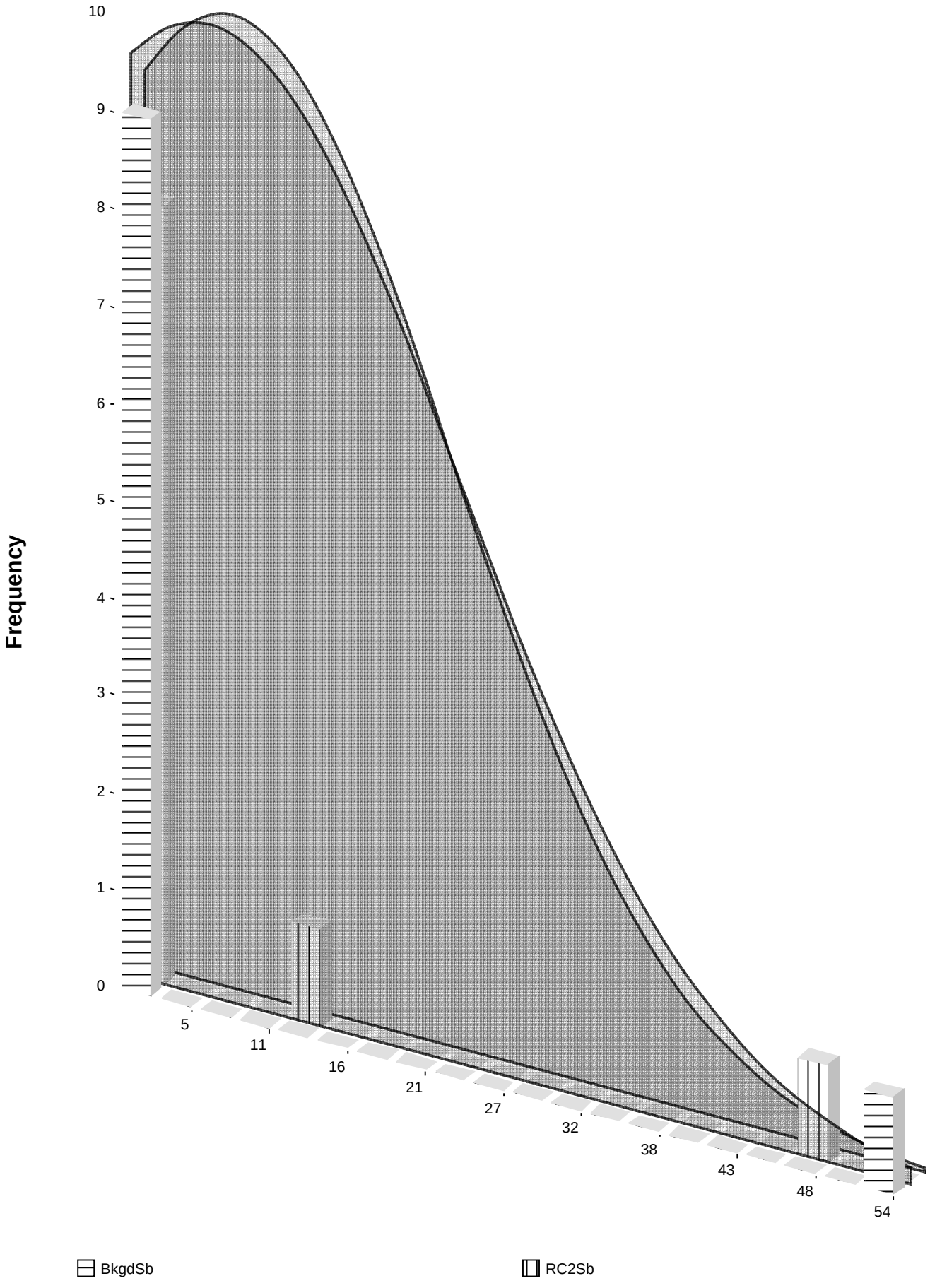
Histograms for BkgdSb, RC2Sb



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8.0 SUMMARY OF RESULTS

8.1 SUMMARY

8.1.1 MEC and MC Nature and Extent

8.1.1.1 MEC

The extent of MEC contamination at each MRS was determined based on the RI results. As described in subsections 5.2.1, 5.2.3, and 5.2.4, MEC contamination was identified in the ARNG MRS, RC1 MRS, RC2 MRS, and the HGR MRS. The RI results are used to define MEC-contaminated areas for revision to the current MRS boundaries and to support the development and execution of potential remedial alternatives as part of the recommended FS. The RI was conducted in accordance with the approved Work Plan and to meet the established DQOs. Sufficient information was gathered from areas where ROE was granted during the RI performance, or from historical data, to characterize areas where ROE was refused.

It should be noted that the areas outside the MEC contamination boundaries described for ARNG, RC1, and RC2, or remaining lands, may still contain MEC; however, the existence of MEC is considered unlikely and the potential for encountering MEC in these areas is anticipated to be low based on the results of the RI and previous investigations.

8.1.1.2 Munitions Constituents

During the RI/FS activities, ISM soil samples were collected within the three MRSs and for background and analyzed for explosives and metals (copper, lead, antimony and zinc). No MC was detected at levels constituting a risk to human health or the environment, indicating there is no MC contamination. The results of the BLRA for MC are summarized below.

8.1.2 BLRA for MC

The BLRA was conducted in accordance with USACE and USEPA guidance, and included an HHRA and a SLERA.

The HHRA evaluated current and potential future receptors who may contact soil at ARNG, RC1, and RC2. The only metal present at concentrations that could pose a threat to human health, antimony, was determined to be naturally occurring. For explosive compounds, only concentrations of 2,6-DNT and the summed 2,4-DNT and 2,6-DNT concentrations exceeded health-based screening values. Because the screening level risk estimates were in the middle or on the low end of the target risk range (1E-06 to 1E-04), and because the October 2013 re-sampling results did not replicate the original detections, it was concluded that explosives contamination at the three MRSs does not pose a threat to human health.

The SLERA evaluated exposure of terrestrial receptors (plants, soil invertebrates, birds, and mammals) to contaminants at each of the three MRSs. Exposure via the food web was also considered. The SLERA concluded that lead posed minimal threat to insectivorous birds and

no threat to the other ecological receptors, and that the other site contaminants did not pose a threat to ecological receptors.

8.1.3 MEC Hazard Assessment

8.1.3.1 Munitions and Explosives of Concern

Based on the MEC contamination present, the potential exists for human receptors to be exposed to explosive hazards at the project sites. Using the results of the RI activities, a qualitative MEC HA was developed using the MEC HA method (USEPA, 2008). The MEC HA evaluation calculated the total MEC HA scores in Table 7.1, indicating a qualitative rating of the highest potential for explosive hazards at the ARNG, RC1, and RC2 sites (Hazard Level 1). A Hazard Level of 4 was given to the FTR, indicating a low potential for explosive hazards. This information will provide the baseline for the assessment of response alternatives to be conducted in the FS. No evidence of MEC was found during previous investigations of the HGR.

8.2 CONCLUSIONS

8.2.1 Recommendations for FS

The conclusions of this RI and the MEC HA show that the MEC contamination was identified within the MRSs investigated and does pose explosive hazards to current and future receptors. Additionally, ARNG HGR was identified during the RI investigation, and recommended as a new MRS within Butner. These sites, with the exception of HGR MRS, are recommended for inclusion in an FS to develop potential remedial alternatives capable of reducing the site hazards to acceptable levels. Table 8.1 summarizes the RI recommendations for each MRS. Based on the RI and historical investigation results, a distinction can be made between the areas of ARNG, RC1, and RC2 with a higher potential for MEC hazards, and the remaining lands of the MRS with a lower potential for MEC hazards. Based on this distinction, a recommendation can be made to revise the current MRS boundaries, inclusive of the areas determined to be MEC contaminated. Figures 8.1 through 8.5 show the MRSs recommended for inclusion in an FS, as well as the recommended revised MRS boundaries.

The BLRA for MC identified no actionable risk to human or ecological receptors at the project sites. The collected data and the associated characterization described in this report are considered sufficient to characterize the project site, to identify and evaluate associated potential MEC hazards or MC risks, and to support the recommended FS.

Table 8.1
RI Recommendations by MRS

Munitions Response Site	RI Recommendation for Future MRS	Revised Acreage	Potential MEC Hazards	MC Risk Present	Recommendation
ARNG MRS	MEC-Contaminated Area	1,429	High	No	FS
	Five-Year Review Area	402	Low	No	FS
	Non MEC-Contaminated Area	3,395	Low	No	NFA
RC1 MRS	MEC-Contaminated Area	3,901	High	No	FS
	Five-Year Review Area	549	Low	No	FS
	Non MEC-Contaminated Area	8,462	Low	No	NFA
RC2 MRS	MEC-Contaminated Area	4,100	High	No	FS
	Five-Year Review Area	439	Low	No	FS
	Non MEC-Contaminated Area	7,429	Low	No	NFA
FTR MRS		20	Low	No	FS
HGR MRS		25	No	No	NFA
ARNG HGR		6	High	No	FS

NFA = No Further Action

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FIGURES

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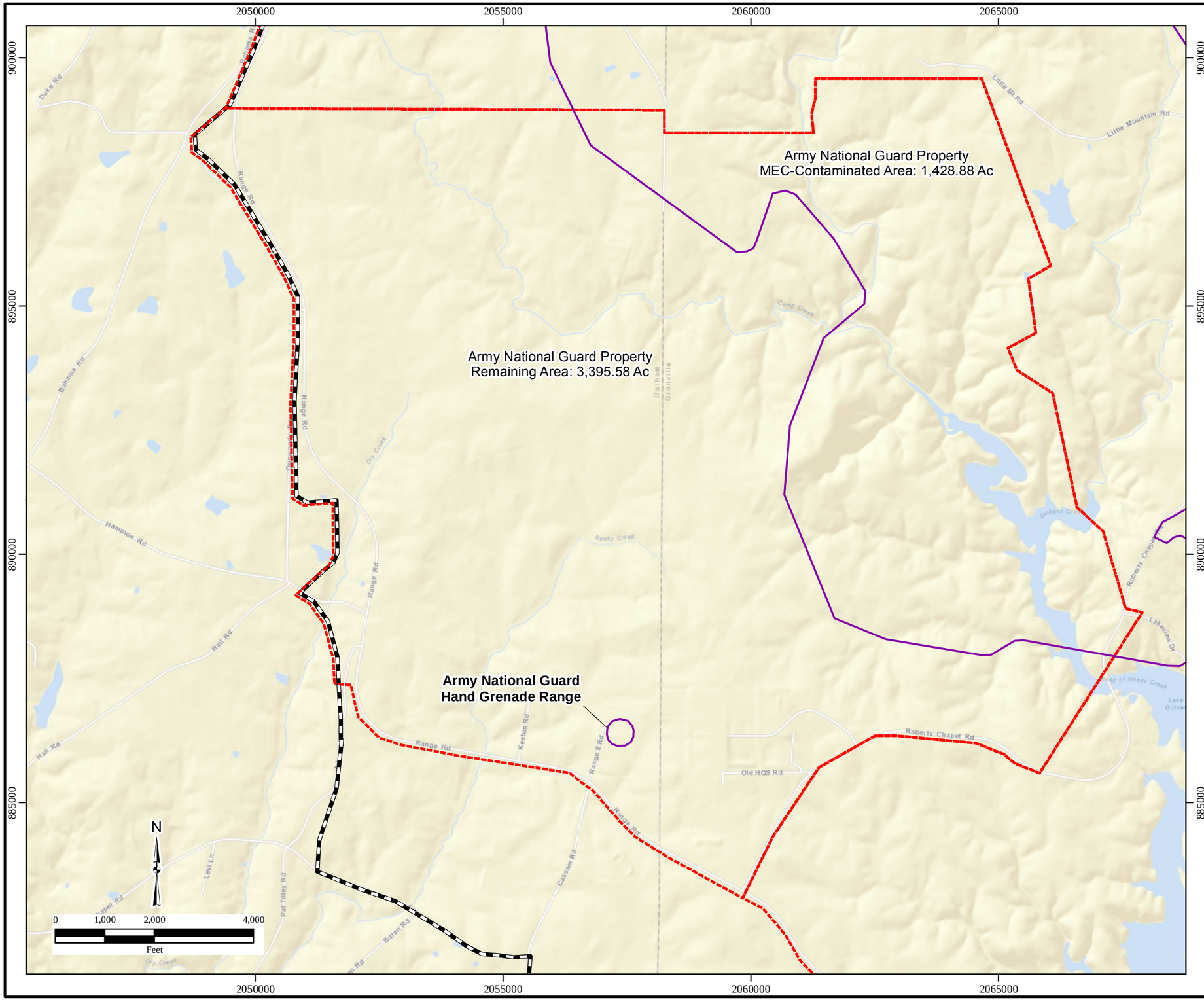
Figure 8.1
MRS Recommended for Feasibility Study
ARNG MRS



Legend

- MEC Contamination
- MRS
- Former Camp Butner

Notes:
ARNG MEC contaminated area = 1428.88 acres
ARNG remaining land = 3395.58 acres

ARNG= Army National Guard Property
MRS=Munition Response Site
MEC=Munitions and Explosives of Concern

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(8-01)ARNG_Delineation.mxd
5/24/2016 CNL
Source: HGL, USACE
ArcGIS Online Streetmap

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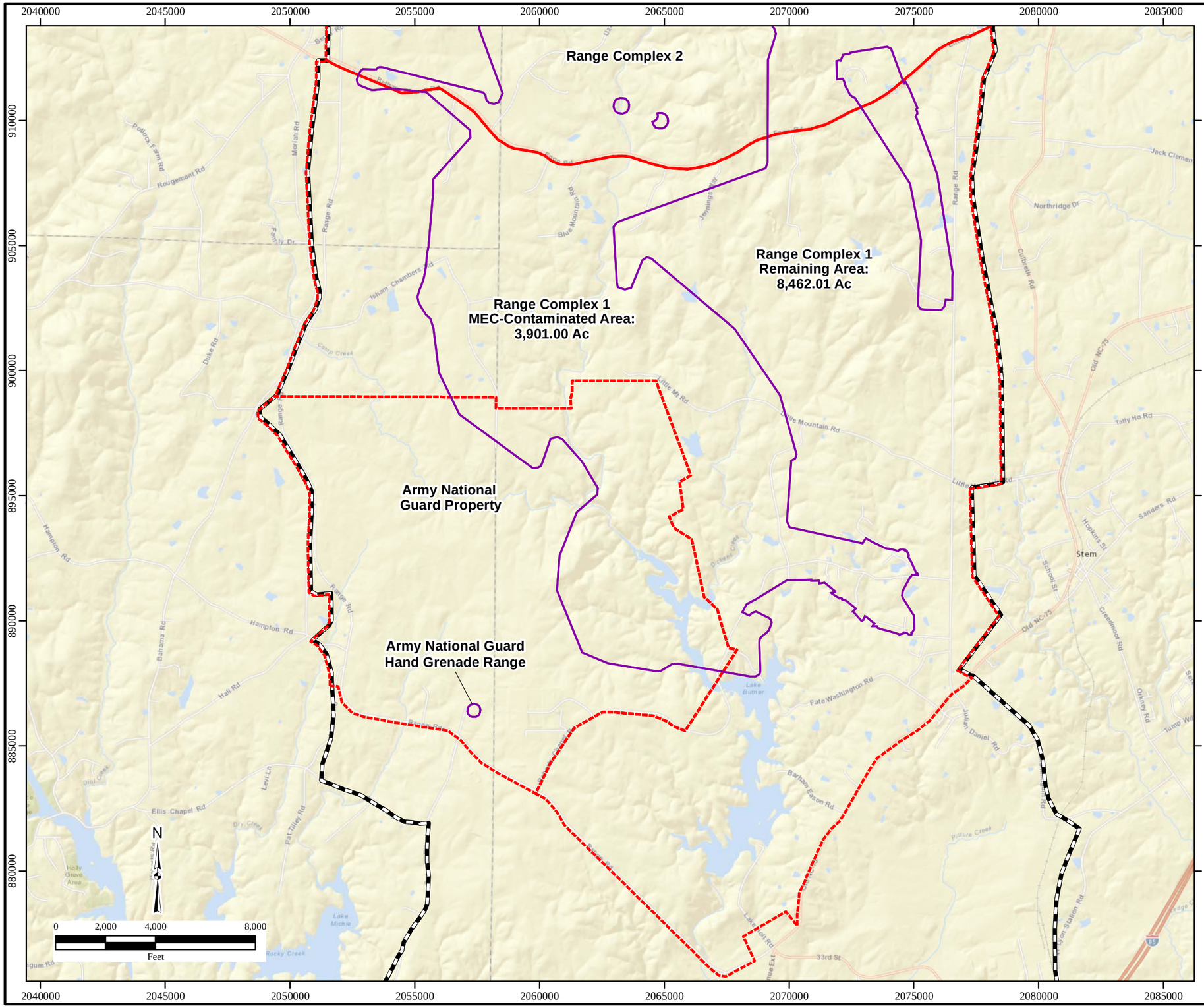
Figure 8.2
MRS Recommended for Feasibility Study
RC1 MRS



Legend

- MEC Contamination
- MRS
- Former Camp Butner

Notes:
RC1 MEC contaminated area = 3,901.00 acres
RC1 remaining land = 8,462.01.45 acres

MRS=Munition Response Site
MEC=Munitions and Explosives of Concern
RC=Range Complex

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5/24/2016 CNL
Source: HGL, USACE
ArcGIS Online Streetmap

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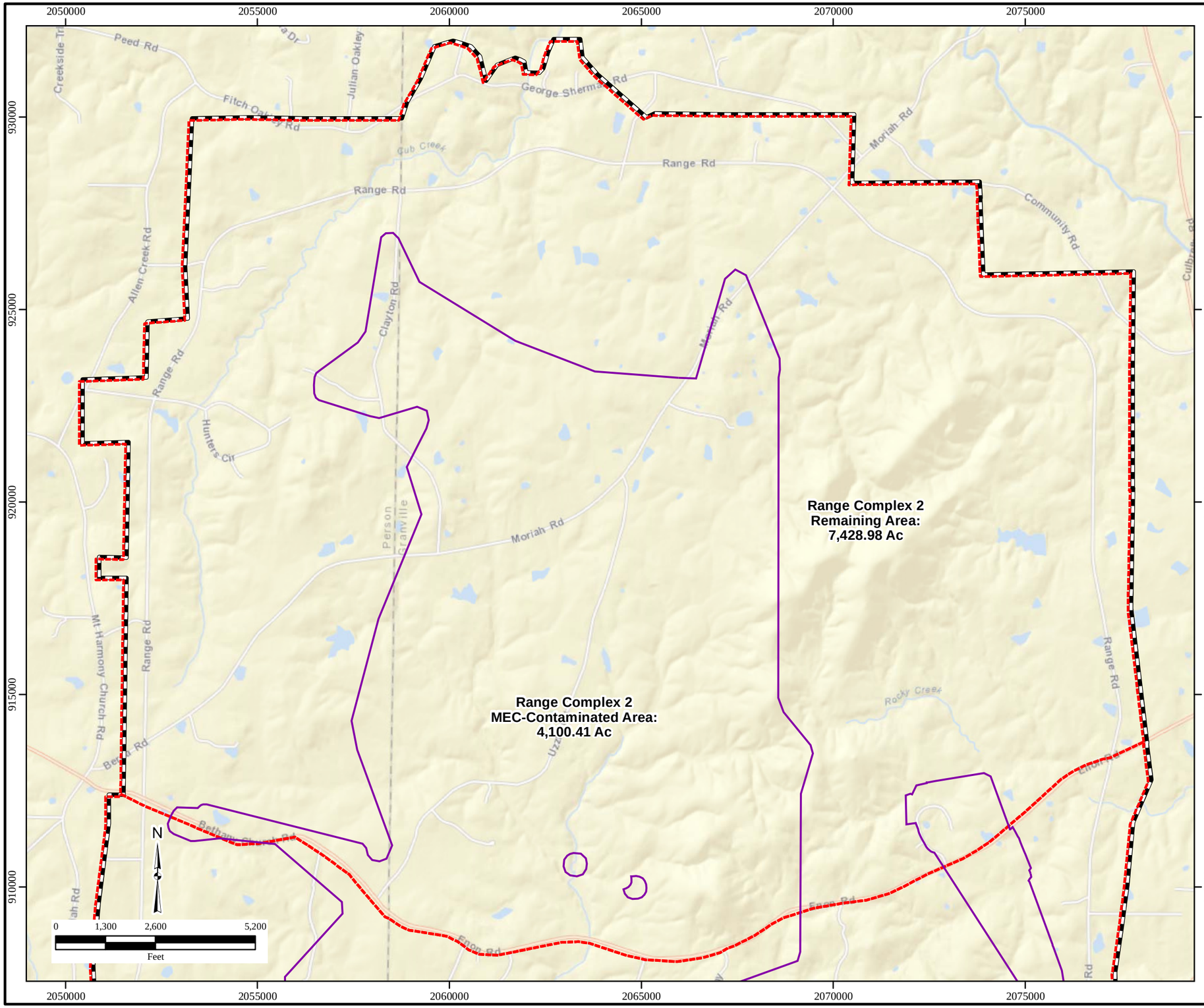
Figure 8.3
MRS Recommended for Feasibility Study
RC2 MRS



Legend

- MEC Contamination
- MRS
- Former Camp Butner

Notes:
RC1 MEC contaminated area = 4,100.41 acres
RC1 remaining land = 7,428.98 acres

MRS=Munition Response Site
MEC=Munitions and Explosives of Concern
RC=Range Complex

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Source: HGL, USACE
ArcGIS Online Streetmap

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Figure 8.4
MRS Recommended for Feasibility Study
FTR MRS



Legend

MRS

Notes:
FTR MRS area = 20.12 acres

FTR=Flamethrower Training Range
MRS=Munition Response Site
MEC=Munitions and Explosives of Concern

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(8-04)FTR_Delineation.mxd
1/7/2015 CNL
Source: HGL, USACE
ArcGIS Online Streetmap

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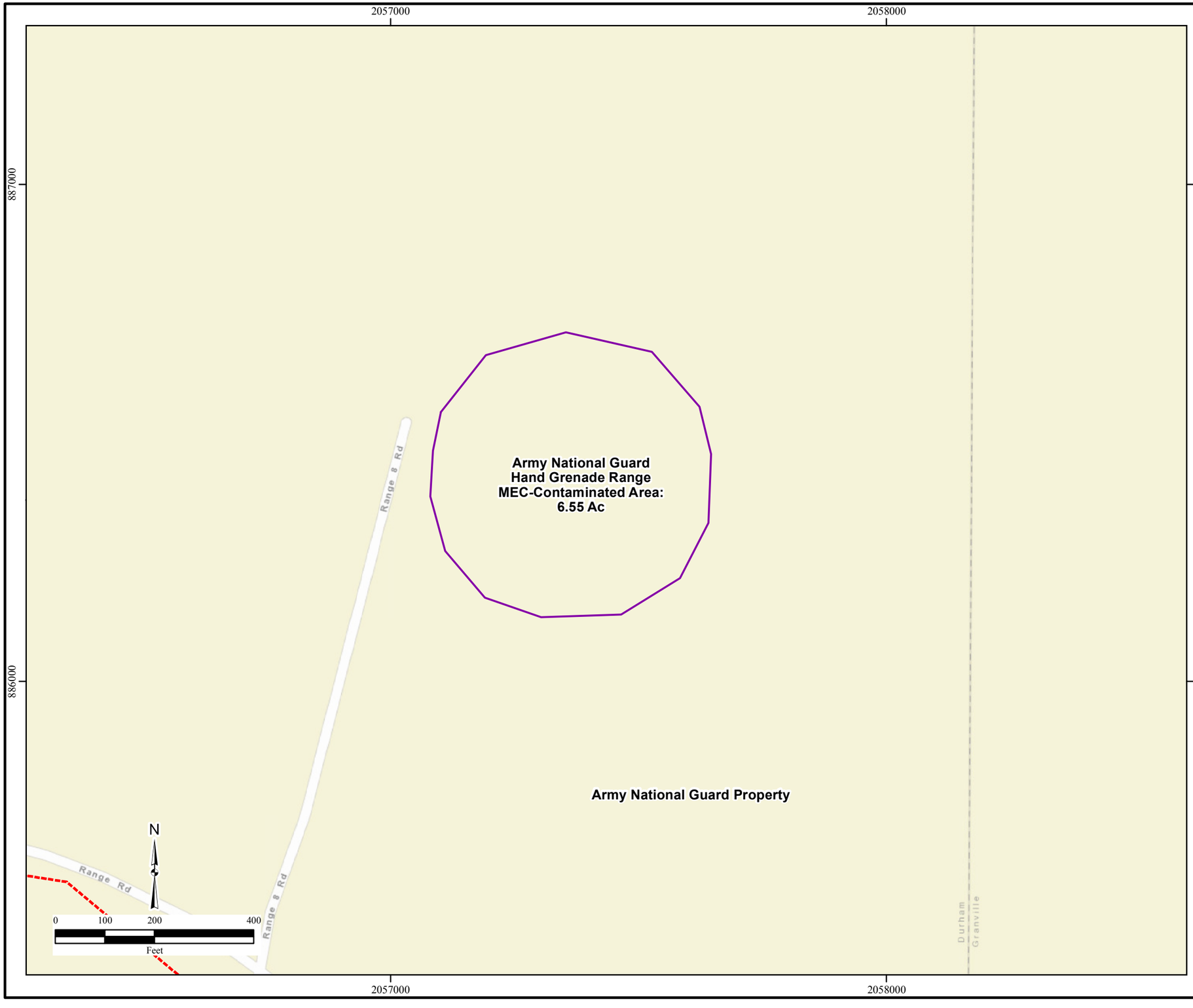
Figure 8.5
MRS Recommended for Feasibility Study
ARNG HGR



Legend

- MEC Contamination
- MRS

Notes:
ARNG HGR MEC contaminated area = 6.55 acres

ARNG= Army National Guard Property
HGR=Hand Grenade Range
MRS=Munition Response Site
MEC=Munitions and Explosives of Concern

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ArcGIS Online Streetmap

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APPENDIX A

DOCUMENT OF DISPOSITION OF MPPEH, MD, AND WASTES

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TABLE OF CONTENTS

Form 15.07	Inert, Demilitarization and Chain of Custody Certification for Non-Hazardous AEDA and Range Scrap
Letter of Receiving	Bonetti Explosives, LLC
Form 15.05	Explosive Material Disposition Record—Bill of Lading
Form 1348-1A	Issue Release/Receipt Document
Freight Receipt	Old Dominion Freight Line, Inc.
Notice of Destruction	Bonetti Explosives, LLC

Inert, Demilitarization and Chain of Custody Certification for Non-Hazardous AEDA and Range Scrap

1a. Load number: **05222013-001**

SECTION 1—GENERATOR RELEASE

1b. Releasing generator name and mailing address:	Telephone number:	Site Manager/Senior UXO Supervisor:
HydroGeoLogic, Inc. Munitions Response Team 5030 Bradford Drive, Bldg. 1, Ste 230, Huntsville, AL 35805	(259) 970-2105	Joel A. Sanders
1c. Project site name and location:	**Telephone number:**	**Senior Unexploded Ordnance Supervisor:**
Former Camp Butner RI/FS, Stem, NC	(919) 236-3304	Joel A. Sanders

1d. Container Numbers:	1e. Seal Numbers:	1f. Gross weight:	1g. Tare weight:	1h. Net weight:
USACE/FCB/HGL001 USACE/FCB/HGL002	4495805 4495804	1214	110	1104

1i. Material description:	1j. Material type:	1k. Units (weight/volume):
Munitions Debris (MD)	Mixed Metal (steel, brass, copper, aluminum)	lbs

1l. Inert certification:

"This certifies and verifies that the material listed has been 100 percent inspected and to the best of our knowledge and belief, are inert and/or free of explosives or related materials."

1m. Project Inspector/Certifier—Unexploded Ordnance Quality Control Specialist (UXOQCS):

Print or type name:	Signature:	Month/Day/Year:
Westleon Paul Rogers	Westleon Paul Rogers	05/22/13

1n. Inspector/Certifier—Project Site Senior Unexploded Ordnance Supervisor (SUXOS):

Print or type name:	Signature:	Month/Day/Year:
Joel A. Sanders	Joel A. Sanders	05/22/13

1o. Generator Release—I am the Project Site Manager and acknowledge release of this material:

Print or type name:	Signature:	Month/Day/Year:
Joel A. Sanders	Joel A. Sanders	05/22/13

SECTION 2—TRANSPORTER

2a. Transporter company name and mailing address:	Telephone Number:	Dispatcher Name:
Old Dominion Freight Line, Inc. 500 Old Dominion Way, Thomasville, NC 277360	(800) 432-6335	

2b. Transporter Receipt—I acknowledge receipt of this material and have verified that each container is sealed and intact:

Print or type name:	Signature:	Month/Day/Year:

2c. Transporter Release— I acknowledge release of this material:

Print or type name:	Signature:	Month/Day/Year:
Anthony Tombs	Anthony Lee Drums	5-24-13

SECTION 3—RECYCLER RECEIPT

3a. Demilitarization Recycler / Processor name and mailing address:	Telephone Number:	Recycler manager:
Bonetti Explosives, Inc. 1618 Smith Rau Road, Columbus, TX 78934	(979) 739-5597	Matt Barnett

3b. Certified Recycler/Storage Manager—I acknowledge receipt of this material and have verified that each container is seal and intact:

Print or type name:	Signature:	Month/Day/Year:

3c. Certified Demilitarization / Destruction Processor—I acknowledge receipt of this material (when applicable):

Print or type name:	Signature:	Month/Day/Year:
Matt Barnett	Matt Barnett	5/29/13

3d. Demilitarization / Destruction Certification:

"I certify that each item or items listed hereon were demilitarized and/or destroyed, so as to no longer resemble MPPEH (AEDA) or ordnance beyond the requirement listed in DoD 4160.21-M-1."

3e. Certified Recycler Manager—I acknowledge this material has undergone demilitarization/destruction in accordance with DoD 4160.21-M-1.

Print or type name:	Signature	Month/Day/Year:

3f. List special instruction or discrepancies here:

1. Three copies of this form will be completed and signed with original signature by the generator.
2. The transporter will receive one original copy and complete Section 2, blocks 2a.-2c., affix signature on 3-copies of this document and deliver 1-original copy with the material shipment to the recycler.
3. The recycler upon receipt and completion of Section 3. 3a.-3e. will return the original copy with affixed signatures to the generator address shown in Section 1, block 1b.
4. Attach DD FORM 1348-Issue Release/Transfer Document must remain attached with this document at all times.

Bonetti Explosives, LLC

June 6, 2013 Invoice # 3070

Mr. George Mackanin
American EOD Services, Inc.
P.O. Box 1237
Spearfish, South Dakota 57783-1237

Re: HydroGeoLogic Inc MDAS sent from Former Camp Butner, Stem, NC

Mr. Mackanin,

This letter is to verify that Bonetti Explosives, LLC has received two (2) barrels of MDAS sent by HydroGeoLogic Inc from Former Camp Butner, Stem, NC weighing a total of 1,078 lbs. The material arrived on May 29, 2013 in good condition. Security seal numbers and notations are as follows:

Barrel#	Security seal #s
001	4495805
002	4495804

The shipping material was subtracted from the total weight to give an actual MDAS weight of 989 lbs and was stored in Corridor "C" until it will be smelted and/or mutilated in accordance with EM 1110-4009. At that time you will receive a letter of final disposition.

Thank you for your Business,

Gina Barnett

(979) 739-5597

Explosive Material Disposition Record – Bill of Lading

Date:	Site Name/Location:	Grid #/Area or GPS coordinate:	Distributee Explosive License #:
05222013	Former Camp Butner RI/FS Butner, NC	ARNG # 022	1-AL-089-20-4F-00632

This form will be used as a Bill of Lading anytime explosives are transported in a HGL vehicle under DOT regulations and kept with the explosive driver in the vehicle until the explosives are issued, expended or returned to storage.

SECTION I. Explosive Material Issued for Demilitarization/Demolition Operations:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	51	1.4B	WPRogers
09APR12	Jet Perforator, 32g	34	1.4B	WPRogers
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	305ft	1.1D	WPRogers
02AU12J2	Cast Booster, Spartan 350	45	1.1D	WPRogers
17SE12W1	NONEL Leadline	5,000	1.4B	WPRogers
10SE12W1	NONEL Leadline	2,500	1.4B	WPRogers

Print Explosive Driver Name:	Explosive Driver Signature:
Westleon Paul Rogers	Westleon Paul Rogers

SECTION II. Explosive Material Expended by Detonation:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	51	1.4B	CBH
09APR12	Jet Perforator, 32g	34	1.4B	CBH
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	305ft	1.1D	CBH
02AU12J2	Cast Booster, Spartan 350	45	1.1D	CBH
17SE12W1	NONEL Leadline	5,000	1.4B	CBH
10SE12W1	NONEL Leadline	2,500	1.4B	CBH

SECTION III. Explosive Material Returned to Storage:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials

Demolition Supervisor Signature:	SUXOS Signature:
Westleon Paul Rogers	

DD FORM 1348-1A, JUL 91 (EG) ISSUE RELEASE/RECEIPT DOCUMENT

1	2	3	4	5	6	7		23	24	25	26	27	28	29	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
DOC IDENT			RI FROM			M&S		UNIT ISS		QUANTITY						SER	SUPPLEMENTARY ADDRESS				SIG	FUND		DISTRIBUTION			PROJECT			PRI		REQD	DEL DATE		ADV		RI			O/P		COND		MGT								

UNIT PRICE		1. TOTAL PRICE		2. SHIP FROM	3. SHIP TO
DOLLARS	CTS	DOLLARS	CTS	Former Camp Butner, Stem, North Carolina	Bonetti Explosives Columbus, TX 78934
				4. MARK FOR	

5. DOC DATE	6. NMFC	7. FRT RATE	8. TYPE CARGO	9. PS
5-22-13				

10. QTY. REC'D	11.UP	12. UNIT WEIGHT	13. UNIT CUBE	14. UFC	15. SL

16. FREIGHT CLASSIFICATION NOMENCLATURE

17. ITEM NOMENCLATURE

Mixed Metals (Steel, brass, copper, aluminum)

18. TY CONT	19. NO CONT	20. TOTAL WEIGHT	21. TOTAL CUBE
		1,214	

22. RECEIVED BY	23. DATE RECEIVED

24. DOCUMENT NUMBER & SUFFIX (30-44)

"This certifies that the material listed has been 100 percent properly inspected and, to the best of our knowledge and belief are free of explosive hazards, engine fluids, and illuminating dials and other visible liquid hazardous, toxic, and radioactive waste materials."

25. NATIONAL STOCK NO. & ADD (8-22)

Joel A. Sanders
Senior UXO Supervisor (SUXOS)
HydroGeoLogic, Inc.
5030 Bradford Drive
Bldg 1, Suite 230
Huntsville, AL 35805

26. RIC (4-6) UI (23-24) QTY (25-29) CON CODE (71) DIST (55-56) UP (74-80)

Westleon Paul Rogers
UXO Quality Control Specialist (UXOQCS)
HydroGeoLogic, Inc.
5030 Bradford Drive
Bldg 1, Suite 230

27. ADDITIONAL DATA

USACE/FCB/HydroGeoLogic, Inc./Container Number: 001 /Serial Number: 4495805
USACE/FCB/HydroGeoLogic, Inc./Container Number: 002 /Serial Number: 4495804

PREVIOUS EDITION MAY BE USED

PerFORM (DLA)

FREIGHT CHARGES ARE PREPAID ON THIS BILL OF LADING UNLESS MARKED COLLECT

OLD DOMINION FREIGHT LINE, INC

PHONE: 800-432-6335 WEB: www.odfl.com

INTERNET STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

Page 1 of 1

77737309342

FREIGHT CHARGES:	DATE:
Prepaid	05/24/2013

B/L# -

PO#:

SHIPPER
HGL, INC.
539 ROBERTS CHAPEL ROAD
INTERSECTION KEETON RD & RANGE RD
STEM, NC 27581
USA Ph#: 919-236-3304
JOEL SANDERS

CONSIGNEE
BONETTI EXPLOSIVES, INC.
1618 SMITH RAU ROAD,
COLUMBUS, TX 78934
USA Ph#: 979-739-5597
MATT BARNETT

COD
Amount:
COD Fee:

Subject to section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful changes.

(Signature of Consignor)

BILL THIRD PARTY FREIGHT CHARGES TO:
AMERICAN EOD SERVICES INC
PO BOX 1237
SPEARFISH, SD 57783
USA Ph#: 818-621-3689
GEORGE MACKANIN

REMIT TO (COD):

Pieces	HM	Description	Type	NMFC No.	Class	Weight (lbs)
1		MATERIAL DOCUMENTED AS SAFE (MDAS).	SKID		70	1,200
		MUNITIONS DEBRIS SCRAP METAL.				

SPECIAL INSTRUCTIONS

Rate Ref: 24708379

HAZARDOUS MATERIALS EMERGENCY CONTACT: -

Total Weight: 1,200

Total Shipping Units: 1 - Skids

Received and mutually agreed by the shipper and his assigns, any additional party with an interest to any of said property hereto and each carrier of all or any of said property over all or any portion of said route to destination, that every service to be performed hereunder shall be subject to the National Motor Freight classifications (NMF 100 Series) including the Rules, packaging and the Uniform Bill of Lading Terms and Conditions, the applicable regulations of the US Department of Transportation (DOT), the ATA Hazardous Materials Rules Guide Book, the Household Goods Mileage Guides, the Carrier's tariffs, the Carrier's pricing schedules, terms, conditions and rules maintained at Carrier's general offices all of which are in effect as of the date of issue of this Bill of Lading. Shipper certifies that the consigned merchandise is properly weighed, classified, described, packaged, marked, labeled, destined as indicated, in apparent good order except as noted (contents and conditions of contents of packages unknown), and in proper condition for transportation according to the DOT and the NMF 100 Series. Carrier (Carrier being understood throughout this contract as meaning any person or corporation in possession of the property under this contract) agrees to carry to said destination if on its route, otherwise to deliver to another carrier on the route to said destination. Carrier shall in no event be liable for loss of profit, income, interest, attorney fees, or any special, incidental or consequential damages.

NOTE-Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $_____ per _____

Carrier liability in the 48 contiguous states only: Shipments valued at more than $20.00 per pound are of extraordinary value. Carrier's maximum liability is $20.00 per pound per package subject to $50,000.00 maximum total liability per occurrence. The agreed value on household goods, used machinery, or personal effects does not exceed ten cents per pound per article, unless otherwise specified.

ACCESSORIAL SERVICES REQUESTED

☑ HYO

SHIPPER: HGL, INC.

AUTHORIZED SIGNATURE: (Shipper)

DATE: | H/U RECEIVED: | TRAILER NO.:

CARRIER: OLD DOMINION FREIGHT LINE, INC.

AUTHORIZED SIGNATURE: (Driver)

Bonetti Explosives, LLC

July 8, 2013 Invoice # 3070

Mr. George Mackanin
American EOD Services, Inc.
P.O. Box 1237
Spearfish, South Dakota 57783-1237

Re: HydroGeoLogic Inc MDAS sent from Former Camp Butner, Stem, NC

Mr. Mackanin,

This letter is to verify that Bonetti Explosives, LLC has smelted and prepared for recycling two (2) barrels of MDAS sent by HydroGeoLogic Inc from Former Camp Butner, Stem, NC weighing 989 lbs. The contents of the container was not sold, traded or otherwise given to another party until the contents were properly prepared for recycle and only identifiable by their basic content. On July 7, 2013 the material was dispositioned into civilian recycling in accordance with EM 1110-4009; this is your final letter regarding this matter.

Thank you for your Business,

Gina Barnett

(979) 739-5597

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APPENDIX B

ANALYTICAL RESULTS TABLES AND QA/QC EVALUATIONS

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Table B.1
Laboratory Analytical Results ARNG, RC1, and RC2 MRSs, May 2013

Former Camp Butner
ISM RESULTS (VALIDATED)

Sample ID	IS-ARNG-01		IS-ARNG-11		IS-ARNG-14		IS-ARNG-19		IS-ARNG-22		IS-ARNG-23		IS-ARNG-26		IS-ARNG-45		IS-ARNG-49		IS-ARNG-51		IS-ARNG-82		IS-ARNG-82D	
Sample Date	5/15/2013		5/14/2013		5/21/2013		5/15/2013		5/16/2013		5/15/2013		5/15/2013		5/21/2013		5/14/2013		5/15/2013		5/15/2013		5/15/2013	
Sample Type	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Lab Report#	L13051051-03		L13051051-02		L13051269-07		L13051051-05		L13051051-18		L13051051-07		L13051051-04		L13051269-08		L13051051-01		L13051051-06		L13051051-08		L13051051-09	
Parameter																								
Total Metals (6010B) (mg/kg)																								
Antimony, Total	0.396		0.226		0.262		0.194		0.272		0.713		0.177		0.285		0.268		0.294		0.744		0.738	
Copper, Total	11.20	J	7.82	J	4.39	J	4.24	J	7.70	J	15.40	J	3.24	J	4.84	J	4.74	J	4.84	J	68.20	J	50.10	J
Lead, Total	17.50	J	18.50	J	11.60		14.00	J	18.00	J	32.10	J	12.70	J	15.20		17.70	J	22.70	J	83.00	J	77.00	J
Zinc, Total	22.50	J	40.00	J	7.88	J	5.80	J	15.60	J	26.80	J	8.02	J	10.40	J	13.60	J	12.50	J	136.00	J	168.00	J
Explosives (8330B) (mg/kg)																								
1,3,5-Trinitrobenzene	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
1,3-Dinitrobenzene	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
2,4,6-Trinitrotoluene	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
2,4-Dinitrotoluene	0.563	J	0.349	J	0.270	J	0.404	J	0.238	J	0.555	J	0.310	J	0.359	J	0.299	J	0.351	J	0.186	J	0.203	J
2,6-Dinitrotoluene	2.340	J	1.460	J	1.090	J	1.520	J	0.857	J	2.180	J	1.480	J	1.380	J	1.220	J	1.380	J	0.768	J	0.827	J
2,4 and 2,6 mixture	2.903		1.809		1.360		1.924		1.095		2.735		1.790		1.739		1.519		1.731		0.954		1.030	
2-Amino-4,6-dinitrotoluene	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
2-Nitrotoluene	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
3-Nitrotoluene	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
4-Nitrotoluene	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
4-Amino-2,6-dinitrotoluene	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
HMX	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
Nitrobenzene	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
RDX	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
Tetryl	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
Nitroglycerin	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ
PETN	0.0986	UJ	0.0991	UJ	0.0976	UJ	0.0978	UJ	0.0975	UJ	0.0985	UJ	0.0978	UJ	0.0913	UJ	0.0985	UJ	0.0994	UJ	0.0996	UJ	0.0982	UJ

Table B.1
Laboratory Analytical Results ARNG, RC1, and RC2 MRSs, May 2013

Former Camp Butner
ISM RESULTS (VALIDATED)

Sample ID	IS-ARNG-82T		IS-RC1-01		IS-RC1-05		IS-RC1-06		IS-RC1-06D		IS-RC1-06T		IS-RC1-08		IS-RC1-10		IS-RC1-11		IS-RC1-13		IS-RC1-14		IS-RC1-34		IS-RC1-43	
Sample Date	5/15/2013		5/21/2013		5/20/2013		5/21/2013		5/21/2013		5/21/2013		5/20/2013		5/21/2013		5/21/2013		5/20/2013		5/20/2013		5/20/2013		5/20/2013	
Sample Type	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Lab Report#	L13051051-10		L13051269-11		L13051269-03		L13051269-12		L13051269-13		L13051269-14		L13051269-04		L13051269-10		L13051269-09		L13051269-01		L13051269-02		L13051269-06		L13051269-05	
Parameter																										
Total Metals (6010B) (mg/kg)																										
Antimony, Total	0.735		0.198		0.205		0.434		0.492		0.386		0.448		0.496		0.447		4.18		0.276		0.358		0.401	
Copper, Total	75.70	J	3.07	J	5.43	J	5.05	J	5.08	J	7.17	J	8.43	J	15.20	J	8.91	J	14.70	J	5.85	J	8.83	J	8.59	J
Lead, Total	94.70	J	18.30		7.74		27.50		29.70		29.30		28.20		24.20		43.30		70.60		16.90		23.00		32.30	
Zinc, Total	77.50	J	13.90	J	11.20	J	19.60	J	20.00	J	26.60	J	16.80	J	46.50	J	31.70	J	19.40	J	14.20	J	16.00	J	23.20	J
Explosives (8330B) (mg/kg)																										
1,3,5-Trinitrobenzene	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
1,3-Dinitrobenzene	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
2,4,6-Trinitrotoluene	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
2,4-Dinitrotoluene	0.208	J	0.683	J	0.322	J	0.635	J	0.453	J	0.395	J	0.738	J	0.540	J	0.441	J	0.340	J	0.413	J	0.426	J	0.341	J
2,6-Dinitrotoluene	0.820	J	2.490	J	0.990	J	2.350	J	1.690	J	1.350	J	2.750	J	1.810	J	1.570	J	1.280	J	1.540	J	1.460	J	1.280	J
2,4 and 2,6 mixture	1.028		3.173		1.312		2.985		2.143		1.745		3.488		2.350		2.011		1.620		1.953		1.886		1.621	
2-Amino-4,6-dinitrotoluene	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
2-Nitrotoluene	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
3-Nitrotoluene	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
4-Nitrotoluene	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
4-Amino-2,6-dinitrotoluene	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
HMX	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
Nitrobenzene	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
RDX	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
Tetryl	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ
Nitroglycerin	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	R	0.0981	UJ	0.0977	UJ	0.100	UJ
PETN	0.0976	UJ	0.0984	UJ	0.0968	UJ	0.0946	UJ	0.0974	UJ	0.0962	UJ	0.0982	UJ	0.0997	UJ	0.0982	UJ	0.0978	UJ	0.0981	UJ	0.0977	UJ	0.100	UJ

Table B.1
Laboratory Analytical Results ARNG, RC1, and RC2 MRSs, May 2013

Former Camp Butner
ISM RESULTS (VALIDATED)

Sample ID	IS-RC2-01		IS-RC2-02		IS-RC2-02D		IS-RC2-02T		IS-RC2-04		IS-RC2-05		IS-RC2-19		IS-RC2-21		IS-RC2-30		IS-RC2-34		IS-RC2-52		IS-RC2-64	
Sample Date	5/16/2013		5/17/2013		5/17/2013		5/17/2013		5/16/2013		5/16/2013		5/16/2013		5/17/2013		5/17/2013		5/17/2013		5/17/2013		5/16/2013	
Sample Type	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Lab Report#	L13051051-11		L13051051-19		L13051051-20		L13051051-21		L13051051-15		L13051051-13		L13051051-12		L13051051-23		L13051051-25		L13051051-22		L13051051-24		L13051051-14	
Parameter																								
Total Metals (6010B) (mg/kg)																								
Antimony, Total	0.217		47.30		46.70		47.20		0.331		0.353		0.316		0.319		0.363		13.40		0.235		0.286	
Copper, Total	3.56	J	8.80	J	9.03	J	9.54	J	8.21	J	4.66	J	6.36	J	7.05	J	4.88	J	6.25	J	4.11	J	16.40	J
Lead, Total	13.50	J	13.70	J	13.30	J	14.00	J	28.90	J	22.20	J	15.80	J	27.50		20.10		10.40	J	16.60		23.10	J
Zinc, Total	5.62	J	26.60	J	26.90	J	23.40	J	22.50	J	19.20	J	14.80	J	49.00	J	28.50	J	21.70	J	13.50	J	29.30	J
Explosives (8330B) (mg/kg)																								
1,3,5-Trinitrobenzene	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
1,3-Dinitrobenzene	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
2,4,6-Trinitrotoluene	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
2,4-Dinitrotoluene	0.491	J	0.346	J	0.340	J	0.331	J	0.214	J	0.337	J	0.598	J	0.962	J	0.269	J	0.709	J	0.289	J	0.783	J
2,6-Dinitrotoluene	1.940	J	1.240	J	1.210	J	1.170	J	0.836	J	1.510	J	2.160	J	2.950	J	1.160	J	2.490	J	1.240	J	2.720	J
2,4 and 2,6 mixture	2.431		1.586		1.550		1.501		1.050		1.847		2.758		3.912		1.429		3.199		1.529		3.503	
2-Amino-4,6-dinitrotoluene	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
2-Nitrotoluene	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
3-Nitrotoluene	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
4-Nitrotoluene	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
4-Amino-2,6-dinitrotoluene	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
HMX	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
Nitrobenzene	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
RDX	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.1180	J
Tetryl	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
Nitroglycerin	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972	UJ	0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ
PETN	0.0985	UJ	0.0992	UJ	0.0994	UJ	0.0995	UJ	0.0972		0.0994	UJ	0.0996	UJ	0.0978	UJ	0.0969	UJ	0.0975	UJ	0.0991	UJ	0.0988	UJ

U Analyte was not detected. The concentration is below the reported LOD.
J Analyte present. Reported value may not be accurate or precise.
% percent
mg/kg milligrams per kilogram
µg/kg micrograms per kilogram
0.xxx Value is above the screening level

Table B.2
Laboratory Analytical Results Background Samples, May 2013

Former Camp Butner
ISM RESULTS (VALIDATED)

Sample ID	IS-BG-01		IS-BG-01D		IS-BG-01T		IS-BG-02		IS-BG-03		IS-BG-04		IS-BG-05		IS-BG-06		IS-BG-07		IS-BG-08		IS-BG-09		IS-BG-10	
Sample Date	5/22/2013		5/22/2013		5/22/2013		5/22/2013		5/22/2013		5/22/2013		5/22/2013		5/22/2013		5/22/2013		5/23/2013		5/23/2013		5/23/2013	
Sample Type	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Lab Report#	L13051269-19		L13051269-20		L13051269-21		L13051269-22		L13051269-23		L13051269-24		L13051269-25		L13051269-26		L13051269-27		L13051361-01		L13051361-02		L13051361-03	
Parameter																								
Total Metals (6010B) (mg/kg)																								
Antimony, Total	0.154	J	0.150	J	0.123	J	0.316		0.304		0.178		0.260		0.662		0.274		0.222		53.90		0.325	
Copper, Total	2.16	J	1.73	J	1.67	J	3.49	J	3.07	J	4.00	J	2.48	J	16.10	J	4.88	J	2.62	J	54.50	J	8.64	J
Lead, Total	13.00		13.00		12.60		20.90		22.60		7.22		16.40		15.50		12.20		10.90		17.20		16.40	
Zinc, Total	11.40	J	10.60	J	9.92	J	11.70	J	16.50	J	9.01	J	5.23	J	26.30	J	10.40	J	11.60	J	93.00	J	29.10	J
Explosives (8330B) (mg/kg)																								
1,3,5-Trinitrobenzene	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
1,3-Dinitrobenzene	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
2,4,6-Trinitrotoluene	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
2,4-Dinitrotoluene	0.140	J	0.176	J	0.162	J	0.264	J	0.459	J	0.396	J	0.425	J	0.208	J	0.150	J	NA		NA		NA	
2,6-Dinitrotoluene	0.522	J	0.586	J	0.530	J	1.040	J	1.640	J	1.420	J	1.800	J	0.735	J	0.593	J	NA		NA		NA	
2,4 and 2,6 mixture	0.662		0.762		0.692		1.304		2.099		1.816		2.225		0.943		0.743		NA		NA		NA	
2-Amino-4,6-dinitrotoluene	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
2-Nitrotoluene	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
3-Nitrotoluene	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
4-Nitrotoluene	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
4-Amino-2,6-dinitrotoluene	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
HMX	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
Nitrobenzene	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
RDX	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
Tetryl	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
Nitroglycerin	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	
PETN	0.0975	UJ	0.0978	UJ	0.100	UJ	0.0985	UJ	0.0974	UJ	0.0973	UJ	0.0970	UJ	0.0983	UJ	0.0985	UJ	NA		NA		NA	

U Analyte was not detected. The concentration is below the reported LOD.
J Analyte present. Reported value may not be accurate or precise.
% percent
mg/kg milligrams per kilogram
µg/kg micrograms per kilogram
0.xxx Value is above the screening level

Table B.3
Laboratory Analytical Results Confirmation Samples, October 2013

Method	Analyte	Client Sample ID	IS-ARNG-01	IS-ARNG-23	IS-BG-01	IS-BG-02	IS-BG-03	IS-BG-04
		Collected Date	10/29/2013 14:30:00	10/29/2013 15:50:00	10/29/2013 16:45:00	10/30/2013 07:30:00	10/30/2013 08:35:00	10/30/2013 10:45:00
		Lab Sample ID	280-48706-11	280-48706-14	280-48706-15	280-48706-13	280-48706-12	280-48706-8
		Matrix ID	Soil	Soil	Soil	Soil	Soil	Soil
		Units						
8330B	1,3,5-Trinitrobenzene	mg/kg	0.46 J	0.038 U	0.037 U	0.5	0.037 U	0.048 J
	1,3-Dinitrobenzene	mg/kg	0.049 J	0.038 U	0.037 U	0.038 U	0.037 U	0.038 UJ
	2,4,6-Trinitrotoluene	mg/kg	0.038 U	0.038 U	0.037 U	0.038 U	0.037 U	0.038 UJ
	2,4-Dinitrotoluene	mg/kg	0.038 U	0.038 U	0.037 U	0.038 U	0.037 U	0.038 UJ
	2,6-Dinitrotoluene	mg/kg	0.038 U	0.038 U	0.037 U	0.038 U	0.037 U	0.45 J
	2-Amino-4,6-dinitrotoluene	mg/kg	0.038 U	0.038 U	0.037 U	0.038 U	0.037 U	0.038 UJ
	2-Nitrotoluene	mg/kg	0.076 U	0.077 U	0.074 U	0.076 U	0.047 J	0.077 U
	3,5-Dinitroaniline	mg/kg	0.038 U	0.038 U	0.037 U	0.038 U	0.037 U	0.061 J
	3-Nitrotoluene	mg/kg	0.076 U	0.077 U	0.074 U	0.076 U	0.075 U	0.077 U
	4-Amino-2,6-dinitrotoluene	mg/kg	0.038 U	0.038 U	0.037 U	0.038 U	0.037 U	0.038 UJ
	4-Nitrotoluene	mg/kg	0.095 U	0.096 U	0.092 U	0.095 U	0.094 U	0.096 UJ
	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	mg/kg	0.076 U	0.077 U	0.074 U	0.048 J	0.075 U	0.077 UJ
	Methyl-2,4,6-Trinitrophenylnitramine (Tetryl)	mg/kg	0.076 U	0.077 U	0.074 U	0.076 U	0.075 U	0.077 UJ
	Nitrobenzene	mg/kg	0.095 U	0.096 U	0.092 U	0.18 J	0.094 U	0.096 UJ
	Nitroglycerine	mg/kg	0.38 U	0.38 U	0.37 U	0.38 U	0.37 U	0.38 UJ
	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	mg/kg	0.038 U	0.038 U	0.037 U	0.038 U	0.037 U	0.038 UJ
	Pentaerythritol Tetranitrate	mg/kg	0.95 U	0.96 U	0.92 U	0.95 U	0.94 U	0.96 U

U Analyte was not detected. The concentration is below the reported LOD.
J Analyte present. Reported value may not be accurate or precise.
% percent
mg/kg milligrams per kilogram

Table B.3
Laboratory Analytical Results Confirmation Samples, October 2013

Method	Analyte	Client Sample ID	IS-BG-05	IS-BG-06	IS-BG-07	IS-BG-07	IS-BG-07	IS-BG-08
		Collected Date	10/30/2013 11:30:00	10/30/2013 12:00:00	10/30/2013 12:50:00	10/30/2013 12:50:00	10/30/2013 12:50:00	10/31/2013 08:30:00
		Lab Sample ID	280-48706-7	280-48706-6	280-48706-1	280-48706-1 DUP	280-48706-1 TRL	280-48706-19
		Matrix ID	Soil	Soil	Soil	Soil	Soil	Soil
		Units						
8330B	1,3,5-Trinitrobenzene	mg/kg	0.039 U	0.038 U	0.039 U	0.037 U	0.038 U	0.49
	1,3-Dinitrobenzene	mg/kg	0.039 U	0.038 U	0.039 U	0.037 U	0.038 U	0.039 U
	2,4,6-Trinitrotoluene	mg/kg	0.039 U	0.038 U	0.039 U	0.037 U	0.038 U	0.039 U
	2,4-Dinitrotoluene	mg/kg	0.039 U	0.038 U	0.039 U	0.037 U	0.038 U	0.039 U
	2,6-Dinitrotoluene	mg/kg	0.039 U	0.038 U	0.039 U	0.037 U	0.038 U	0.039 U
	2-Amino-4,6-dinitrotoluene	mg/kg	0.039 U	0.038 U	0.039 U	0.037 U	0.038 U	0.039 U
	2-Nitrotoluene	mg/kg	0.079 U	0.075 U	0.078 U	0.074 U	0.076 U	0.078 U
	3,5-Dinitroaniline	mg/kg	0.039 U	0.038 U	0.039 U	0.037 U	0.038 U	0.039 U
	3-Nitrotoluene	mg/kg	0.079 U	0.075 U	0.078 U	0.074 U	0.076 U	0.078 U
	4-Amino-2,6-dinitrotoluene	mg/kg	0.039 U	0.038 U	0.039 U	0.037 U	0.038 U	0.039 U
	4-Nitrotoluene	mg/kg	0.098 U	0.094 U	0.097 U	0.092 U	0.095 U	0.097 U
	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	mg/kg	0.079 U	0.075 U	0.078 U	0.074 U	0.076 U	0.078 U
	Methyl-2,4,6-Trinitrophenylnitramine (Tetryl)	mg/kg	0.079 U	0.075 U	0.078 U	0.074 U	0.076 U	0.078 U
	Nitrobenzene	mg/kg	0.098 U	0.094 U	0.097 U	0.092 U	0.095 U	0.097 U
	Nitroglycerine	mg/kg	0.39 U	0.38 U	0.39 U	0.37 U	0.38 U	0.39 U
	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	mg/kg	0.039 U	0.038 U	0.039 U	0.037 U	0.038 U	0.039 U
	Pentaerythritol Tetranitrate	mg/kg	0.98 U	0.94 U	0.97 U	0.92 U	0.95 U	0.97 U

U Analyte was not detected. The concentration is below the reported LOD.
J Analyte present. Reported value may not be accurate or precise.
% percent
mg/kg milligrams per kilogram

Table B.3
Laboratory Analytical Results Confirmation Samples, October 2013

Method	Analyte	Client Sample ID	IS-BG-09	IS-BG-10	IS-RC1-01	IS-RC1-06	IS-RC1-08
		Collected Date	10/30/2013 17:10:00	10/31/2013 07:55:00	10/29/2013 15:05:00	10/30/2013 16:20:00	10/30/2013 13:50:00
		Lab Sample ID	280-48706-5	280-48706-17	280-48706-10	280-48706-3	280-48706-2
		Matrix ID	Soil	Soil	Soil	Soil	Soil
		Units					
8330B	1,3,5-Trinitrobenzene	mg/kg	0.014 J	0.038 U	0.038 U	0.038 U	0.037 U
	1,3-Dinitrobenzene	mg/kg	0.037 U	0.038 U	0.038 U	0.038 U	0.037 U
	2,4,6-Trinitrotoluene	mg/kg	0.037 U	0.038 U	0.038 U	0.038 U	0.037 U
	2,4-Dinitrotoluene	mg/kg	0.037 U	0.038 U	0.038 U	0.038 U	0.037 U
	2,6-Dinitrotoluene	mg/kg	0.037 U	0.038 U	0.11 J	0.038 U	0.053 J
	2-Amino-4,6-dinitrotoluene	mg/kg	0.037 U	0.038 U	0.038 U	0.038 U	0.047 J
	2-Nitrotoluene	mg/kg	0.074 U	0.076 U	0.076 U	0.077 U	0.074 U
	3,5-Dinitroaniline	mg/kg	0.037 U	0.038 U	0.038 U	0.038 U	0.037 U
	3-Nitrotoluene	mg/kg	0.074 U	0.076 U	0.076 U	0.077 U	0.074 U
	4-Amino-2,6-dinitrotoluene	mg/kg	0.037 U	0.038 U	0.038 U	0.038 U	0.037 U
	4-Nitrotoluene	mg/kg	0.092 U	0.095 U	0.048 J	0.096 U	0.093 U
	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	mg/kg	0.074 U	0.076 U	0.076 U	0.077 U	0.074 U
	Methyl-2,4,6-Trinitrophenylnitramine (Tetryl)	mg/kg	0.074 U	0.076 U	0.076 U	0.077 U	0.074 U
	Nitrobenzene	mg/kg	0.092 U	0.095 U	0.095 U	0.096 U	0.093 U
	Nitroglycerine	mg/kg	0.37 U	0.38 U	0.38 U	0.38 U	0.37 U
	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	mg/kg	0.061 J	0.038 U	0.038 U	0.038 U	0.037 U
	Pentaerythritol Tetranitrate	mg/kg	0.92 U	0.95 U	0.95 U	0.96 U	0.93 U

U Analyte was not detected. The concentration is below the reported LOD.
J Analyte present. Reported value may not be accurate or precise.
% percent
mg/kg milligrams per kilogram

Table B.3
Laboratory Analytical Results Confirmation Samples, October 2013

Method	Analyte	Client Sample ID	IS-RC1-10	IS-RC1-11	IS-RC2-21	IS-RC2-64
		Collected Date	10/30/2013 14:55:00	10/30/2013 15:55:00	10/31/2013 10:05:00	10/31/2013 09:30:00
		Lab Sample ID	280-48706-9	280-48706-4	280-48706-20	280-48706-18
		Matrix ID	Soil	Soil	Soil	Soil
		Units				
8330B	1,3,5-Trinitrobenzene	mg/kg	0.076 J	0.039 U	0.038 U	0.16 J
	1,3-Dinitrobenzene	mg/kg	0.039 U	0.039 U	0.038 U	0.038 U
	2,4,6-Trinitrotoluene	mg/kg	0.039 U	0.039 U	0.038 U	0.047 J
	2,4-Dinitrotoluene	mg/kg	0.039 U	0.039 U	0.038 U	0.038 U
	2,6-Dinitrotoluene	mg/kg	0.039 U	0.16	0.038 U	0.038 U
	2-Amino-4,6-dinitrotoluene	mg/kg	0.039 U	0.039 U	0.038 U	0.038 U
	2-Nitrotoluene	mg/kg	0.079 U	0.077 U	0.076 U	0.075 U
	3,5-Dinitroaniline	mg/kg	0.039 U	0.039 U	0.038 U	0.038 U
	3-Nitrotoluene	mg/kg	0.079 U	0.077 U	0.076 U	0.075 U
	4-Amino-2,6-dinitrotoluene	mg/kg	0.039 U	0.039 U	0.038 U	0.038 U
	4-Nitrotoluene	mg/kg	0.099 U	0.097 U	0.095 U	0.094 U
	Hexahydro-1,3,5-Trinitro-1,3,5-Triazine (RDX)	mg/kg	0.079 U	0.077 U	0.076 U	0.075 U
	Methyl-2,4,6-Trinitrophenylnitramine (Tetryl)	mg/kg	0.079 U	0.077 U	0.076 U	0.075 U
	Nitrobenzene	mg/kg	0.099 U	0.097 U	0.095 U	0.094 U
	Nitroglycerine	mg/kg	0.39 U	0.39 U	0.38 U	0.38 U
	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	mg/kg	0.039 U	0.039 U	0.038 U	0.038 U
	Pentaerythritol Tetranitrate	mg/kg	0.99 U	0.97 U	0.95 U	0.94 U

U Analyte was not detected. The concentration is below the reported LOD.
J Analyte present. Reported value may not be accurate or precise.
% percent
mg/kg milligrams per kilogram

APPENDIX C

INSTITUTIONAL ANALYSIS AND INSTITUTIONAL ANALYSIS REPORT

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APPENDIX C-1

INSTITUTIONAL ANALYSIS

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APPENDIX C-1
INSTITUTIONAL ANALYSIS

C-1.1 INSTITUTIONAL ANALYSIS

This Institutional Analysis is presented along with the Institutional Analysis Report provided in Appendix C-2. Both appendices support the Remedial Investigation (RI) report developed for this project. This Institutional Analysis was prepared by HydroGeoLogic, Inc. (HGL) for the U.S. Army Engineering and Support Center, Huntsville (USAESCH), and U.S. Army Corps of Engineers (USACE), Wilmington District, under contract number W912DY-10-D-0023, Delivery Order No. 0009. The report is prepared in accordance with Engineer Pamphlet (EP) 1110-1-18 EM-CX Interim Guidance 06-04. The purpose of the institutional analysis is to identify the government agencies that have jurisdiction over former Camp Butner, Granville, Person, and Durham Counties, North Carolina, specifically the five Munitions Response Sites (MRSs):

1) Army National Guard Property (ARNG) MRS;
2) Range Complex 1 (RC1) MRS;
3) Range Complex 2 (RC2) MRS;
4) Hand Grenade Range (HGR) MRS; and
5) Flame Thrower Range (FTR) MRS.

This evaluation also assesses the ability of each of these agencies to protect the public from munitions and explosives of concern (MEC) hazards and munitions constituents (MC) risks. Additional information on the jurisdiction of each entity (i.e., authority and/or willingness to implement land use controls [LUCs] or Military Munitions Response Program [MMRP]-related actions) is included in the Institution Summary Results below.

In order for institutional control strategies to be successful and effective, cooperation of local and state authorities is required. Assessment of the government agencies associated with the former Camp Butner site included collection of the following data:

- Name of agency;
- Origin of institution;
- Basis of authority;
- Sunset provisions;
- Geographic jurisdiction;
- Public safety function;
- Land use control function;
- Financial capability;
- Desire to participate in the institutional control program; and
- Constraints on institutional effectiveness.

C-1.2 INSTITUTION SUMMARY RESULTS

U.S. ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT

Origin of Institution:	The Corps of Engineers was established as a separate branch by the Army in 1802. The Wilmington District acts as the manager and director of the Department of Defense Formerly Used Defense Sites (FUDS) program.
Basis of Authority:	Office of USACE Geographic District in Wilmington.
Sunset Provisions:	None.
Geographic Jurisdiction:	Includes North Carolina, South Carolina, Georgia, Florida, most of Alabama, and approximately one-third of Mississippi and Virginia.
Public Safety Function:	Responsible for public affairs.
Land Use Control Function:	None.
Financial Capability:	Primary funding source.
Desire to participate:	Yes.
Institutional effectiveness:	Does not have control or authority over the property. May only recommend actions.

U.S. ARMY ENGINEERING SUPPORT CENTER, HUNTSVILLE

Origin of Institution:	USAESCH began as a single mission center in 1967, evolved into a diversified high technology engineering and design and procurement organization, and was renamed the U.S. Army Engineering and Support Center, Huntsville, in 1995.
Basis of Authority:	Responsible for evaluating MEC and MC hazards at Former Camp Butner.
Sunset Provisions:	None.
Geographic Jurisdiction:	Nationwide.
Public Safety Function:	Responsible for providing competent site guidance to ensure site conditions do not endanger current or potential inhabitants of areas under investigation.
Land Use Control Function:	None.
Financial Capability:	Allocates funds from Wilmington District.
Desire to participate:	Yes.
Institutional effectiveness:	Does not have control or authority over the property. May only recommend actions.

U.S. ENVIRONMENTAL PROTECTION AGENCY

Origin of Institution:	In July of 1970, the U.S. Environmental Protection Agency (USEPA) was established in response to the growing public demand for cleaner water, air and land.
Basis of Authority:	Environmental regulators for the United States
Sunset Provisions:	None
Geographic Jurisdiction:	Region 4, serves Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee
Public Safety Function:	Protect the public from environmental hazards
Land Use Control Function:	Can implement LUCs on private or government-owned lands through legal powers authorized through Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) mandates.
Financial Capability:	Allocates funds through government initiatives such as Superfund.
Desire to participate:	Yes
Institutional effectiveness:	The USEPA enacts constraints on businesses and individuals through legal mandates such as RCRA and CERCLA to ensure compliance with developed environmental laws.

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Origin of Institution:	With health functions and environmental pressures of the Department of Environment, Health, and Natural Resources growing at equally substantial rates, the 1996 General Assembly divided the department to better handle growth. On June 1, 1997, health functions were transferred to the Department of Human Resources, and the Department of Environment and Natural Resources was born.
Basis of Authority:	Environmental regulators for the State of North Carolina
Sunset Provisions:	None
Geographic Jurisdiction:	State of North Carolina
Public Safety Function:	Protect the public from environmental hazards.
Land Use Control Function:	Only within applicable regulatory framework.
Financial Capability:	Limited
Desire to participate:	Yes
Institutional effectiveness:	Must operate within regulatory framework and authority limited to emergencies that effect the public.

NORTH CAROLINA NATIONAL GUARD, CAMP BUTNER TRAINING CENTER

Origin of Institution:	The former Camp Butner (the FUDS site which is included in this RI) was established on August 4, 1942 to train infantry divisions and various artillery and engineer units. Camp Butner was an active installation from 1942 until 1946. In 1947, the War Department closed the former Camp Butner and a portion (4,824 acres) became the North Carolina National Guard Training Center.
Basis of Authority:	Landowner (4,824 acres).
Sunset Provisions:	None.
Geographic Jurisdiction:	ARNG MRS landowner.
Public Safety Function:	Responsible for MEC awareness for personnel with access to the site and controls overall access to the site.
Land Use Control Function:	Controls Site Closure.
Financial Capability:	Limited.
Desire to participate:	Yes.
Institutional effectiveness:	Has control or authority over the property at the ARNG MRS.

BUTNER PUBLIC SAFETY

Origin of Institution:	The Butner Public Safety department operates within the North Carolina Department of Public Safety. North Carolina Department of Public Safety is North Carolina's statewide public safety and homeland security agency. The department was formed in 2012 from consolidation of previous departments. The mission of the Department of Public Safety is to improve the quality of life for North Carolinians by reducing crime and enhancing public safety.
Basis of Authority:	Butner Public Safety serves as the consolidating and coordinating entity for police officer responses at the former Camp Butner.
Sunset Provisions:	None
Geographic Jurisdiction:	Granville County
Public Safety Function:	Enforce ordinances and laws developed to protect public safety.
Land Use Control Function:	None
Financial Capability:	Limited
Desire to participate:	Yes
Institutional effectiveness:	Enforces ordinances and laws only.

PERSON COUNTY SHERIFF'S OFFICE

Origin of Institution:	Person County was established in 1791, and Roxboro, the county seat, was incorporated in 1855.
Basis of Authority:	Sheriff's office for portions of the Range Complex 1 and Range Complex 2 MRSs
Sunset Provisions:	None
Geographic Jurisdiction:	Person County
Public Safety Function:	Enforce ordinances and laws developed to protect public safety.
Land Use Control Function:	None
Financial Capability:	Limited
Desire to participate:	Yes
Institutional effectiveness:	Enforces ordinances and laws only.

DURHAM COUNTY SHERIFF'S OFFICE

Origin of Institution:	Durham County was established in 1881, and Durham was made the county seat in 1881.
Basis of Authority:	Sheriff's office for portions of the Range Complex 1 and Army National Guard Property MRSs
Sunset Provisions:	None
Geographic Jurisdiction:	Durham County
Public Safety Function:	Enforce ordinances and laws developed to protect public safety.
Land Use Control Function:	None
Financial Capability:	Limited
Desire to participate:	Yes
Institutional effectiveness:	Enforces ordinances and laws only.

GRANVILLE COUNTY SHERIFF'S OFFICE

Origin of Institution:	Granville County was established in 1746, Oxford was made the county seat in 1761, and incorporated in 1816.
Basis of Authority:	Through coordination with Butner Public Safety, the Granville County Sheriff's office coordinates emergency responses within Granville County boundary.
Sunset Provisions:	None
Geographic Jurisdiction:	Granville County
Public Safety Function:	Enforce ordinances and laws developed to protect public safety.
Land Use Control Function:	None
Financial Capability:	Limited
Desire to participate:	Yes
Institutional effectiveness:	Enforces ordinances and laws only.

PRIVATE LANDOWNERS

Origin of Institution:	These are individual citizens.
Basis of Authority:	These citizens control the access to the land based on their ownership of the land.
Sunset Provisions:	None
Geographic Jurisdiction:	Each individual parcel within either Granville, Person, or Durham County
Public Safety Function:	None
Land Use Control Function:	Control access to each parcel
Financial Capability:	Limited
Desire to participate:	Various
Institutional effectiveness:	None

APPENDIX C-2

INSTITUTIONAL ANALYSIS REPORT

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APPENDIX C-2
INSTITUTIONAL ANALYSIS REPORT

C-2.1 INTRODUCTION

This Institutional Analysis Report is presented along with the Institutional Analysis provided in Appendix C-1. Both appendices support the Remedial Investigation (RI) report developed for this project. This report outlines the agencies that have jurisdiction over former Camp Butner, located in Granville, Person, and Durham Counties, North Carolina, and outlines their ability to enforce institutional controls. Local and state agencies that would implement the institutional controls recommended for the five Munitions Response Sites (MRSs): (1) Army National Guard Property (ARNG) MRS; (2) Range Complex 1 (RC1) MRS; (3) Range Complex 2 (RC2) MRS; (4) Hand Grenade Range (HGR) MRS; and (5) Flame Thrower Range (FTR) MRS are identified.

C-2.2 METHODOLOGY

The methodology used to evaluate potential institutional controls focuses on reducing potential munitions and explosives of concern (MEC) hazards and munitions constituent (MC) risks at former Camp Butner and included the review of the government institutions and non-government entities that have some form of jurisdiction or ownership of the properties within the site (Appendix C-1). Once jurisdictions and ownership were determined, the information gathered was reviewed based on the following criteria:

- Based on knowledge of the area and discussions with the U.S. Army Corps of Engineers (USACE), including during the technical project planning (TPP) process for this project, a list of organizations was outlined.
- The primary institutions having jurisdiction over the five MRSs addressed under the RI were reviewed. The governmental agencies exercising authority over the land containing the MRSs are the U.S. Environmental Protection Agency (USEPA) and North Carolina Department of Environment and Natural Resources (NCDENR). Various entities were identified with either jurisdiction and/or capability and willingness to assert control over the land containing potential MEC hazards (if identified).

C-2.3 SCOPE OF EFFORT

This detailed institutional analysis report is developed in accordance with U.S. Army Engineering and Support Center, Huntsville (USAESCH) guidance. This analysis supports the development of strategies that may require the cooperation of local and state authorities. The local, state, and federal government agencies with jurisdiction over former Camp Butner have been assessed with regard to their concerns and authority to exercise institutional controls over the property. This report outlines potential control strategies and provides recommendations for specific control strategies.

C-2.4 SELECTION CRITERIA

A list of agencies, individuals and organizations were selected based on relevance to the institutional control process. A set of criteria was utilized in the selection of agencies. These organizations and agencies should:

- Have jurisdiction as a public agency.
- Have primary concern for ordnance hazards because of ownership or use.
- Have technical capability for access control and/or behavior modification strategies.
- Provide a variety of sources (i.e., print, and visual) that would provide complete coverage/contact with users.
- Repeat the same or different strategy at a later date.
- Have authority to assist in implementation of institutional controls.
- Have responsibility for land-use control and/or public safety.
- Have capacity to conduct public information and education activities.
- Have expressed an ability and willingness to assist.

C-2.5 ACCEPTANCE OF JOINT RESPONSIBLITIES

Relationships with the former Camp Butner stakeholders have been established through TPP meetings, public meetings and joint efforts with the local community. The ARNG MRS is owned by the state of North Carolina National Guard, while the RC1, RC2, HGR, and FTR MRSs are owned by various private parties. Institutional controls (if recommended) will provide a mechanism to reduce the risk of exposure to MEC or MC.

C-2.6 TECHNICAL CAPABLITIES

The landowners have the ability to limit access and provide awareness to residents, visitors, workers, and employees that work within the boundaries of the MRSs. The Butner Public Safety office and the Granville County, Person County, and Durham County Sheriff's Offices have the capability to provide emergency response support for the MRSs, if necessary. The counties and municipalities also have the capabilities to apply planning and zoning restrictions within the MRS property boundary. Granville, Person, and Durham Counties also have jurisdiction on planning and zoning restrictions on the properties associated with each county.

C-2.7 INTERGOVERNMENTAL RELATIONSHIPS

The USACE, NCDENR and USEPA have cooperated during the RI conducted for these MRSs. The government will continue to recognize the safety concerns identified (if any) and will follow the recommendations made by the TPP team and approved by the USACE Wilmington District, and USAESCH. These recommendations may include instituting land use controls (LUCs).

C-2.8 STABILITY

NCDENR, USEPA and the USACE are government entities and, hence, are expected to be the most stable type of organization.

C-2.9 FUNDING SOURCE RECOMMENDED FOR DETAILED ANALYSIS

If eventually recommended, LUCs would provide cost effective ways to ensure and maintain the safety of the public and provide awareness. The source of funding would be provided by the USACE Wilmington District. The district would provide the main source of funding for the access controls and printed media.

C-2.10 RECOMMENDATIONS

Recommended preliminary LUC strategies which may be necessary would be based on discussions with the USACE and the various landowners and based on overall knowledge of the site and conditions. The final recommendation may involve educational awareness and continued remedies prior to closure for an MRS as the appropriate method for reducing MEC risks. Any LUC strategies that may be recommended would be considered in coordination with other potential response action alternatives that will be developed in a feasibility study.

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APPENDIX D

DEMOLITION ACTIVITY SUMMATION TABLES

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APPENDIX D-1

MEC-MPPEH ACCOUNTABILITY RECORD

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HGL HydroGeoLogic, Inc MUNITIONS RESPONSE TEAM

Munitions and Explosives of Concern Demilitarization/ Disposal by Detonation Accountability Record

Site Name:	Site Location:	Contract Number:	Delivery/Task Order No:
Former Camp Butner	Granville, Person, and Durham Counties, North Carolina	W912DY-10-D-0023	0009

Anomaly No.	Grid or GPS Coordinates Location	Depth Detected (feet)	Identification/Nomenclature (include DMM, MC, MEC or UXO)	Date Located	Date of Demil/ Disposal	Method of Demil/Disposal	Comments
RC1-001	899977.58 N, 2057341.2 E		MEC, M306, 57mm HE Projectile	02/13/13	02/14/13	Demo	Unfuzed, consolidated to guard base overnight
RC1-002	902820.61 N, 2055438.5 E		MEC, M306, 57mm HE Projectile	02/14/13	02/14/13	Demo	Unfuzed, discovered while scouting demo site
RC1-003	902719.01 N, 2054630.7 E		MPPEH, M70, 57mm AP-T Projectile	02/14/13	02/14/13	Demo	Discovered while scouting demo site, vented to ensure no energetic material
ARNG-001	889556.11 N, 2064414.5 E		MEC, M48, 60mm HE Mortar	03/22/13	03/22/13	Demo/BIP	Found at flag #43, grid ARNG-011
ARNG-002	890705.41 N, 2062928 E		MEC, M49, 60mm HE Mortar	04/02/13	04/02/13	Demo/BIP	Fuzed, found at flag #18, grid ARNG-014
RC2-001	911772.25 N, 2066984.2 E		MEC, M107, 155mm HE Projectile	04/15/13	04/15/13	Demo/BIP	Located by property owner, Butner Fire Marshal and Sheriff responded
ARNG-003	Grid ARNG-023		MPPEH, M70, 57mm AP-T Projectile	4/18/13	04/18/13	Demo	Vented to ensure no energetic material or possible cavaties
ARNG-004	Grid ARNG-013		MPPEH, M2, 3.25" AA Target Rocket	04/17/13	04/18/13	Demo	Vented to ensure no energetic material or possible cavaties
ARNG-005	886383.12 N, 2057360.89 E		MEC, Mk II, Hand Grenade, HE	04/25/13	04/25/13	Demo/BIP	Fuzed grenade, found in grid ARNG-082
ARNG-006	886321.79 N, 2057334.92 E		MEC, Mk II, Hand Grenade, HE	04/25/13	04/25/13	Demo/BIP	Fuzed grenade, found in grid ARNG-082
ARNG-007	886391.23 N, 2057384.70 E		MEC, Mk II, Hand Grenade, HE	04/25/13	04/25/13	Demo/BIP	Fuzed grenade, found in grid ARNG-082
ARNG-008	886335.18 N, 2057353.51 E		MEC, Mk II, Hand Grenade, HE	04/25/13	04/25/13	Demo/BIP	Fuzed grenade, found in grid ARNG-082
RC2-002	913197.73 N, 2066067 E		MEC, M63 Mod 1, 37mm TP Projectile	05/01/13	05/01/13	Demo/BIP	TP round containing black powder simulator,

HydroGeoLogic, Inc
MUNITIONS RESPONSE TEAM

Munitions and Explosives of Concern Demilitarization/ Disposal by Detonation Accountability Record

							found at flag #12, grid RC2-019
RC2-003	915629.81 N, 2064387.9 E		MEC, M63 Mod 1, 37mm TP Projectile	05/15/13	05/15/13	Demo	TP round containing black powder simulator, found at flag #12, grid RC2-106
RC1-004	904098.93 N, 2055701 E		MEC, M6, 2.36" Rocket Warhead	05/16/13	05/16/13	Demo	Unfuzed rocket warhead, found at flag #5, grid RC1-086

SUXOS review and acceptance (print name):	SUXOS signature:	Date:
Joel A. Sanders		**7/31/2013**

HGL MR Form 15.04 (Apr 2012)

APPENDIX D-2

MANUFACTURER OF EXPLOSIVES
RECORD OF ACQUISITION

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HGL HydroGeoLogic, Inc MUNITIONS RESPONSE TEAM

Manufacturer of Explosives Record of Acquisition

Site Name/Location:	HGL License Number:
Former Camp Butner / Butner, NC	5-NM-001-20-4F-00302
Project Site Activity: Remedial Investigation/MEC Clearance	**Supervisor's Name/Position:** Joel Sanders

Date of Manufacture or other Acquisition	Lot Number or Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description and Size-(when mixing binary materials)	Quantity Acquired	Name, Address and License or Permit Number of Distributor
11/29/2012	02AU12J2	Trojan Spartan 350G, Cast Boosters	45	Dyno Nobel Garner Distribution Facility Wren Road, State Road 2704 Garner, NC 27529 1-NC-183-20-3C-00882
11/29/2012	18OC12G1	Fireline 17/80 PETN, Detonating Cord	500 ft	Dyno Nobel Garner Distribution Facility Wren Road, State Road 2704 Garner, NC 27529 1-NC-183-20-3C-00882
11/29/2012	09APR12	Jet Perforators 32g	50	Dyno Nobel Garner Distribution Facility Wren Road, State Road 2704 Garner, NC 27529 1-NC-183-20-3C-00882
11/29/2102	01MA10X1	NONEL MS 0, Blasting Caps, 40ft	60	Dyno Nobel Garner Distribution Facility Wren Road, State Road 2704 Garner, NC 27529 1-NC-183-20-3C-00882
11/29/2012	10SE12W1	NONEL Leadline, 2500ft rolls	5000 ft	Dyno Nobel Garner Distribution Facility Wren Road, State Road 2704 Garner, NC 27529 1-NC-183-20-3C-00882
11/29/2012	17SE12W1	NONEL Leadline, 2500ft rolls	5000 ft	Dyno Nobel Garner Distribution Facility Wren Road, State Road 2704 Garner, NC 27529 1-NC-183-20-3C-00882

HGL MR Form 15.02 (Revised Apr 2012)

Page _____ of _____.

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APPENDIX D-3

DELIVERY RECEIPT

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DYNO NOBEL INC.

2795 East Cottonwood Parkway
Suite 500
Salt Lake City, Utah 84121 USA
801 364 4800

DYNO
Dyno Nobel

INVOICE

DUE DATE: 06/22/2013

BILL TO	SHIP TO
HYDROGEOLOGIC, INC. 11107 SUNSET HILLS RESTON VA 20190	HYDROGEOLOGIC, INC. 11107 SUNSET HILLS RESTON VA 20190

Invoice Number	93235144	Date 05/23/2013
Delivery Note	81740849	Date 05/23/2013
Sales Order	772842	Date 05/22/2013
Purchase Order	NONE	Date
Customer Number	23067	

Remit Payment to Dyno Nobel Inc. Dept. 2643 P.O. Box 122643 Dallas TX 75312-2643 USA
Terms of Payment Net 30 days **Terms of Delivery** FOB FOB WHITESBURG, GA **Currency** USD

L/N	Material Number	Material Description	Batch Number	Quantity	UOM	Unit Price	Units	UOM	Sales Value
10	NS122	MAGAZINE RENTAL - SM - 11/12		2	EA	200.00	1	EA	400.00
20	NS122	MAGAZINE RENTAL - SM - 12/12		2	EA	200.00	1	EA	400.00
30	NS122	MAGAZINE RENTAL - SM - 01/13		2	EA	200.00	1	EA	400.00
40	NS122	MAGAZINE RENTAL - SM - 02/13		2	EA	200.00	1	EA	400.00
50	NS122	MAGAZINE RENTAL - SM - 03/13		2	EA	200.00	1	EA	400.00
60	NS122	MAGAZINE RENTAL - SM - 04/13		2	EA	200.00	1	EA	400.00
				12					**2,400.00**
70	SS132	MAGAZINE MOVE IN FEE - 5/23/13		1	EA	1,000.00	1	EA	1,000.00
				1					**1,000.00**

Order Total **3,400.00**

PO#2012-00358

H1009A.04.01 $3,570.00

PM:

Orders Total **3,400.00**

Tax Amount **170.00**

Invoice Total **3,570.00**

Dyno Nobel's Standard Terms and Conditions of Sale ("Terms") exclusively apply to all transactions for the supply of products and services covered by this invoice. A copy of the applicable terms and conditions is found at www.dynonobel.com/terms-and-conditions and hereby incorporated by reference and made a part of this invoice. Any and all other terms and conditions purporting to govern this transaction, whether written or oral, including those contained on any purchase order, but excluding any written agreement to the contrary signed by both parties, are hereby expressly rejected. Buyer agrees that by accepting products or services hereunder from Dyno Nobel that these Terms apply to the exclusion of all others.

Groundbreaking Performance

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APPENDIX D-4

EXPLOSIVE MATERIAL DISPOSITION RECORD

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Explosive Material Disposition Record – Bill of Lading

Date:	Site Name/Location:	Grid #/Area or GPS coordinate:	Distributee Explosive License #:
02142013	Former Camp Butner RI/FS Butner,NC	N: 902827.241 E: 2054700.489	1AL-089-20-4F-00632

This form will be used as a Bill of Lading anytime explosives are transported in a HGL vehicle under DOT regulations and kept with the explosive driver in the vehicle until the explosives are issued, expended or returned to storage.

SECTION I. Explosive Material Issued for Demilitarization/Demolition Operations:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps OMS, 40 ft	2	1.4B	WP Rogers
02AU12J2	Trojan Spartan, Cast Booster 350G	5	1.4D	WP Rogers
09APR12	Jet Perforators, 32g	5	1.4B	WP Rogers
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	500ft	1.4D	WP Rogers

Print Explosive Driver Name:	Explosive Driver Signature:
Westleon Rogers	Westleon Paul Rogers

SECTION II. Explosive Material Expended by Detonation:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps OMS, 40 ft	1	1.4B	
02AU12J2	Trojan Spartan, Cast Booster 350G	0	1.4D	
09APR12	Jet Perforators, 32g	3	1.4B	
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	39ft	1.4D	

SECTION III. Explosive Material Returned to Storage:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps OMS, 40 ft	1	1.4B	
02AU12J2	Trojan Spartan, Cast Booster 350G	5	1.4D	
09APR12	Jet Perforators, 32g	2	1.4B	
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	461ft	1.4D	

Demolition Supervisor Signature:	SUXOS Signature:
Westleon Paul Rogers	

Explosive Material Disposition Record – Bill of Lading

Date:	Site Name/Location:	Grid #/Area or GPS coordinate:	Distributee Explosive License #:
03222013	Former Camp Butner RI/FS Butner, NC	ARNG Grid # 11	1-AL-089-20-4F-00632

This form will be used as a Bill of Lading anytime explosives are transported in a HGL vehicle under DOT regulations and kept with the explosive driver in the vehicle until the explosives are issued, expended or returned to storage.

SECTION I. Explosive Material Issued for Demilitarization/Demolition Operations:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	2	1.4B	WP Rogers
09APR12	Jet Perforator, 32g	1	1.4B	WP Rogers
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	6ft	1.4D	WP Rogers

Print Explosive Driver Name:	Explosive Driver Signature:
Westleon Paul Rogers	Westleon Paul Rogers

SECTION II. Explosive Material Expended by Detonation:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	JS
09APR12	Jet Perforator, 32g	1	1.4B	JS
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	6ft	1.4D	JS

SECTION III. Explosive Material Returned to Storage:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	JS

Demolition Supervisor Signature:	SUXOS Signature:

Explosive Material Disposition Record – Bill of Lading

Date:	Site Name/Location:	Grid #/Area or GPS coordinate:	Distributee Explosive License #:
04022013	Former Camp Butner RI/FS Butner, NC	ARNG Grid # 14	1-AL-089-20-4F-00632

This form will be used as a Bill of Lading anytime explosives are transported in a HGL vehicle under DOT regulations and kept with the explosive driver in the vehicle until the explosives are issued, expended or returned to storage.

SECTION I. Explosive Material Issued for Demilitarization/Demolition Operations:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	WP Rogers
09APR12	Jet Perforator, 32g	1	1.4B	WP Rogers
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	5ft	1.4D	WP Rogers

Print Explosive Driver Name:	Explosive Driver Signature:
Westleon Paul Rogers	Westleon Paul Rogers

SECTION II. Explosive Material Expended by Detonation:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	
09APR12	Jet Perforator, 32g	1	1.4B	
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	5ft	1.4D	

SECTION III. Explosive Material Returned to Storage:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials

Demolition Supervisor Signature:	SUXOS Signature:

Explosive Material Disposition Record – Bill of Lading

Date:	Site Name/Location:	Grid #/Area or GPS coordinate:	Distributee Explosive License #:
04152013	Former Camp Butner RI/FS Butner, NC	N. 911772.25 E. 2066984.17	1-AL-089-20-4F-00632

This form will be used as a Bill of Lading anytime explosives are transported in a HGL vehicle under DOT regulations and kept with the explosive driver in the vehicle until the explosives are issued, expended or returned to storage.

SECTION I. Explosive Material Issued for Demilitarization/Demolition Operations:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	WPR
09APR12	Jet Perforator, 32g	2	1.4B	WPR
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	50ft	1.4D	WPR

Print Explosive Driver Name:	Explosive Driver Signature:
Westleon Paul Rogers	Westleon Paul Rogers

SECTION II. Explosive Material Expended by Detonation:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	JAS
09APR12	Jet Perforator, 32g	2	1.4B	JAS
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	50ft	1.4D	JAS

SECTION III. Explosive Material Returned to Storage:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials

Demolition Supervisor Signature:	SUXOS Signature:

Explosive Material Disposition Record – Bill of Lading

Date:	Site Name/Location:	Grid #/Area or GPS coordinate:	Distributee Explosive License #:
04182013	Former Camp Butner RI/FS Butner, NC	ARNG # 22	1-AL-089-20-4F-00632

This form will be used as a Bill of Lading anytime explosives are transported in a HGL vehicle under DOT regulations and kept with the explosive driver in the vehicle until the explosives are issued, expended or returned to storage.

SECTION I. Explosive Material Issued for Demilitarization/Demolition Operations:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	WPR
09APR12	Jet Perforator, 32g	2	1.4B	WPR
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	5ft	1.4D	WPR
10SE12W1	Leadline / NONEL	2,500ft	1.4B	WPR

Print Explosive Driver Name:	Explosive Driver Signature:
Westleon Paul Rogers	

SECTION II. Explosive Material Expended by Detonation:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	WPR
09APR12	Jet Perforator, 32g	2	1.4B	WPR
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	5ft	1.4D	WPR
10SE12W1	Leadline / NONEL	2,500ft	1.4B	WPR

SECTION III. Explosive Material Returned to Storage:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials

Demolition Supervisor Signature:	SUXOS Signature:
Westleon Paul Rogers	

Explosive Material Disposition Record – Bill of Lading

Date:	Site Name/Location:	Grid #/Area or GPS coordinate:	Distributee Explosive License #:
04252013	Former Camp Butner RI/FS Butner, NC	ARNG # 82	1-AL-089-20-4F-00632

This form will be used as a Bill of Lading anytime explosives are transported in a HGL vehicle under DOT regulations and kept with the explosive driver in the vehicle until the explosives are issued, expended or returned to storage.

SECTION I. Explosive Material Issued for Demilitarization/Demolition Operations:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	WP Rogers
09APR12	Jet Perforator, 32g	5	1.4B	WP Rogers
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	395ft	1.4D	WP Rogers

Print Explosive Driver Name:	Explosive Driver Signature:
Westleon Paul Rogers	Westleon Paul Rogers

SECTION II. Explosive Material Expended by Detonation:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	
09APR12	Jet Perforator, 32g	4	1.4B	
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	75ft	1.4D	

SECTION III. Explosive Material Returned to Storage:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
09APR12	Jet Perforator, 32g	1	1.4B	WP Rogers
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	320ft	1.4D	WP Rogers

Demolition Supervisor Signature:	SUXOS Signature:

Explosive Material Disposition Record – Bill of Lading

Date:	Site Name/Location:	Grid #/Area or GPS coordinate:	Distributee Explosive License #:
05012013	Former Camp Butner RI/FS Butner, NC	RC2 # 019	1-AL-089-20-4F-00632

This form will be used as a Bill of Lading anytime explosives are transported in a HGL vehicle under DOT regulations and kept with the explosive driver in the vehicle until the explosives are issued, expended or returned to storage.

SECTION I. Explosive Material Issued for Demilitarization/Demolition Operations:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	WPR
09APR12	Jet Perforator, 32g	1	1.4B	WPR
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	5ft	1.4D	WPR

Print Explosive Driver Name: Westleon Paul Rogers

Explosive Driver Signature: Westleon Paul Rogers

SECTION II. Explosive Material Expended by Detonation:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	CAK
09APR12	Jet Perforator, 32g	1	1.4B	CAK
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	5ft	1.4D	CAK

SECTION III. Explosive Material Returned to Storage:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials

Demolition Supervisor Signature: Westleon Paul Rogers

SUXOS Signature:

Explosive Material Disposition Record – Bill of Lading

Date:	Site Name/Location:	Grid #/Area or GPS coordinate:	Distributee Explosive License #:
05152013	Former Camp Butner RI/FS Butner, NC	RC2 # 106	1-AL-089-20-4F-00632

This form will be used as a Bill of Lading anytime explosives are transported in a HGL vehicle under DOT regulations and kept with the explosive driver in the vehicle until the explosives are issued, expended or returned to storage.

SECTION I. Explosive Material Issued for Demilitarization/Demolition Operations:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	WPRogers
09APR12	Jet Perforator, 32g	1	1.4B	WPRogers
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	5ft	1.4D	WPRogers

Print Explosive Driver Name:	Explosive Driver Signature:
Westleon Paul Rogers	Westleon Paul Rogers

SECTION II. Explosive Material Expended by Detonation:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	WPRogers
09APR12	Jet Perforator, 32g	1	1.4B	WPRogers
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	5ft	1.4D	WPRogers

SECTION III. Explosive Material Returned to Storage:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials

Demolition Supervisor Signature:	SUXOS Signature:
Westleon Paul Rogers	

Explosive Material Disposition Record – Bill of Lading

Date:	Site Name/Location:	Grid #/Area or GPS coordinate:	Distributee Explosive License #:
05162013	Former Camp Butner RI/FS Butner, NC	RC1 # 86	1-AL-089-20-4F-00632

This form will be used as a Bill of Lading anytime explosives are transported in a HGL vehicle under DOT regulations and kept with the explosive driver in the vehicle until the explosives are issued, expended or returned to storage.

SECTION I. Explosive Material Issued for Demilitarization/Demolition Operations:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	WP Rogers
09APR12	Jet Perforator, 32g	1	1.4B	WP Rogers
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	5ft	1.4D	WP Rogers

Print Explosive Driver Name:	Explosive Driver Signature:
Westleon Paul Rogers	Westleon Paul Rogers

SECTION II. Explosive Material Expended by Detonation:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	1	1.4B	WP Rogers
09APR12	Jet Perforator, 32g	1	1.4B	WP Rogers
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	5ft	1.4D	WP Rogers

SECTION III. Explosive Material Returned to Storage:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials

Demolition Supervisor Signature:	SUXOS Signature:
Westleon Paul Rogers	

Explosive Material Disposition Record – Bill of Lading

Date:	Site Name/Location:	Grid #/Area or GPS coordinate:	Distributee Explosive License #:
05222013	Former Camp Butner RI/FS Butner, NC	ARNG # 022	1-AL-089-20-4F-00632

This form will be used as a Bill of Lading anytime explosives are transported in a HGL vehicle under DOT regulations and kept with the explosive driver in the vehicle until the explosives are issued, expended or returned to storage.

SECTION I. Explosive Material Issued for Demilitarization/Demolition Operations:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	51	1.4B	WPR
09APR12	Jet Perforator, 32g	34	1.4B	WPR
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	305ft	1.1D	WPR
02AU12J2	Cast Booster, Spartan 350	45	1.1D	WPR
17SE12W1	NONEL Leadline	5,000	1.4B	WPR
10SE12W1	NONEL Leadline	2,500	1.4B	WPR

Print Explosive Driver Name:	Explosive Driver Signature:
Westleon Paul Rogers	Westleon Paul Rogers

SECTION II. Explosive Material Expended by Detonation:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials
01MA10X1	NONEL Blasting Caps 0MS, 40ft	51	1.4B	BH
09APR12	Jet Perforator, 32g	34	1.4B	
18OC12G1	Fireline, Detonating Cord, 17/80 PETN	305ft	1.1D	
02AU12J2	Cast Booster, Spartan 350	45	1.1D	
17SE12W1	NONEL Leadline	5,000	1.4B	
10SE12W1	NONEL Leadline	2,500	1.4B	

SECTION III. Explosive Material Returned to Storage:

Lot Number/Manufacturer's Marks of Identification	Brand Name, Nomenclature or Description	Quantity	Hazard/ Class	Receipt Initials

Demolition Supervisor Signature:	SUXOS Signature:
Westleon Paul Rogers	

HGL MR Form 15.05 (Revised Apr 2012)

APPENDIX D-5

DAILY SUMMARY OF MAGAZINE TRANSACTIONS

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HGL

Daily Summary of Magazine Transactions (Magazine Data Card)

Nomenclature/Brand Name of Manufacturer:	Lot Number/Manufacturer Mark:	Hazard Class/Division:
Cast Booster / Trojan Spartan 350G	02AU12J2	1.1D
Site Location/Name:	**GPS Coordinate:**	**HGL License Number:**
Camp Butner		5-NM-001-20-4F-00302

Date	Quantity In	Quantity Out	Current Balance	Action/Purpose (Receipt/Issue/Inventory)	Printed Name
11/29/2012	45		45	Receipt	Joel Sanders
12/6/12			45	INV	
12/13/12			45	INV	
12/20/12			45	INV	
12/27/12			45	INV	
1/03/13			45	INV	
1/10/13			45	INV	
1/17/13			45	INV	
1/24/13			45	INV	
1/31/13			45	INV	
2/7/13			45	INV	
2/14/13		5	40	ISSUE	
2/14/13	5		45	RETURN/INV	
2/21/13			45	INV	
2/28/13			45	INV	
3/7/13			45	INV	
3/14/13			45	INV	
3/21/13			45	INV	
3/28/13			45	INV	
4/4/13			45	INV	
4/11/13			45	INV	
4/18/13			45	INV	
4/25/13			45	INV	
5/2/13			45	INV	
5/9/13			45	INV	
5/16/13			45	INV	
5/22/13		45	0	ISSUE	

HGL MR Form 15.03 (Revised Apr 2012)

MAGAZINE

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Daily Summary of Magazine Transactions
(Magazine Data Card)

Nomenclature/Brand Name of Manufacturer:	Lot Number/Manufacturer Mark:	Hazard Class/Division:
Detonating Cord / Fireline 17/80 PETN	18OC12G1	1.1D
Site Location/Name:	**GPS Coordinate:**	**HGL License Number:**
Camp Butner		5-NM-001-20-4F-00302

Date	Quantity In	Quantity Out	Current Balance	Action/Purpose (Receipt/Issue/Inventory)	Printed Name
11/29/2012	500ft		500ft	Receipt	Joel Sanders
12/6/12			500	INV	
12/13/12			500	INV	
12/20/12			500	INV	
12/27/12			500	INV	
1/03/13			500	INV	
1/10/13			500	INV	
1/17/13			500	INV	
1/24/13			500	INV	
1/31/13			500	INV	
2/7/13			500	INV	
2/14/13		500	0	ISSUE	
2/14/13	461		461	RETURN/~~ISSUE~~INV	
2/21/13			461	INV	Weather Paul Rogers
2/28/13			461	INV	Weather Paul Rogers
3/7/13			461	INV	
3/14/13			461	INV	
3/21/13			461	INV	
3/22/13		6	455	ISSUE	
3/28/13			455	INV	
4/2/13		5	450	ISSUE	
4/4/13			450	INV	
4/11/13			450	INV	
4/15/13		50'	400'	ISSUE	
4/18/13		5'	395'	ISSUE	
4/18/13			395'	INV	
4/25/13		395'		ISSUE	
4/25/13	320'		320'	RETURN	
4/25/13			320'	INV	
5/1/13		5'	315'	ISSUE	

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Daily Summary of Magazine Transactions
(Magazine Data Card)

Nomenclature/Brand Name of Manufacturer:	Lot Number/Manufacturer Mark:	Hazard Class/Division:
Detonating Cord / Fireline 17/80 PETN	18OC12G1	1.1D
Site Location/Name:	**GPS Coordinate:**	**HGL License Number:**
Camp Butner		5-NM-001-20-4F-00302

Date	Quantity In	Quantity Out	Current Balance	Action/Purpose (Receipt/Issue/Inventory)	Printed Name
5/1/13			315'	INV	Joel Sanders
5/2/13			315'	INV	
5/9/13			315'	INV	
5/15/13		5'	310'	ISSUE	
5/16/13		5'	305'	ISSUE	
5/16/13			305'	INV	
5/22/13		305'	Ø	ISSUE	

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HGL

Daily Summary of Magazine Transactions
(Magazine Data Card)

Nomenclature/Brand Name of Manufacturer:	Lot Number/Manufacturer Mark:	Hazard Class/Division:
Perforators 32G / Jet Research Center	09APR12	1.4D
Site Location/Name:	**GPS Coordinate:**	**HGL License Number:**
Camp Butner		5-NM-001-20-4F-00302

Date	Quantity In	Quantity Out	Current Balance	Action/Purpose (Receipt/Issue/Inventory)	Printed Name
11/29/2012	50		50	Receipt	Joel Sanders
12/6/12			50	INV	Joel Sanders
12/13/12			50	INV	Joel Sanders
12/20/12			50	INV	Joel Sanders
12/27/12			50	INV	Joel Sanders
1/03/13			50	INV	Joel Sanders
1/10/13			50	INV	Joel Sanders
1/17/13			50	INV	Joel Sanders
1/24/13			50	INV	Joel Sanders
1/31/13			50	INV	Joel Sanders
2/7/13			50	INV	Joel Sanders
2/14/13		5	45	ISSUE	Joel Sanders
2/14/13	2		47	RETURN/INV	Joel Sanders
2/21/13			47	INV	William Paul Rogers
2/28/13			47	INV	William Paul Rogers
3/7/13			47	INV	Joel Sanders
3/14/13			47	INV	Joel Sanders WPR
3/21/13			47	INV	Joel Sanders WPR
3/23/13		1	46	ISSUE	Joel Sanders WPR
3/28/13			46	INV	Joel Sanders WPR
4/2/13		1	45	ISSUE	Joel Sanders WPR
4/4/13			45	INV	Joel Sanders WPR
4/11/13			45	INV	Joel Sanders WPR
4/15/13		2	43	ISSUE	Joel Sanders WPR
4/18/13		2	41	ISSUE	Joel Sanders WPR
4/18/13			41	INV	Joel Sanders WPR
4/25/13		5	36	ISSUE	Joel Sanders WPR
4/25/13	1		37	RETURN	Joel Sanders WPR
4/25/13			37	INV	Joel Sanders WPR
5/1/13		1	36	ISSUE	Joel Sanders WPR

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Daily Summary of Magazine Transactions
(Magazine Data Card)

Nomenclature/Brand Name of Manufacturer:	Lot Number/Manufacturer Mark:	Hazard Class/Division:
Perforators 32G / Jet Research Center	09APR12	1.4D
Site Location/Name:	**GPS Coordinate:**	**HGL License Number:**
Camp Butner		5-NM-001-20-4F-00302

Date	Quantity In	Quantity Out	Current Balance	Action/Purpose (Receipt/Issue/Inventory)	Printed Name
5/1/13			36	INV	Joel Sanders
5/2/13			36	INV	
5/9/13			36	INV	
5/15/13		1	35	ISSUE	
5/16/13		1	34	ISSUE	
5/16/13			34	INV	
5/23/13		34	Ø	ISSUE	

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HGL
Hydrogeologic, Inc.

Daily Summary of Magazine Transactions
(Magazine Data Card)

Nomenclature/Brand Name of Manufacturer:	Lot Number/Manufacturer Mark:	Hazard Class/Division:
Blasting Caps / NONEL 0MS, 40ft	01MA10X1	1.4B
Site Location/Name:	**GPS Coordinate:**	**HGL License Number:**
Camp Butner		5-NM-001-20-4F-00302

Date	Quantity In	Quantity Out	Current Balance	Action/Purpose (Receipt/Issue/Inventory)	Printed Name
11/29/2012	60		60	Receipt	Joel Sanders
12/6/12			60	INV	
12/13/12			60	INV	
12/20/12			60	INV	
12/27/12			60	INV	
1/03/13			60	INV	
1/10/13			60	INV	
1/17/13			60	INV	
1/24/13			60	INV	
1/31/13			60	INV	
2/7/13			60	INV	
2/14/13		2	58	ISSUE	
2/14/13	1		59	RETURN/INV	
2/21/13			59	INV	
2/28/13			59	INV	
3/7/13			59	INV	
3/14/13			59	INV	
3/21/13			59	INV	
3/22/13		2	57	ISSUE	
3/22/13	1		58	RETURN/INV	
3/28/13			58	INV	
4/2/13		1	57	ISSUE	
4/4/13			57	INV	
4/11/13			57	INV	
4/15/13		1	56	ISSUE	
4/18/13		1	55	ISSUE	
4/18/13			55	INV	
4/25/13		1	54	ISSUE	
4/25/13			54	INV	
5/1/13		1	53	ISSUE	

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Daily Summary of Magazine Transactions
(Magazine Data Card)

Nomenclature/Brand Name of Manufacturer:	Lot Number/Manufacturer Mark:	Hazard Class/Division:
Blasting Caps / NONEL 0MS, 40ft	01MA10X1	1.4B
Site Location/Name:	**GPS Coordinate:**	**HGL License Number:**
Camp Butner		1-AL-089-20-4F-00632

Date	Quantity In	Quantity Out	Current Balance	Action/Purpose (Receipt/Issue/Inventory)	Printed Name
5/2/13			53	INV	Joel Sanders
5/9/13			53	INV	
5/15/13		1	52	ISSUE	
5/16/13		1	51	ISSUE	
5/16/13			51	INV	
5/22/13		51	Ø	ISSUE	

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HGL

Daily Summary of Magazine Transactions (Magazine Data Card)

Nomenclature/Brand Name of Manufacturer:	Lot Number/Manufacturer Mark:	Hazard Class/Division:
Leadline / NONEL	10SE12W1	1.4B
Site Location/Name:	**GPS Coordinate:**	**HGL License Number:**
Camp Butner		5-NM-001-20-4F-00302

Date	Quantity In	Quantity Out	Current Balance	Action/Purpose (Receipt/Issue/Inventory)	Printed Name
11/29/2012	5000		5000	Receipt	Joel Sanders
12/6/12			5000	INV	
12/13/12			5000	INV	
12/20/12			5000	INV	
12/27/12			5000	INV	
1/03/13			5000	INV	
1/10/13			5000	INV	
1/17/13			5000	INV	
1/24/13			5000	INV	
1/31/13			5000	INV	
2/7/13			5000	INV	
2/14/13			5000	INV	
2/21/13			5000	INV	William Paul Rogers
2/28/13			5000	INV	William Paul Rogers
3/7/13			5000	INV	
3/14/13			5000	INV	WPR
3/21/13			5000	INV	WPR
3/28/13			5000	INV	WPR
4/4/13			5000	INV	WPR
4/11/13			5000	INV	WPR
4/18/13		2,500	2,500	ISSUE	WPR
4/18/13			2,500	INV	WPR
4/25/13			2,500	INV	WPR
5/2/13			2,500	INV	WPR
5/9/13			2,500	INV	WPR
5/16/13			2,500	INV	WPR
5/22/13		2500	Ø	ISSUE	WPR

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Daily Summary of Magazine Transactions (Magazine Data Card)

Nomenclature/Brand Name of Manufacturer:	Lot Number/Manufacturer Mark:	Hazard Class/Division:
Leadline / NONEL	17SE12W1	1.4B
Site Location/Name:	**GPS Coordinate:**	**HGL License Number:**
Camp Butner		5-NM-001-20-4F-00302

Date	Quantity In	Quantity Out	Current Balance	Action/Purpose (Receipt/Issue/Inventory)	Printed Name
11/29/2012	5000		5000	Receipt	Joel Sanders
12/6/12			5000	INV	
12/13/12			5000	IN	
12/20/12			5000	INV	
12/27/12			5000	INV	
1/03/13			5000	INV	
1/10/13			5000	INV	
1/17/13			5000	INV	
1/24/13			5000	INV	
1/31/13			5000	INV	
2/7/13			5000	INV	
2/14/13			5000	INV	
2/21/13			5000	INV	
2/28/13			5000	INV	
3/7/13			5000	INV	
3/14/13			5000	INV	
3/21/13			5000	INV	
3/28/13			5000	INV	
4/4/13			5000	INV	
4/11/13			5000	INV	
4/18/13			5000	INV	
4/25/13			5000	INV	
5/2/13			5000	INV	
5/9/13			5000	INV	
5/16/13			5000	INV	
5/22/13		5000	Ø	ISSUE	

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MAGAZINE

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APPENDIX E

TPP MEMORANDUM

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E-1 Final TPP Memorandum, March 2012
The memorandum is provided in the electronic version only.

E-2 Final TPP Memorandum-2, October 2012
The memorandum is provided in the electronic version only.

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APPENDIX E-1

FINAL TPP MEMORANDUM, MARCH 2012

(electronic only)

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U.S. Army Corps of Engineers

Final
Technical Project Planning Memorandum & Associated Documentation

In Support of

Remedial Investigation/Feasibility Study (RI/FS) Project

Project Site:
Munitions Response Sites (5)
Former Camp Butner
Butner, North Carolina

Project No. I04NC000902

March 2012

prepared for:
U.S. Army Engineering and Support Center, Huntsville
and
U.S. Army Corps of Engineers, Kansas City District

prepared by:
HydroGeoLogic, Inc.
11107 Sunset Hills Road, Suite 400
Reston, VA 20190

Contract No. W912DY-10-D-0023
Task Order No. 009

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Technical Project Planning Memorandum

Subject: Documentation of Technical Project Planning Project Team Concurrence for Remedial Investigation / Feasibility Study Project

Site: Former Camp Butner Munitions Response Sites (5), Butner, North Carolina

Contract: Contract No. W912DY-10-D-0023, Delivery Order No. 009

Date: March 14, 2012

This document serves as a record of the Technical Project Planning (TPP) meeting for the Remedial Investigation / Feasibility Study (RI/FS) for the five Munitions Response Sites (MRS) associated with the former Camp Butner in Butner, North Carolina. The TPP Team members listed below indicated concurrence with the technical approach described during the TPP meeting held at the Army National Guard (ARNG) Range Conference Room in Butner, North Carolina, on November 10, 2011.

The five MRSs included in the scope of the RI/FS include the following:

- Flame Thrower Range (FTR)
- Hand Grenade Range (HGR)
- Range Complex 1 (RC-1)
- RC-2
- ARNG property

HydroGeoLogic, Inc. (HGL) developed an initial technical approach to characterize the nature and extent of munitions and explosives of concern (MEC) and munitions constituents (MC) at the five MRSs using available site information, including the Archives Search Report (ASR), Engineering Evaluation / Cost Analysis (EE/CA), and removal action reports and other pertinent documents. The approach was outlined in HGL's proposal and is also detailed in Section 4 of this TPP memorandum package. The technical approach was briefed during the TPP meeting and will be utilized in the development of the site-specific RI work plan, which will be submitted to the project stakeholders for review.

The TPP meeting began at 0900 eastern time and, following introductions, HGL presented a summary of past Department of Defense (DoD) activities at the site and proposed RI activities (See Section 10 for TPP Meeting Presentation Slides). As part of the TPP process, discussions were held by participants regarding the proposed activities for each MRS.

FTR and HGR - it was discussed that enough data exists through previous removal actions and EE/CAs to fully characterize the areas. No additional field work is planned for the RI but the site will be carried through the process through the Decision Document (DD) just as the other three MRSs.

The technical approach for RC-1, RC-2, and the ARNG sites are based upon the history of the sites in terms of munitions usage and past clearance activities and removal actions (RAs). During Camp Butner training activities, various types of munitions were utilized. Munitions deployed at Camp Butner include small arms; hand grenades; rifle grenades; practice landmines; 20 through 240 mm projectiles; 60 and 81mm mortars; and 2.36-inch rockets. During the completion of previous investigation activities, numerous areas have been investigated and/or cleared. Using the existing EE/CA and RA data, the nature and extent of MEC has been characterized for significant portions of RC1 and RC2. However, EE/CA and RA coverage was generally limited to low density residential dwellings, typically along main roadways; therefore, significant expanses of RC1 and RC2 have not been investigated or characterized. Furthermore, no characterization activities have been conducted on the ARNG property. Existing coverage and proposed coverage are discussed in the Conceptual Site Model (CSM), Section 6.

Utilizing data presented in the ASR, information produced during EE/CA field activities, and the TEC 2001 historical aerial photograph analysis HGL developed boundaries for interpreted impact areas. The technical approach for areas inside the interpreted impact areas includes the following: (1) mag-and-dig intrusive investigations of anomalies located along transects of varying spacing, and (2) Digital Geophysical Mapping (DGM) investigations of grids in areas of high, medium, and low anomaly density. A minimum of 20 percent% of the transect acreage will also be investigated using grids. Grids will be evaluated using DGM techniques that incorporate intrusive investigation of MEC-like anomalies in the grids. Intrusive transects will be placed within the HGL interpreted impact areas, which are based on the TEC 2001 GIS-Based Aerial Photo Analysis and past investigations.

The strategy for areas outside of the interpreted impact areas will be investigated in a similar fashion as the interpreted impact areas but with geophysical anomaly data collected along reconnaissance transects of varying spacing. Specifics for RC-1, RC-2, and the ARNG MRS are described below.

RC-1 – Transect spacing in areas within the interpreted impact areas that were not previously investigated will be based upon the munition types known or suspected to be in the area with the default or minimum spacing of 500 feet. Along these lines, 300 foot spacing will be done in areas known or suspected of containing 37mm projectiles. Areas outside of the interpreted impact areas will be assessed through reconnaissance transects. See Figure 1-A for estimated transects and grids including reconnaissance survey transects.

RC-2 – Transect spacing in areas within the interpreted impact areas that were not previously investigated will be based upon the munition types known or suspected to be in the area with the default or minimum spacing of 500 feet. Along these lines, 300 foot spacing will be done in areas known or suspected of containing 37mm projectiles. Areas outside of the interpreted

impact areas will be assessed through reconnaissance transects. See Figure 1-B for estimated transects and grids including reconnaissance survey transects.

ARNG – Transect spacing in areas within the interpreted impact areas will be based upon the munition types known or suspected to be in the area with the default or minimum spacing of 500 feet. Along these lines, 300 foot spacing will be done in areas known or suspected of containing 37mm projectiles. Areas outside of the interpreted impact areas will be assessed through reconnaissance transects. See Figure 1-C for estimated transects and grids including reconnaissance survey transects.

Additional discussions were held concerning the ARNG area. The discussions are summarized below.

- CPT LeQuick mentioned that the National Guard utilizes the ranges to conduct approximately 70,000 man-days of training so scheduling access to the ARNG will have to be coordinated closely to minimize impacts to training schedules. He further indicated that the use of the ranges tends to be less during the winter months compared to the spring and summer.
- ARNG personnel indicated that control burns are performed over the ARNG property. The burns, usually conducted annually, are done on a cycle covering a portion or segment of the property each year. Scheduling of the RI fieldwork should be done to take advantage of the control burn schedule to reduce the vegetation clearance required for the RI.
- The ARNG property lies within the Falls Lake watershed, it was mentioned that any excavations covering more than a 1/4 acre of land would have to apply to for a permit. The permit requirement should not apply to the RI as the plan is to dig on individual anomalies across transects and grids and not clearing entire plots of land.
- ARNG has a process whereby they engage the local tribes regarding potential impacts to cultural issues. The ARNG does not foresee any issues but will look into engaging the tribes anyway to brief them on the project.

In addition to the TPP Team determinations stated above, the following specific issues and resolutions were noted:

- It was mentioned that LIDAR data may be available for the area that was collected through the State of North Carolina. The exact specifications of the data (e.g., resolution and file formats) was not known.
- No known endangered or federally recognized species are not to exist within the MRSs area of interest.
- Rights of Entry (ROE) may be an issue on some properties based upon previous removal actions. To support the ROE process, it was suggested that the Savannah District have a booth/kiosk setup at the public meeting to coordinate ROEs and to answer questions from the public.

- The U.S. Army Corps of Engineers (USACE) is looking into the potential use of the Metal Mapper and other geophysical survey discrimination tools for use at Camp Butner.
- The Data Item Descriptions (DiDs) for the contract have not been updated to include the use of Geophysical System Verifications (GSV) strips so the work plan will have to address the discrepancy.
- The HGL RI team should plot unexploded ordnance (UXO) discoveries from the Granville County Emergency Response (i.e., historically deed restricted area) and ARNG UXO finds (to be provided) during the RI as well as existing removal action data to ensure a comprehensive understanding is reflected in the RI.
- MC screening levels discussed - will include Screening levels as agreed upon by the Project Team will be based on the EPA Regional Screening Level (RSL), North Carolina Groundwater Protection Standards. Screening level standards are further discussed in Section 6, CSM.
- The approach for MC sampling will include 10 samples collected from each MRS. Incremental sampling (IS) will be performed on the surface. If that shows an exceedance of the screening values, a discrete sub-surface sample will be collected in the same general area. If no exceedance, subsurface discrete samples will not be taken from the respective general area.
- Pre-and Post-blow in place sampling on MEC disposal shots will not be conducted. Studies have shown that the amount of MC remaining from a high-order disposal shot is minimal.
- Public meeting will be scheduled in coordination with the Remedial Advisory Board (RAB) meeting in the April time frame. HGL will secure the meeting area (the school gym has been used in the past as well as the Soldiers Memorial Sports Arena on 24th Street). The community RAB chair, Vicki Cates, has reserved both the Gym and the Butner Town Hall. HGL will coordinate with Vicki to select which facility best fits the needs of the group. HGL will also be responsible for the logistics including refreshments (no bottled water provided). Local news publications include the Oxford Ledger and the Raleigh Times for advertising public meetings.
- The Administrative Record is at the County Library. A second location which has copies of documents related to Camp Butner is the Butner Town Hall at 415 Central Avenue, Suite A.
- As a quality control measure, the names and size (i.e., acreage) of the MRSs should be checked against the FUDSMIS database.
- Automated brush clearing technology may be available for use as government furnished equipment (GFE) through the USACE.

In conclusion, the project team agreed with the basic strategy presented for the site and concurred with the technical approach outlined for the RI. The technical approach will be further refined in the work plan, which will be made available to the stakeholders for review.

The technical approach will not be modified without consultation with the TPP Team members listed below. RI results will be fully documented in an RI report for TPP Team review.

The meeting concluded around 1330.

TPP Participants:

Mr. Ray Livermore USACE, SAW Project Manager	Ms. Marti Morgan NCDENR Project Manager
Ms. Chris Cochrane USAESCH Project Manager / COR	Ms. Amy Walker USAESCH Geophysicist
Mr. Cecil 'Bud' Morgan USAESCH Environmental Manager	Mr. Derek Anderson HGL PM
Jonathan Sperka HGL Deputy PM	Mr. Tim Bohannon USACE Savannah District OESS
Ms. Sara Mathews AMEC Risk Assessor	Mr. Raye Lahti AMEC Geophysicist

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TECHNICAL APPROACH

REMEDIAL INVESTIGATION/FEASIBILITY STUDY

MUNITIONS RESPONSE SITES

FORMER CAMP BUTNER
GRANVILLE COUNTY, NORTH CAROLINA

Contract No. W912DY-10-D-0023, Task Order No. 0009
USACE Project No. B07KS025607



Prepared for:

U.S. Army Engineering and Support Center, Huntsville
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1.0 INTRODUCTION

HydroGeoLogic (HGL) has designed a technical approach to perform a Remedial Investigation / Feasibility Study (RI/FS) for five (5) Munitions Response Sites (MRSs) on the former Camp Butner, a formerly used defense site (FUDS) (Site No. B07KS025607) in Granville County, North Carolina. The five (5) MRSs include the following:

- Army National Guard Property (ANG)
- Flame Thrower Range (FTR)
- Hand Grenade Range (HGR)
- Range Complex 1 (RC1)
- Range Complex 2 (RC2)

Brief descriptions of each MRS are included in the Conceptual Site Model (CSM) Section 6.

The RI/FS is being conducted pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and in accordance with (IAW) Department of Defense (DoD), U.S. Army, and USACE regulations and guidance.

The primary goals of a CERCLA- based Military Munitions Response Program (MMRP) RI are (i) to collect and analyze the data necessary to determine the nature and extent of munitions and explosives of concern (MEC) and munitions constituents (MC) contamination, and (ii) to conduct a baseline risk assessment to quantify risk and explosives safety concerns to human health and the environment. The primary objective of an MMRP FS is to ensure that appropriate remedial alternatives are developed and evaluated and that an appropriate remedy is selected. For the MMRP, the FS is the mechanism in the remedial process for the development, screening, and detailed evaluation of alternative munitions response options that will result in timely and appropriate decisions for protecting human health, safety, and the environment. The accuracy and completeness of the RI characterization of the site conditions with respect to MEC and MC is critical to the evaluation of available technologies performed during the FS.

The scope of the work for the Camp Butner project also includes preparation of a Proposed Plan (PP) and a Decision Document (DD) for each MRS.

HGL has reviewed the performance work statement and the historical site-specific information provided by U.S. Army Engineering and Support Center Huntsville (USAESCH), including the prior Engineering Evaluation / Cost Analysis (EE/CA) and MEC removal actions (RA) activities as part of the development of the technical approach for the RI/FS.

HGL's proposed approach to the investigation is to perform a combination of instrument-assisted intrusive investigations (hereafter referred to as mag-and-dig), instrument-assisted surface reconnaissance, and digital geophysical mapping (DGM) across select grids to characterize the nature, density, and extent of MEC at each MRS. Locations and spacing of transects and



sampling grids is based upon statistical analysis performed with the Visual Sampling Plan (VSP) and UXO Estimator tools.

Munitions Constituents (MC) sampling will be performed at applicable MRSs to augment existing environmental sampling data to fully characterize the nature and extent of MC in the RI in order to support the FS and follow-on DD.

HGL understands that the technical approach for MEC investigations and MC sampling are subject to change during the TPP process. The following provides a task-by-task discussion of the proposed technical approach.

2.0 PLANNING DOCUMENTS

A work plan (WP) will be developed to describe the goals, methods, procedures, and personnel for the field investigation and data gathering activities. The WP will discuss the procedures necessary to characterize the nature and potential threat to human health and/or the environment posed by MEC and will address plans for assessing risk in accordance with the U.S. Environmental Protection Agency (EPA) Risk Assessment Guidance (RAGs).

The WP will contain the methodology to gather data to support the analysis and design of potential response actions by assessing the following factors:

- ✓ Physical characteristics of the property.
- ✓ Characteristics/classification of surface water, groundwater, soil, and sediment.
- ✓ Characteristics of the MEC/MC (e.g., quantities, concentrations, toxicity, persistence, mobility, depth, nature and extent, etc.)
- ✓ Actual and potential pathways through environmental media.
- ✓ Actual and potential exposure routes.
- ✓ Other factors such as sensitive populations that pertain to the characterization of the site or support the analysis of potential remedial action alternatives.

In addition to the conceptual items listed above, the WP will contain various sub- plans and elements (e.g., technical management plan, accident prevention plan [APP], and sampling and analysis plan [SAP]) that will be used to identify specific procedures for execution of the technical approach. Based on recent project experience with the USACE on other MMRP RI/FS task orders (TOs) and a close evaluation of the Data Item Description (DID) requirements, it is noted that the Uniform Federal Policy Quality Assurance Project Plan (UFP-QAPP) will be included as part of the SAP to address MC.

The data collected during the RI will be used to characterize the nature and extent of MEC and MC at the applicable MRSs and be used to identify Applicable or Relevant and Appropriate Requirements (ARARs), Preliminary Remediation Goals (PRGs), Remedial Action Objectives (RAOs) and to screen various technologies for the development of remedial alternatives.



HGL will also develop an explosives siting plan (ESP) for the RI IAW DoD 6055.09-STD, Chapter 12; EM 385-1-97, Errata Sheet #3; and DID WERS-003.01. The ESP will be a stand-alone document appended to the WP and will be reviewed and approved by the Department of Defense Explosive Safety Board (DDESB) prior to the commencement of field activities.

3.0 MANAGEMENT OF GEOGRAPHIC INFORMATION SYSTEM DATA

HGL will develop an initial conceptual site model (CSM) with geographic information system (GIS) software based upon data available for the project site. GIS project data will be managed in accordance with (IAW) Contract Data Item Description (DID) MR-005-07.01, EM 200-1-2, EM 1110-1-4009, and applicable IGDs. The GIS will be used to update the CSM as data are collected and analyzed throughout the project. The GIS will incorporate geospatial data and other information in the geodatabase provided by USAESCH as U.S. Government-furnished information.

A pre-RI version of the CSM will be included in the WP. After the RI fieldwork has been completed, the results of the fieldwork will be incorporated into the GIS database and CSM. These results will include the location of MEC found during the investigation; the locations and types of any incidental material potentially presenting and explosive hazard (MPPEH), and/or munitions debris (MD) finds; and the locations and results of environmental sampling activities conducted as part of the RI. At the conclusion of the project, the geodatabase will be delivered to the USAESCH in its native ArcGIS electronic format.

4.0 RI FIELD WORK

EE/CA and removal activities have been conducted at Camp Butner including 580 grids distributed throughout RC1 and RC2 (23,892 acres) and also grids within FTR and HGR. As a result, enough data exists to effectively characterize the nature and extent of MEC and MC at the FTR and HGR along with significant portions of RC1 and RC2. Therefore, the field efforts will focus on the remaining portions of RC1 and RC2 along with the ANG MRS.

Utilizing data presented in the Archives Search Report (ASR) and information produced during field activities, area boundaries were developed during the EE/CA. HGL has additionally defined "interpreted impact areas" within those boundaries based on a 2001 historical aerial photograph analysis and EE/CA and RA findings.

Strategy for Areas Inside of the HGL Interpreted Impact Area

The ANG Property, RC1, and RC2 MRSs are composed of various types and sizes of ranges as outlined in the 2003 ASR Supplement. The historic ranges associated with RC1 and RC2 as described in the ASR Supplement are as follows:

The investigation strategy proposed for the interpreted impact area portions of each of these areas is similar: (1) conduct mag-and-dig intrusive investigations of anomalies located along



transects of varying spacing, and (2) incorporate DGM investigations of grids in areas of high, medium, and low anomaly density. A minimum of 20% of the transect acreage will also be investigated using grids. Grids will be evaluated using DGM techniques that incorporate intrusive investigation of MEC-like anomalies in the grids. Intrusive transects will be placed within the HGL interpreted impact areas.

Strategy for Areas Outside of the HGL Interpreted Impact Area

HGL will collect geophysical anomaly data along reconnaissance transects of varying spacing.

The 2001 aerial GIS-Based Aerial Photograph Analysis identifies small pockets of ground scars, cleared earth, and other similar disturbances that was not included in HGL interpreted impact areas.

The strategy for areas outside of the interpreted impact areas will be investigated in a similar fashion as the interpreted impact areas but with geophysical anomaly data collected along reconnaissance transects of varying spacing. Specifics for RC-1, RC-2, and the ARNG MRS are described below.

RC-1 – Transect spacing in areas within the interpreted impact areas that were not previously investigated will be based upon the munition types known or suspected to be in the area with the default or minimum spacing of 500 feet. Along these lines, 300 foot spacing will be done in areas known or suspected of containing 37mm projectiles. Areas outside of the interpreted impact areas will be assessed through reconnaissance transects.

RC-2 – Transect spacing in areas within the interpreted impact areas that were not previously investigated will be based upon the munition types known or suspected to be in the area with the default or minimum spacing of 500 feet. Along these lines, 300 foot spacing will be done in areas known or suspected of containing 37mm projectiles. Areas outside of the interpreted impact areas will be assessed through reconnaissance transects.

ARNG – Transect spacing in areas within the interpreted impact areas will be based upon the munition types known or suspected to be in the area with the default or minimum spacing of 500 feet. Along these lines, 300 foot spacing will be done in areas known or suspected of containing 37mm projectiles. Areas outside of the interpreted impact areas will be assessed through reconnaissance transects..

A percentage of grids will be placed in these outlying areas as described in the CSM. The grids will be evaluated with DGM and intrusive investigation of MEC-like anomalies.

4.1 SITE PREPARATION

HGL will establish a field office at a centrally located area. HGL will site an explosives magazine IAW the approved ESP for the storage of commercial demolition explosives. HGL will clear as little vegetation as possible in order to support the operations as HGL is aware that



some property owners may have concerns that transect paths cut through wooded areas promote trespassing. Therefore, when transect pathway clearance is required, pathways will be limited to a nominal width of four 4 feet. Brush clearing will be accomplished by a small brush clearing team consisting of at least one a UXO Technician II and an equipment operator using a tracked loader with mulching head or brush-hog attachment. Brush clearing personnel will don appropriate personal protective equipment (PPE) during brush clearing activities. During brush clearing, any surface MEC items encountered will be marked for subsequent disposed of as described in the MEC Disposal section. MEC encounters during brush clearance activities will be documented for inclusion in the RI report.

4.2 EVACUATIONS

HGL will provide for evacuations and temporary relocation of local residences who are located within defined safety exclusion zones as needed to support the fieldwork. It is not anticipated that overnight lodging will be required for the evacuated personnel; rather, evacuations will occur during normal field hours (7:00 a.m. through 5:00 p.m.). HGL will make arrangements with the a local community center, church, or hotel, with handicap access, for individuals who do not have a place to stay during the time intrusive investigations are taking place. Transportation, if needed, will be provided and refreshments will be available. Schedules for garbage collection, school bus pick-up/drop- off, and mail delivery will be obtained to sequence field activities and minimize impacts to these services. To ensure safety of the public, road-guards will be posted to notify field teams of traffic in order to stop work to allow traffic to pass. If possible, and acceptable to the local police department, temporary road blocks may be erected to maintain efficiencies in fieldwork, thereby reducing the impact to local residents/businesses.

HGL will work closely with individuals and businesses whose property may be affected by intrusive investigations to ensure that everyone is kept informed throughout the process. Planned communication activities will include face-to-face meetings, mailings, and telephone contact. During the completion of the project, HGL will establish a toll-free telephone number for local public use as a way to obtain project-specific information. The Camp Butner website will be updated weekly to depict project activities and progress and to identify plans and locations for on-going and future work.

5.0 REMEDIAL INVESTIGATION REPORT

HGL will prepare an RI Report IAW DID WERS-010.01, US Army MMRP RI/FS guidance (US Army, 2009), EP 1110-1-18 (USACE, 2000), and IGD 06-04 (USACE, 2006) in draft, draft final, and final versions. Major components of the RI Report include Site Characterization, MRS Characterization for MEC, MC, Data Evaluation, Human Health and Ecological Risk Assessments based on current and future land use, and Recommendations including No Further Action and Assessment of Required Interim Measures.

HGL will incorporate all relevant previously collected data into the RI Report. If warranted, HGL will recommend MRS boundary changes within the RI Report. The following paragraphs

detail some of the key aspects of these assessments.

Site Characterization: HGL will document the physical characteristics of the property, soil, sediment, surface water and groundwater, the types, quantity and concentration of MEC and MD, the extent of observations, actual and potential exposure routes to human and ecological receptors, and other factors that may affect characterization.

MRS Characterization for MEC: HGL will describe the technology selected for MEC characterization, the survey design utilized, analysis of the geophysical data, anomaly discrimination and interpretation and results of the intrusive investigation. Activities associated with this section are described in detail in Task 4, RI/FS Field Activities, herein.

MC Characterization: HGL will describe the media, environmental sample locations and techniques, sample interval selection and rationale, analytical methods and results, and data validation processes incorporated to ensure data representativeness and accuracy. Activities associated with this section are described in detail in the Environmental Sampling and Analysis Section below.

HHRA: HGL assumes that a comprehensive HHRA will not be conducted. Pending the results of the geophysical surveys, and supplemental sampling to determine the presence or absence of MC, a human health risk-based screening will be performed that compares the maximum site constituent concentration to the most stringent of USEPA RSLs and NCDENR human health screening criteria to identify chemicals of potential concern (COPCs). Identified COPCs will be evaluated further in the HHRA. Private land owners, recreational users, and workers are anticipated to be the primary exposure receptors. Upon review of existing information from TPP meetings, land use conditions, etc., a more detailed discussion of site conditions and potential exposure scenarios will be developed. A toxicity assessment and a risk characterization will also be included in the HHRA. The principal guidance include: Risk Assessment Guidance for Superfund (RAGS) (Parts A through E) (US EPA, 1989, 1991, 2001, and 2004) and EM 200-1-4, Volume I Human Health Evaluation (USACE, 1999). Ecological Risk Assessment: A screening level ecological risk assessment (SLERA) will be developed based on the existing data and all subsequent data collected from the various MRS locations to determine the presence/absence of MC. Available published ecological-based screening levels will be used including the USEPA ecological soil screening levels. A review of existing information as to the potential for sensitive habitats in the affected areas will be included. It is assumed that the ERA process will not continue beyond the SLERA. The principal guidance documents that will be used in conducting the ecological risk assessment include, but are not limited to: EM 200-1-4, Volume II Environmental Evaluation (USACE, 1996), Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments (USEPA, 1997), and NCDENR guidance. If recommended by the PDT, a baseline risk assessment will be conducted.

The risk assessments will be prepared as an appendix to the RI report and summarized in the main body of the RI report. The risk assessments will be structured per the guidance materials to include an exposure evaluation that addresses chemical fate and transport to the receptors and the



factors that may affect potential bioavailability, persistence, and bioaccumulation potential. Toxicity evaluations and characterization of risks will also be described. Output from software used during the risk assessment will be included in the appendix to the RI report.

MEC Risk Assessment: HGL will complete the MEC Risk Assessment IAW the guidance provided in the MEC HA Methodology, Interim (US EPA, 2008). The MEC HA methodology provides guidance assessing explosive hazards to human receptors at MRS locations and reflects the fundamental difference between assessing the chronic chemical exposure risk and assessing the acute MEC explosive hazards.

Munitions Response Site Prioritization Protocol (MRSPP): HGL will use the data from the RI field activities to update MRSPP forms for each resulting MRS, and compile information as a stand-alone document for insertion as an appendix into the RI Report. HGL will submit a draft RI report after completion of fieldwork as indicated in the project schedule. HGL defines completion of fieldwork as 100% completion the RI/FS Field Activities. The draft RI report will be submitted to the USACE. HGL will submit a draft final RI report within 21 days of receiving review comments on the draft version. The final RI report will be submitted within 14 days of receipt of review comments on the draft final version and the third TPP meeting. Our project schedule includes a 30-day review period for each deliverable.

6.0 FEASIBILITY STUDY REPORT

HGL will prepare an FS Report IAW DID WERS-010.01, EP 1110-1-18 (USACE, 2000), and IGD06-04 (USACE, 2006) in draft, draft final and final versions. The FS Report will be submitted in Task 5, Remedial Investigation Report. The FS will include the following subtask items: Preliminary ARARs Identification Technical Memorandum: This subtask includes the identification and description of site-specific, chemical-specific, and ARARs. Efforts to identify ARARs will be conducted throughout the RI process. HGL will identify and submit ARARs to the PDT in a Preliminary ARARs Identification Technical Memorandum in a format appropriate for direct incorporation into the FS report.

Remedial Action Alternatives Screening Memorandum: HGL will formulate remediation alternatives based upon ARARs identified throughout the RI process, and will separately consider environmental media as applicable.

Development of potential alternatives will include long-term management of waste or residuals, containment with little or no treatment, and/or no action. The memorandum will include remedial action objectives, preliminary remediation goals, general response actions, identification of applicable technologies, and development of alternatives. The memorandum will include screening alternatives for effectiveness, implementability, and cost. The memorandum will be presented in a format appropriate for direct incorporation into the FS report.



Remedial Alternatives Evaluation Memorandum: HGL will describe each alternative, outlining the strategy and ARARs associated with each alternative, including a discussion of the performance of each alternative with respect to selection criteria, while summarizing and tabulating the results. HGL will provide a detailed analysis of remedial alternatives addressing surface and subsurface soil, groundwater, surface water and sediment, as appropriate, and use USEPA's three-tiered approach in determining remedial alternatives. The evaluation criteria include 1) Threshold Criteria, 2) Modifying Criteria, and 3) Primary Balancing Criteria. Threshold Criteria includes a) Overall protection of human health and the environment and b) Compliance with identified ARARs. Modifying Criteria includes a) State regulatory acceptance and b) Community acceptance. Primary Balancing Criteria includes a) Long term effectiveness and permanence, b) Reduction of toxicity, mobility, and volume through treatment, c) Short term effectiveness, d) Implementability, and e) Cost.

7.0 PROPOSED PLAN

HGL will prepare a PP written in non-technical language that is understandable by the general public. HGL will prepare the PP IAW CERCLA, ER 200-3-1 (USACE, 2004b) and Errata Sheet #1 dated 4 December 2007, EP 1110-1-18 (USACE, 2000), and IGD 06-04 (USACE, 2006), and will include a brief summary description of the remedial alternatives evaluated in the FS. We will clearly outline the decision-making process, presenting the results of the data collection, rationale for interpreting analytical results, outcome of the risk assessments, and how all of these data relate to a remedial alternative. The PP will include a summary of formal comments received from regulators; a summary explanation of any proposed ARAR waiver(s), and will identify and provide a discussion of the rationale that supports the preferred remedial alternative. HGL will submit a draft PP to the USACE only within 14 days of the acceptance of the FS report. HGL will submit a draft final PP 14 days after receipt of comments on the draft PP. Following a 30-day public review period of the revised draft final PP, HGL will conduct a public meeting to discuss the PP with interested stakeholders. HGL will submit a final PP that incorporates and/or addresses public comments along with meeting minutes documenting the public discussions within 14 days following the public meeting.

8.0 DECISION DOCUMENT

HGL will prepare a DD for each MRS IAW CERCLA, ER 200-3-1 (USACE, 2004b), EP 1110-1-18 (USACE, 2000), IGD 06-04 (USACE, 2006), and Appendix C of the PWS. HGL will submit draft, draft-final, and final DD(s). The final DD will include a responsive summary.

9.0 COMMUNITY RELATIONS

HGL will provide community relations support throughout the project life to accomplish project requirements and objectives. The HGL Team will attend and participate in two public meetings and five RAB meetings to be held in the Butner, NC area. One of the public meetings will be held to discuss the PP with interested stakeholders. Community relations support tasks include

delivery of presentations, graphics and development and production of handout materials. HGL will submit all presentation materials to USACE for approval not later than 21 days prior to the meetings and make them available to the public seven days prior to the meeting. HGL will also coordinate the logistical support for these meetings

10.0 PUBLIC INVOLVEMENT PLAN

A detailed PIP will be developed IAW USACE guidance documents ER 200-3-1 and EP 1110-3-8, EM CX Interim Guidance 06-04, and guidance provided in the FUDS Public Involvement Toolkit and on the DoD Environment, Safety and Occupational Health Network and Information Exchange (DENIX) website. Provisions of the National Contingency Plan will apply, as the project is scheduled to last more than 120 days. The PIP will document the concerns of the public about the site identified during community interviews and will provide a detailed description of the public involvement activities planned based on USACE guidance and information obtained from the interviews. Public involvement activities will include a project website, fact sheet, and public meetings. All documents developed for the public will be forwarded to USAESCH Operational Security for review and approval prior to public release.

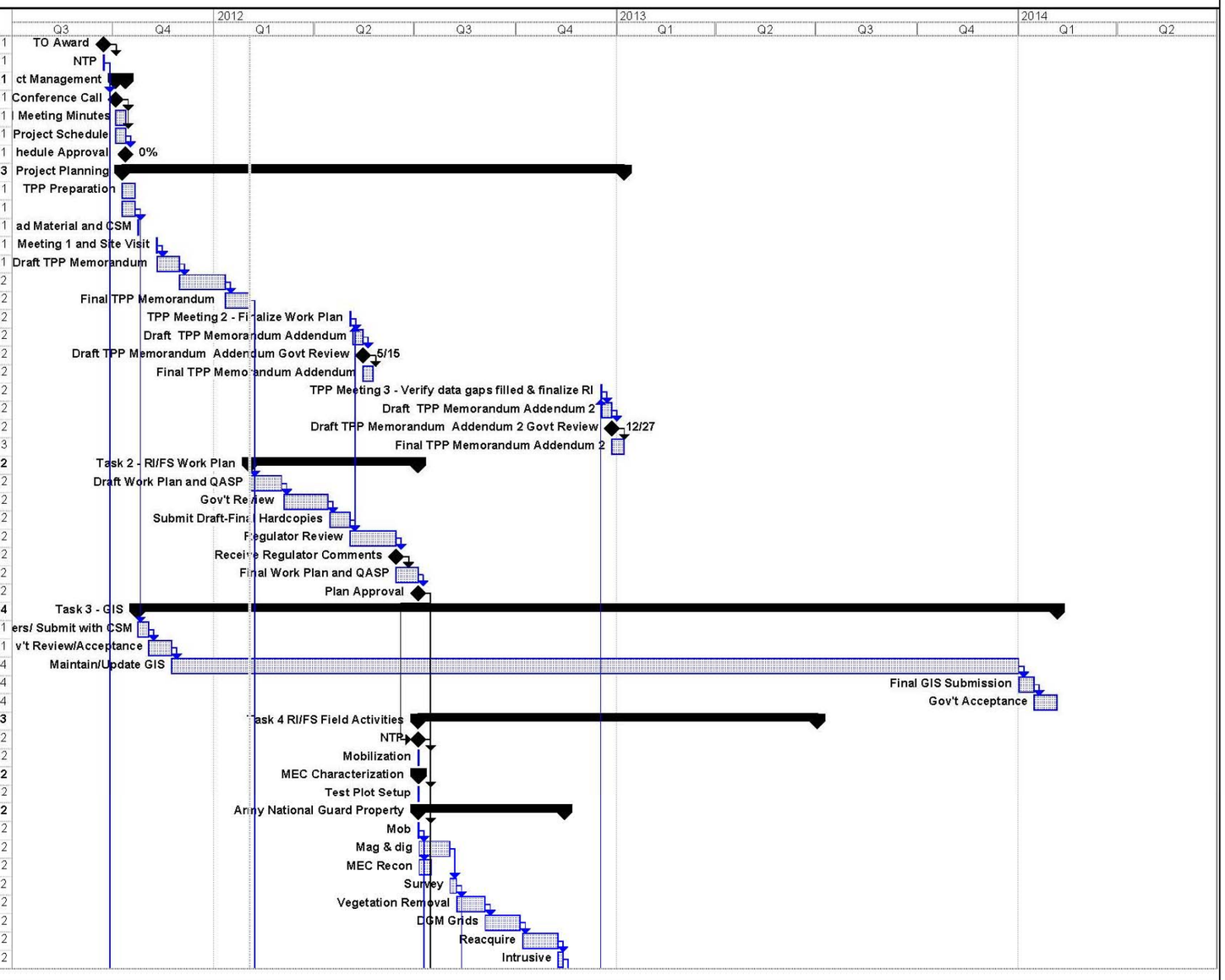
The PIP will also identify and provide contact information for key stakeholders, media outlets, and public meeting locations and will detail how stakeholders may become involved and provide feedback to the USACE. The PIP will be continually updated to provide the most current, complete information. HGL will submit a draft PIP at a time to be determined over the course of the project. A draft final PIP will be submitted 14 days after receipt of draft PIP comments, and a final version of the PIP will be submitted 7 days after receipt of draft final PIP comments.

11.0 ADMINISTRATIVE RECORD FILE

HGL will establish and maintain a project repository and Administrative Record (AR) IAW the guidance given in Chapter 4 (Establishing and Maintaining Administrative Records) of EP 1110-3-8 (USACE, 2004a) and Standard Operating Procedure for FUDS Records Management, Revision 5, dated January 2008. The documents available for public review will be housed at a local library or other suitable location. HGL will closely coordinate with the USACE to secure all required documents necessary to support the AR. The project repository and AR will be updated by HGL on a monthly basis, and made available to the public, for the duration of the contract. Final electronic document files will be in text-searchable (*.pdf) format. Final documents in the AR suitable for placement on the Project Information Retrieval System (PIRS) website will be provided on CD/DVD to appropriate entities, including USACE, at the end of the project.

Schilling AFB TPP Memorandum

ID	Task Name	Duration	Start	Finish
1	TO Award	0 days	Fri 9/23/11	Fri 9/23/11
2	NTP	1 day	Fri 9/23/11	Fri 9/23/11
3	**Project Management**	**7 days**	**Tue 10/4/11**	**Wed 10/12/11**
4	Kick-Off Conference Call	0 days	Tue 10/4/11	Tue 10/4/11
5	Kick-Off Conference Call Meeting Minutes	7 days	Tue 10/4/11	Wed 10/12/11
6	Project Schedule	7 days	Tue 10/4/11	Wed 10/12/11
7	Schedule Approval	0 days	Wed 10/12/11	Wed 10/12/11
8	**Task 1 - Technical Project Planning**	**326 days**	**Mon 10/10/11**	**Mon 1/7/13**
9	TPP Preparation	10 days	Mon 10/10/11	Fri 10/21/11
10	CSM Preparation	10 days	Mon 10/10/11	Fri 10/21/11
11	Submit Read Ahead Material and CSM	1 day	Mon 10/24/11	Mon 10/24/11
12	TPP Meeting 1 and Site Visit	1 day	Thu 11/10/11	Thu 11/10/11
13	Draft TPP Memorandum	14 days	Fri 11/11/11	Wed 11/30/11
14	Draft TPP Memorandum Govt Review	30 days	Thu 12/1/11	Wed 1/11/12
15	Final TPP Memorandum	16 days	Thu 1/12/12	Thu 2/2/12
16	TPP Meeting 2 - Finalize Work Plan	1 day	Fri 5/4/12	Fri 5/4/12
17	Draft TPP Memorandum Addendum	7 days	Mon 5/7/12	Tue 5/15/12
18	Draft TPP Memorandum Addendum Govt Review	0 days	Tue 5/15/12	Tue 5/15/12
19	Final TPP Memorandum Addendum	7 days	Wed 5/16/12	Thu 5/24/12
20	TPP Meeting 3 - Verify data gaps filled & finalize RI	1 day	Tue 12/18/12	Tue 12/18/12
21	Draft TPP Memorandum Addendum 2	7 days	Wed 12/19/12	Thu 12/27/12
22	Draft TPP Memorandum Addendum 2 Govt Review	0 days	Thu 12/27/12	Thu 12/27/12
23	Final TPP Memorandum Addendum 2	7 days	Fri 12/28/12	Mon 1/7/13
24	**Task 2 - RI/FS Work Plan**	**109 days**	**Fri 2/3/12**	**Wed 7/4/12**
25	Draft Work Plan and QASP	21 days	Fri 2/3/12	Fri 3/2/12
26	Gov't Review	30 days	Mon 3/5/12	Fri 4/13/12
27	Submit Draft-Final Hardcopies	14 days	Mon 4/16/12	Thu 5/3/12
28	Regulator Review	30 days	Fri 5/4/12	Thu 6/14/12
29	Receive Regulator Comments	0 days	Thu 6/14/12	Thu 6/14/12
30	Final Work Plan and QASP	14 days	Fri 6/15/12	Wed 7/4/12
31	Plan Approval	0 days	Wed 7/4/12	Wed 7/4/12
32	**Task 3 - GIS**	**598 days**	**Mon 10/24/11**	**Wed 2/5/14**
33	Establish Baseline GIS Layers/ Submit with CSM	8 days	Mon 10/24/11	Wed 11/2/11
34	Gov't Review/Acceptance	15 days	Thu 11/3/11	Wed 11/23/11
35	Maintain/Update GIS	550 days	Thu 11/24/11	Wed 1/1/14
36	Final GIS Submission	10 days	Thu 1/2/14	Wed 1/15/14
37	Gov't Acceptance	15 days	Thu 1/16/14	Wed 2/5/14
38	**Task 4 RI/FS Field Activities**	**259 days**	**Wed 7/4/12**	**Tue 7/2/13**
39	NTP	0 days	Wed 7/4/12	Wed 7/4/12
40	Mobilization	1 day	Thu 7/5/12	Thu 7/5/12
41	**MEC Characterization**	**1 day**	**Thu 7/5/12**	**Thu 7/5/12**
42	Test Plot Setup	1 day	Thu 7/5/12	Thu 7/5/12
43	**Army National Guard Property**	**95 days**	**Thu 7/5/12**	**Wed 11/14/12**
44	Mob	1 day	Thu 7/5/12	Thu 7/5/12
45	Mag & dig	20 days	Fri 7/6/12	Thu 8/2/12
46	MEC Recon	7 days	Fri 7/6/12	Mon 7/16/12
47	Survey	4 days	Fri 8/3/12	Wed 8/8/12
48	Vegetation Removal	18 days	Thu 8/9/12	Mon 9/3/12
49	DGM Grids	24 days	Tue 9/4/12	Fri 10/5/12
50	Reacquire	24 days	Mon 10/8/12	Thu 11/8/12
51	Intrusive	3 days	Fri 11/9/12	Tue 11/13/12



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HydroGeoLogic, Inc

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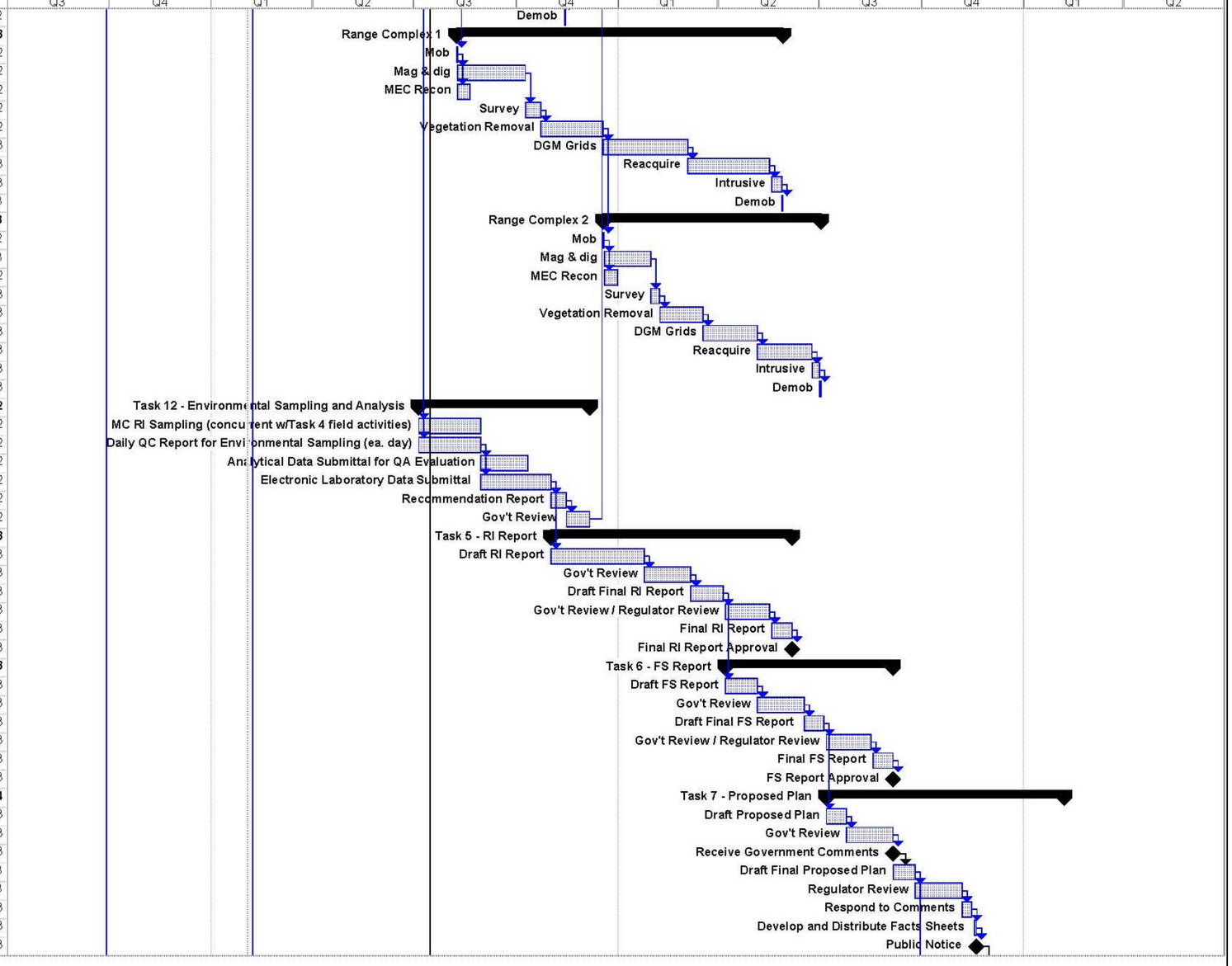
ID	Task Name	Duration	Start	Finish
52	Demob	1 day	Wed 11/14/12	Wed 11/14/12
53	**Range Complex 1**	**210 days**	**Thu 8/9/12**	**Wed 5/29/13**
54	Mob	1 day	Thu 8/9/12	Thu 8/9/12
55	Mag & dig	43 days	Fri 8/10/12	Tue 10/9/12
56	MEC Recon	7 days	Fri 8/10/12	Mon 8/20/12
57	Survey	10 days	Wed 10/10/12	Tue 10/23/12
58	Vegetation Removal	40 days	Wed 10/24/12	Tue 12/18/12
59	DGM Grids	54 days	Wed 12/19/12	Mon 3/4/13
60	Reacquire	54 days	Tue 3/5/13	Fri 5/17/13
61	Intrusive	7 days	Mon 5/20/13	Tue 5/28/13
62	Demob	1 day	Wed 5/29/13	Wed 5/29/13
63	**Range Complex 2**	**140 days**	**Wed 12/19/12**	**Tue 7/2/13**
64	Mob	1 day	Wed 12/19/12	Wed 12/19/12
65	Mag & dig	30 days	Thu 12/20/12	Wed 1/30/13
66	MEC Recon	8 days	Thu 12/20/12	Mon 12/31/12
67	Survey	6 days	Thu 1/31/13	Thu 2/7/13
68	Vegetation Removal	27 days	Fri 2/8/13	Mon 3/18/13
69	DGM Grids	35 days	Tue 3/19/13	Mon 5/6/13
70	Reacquire	35 days	Tue 5/7/13	Mon 6/24/13
71	Intrusive	5 days	Tue 6/25/13	Mon 7/1/13
72	Demob	1 day	Tue 7/2/13	Tue 7/2/13
73	**Task 12 - Environmental Sampling and Analysis**	**110 days**	**Fri 7/6/12**	**Thu 12/6/12**
74	MC RI Sampling (concurrent w/Task 4 field activities)	40 days	Fri 7/6/12	Thu 8/30/12
75	Daily QC Report for Environmental Sampling (ea. day)	40 days	Fri 7/6/12	Thu 8/30/12
76	Analytical Data Submittal for QA Evaluation	30 days	Fri 8/31/12	Thu 10/11/12
77	Electronic Laboratory Data Submittal	45 days	Fri 8/31/12	Thu 11/1/12
78	Recommendation Report	10 days	Fri 11/2/12	Thu 11/15/12
79	Gov't Review	15 days	Fri 11/16/12	Thu 12/6/12
80	**Task 5 - RI Report**	**155 days**	**Fri 11/2/12**	**Thu 6/6/13**
81	Draft RI Report	60 days	Fri 11/2/12	Thu 1/24/13
82	Gov't Review	30 days	Fri 1/25/13	Thu 3/7/13
83	Draft Final RI Report	21 days	Fri 3/8/13	Fri 4/5/13
84	Gov't Review / Regulator Review	30 days	Mon 4/8/13	Fri 5/17/13
85	Final RI Report	14 days	Mon 5/20/13	Thu 6/6/13
86	Final RI Report Approval	0 days	Thu 6/6/13	Thu 6/6/13
87	**Task 6 - FS Report**	**109 days**	**Mon 4/8/13**	**Thu 9/5/13**
88	Draft FS Report	21 days	Mon 4/8/13	Mon 5/6/13
89	Gov't Review	30 days	Tue 5/7/13	Mon 6/17/13
90	Draft Final FS Report	14 days	Tue 6/18/13	Fri 7/5/13
91	Gov't Review / Regulator Review	30 days	Mon 7/8/13	Fri 8/16/13
92	Final FS Report	14 days	Mon 8/19/13	Thu 9/5/13
93	FS Report Approval	0 days	Thu 9/5/13	Thu 9/5/13
94	**Task 7 - Proposed Plan**	**154 days**	**Mon 7/8/13**	**Thu 2/6/14**
95	Draft Proposed Plan	14 days	Mon 7/8/13	Thu 7/25/13
96	Gov't Review	30 days	Fri 7/26/13	Thu 9/5/13
97	Receive Government Comments	0 days	Thu 9/5/13	Thu 9/5/13
98	Draft Final Proposed Plan	14 days	Fri 9/6/13	Wed 9/25/13
99	Regulator Review	30 days	Thu 9/26/13	Wed 11/6/13
100	Respond to Comments	7 days	Thu 11/7/13	Fri 11/15/13
101	Develop and Distribute Facts Sheets	2 days	Mon 11/18/13	Tue 11/19/13
102	Public Notice	0 days	Tue 11/19/13	Tue 11/19/13



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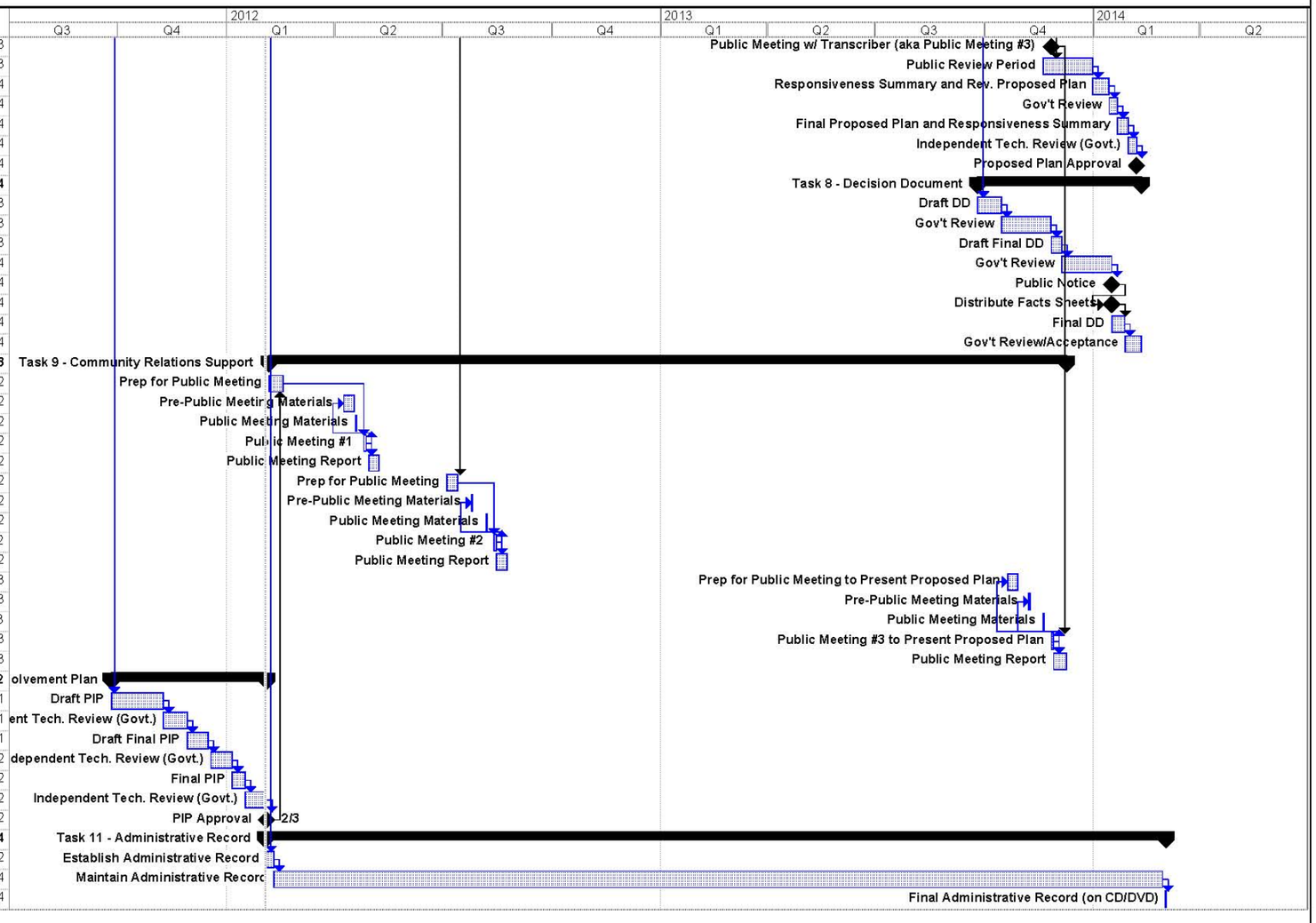
ID	Task Name	Duration	Start	Finish
103	Public Meeting w/ Transcriber (aka Public Meeting #3)	0 days	Tue 11/26/13	Tue 11/26/13
104	Public Review Period	30 days	Wed 11/20/13	Tue 12/31/13
105	Responsiveness Summary and Rev. Proposed Plan	10 days	Wed 1/1/14	Tue 1/14/14
106	Gov't Review	5 days	Wed 1/15/14	Tue 1/21/14
107	Final Proposed Plan and Responsiveness Summary	7 days	Wed 1/22/14	Thu 1/30/14
108	Independent Tech. Review (Govt.)	5 days	Fri 1/31/14	Thu 2/6/14
109	Proposed Plan Approval	0 days	Thu 2/6/14	Thu 2/6/14
110	**Task 8 - Decision Document**	**98 days**	**Thu 9/26/13**	**Mon 2/10/14**
111	Draft DD	14 days	Thu 9/26/13	Tue 10/15/13
112	Gov't Review	30 days	Wed 10/16/13	Tue 11/26/13
113	Draft Final DD	7 days	Wed 11/27/13	Thu 12/5/13
114	Gov't Review	30 days	Fri 12/6/13	Thu 1/16/14
115	Public Notice	0 days	Thu 1/16/14	Thu 1/16/14
116	Distribute Facts Sheets	0 days	Thu 1/16/14	Thu 1/16/14
117	Final DD	7 days	Fri 1/17/14	Mon 1/27/14
118	Gov't Review/Acceptance	10 days	Tue 1/28/14	Mon 2/10/14
119	**Task 9 - Community Relations Support**	**481 days**	**Mon 2/6/12**	**Mon 12/9/13**
120	Prep for Public Meeting	10 days	Mon 2/6/12	Fri 2/17/12
121	Pre-Public Meeting Materials	7 days	Mon 4/9/12	Tue 4/17/12
122	Public Meeting Materials	1 day	Thu 4/19/12	Thu 4/19/12
123	Public Meeting #1	2 days	Thu 4/26/12	Fri 4/27/12
124	Public Meeting Report	7 days	Mon 4/30/12	Tue 5/8/12
125	Prep for Public Meeting	7 days	Thu 7/5/12	Fri 7/13/12
126	Pre-Public Meeting Materials	1 day	Thu 7/26/12	Thu 7/26/12
127	Public Meeting Materials	1 day	Tue 8/7/12	Tue 8/7/12
128	Public Meeting #2	2 days	Tue 8/14/12	Wed 8/15/12
129	Public Meeting Report	7 days	Thu 8/16/12	Fri 8/24/12
130	Prep for Public Meeting to Present Proposed Plan	7 days	Mon 10/21/13	Tue 10/29/13
131	Pre-Public Meeting Materials	1 day	Fri 11/8/13	Fri 11/8/13
132	Public Meeting Materials	1 day	Wed 11/20/13	Wed 11/20/13
133	Public Meeting #3 to Present Proposed Plan	2 days	Wed 11/27/13	Thu 11/28/13
134	Public Meeting Report	7 days	Fri 11/29/13	Mon 12/9/13
135	**Task 10 - Public Involvement Plan**	**95 days**	**Mon 9/26/11**	**Fri 2/3/12**
136	Draft PIP	32 days	Mon 9/26/11	Tue 11/8/11
137	Independent Tech. Review (Govt.)	14 days	Wed 11/9/11	Mon 11/28/11
138	Draft Final PIP	14 days	Tue 11/29/11	Fri 12/16/11
139	Independent Tech. Review (Govt.)	14 days	Mon 12/19/11	Thu 1/5/12
140	Final PIP	7 days	Fri 1/6/12	Mon 1/16/12
141	Independent Tech. Review (Govt.)	14 days	Tue 1/17/12	Fri 2/3/12
142	PIP Approval	0 days	Fri 2/3/12	Fri 2/3/12
143	**Task 11 - Administrative Record**	**542 days**	**Fri 2/3/12**	**Mon 3/3/14**
144	Establish Administrative Record	5 days	Fri 2/3/12	Thu 2/9/12
145	Maintain Administrative Record	536 days	Fri 2/10/12	Fri 2/28/14
146	Final Administrative Record (on CD/DVD)	1 day	Mon 3/3/14	Mon 3/3/14



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Area Name	Acreage	Previous Land-Use	Past Investigations, Munitions Found or Suspected	Current Land Use	Future Land Use
Army National Guard Property	4,824ac	Army National Guard Property is situation in the southwestern portion of Range Complex 1, which contained an artillery impact area, 2 mortar ranges and several small arms ranges. Existing range fans for the artillery impact area were taken from historical maps, while the remainder of the range fans used were standard range fans for the individual type of range. All range fans remain within site boundaries and some range fans overlap with others within the complex.	Munitions types expected and/or identified included small arms, 2.36-inch rockets, rifle grenades, 37mm, 57mm, 105mm, and 155mm projectiles, 60mm and 81mm mortars based on data from the NCNG and the ASR. No known clearances.	Army National Guard Training	Army National Guard Training and Construction
Range Complex 1	12,363ac	Range Complex 1 (excluding Army National Guard Property) existed near the center of the site and contained an artillery impact area, 2 mortar ranges and several small arms ranges. Existing range fans for the artillery impact area were taken from historical maps, while the remainder of the range fans used were standard range fans for the individual type of range. All range fans remain within site boundaries and some range fans overlap with others within the complex.	Munitions types expected and/or identified included 37mm, 40mm, 57mm, 105mm, 155mm and 240mm projectiles, 60mm and 81mm mortars; 2.36-inch rockets; and hand and rifle grenades. 2001 EE/CA: The EE/CA evaluated 77 acres primarily utilizing DGM to investigate ¼ acre grids (approximately total of 330 grids). Grids were distributed throughout suspected former munition use areas within RC1 and RC2. Intrusive results provided an indication of actual impact/munitions use areas. A total of 13 MEC and 1489 MD items were recovered during the EE/CA. 2003 Time Critical Removal Action: A TCRA was conducted at the Lakeview Residential Housing Subdivision within RC1 in 2003. Approximately 26 acres were intrusively investigated using analog techniques to a depth of 6-inches. MEC and MD were subsequently recovered. DGM was then conducted over areas previously investigated to a depth of six inches and identified additional anomalies. DGM was also conducted over portions of the properties in the Riley subdivision. A continuation of the TCRA was conducted in 2004 that included the investigation of anomalies identified at the Riley properties. MEC-like DGM anomalies were cleared to depth of detection. 2008, 2009, 2010 Non Time Critical Removal Actions: Portions of the Lakeview Subdivision that were previously only cleared to a depth of 6-inches were cleared to depth of detection. In addition, RA activities were completed at more	ASR Supplement: Recreational Residential-Single Family Undeveloped	ASR Supplement: Recreational Residential-Single Family Undeveloped

Area Name	Acreage	Previous Land-Use	Past Investigations, Munitions Found or Suspected	Current Land Use	Future Land Use
			than 250 parcels (average parcel was approximately 1.75ac). Land parcel grids investigated were distributed throughout RC1 and RC2. RA activities were generally focused around existing residential dwellings. Intrusive results indicate the presence of former impact and munitions-use areas. Munitions recovered included 37mm, 57mm, 105mm, and 155mm projectiles, 60mm and 81mm mortars; 2.36-inch rockets; and hand and rifle grenades. 1958-69 Annual Surface Inspections: Area B: 2.36-inch rockets and 81mm mortars Area C: 2.36-inch rockets, 81mm mortars, 37mm, 105mm, 155mm, and 240mm projectiles Area D: 2.36-inch rocket, 37mm and 40mm projectiles Area E: 2.36-inch rocket Area F: No findings reported Other "Unrestricted" Areas: Hand grenades, 37mm, 40mm, 60mm, 81mm, 105mm, and 155mm projectiles and 2.36-inch rockets		
Range Complex 2	11,529ac	ASR Supplement: Range Complex 2 existed on the north side of the site and contained an artillery impact area, a mock village and 2 machine gun ranges. The range fan for the artillery impact area was taken from historical maps, while the remainder of the range fans used were standard range fans for the individual type of range. All range fans remain within site boundaries and some range fans overlap with others within the complex. The entire complex is currently under private ownership. West Artillery Impact Area Rifle/MG Range 1 Rifle/MG Range 2 Mock German Village	Munitions types expected and/or identified included 37mm, 40mm, 57mm, 105mm, 155mm and 240mm projectiles, 60mm and 81mm mortars; 2.36-inch rockets; and hand and rifle grenades. 2001 EE/CA: The EE/CA evaluated 77 acres primarily utilizing DGM to investigate ¼ acre grids (approximately total of 330 grids). Grids were distributed throughout suspected former munition use areas within RC1 and RC2. Intrusive results provided an indication of actual impact/munitions use areas. A total of 13 MEC and 1489 MD items were recovered during the EE/CA. Munitions types identified at these MRSs included 37mm, 40mm, 57mm, 105mm, and 155mm projectiles, 60mm and 81mm mortars; 2.36-inch rockets; and hand and rifle grenades. 2008, 2009, 2010 Non Time Critical Removal Actions: RA activities were completed at more than 250 parcels (average parcel was approximately 1.75ac). Land parcel grids investigated were distributed throughout RC1 and RC2. RA activities were generally focused around existing residential dwellings. Intrusive results indicate the presence of former impact and munitions-use areas. Munitions recovered	Recreational Residential-Single Family Undeveloped	Recreational Residential-Single Family Undeveloped

Area Name	Acreage	Previous Land-Use	Past Investigations, Munitions Found or Suspected	Current Land Use	Future Land Use
			included 37mm, 40mm, 57mm, 105mm, and 155mm projectiles, 60mm and 81mm mortars; 2.36-inch rockets; and hand and rifle grenades. 1958-69 Annual Inspections: Area A: Rifle grenade, 2.36-inch rockets, 37mm, 40mm, 81mm mortar, 105mm, 155mm, and 240mm projectiles		
Flame Thrower Range	5ac	ASR Supplement:This range was used to conduct flame thrower training during WWII. The layout of the range is unknown. It existed just north of the former cantonment area. The standard range fan for a flame thrower range as given in TM 9-855, August 1944, was used for the range fan. The range fan does not extend beyond site boundaries or overlap other range fans.	RA: The 2006 RA conducted at the FTR cleared approximately 20 acres to depth of detection using analog techniques. The RA activities identified and disposed of two MEC items and 530lbs of MD. Based on results of the RA, the nature and extent of MEC at the Flame Thrower Range have been adequately characterized.	Recreational Residential-Single Family Undeveloped	Recreational Residential-Single Family Undeveloped
Hand Grenade Range	25ac	ASR Supplement: The Hand Grenade Range is believed to have been used during WWII for live hand grenade training. Therefore, the standard range fan for a live hand grenade range as given in AR 750-10, January 1944, was used. The range fan does not extend beyond site boundaries or overlap with other range fans. There have been no reported incidents of OE on the range.	2001 EE/CA: Approximately 8.5 acres were geophysically mapped and intrusively investigated. No MEC or MD was identified at the HGR during the EE/CA. Based on EE/CA results, the nature and extent of MEC has been adequately characterized. Potential: Mk II, Hand Grenade	Recreational Residential-Single Family Undeveloped	Recreational Residential-Single Family Undeveloped

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MEC Data Quality Objective (DQO) Worksheet

Site: MRSs – ARNG, RC 1, and RC 2

Project: Former Camp Butner, NC

DQO Statement Number: 1 of 2

DQO Element Number [(1)]	DQO Element Description [(1)]	Site-Specific DQO Statement
Intended Data Use(s):		
1	Project Objective(s) Satisfied	Evaluate presence/absence of MEC and determine if further response actions are required to support current and future residential, commercial, agricultural, ARNG training, and recreational land use.
Intended Need Requirements:		
2	Data User Perspective(s)	Risk, Remedy
3	Contaminant or Characteristic of Interest	MEC, Munitions Debris distribution/density
4	Media of Interest	N/A
5	Required Locations or Areas	MRSs – ARNG, RC 1 and RC 2
6	Number of Samples Required	N/A
7	Reference Concentration of Interest or Other Performance Criteria	Digital Geophysical Mapping (DGM), Analog Investigation, Intrusive Investigation (as required) in areas cited above. Geophysical investigations will be conducted IAW Table 1 (based on DID WERS-004.01).
Appropriate Sampling and Analysis Methods:		
8	Sampling Method	DGM, Mag-and-Dig Intrusive Investigation.
9	Analytical Method	N/A

[(1)] Refer to EM 200-1-2, Para. 4.2.1

MC Data Quality Objective (DQO) Worksheet

Site: MRSs – ARNG, RC 1, and RC 2

Project: Former Camp Butner, NC

DQO Statement Number: 2 of 2

DQO Element Number[(1)]	DQO Element Description[(1)]	Site-Specific DQO Statement
Intended Data Use(s):		
1	Project Objective(s) Satisfied	Evaluate presence/absence of MC
Intended Need Requirements:		
2	Data User Perspective(s)	Risk, Remedy
3	Contaminant or Characteristic of Interest	See Tables 2 & 3
4	Media of Interest	Soil, Sediment, and Water
5	Required Locations or Areas	Incremental sampling (IS) will be conducted throughout the ARNG, RC1 and RC2 MRSs, based on confirmation of historical information, DGM analysis, and intrusive investigative results IAW the approved WP. These areas will be designated as sampling units (SUs). One discrete surface and subsurface soil sample will be collected if a surface IS unit has elevated levels of COPC. Based on the soil sampling results, sediment samples may be collected. Background groundwater sampling will be conducted offsite. If necessary, background sampling may also be conducted offsite using IS SU.
6	Number of Samples Required	Ten IS surface soil samples will be collected from the following MRSs: RC1, RC2 and ARNG. One discrete surface and subsurface soil sample will be collected at each IS sample location with elevated levels of COPC. Up to ten sediment samples will be collected at each MRS. Ten groundwater samples will be collected at offsite locations for establishing background. Ten offsite IS surface soil samples may be collected at offsite locations, if needed.
7	Reference Concentration of Interest or Other Performance Criteria	If MC is detected, comparison against background levels and screening levels to determine if further MC evaluation is warranted. Screening levels as agreed upon by the Project Team will be based on the EPA Regional Screening Level (RSL), NC GW Protection Standards. Background samples may be used to assess the possible presence of metals.
Appropriate Sampling and Analysis Methods:		
8	Sampling Method	Samples in accordance with SAP.
9	Analytical Method	IS will be analyzed for explosives (8330B) and select metals (6010C). Analysis of discrete samples will include explosives (8330A), select metals (6010C) and perchlorate (6850).

[(1)] Refer to EM 200-1-2, Para. 4.2.1

TABLE 2 - Human Health and Ecological Screening Values for Soil and Sediment

Analyte	Abbreviation	CAS #	Human Health Screening Values		Ecological Screening Values			
			EPA Regional Screening Levels for Residential Soil (mg/kg) (1)	EPA Noncarcinogenic Regional Screening Levels for Residential Soil divided by a factor of 10 (2) (mg/kg)	Ecological Soil Screening Values (mg/kg)	Eco Soil SV Source	Ecological Sediment Screening Values (mg/kg)	Eco Sediment SV Source
Trinitrobenzene, 1,3,5-	1,3,5-TNB	99-35-4	2,200*	220	0.376	B	1300	C
Dinitrobenzene, 1,3-	1,3-DNB	99-65-0	6.1*	0.61	0.655	B	0.00861	B
Trinitrotoluene, 2,4,6-	2,4,6-TNT	118-96-7	19		6.4	C	420	C
Dinitrotoluene, 2,4-	2,4-DNT	121-14-2	1.6		1.28	B	0.0144	B
Dinitrotoluene, 2,6-	2,6-DNT	606-20-2	61*	6.1	0.0328	B	0.0398	B
Dinitrotoluene, 2-Amino-4,6-	2-Am-DNT	35572-78-2	150*	15	10	C	34	C
Nitrotoluene, 2-	2-NT (o)	88-72-2	2.9		9.9	C	28	C
Nitrotoluene, 3-	3-NT (m)	99-08-1	6.1*	0.61	12	C	24	C
Dinitrotoluene, 4-Amino-2,6-	4-Am-DNT	19406-51-0	150*	15	3.6	C	9.5	C
Nitrotoluene, 4-	4-NT (p)	99-99-0	30		22	C	52	C
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	HMX	2691-41-0	3,800*	380	27	C	27000	C
Nitrobenzene	NB	98-95-3	4.8		2.26	E	0.0145	B
Nitroglycerin	NG	55-63-0	6.1*	0.61	71	C	1700	C
Pentaerythritol Tetranitrate	PETN	78-11-5	120		100	C	1400	C
Hexahydro-1,3,5-trinitro-1,3,5-triazine	RDX	121-82-4	5.6		7.5	C	45	C
Methyl-2,4,6-trinitrophenylnitramine	Tetryl	479-45-8	240*	24	0.99	C	100	C
Copper	Cu	7440-50-8	3100*	310	28	A	16	E
Lead	Pb	7439-92-1	400***		11	A	30.2	B
Antimony	Sb	7440-36-0	31*	3.1	0.27	A	2	D
Zinc	Zn	7440-66-6	23,000*	2300	46	A	98	D
Perchlorate	ClO4	14797-73-0	55*	5.5				

(1) Based on "Regional Screening Levels for Chemical Contaminants at Superfund Sites" dated June 2011; Carcinogenic RSLs based on a Target Risk of 1E-06; Noncarcinogenic RSLs based on Hazard Quotient of 1.
(2) EPA Noncarcinogenic Regional Screening Levels for Residential Soil divided by a factor of 10.

* Noncancer Hazard Quotient (HQ) = 1.
** Neither Industrial/Residential EPA Regional Screening Level (RSL) are available.
***Lead value based on IEUBK Model

+ If the laboratory cannot meet any of the preferred QLs with routine SW846 methodology (as supported by MDLs that are no greater than 1/3 QL), laboratory's QL will be identified in Laboratory submittal as failing to meet the QL. Some screening values cannot be obtained with routine methodology to the QL. In those cases, the QL achievable with a routine SW846 methodology would be accepted.

Eco Screening Value Sources:
A - USEPA Eco SSLs
B - USEPA Region V Ecological Screening Levels
C - Los Alamos National Laboratory (LANL), ECORISK Database Release 3.0, 2011
D - Savannah River National Laboratory Ecological Screening Level
E - USEPA Region VI Ecological Screening Levels

TABLE 3 - Human Health and Ecological Screening Values for Surface Water/Groundwater

Analyte	Abbreviation	CAS #	Screening Values				Eco SV Source
			Human Health EPA RSLs for Tap Water (mg/L)	Human Health EPA Noncarcinogenic RSLs for Tap Water divided by a factor of 10 (2) (mg/L)	North Carolina Groundwater Protection Standard 2L (3) (mg/L)	Ecological Screening Values (mg/L)	
1,3,5-Trinitrobenzene	1,3,5-TNB	99-35-4	1.1*	0.11		0.011	G
1,3-Dinitrobenzene	1,3-DNB	99-65-0	0.0037*	0.00037		0.02	G
2,4,6-Trinitrotoluene	2,4,6-TNT	118-96-7	0.0022			0.09	G
2,4-Dinitrotoluene	2,4-DNT	121-14-2	0.22		0.0001	0.023	E
2,6-Dinitrotoluene	2,6-DNT	606-20-2	0.037*	0.0037		0.06	E
2-Amino-4,6-dinitrotoluene	2-Am-DNT	35572-78-2	0.073*	0.0073		0.02	G
2-Nitrotoluene	2-NT	88-72-2	0.31			39	C
3-Nitrotoluene	3-NT	99-08-1	0.037*	0.0037		0.75	F
4-Amino-2,6-dinitrotoluene	4-Am-DNT	19406-51-0	0.073*	0.0073		43	C
4-Nitrotoluene	4-NT	99-99-0	0.0042			1.9	F
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	HMX	2691-41-0	1.8*	0.18		0.15	F
Nitrobenzene	NB	98-95-3	0.00012			0.22	B
Nitroglycerin	NG	55-63-0	0.0037*	0.00037		0.138	F
Pentaerythritol Tetranitrate	PETN	78-11-5	0.017			85	F
Hexahydro-1,3,5-trinitro-1,3,5-triazine	RDX	121-82-4	0.00061			0.19	G
Methyl-2,4,6-trinitrophenylnitramine	Tetryl	479-45-8	0.15*	0.015		5.8	C
Copper	Cu	7440-50-8	1.5*	0.15	1	0.00158	B
Lead	Pb	7439-92-1	0.015 **		0.015	0.001	D
Antimony	Sb	7440-36-0	0.015*	0.0015	0.001	0.03	E, F
Zinc	Zn	7440-66-6	11*	1.1	1	0.03	D
Perchlorate	ClO4	14797-73-0	0.026*	0.0026	0.002		

(1) Based on "Regional Screening Levels for Chemical Contaminants at Superfund Sites" dated June 2011; Carcinogenic RSLs based on a Target Risk of 1E-06; Noncarcinogenic RSLs based on Hazard Quotient of 1.
(2) EPA Noncarcinogenic Regional Screening Levels for Tapwater divided by a factor of 10.
(3) North Carolina Administrative Code Title 15A, Subchapter 2L Groundwater Classification and Standards, last amended January 1, 2010.
* Noncancer Hazard Quotient (HQ) = 1.
** MCL for lead.

+ If the laboratory cannot meet any of the preferred QLs with routine SW846 methodology (as supported by MDLs that are no greater than 1/3 QL), laboratory's QL will be identified in Laboratory submittal as failing to meet the QL. Some screening values cannot be obtained with routine methodology to the QL. In those cases, the QL achievable with a routine SW846 methodology would be accepted.

ECO Screening Value Sources
B - USEPA Region VEcological Screening Levels
C - Los Alamos National Laboratory (LANL), ECORISK Database Release 3.0, 2011
D - Savannah River National Laboratory Ecological Screening Level
E - USEPA Region VI Ecological Screening Levels
F USEPA Region III Freshwater Screening Benchmarks,
G Talmage, et. al. 1999

Camp Butner

TPP Team	**EM 200-1-2, Paragraph 1.1.1**	
Decision Makers		
Customer	USACE Wilmington District (CESAW) / SAS	
Project Manager	Ray Livermore, CESAW; Julie Hiscox	
Contract Manager	Chris Cochrane, USAESCH	
TPP Technical Manager	Bud Morgan, USAESCH	
Regulators	North Carolina Department of Environment and Natural Resources (NCDENR), Marti Morgan	
Primary Stakeholders	Property owners, tenants, government representatives, North Carolina Army National Guard (ARNG)	
Data Types	**Data Users**	**Data Gatherer**
Compliance/Regulatory (CR)	Regulatory Perspective (CESAW, NCDENR, USEPA, HGL)	HGL RI/FS Team
Demographics/Land Use	Risk, Responsibility, and Compliance Perspectives (CESAW, Town of Butner, Granville, Durham and Person Counties)	HGL RI/FS Team
Site Conditions	Remedy Perspective (CESAW, HGL)	HGL RI/FS Team
Munitions and Explosives of Concern (MEC)	Risk and Remedy Perspectives (CESAW, HGL)	HGL RI/FS Team
Munitions Constituents (MC)	Risk and Remedy Perspectives (CESAW, NCDENR, and HGL)	HGL RI/FS Team
Archaeology	Compliance and Remedy Perspectives (CESAW and HGL)	ARNG (REC)
Endangered Species	Risk and Compliance Perspectives (CESSAW, NCDENR, and HGL)	ARNG (REC)

CUSTOMER'S GOALS		**EM 200-1-2, Paragraph 1.1.2**	
Munitions Response Site (MRS)	**Contaminant Issues**	**Future Land Use**	**Site-specific Closeout Goal (if applicable)**
5 Munitions Response Sites: Flame Thrower Range (FTR), Hand Grenade Range (HGR), Army National Guard Property (ARNG), Range Complex 1 (RC1), and Range Complex 2 (RC2)	MEC, MC	Residential, Recreational, Agricultural, Guard Training	Remedy protective of human health/environment.

Site Closeout Statement
To manage the munitions and explosives of concern (MEC) and munitions constituents (MC) risk through a combination of characterization, administrative controls, remediation, and public education; thereby rendering the site as safe as reasonably possible to humans and the environment and conducive to the anticipated future land use.
Customer's Schedule Requirements
RI/FS process through Decision Document by March 2014.
Customer's Site Budget
RI/FS: Fully Funded Through Decision Document.

IDENTIFY SITE APPROACH		
EXISTING SITE INFORMATION & DATA EM 200-1-2, Paragraph 1.1.3 and 1.2.1		
TPP Information and Data	**Located at Repository**	**Preliminary Conceptual Site Model**
Archive Search Report (ASR)	TBD	No
ASR Supplement (2004)	TBD	No
EE/CA 2004	TBD	No
TC Removal Action - Blalock and Riley Properties	TBD	No
Time Critical Removal Action - Lakeview Subdivision	TBD	No
Interim Removal Actions (2008, 2009, 2010)	TBD	No
POTENTIAL POINTS OF COMPLIANCE EM 200-1-2, Paragraph 1.2.1.3		
Determination of absence or presence of MEC/MC		
If MC is detected, comparison against background concentrations and Soil Screening Levels (SSLs) will be conducted to determine if further MC evaluation during RI/FS is warranted. Screening levels as agreed upon by the project team to include the EPA Regional Screening Level (RSL) for Residential Soil, Tap Water and NC GW Protection Standards. Background samples will be used to assess metals concentrations, if needed. Background samples will also be used to assess perchlorate concentrations detected during past groundwater sampling events.		
MEDIA OF POTENTIAL CONCERN EM 200-1-2, Paragraph 1.2.1.4		
Qualitative review of MEC presence		
Quantitative screening of MC constituents for soil and sediment. Background sampling of surface soils for metals and groundwater for perchlorate and lead (total and dissolved).		
SITE OBJECTIVES EM 200-1-2, Paragraph 1.2.2		
Phased approach for geophysical evaluation and media sampling focused on areas of greatest concern (historical use and existing site conditions).		
MEC and MC sampling to adequately characterize site conditions		
Evaluation of MEC and MC data to determine if acceptable for completion of RI/FS		
Eliminate from further consideration those releases that pose no significant threat to public health or the environment.		
Completion of RI/FS		
Develop MRSPP scores for each MRS		
REGULATOR AND STAKEHOLDER PERSPECTIVES EM 200-1-2, Paragraph 1.2.3		
Regulators	**Community Interests**	**Others**
Regulators principal concern is the protection of human health and the environment. Also ensuring that sampling results are defensible by requiring the use of approved analytical laboratories and methods.	Landowners (including homeowners) primary concern is the presence of potential hazards (MEC and MC). Land is safe for intended/current land use.	Nearby towns concerned with potential for future land development. ARNG - safety of troops training on the site and future construction efforts
PROBABLE REMEDIES EM 200-1-2, Paragraph 1.2.4		
Remedial Action following RI/FS characterization.		
Institutional controls following RI/FS characterization.		
EXECUTABLE STAGES TO SITE CLOSEOUT EM 200-1-2, Paragraph 1.2.5		
Remedial Investigation/Feasibility Study (RI/FS)		
Public Involvement Plan (PIP)		
Proposed Plan		
Decision Document		
Follow work as stipulated in Decision Document		

IDENTIFY CURRENT PROJECT		
SITE CONSTRAINTS AND DEPENDENCIES EM 200-1-2, Paragraph 1.3.1		
Administrative Constraints and Dependencies		
Rights of Entry (ROE) will be executed by USACE (SAS), supported by HGL .		
Utility review and coordination.		
Coordination with ARNG and training schedules		
Cultural Resources		
Funding beyond the RI/FS		
Site Security		
Scheduling		
Technical Constraints and Dependencies		
Establishment of exclusion zone for munition of greatest fragmentation distance during excavation of MEC/UXO.		
Working depth of geophysical instruments.		
MEC avoidance		
Topography/Vegetation		
Heat stress consideration during summer activities		
Hunting seasons		
Legal and Regulatory Milestones and Requirements		
Consistent with CERCLA and NCP		
Public, stakeholder & regulatory involvement & review of key documents		
Screening levels as agreed upon by the Project Team to include EPA Regional Screening Levels (Residential Soil and Tap Water), NC GW Protection Standards, and various Ecological Screening Values (ESVs) and other applicable SSLs for Eco Risk Assessment. Background samples will be used to assess metals.		
CURRENT EXECUTABLE STAGE EM 200-1-2, Paragraph 1.3.3		
Technical Project Planning (TPP)		
Remedial Investigation/ Feasibility Study (RI/FS) Work Plan Development		
RI fieldwork		
RI/FS Reports		
Proposed Plans		
Decision Documents		
Basic (For Current Projects)	**Optimum** (For Future Projects)	**Excessive** (Objectives that do not lead to site closeout)
MEC investigation and MC sampling w/in MRSs	MEC and MC Removal Actions, if warranted.	

Acronyms

ASR - Archives Search Report
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CESAW - U.S. Army Corps of Engineers, Wilmington District
EPA - U.S. Environmental Protection Agency
EE/CA - Engineering Evaluation/Cost Analysis
ESV - Ecological Screening Value
FUDS - Formerly Used Defense Sites
HGL - HydroGeoLogic
HRS - Hazard Ranking System

MC - munitions constituents
MEC - munitions and explosives of concern
MRS - Munitions Response Site
MRSPP - Munitions Response Site Prioritization Protocol
NCP - National Contingency Plan
NCDENR _ North Carolina Department of Environmenta and Natural Resources
NDAI - No Department of Defense Action Indicated
PIP - Public Involvement Plan
PRG - Preliminary Remediation Goal
RAB - Restoration Advisory Board
RI/FS - Remedial Investigation and Feasibility Study
ROE - Rights of Entry
SSL - Soil Screening Level
TBD - To be determined
TPP - Technical Project Planning

PROJECT OBJECTIVES WORKSHEET

SITE: **MRSs - ARNG, RC 1 and RC 2**

PROJECT: **Former Camp Butner, NC**

Site Objective					Data Needs	Data Collection Methods	Data Users	Project Objective Classification [d]
Number	Executable Stage [b]		Description	Source [c]				
	Current	Future						
1	Yes		Assess MEC data, determine risk reduction alternatives.	ASR, EE/CA, RAs	Additional MEC investigation	Digital Geophysical Mapping, Mag-and-dig, intrusive investigation	Risk and Remedy Perspectives	Basic
2	Yes		Assess MC data to evaluate risk to human health or the environment	ASR, EE/CA, RAs	Additional MC sampling	Soil, sediment, and groundwater sample collection	Risk and Remedy Perspectives	Basic

a Refer to EM 200-1-2, Paragraph 1.2.2

b Refer to EM 200-1-2, Paragraph 1.2.5

c For example, Meeting with Customer/stakeholder/Regulator, State Regulation____,

d Classification of project objectives can only occur after the current project has been identified. Refer to EM 200-1-2,

ASR - Archive Search Report

IAW - In accordance with

MEC - Munitions and Explosives of Concern

LU - Land Use

MC - Munitions Constituents

SAP - Sampling and Analysis Plan

PROJECT OBJECTIVES WORKSHEET

SITE: **MRSs - FTR, HGR**

PROJECT: **Former Camp Butner, NC**

PAGE 1 of 1

Site Objective					Data Needs	Data Collection Methods	Data Users	Project Objective Classification [d]
Number	Executable Stage [b]		Description	Source [c]				
	Current	Future						
1	Yes		Assess MEC data, determine risk reduction alternatives.	ASR, EE/CA, Ras	None	Document Review	Risk and Remedy Perspectives	Basic
2	Yes		Assess MC data to evaluate risk to human health or the environment	ASR, EE/CA, Ras	None	Document Review	Risk and Remedy Perspectives	Basic

a Refer to EM 200-1-2, Paragraph 1.2.2

b Refer to EM 200-1-2, Paragraph 1.2.5

c For example, Meeting with Customer/stakeholder/Regulator, State Regulation____,

d Classification of project objectives can only occur after the current project has been identified. Refer to EM 200-1-2, Paragraph 1.3.3.

ASR - Archive Search Report
IAW - In accordance with
MEC - Munitions and Explosives of Concern
LU - Land Use
MC - Munitions Constituents
SAP - Sampling and Analysis Plan

Section 10

Technical Project Planning Meeting #1
Former Camp Butner
Presentation Slides

The following slides have been provided as a copy of the TPP Meeting #1 presentation. Changes to the technical approach, schedule, proposed sampling, and any other changes made during the TPP meeting area reflected in the TPP Memorandum and the remainder of the associated documents. The slides on the following pages are shown as they were presented.

U.S. Army Corps of Engineers

Former Camp Butner

Formerly Used Defense Site

Butner, North Carolina

Technical Project Planning Meeting

Remedial Investigation/ Feasibility Study

Munitions Response Sites: FTR, HGR ARNG, RC 1, and RC 2





Anti-tank class at Camp Butner

10 November 2011

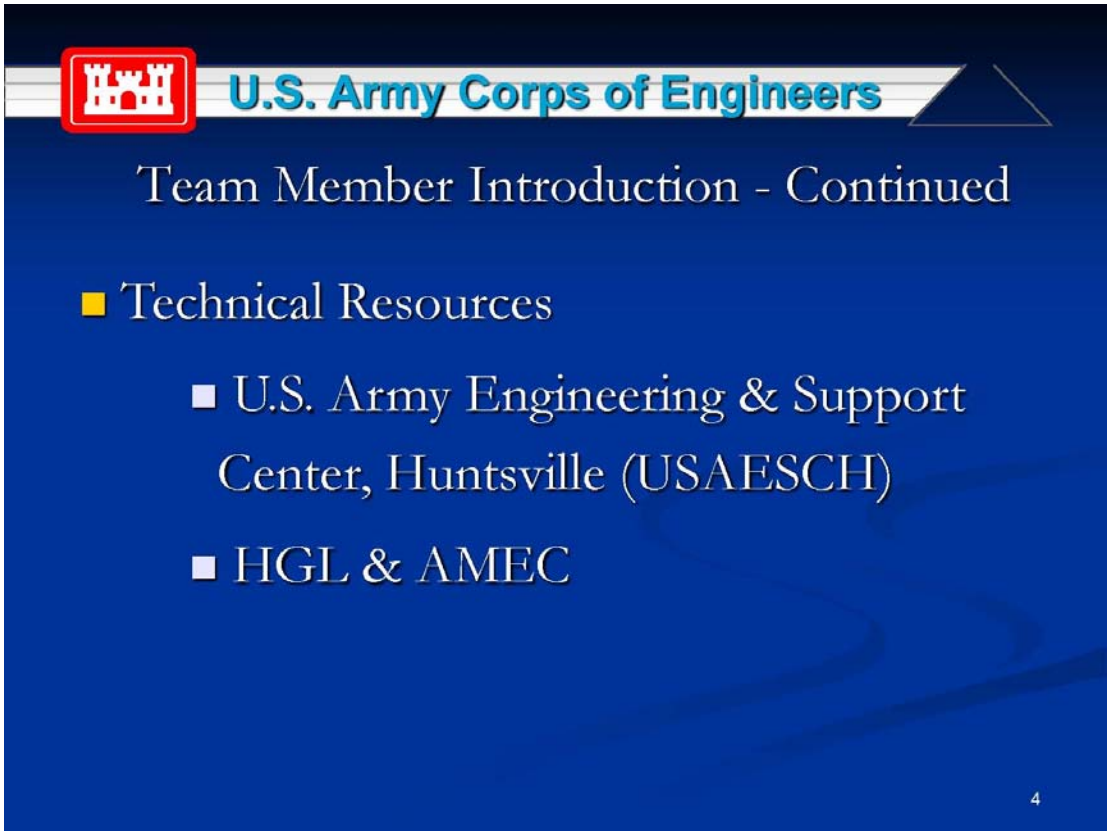
U.S. Army Corps of Engineers

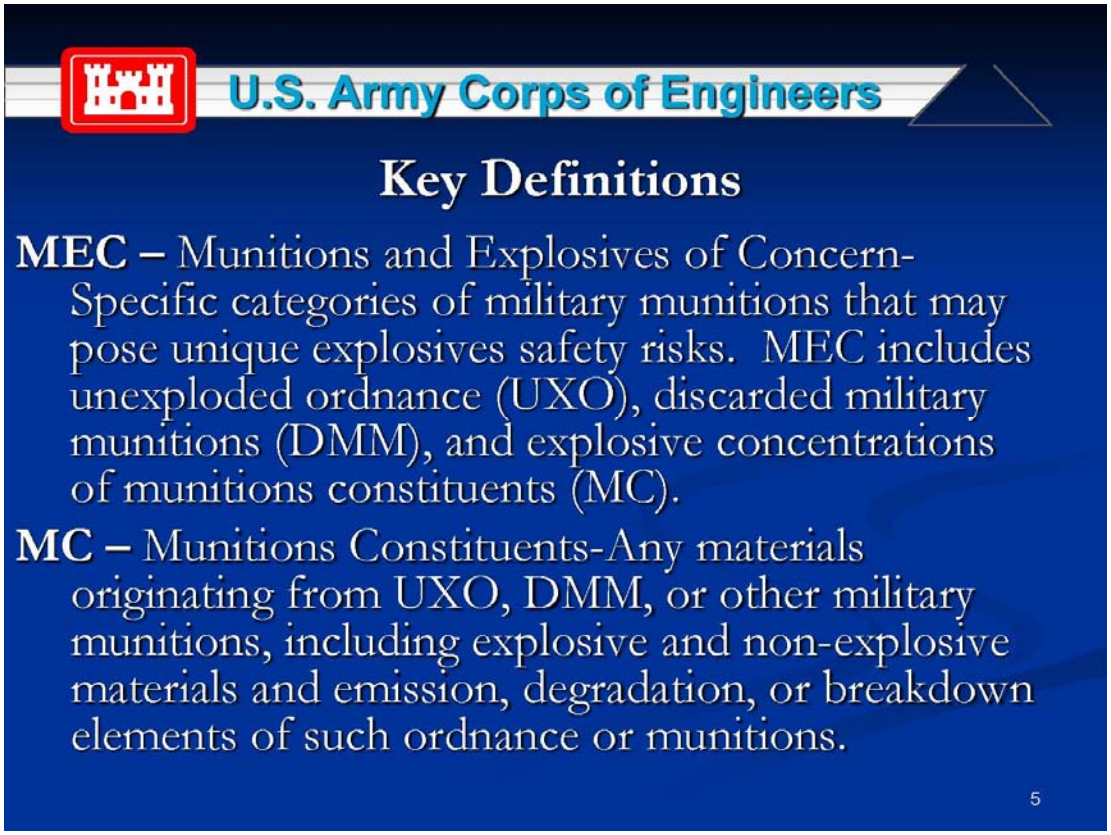
Meeting Agenda

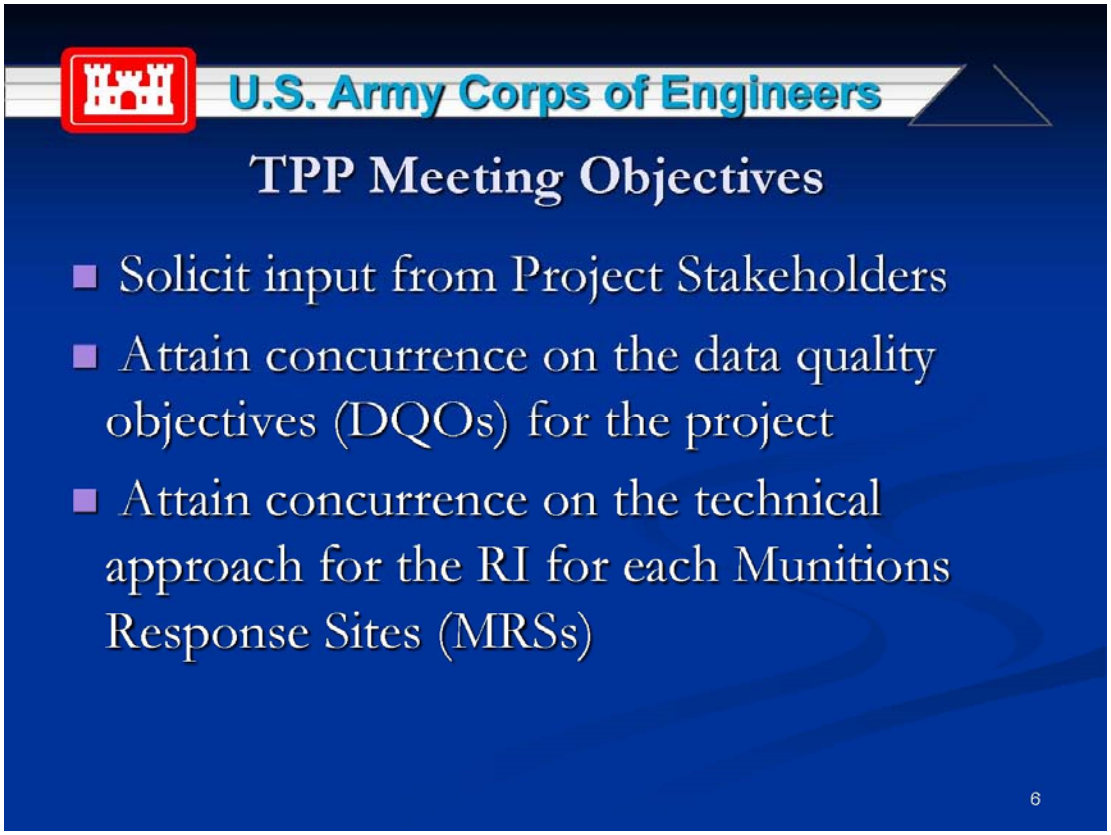
- Introductions
- Key Definitions
- RI Purpose / FS Purpose
- TPP Objectives
- Site Background
- Conceptual Site Models (CSM)
- RI Process / Field Activities
- TPP Worksheets (RI Data Quality Objectives - DQOs)
- Key Reports / Documentation
- Community Relations Support
- Schedule Overview
- Closing and Action Items Review

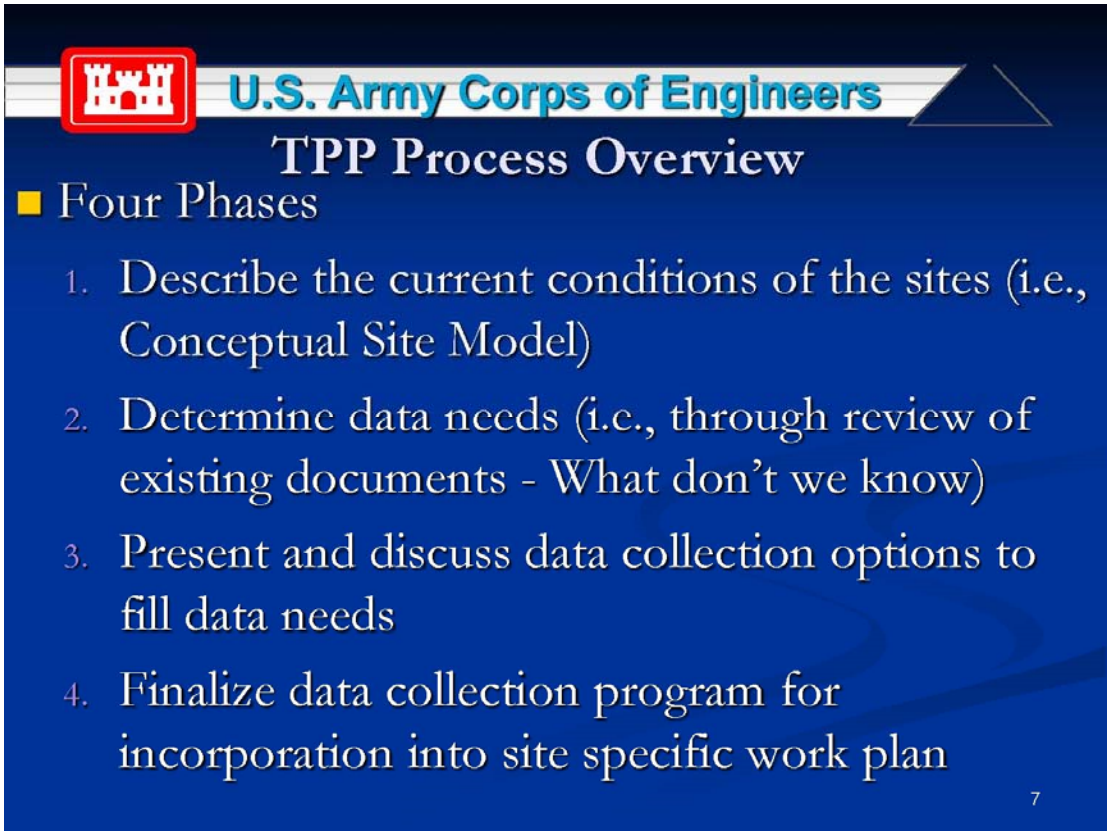
2

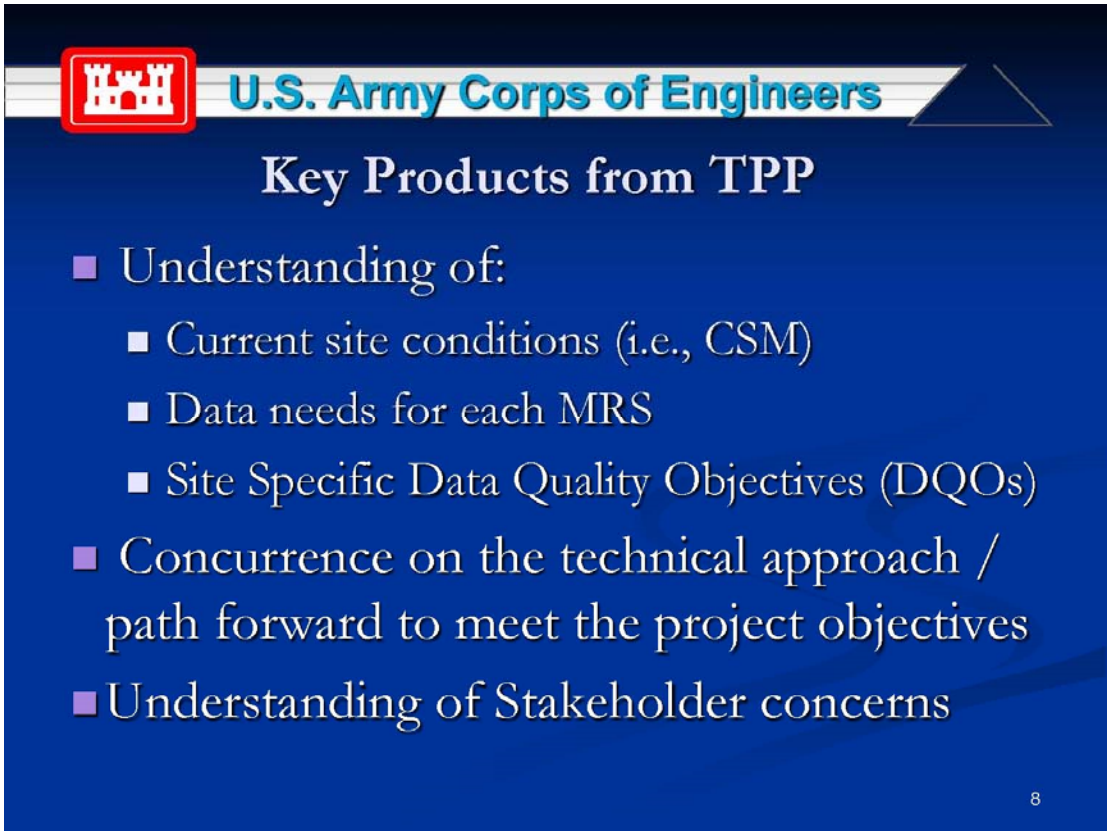

U.S. Army Corps of Engineers
Introductions
Government Agencies – Federal, State and Local
USACE (CESAW, CESAS, CEHNC)
North Carolina Department of Environment and Natural Resources (NCDENR)
North Carolina National Guard
Town of Butner, Granville, Durham, and Person Counties
3

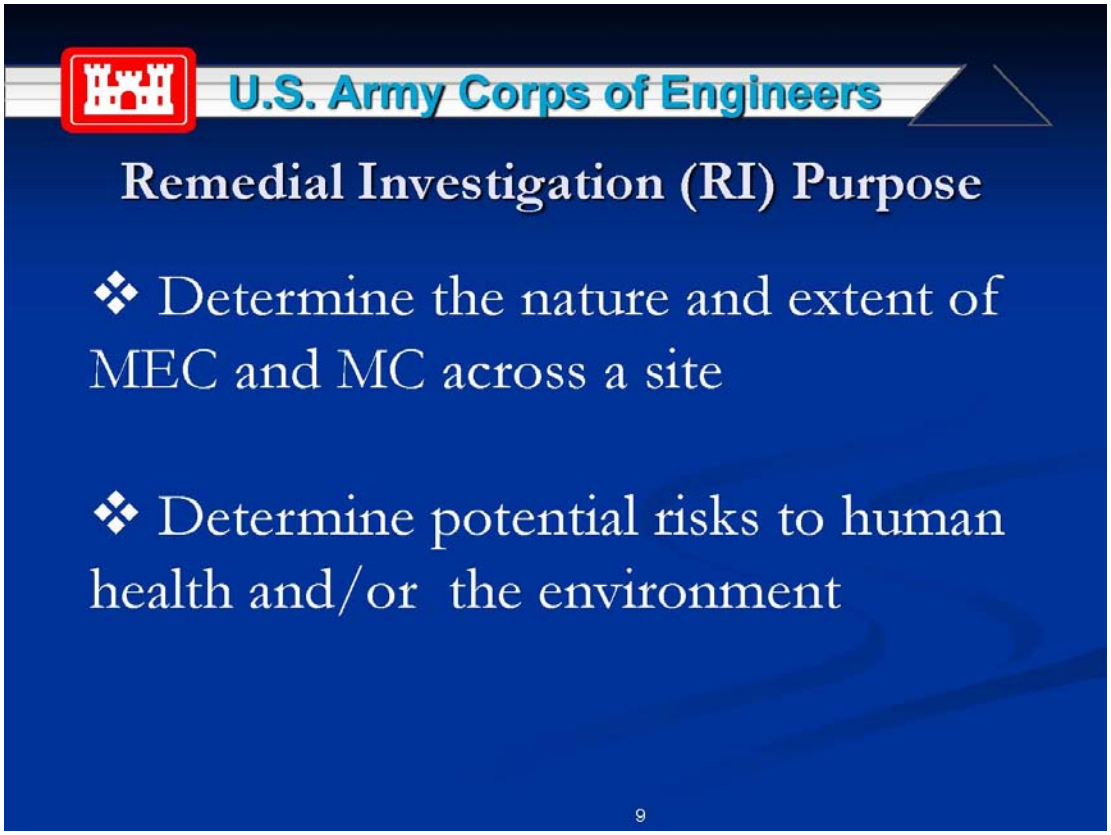

U.S. Army Corps of Engineers
Team Member Introduction - Continued
Technical Resources
U.S. Army Engineering & Support Center, Huntsville (USAESCH)
HGL & AMEC
4

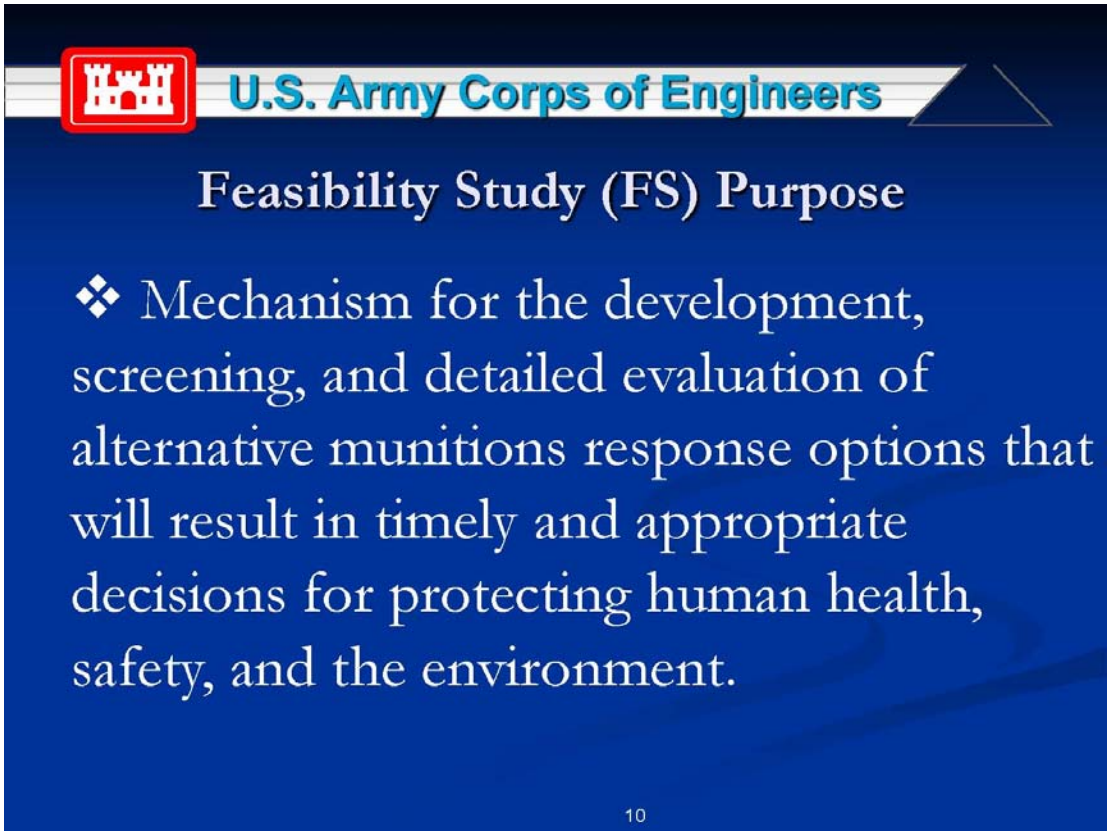

U.S. Army Corps of Engineers
Key Definitions
MEC – Munitions and Explosives of Concern-Specific categories of military munitions that may pose unique explosives safety risks. MEC includes unexploded ordnance (UXO), discarded military munitions (DMM), and explosive concentrations of munitions constituents (MC).
MC – Munitions Constituents-Any materials originating from UXO, DMM, or other military munitions, including explosive and non-explosive materials and emission, degradation, or breakdown elements of such ordnance or munitions.
5

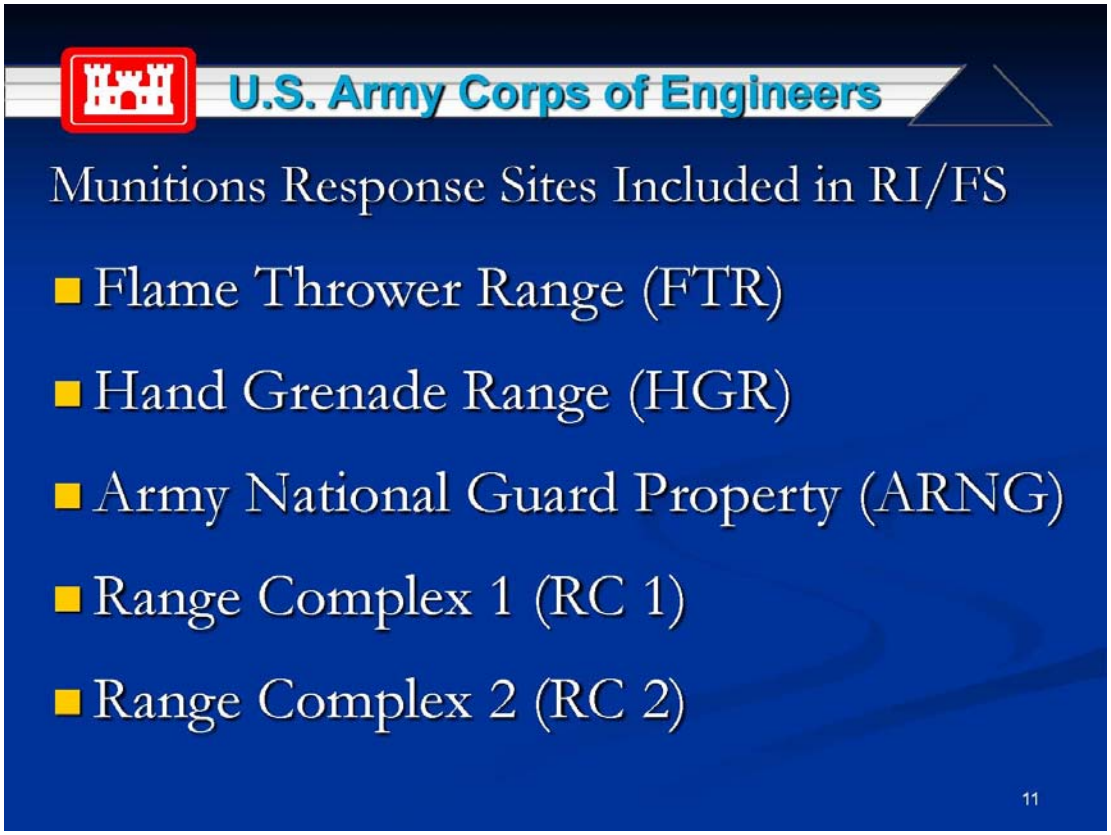

U.S. Army Corps of Engineers
TPP Meeting Objectives
Solicit input from Project Stakeholders
Attain concurrence on the data quality objectives (DQOs) for the project
Attain concurrence on the technical approach for the RI for each Munitions Response Sites (MRSs)
6

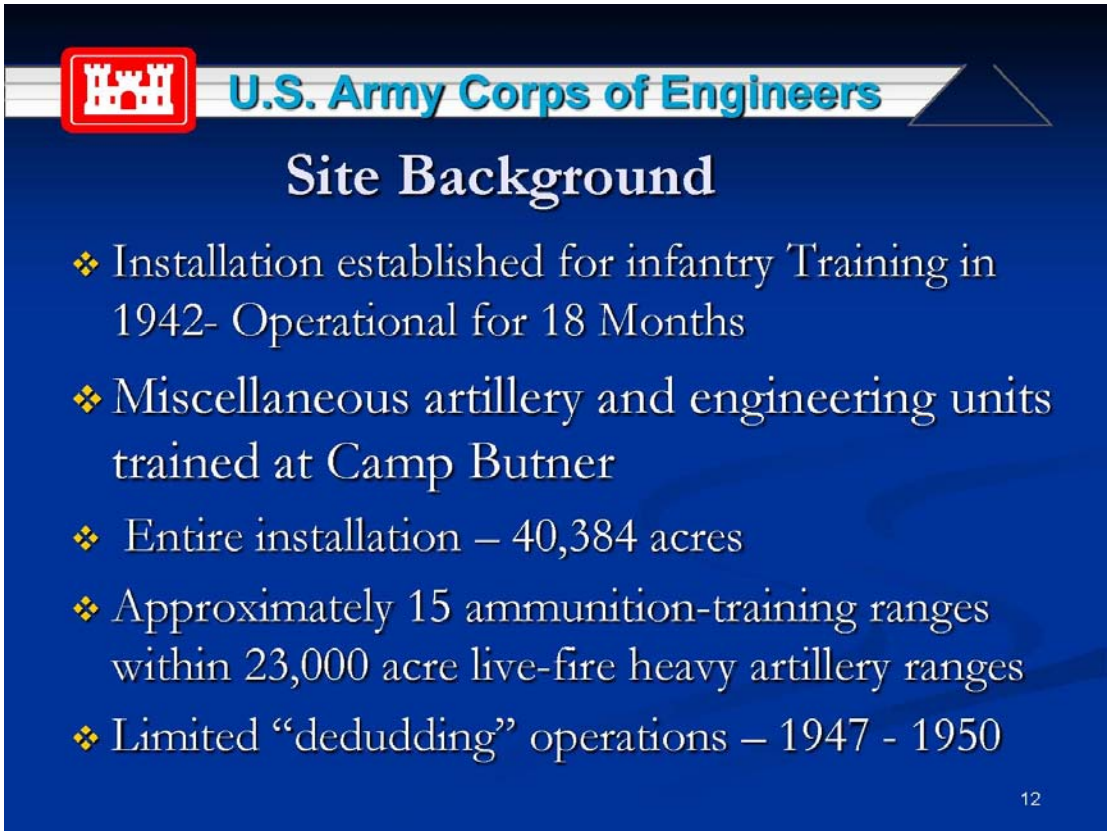

U.S. Army Corps of Engineers
TPP Process Overview
Four Phases
1. Describe the current conditions of the sites (i.e., Conceptual Site Model)
2. Determine data needs (i.e., through review of existing documents - What don't we know)
3. Present and discuss data collection options to fill data needs
4. Finalize data collection program for incorporation into site specific work plan
7

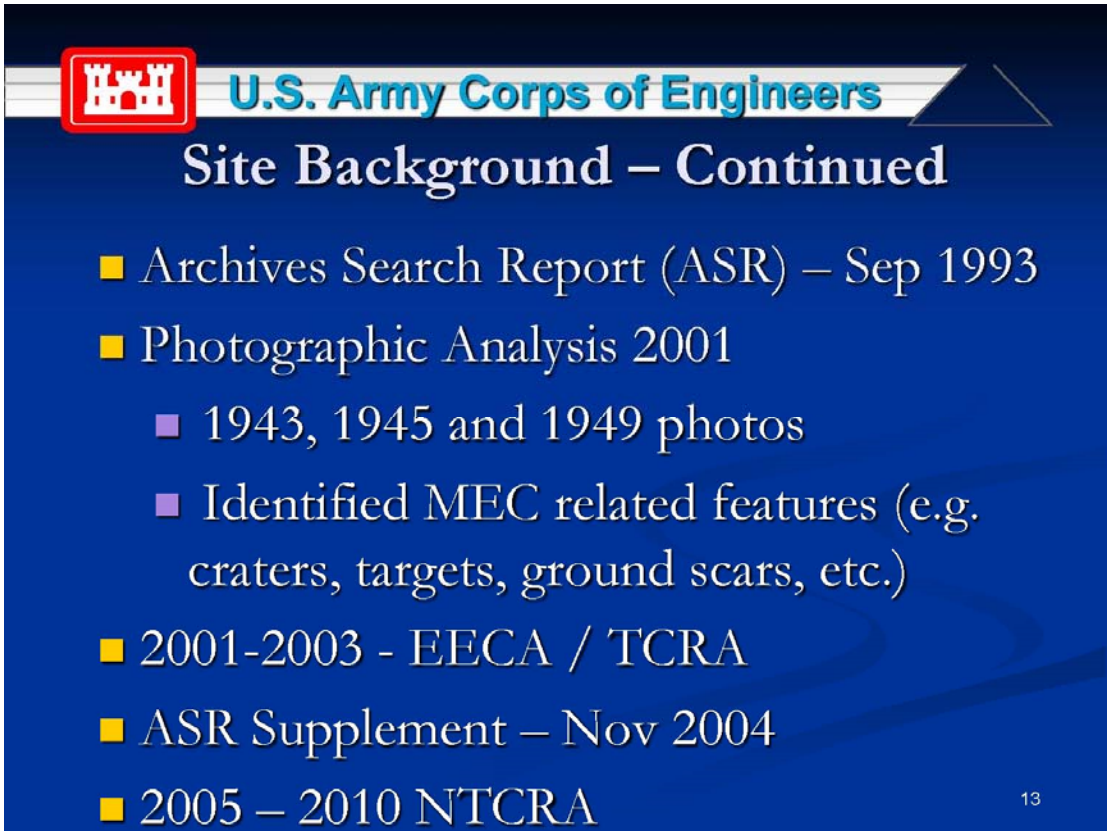

U.S. Army Corps of Engineers
Key Products from TPP
Understanding of:
Current site conditions (i.e., CSM)
Data needs for each MRS
Site Specific Data Quality Objectives (DQOs)
Concurrence on the technical approach / path forward to meet the project objectives
Understanding of Stakeholder concerns
8

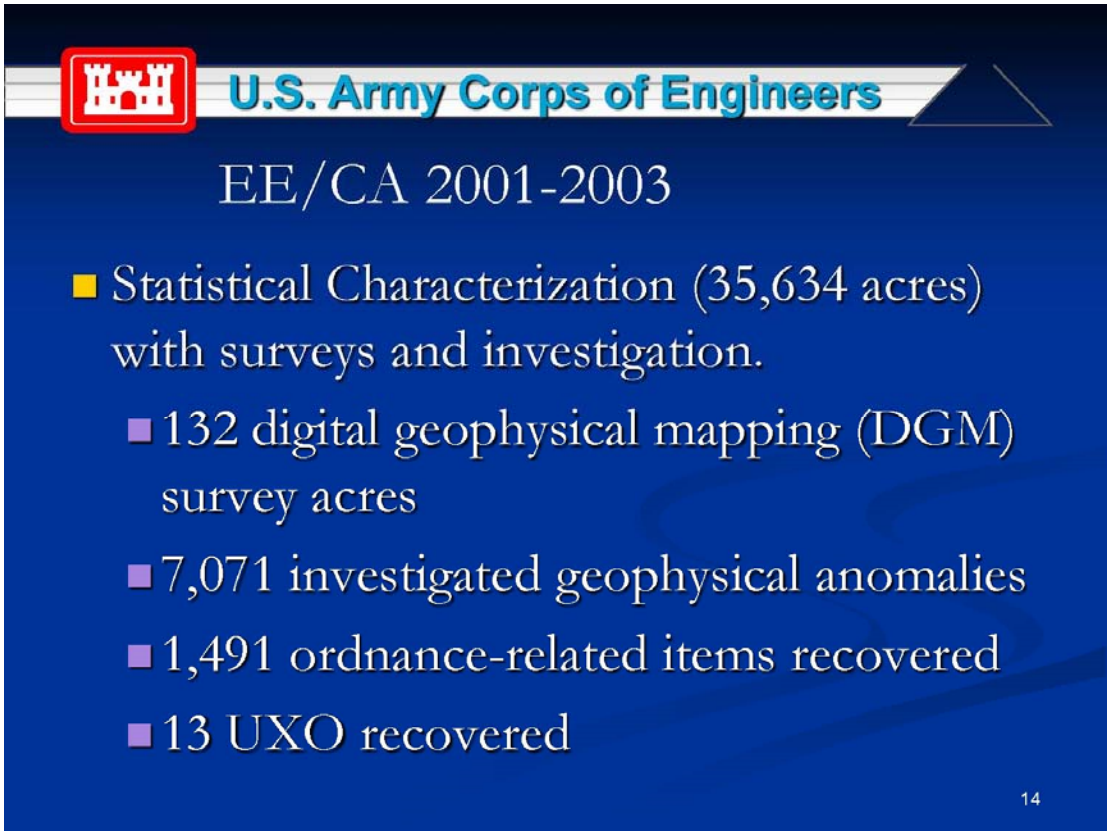

U.S. Army Corps of Engineers
Remedial Investigation (RI) Purpose
❖ Determine the nature and extent of MEC and MC across a site
❖ Determine potential risks to human health and/or the environment
9

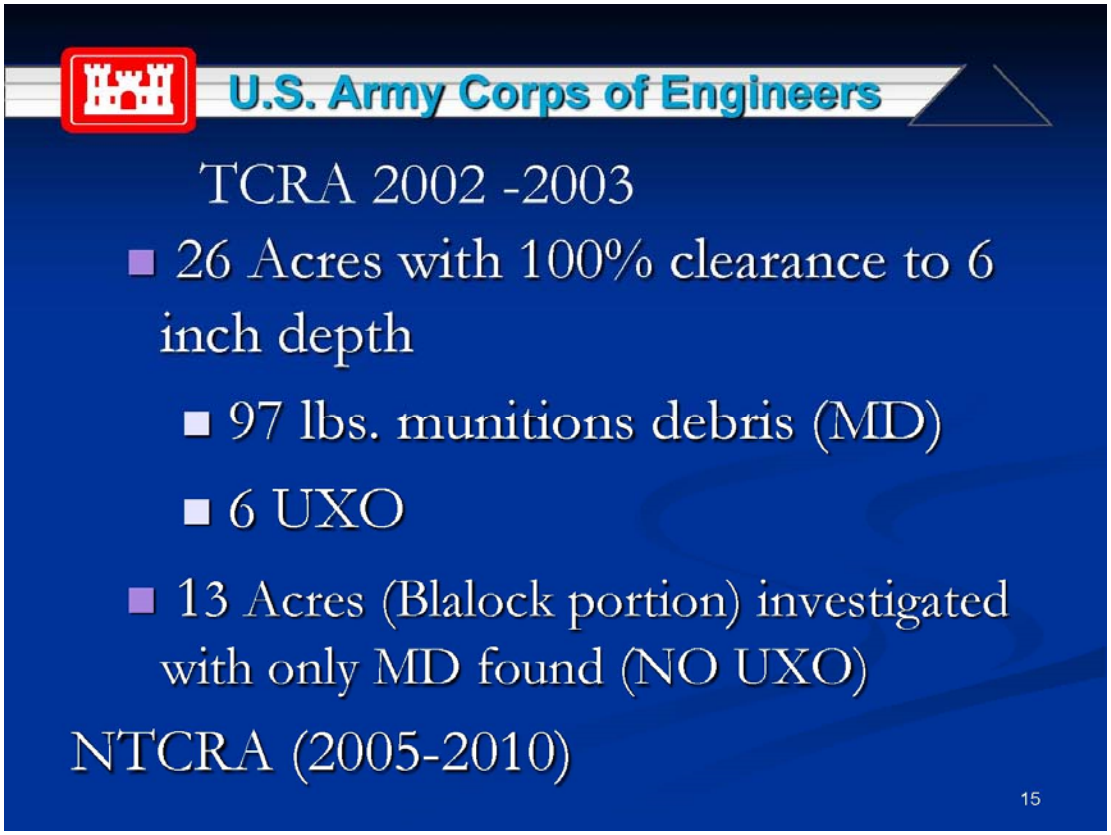

U.S. Army Corps of Engineers
Feasibility Study (FS) Purpose
❖ Mechanism for the development, screening, and detailed evaluation of alternative munitions response options that will result in timely and appropriate decisions for protecting human health, safety, and the environment.
10

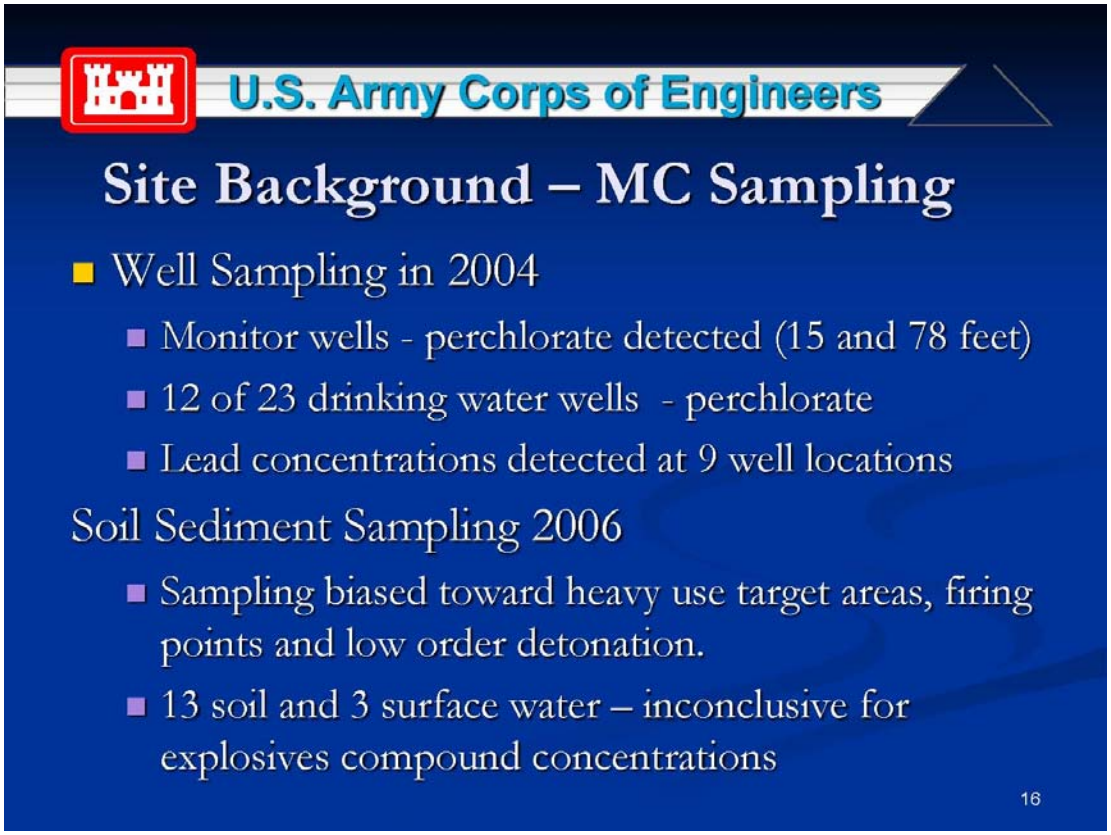

U.S. Army Corps of Engineers
Munitions Response Sites Included in RI/FS
Flame Thrower Range (FTR)
Hand Grenade Range (HGR)
Army National Guard Property (ARNG)
Range Complex 1 (RC 1)
Range Complex 2 (RC 2)
11

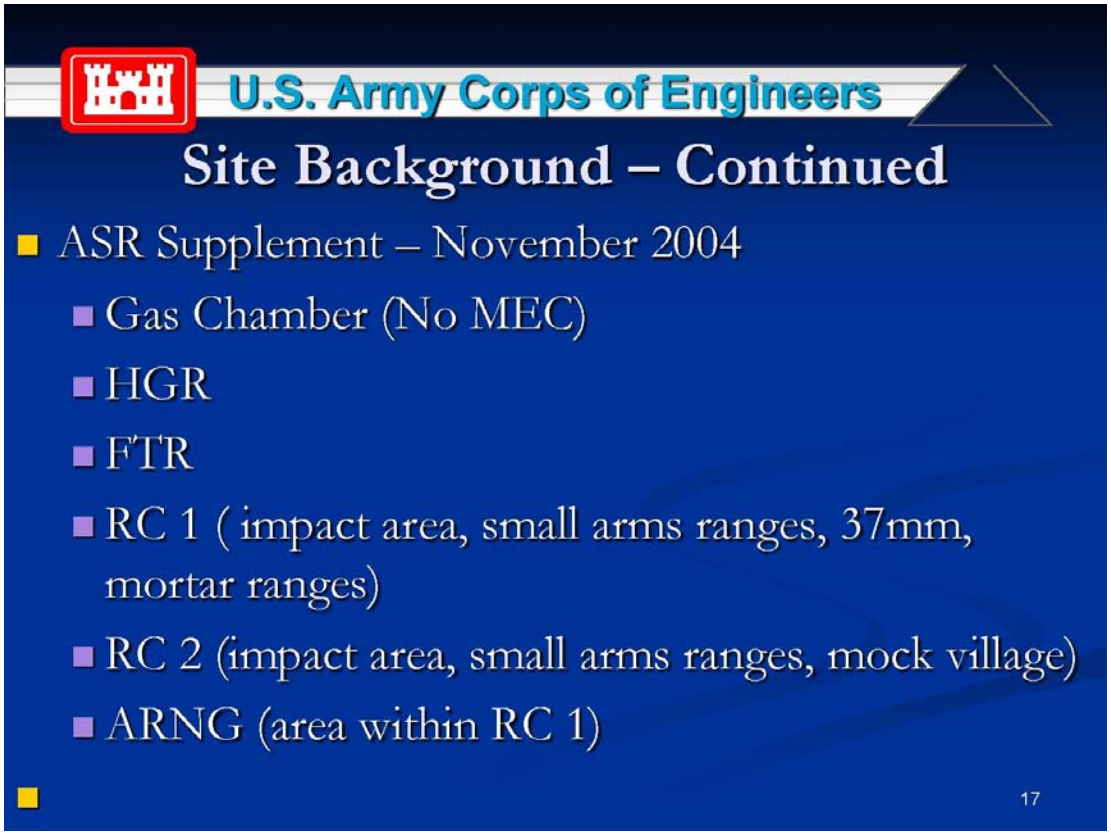

U.S. Army Corps of Engineers
Site Background
Installation established for infantry Training in 1942- Operational for 18 Months
Miscellaneous artillery and engineering units trained at Camp Butner
Entire installation – 40,384 acres
Approximately 15 ammunition-training ranges within 23,000 acre live-fire heavy artillery ranges
Limited "dedudding" operations – 1947 - 1950
12

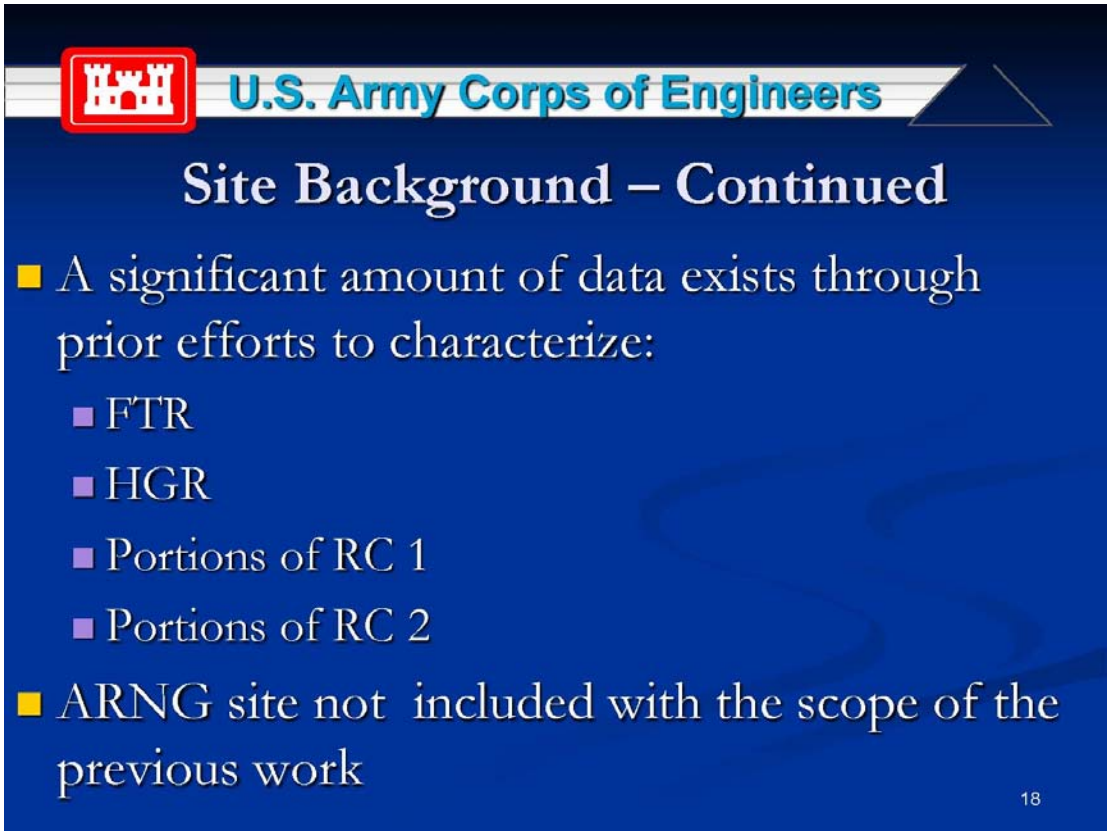

U.S. Army Corps of Engineers
Site Background – Continued
Archives Search Report (ASR) – Sep 1993
Photographic Analysis 2001
1943, 1945 and 1949 photos
Identified MEC related features (e.g. craters, targets, ground scars, etc.)
2001-2003 - EECA / TCRA
ASR Supplement – Nov 2004
2005 – 2010 NTCRA
13

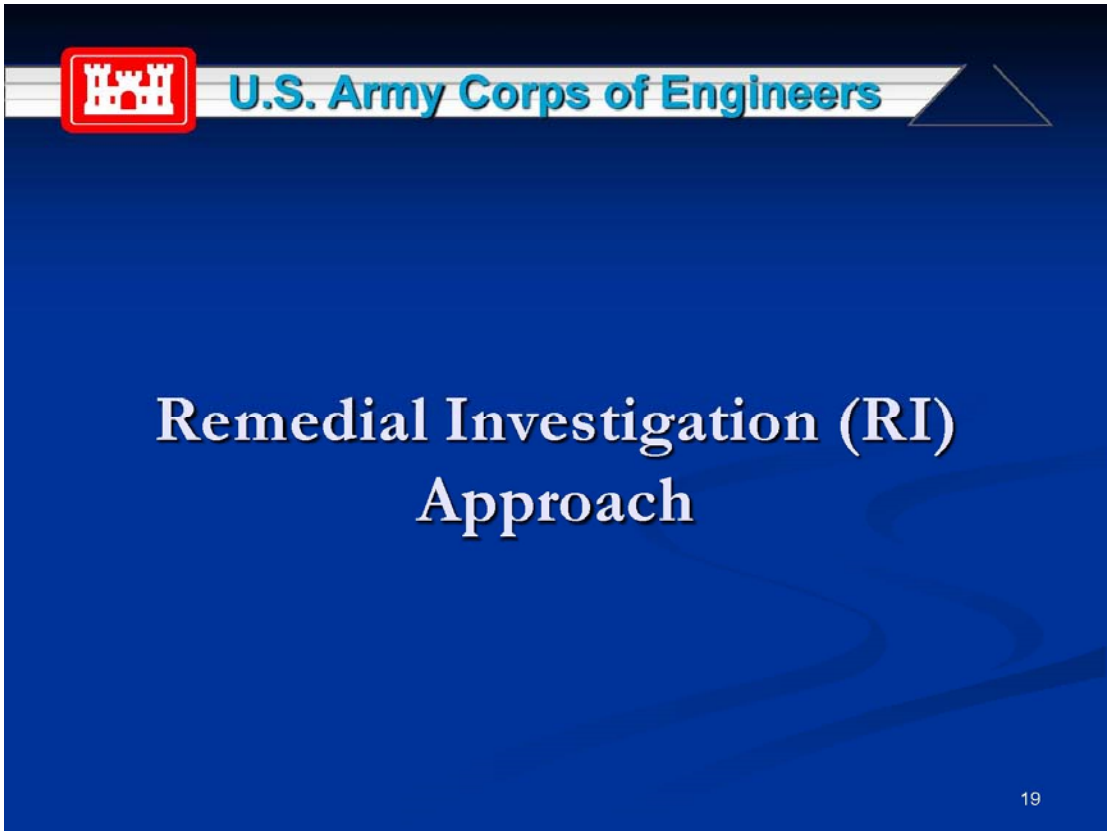

U.S. Army Corps of Engineers
EE/CA 2001-2003
Statistical Characterization (35,634 acres) with surveys and investigation.
132 digital geophysical mapping (DGM) survey acres
7,071 investigated geophysical anomalies
1,491 ordnance-related items recovered
13 UXO recovered
14

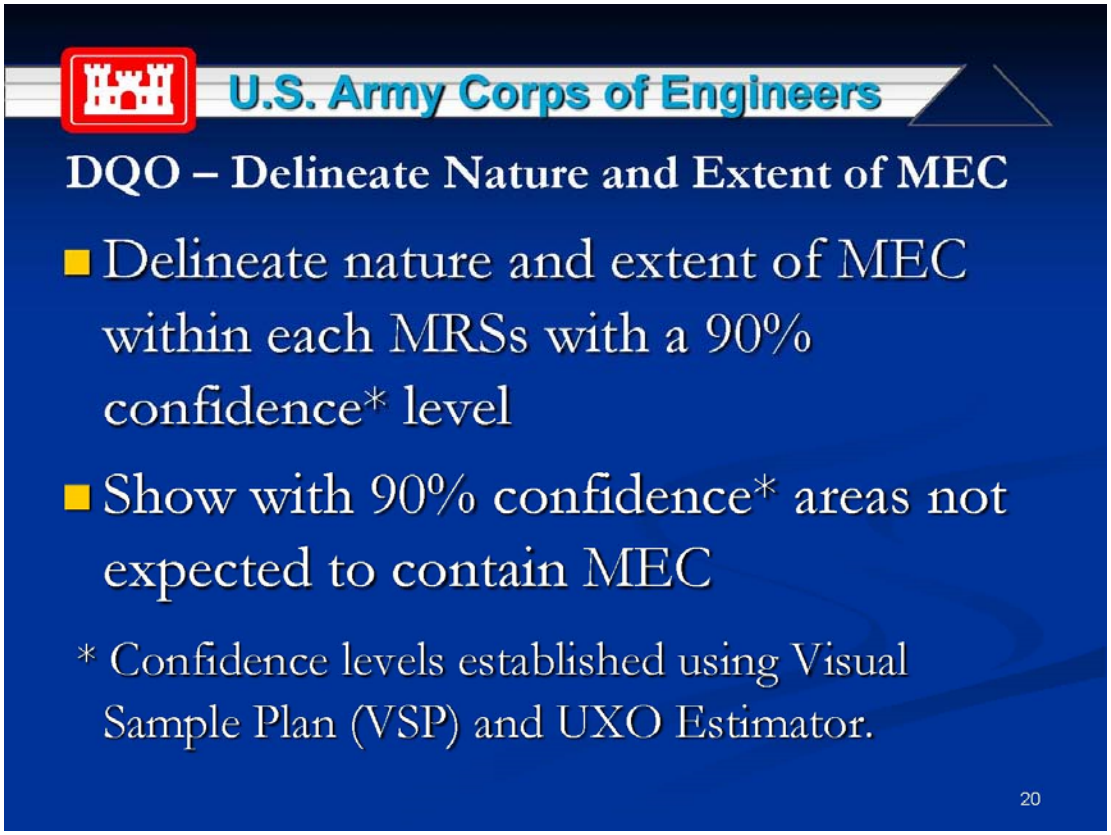

U.S. Army Corps of Engineers
TCRA 2002 -2003
26 Acres with 100% clearance to 6 inch depth
97 lbs. munitions debris (MD)
6 UXO
13 Acres (Blalock portion) investigated with only MD found (NO UXO)
NTCRA (2005-2010)
15

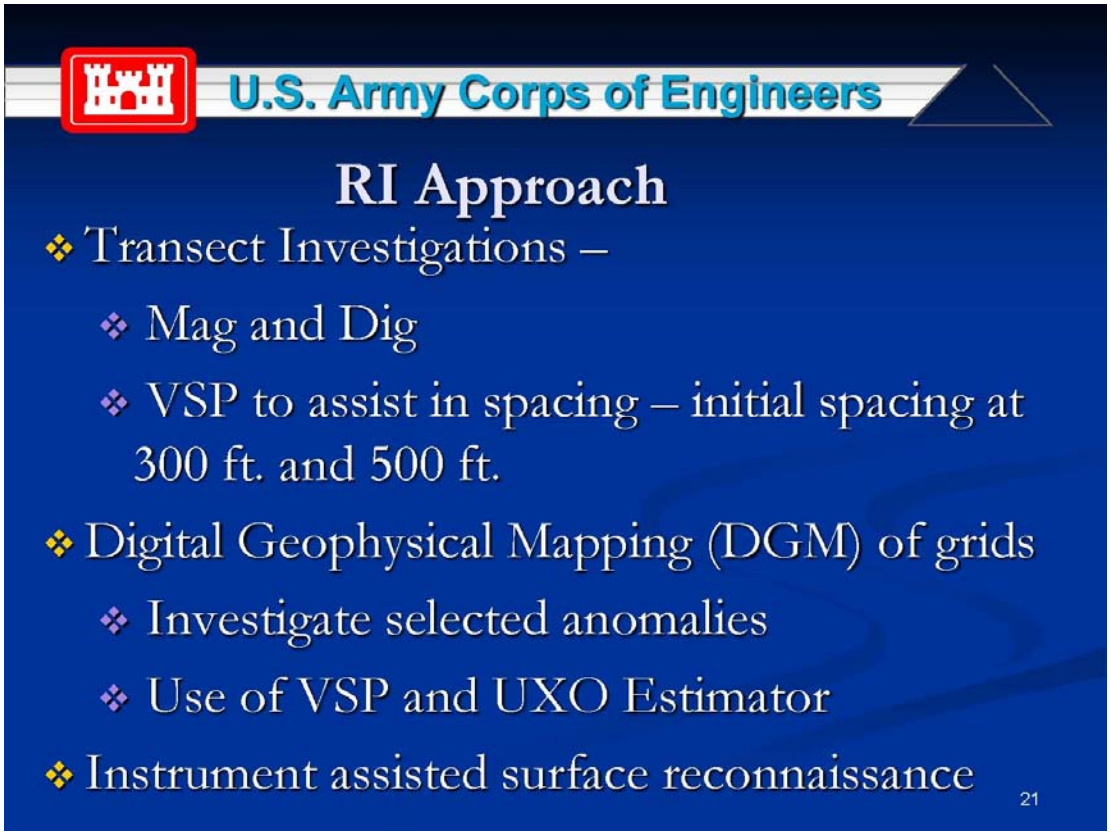

U.S. Army Corps of Engineers
Site Background – MC Sampling
Well Sampling in 2004
Monitor wells - perchlorate detected (15 and 78 feet)
12 of 23 drinking water wells - perchlorate
Lead concentrations detected at 9 well locations
Soil Sediment Sampling 2006
Sampling biased toward heavy use target areas, firing points and low order detonation.
13 soil and 3 surface water – inconclusive for explosives compound concentrations
16

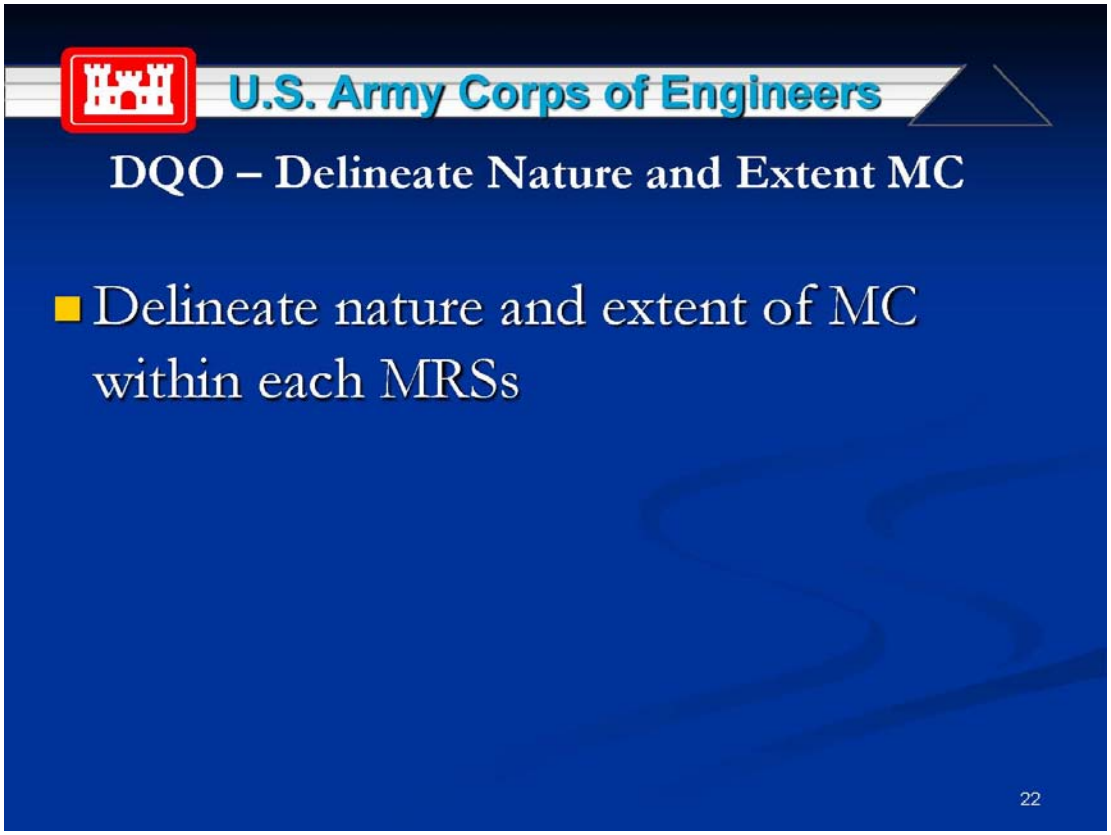

U.S. Army Corps of Engineers
Site Background – Continued
ASR Supplement – November 2004
Gas Chamber (No MEC)
HGR
FTR
RC 1 (impact area, small arms ranges, 37mm, mortar ranges)
RC 2 (impact area, small arms ranges, mock village)
ARNG (area within RC 1)
17

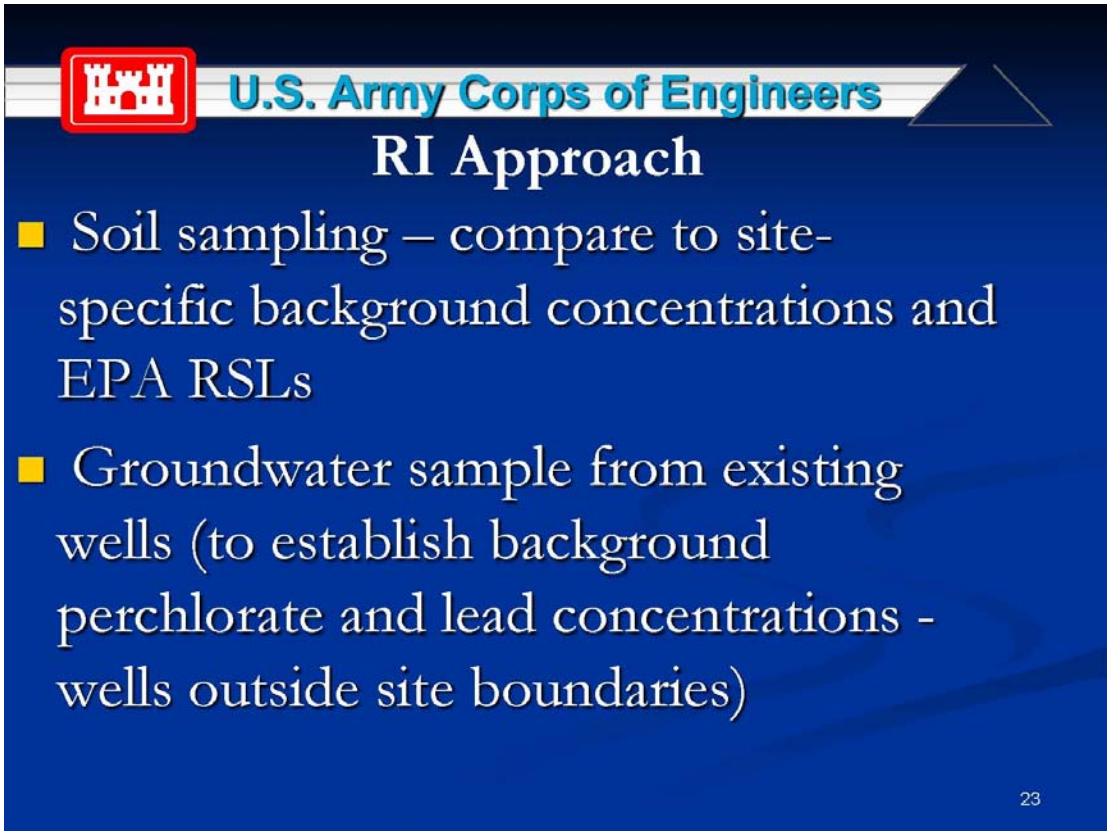

U.S. Army Corps of Engineers
Site Background – Continued
A significant amount of data exists through prior efforts to characterize:
FTR
HGR
Portions of RC 1
Portions of RC 2
ARNG site not included with the scope of the previous work
18

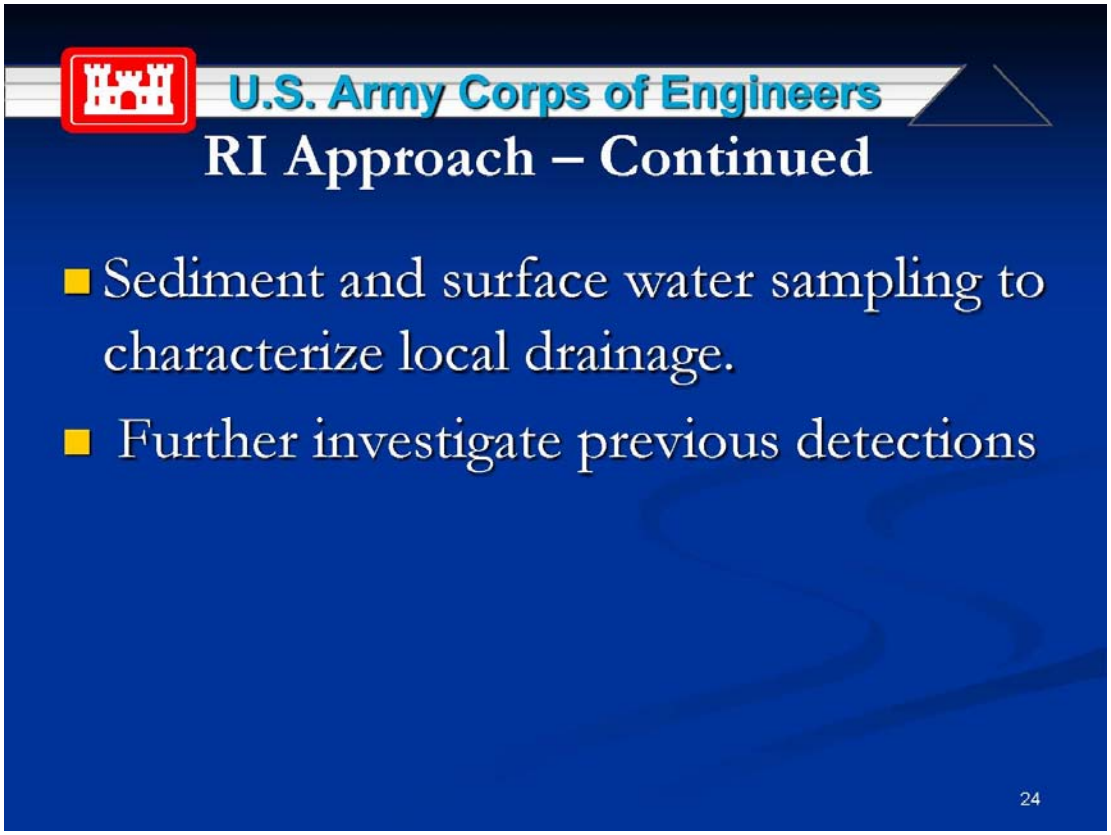

U.S. Army Corps of Engineers
Remedial Investigation (RI) Approach
19

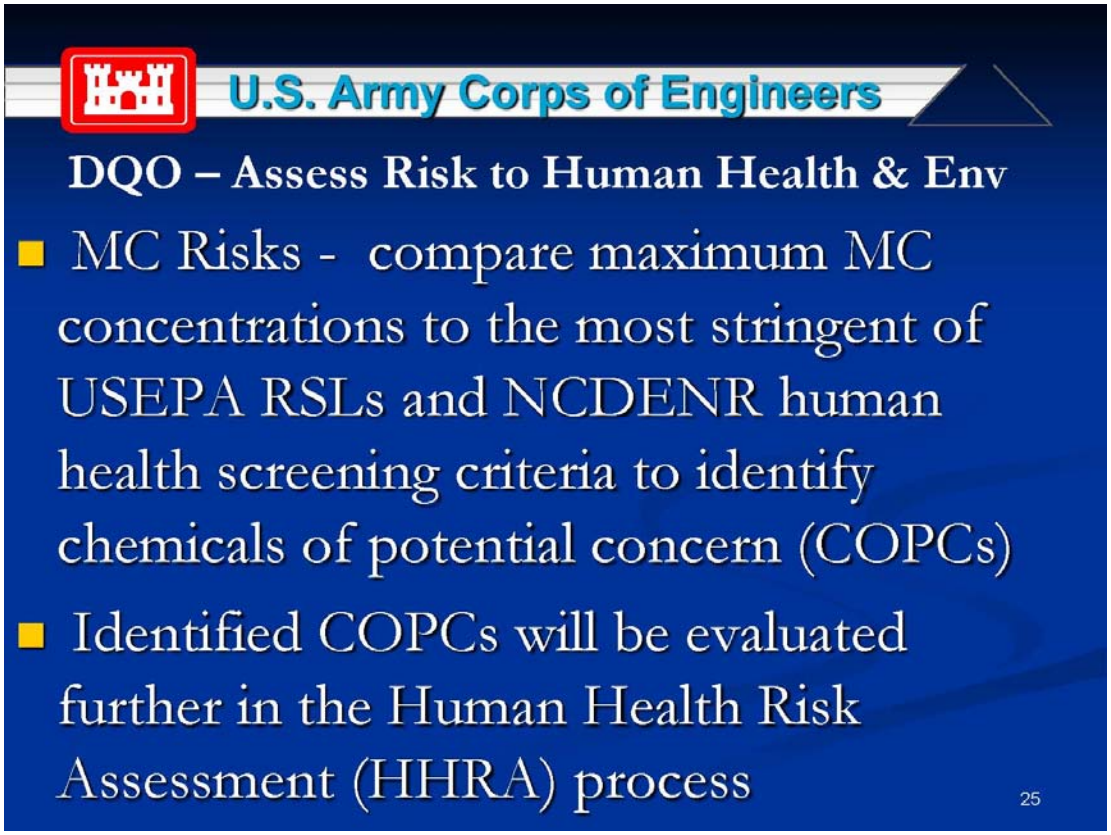

U.S. Army Corps of Engineers
DQO – Delineate Nature and Extent of MEC
Delineate nature and extent of MEC within each MRSs with a 90% confidence* level
Show with 90% confidence* areas not expected to contain MEC
* Confidence levels established using Visual Sample Plan (VSP) and UXO Estimator.
20

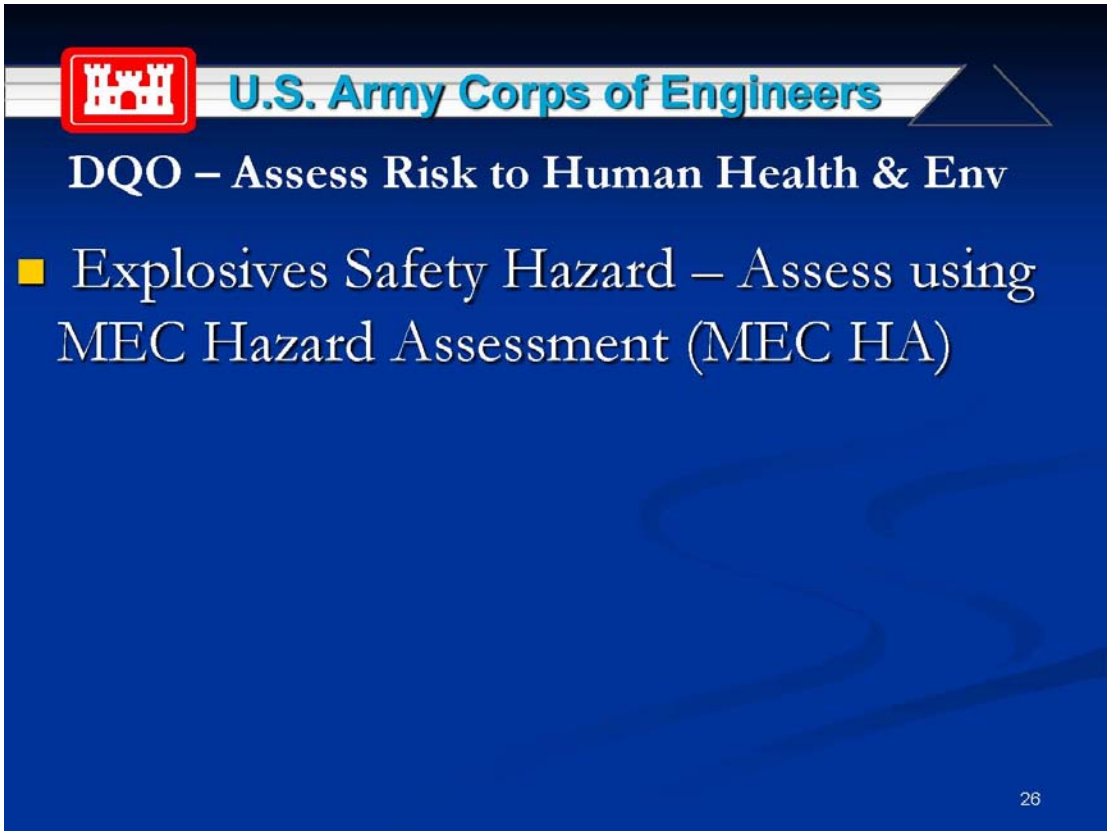

U.S. Army Corps of Engineers
RI Approach
Transect Investigations –
Mag and Dig
VSP to assist in spacing – initial spacing at 300 ft. and 500 ft.
Digital Geophysical Mapping (DGM) of grids
Investigate selected anomalies
Use of VSP and UXO Estimator
Instrument assisted surface reconnaissance
21

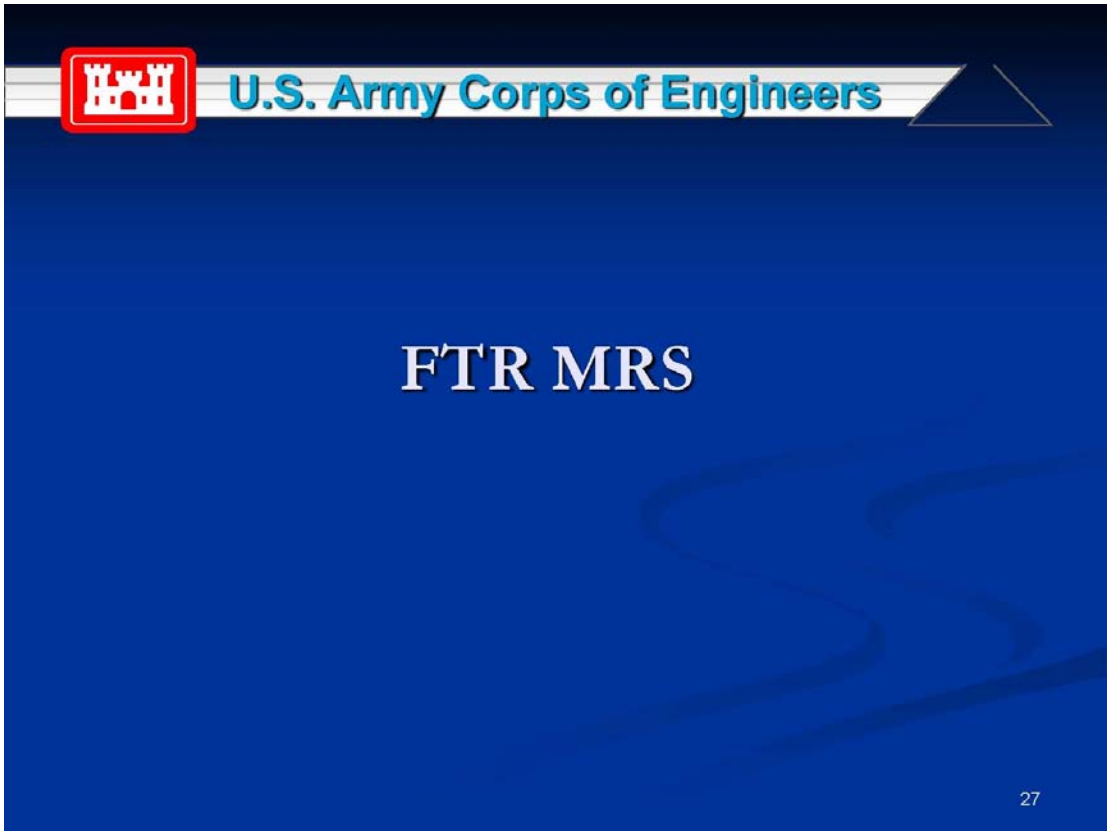

U.S. Army Corps of Engineers
DQO – Delineate Nature and Extent MC
Delineate nature and extent of MC within each MRSs
22

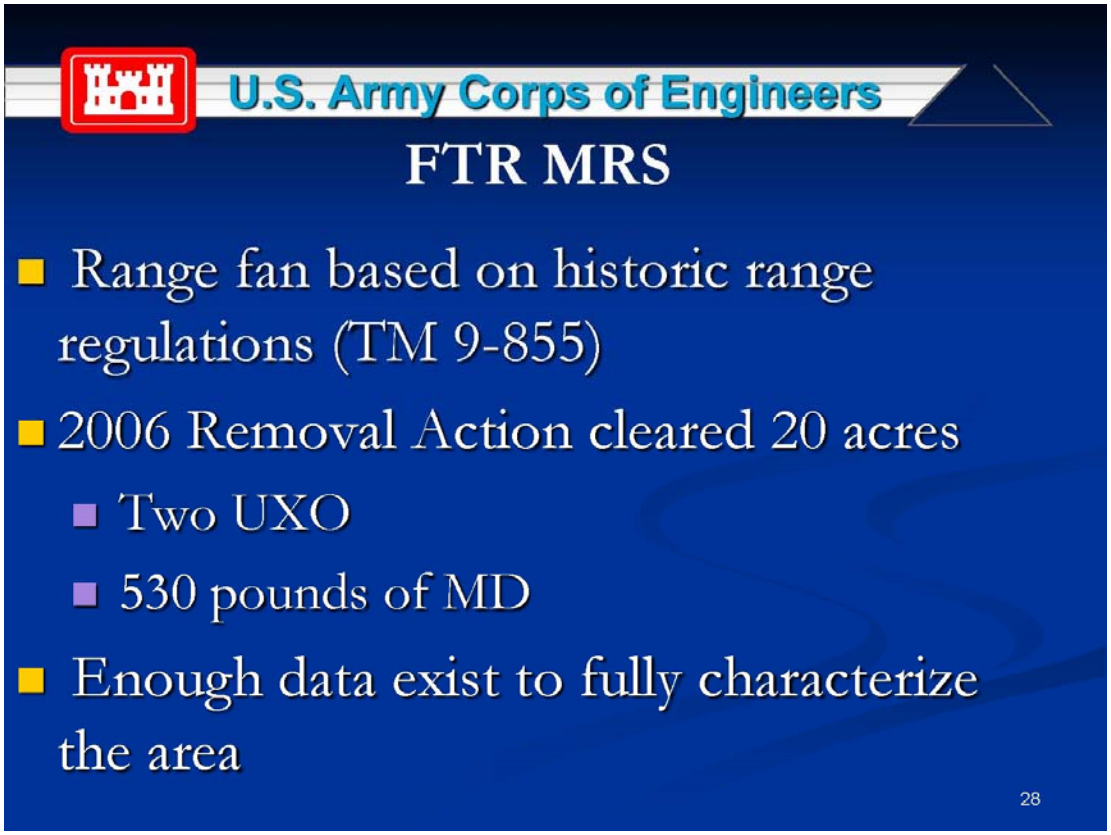

U.S. Army Corps of Engineers
RI Approach
Soil sampling – compare to site-specific background concentrations and EPA RSLs
Groundwater sample from existing wells (to establish background perchlorate and lead concentrations - wells outside site boundaries)
23

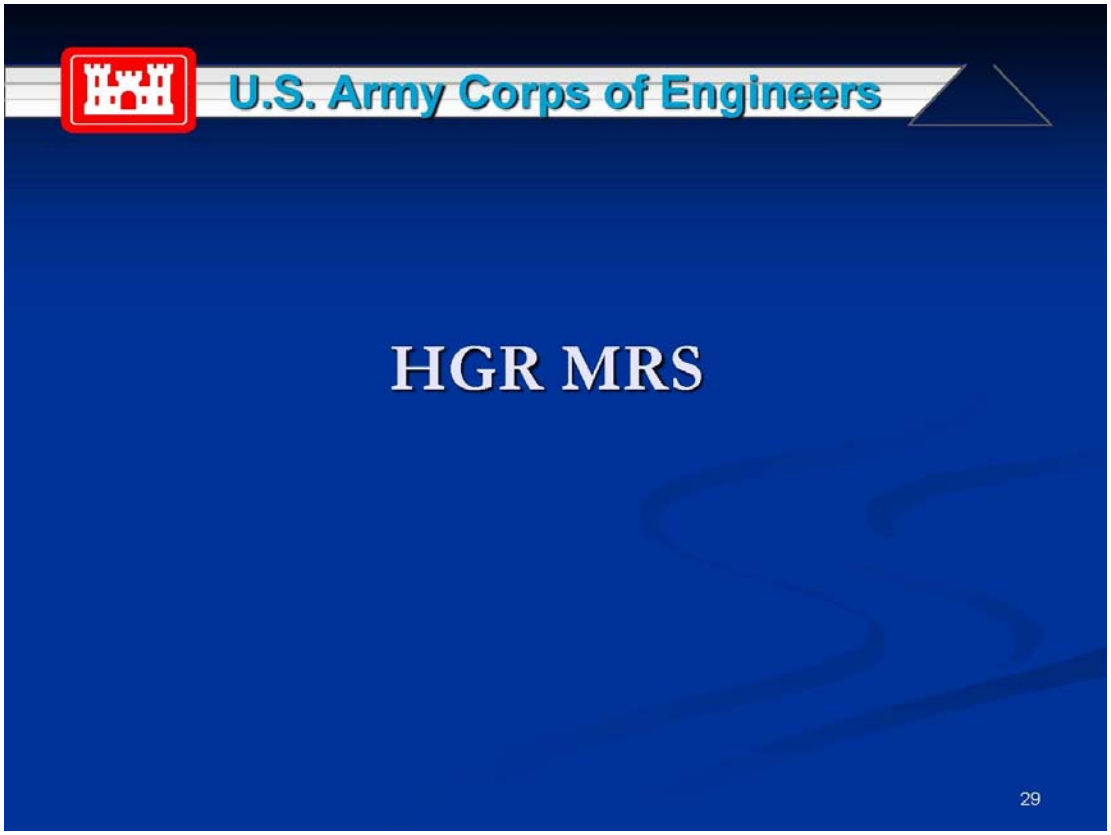

U.S. Army Corps of Engineers
RI Approach – Continued
Sediment and surface water sampling to characterize local drainage.
Further investigate previous detections
24

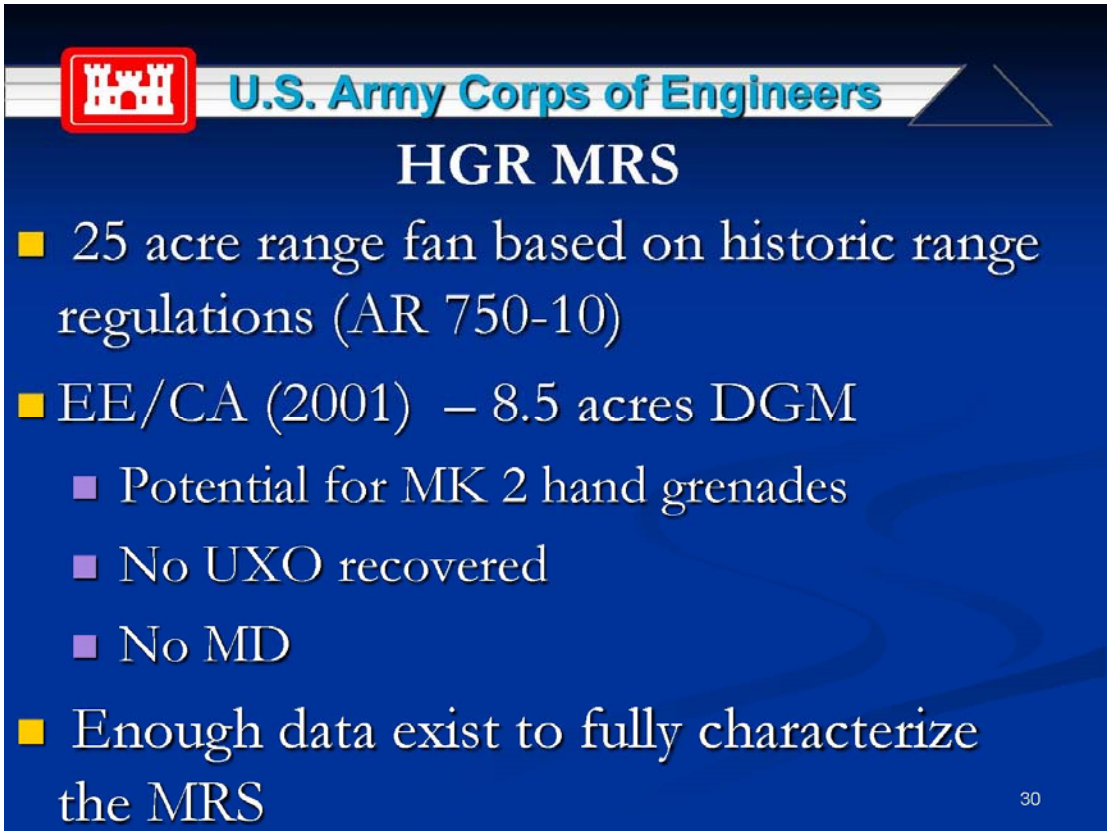

U.S. Army Corps of Engineers
DQO – Assess Risk to Human Health & Env
MC Risks - compare maximum MC concentrations to the most stringent of USEPA RSLs and NCDENR human health screening criteria to identify chemicals of potential concern (COPCs)
Identified COPCs will be evaluated further in the Human Health Risk Assessment (HHRA) process
25

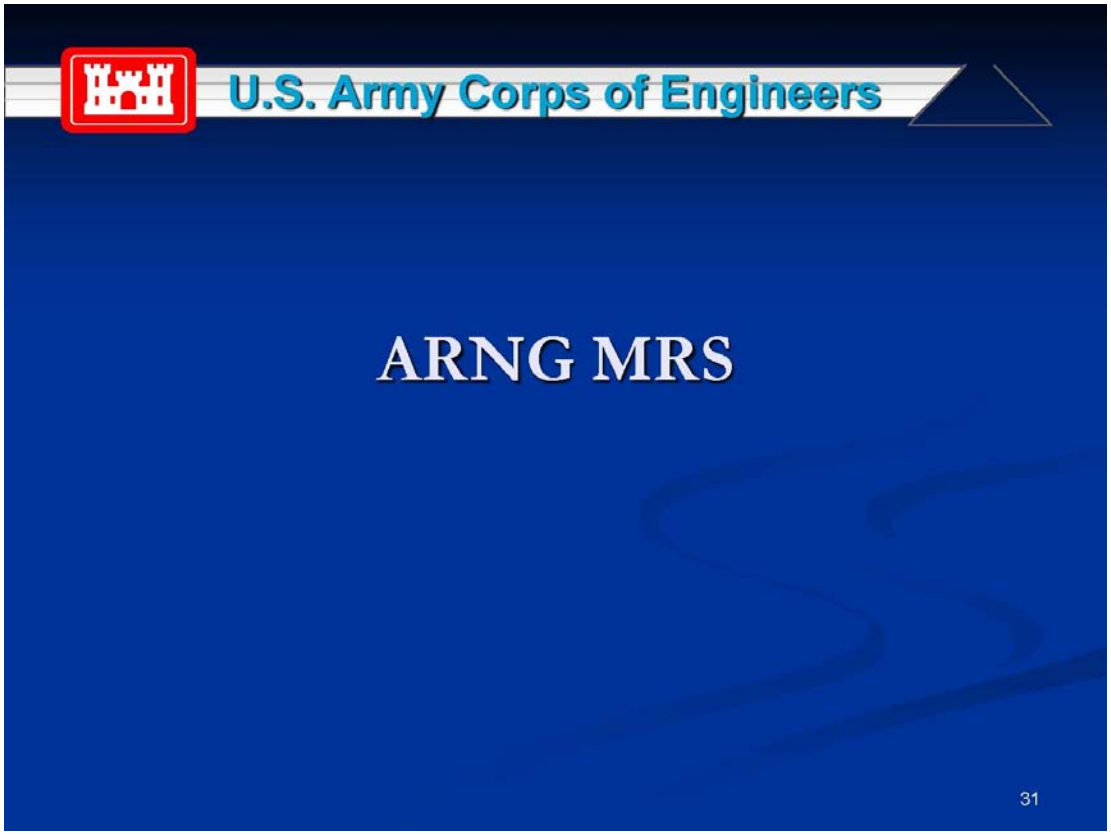

U.S. Army Corps of Engineers
DQO – Assess Risk to Human Health & Env
Explosives Safety Hazard – Assess using MEC Hazard Assessment (MEC HA)
26

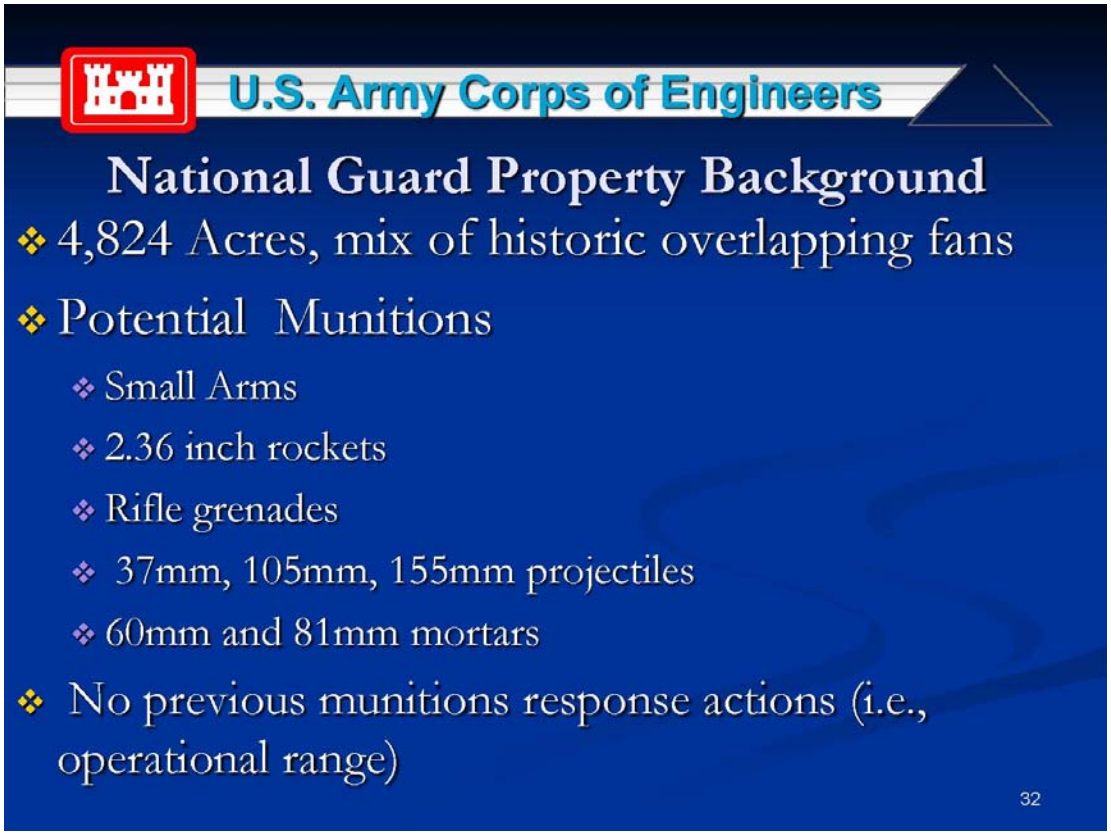

U.S. Army Corps of Engineers
FTR MRS
27


U.S. Army Corps of Engineers
FTR MRS
Range fan based on historic range regulations (TM 9-855)
2006 Removal Action cleared 20 acres
Two UXO
530 pounds of MD
Enough data exist to fully characterize the area
28


U.S. Army Corps of Engineers
HGR MRS
29


U.S. Army Corps of Engineers
HGR MRS
25 acre range fan based on historic range regulations (AR 750-10)
EE/CA (2001) – 8.5 acres DGM
Potential for MK 2 hand grenades
No UXO recovered
No MD
Enough data exist to fully characterize the MRS
30

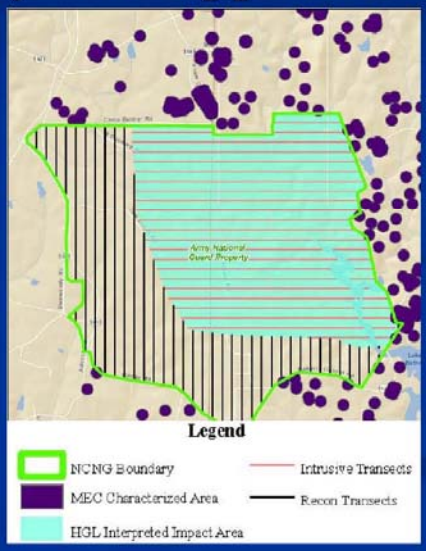

U.S. Army Corps of Engineers
ARNG MRS
31


U.S. Army Corps of Engineers
National Guard Property Background
4,824 Acres, mix of historic overlapping fans
Potential Munitions
Small Arms
2.36 inch rockets
Rifle grenades
37mm, 105mm, 155mm projectiles
60mm and 81mm mortars
No previous munitions response actions (i.e., operational range)
32

U.S. Army Corps of Engineers

National Guard Property – RI Approach

- Transect Approach
  - 300 ft and 500 ft. Spacing
  - Mag and Dig investigations
- DGM grids / Intrusive
  - Placed based upon transects
- Surface reconnaissance to confirm areas not suspected of containing MEC

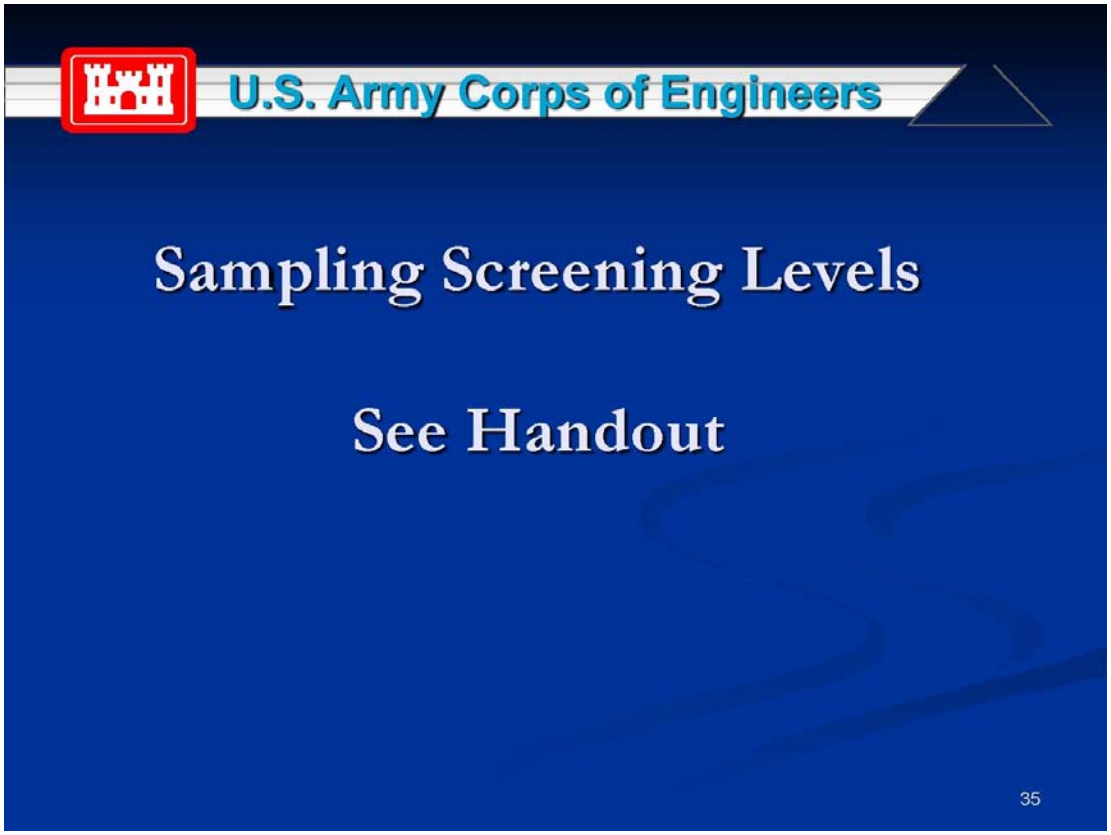


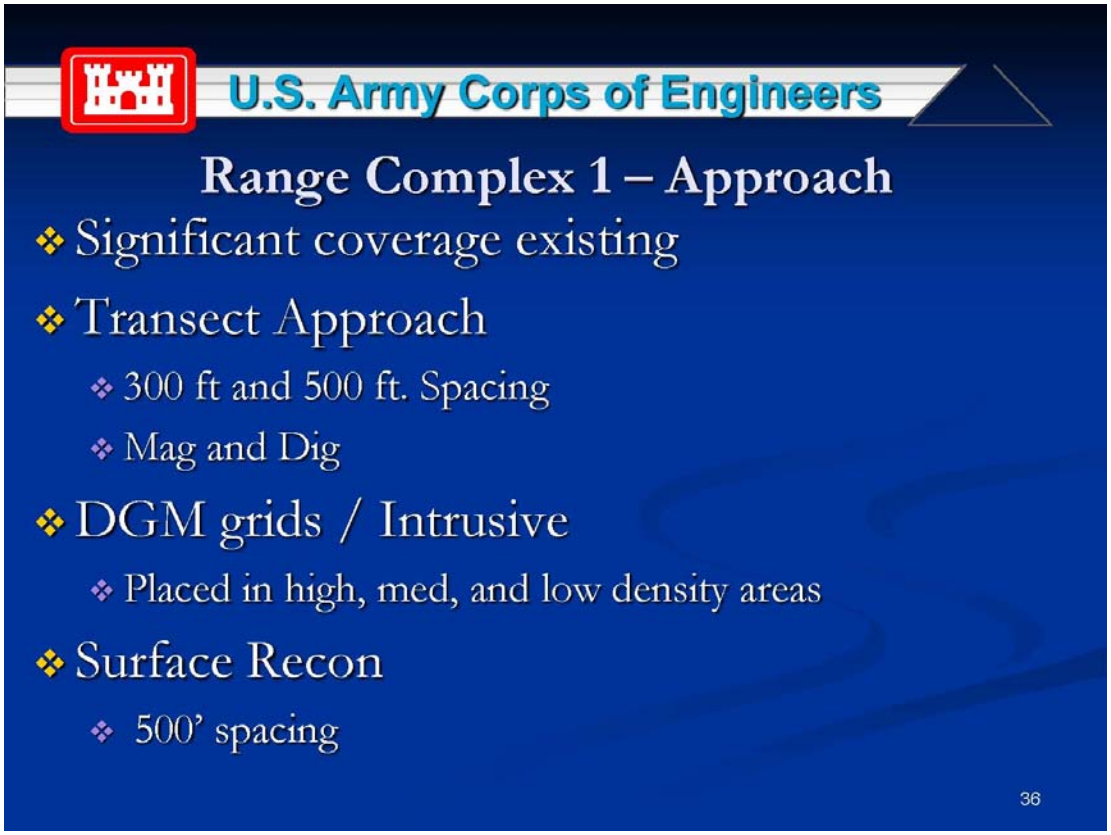
33

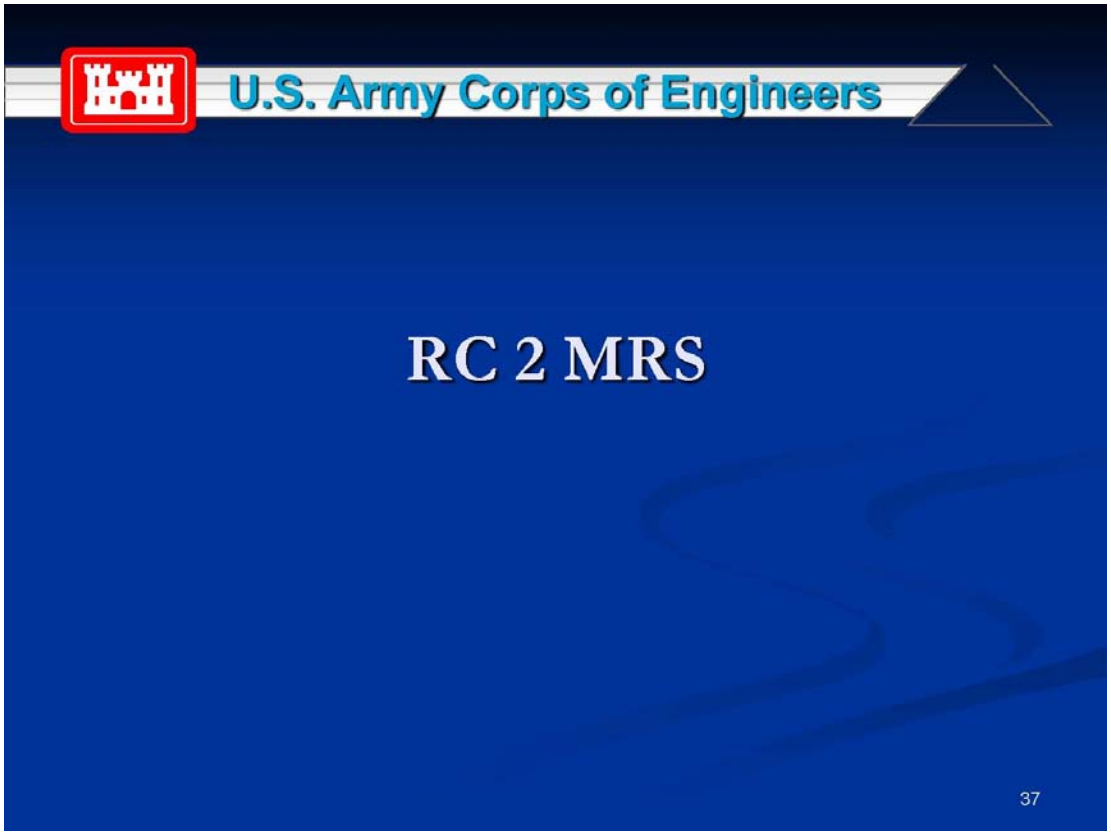
U.S. Army Corps of Engineers

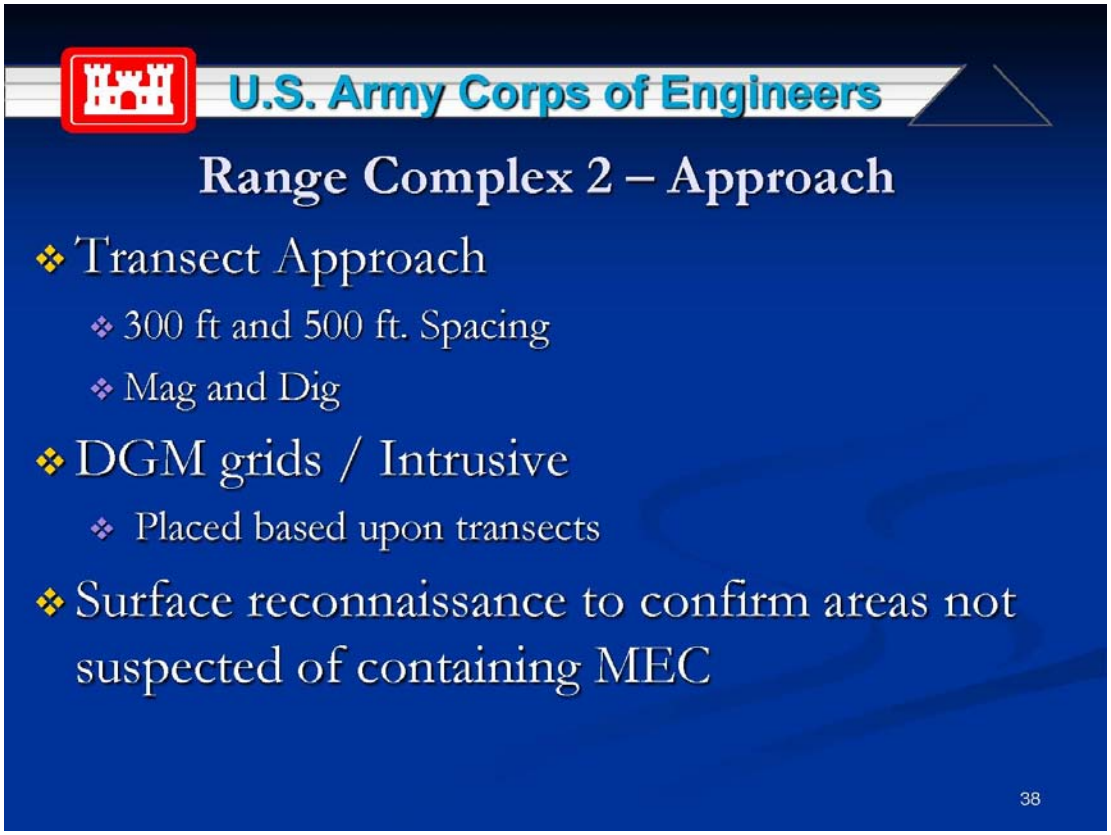
RC 1 MRS

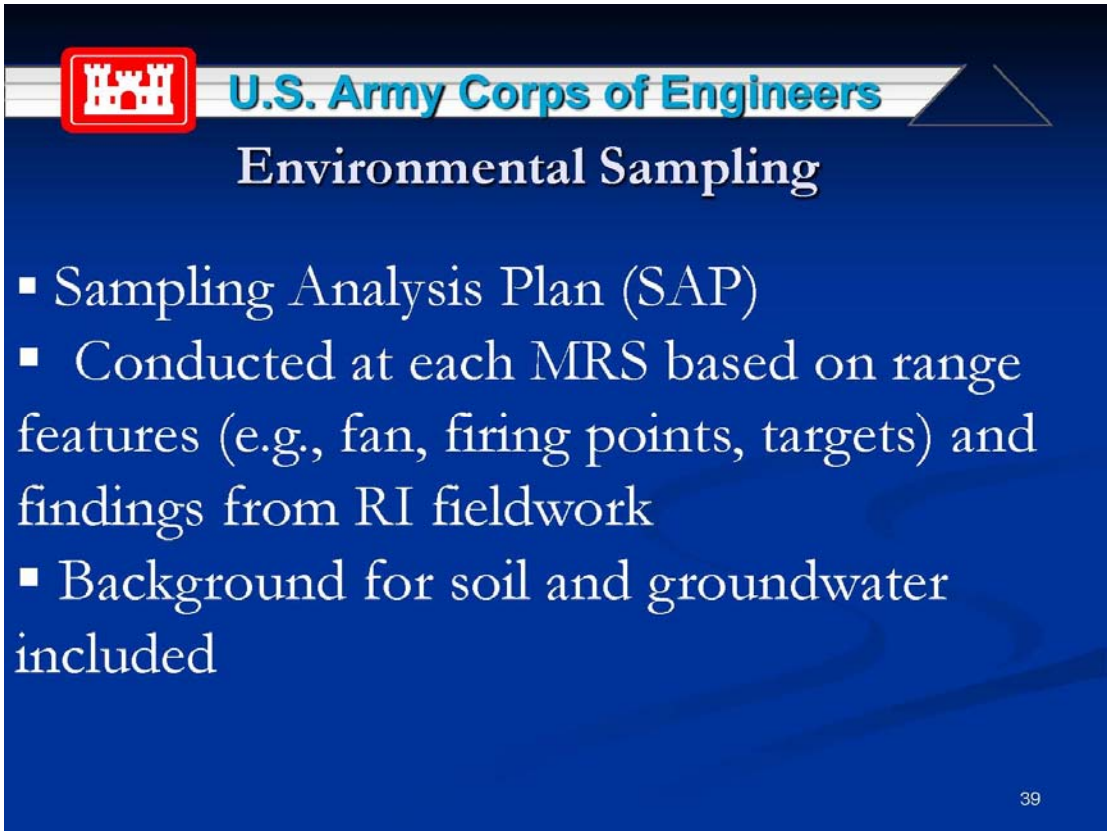
34

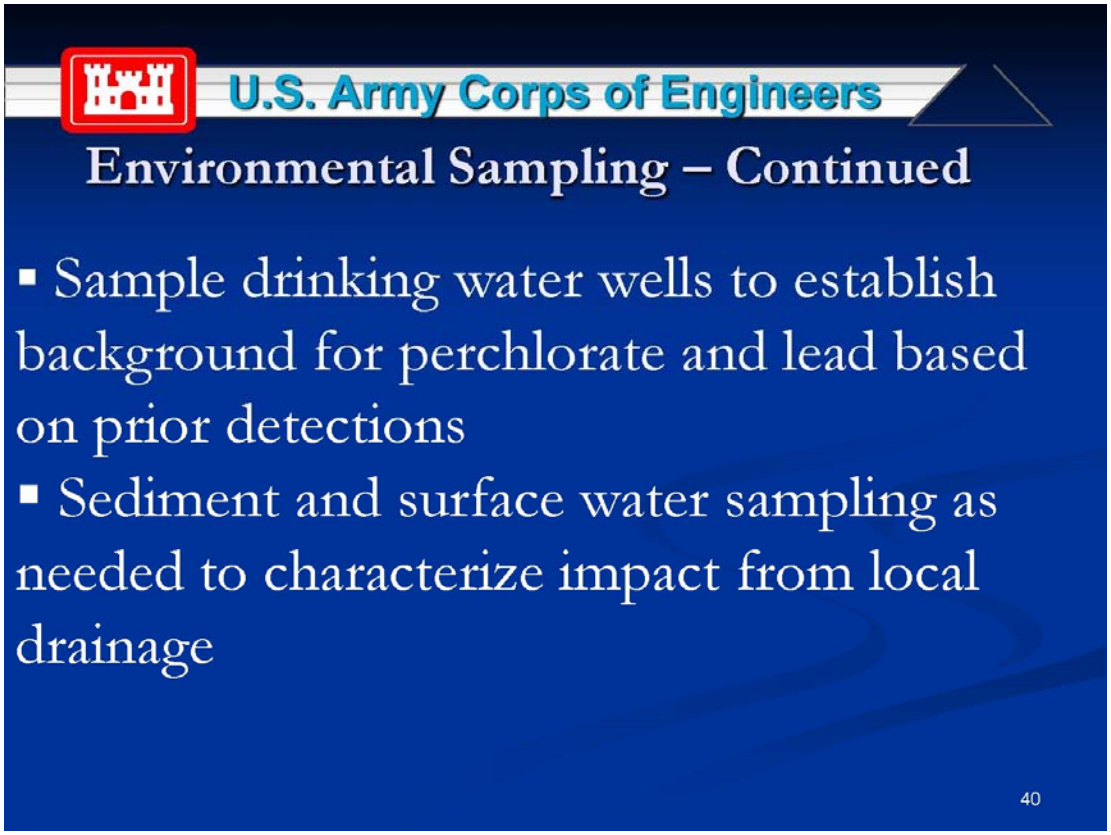

U.S. Army Corps of Engineers
Sampling Screening Levels
See Handout
35

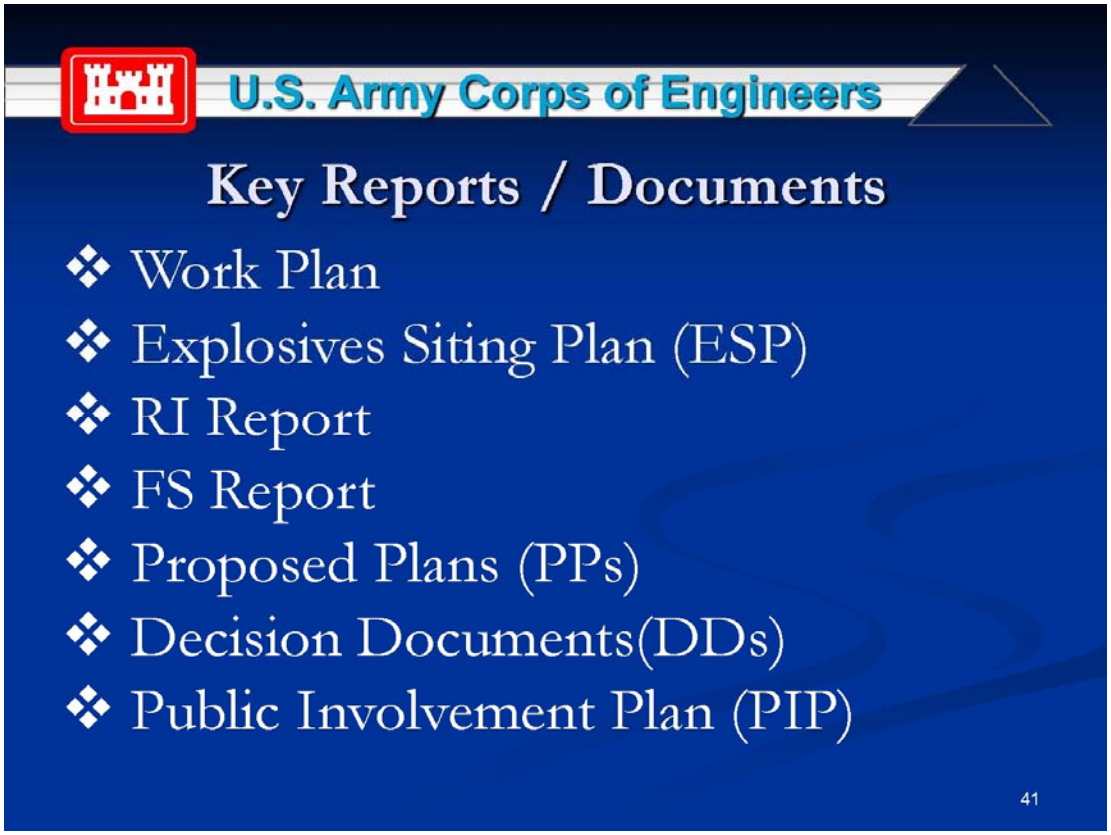

U.S. Army Corps of Engineers
Range Complex 1 – Approach
Significant coverage existing
Transect Approach
300 ft and 500 ft. Spacing
Mag and Dig
DGM grids / Intrusive
Placed in high, med, and low density areas
Surface Recon
500' spacing
36

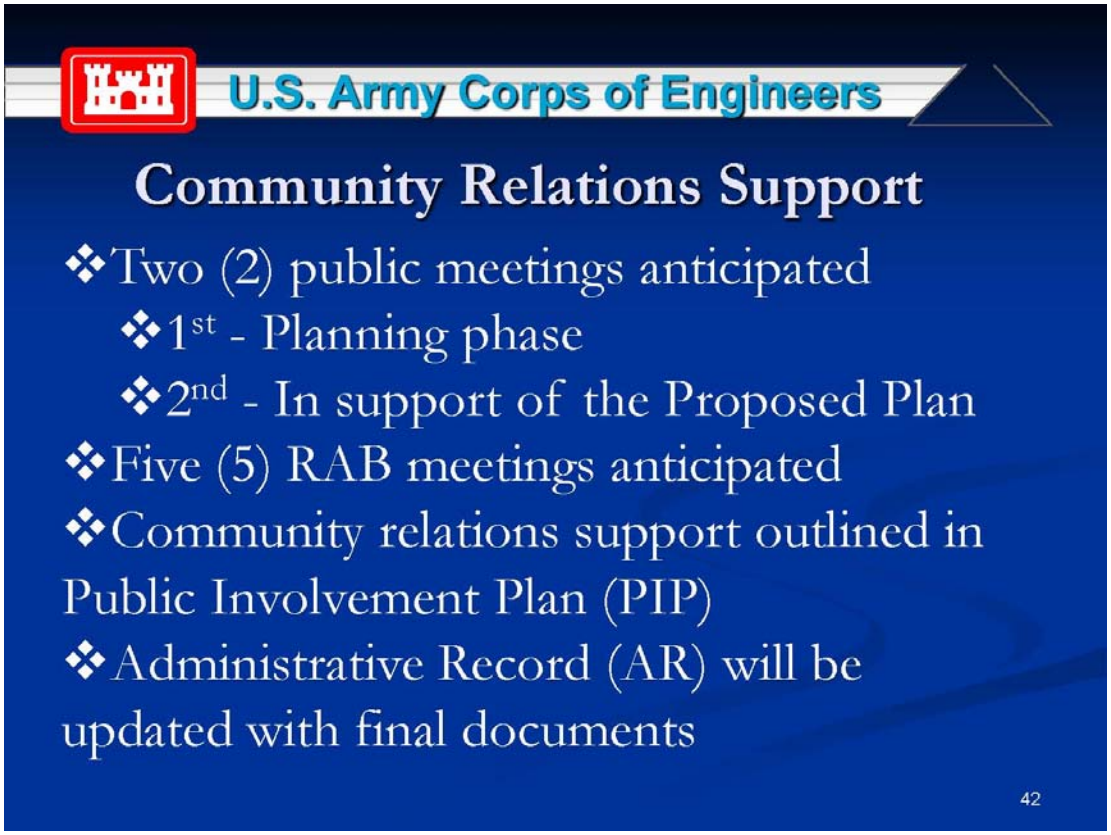

U.S. Army Corps of Engineers
RC 2 MRS
37

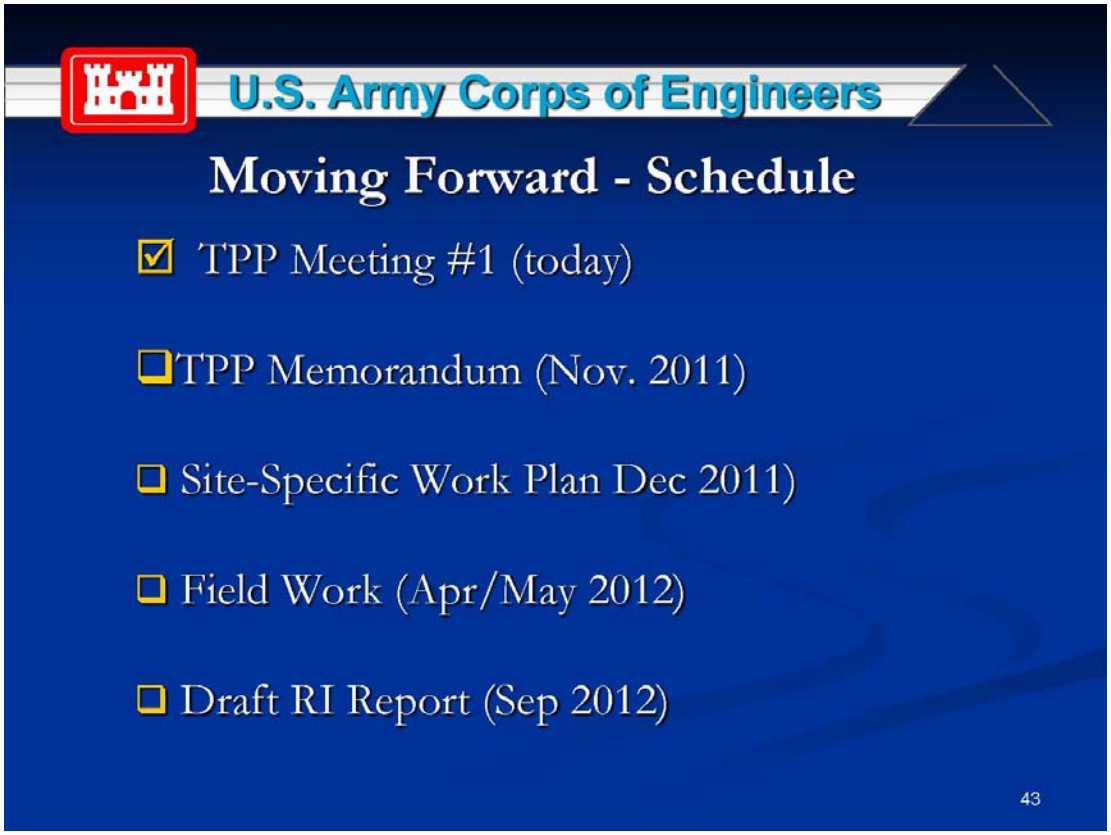

U.S. Army Corps of Engineers
Range Complex 2 – Approach
Transect Approach
300 ft and 500 ft. Spacing
Mag and Dig
DGM grids / Intrusive
Placed based upon transects
Surface reconnaissance to confirm areas not suspected of containing MEC
38

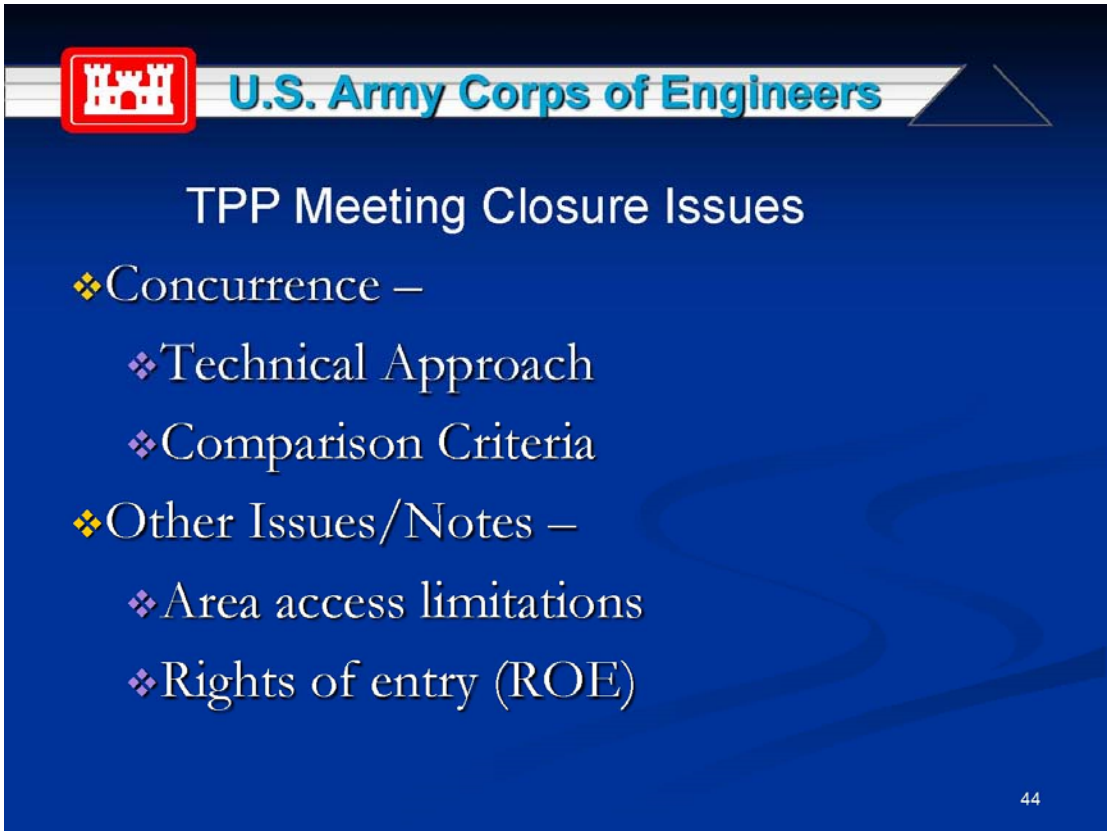

U.S. Army Corps of Engineers
Environmental Sampling
▪ Sampling Analysis Plan (SAP)
▪ Conducted at each MRS based on range features (e.g., fan, firing points, targets) and findings from RI fieldwork
▪ Background for soil and groundwater included
39

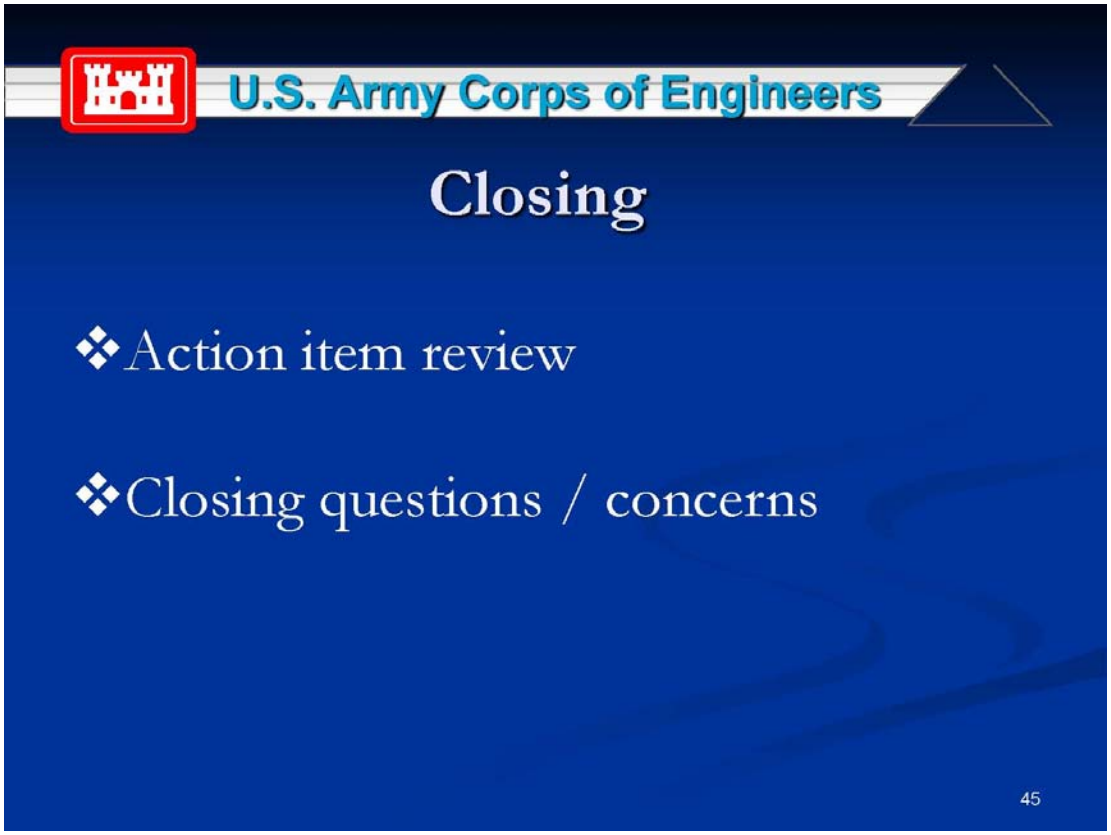

U.S. Army Corps of Engineers
Environmental Sampling – Continued
▪ Sample drinking water wells to establish background for perchlorate and lead based on prior detections
▪ Sediment and surface water sampling as needed to characterize impact from local drainage
40


U.S. Army Corps of Engineers
Key Reports / Documents
Work Plan
Explosives Siting Plan (ESP)
RI Report
FS Report
Proposed Plans (PPs)
Decision Documents(DDs)
Public Involvement Plan (PIP)
41


U.S. Army Corps of Engineers
Community Relations Support
Two (2) public meetings anticipated
1st - Planning phase
2nd - In support of the Proposed Plan
Five (5) RAB meetings anticipated
Community relations support outlined in Public Involvement Plan (PIP)
Administrative Record (AR) will be updated with final documents
42


U.S. Army Corps of Engineers
Moving Forward - Schedule
TPP Meeting #1 (today)
TPP Memorandum (Nov. 2011)
Site-Specific Work Plan Dec 2011)
Field Work (Apr/May 2012)
Draft RI Report (Sep 2012)
43


U.S. Army Corps of Engineers
TPP Meeting Closure Issues
Concurrence –
Technical Approach
Comparison Criteria
Other Issues/Notes –
Area access limitations
Rights of entry (ROE)
44


U.S. Army Corps of Engineers
Closing
Action item review
Closing questions / concerns
45

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APPENDIX E-2

FINAL TPP MEMORANDUM-2, OCTOBER 2012

(electronic only)

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FINAL
TECHNICAL PROJECT PLANNING - 2
MEMORANDUM & ASSOCIATED DOCUMENTATION

In Support of

Remedial Investigation/Feasibility Study Project

Project Sites:
Range Complex 1, Range Complex 2, Army National Guard Property,
Hand Grenade Range, and Flame Thrower Range
Former Camp Butner
Butner, North Carolina



U.S. Army Corps of Engineers

prepared for:
U.S. Army Engineering and Support Center, Huntsville
and
U.S. Army Corps of Engineers, Kansas City District

prepared by:
HydroGeoLogic, Inc.
5030 Bradford Drive, Building 1, Suite 230
Huntsville, Alabama 35805

Contract No. W912DY-10-D-0023
Project No. I04NC000902
Task Order No. 009

October 2012

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2.0 LIST OF KEY CONTACTS 2-1

3.0 TPP-2 MEETING ATTENDANCE SIGN IN SHEET 3-1

4.0 DATA QUALITY OBJECTIVE WORKSHEETS 4-1

5.0 PHASE I MEMORANDUM FOR RECORD WORKSHEET 5-1

6.0 PROJECT OBJECTIVES WORKSHEETS 6-1

7.0 RESPONSES TO COMMENTS (NCDENR REVIEW OF DRAFT FINAL WORK PLAN) 7-1

8.0 SEPTEMBER 5, 2012 TPP MEETING PRESENTATION 8-1

LIST OF TABLES

Table 1.1 TPP Participants 1-5

Table 4.1 MEC Data Quality Objective Worksheet at Site MRSs - ARNG, RC 1, and RC 2 4-1

Table 4.2 MEC Data Quality Objective Worksheet at Site ARNG, RC 1 and RC 2 4-2

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LIST OF ACRONYMS AND ABBREVIATIONS

ARNG	Army National Guard Property
ASR	Archive Search Report
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESAW	U.S. Army Corps of Engineers, Wilmington District
DD	Decision Document
DGM	digital geophysical mapping
DMM	discarded military munitions
DQO	data quality objective
EE/CA	Engineering Evaluation/Cost Analysis
EM CX	Munitions Center of Expertise
EPA	U.S. Environmental Protection Agency
ESV	Ecological Screening Value
FS	Feasibility Study
FTR	Flame Thrower Range
FUDS	Formerly Used Defense Sites
GIS	Geographical Information System
HGL	HydroGeoLogic, Inc.
HGR	Hand Grenade Range
IAW	In accordance with
LU	Land Use
MC	Munitions Constituents
MEC	Munitions and Explosives of Concern
MRS	Munitions Response Site
MRSPP	munitions response site priority protocol
NDAI	no Department of Defense Action indicated
NCDENR	North Carolina Department of Environment and Natural Resources
NCP	National Contingency Plan
PIP	Public Involvement Plan
PRG	Preliminary Remediation Goal
RA	removal action
RAB	Restoration Advisory Board

LIST OF ACRONYMS AND ABBREVIATIONS (continued)

RC-1	Range Complex 1
RC-2	Range Complex 2
RI	Remedial Investigation
ROE	right of entry
SAP	Sampling and Analysis Plan
SSL	soil screening level
TPP	Technical Project Planning
USAESCH	U.S. Army Engineering and Support Center-Huntsville
UXO	unexploded ordnance
VSP	Visual Sample Plan

1.0 TECHNICAL PROJECT PLANNING MEMORANDUM

Subject: Documentation of Technical Project Planning - 2 Meeting
Remedial Investigation / Feasibility Study Project

Site: Former Camp Butner Munitions Response Sites, Butner, North Carolina

Contract: Contract No. W912DY-10-D-0023, Delivery Order No. 0009

Date: September 5, 2012

This document serves as a record of the Technical Project Planning (TPP) - 2 meeting for the Remedial Investigation (RI) / Feasibility Study (FS) for the five Munitions Response Sites (MRS) associated with the former Camp Butner in Butner, North Carolina. Attendees to the TPP meeting participated in person and by telephone, and are listed on the meeting sign-in sheet (Section 3.0). The TPP Team members listed below indicated their concurrence with the technical approach described during the TPP meeting held at Butner Town Hall Multi-purpose Room, 415 Central Avenue, Butner, North Carolina, on September 5, 2012. The TPP Team members personally attending the TPP-2 meeting are listed in Section 3, the sign-in sheet. The TPP team members who participated by telephone are noted in Table 1.1, below.

The TPP meeting began at 1300 eastern time and, following introductions, HydroGeoLogic, Inc. (HGL) presented an overview of the proposed RI activities (See Section 8 for TPP Meeting Presentation Slides). Handouts provided at the meeting included tables and figures from the draft final work plan. The TPP-2 meeting was held to discuss revisions made to the draft final work plan and the technical approach for each MRS prior to the issuance of the final work plan. TPP-2 meeting discussions focused on the TPP process and objectives, the draft final work plan, the technical approach for each MRS, the remaining schedule and deliverables, and regulatory comments made to the draft final work plan.

HGL reviewed the TPP process and its four phases, including describing the current conditions of the site, determining data needs, discussing data collection options, and finalizing the data collection program that is documented in the work plan. The site closeout statement developed previously by the TPP team was reviewed: "To manage the MEC and MC risk through a combination of characterization, administrative controls, remediation, and public education; thereby rendering the site as safe as reasonably possible to humans and the environment and conducive to the anticipated future use." U.S. Army Engineering and Support Center Huntsville (USAESCH) noted that this site closeout statement is not related, specifically, to this RI project. The site closeout statement should be viewed as the overall goal for the site in the future and following the RI project.

The site history for the former Camp Butner is summarized in a handout provided (Table 1.1 of the work plan) and summarizes all historical investigations. The five MRSs included in the scope of the RI/FS include the following:

- Flame Thrower Range (FTR), approximately 5 acres

- Hand Grenade Range (HGR), approximately 25 acres
- Range Complex 1 (RC-1), approximately 12,363 acres
- RC-2, approximately 11,529 acres
- Army National Guard Property (ARNG) property, approximately 4,824 acres

The technical approaches presented in the draft final work plan for these 5 MRSs was reviewed by HGL. As discussed during the November 10, 2011, TPP meeting, enough data exists for the FTR and HGR through previous removal actions and the Engineering Evaluation/Cost Analysis (EE/CA) to fully characterize the areas. No additional field work is planned for the RI, but the sites will be carried through the RI process to the Decision Document (DD) just as the other three MRSs.

The technical approach for RC-1, RC-2, and the ARNG sites are based upon the munitions usage history of the sites and past clearance activities and removal actions (RAs). Using all historical data available, HGL developed boundaries for the interpreted impact areas (handout figures 1.4 and 1.5). As detailed in the draft final work plan, HGL developed separate technical approaches for inside the interpreted impact areas and outside the interpreted impact areas. The technical approach for munitions use areas inside the interpreted impact areas includes the following: (1) digital geophysical mapping (DGM) of transects of varying spacing (either 300-foot or 500-foot), (2) development of anomaly density maps, and (3) DGM investigations of grids in areas of high, medium, and low anomaly density. A minimum of 20 percent (%) of the transect acreage will also be investigated using grids. Investigation results will be evaluated by the TPP team and refined for each area determined to contain elevated anomaly densities. Based on the investigation results and TPP team concurrence, additional grids or transects may be placed at different spacings to refine the data collected for the area.

The strategy for munitions use areas outside of the interpreted impact areas includes the following: (1) instrument assisted surface reconnaissance along transects of 500-foot spacing, and (2) DGM grids placed in historical use areas that are outside the interpreted impact areas, and (3) DGM grid locations where selected anomalies will be investigated. Investigation results will be evaluated by the TPP team and refined for each area.

For both inside and outside of the interpreted impact areas, weekly reports and summaries will be distributed to the project team to solicit concurrence on the placement of grids and the delineation of any high anomaly density areas. Therefore, during the field effort there will be an ongoing evaluation of investigation results and team input will be needed quickly to refine the approach while teams are in the field. It was discussed that the Geographical Information System (GIS) webmap created by HGL is one way for the team to review changing data as the field work progresses. The webmap can be accessed at http://gis.hgl.com/Camp_Butner/ through an internet browser and the various layers can be activated for viewing in the "Layers" menu by clicking on or off in the appropriate box. Access is granted with username "HGL\giswebmap" and password "Gwm2011" if using Internet Explorer. If using a browser such as Firefox or Chrome, the letters "HGL\" are not required in front of the username. The TPP team members each agreed to confirm that they are able to use the webmap as a data review tool.

North Carolina Department of Environment and Natural Resources (NCDENR) referenced Comment No. 2 to the draft final work plan requesting additional information on the planned spacings between transects. USAESCH and HGL explained that the transect spacings are developed using Visual Sample Plan (VSP). USAESCH geophysicist Elise Goggin explained the specific assumptions that are used in VSP to establish transect spacings. The VSP spacings are intended to intersect areas with concentrations of anomalies, such as a target or impact area rather than single unexploded ordnance (UXO) or discarded military munitions (DMM) items. Ms. Goggin noted that the maximum fragmentation distance of the anticipated munitions can range from 950 feet to 1,400 feet. Therefore, dependent upon the maximum fragmentation distance, a transect spacing of 300 feet or 500 feet would intersect the impact area for each munition, respectively. HGL explained that the interpreted impact areas were further evaluated, and munitions use areas were developed. The munitions use areas can be seen on the Figures 1.4 and 1.5 of the work plan and were included in the handouts for the meeting. The various munitions use areas include: 37 millimeter (mm), 57mm, mortar, 2.36-inch rocket, grenade, and combined 105mm and 150mm. The 37mm munitions use areas within the interpreted impact areas are planned for 300-foot DGM transect spacings. All other munitions use areas are planned for 500-foot DGM transect spacings. NCDENR would like to continue to provide input into project team decisions while data is being collected in the field.

HGL then discussed the data quality objectives (DQOs) and decision rules submitted in the draft final work plan (Table 3.8 and 3.9). Handouts of Tables 3.8 and 3.9 were provided as an overview of the DQOs and the decision rules that would apply to characterization of any identified MEC contaminated or MC contaminated areas. These tables incorporate the DQOs developed previously and presented at the TPP-1 meeting on November 10, 2011 (Section 4.0). HGL expects to have a fully engaged discussion with the TPP team throughout the field work, as decisions are made. The DQOs relevant to both the MEC (whether UXO or DMM) and MC characterization were also discussed. In addition to the DQOs provided in Section 4.0, Sections 5.0 and 6.0 of this TPP-2 Memorandum present the Phase I Memorandum for Record Worksheet and the Project Objectives Worksheets developed during the TPP-1 meeting, respectively.

MRS-specific summaries of the work plan were discussed and included the following:

ARNG – Transect spacing in munitions use areas within the interpreted impact areas will be based upon the munitions types known or suspected to be in the area with the minimum spacing of 500 feet and with 300-foot spacings to be used in areas known or suspected of containing 37mm projectiles. Areas outside of the interpreted impact areas will be assessed through reconnaissance transects. Figure 3.3 and Table 3.1 of the draft final work plan provide the estimated RI approach at this MRS.

As reported during the meeting, the team has right of entry (ROE) to 100% of the ARNG property. ARNG staff confirmed that there is one week of hunting at Thanksgiving and one week of hunting at Christmas for which some areas would be off limits. NCDENR requested more information on how existing small arms ammunition debris at ARNG would be differentiated from anomalies present due to UXO or DMM. HGL and USAESCH clarified that observations made during the collection of the data (photos of small arms ammunition debris) would be incorporated to develop the characterization of the area. HGL will request the

locations of current and historically active small arms ranges from ARNG personnel so that this data can be incorporated.

RC-1 – Transect spacing in areas within the interpreted impact areas that were not previously investigated will be based upon either the 37mm munitions use area or a minimum spacing of 500 feet for all other munitions. Areas outside of the interpreted impact areas will be assessed through reconnaissance transects. Figure 3.1 and Table 3.1 of the draft final work plan provide the estimated RI approach at this MRS. Currently, the team has received ROEs for approximately 64% of the properties for the DGM and reconnaissance at this MRS.

RC-2 – Transect spacing in areas within the interpreted impact areas that were not previously investigated will be based upon the munitions types known or suspected to be in the area with the default, or minimum, spacing of 500 feet. The 300-foot spacing will be used in areas known or suspected of containing 37mm projectiles. Areas outside of the interpreted impact areas will be assessed through reconnaissance transects. Figure 3.2 and Table 3.1 of the draft final work plan provide the estimated RI approach at this MRS. The team has received ROE for approximately 70% of the properties for the DGM and approximately 48% of the properties for the reconnaissance planned at this MRS.

The TPP team also discussed the NCDENR responses to comments provided on the draft final work plan. A set of revised responses to comments was prepared to document the discussions during the TPP-2 meeting and these revised responses to comments are provided in Section 7.

The TPP-2 meeting concluded with discussions of the key deliverables remaining and their status, including the work plan (final version to be issued in October 2012). Other remaining deliverables include this TPP-2 Memorandum (draft and final) and RI/FS report to be submitted following the conclusion of the field work.

In addition to the TPP Team determinations stated above, the following specific issues, action items, and resolutions were noted:

- Based upon NCDENR review Comment No. 9, HGL will follow up with Doug Logan, Granville County Fire Marshal, and Wayne Hobgood, Chief of Butner Public Safety to request the locations of any additional explosive hazardous items that have been found in 2012. HGL will evaluate the locations of any recent items found. HGL will advise the TPP Team if their presence changes the munitions use areas planned for investigation.
- HGL will provide the GIS webmap URL and username/password information to the TPP Team. Team members can evaluate using the website for information sharing during the field effort.
- HGL will reach out to the ARNG point of contact, (1LT James Bowden, 919-620-5400 extension 17324) and clarify the locations of current and historically used small arms ammunition ranges. HGL will also be communication with ARNG concerning any controlled burns conducted and the training schedule for the upcoming field effort.
- USAESCH will follow up with the Environmental and Munitions Center of Expertise (EM CX) to verify the status of the Explosive Site Plan that was submitted by HGL.

- USAESCH and NCDENR inquired whether development of the Munitions Response Site Prioritization Protocol (MRSPP) scores is intended for the RI report. HGL confirmed that MRSPP scores for the MRSs will be included in the RI report.
- NCDENR confirmed that they will require an electronic only (CD only) submittal of the Final Work Plan.
- NCDENR and USAESCH discussed the format for the public meeting to be held the same evening as the TPP-2 meeting. After further discussion, the open house format was determined to be the best method for the meeting. HGL will have a slide presentation viewable by attendees going on a constant loop for information only purposes.
- USAESCH Geophysicist (Ms. Elise Goggin) noted that she would like to be kept informed of the field work start date. She would like to visit the site during the instrument verification strip installation, if possible.

In conclusion, the project team agreed with the basic strategy presented for the site and concurred with the technical approach outlined for the RI. The final work plan will be issued to the TPP team based on discussions held today. The technical approach will not be modified without consultation with, and agreement by the TPP Team members listed below. RI results will be fully documented in the RI report for TPP Team review.

The meeting concluded around 1600.

Table 1.1 - TPP Participants

Ms. Chris Cochrane USAESCH Project Manager / COR	Ms. Marti Morgan NCDENR Project Manager
Ms. Elise Goggin USAESCH Geophysicist	Mr. Cecil 'Bud' Morgan USAESCH Environmental Manager
Mr. Derek Anderson HGL PM	Ms. Kimberly Vaughn HGL Deputy PM
Ms. Sara Mathews *(by telephone)* AMEC Risk Assessor	

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2.0 LIST OF KEY CONTACTS

Key Contacts
RI/FS Project

Organization	Name	Telephone/Fax
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USAESCH ATTN: OE (Cochrane) P.O. Box 1600 Huntsville, AL 35807-4301 Overnight Mailing Address: USAESCH ATTN: OE (Cochrane) 4820 University Square Huntsville, AL 35816-1822	Chris Cochrane USAESCH, PM **Email:** chris.cochrane@usace.army.mil	(256) 895-1696 (256) 990-0888 (cell)
USAESH ATTN: OE (Morgan) P.O. Box 1600 Huntsville, AL 35807-4301 Overnight Mailing Address: USAESCH ATTN: OE (Morgan) 4820 University Square Huntsville, AL 35816-1822	Cecil “Bud” Morgan USAESCH, Environmental Manager **Email:** Cecil.w.morgan@usace.army.mil	(256) 895-1491 (256) 509-0854 (cell)
USAESCH ATTN: OE (Goggin) P.O. Box 1600 Huntsville, AL 35807-4301 Overnight Mailing Address: USAESCH ATTN: OE (Goggin) 4820 University Square Huntsville, AL 35816-1822	Elise Goggin USAESCH, Geophysicist **Email:** Elise.M.Goggin@usace.army.mil	(256) 679-0419
AMEC Environment & Infrastructure 800 Marquette Ave, Suite 1200 Minneapolis, MN 55402	Raye Lahti AMEC Geophysicist **Email:** Raye.lahti@amec.com	(970) 569-3361 (651) 767-2335 (cell)
HGL 11107 Sunset Hills Road, Suite 400 Reston, VA 20190	Janardan Patel HGL Program Manger **Email:** jpatel@hgl.com	(703) 736-4509 (703) 471-4180 (fax)
HGL 325 Heritage Forest Drive Blythewood, SC 29016	Derek Anderson HGL PM **Email:** danderson@hgl.com	(706) 372-5138

Key Contacts (continued)
RI/FS Project

Organization	Name	Telephone/Fax
HGL 5030 Bradford Drive, Building 1, Suite 230 Huntsville, AL 35805	Kimberly Vaughn HGL Deputy PM **Email:** kvaughn@hgl.com	(512) 828-6684 (512) 658-6828 (cell)
HGL 11107 Sunset Hills Road, Suite 400 Reston, VA 20190	Mark McGowan HGL Corporate Health and Safety Manger **Email:** mmcgowan@hgl.com	(703) 736-4561 (703) 888-6441 (cell) (703) 471-4180 (fax)
AMEC Environment & Infrastructure 3800 Ezell Road, Suite 100 Nashville, TN 37211	Sara Mathews AMEC, Risk Assessor **Email:** Sara.Mathews@amec.com	(615) 333-0630 ext. 489
DENR Office Building 217 West Jones Street Raleigh, NC 27603-6100	Marti Morgan NCDENR **Email:** martha.morgan@ncdenr.gov	(o) 919707-8342
USACE - Savannah District P.O. Box 889 Savannah, GA 31402-0889 Attn: Julie Hiscox	Julie Hiscox USACE, SAD FUDS PM **Email:** Julie.a.hiscox@usace.army.mil	(912) 652-5363 (912) 656-1183 (cell)

3.0 TPP-2 MEETING ATTENDANCE SIGN IN SHEET

U.S. Army Corps of Engineers, Wilmington District
Technical Project Planning Meeting

Project: Camp Butner Formerly Used Defense Site
Date: September 5, 2012
Place: Butner Town Hall Multi-Purpose Room, 415 Central Avenue, Butner, North Carolina

Name	Address	Affiliation (Private, Government, etc.)	Place Name on Mailing List (Yes or No)	
Kimberly Vaughn	1403 Balmorhea Cv Round Rock TX 78664	HGL	No	kvaughn@hgl.com 512.828.6684
Elise Goggin	4820 University Sq Huntsville, AL 35816	USACE - HNC	256.895.1655 No	elise.m.goggin@usace.army.mil 256.679.~~4449~~ 0419
Derek Anderson	325 Heritage Forest Dr. Blythewood, SC 29016	HGL	No	danderson@hgl.com 706.372.5138
Marti Morgan	217 W. Jones Street Raleigh, NC	State of NC NCDENR	No	martha.morgan@ncdenr.gov 919.707.8342
Chris Cochrane	USACE - HNC		NO	chris.cochrane@usace.army.mil 256.895.1696
CECIL W. (BUD) MORGAN	USACE - HNC.		NO	cecil.w.morgan@usace.army.mil 256.895.1491 256.509.0854
Sara Mathews	AMEC, Tennessee	AMEC		sara.mathews@amec.com 615.333.0630

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4.0 DATA QUALITY OBJECTIVE WORKSHEETS

Table 4.1
MEC Data Quality Objective Worksheet
at Site MRSs - ARNG, RC 1, and RC 2

DQO Element Number (1)	DQO Element Description (1)	Site-Specific DQO Statement
Intended Data Use(s):		
1	Project Objective(s) Satisfied	Evaluate presence/absence of MEC and determine if further response actions are required to support current and future residential, commercial, agricultural, ARNG training, and recreational land use.
Intended Need Requirements:		
2	Data User Perspective(s)	Risk, Remedy
3	Contaminant or Characteristic of Interest	MEC, Munitions Debris distribution/density
4	Media of Interest	N/A
5	Required Locations or Areas	MRSs - ARNG, RC 1 and RC 2
6	Number of Samples Required	N/A
7	Reference Concentration of Interest or Other Performance Criteria	Digital Geophysical Mapping (DGM), Analog Investigation, Intrusive Investigation (as required) in areas cited above. Geophysical investigations will be conducted IAW work plan (based on DID WERS-004.01).
Appropriate Sampling and Analysis Methods:		
8	Sampling Method	DGM, Mag-and-Dig Intrusive Investigation.
9	Analytical Method	N/A

(1) Refer to EM 200-1-2, Para. 4.2.1

Table 4.2
MEC Data Quality Objective Worksheet
at Site ARNG, RC 1 and RC 2

DQO Element Number (1)	DQO Element Description (1)	Site-Specific DQO Statement
Intended Data Use(s):		
1	Project Objective(s) Satisfied	Evaluate presence/absence of MC
Intended Need Requirements:		
2	Data User Perspective(s)	Risk, Remedy
3	Contaminant or Characteristic of Interest	See Work Plan Section 3.15.
4	Media of Interest	Soil, Sediment, and Water
5	Required Locations or Areas	Incremental sampling (IS) will be conducted throughout the ARNG, RC1 and RC2 MRSs, based on confirmation of historical information, DGM analysis, and intrusive investigative results IAW the approved WP. These areas will be designated as sampling units (SUs). Additional SUs or discrete surface and subsurface soil samples will be collected if a surface SU has elevated levels of COPC. Based on the soil sampling results, sediment samples may be collected. Background groundwater sampling will be conducted offsite. If necessary, background sampling may also be conducted offsite using IS SU.
6	Number of Samples Required	Ten IS surface soil samples will be collected from the following MRSs: RC1, RC2 and ARNG. Additional SUs or discrete surface and subsurface soil samples will be collected at each IS sample locations with elevated levels of COPC. Up to ten sediment samples will be collected at each MRS. Ten groundwater samples will be collected at offsite locations for establishing background. Ten offsite IS surface soil samples may be collected at offsite locations, if needed.
7	Reference Concentration of Interest or Other Performance Criteria	If MC is detected, comparison against background levels and screening levels to determine if further MC evaluation is warranted. Screening levels as agreed upon by the Project Team will be based on the EPA Regional Screening Level (RSL), NC GW Protection Standards. Background samples may be used to assess the possible presence of metals.
Appropriate Sampling and Analysis Methods:		
8	Sampling Method	Samples in accordance with SAP.
9	Analytical Method	IS will be analyzed for explosives (8330B) and select metals (6020A). Analysis of discrete samples will include explosives (8330A), select metals (6020A) and perchlorate (6850).

(1) Refer to EM 200-1-2, Para. 4.2.1

5.0 PHASE I MEMORANDUM FOR RECORD WORKSHEET

TPP Team **EM 200-1-2, Paragraph 1.1.1**		
Decision Makers		
Customer	USACE Wilmington District (CESAW) / SAS	
Project Manager	Ray Livermore, CESAW; Julie Hiscox	
Contract Manager	Chris Cochrane, USAESCH	
TPP Technical Manager	Bud Morgan, USAESCH	
Regulators	North Carolina Department of Environment and Natural Resources (NCDENR), Marti Morgan	
Primary Stakeholders	Property owners, tenants, government representatives, North Carolina Army National Guard (ARNG)	
Data Types	**Data Users**	**Data Gatherer**
Compliance/Regulatory (CR)	Regulatory Perspective (CESAW, NCDENR, USEPA, HGL)	HGL RI/FS Team
Demographics/Land Use	Risk, Responsibility, and Compliance Perspectives (CESAW, Town of Butner, Granville, Durham and Person Counties)	HGL RI/FS Team
Site Conditions	Remedy Perspective (CESAW, HGL)	HGL RI/FS Team
Munitions and Explosives of Concern (MEC)	Risk and Remedy Perspectives (CESAW, HGL)	HGL RI/FS Team
Munitions Constituents (MC)	Risk and Remedy Perspectives (CESAW, NCDENR, and HGL)	HGL RI/FS Team
Archaeology	Compliance and Remedy Perspectives (CESAW and HGL)	ARNG (REC)
Endangered Species	Risk and Compliance Perspectives (CESSAW, NCDENR, and HGL)	ARNG (REC)

CUSTOMER'S GOALS **EM 200-1-2, Paragraph 1.1.2**			
Munitions Response Site (MRS)	**Contaminant Issues**	**Future Land Use**	**Site-specific Closeout Goal (if applicable)**
5 Munitions Response Sites: Flame Thrower Range (FTR), Hand Grenade Range (HGR), Army National Guard Property (ARNG), Range Complex 1 (RC1), and Range Complex 2 (RC2)	MEC, MC	Residential, Recreational, Agricultural, Guard Training	Remedy protective of human health/environment.

Site Closeout Statement		
To manage the munitions and explosives of concern (MEC) and munitions constituents (MC) risk through a combination of characterization, administrative controls, remediation, and public education; thereby rendering the site as safe as reasonably possible to humans and the environment and conducive to the anticipated future land use.		
Customer's Schedule Requirements		
RI/FS process through Decision Document by March 2014.		
Customer's Site Budget		
RI/FS: Fully Funded Through Decision Document.		
IDENTIFY SITE APPROACH		
EXISTING SITE INFORMATION & DATA EM 200-1-2, Paragraph 1.1.3 and 1.2.1		
TPP Information and Data	**Located at Repository**	**Preliminary Conceptual Site Model**
Archive Search Report (ASR)	Yes	No
ASR Supplement (2004)	Yes	No
EE/CA 2004	Yes	No
TC Removal Action - Blalock and Riley Properties	Yes	No
Time Critical Removal Action - Lakeview Subdivision	Yes	No
Interim Removal Actions (2008, 2009, 2010)	TBD	No
POTENTIAL POINTS OF COMPLIANCE EM 200-1-2, Paragraph 1.2.1.3		
Determination of absence or presence of MEC/MC		
If MC is detected, comparison against background concentrations and Soil Screening Levels (SSLs) will be conducted to determine if further MC evaluation during RI/FS is warranted. Screening levels as agreed upon by the project team to include the EPA Regional Screening Level (RSL) for Residential Soil, Tap Water and NC GW Protection Standards. Background samples will be used to assess metals concentrations, if needed. Background samples will also be used to assess perchlorate concentrations detected during past groundwater sampling events.		
MEDIA OF POTENTIAL CONCERN EM 200-1-2, Paragraph 1.2.1.4		
Qualitative review of MEC presence		
Quantitative screening of MC constituents for soil and sediment. Background sampling of surface soils for metals and groundwater for perchlorate and lead (total and dissolved).		
SITE OBJECTIVES EM 200-1-2, Paragraph 1.2.2		
Phased approach for geophysical evaluation and media sampling focused on areas of greatest concern (historical use and existing site conditions).		
MEC and MC sampling to adequately characterize site conditions		
Evaluation of MEC and MC data to determine if acceptable for completion of RI/FS		
Eliminate from further consideration those releases that pose no significant threat to public health or the environment.		
Completion of RI/FS		
Develop MRSPP scores for each MRS		

REGULATOR AND STAKEHOLDER PERSPECTIVES **EM 200-1-2, Paragraph 1.2.3**		
Regulators	**Community Interests**	**Others**
Regulators principal concern is the protection of human health and the environment. Also ensuring that sampling results are defensible by requiring the use of approved analytical laboratories and methods.	Landowners (including homeowners) primary concern is the presence of potential hazards (MEC and MC). Land is safe for intended/current land use.	Nearby towns concerned with potential for future land development. ARNG - safety of troops training on the site and future construction efforts
PROBABLE REMEDIES **EM 200-1-2, Paragraph 1.2.4**		
Remedial Action following RI/FS characterization.		
Institutional controls following RI/FS characterization.		
EXECUTABLE STAGES TO SITE CLOSEOUT **EM 200-1-2, Paragraph 1.2.5**		
Remedial Investigation/Feasibility Study (RI/FS)		
Public Involvement Plan (PIP)		
Proposed Plan		
Decision Document		
Follow work as stipulated in Decision Document		
IDENTIFY CURRENT PROJECT		
SITE CONSTRAINTS AND DEPENDENCIES **EM 200-1-2, Paragraph 1.3.1**		
Administrative Constraints and Dependencies		
Rights of Entry (ROE) will be executed by USACE (SAS), supported by HGL .		
Utility review and coordination.		
Coordination with ARNG and training schedules		
Cultural Resources		
Funding beyond the RI/FS		
Site Security		
Scheduling		
Technical Constraints and Dependencies		
Establishment of exclusion zone for munitions of greatest fragmentation distance during excavation of MEC/UXO.		
Working depth of geophysical instruments.		
MEC avoidance		
Topography/Vegetation		
Heat stress consideration during summer activities		
Hunting seasons		
Legal and Regulatory Milestones and Requirements		
Consistent with CERCLA and NCP		
Public, stakeholder & regulatory involvement & review of key documents		
Screening levels as agreed upon by the Project Team to include EPA Regional Screening Levels (Residential Soil and Tap Water), NC GW Protection Standards, and various Ecological Screening Values (ESVs) and other applicable SSLs for Eco Risk Assessment. Background samples will be used to assess metals.		

CURRENT EXECUTABLE STAGE **EM 200-1-2, Paragraph 1.3.3**		
Technical Project Planning (TPP)		
Remedial Investigation/ Feasibility Study (RI/FS) Work Plan Development		
RI fieldwork		
RI/FS Reports		
Proposed Plans		
Decision Documents		
Basic (For Current Projects)	**Optimum** (For Future Projects)	**Excessive** (Objectives that do not lead to site closeout)
MEC investigation and MC sampling w/in MRSs	MEC and MC Removal Actions, if warranted.	

6.0 PROJECT OBJECTIVES WORKSHEETS

Site MRSs - ARNG, RC 1 and RC 2

Site Objective					Data Needs	Data Collection Methods	Data Users	Project Objective Classification [d]
No	Executable Stage [b]		Description	Source [c]				
	Current	Future						
1	Yes		Assess MEC data, determine risk reduction alternatives.	ASR, EE/CA, RAs	Addition-al MEC investiga-tion	DGM, Mag-and-dig, intrusive investigation	Risk and Remedy Perspectives	Basic
2	Yes		Assess MC data to evaluate risk to human health or the environment.	ASR, EE/CA, RAs	Addition-al MC sampling	Soil, sediment, and groundwater sample collection.	Risk and Remedy Perspectives	Basic

a Refer to EM 200-1-2, Paragraph 1.2.2
b Refer to EM 200-1-2, Paragraph 1.2.5
c For example, Meeting with Customer/stakeholder/Regulator, State Regulations
d Classification of project objectives can only occur after the current project has been identified. Refer to EM 200-1-2, Paragraph 1.3.3.
ASR - Archive Search Report
IAW - In accordance with
LU - Land Use
MC - Munitions Constituents
MEC - Munitions and Explosives of Concern
SAP - Sampling and Analysis Plan

Site MRSs - FTR, HGR

Site Objective					Data Needs	Data Collection Methods	Data Users	Project Objective Classification [d]
No.	Executable Stage [b]		Description	Source [c]				
	Current	Future						
1	Yes		Assess MEC data, determine risk reduction alternatives.	ASR, EE/CA, Ras	None	Document Review	Risk and Remedy Perspectives	Basic
2	Yes		Assess MC data to evaluate risk to human health or the environment	ASR, EE/CA, Ras	None	Document Review	Risk and Remedy Perspectives	Basic

a Refer to EM 200-1-2, Paragraph 1.2.2
b Refer to EM 200-1-2, Paragraph 1.2.5
c For example, Meeting with Customer/stakeholder/Regulator
d Classification of project objectives can only occur after the current project has been identified. Refer to EM 200-1-2, Paragraph 1.3.3.
ASR - Archive Search Report
IAW - In accordance with
LU - Land Use
MC - Munitions Constituents
MEC - Munitions and Explosives of Concern
SAP - Sampling and Analysis Plan

7.0 RESPONSES TO COMMENTS (NCDENR REVIEW OF DRAFT FINAL WORK PLAN)

HydroGeoLogic, Inc.,
Responses to Comments
to the
Draft Final Work Plan,
Remedial Investigation/Feasibility Study,
Military Munitions Response Sites
FUDS MMRP Project No. I04NC000902
Former Camp Butner, Butner, Granville County, NC
(comments received by HGL on August 20, 2012)

Responses to comments from Ms. Marti Morgan, North Carolina Department of Environment and Natural Resources, Division of Waste Management, dated August 17, 2012. (Original letter attached, responses to comments provided below.)

1. In Section 3.0, page 1, it lists one of the overall RI approach objectives to include performing geophysical investigations to delineate the potential extent of MEC contamination. One of the bulleted items listed there is to intrusively investigate a suspect 37mm projectile anomaly detected during the ESTCP Pilot study.

Under the ESTCP Pilot study, four areas totaling approximately 30 acres were chosen for surface clearance and initial EM61 mapping, (see Figure 2-6 attached). The results from this mapping were used to select the final 10-acre demonstration site and guide the emplacement of inert seed items. The final 10-acre demonstration area is shown in attached Figure 2-7 subdivided into (44) 30-m x 30-m grids established by the EM61 contractor, NAEVA Geophysics, Inc. (NAEVA). The two survey instruments, EM61-MK2 cart and MetalMapper, covered the entire 10-acre area. Because of the high anomaly density across this site, program resources limited the intrusive validation efforts to a subset of the site containing approximately 2500 anomalies. This sub-area is denoted as the "Cued Area" in Figure 2-7; the cued sensors were only deployed to anomalies within this sub-area and only targets in this area were dug and scored. NCDENR recommends that the remaining areas that have been mapped, as shown on Figure 2-7, be intrusively investigated as part of this next phase of work at Former Camp Butner if rights of entry can be obtained.

RESPONSE: This comment was reviewed by the entire Technical Project Planning (TPP) team at the September 5, 2012, meeting. As discussed by the TPP team, additional intrusive investigation in this area will not change the anticipated RI conclusions for this area, as MEC has already been found. As requested by NCDENR, the RI report will capture this data for use in future planning and/or future removal actions.

2. In Section 3.0.3 it states that the goal of the Remedial Investigation is to conduct an on-site investigation of each of the three MRSs to gather sufficient data to characterize the nature and extent of MEC and MC contamination. Additionally it states that the geophysical investigation

will be performed to delineate the potential extent of MEC contamination. This may not be accomplished using 300 foot and 500 foot spacing between transects.
RESPONSE: As discussed in previous TPP meetings and set out in Section 3.1 and 3.2 of the work plan, all historical data was evaluated for the former Camp Butner to plan the RI effort. HGL developed "interpreted impact areas" based on munitions found historically and historical aerial photograph analysis performed by the Topographic Engineering Center. The size of an anticipated target impact area for each of the *interpreted impact areas* would be intersected by transect spacings of 300 foot and 500 foot. Once the data gathered shows an impact area is suspected, additional transects and/or grids can be conducted, at a varied spacing, to further delineate the suspected MEC contaminated area. This comment was discussed in more detail at the September 5, 2012, TPP meeting. As discussed, HGL will solicit project team concurrence and input during evaluation of the collected data and execution of the RI field activities. A sentence was added to this paragraph: "As discussed during TPP meetings, HGL will solicit project team concurrence and input during evaluation of the RI data collected for characterization of MEC (whether UXO or DMM) and MC."

3. In Section 3 .2.1.3, the last sentence states that "In the event that MEC is discovered at the outer boundary of an MRS, the project delivery team (PDT) will be consulted to determine an acceptable approach for expanding the characterization." On October 13, 2010, four HE 81mm mortars were found at 655 Bethany Church Road during one of the 2-acre clearance actions. From the historical range fan maps, the fan for range 11 doesn't appear to include 655 Bethany Church, although the boundary is close. NCDENR requests that there be adequate margin when deciding which areas are more likely to contain MEC based on historical information.

RESPONSE: Based on RI data obtained (DGM, intrusive, reconnaissance) the TPP team will evaluate and concur on the boundaries of any MEC contaminated areas that are located. The area at 655 Bethany Church Road is currently part of an HGL interpreted impact area, specifically the Mortar Use Area, and is scheduled for DGM transect data collection in all areas that have not been previously MEC characterized.

4. Section 3.6.6.1 provides a discussion of the geologic conditions at former Camp Butner. It states that "its geology is characterized by numerous rock formations of different materials and ages representing ancient eroded mountain chains. The soils are of high clay content; little impact to geophysical systems is anticipated." The previous investigations at former Camp Butner have had anomalies which were caused by volcanic rock and contributed to difficulty in interpretation of the results in some cases.

RESPONSE: Text will be added to this section to clarify that volcanic rock exists at the site and may be the cause of anomalies in geophysical survey data. HGL will select the appropriate equipment (such as a White's magnetometer) to reduce difficulty in interpretation of results.

5. Table 3.9 provides the Decision Rules for the Munitions Response Sites ARNG, Range Complex 1 and Range Complex 2. NCDENR has the following questions regarding some of the decision rules provided:

- It states that for an area having elevated anomaly density or the potential to contain UXO, it will be demonstrated that a 90% confidence has been achieved for determining both the

potential depth of UXO and the nature (type and density) of UXO. How is this possible with 300 -foot and 500-foot transects?

RESPONSE: This comment was discussed by the TPP team at the September 5, 2012, meeting. Based on both the transect data and all other available data (intrusive investigations from grids and/or transects, historical data, aerial photograph interpretation, etc) HGL will demonstrate that any areas with elevated anomaly density (relatively homogenous UXO contaminated areas) have been identified. Additionally, HGL will demonstrate to the highest confidence possible that the nature (type and density) of UXO has been determined. HGL's goal is achieving 90% confidence for these determinations, per the PWS.

• It states that for an area unlikely to contain UXO contamination, it will be demonstrated that the investigation approach was capable of locating potential UXO contamination. How is this possible with 300-foot and 500-foot transects? It further states that for these areas, no Feasibility Study would be required and they would be areas for potential determination of No DoD Action Indicated (NDAI). NCDENR could not concur with such a recommendation without 100% coverage of the area during the investigation.

RESPONSE: This comment was discussed in more detail at the September 5, 2012, TPP meeting. Options discussed for future MRSs included the potential for institutional controls (public education, etc.). As discussed, HGL will solicit project team concurrence and input during evaluation of future recommendations for the MRSs.

6. Please include Figures 1.4 and 1.5 for Appendix B.

RESPONSE: These figures will be included in the final work plan and are attached.

7. On the QAPP Worksheet #3 in Appendix E and on pages H-13 and H-14, please correct my phone number to: (919) 707-8342.

RESPONSE: The text was revised.

8. On page H-9, it states that the U.S. Army Corps of Engineers (USACE) is looking into the potential use of the Metal Mapper and other geophysical survey discrimination tools for use at Camp Butner. Is there a plan to utilize any of this equipment during the Remedial Investigation?

RESPONSE: This comment was discussed during the September 5, 2012, TPP meeting. USAESCH indicated that it is currently unknown if the equipment is available. Additionally, the MetalMapper has already been used for demonstration purposes at Camp Butner and other sites would probably have a higher priority.

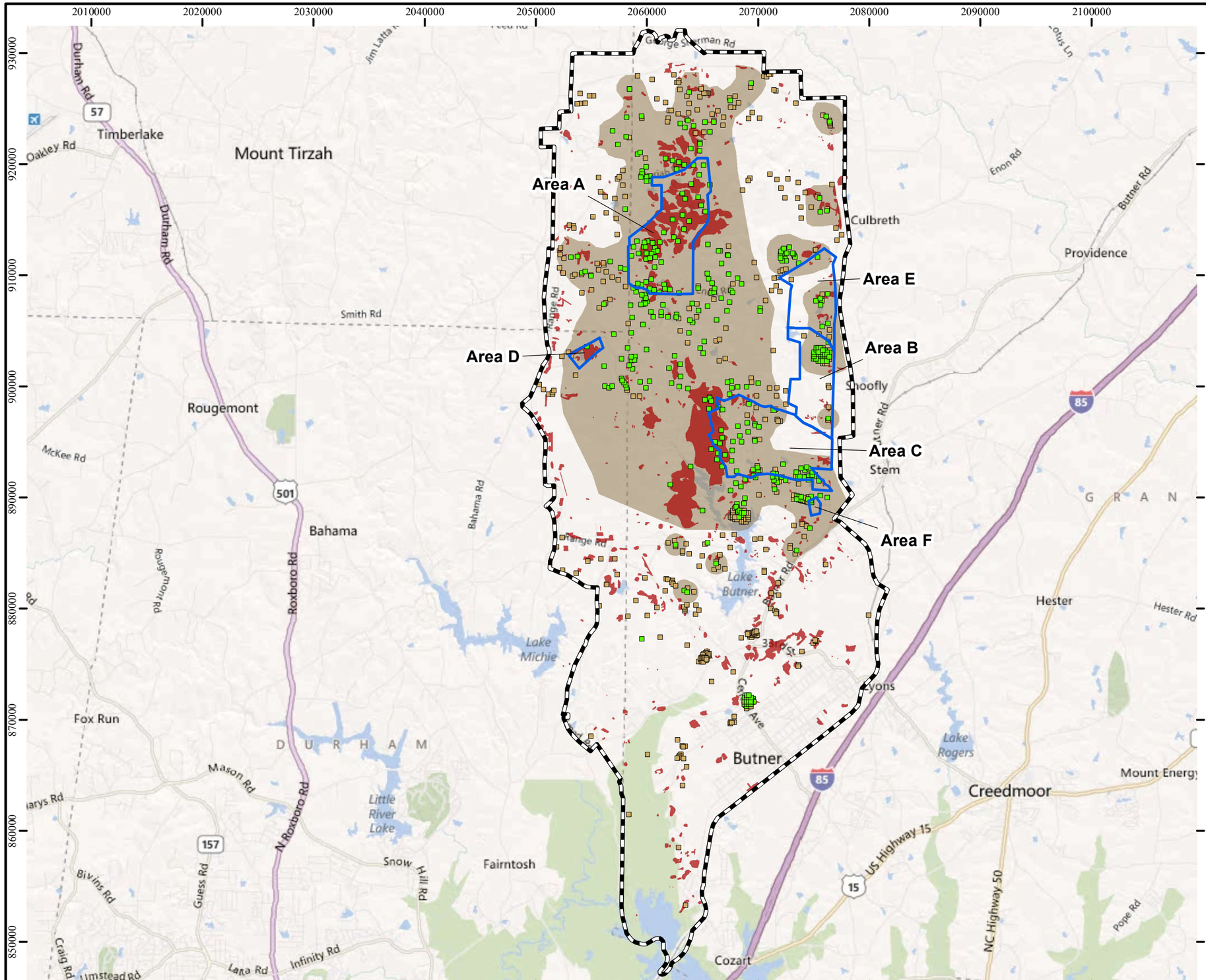
9. In addition to the information known at former Camp Butner regarding ordnance discoveries made during the EE/CA investigation and the subsequent clearance actions around approximately 250 residences, there have also been ordnance items discovered by homeowners which were destroyed by Ft. Bragg EOD. It states on page H-10, that the HGL RI team should plot unexploded ordnance (UXO) discoveries from the Granville County Emergency Response

and ARNG UXO finds during the RI to ensure a comprehensive understanding is reflected in the RI. Has this information been obtained?
RESPONSE: This information has been requested and will be incorporated into the GIS when obtained. If the information changes any of the interpreted impact areas or munitions use areas, as previously defined, HGL will inform the TPP team. HGL has incorporated all available data for planning purposes in this RI project.

10. On page H-10, it states that HGL will be responsible for coordinating public meetings and that the local news publications include the Oxford Ledger and the Raleigh Times. NCDENR requests that instead of the Raleigh Times, HGL utilize the News and Observer and/or WRAL (preferably both). In addition to advertising in the Oxford Ledger, NCDENR requests that a notice also be placed in the Butner Creedmoor News.

RESPONSE: These newspapers were planned for publication at time of the TPP-1 meeting. Based on community relations interview responses, the Butner Creedmoor News was determined to be the newspaper most respondents relied on for information. For the Public Meeting 2 the announcement was published in both the Butner Creedmoor News and the Oxford Public Ledger, as the preferred newspapers indicated by interviewees during the community relations effort. As noted during the TPP-2 meeting on September 5, 2012, NCDENR would like future publications to be made in the Raleigh News and Observer.

Historical Use Munitions Feature



Legend

- Munitions Present
- Munitions Absent
- Area (A-F)
- Historical Analysis
- Suspected Munitions Use Area
- Former Camp Butner

Notes:
FS=feasibility study
RI=remedial investigation

N

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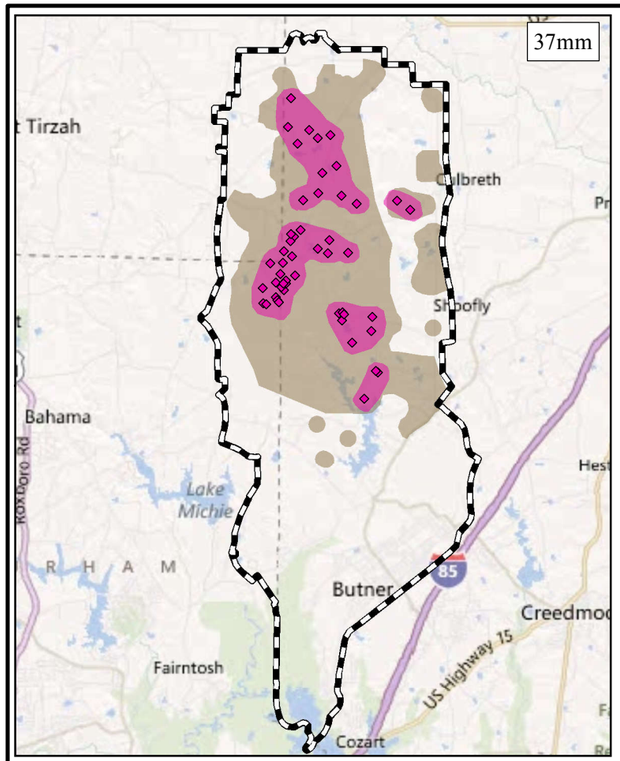
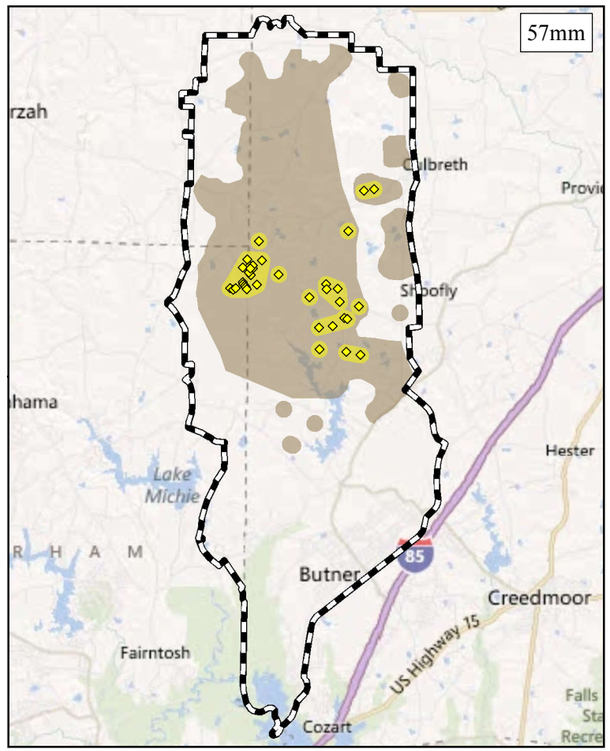
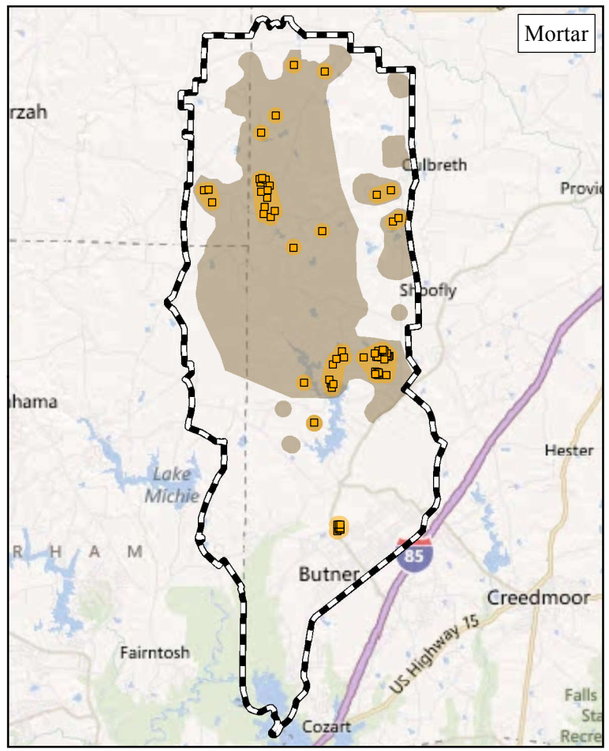
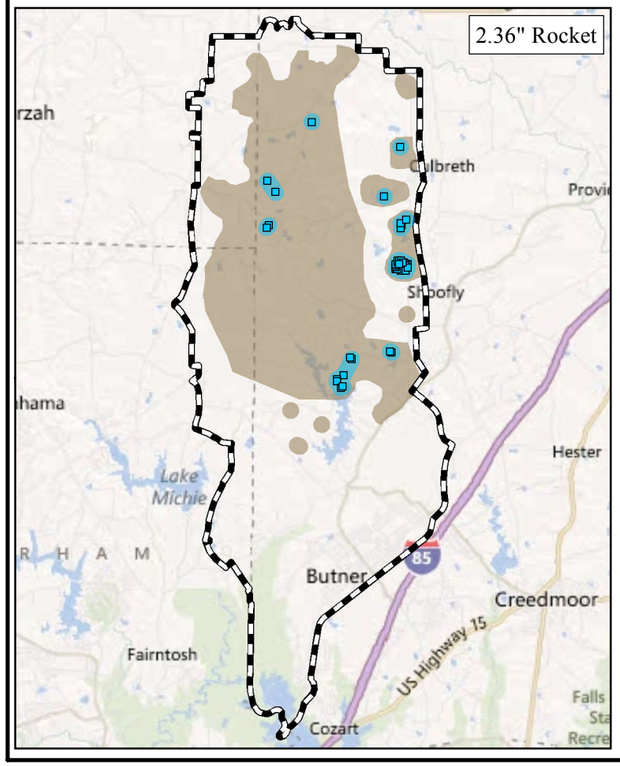
5/25/2012 TJ
Source: HGL, USACE
ESRI Online Bing Maps Roads
Coordinate System: NAD83, State Plane, North Carolina FIPS 3200, Feet

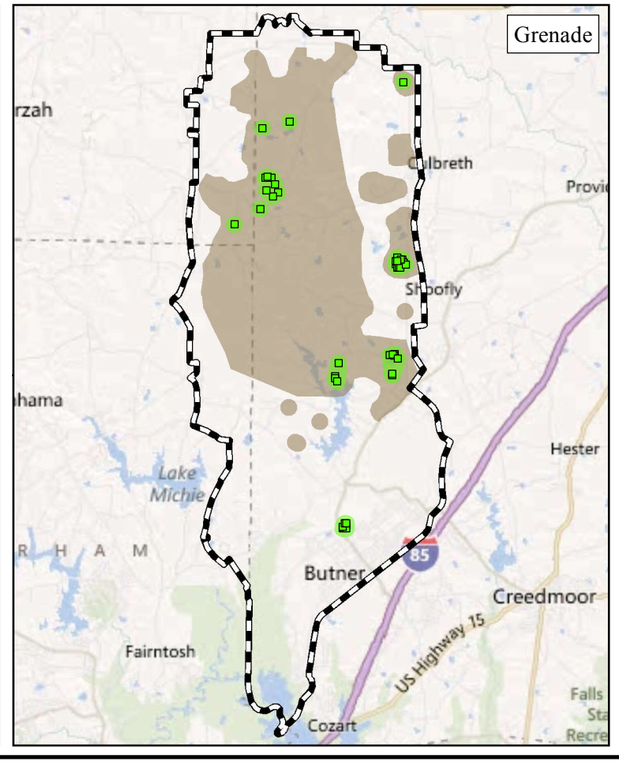
Munitions Use Areas

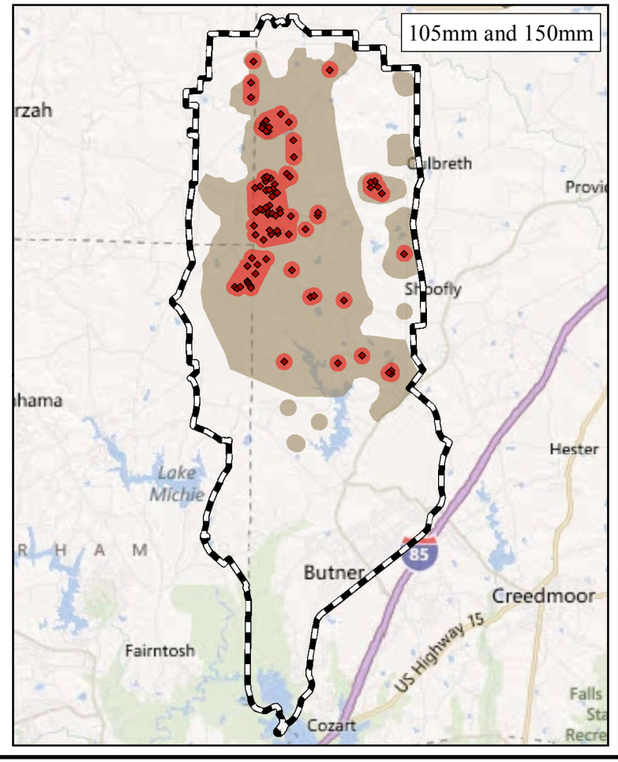












Legend

- 37mm Projectile
- 57mm Projectile
- Mortar
- 2.36" Rocket
- Grenade
- 105mm and 150mm Projectile
- 37mm Use Area
- 57mm Use Area
- Mortar Use Area
- 2.36" Rocket Use Area
- Grenade Use Area
- 105mm and 150mm Use Area
- Suspected Munitions Use Area
- Former Camp Butner

Notes:
FS=feasibility study
RI=remedial investigation
Munitions Use Areas calculate from 1,000 foot buffers.

N

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(1-05)Munition_Use_Areas.mxd
5/25/2012 TJ
Source: HGL, USACE
ESRI Online Bing Maps Roads
Coordinate System: NAD83, State Plane, North Carolina FIPS 3200, Feet

HGL HydroGeoLogic, Inc MUNITIONS RESPONSE TEAM

North Carolina Department of Environment and Natural Resources
Division of Waste Management

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

August 17, 2012

US Army Corps of Engineers
Attention: Mr. Ray Livermore
69 Darlington Avenue
Wilmington, North Carolina 28402

Subject: Draft Final Work Plan for
Remedial Investigation/Feasibility Study for
Military Munitions Response Sites
Former Camp Butner (FUDS)
North Carolina

Dear Mr. Livermore:

The Superfund Section has completed a review of the Draft Final Work Plan for Remedial Investigation/Feasibility Study for Military Munitions Response Sites at Former Camp Butner, with comments attached. We appreciate the opportunity to work with the US Army Corps of Engineers on this important project.

Please contact me if you have any questions. I may be reached at (919) 707-8342.

Sincerely,

Marti Morgan

Marti Morgan
Environmental Engineer
Superfund Section/Federal Remediation Branch
NCDENR

Cc: Dave Lown

1646 Mail Service Center, Raleigh, North Carolina 27699-1646
Phone/Fax: 919-707-8200 \ Internet: http://portal.ncdenr.org/web/wm/

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One North Carolina Naturally

Draft Final Work Plan for Remedial Investigation/Feasibility Study
For Military Munitions Response Sites
at Former Camp Butner
NCDENR Superfund Section Comments

1. In Section 3.0, page 1, it lists one of the overall RI approach objectives to include performing geophysical investigations to delineate the potential extent of MEC contamination. One of the bulleted items listed there is to intrusively investigate a suspect 37mm projectile anomaly detected during the ESTCP Pilot study.

   Under the ESTCP Pilot study, four areas totaling approximately 30 acres were chosen for surface clearance and initial EM61 mapping, (see Figure 2-6 attached). The results from this mapping were used to select the final 10-acre demonstration site and guide the emplacement of inert seed items. The final 10-acre demonstration area is shown in attached Figure 2-7 subdivided into (44) 30-m x 30-m grids established by the EM61 contractor, NAEVA Geophysics, Inc. (NAEVA). The two survey instruments, EM61-MK2 cart and MetalMapper, covered the entire 10-acre area. Because of the high anomaly density across this site, program resources limited the intrusive validation efforts to a subset of the site containing approximately 2500 anomalies. This sub-area is denoted as the "Cued Area" in Figure 2-7; the cued sensors were only deployed to anomalies within this sub-area and only targets in this area were dug and scored. NCDENR recommends that the remaining areas that have been mapped, as shown on Figure 2-7, be intrusively investigated as part of this next phase of work at Former Camp Butner if rights of entry can be obtained.

2. In Section 3.0.3 it states that the goal of the Remedial Investigation is to conduct an on-site investigation of each of the three MRSs to gather sufficient data to characterize the nature and extent of MEC and MC contamination. Additionally it states that the geophysical investigation will be performed to delineate the potential extent of MEC contamination. This may not be accomplished using 300 foot and 500 foot spacing between transects.

3. In Section 3.2.1.3, the last sentence states that "In the event that MEC is discovered at the outer boundary of an MRS, the project delivery team (PDT) will be consulted to determine an acceptable approach for expanding the characterization." On October 13, 2010, four HE 81mm mortars were found at 655 Bethany Church Road during one of the 2-acre clearance actions. From the historical range fan maps, the fan for range 11 doesn't appear to include 655 Bethany Church, although the boundary is close. NCDENR requests that there be adequate margin when deciding which areas are more likely to contain MEC based on historical information.

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soils are of high clay content; *little impact to geophysical systems is anticipated.*" The previous investigations at former Camp Butner have had anomalies which were caused by volcanic rock and contributed to difficulty in interpretation of the results in some cases.

5. Table 3.9 provides the Decision Rules for the Munitions Response Sites ARNG, Range Complex 1 and Range Complex 2. NCDENR has the following questions regarding some of the decision rules provided:
   - It states that for an area having elevated anomaly density or the potential to contain UXO, it will be demonstrated that a 90% confidence has been achieved for determining both the potential depth of UXO and the nature (type and density) of UXO. How is this possible with 300 –foot and 500-foot transects?
   - It states that for an area unlikely to contain UXO contamination, it will be demonstrated that the investigation approach was capable of locating potential UXO contamination. How is this possible with 300 –foot and 500-foot transects? It further states that for these areas, no Feasibility Study would be required and they would be areas for potential determination of No DoD Action Indicated (NDAI). NCDENR could not concur with such a recommendation without 100% coverage of the area during the investigation.

6. Please include Figures 1.4 and 1.5 for Appendix B.

7. On the QAPP Worksheet #3 in Appendix E and on pages H-13 and H-14, please correct my phone number to: (919) 707-8342.

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9. In addition to the information known at former Camp Butner regarding ordnance discoveries made during the EE/CA investigation and the subsequent clearance actions around approximately 250 residences, there have also been ordnance items discovered by homeowners which were destroyed by Ft. Bragg EOD. It states on page H-10, that the HGL RI team should plot unexploded ordnance (UXO) discoveries from the Granville County Emergency Response and ARNG UXO finds during the RI to ensure a comprehensive understanding is reflected in the RI. Has this information been obtained?

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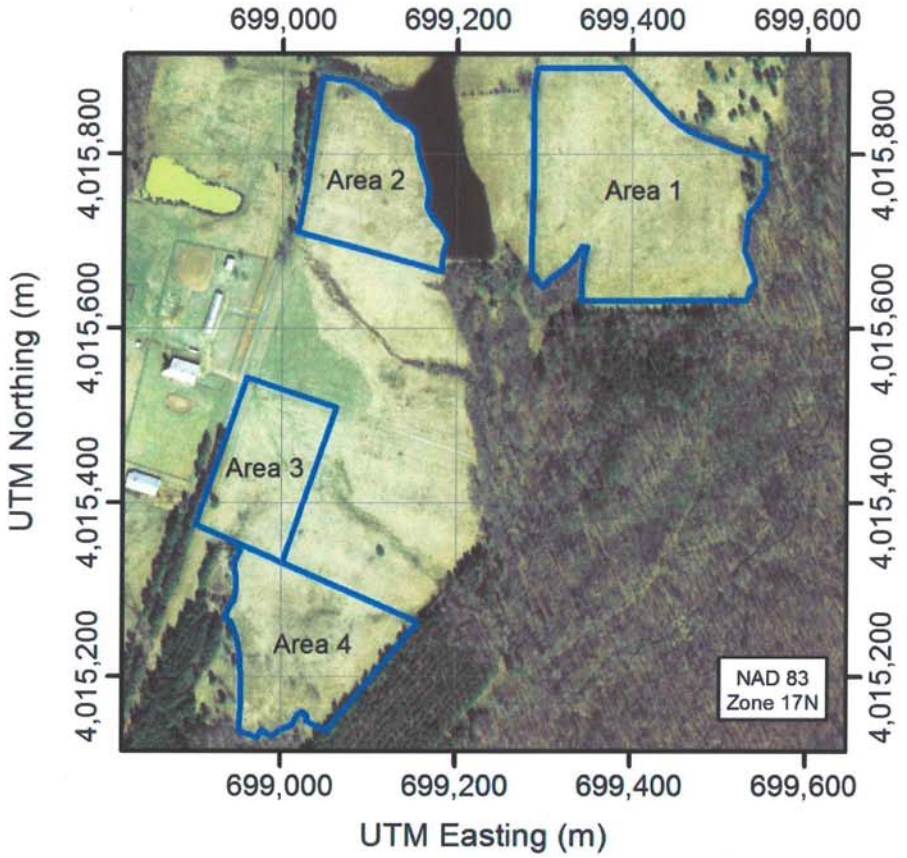

Figure 2-6. Former Camp Butner areas chosen for surface clearance and initial EM61 mapping.

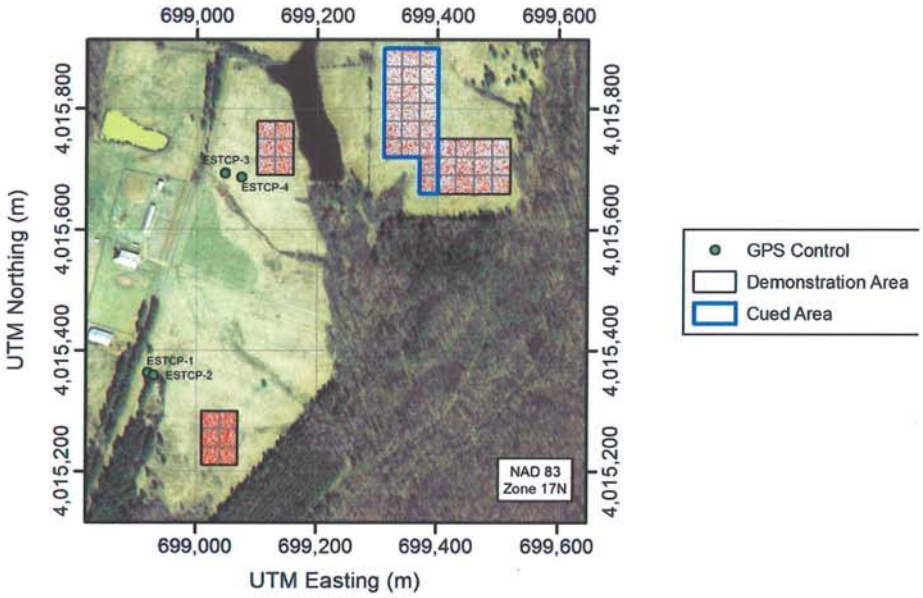

Figure 2-7. Final Camp Butner demonstration area showing the GPS control points established, the EM61-MK2 cart data, and the portion of the site chosen for cued investigation.

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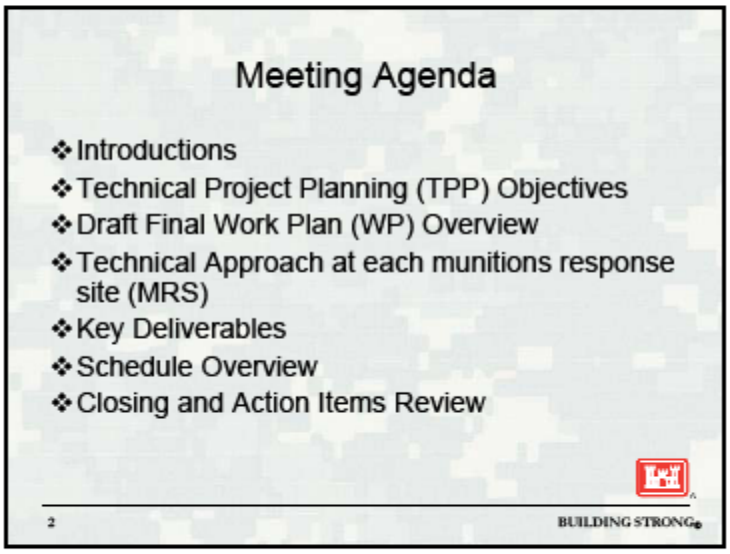
8.0 SEPTEMBER 5, 2012 TPP MEETING PRESENTATION





Introductions

- Government Agencies – Federal, State and Local
  - USACE (CESAW, CESAS, CEHNC)
  - North Carolina Department of Environment and Natural Resources (NCDENR)
  - North Carolina National Guard
  - Town of Butner, Granville, Durham, and Person Counties

3 BUILDING STRONG®

Team Member Introduction - Continued

- Technical Resources
  - U.S. Army Engineering & Support Center, Huntsville (USAESCH)
  - HGL & AMEC

4 BUILDING STRONG®

Key Definitions

MEC – Munitions and Explosives of Concern-Specific categories of military munitions that may pose unique explosives safety risks. MEC includes unexploded ordnance (UXO), discarded military munitions (DMM), and explosive concentrations of munitions constituents (MC).

MC – Munitions Constituents-Any materials originating from UXO, DMM, or other military munitions, including explosive and non-explosive materials and emission, degradation, or breakdown elements of such ordnance or munitions.

5 BUILDING STRONG®

TPP Meeting Objectives

- ► Solicit input from Project Stakeholders
- ► Attain concurrence on the data quality objectives (DQOs) for the project
- ► Attain concurrence on the technical approach for the RI for each Munitions Response Sites (MRSs)
- ►Discuss WP comments in preparation for the Final version to be issued

6 BUILDING STRONG®

TPP Process Overview

- Four Phases of TPP process
  - Describe current conditions; determine data needs; discuss data collection options; finalize data collection program in WP
- TPP Key Products
  - Concurrence on the technical approach / path forward to meet the project objectives
  - Understanding of Stakeholder concerns

7 BUILDING STRONG®

RI/FS Purpose

- Remedial Investigation (RI) Purpose
  - Determine the nature and extent of MEC and MC across a site
  - Determine potential risks to human health and/or the environment
- Feasibility Study (FS) Purpose
  - Evaluates alternative munitions response options

8 BUILDING STRONG®

MRSs included in Butner RI/FS

Handout Figure 1.2



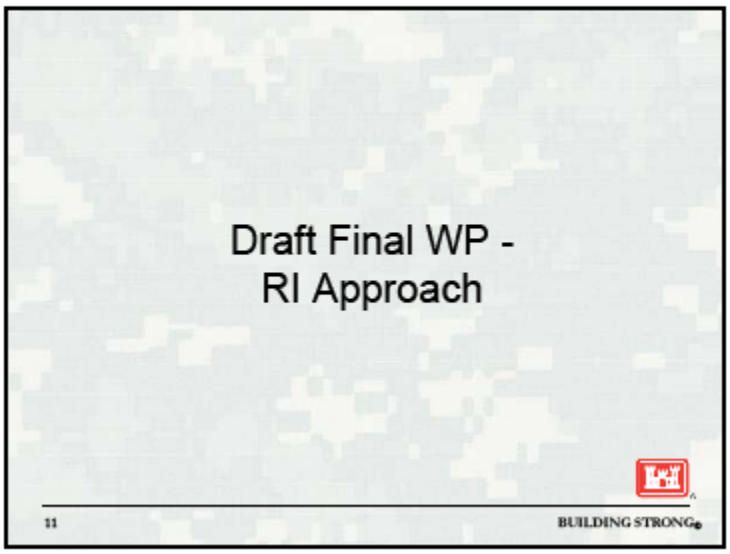
- Flame Thrower Range (FTR)
- Hand Grenade Range (HGR)
- Army National Guard Property (ARNG)
- Range Complex 1 (RC 1)
- Range Complex 2 (RC 2)

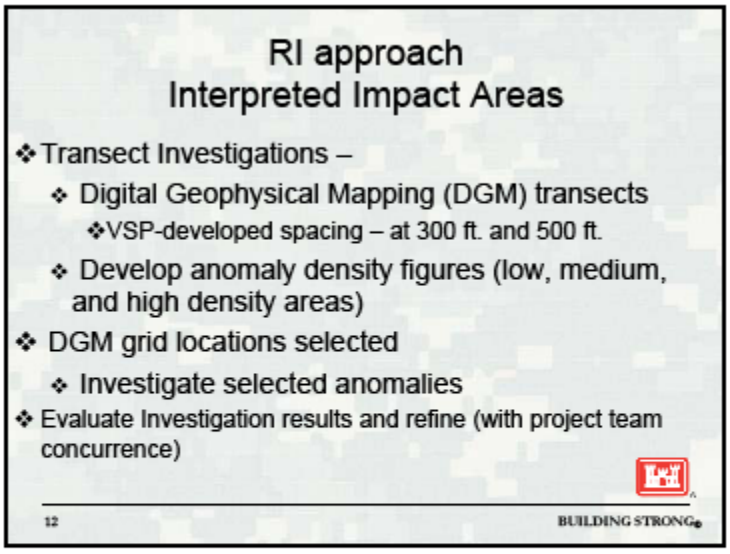
9 BUILDING STRONG®

Site Background

- Established 1942; operated for 18 Months
- 40,384 acres / 23,000 acre live-fire artillery ranges
- Limited "dedudding" operations – 1947 – 1950
- Multiple Previous Investigations (see Handout Table 1.1, summary of previous investigations)
  - Available data incorporated into the GIS for this RI/FS

10 BUILDING STRONG®


Draft Final WP -
RI Approach
11
BUILDING STRONG


RI approach
Interpreted Impact Areas
Transect Investigations –
Digital Geophysical Mapping (DGM) transects
VSP-developed spacing – at 300 ft. and 500 ft.
Develop anomaly density figures (low, medium, and high density areas)
DGM grid locations selected
Investigate selected anomalies
Evaluate Investigation results and refine (with project team concurrence)
12
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RI approach
Outside Interpreted Impact Areas

- Instrument assisted surface reconnaissance
  - Parallel transects, 500-ft spacing
- DGM grids
  - Placed in historical use areas that are outside the interpreted impact areas
- Intrusive Investigation of Selected anomalies in the DGM Grids
- Evaluate Investigation results and refine (with project team concurrence)

13 BUILDING STRONG®

DQO – Delineate Nature and Extent of MEC

- Delineate nature and extent of MEC within each MRSs with a 90% confidence* level (See Table 3.8)
- Show with 90% confidence* areas not expected to contain MEC

* Confidence levels established using Visual Sample Plan (VSP) and UXO Estimator.

- Where Explosives Safety Hazards occur – Assess using MEC Hazard Assessment (MEC HA)

14 BUILDING STRONG®

RI Approach – MC characterization

- 10 incremental sampling methodology (ISM) sampling units (SU) per MRS
  - Locations based on anomaly density and intrusive results
- Evaluate initial ISM results for surface soil
  - An exceedance = additional ISM SUs for surface soil
  - Discrete subsurface samples to characterize subsurface soil
- Groundwater sampling from existing wells (to establish background perchlorate and lead concentrations - wells outside site boundaries)

15 BUILDING STRONG®

DQO – Delineate Nature and Extent MC

- Delineate nature and extent of MC within each MRSs

  (See Table 3.8, WP DQOs)
- Based on initial sampling results:
  - Sediment and surface water sampling may be conducted

16 BUILDING STRONG®

DQO – Assess Risk to Human Health & Env

- MC Risks - compare maximum MC concentrations to the most stringent of USEPA RSLs and NCDENR human health screening criteria to identify chemicals of potential concern (COPCs)
- Identified COPCs will be evaluated further in the Human Health Risk Assessment (HHRA) process
- See Table 3.8 (Handout)

17 BUILDING STRONG®

MRS-Specific Technical Approaches

18 BUILDING STRONG®

FTR MRS and HGR MRS

- FTR MRS: 2006 Removal Action (20 acres)
  - Two UXO and 530 pounds of MD
- HGR MRS: Potential for MK 2 hand grenades
  - EE/CA (2001) – 8.5 acres DGM, no MEC or MD
- Enough data exists to fully characterize both these areas

19 BUILDING STRONG®

ARNG MRS

20 BUILDING STRONG®

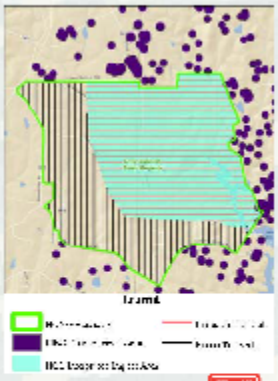
National Guard Property Background

- 4,824 Acres, mix of historic overlapping fans
- Potential Munitions
  - 2.36 inch rockets
  - Rifle grenades
  - 37mm, 105mm, 155mm projectiles
  - 60mm and 81mm mortars
- No previous munitions response actions (i.e., operational range)

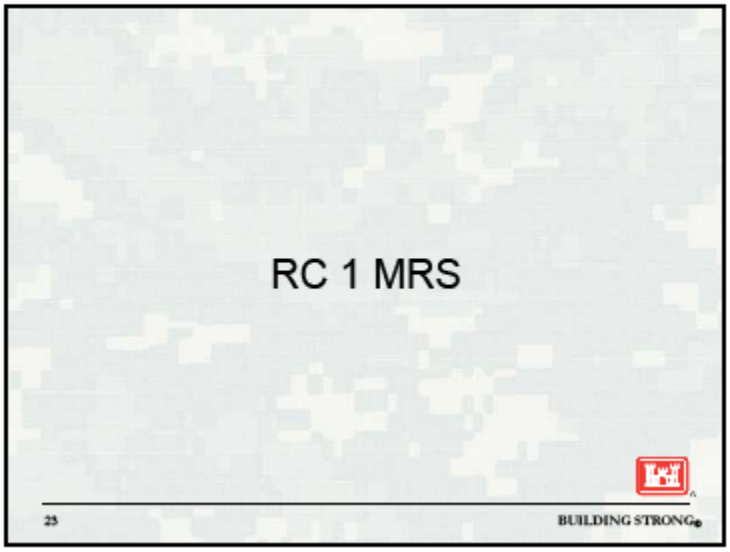
21 BUILDING STRONG®

National Guard Property – RI Approach

- Transect Approach
  - 300 ft and 500 ft. Spacing
  - Mag and Dig investigations
- DGM grids / Intrusive
  - Placed based upon transects
- Surface reconnaissance to confirm areas not suspected of containing MEC



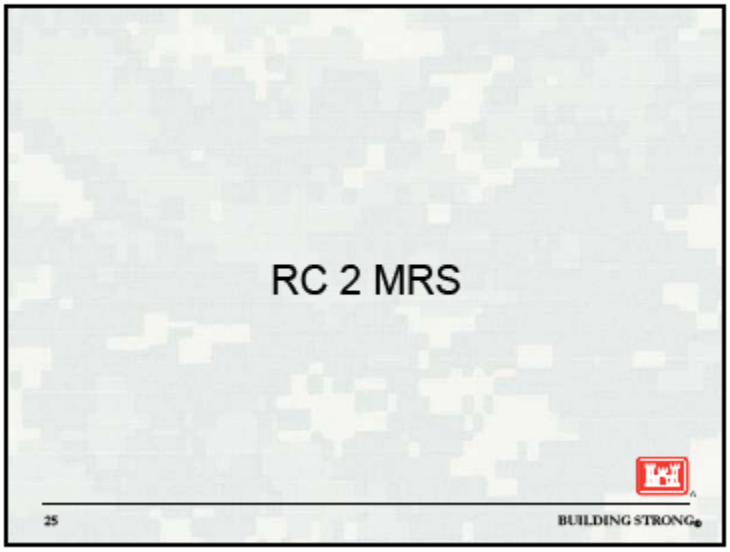
22 BUILDING STRONG®



Range Complex 1 – Approach

- Significant coverage existing
- Transect Approach
  - 300 ft and 500 ft. Spacing
  - Mag and Dig
- DGM grids / Intrusive
  - Placed in high, med, and low density areas
- Surface Recon
  - 500' spacing

24 BUILDING STRONG



Range Complex 2 – Approach

- Transect Approach
  - 300 ft and 500 ft. Spacing
  - Mag and Dig
- DGM grids / Intrusive
  - Placed based upon transects
- Surface reconnaissance to confirm areas not suspected of containing MEC

26 BUILDING STRONG

MC Investigation – all MRSs

- Conducted at each MRS based on range features (e.g., fan, firing points, targets) and RI data collected
- Background for soil and groundwater included

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MC Investigation – Continued

- Sample drinking water wells to establish background for perchlorate and lead based on prior detections
- Sediment and surface water sampling as needed (based on initial results) to characterize impact from local drainage

28 BUILDING STRONG®

Key Deliverables

- Work Plan – Draft Final
- Explosives Siting Plan (ESP) - Final
- RI Report
- FS Report
- Proposed Plans (PPs)
- Decision Documents(DDs)
- Public Involvement Plan (PIP) - Final

29 BUILDING STRONG®

Community Relations Support

- Two public meetings conducted
  - 1st – April 2012
  - 2nd – September 5, 2012
- Four RAB meetings remaining
- Community relations support outlined in Community Relations Plan
- Administrative Record (AR) to be updated with final documents (meeting September 5th)

30 BUILDING STRONG®

Moving Forward - Schedule

- ☑ TPP Meeting #2 (today)
- ❑ TPP Memorandum (Sept 2012)
- ❑ Final Work Plan (Sept 2012)
- ❑ Field Work Start (October 2012)
- ❑ Draft RI Report (March 2013)



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TPP Meeting Discussion Items

- Concurrence to WP –
  - Comments to Draft Final WP
    - See draft responses to comments handout
- Other Issues/Notes –
  - Site Access – hunting seasons/coordination with ARNG training schedule
  - Rights of entry (ROE) status
    - ROE for outside MRS boundaries (background sample locations)



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TPP Meeting Discussion Items - continued

- Potential for innovative technology tools to be used onsite
- Potential for automated brush clearance
- Solicit any available data on historical MEC finds from Granville County Emergency Response and ARNG



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Closing

- Action item review
- Closing questions / concerns



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APPENDIX F

GEOPHYSICAL DATA

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Appendix F - DGM Survey Data includes the following files as electronic only files submitted on the enclosed CDROM: Daily "raw" data, processed data, "gdb" files, "grd" files, "ply" files, targets, and xyz files.

Additional documents included (electronically only) in Appendix F are:

Appendix F-1	Final IVS Letter Report
Appendix F-2	ARNG Proposed Grid Locations Memo
Appendix F-3	RC1 Proposed Grid Locations Memo
Appendix F-4	RC2 Proposed Grid Locations Memo
Appendix F-5	ARNG Reconnaissance Survey Proposed Grid Locations
Appendix F-6	RC1 and RC2 Reconnaissance Survey Proposed Grid Locations
Appendix F-7	DID required MS Access database
Appendix F-8	Analog Transects, Analog Grids MS Excel tables
Appendix F-9	A MS Excel version of the "geophysical intrusive results table" exported from Appendix F-7 (the DID required MS Access database)
Appendix F-10	January 2015 Memorandum for Re-investigation of Grids

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APPENDIX F-1

FINAL IVS LETTER REPORT

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December 14, 2012

Ms. Elise Goggin
U.S. Army Corps of Engineers
Huntsville Center
Contract No. W912DY-10-D0023
FUDS Project No. I04NC000902
W912DY-10-D-0023

Subject: Final Instrument Verification Strip (IVS) Testing Letter Report for the Former Camp Butner (Range Complex 1, Range Complex 2, Army National Guard Property, Hand Grenade Range, and Flame Thrower Range) Remedial Investigation / Feasibility Study Project, Granville County, North Carolina.

Dear Ms. Goggin:

The purpose of this letter report is to summarize the results of the instrument verification strip (IVS) data collection performed at the former Camp Butner on November 12 and 13, 2012.

INTRODUCTION

HydroGeoLogic, Inc. (HGL) is conducting digital geophysical mapping (DGM) activities to detect and map locations of materials potentially presenting an explosive hazard (MPPEH) including munitions and explosives of concern (MEC) at the former Camp Butner, Granville County, North Carolina. Geonics Limited EM61-MK2A (EM61) equipment integrated with a Wide Area Augmentation System (WAAS) capable Global Positioning System (GPS) will be used to collect DGM data along one dimensional transects spaced a minimum of several hundred feet apart. The information from the transects will be used to select locations for grids where DGM data will be collected in full coverage mode. It is anticipated that the fiducial positioning method will be used for full coverage DGM within the grids; however, real time kinematic (RTK) GPS or robotic total station (RTS) may be used. If used, these positioning systems will be "proven" at the IVS during the twice-daily test regimen that occurs as part of production DGM activities.

This letter report presents the results of the IVS effort. The purpose of the IVS is to demonstrate and document the site-specific capabilities of the proposed equipment and sensors, geophysical survey platform, data acquisition and processing protocol, and to verify the DGM systems are functioning properly and capable of meeting data quality objectives (DQOs) necessary to achieve project performance goals. The IVS also provides the opportunity to establish the information management and data transfer elements of the project and the US Army Engineering and Support Center Huntsville (USAESCH) an opportunity to observe HGL's methods, evaluate the survey results, and determine if the results meet the project DQO requirements.

IVS CONSTRUCTION

IVS Location and Size

The IVS is located in an area with an environment (topography, geology, terrain, etc.) similar to the anticipated project data collection environment. The IVS is 40 meters long and is located just southwest of the site trailer. The location is easily accessible and required limited vegetation clearance. The end coordinates of the IVS were surveyed using a Trimble R8 Glonass (GNSS) RTK GPS and are provided in Table 1.

Table 1. IVS Corners

Corner Point	* Easting	* Northing
IVS-NE	2055128.827	887371.234
IVS-SE	2055125.458	887356.839
IVS-SW	2054998.483	887389.204
IVS-NW	2055001.873	887403.695

* *NAD83 North Carolina State Plane, US survey feet*

IVS Preparation

An unexploded ordnance (UXO) technician employed a Schonstedt fluxgate magnetometer in the area selected for the IVS to ensure the absence of significant metal (ferrous) anomaly sources within the chosen test strip plot. The IVS was established using a surveyors tape, survey string, and 8-inch nails marking each end. In addition to the seeded line, four parallel transects were established to (1) record an intermediate geometry response (offset 0.4 meter), (2) document the response of ISOs under the outside edges of the EM61-MK2 (offset 0.5 meter), (3) assess off-line signal falloff (offset 0.7 meter), and (4) record and monitor the instrument noise regime of the deployed system (transect offset 4.5 meters). Attachment 1 depicts a graphic as-built diagram of the IVS layout.

IVS Seed Items

Six steel industry standard objects (ISO), purchased from the McMaster-Carr were used to seed the IVS: three 1-inch inside diameter (ID) by 4-inch long pipe nipples (small ISO) and three 2-inch ID by 8-inch long pipe nipples (medium ISO), all black welded steel (BWS) and threaded schedule 40.

Seed items were emplaced on November 12, 2012 by HGL personnel. The relative location of the center of each seed item along the centerline was marked using a surveyors tape and the coordinates were also recorded with a Trimble RTK GPS. Seed item depths were measured from ground surface to the top of each seed item (Table 2). Photographs were taken of each seed item and are presented as Attachment 2.

Table 2. IVS As Built Details

Seed ID	ISO Size	ISO Description	ISO Orientation	[1] Depth (cm)	[2] Actual Easting	[2] Actual Northing	[3] Actual Distance (m)
IVS-1	small	1-inch x 4-inch pipe nipple	Traverse-Horizontal	0	2055010.902	887386.040	4.00
IVS-2	medium	2-inch x 8-inch pipe nipple	Traverse-Horizontal	21	2055026.770	887381.961	8.97
IVS-3	small	1-inch x 4-inch pipe nipple	Traverse-Horizontal	10	2055045.143	887377.340	14.70
IVS-4	medium	2-inch x 8-inch pipe nipple	Traverse-Horizontal	40	2055061.476	887373.244	19.90
IVS-5	small	1-inch x 4-inch pipe nipple	Traverse-Horizontal	20	2055074.103	887369.968	23.85
IVS-6	medium	2-inch x 8-inch pipe nipple	Traverse-Horizontal	0	2055088.825	887366.307	28.45

[1] Depth is measured as distance below the local ground surface to the top of the ISO
[2] NAD83 North Carolina State Plane, US Survey feet
[3] Distance measured from the west end of the IVS line

A Trimble R8 GNSS RTK GPS was used to record the coordinates of the IVS line ends and seeds. There were no survey monuments for the GPS base station within radio range near the IVS test strip, therefore, HGL "burned" a nearby point using Trimble's Survey Controller "Quick Static" tool. Coordinates for the base point are displayed in Table 3. If RTK GPS is to be used for data collection HGL will utilize an existing survey monument or have one installed by a licensed surveyor.

Table 3. IVS Base point

Point ID	* Northing	* Easting
IVS Base	887653.148	2054999.281

[*] NAD83 North Carolina State Plane, US survey feet

DATA COLLECTION

Equipment

The digital geophysical sensor selected for DGM is the Geonics EM61-MK2A setup as a single coil man-portable system. The EM61 is an electromagnetic induction metal detection geophysical technology. The EM61 transmits a primary electromagnetic field that induces a secondary magnetic field in the ground and objects that are conductive. The EM61 receiver coil measures the voltage component of the secondary magnetic field in millivolts (mV) at four set time gates after shut-off of the primary field that is expected to represent only metallic

objects. When the measured voltage exceeds background responses, metallic objects, including military munitions and other conductive items, are identified as potential anomalies requiring further investigation. The EM61 system is composed of two 1-meter by 0.5-meter EM61 coil. The bottom coil, positioned 40 centimeters above ground surface, is mounted on wheels and serves as both a transmitter and receiver coil. The top coil, positioned 82 centimeters above ground surface, is only being used as a mounting structure for the GPS antenna. The EM61 will be hand-pulled by one or more operators.

The Hemisphere Crescent WAAS-capable GPS will be integrated with the EM61 to provide less than 10-meter accuracy for transects, however, line and fiducial methods will be employed for the IVS test strip and grids.

Data Collection

Pre-seeding baseline data were collected along the IVS lanes to ensure ISOs were placed within "clean" areas, free of metallic interference. Static measurements were then collected over each seed item at ground level and in place at depth for at least 15 seconds for each ISO.

Data were collected along the center of the IVS and on the north side of the seeded line with a line separation spacing of approximately 0.4 and 0.5, and 0.7 meter spacing. Data were also collected along a single pass over the IVS "Clean Lane" offset by 4.5 meters from the seeded line.

The line and fiducial method was used to position the geophysical data for the IVS survey. Flags were placed at 10-meter intervals along each line. Data was logged in "auto" mode while a digital marker was entered into the data as the center of the EM61 sensor crossed over each flag.

Data Processing

IVS and QC data were collected with Geomar Software, Inc., Nav61 data collection software on a Juniper Systems, Archer field computer. Local coordinates were corrected using Geomar Software, Inc., TrackMaker and Geonics Limited, DAT61MK2. Position corrected data was exported as XYZ files for processing in Oasis Montaj. The project coordinate system (NAD83 North Carolina State Plane, US survey feet) was used in the Geosoft database in Oasis Montaj.

Leveling was conducted with both a 75 point rolling statistics window with a median filter in coordination with local background removal by interpolating and subtracting background values. A latency correction of 0.35 seconds was applied using the UCELATENCY GX.

Local data positions were warped between the points listed in Table 1 to the project coordinate system using WARPDATA GX in Oasis Montaj. The seeded and background IVS lines were gridded using minimum curvature gridding with a 0.1-foot cell size as displayed in Figure 3.

RESULTS

A test regimen was performed at the IVS that included the following:

- Static response with small and medium ISOs at ground level
- Static response with small and medium ISOs buried at designated depths;
- Kinematic response over small and medium ISOs buried at designated depths;
- Kinematic response over small and medium ISOs buried at designated depths at several lateral offset distances

Overall, the three small ISOs revealed static and kinematic response amplitudes for the tests that are significantly lower for most of the early time gate channels compared to those predicted by the Naval Research Lab (NRL) response curves for the small ISO. The static and kinematic responses measured over the medium ISOs in the IVS are within the range of acceptable responses with the exception of channels 1 and 2 for IVS-4 during the static response test with the medium ISO on the ground surface. Detailed results for the static and kinematic responses over each ISO can be found in Tables 5 through 8 of Attachment 3. A detailed summary of the first weeks' IVS data are included in Table 9 of Attachment 3.

The test results for the medium ISOs are representative and directly comparable to the results predicted by the NRL response curves for the medium ISO. The small differences in the results for the static and kinematic tests for the medium ISOs used for the project are likely due to one or more of the following:

- Small errors in seed distance from the EM61 coil due to seed movement during hole in-fill, ground settling, or minor elevation changes near the IVS centerline transect;
- Small errors in navigation during the kinematic tests;
- Variability in the orientation of the coil during the dynamic tests ("tilt");
- Variability in the orientation and/or distance between the coil and ISO during some of the static tests;

Attachment 3, Table 7 provides the results of the static tests with ISOs at ground level. The responses for Channels 1-3 for the three small ISOs are significantly less than those expected based on the NRL response curves for the small ISO. Based on our past experience, approximately 5 % of the small ISOs used for testing purposes do not mimic the NRL response curves. The small ISOs used for the tests were purchased from McMaster Carr, whom the NRL also uses as a supplier. Based on the results of the testing performed, it is likely that the small ISOs purchased for this project are slightly different in size and / or composition compared to those used by the NRL to generate the response curves for the small ISO.

Eight (8) IVS runs have been performed throughout the first week of field work, including the initial IVS run. The sum channel responses for all six seed items ranged from -15% to +15% of the week's average (Attachment 3, Table 9). Consistency in the measured responses for all seed items and the agreement of the responses for the medium ISOs with the NRL response curves for the medium ISO indicate the instrumentation is functioning as

intended.

Positioning offsets between the recorded seed locations and detected targets were all less than 1 meter with the greatest offset at .65 meters for IVS-1. Field observations indicate that part of this offset may be due to an inconsistent speed between the start of the line and the first marker.

The background test line located 4.5 meters north of the seeded test line in the IVS seeded line was analyzed for noise. The noise level, as measured using the standard deviation on the sum channel was 3.93 mV above background. Detailed results for all channels are tabulated in Attachment 3.

The data collected over the IVS line were analyzed and anomalies were selected. The peak responses observed over each target were determined by manually picking peaks along the profile of each of the four channel's responses. Response profiles for the seeded line, 0.5-meter offset line, and the 4.5 meter background line are displayed in Attachment 4. Maps of the noise strip and seeded lines are presented in Figure 3.

Predicted responses were obtained by interpolating values calculated *with NRL's EM61-MK2 Response* version 1.2.0.0 software.

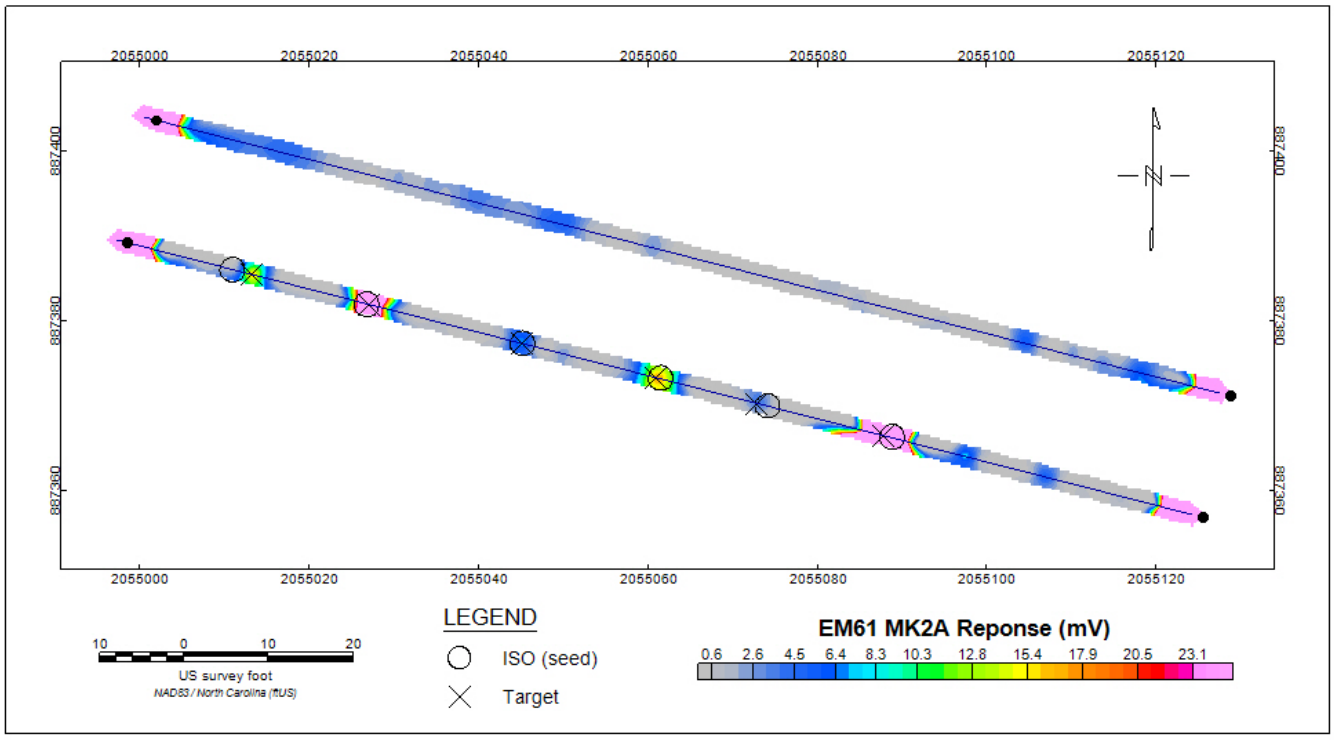


Figure 3. EM61-MK2A seeded and background line data collected over the IVS

QUALITY CONTROL

Quality Control (QC) procedures and metrics were initiated in accordance with the project work plans (HGL, 2012) and evaluated as part of the IVS process. QC measures were conducted, documented, and reviewed (and will continue to be conducted as daily or weekly QC measures), to include:

- Equipment Warm Up;
- Personnel Test;
- Vibration Test (Cable Shake);
- Static Instrument Response Test (IRT); and
- Latency Test.

The ITR was performed near the IVS using a small ISO as the static test object. The ISO was placed over the center of the top coil with a polyvinyl chloride (PVC) rod to hold it in place.

On November 13, 2012 QC tests for the EM61 were reviewed and verified to have passing results.

- The Cable Shake and Personnel tests did not produce instrument response above the observed background readings as observed in real time with response deviations ranging from +/- 0.39 mV for the cable shake and +/- 0.16 mV for the personnel test.
- Stationary noise levels for Channel 3 for a three minute background static test were found to be approximately +/- 0.5 mV with a standard deviation of 0.10. Noise levels decreased to approximately +/- 0.4 mV for the static test with a standard deviation of 0.10 when a test object (standard) was placed in a consistent position above the coils.
- The item used as a standard showed a variation in response from 37.5 to 38.17 mV for Channel 3 data. These values are well within the quality metrics of +/- 10 % static repeatability.).
- The IVS target offset was in the order of 0.65-meter maximum.

CONCLUSIONS AND TARGET SELECTION CRITERIA

The IVS results indicate that the geophysical equipment performed at a level to that predicted by the Naval Research Lab/ESTCP Geophysical System Verification calculator for the Geonics EM61 Mk2 metal detectors. To test response and position repeatability the response repeat criteria for IVS runs will be ±25% of the first week average of responses for IVS-2 (194.2 mV) and IVS-4 (57.1 mV).

Target Selection

Signal to noise (SNR) analysis of each of the six IVS seeds demonstrate best results in channels 1, 2, and the sum channel specifically with regard to the small ISOs (Table 4). Later time gates, however, reveal responses that are closer to the expected values. Due to these observations, HGL suggests the sum channel response will provide the most sufficient results for target selection throughout the site.

Table 4. Detailed SNR Results

Channel	[1] RMS Noise (mV)	Background (mV)	SNR IVS-1	SNR IVS-2	SNR IVS-3	SNR IVS-4	SNR IVS-5	SNR IVS-6
Ch 1	2.04	5.80	11.56	42.59	2.88	10.41	0.71	169.95
Ch 2	1.23	3.98	10.58	43.04	2.38	10.66	-0.16	174.38
Ch 3	0.65	2.17	8.82	38.97	1.74	9.89	-0.11	160.05
Ch 4	0.34	1.28	6.56	30.94	1.71	7.29	-0.76	131.21
Sum Channel	3.93	13.06	11.39	44.74	2.71	11.05	0.27	180.65
Weighted Sum	1.08	3.56	10.73	42.95	2.53	10.64	0.14	174.06

[1] *Root mean square (RMS) noise is calculated as the standard deviation of the sample*

Generally, a single threshold is set for a logical grouping of data, (e.g. per grid, or for all datasets derived from similar environments with background values having certain statistical characteristics, etc.) and the threshold is based primarily on the level of noise observed in that grouping of data. The results of the geophysical IVS performed prior to geophysical survey data collection were used to gain an understanding of peak responses to simulated ordnance items anticipated at the site and in an area believed to be geologically representative of the investigation area.

The minimum response threshold can be estimated from the values found in *EM61-MK2 Response of Standard Munitions Items* (NRL/MR/6110--08-9155) and those calculated in the SERDP/ESTCP EM61MK2 Response program.

Since the goal of DGM is to determine the extent of anomalies that may be MEC, as well as to identify those classified as munitions debris (MD), the minimum detection threshold must allow for identification of both target types. Inspection of the IVS noise lane response reveals that the sum channel noise levels are less than 3.9 mV over a relatively short distance. A detection floor reflective of a SNR ratio of 3:1 and 5:1 will result in an 11.8 mV and a 19.7 mV detection floor, respectively.

Attachment 5 presents plots of the expected response versus depth for 75mm projectiles, 40mm grenades, small surrogate, and the medium surrogate with selection thresholds/background levels as discussed in the text shown on the curves.

Based on the above considerations, technical representatives of HGL and CEHNC have agreed the minimum practical threshold value for transect target selection will be set at 11.8 mV on the sum channel of four time gates of the EM61 to assure items of interest are detected to a maximum practical depth. For grids, a minimum threshold of 19.7 mV on the sum channel will be set to assure a sufficient number of targets are selected for an efficient intrusive investigation. However, the data processor will review targets that are equal to or greater than 15 mV and may manually add additional targets to the anomaly list based on profile analysis, signal decay response, advanced analysis, or professional judgment. These detection limits will assure a high level of confidence that MEC or MD have been pragmatically detected. Anomalies placed on the dig list based on the

professional judgment of the analyst will be documented. All anomalies are available in the master target lists if further investigation is needed. Some may be added to the selected anomaly tables to ensure an equitable sampling distribution across the site.

The selected threshold values will allow the detection of a 40-mm hand grenade to a depth of 34 cm below ground surface (bgs) on transects and 26 cm bgs on grids. 75mm projectiles will have a depth detection limit of 98 cm bgs on transects and 86 cm bgs on grids. Depth detection limits are based on our finding that the EM61 functions as expected. Using NRL's predicted responses, the sum of all four time gates of expected values was calculated and associated depths were compared to our minimum selected detection thresholds.

Sincerely,

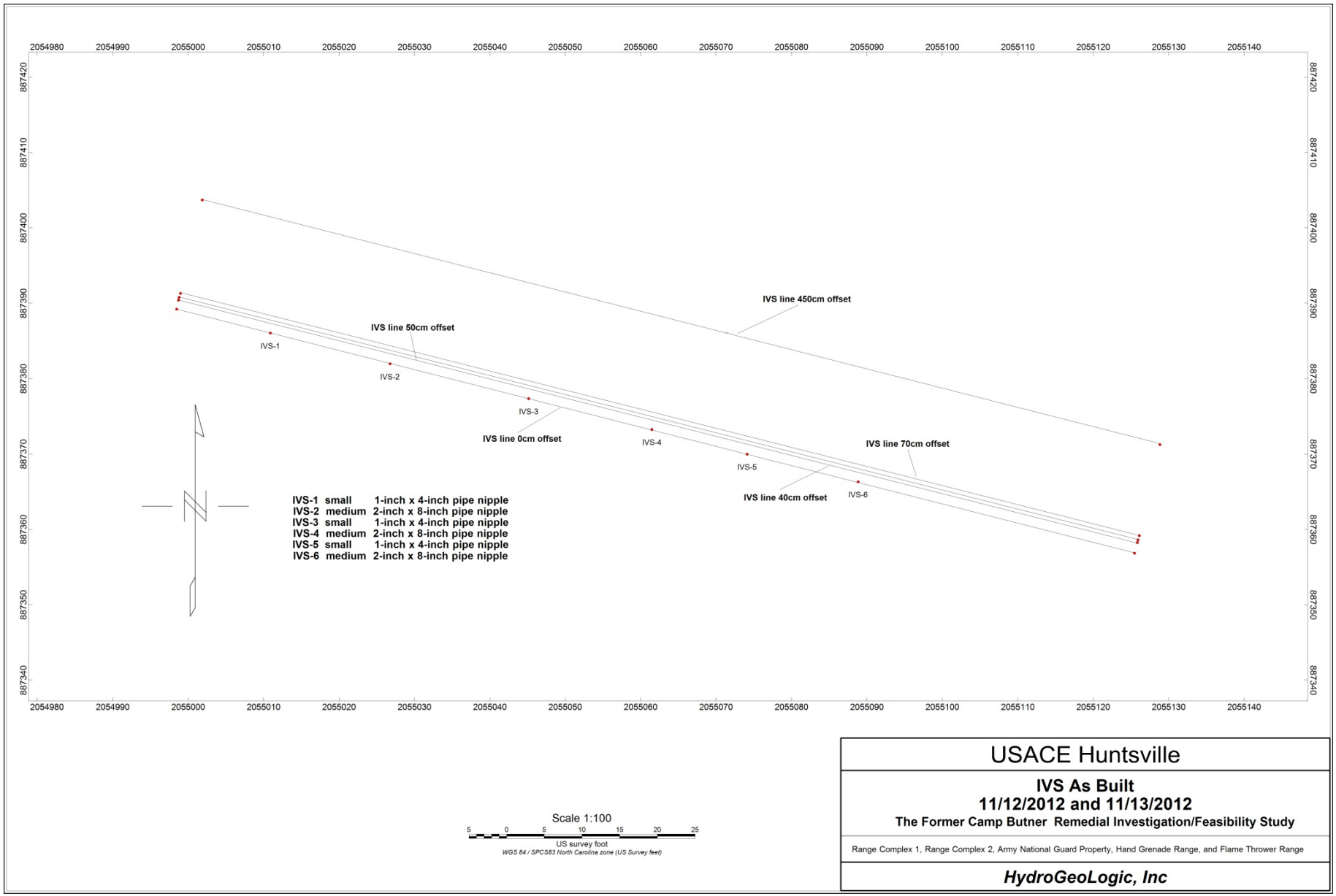


Daryl Donatelli
HGL Project Geophysicist

Cc: Mr. Ray Livermore
Ms. Chris Cochrane
Ms. Julie Hiscox

Enclosures:
Attachment 1: IVS As Built Diagram
Attachment 2: IVS Seed Photographs
Attachment 3: IVS Detailed Results Tables
Attachment 4: IVS Response Curve Profiles
Attachment 5: Response Curves

Attachment 1: IVS As Built Diagram



Attachment 4. IVS Seed Photographs



IVS-1



IVS-2



IVS-3



IVS-4



IVS-5



IVS-6

Attachment 3: Detailed IVS Results

Table 5. IVS Seeded Line Detailed Results

						Channel 1 Response			Channel 2 Response			Channel 3 Response			Channel 4 Response							
Seed ID	ISO Size	ISO Description	ISO Orientation	[1] Depth (cm)	[2] Coil Height Above ISO (cm)	[3] Predicted (mV)	[4] Actual (mV)	% of Predicted Signal	[3] Predicted (mV)	[4] Actual (mV)	% of Predicted Signal	[3] Predicted (mV)	[4] Actual (mV)	% of Predicted Signal	[3] Predicted (mV)	[4] Actual (mV)	% of Predicted Signal	[5] Actual Easting	[5] Actual Northing	[6] Actual Distance (m)	Detected Distance (m)	Target offset (m)
IVS-1	small	1-inch x 4-inch pipe nipple	Traverse-Horizontal	0	41.25	44.6	29.4	-34%	23.0	17.0	-26%	11.1	7.9	-29%	3.9	3.5	-9%	2055010.90	887386.04	4.00	4.63	0.63
IVS-2	medium	2-inch x 8-inch pipe nipple	Traverse-Horizontal	21	63.50	103.9	92.8	-11%	58.3	56.8	-3%	26.3	27.7	5%	10.0	11.9	20%	2055026.77	887381.96	8.97	8.95	-0.02
IVS-3	small	1-inch x 4-inch pipe nipple	Traverse-Horizontal	10	51.25	21.3	11.3	-47%	11.8	7.0	-41%	5.3	3.3	-38%	1.8	1.2	-32%	2055045.14	887377.34	14.70	14.66	-0.04
IVS-4	medium	2-inch x 8-inch pipe nipple	Traverse-Horizontal	40	82.50	32.4	26.3	-19%	18.2	17.3	-5%	8.2	8.5	4%	3.1	3.8	22%	2055061.48	887373.24	19.90	19.66	-0.24
IVS-5	small	1-inch x 4-inch pipe nipple	Traverse-Horizontal	20	61.25	10.7	7.2	-32%	5.9	3.8	-36%	2.7	2.1	-22%	0.9	1.2	26%	2055074.10	887369.97	23.85	23.4	-0.45
IVS-6	medium	2-inch x 8-inch pipe nipple	Traverse-Horizontal	0	42.50	461.6	352.5	-24%	259.1	218.6	-16%	117.0	106.1	-9%	44.3	46.0	4%	2055088.83	887366.31	28.45	28.13	-0.32

[1] Depth is measured as distance below the local ground surface to the top of the ISO

[2] Distance from coil bottom to ISO center (cm) is measured from bottom of actual coil not including the layer of resin that is used on the EM61 MK2A bottom coil

[3] Predicted responses obtained by interpolating values calculated with Navel Research Laboratory's EM61-MK2 Response version 1.2.0.0 software

[4] Using leveled data

[5] NAD83 North Carolina State Plane, US Survey feet

[6] Distance measured from the west end of the IVS line

Figure 4. Front profiles of EM61 MK2 versus EM61 MK2A displaying differences in distance between a small ISO and medium ISO

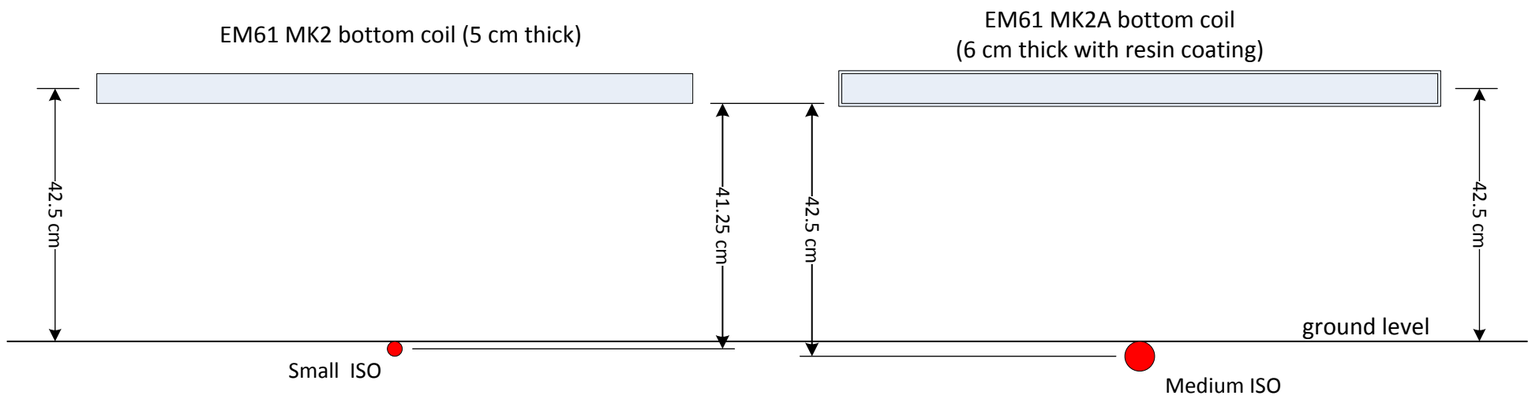


Table 6. IVS Offset Lines Results

					Seeded Line				0.4 Meter Offset Line				0.5 Meter Offset Line				0.7 Meter Offset Line			
Seed ID	ISO Size	ISO Orientation	[1] Depth (cm)	[2] Coil Height Above ISO (cm)	Ch1 (mV)	Ch2 (mV)	Ch3 (mV)	Ch4 (mV)	Ch1 (mV)	Ch2 (mV)	Ch3 (mV)	Ch4 (mV)	Ch1 (mV)	Ch2 (mV)	Ch3 (mV)	Ch4 (mV)	Ch1 (mV)	Ch2 (mV)	Ch3 (mV)	Ch4 (mV)
IVS-1	small	Traverse-Horizontal	0	41.25	29.4	17.0	7.9	3.5	64.43	42.16	23.55	11.46	62.35	42.1	24.54	12.4	46.66	32.69	18.27	9.06
IVS-2	medium	Traverse-Horizontal	21	63.50	92.8	56.8	27.7	11.9	78.22	53.19	29.21	14.73	70.58	49.21	28.41	15.13	54.46	38.79	22.61	11.96
IVS-3	small	Traverse-Horizontal	10	51.25	11.3	7.0	3.3	1.2	26.22	16.44	8.34	3.64	28.2	19.49	10.81	5.63	22.76	15.66	8.61	4.01
IVS-4	medium	Traverse-Horizontal	40	82.50	26.3	17.3	8.5	3.8	30.21	19.9	10.54	4.85	26.75	18.8	10.46	5.04	26.51	19.18	11.21	6.36
IVS-5	small	Traverse-Horizontal	20	61.25	7.2	3.8	2.1	1.2	12.95	8.57	4.84	2.34	13.66	9.31	5.58	2.54	9.66	6.55	3.78	1.75
IVS-6	medium	Traverse-Horizontal	0	42.50	352.5	218.6	106.1	46.0	339.9	231.7	127.5	65.49	286.2	200.8	119.9	64.43	142.1	103.4	62.36	34.35

[1] *Depth is measured as distance below the local ground surface to the top of the ISO*

[2] *Distance from coil bottom to ISO center (cm) is measured from bottom of actual coil not including the layer of resin that is used on the EM61 MK2A bottom coil*

Table 7. Static Results with Bottom of ISOs at Ground Level

		[1] Coil Height Above ISO (cm)	Channel 1			Channel 2			Channel 3			Channel 4		
Seed ID	ISO Size		Predicted (mV)	Actual (mV)	% of Predicted Signal	Predicted (mV)	Actual (mV)	% of Predicted Signal	Predicted (mV)	Actual (mV)	% of Predicted Signal	Predicted (mV)	Actual (mV)	% of Predicted Signal
IVS-1	small	38.75	58.5	39.5	-32%	32.4	23.6	-27%	14.6	11.7	-20%	5.0	4.9	-2%
IVS-2	medium	37.50	679.3	714.3	5%	381.3	439.7	15%	172.1	225.1	31%	65.3	94.8	45%
IVS-3	small	38.75	58.5	40.1	-31%	32.4	23.7	-27%	14.6	11.6	-21%	5.0	4.8	-3%
IVS-4	medium	37.50	679.3	719.5	6%	381.3	443.4	16%	172.1	227.1	32%	65.3	96.3	48%
IVS-5	small	38.75	58.5	39.4	-33%	32.4	23.5	-28%	14.6	11.5	-22%	5.0	4.8	-5%
IVS-6	medium	37.50	679.3	713.8	5%	381.3	441.7	16%	172.1	227.3	32%	65.3	95.7	47%

[1] *Distance from coil bottom to ISO center (cm) is measured from bottom of actual coil not including the layer of resin that is used on the EM61 MK2A bottom coil*

Table 8. Static Results with ISOs In Place

Seed ID	ISO	[1] Coil Height Above ISO (cm)	Channel 1			Channel 2			Channel 3			Channel 4		
			Predicted (mV)	Actual (mV)	% of Predicted Signal	Predicted (mV)	Actual (mV)	% of Predicted Signal	Predicted (mV)	Actual (mV)	% of Predicted Signal	Predicted	Actual	% of Predicted Signal
IVS-1	small	41.25	44.6	31.4	-30%	23.0	18.0	-22%	11.1	9.1	-18%	3.9	3.8	-3%
IVS-2	medium	63.50	103.9	108.1	4%	58.3	67.7	16%	26.3	35.7	36%	10.0	15.4	54%
IVS-3	small	51.25	21.3	8.1	-62%	11.8	4.2	-65%	5.3	2.2	-58%	1.8	0.9	-49%
IVS-4	medium	82.50	32.4	21.0	-35%	18.2	13.0	-29%	8.2	7.1	-13%	3.1	3.0	-5%
IVS-5	small	61.25	10.7	-1.2	-111%	5.9	-1.1	-119%	2.7	-0.3	-110%	0.9	-0.2	-126%
IVS-6	medium	42.50	461.6	437.2	-5%	259.1	269.0	4%	117.0	138.4	18%	44.3	58.1	31%

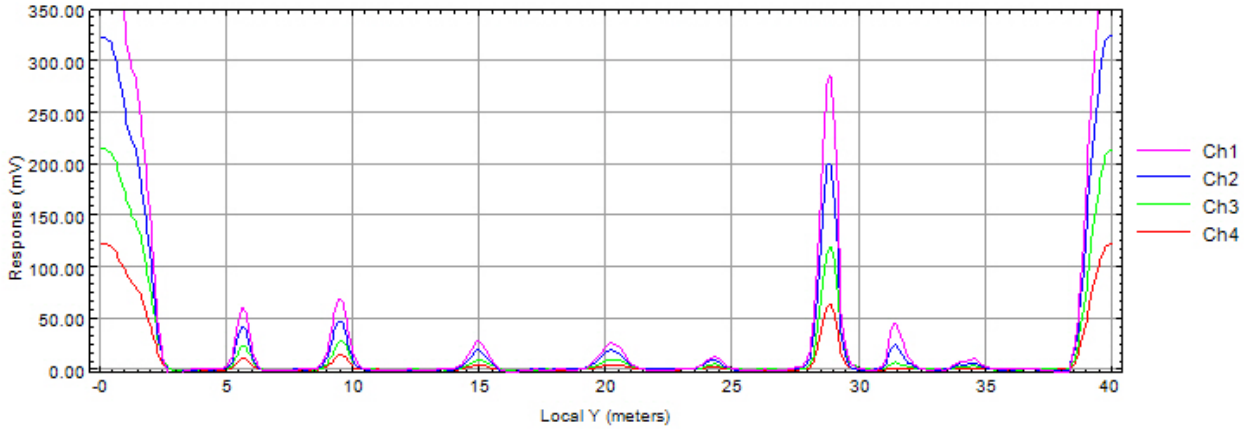
[1] *Distance from coil bottom to ISO center (cm) is measured from bottom of actual coil not including the layer of resin that is used on the EM61 MK2A bottom coil*

Table 9. First Week IVS Results and Averages

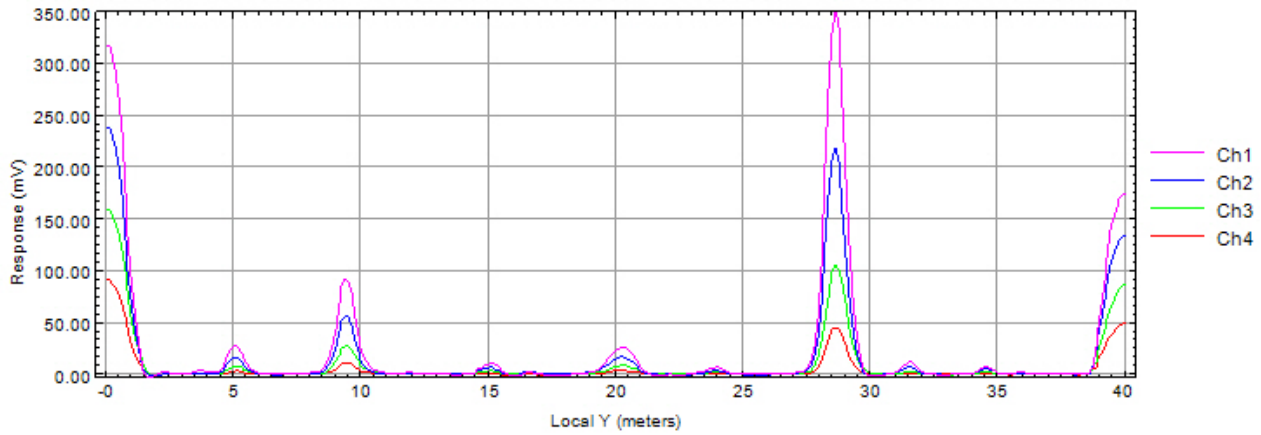
Seed ID	ISO Size	ISO Description	ISO Orientation	[1] Depth (cm)	11/13/12 AM		11/13/12 PM		11/14/12 AM		11/14/12 PM		11/15/12 AM		11/15/12 PM		11/16/12 AM		11/16/12 PM		Week Average Sum Channel Response (mV)
					Sum Response (mV)	% of Week Average	Sum Response (mV)	% of Week Average	Sum Response (mV)	% of Week Average	Sum Response (mV)	% of Week Average	Sum Response (mV)	% of Week Average	Sum Response (mV)	% of Week Average	Sum Response (mV)	% of Week Average	Sum Response (mV)	% of Week Average	
IVS-1	small	1-inch x 4-inch pipe nipple	Traverse-Horizontal	0	57.8	-3%	56.9	-4%	63.2	6%	60.5	2%	61.5	3%	57.1	-4%	59.4	0%	59.6	0%	59.5
IVS-2	medium	2-inch x 8-inch pipe nipple	Traverse-Horizontal	21	189.3	-3%	184.1	-5%	201.7	4%	188.3	-3%	202.3	4%	198.8	2%	185.2	-5%	203.6	5%	194.2
IVS-3	small	1-inch x 4-inch pipe nipple	Traverse-Horizontal	10	22.8	1%	22.6	0%	25.9	15%	21.1	-6%	21.2	-6%	22.6	0%	22.0	-3%	22.0	-2%	22.5
IVS-4	medium	2-inch x 8-inch pipe nipple	Traverse-Horizontal	40	56.0	-2%	56.0	-2%	54.9	-4%	56.1	-2%	58.9	3%	58.9	3%	57.2	0%	58.6	3%	57.1
IVS-5	small	1-inch x 4-inch pipe nipple	Traverse-Horizontal	20	14.2	-3%	16.8	15%	14.8	1%	12.5	-15%	16.1	10%	12.9	-12%	14.0	-5%	16.0	9%	14.7
IVS-6	medium	2-inch x 8-inch pipe nipple	Traverse-Horizontal	0	723.1	-3%	725.0	-3%	726.2	-2%	730.3	-2%	737.8	-1%	813.4	9%	717.9	-4%	784.2	5%	744.7

[1] *Depth is measured as distance below the local ground surface to the top of the ISO*

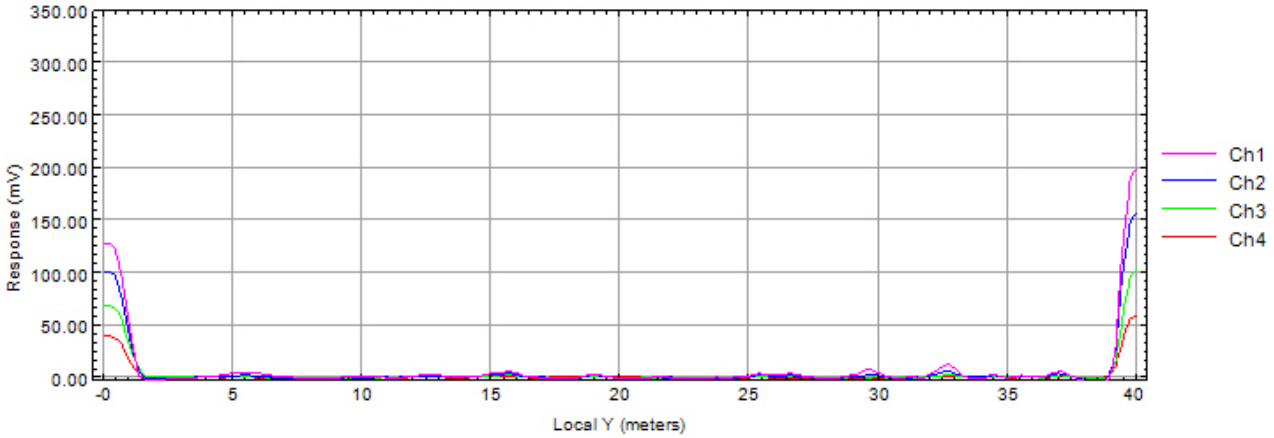
Attachment 4: Response profiles



Line 0 (seeded line)

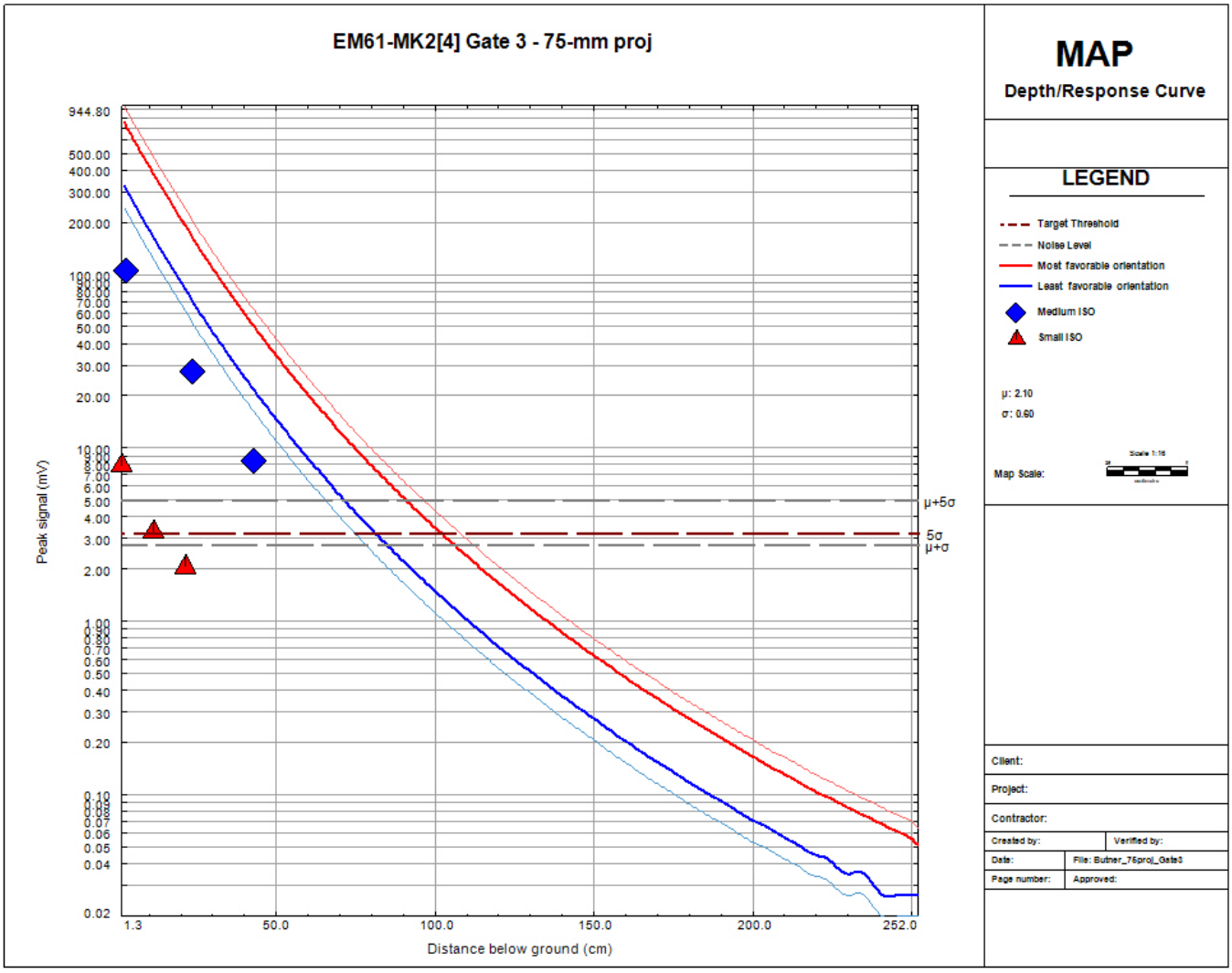


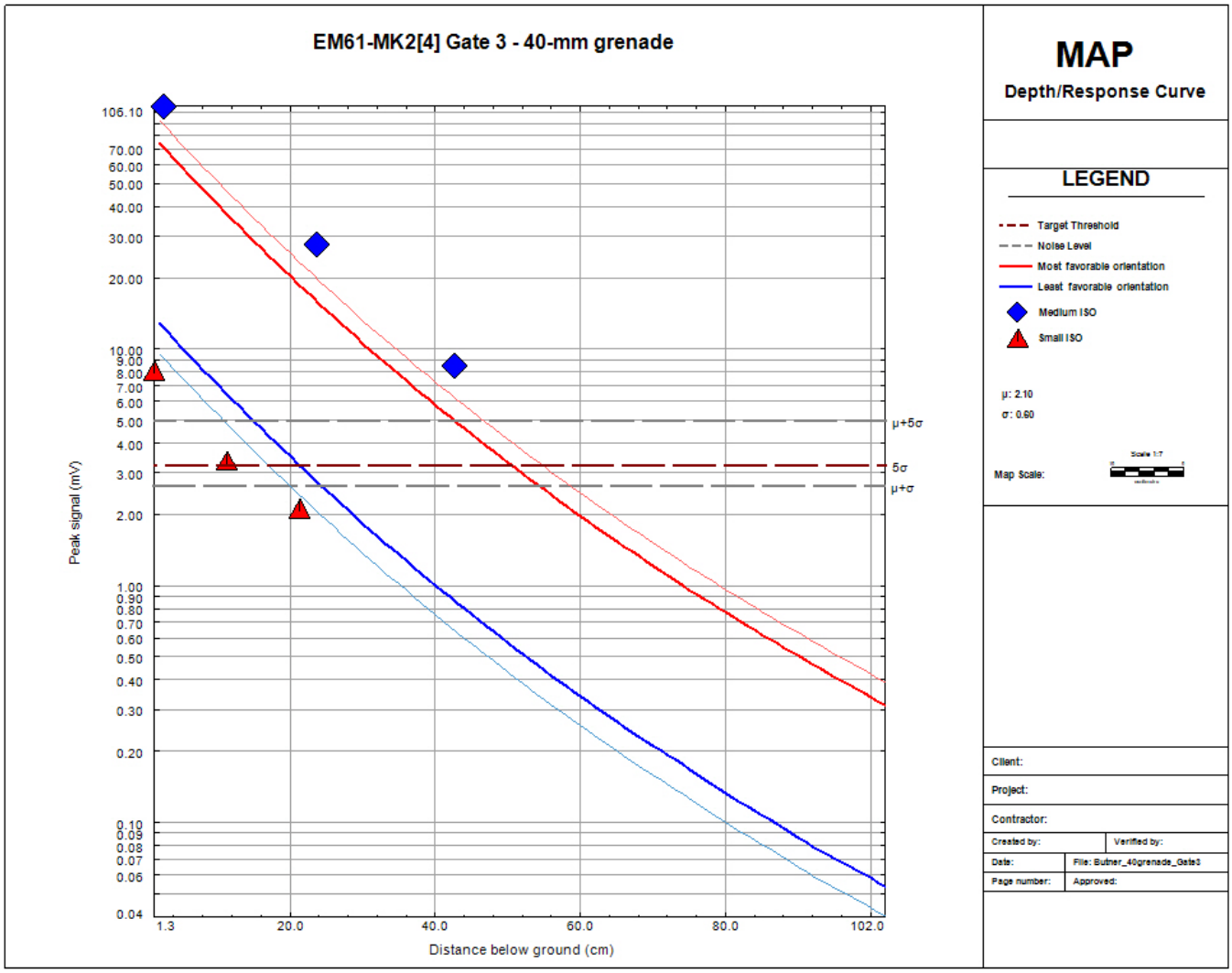
Line 0.5 meters (offset line)

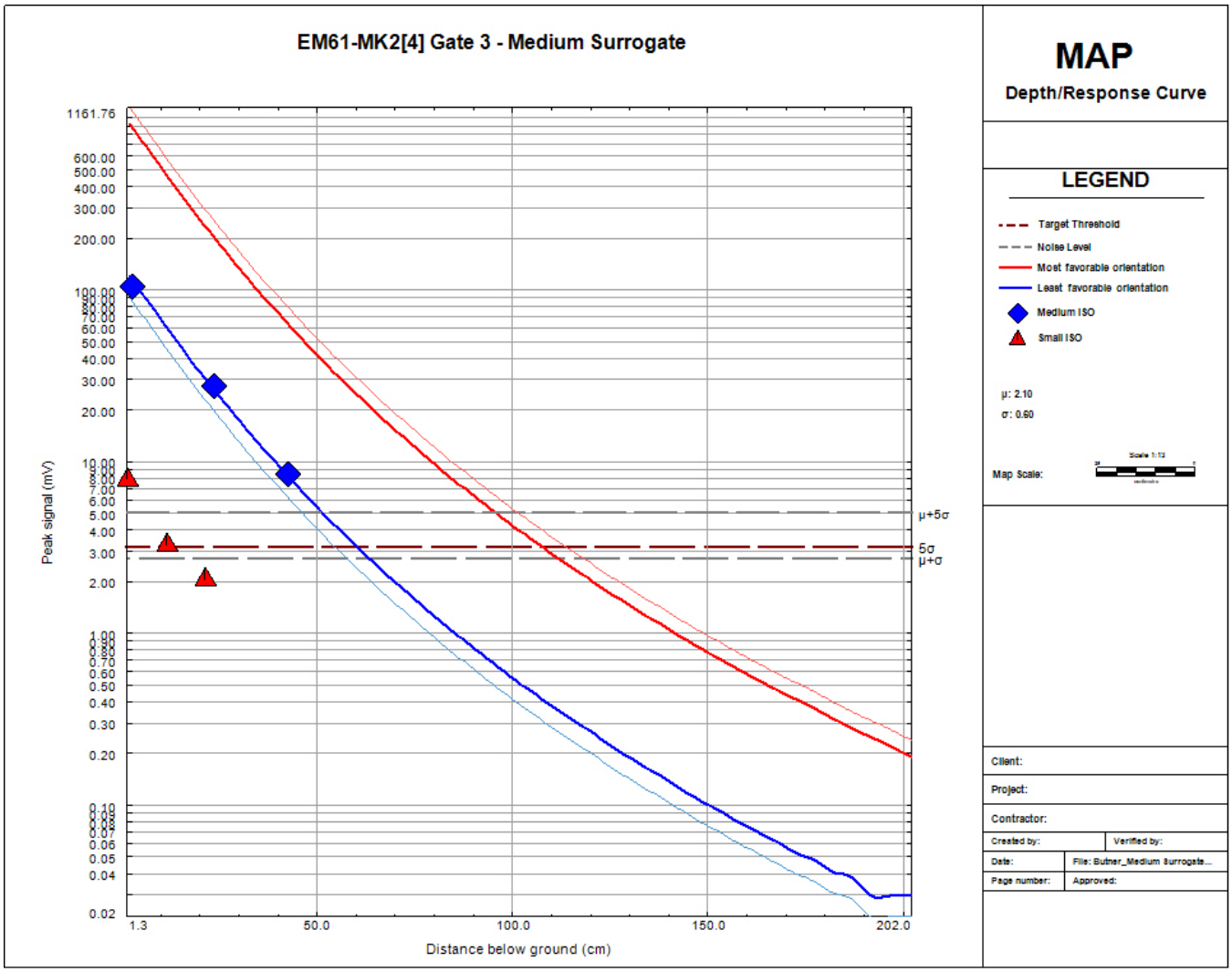


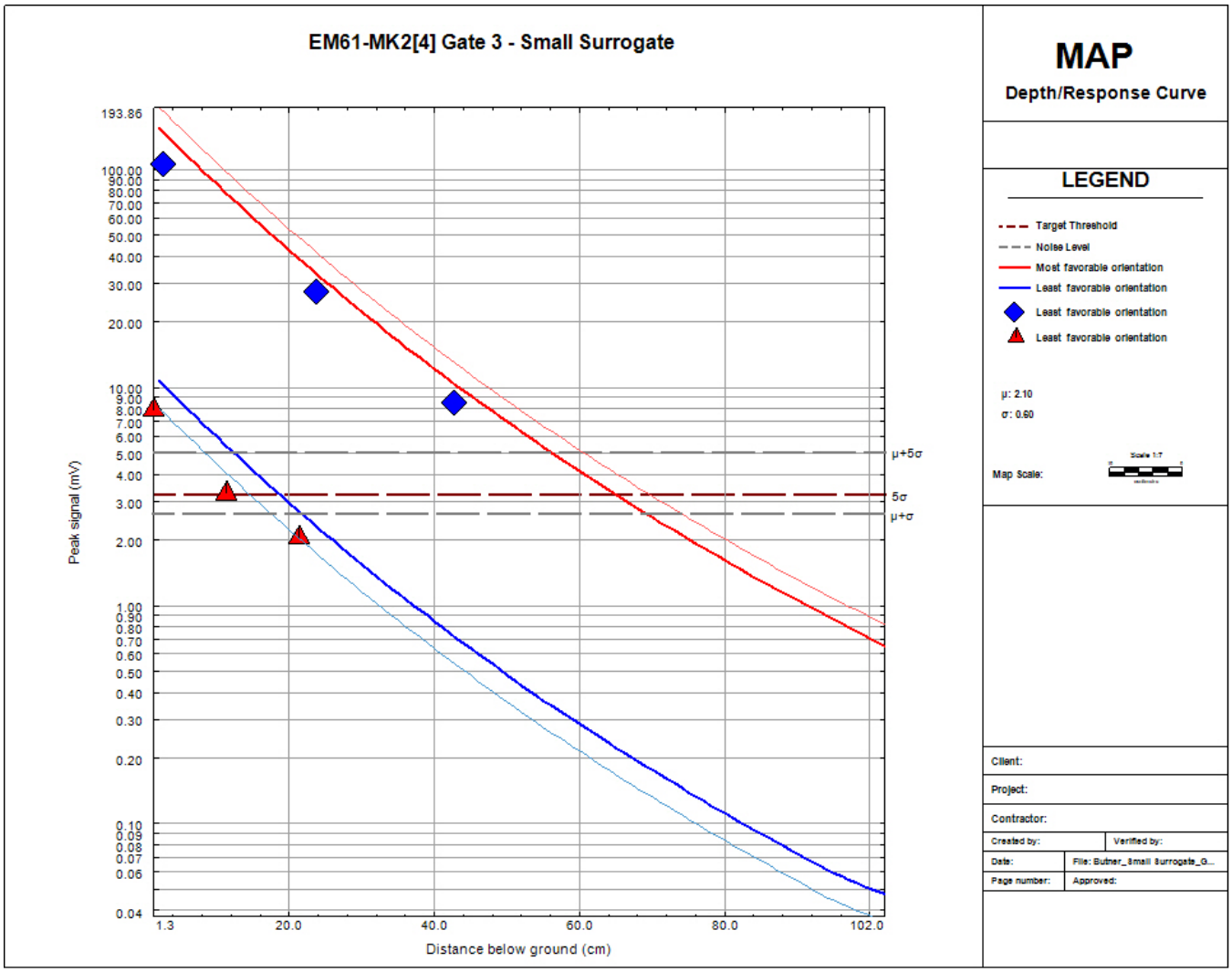
Line 4.5 meters (background offset line)

Attachment 4: Response Curves




EM61-MK2[4] Gate 3 - 40-mm grenade
Peak signal (mV)
106.10
70.00
60.00
50.00
40.00
30.00
20.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.09
0.08
0.07
0.06
0.04
μ+5σ
5σ
μ+σ
1.3
20.0
40.0
60.0
80.0
102.0
Distance below ground (cm)
MAP
Depth/Response Curve
LEGEND
Target Threshold
Noise Level
Most favorable orientation
Least favorable orientation
Medium ISO
Small ISO
μ: 2.10
σ: 0.60
Map Scale:
Client:
Project:
Contractor:
Created by:
Verified by:
Date:
File: Butner_40grenade_Gate3
Page number:
Approved:


EM61-MK2[4] Gate 3 - Medium Surrogate
Peak signal (mV)
Distance below ground (cm)
1161.76
600.00
500.00
400.00
300.00
200.00
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.02
1.3
50.0
100.0
150.0
202.0
μ+5σ
5σ
μ+σ
MAP
Depth/Response Curve
LEGEND
Target Threshold
Noise Level
Most favorable orientation
Least favorable orientation
Medium ISO
Small ISO
μ: 2.10
σ: 0.60
Map Scale:
Scale 1:13
Client:
Project:
Contractor:
Created by:
Verified by:
Date:
File: Butner_Medium Surrogate...
Page number:
Approved:


EM61-MK2[4] Gate 3 - Small Surrogate
Peak signal (mV)
193.86
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.09
0.08
0.07
0.06
0.04
μ+5σ
5σ
μ+σ
1.3
20.0
40.0
60.0
80.0
102.0
Distance below ground (cm)
MAP
Depth/Response Curve
LEGEND
Target Threshold
Noise Level
Most favorable orientation
Least favorable orientation
Least favorable orientation
Least favorable orientation
μ: 2.10
σ: 0.60
Map Scale:
Client:
Project:
Contractor:
Created by:
Verified by:
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File: Butner_Small Surrogate_G...
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APPENDIX F-2

ARNG PROPOSED GRID LOCATIONS MEMO

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February 12, 2013

Ms. Elise Goggin
U.S. Army Corps of Engineers
Huntsville Center
Contract No. W912DY-10-D0023
FUDS Project No. I04NC000902
W912DY-10-D-0023

Subject: Army National Guard Property digital geophysical mapping anomaly density estimates and proposed grid locations for the Former Camp Butner Army National Guard Property, Hand Grenade Range, and Flame Thrower Range Remedial Investigation/Feasibility Study Project, Granville County, North Carolina.

Introduction

The investigation strategy proposed for the Army National Guard (ARNG) munitions response site includes: (1) DGM characterization along transects that vary in spacing; and (2) placement of full coverage DGM grids in areas of high, medium, and low anomaly density. The selected geophysical transect spacing is based on munitions used and findings from previous site characterizations and removal actions (RA).

The proposed characterization strategy in the approved Work Plan consists of the following:

- Conduct DGM transect survey of 52 miles of 3-foot-wide (18.9 acres) using the Geonics EM61-MK2 in MEC use areas.
- Conduct full coverage DGM surveys to evaluate approximately sixty six (66) 50-foot by 50-foot grids (approximately 3.8 acres), using an EM61-MK2 in MEC use areas.
- Conduct full coverage DGM surveys to evaluate approximately eleven (11) 50-foot by 50-foot grids (approximately 0.6 acres), using an EM61-MK2 in satellite historical use areas.

Grid locations in satellite historical use areas will be determined after analog geophysical mapping (AGM) is completed and will incorporate the AGM findings as well as the results of the surface reconnaissance transects previously completed.

All MEC-like targets above a threshold defined by the IVS results and 10% of the residual anomalies in the full coverage DGM grids will be intrusively investigated to adequately characterize anomaly sources. Due to several inaccessible DGM areas a minimal portion of DGM transects were selected for AGM surveys. Attachment 1, Table 1 summarizes the completed transect coverage and proposed grid coverage.

Data Collection Methods

DGM data was collected using a Geonics, Ltd., EM61-MK2 metal detector with wide area augmentation system (WAAS) capable Global Positioning System (GPS) methods (Camp Butner Final Work Plan 3.2.1). There are areas within the ARNG where rugged terrain limited accessibility during DGM operations.

Data Processing / Target Selection

Raw transect data in the ARNG MRS was processed using Geosoft Oasis Montaj. Data were leveled and drift corrected using a 2-step drift correction. First, the UCEDRIFT GX drift correction tool was used with a 20 second window, ignoring 0% of values, and with the despike option selected to remove low frequency drift and potential signals from the geology. A second UCEDRIFT GX drift correction was applied with a 4 second window, ignoring 50% of highest values to minimize the occurrence of negative values associated with potential targets of interest. A 0.3-second latency correction was applied to all data measurements. Anomalies were visually inspected by the QC geophysicist and compared to the raw, unprocessed signals to ensure there were no significant reductions in anomaly peak values.

Initial targets of interest were selected with the Oasis Montaj USEANOMPICK GX (Pick Peaks Along a Profile tool) using an 11.7 mV sum channel threshold of four time gates as determined during the analysis of the IVS data. Some candidate targets were removed from the initial target list based on their signal attributes (e.g., decay, signal width,). Multiple target picks within 2.5 feet of each other were merged. The ARNG targets were merged and delineated by dataset ID into a master Geosoft database, "AllTargets".

There is the potential for geologic "noise" within the ARNG area, specifically on the east side of the MRS within the impact areas (Attachment 4). Metallic debris located along roads and cultural features such as underground utilities and old building foundations may also have a slight impact on estimated anomaly densities.

VSP Analysis and Results

Pacific Northwest Nation Laboratory's Visual Sampling Plan (VSP) software was used to produce anomaly density maps from transect anomaly data. The path of the DGM transects and target picks were imported into VSP and the anomaly density was estimated using Kriging. A 750-foot window size was used to ensure three adjacent transects were used for the estimation of anomaly density. Additional parameters used in VSP are included in Attachment 2.

The analysis of the anomaly density histogram and estimated anomaly density from the Kriging map suggests a maximum low density zone of approximately 225 anomalies per acre over the MRS with an average of 123 anomalies per acre. The low density zones and isolated medium density "islands" were assigned as the background density areas (Attachment 3, Map 1). High density zones were set at a minimum of 900 anomalies per acre, which encompasses four

potential target areas. Five potential target areas total are suspected based on the historical information and all of these are located on the east side of the MRS (Attachment 3, Map 1). Elevated anomaly density areas along single transects within the low density zone suggest target areas that are smaller than anticipated and / or are related to cultural features and debris, especially along roads. Full coverage DGM grids have been placed in these areas for further verification.

A relatively high background anomaly density can be due to a combination of factors, including the presence of geology/terrain "noise", cultural debris from hunting and other associated activities, and the potential for MEC and MD from ARNG activities associated with live firing at several ranges.

Grid Placement

The objective of the DGM grid investigation is to confirm the nature and extent of the target areas. The anomaly density map from the VSP analysis was used in conjunction with the historical information from previous investigations and the munitions use areas, firing fan locations, geologic maps, and satellite images to select the optimum locations for the full coverage DGM grids (Attachment 3, Map 2).

A total of seventy-eight grids locations have been established for a total coverage of 3.8 acres, which represents twenty percent of the planned transect coverage (Attachment 3, Map 3) as defined in the in the approved Work Plan. Twenty-five of these grids are located in historical analysis areas and nine grids reside in munitions use areas throughout the ARNG MRS (Attachment 1, Table 2).

The purpose of DGM grid placement in high anomaly density zones is to confirm the historical information and characterize the type, quantity, and depth extent of the munitions within the suspected target areas. Eleven grids, nine of which are 25x25 feet and two that are 50x50 feet, have been placed in high anomaly density zones. High density grids represent 6.4% of the total grid coverage in the ARNG MRS.

Eight 10x150-foot grids are distributed along the high/medium density boundary. The elongated geometry of these grids was selected to be parallel to the anomaly density gradient in order to better define the boundaries of the primary target areas.

Sixteen grids of various sizes are proposed in the medium anomaly density zone within the anticipated target areas. These grids were selected to provide additional characterization information over different density contours in an attempt to refine target area boundaries and also to assess the impact of the potential geologic/terrain response in these areas, (Attachment 3, Map 4).

Seven grids, either 10x150 or 10x250 feet , span the low/medium density boundary and are parallel to the anomaly density gradient in order to better determine the nature and extent of the suspected target areas.

Thirty-six 50x50-foot grids reside in the background area. The objective of a large number of grids placed in the background area is to determine the nature of the relatively high average anomaly density in these areas (123 anomalies per acre). Based on the available historical information, the elevated background anomaly density is not anticipated to be related to MEC/MD. Some of the anomaly density patterns in the background area are suspect to be related to cultural features based on satellite images and the characteristics of the anomaly density contours. Grid placements were bypassed in locations where cultural features have been confirmed by field notes or observation. Grids are proposed over the unconfirmed isolated zones, directly on the actual transects, to verify the source of the anomalies that were initially detected. If, however, cultural features or debris is confirmed during the grid setup process, the grid location will be re-evaluated. The locations of the remaining grids in the background area are located randomly in a strategic pattern throughout the low anomaly density areas for background verification. Grid density is greatest near the target area boundary for a higher degree of confidence that the extents of the target areas have been established.

To the extent possible, the full coverage DGM grid locations were verified using satellite images to ensure grids do not intersect known cultural features such as buildings and roads, or inaccessible terrain and bodies of water. Satellite images have limitations, and it may be necessary to move some of the grid locations during field activities. Brush cutters and grid setup teams will be provided specific instructions on the procedures for moving the location of a grid, if necessary. If a grid location needs to be modified, the revised location will be sent to the client for concurrence.

Sincerely,



Daryl Donatelli
MMRP Geophysicist
HydroGeoLogic, Inc.

Attachments:

Attachment 1. Tables
Attachment 2. VSP Geostatistical Estimation of Anomaly Density
Attachment 3. Maps
Attachment 4. ARNG Geology

Attachment 1. Tables

Table 1. DGM Transect Coverage and Proposed Grid Coverage Summary

	[1] Background Areas	Targets Areas	All Areas	Low Density Zones	[2] Low/Med Density Boundary	Medium Density Zones	[3] High/Med Density Boundary	High Density Zones
ARNG DGM Area *(acres)*	1779.6	1105.8	2885.3	1490.6	N/A	1028.7	N/A	366.0
# of Grids	36	42	78	22	7	29	9	11
Total Transect Area *(acres)*	8.12	10.48	18.6	8.4	N/A	6.87	N/A	3.3
% of Transect Coverage	0.46%	0.95%	0.64%	0.57%	N/A	0.67%	N/A	0.90%
Total grid area *(acres)*	2.1	1.7	3.8	1.4	N/A	2.0	N/A	0.4
% of Grid Coverage	0.12%	0.16%	0.13%	0.10%	N/A	0.19%	N/A	0.11%

[1] *Background areas include isolated "islands" of medium anomaly density zones that are not suspected to be MEC related*

[2] *Area totals for grids are split and included in both low and medium density zones*

[3] *Area totals for grids are split and included in both high and medium density zones*

Table 2. Detailed Grid Information

Unique_Grid_ID	X (center)	Y (center)	Size *(ft)*	Orientation (long axis)	Azimuth *(degrees)*	Density Zone	Density *(anomalies/acre)*	Area (ft^2)	Expected # of Targets @ 11.7 mV	*Expected # of Targets @ 19.5 mV	Area Information
ARNG_DGM_G001	2064503.2	894415.8	25x25	N	0	hi	1584	625	23	14	Historical Analysis Area
ARNG_DGM_G002	2062830.0	891529.8	25x25	N	0	hi	1490	625	21	13	Historical Analysis, Munitions Use Area
ARNG_DGM_G003	2065439.6	895306.1	25x25	N	0	hi	1406	625	20	13	Historical Analysis Area
ARNG_DGM_G004	2064088.2	898760.5	50x50	N	0	hi	1341	2500	77	48	Historical Analysis Area
ARNG_DGM_G005	2063812.4	891975.0	25x25	N	0	hi	1256	625	18	11	Historical Analysis Area
ARNG_DGM_G006	2065378.2	892911.4	25x25	N	0	hi	1204	625	17	11	Historical Analysis Area
ARNG_DGM_G007	2063996.6	893694.3	25x25	N	0	hi	1191	625	17	11	
ARNG_DGM_G008	2064226.9	895413.6	25x25	N	0	hi	1189	625	17	11	Historical Analysis Area
ARNG_DGM_G009	2064979.1	896288.6	25x25	N	0	hi	1115	625	16	10	Historical Analysis Area
ARNG_DGM_G010	2062308.0	891007.9	25x25	N	0	hi	1034	625	15	9	Historical Analysis, Munitions Use Area
ARNG_DGM_G011	2064349.2	889459.7	50x50	N	0	hi	941	2500	54	34	Historical Analysis, Munitions Use Area
ARNG_DGM_G012	2063466.3	893652.9	10x150	E	90	hi/med	921	1500	32	20	
ARNG_DGM_G013	2064037.1	890922.5	10x150	NW	315	hi/med	907	1500	31	20	Historical Analysis Area
ARNG_DGM_G014	2062895.4	890707.8	10x150	N	0	hi/med	899	1500	31	19	Historical Analysis, Munitions Use Area
ARNG_DGM_G015	2064299.3	896815.3	10x150	NW	315	hi/med	898	1500	31	19	Historical Analysis Area
ARNG_DGM_G016	2061738.6	891076.7	10x150	ENE	67.5	hi/med	897	1500	31	19	Munitions Use Area
ARNG_DGM_G017	2062047.1	892002.3	10x150	NW	315	hi/med	892	1500	31	19	Munitions Use Area
ARNG_DGM_G018	2063651.4	895504.1	10x150	NW	315	hi/med	887	1500	31	19	Historical Analysis Area
ARNG_DGM_G019	2064801.6	898265.0	10x150	NNE	22.5	hi/med	873	1500	30	19	Historical Analysis, Munitions Use Area

ARNG_DGM_G020	2063034.4	892496.0	10x150	NNW	337.5	hi/med	852	1500	29	18	Historical Analysis Area
ARNG_DGM_G021	2065993.5	891865.7	50x50	N	0	med	801	2500	46	29	Historical Analysis Area
ARNG_DGM_G022	2063509.6	890092.4	50x50	N	0	med	798	2500	46	29	Historical Analysis Area
ARNG_DGM_G023	2061809.3	898819.9	50x50	N	0	med	681	2500	39	25	Historical Analysis Area
ARNG_DGM_G024	2063473.9	898265.0	10x250	ENE	67.5	med	656	2500	38	24	Historical Analysis Area
ARNG_DGM_G025	2059825.9	897978.6	50x50	N	0	med	634	2500	36	23	Historical Analysis Area
ARNG_DGM_G026	2064166.5	897396.1	50x50	N	0	med	632	2500	36	23	Historical Analysis Area
ARNG_DGM_G027	2056335.9	893003.3	50x50	N	0	med	624	2500	36	23	
ARNG_DGM_G028	2062714.2	893542.5	50x50	N	0	med	618	2500	35	22	
ARNG_DGM_G029	2061344.4	891801.9	50x50	N	0	med	587	2500	34	21	
ARNG_DGM_G030	2063374.8	899275.7	10x250	WNW	292.5	med	580	2500	33	21	
ARNG_DGM_G031	2062386.0	889717.9	50x50	N	0	med	557	2500	32	20	Historical Analysis Area
ARNG_DGM_G032	2058318.7	897711.8	50x50	N	0	med	519	2500	30	19	
ARNG_DGM_G033	2063013.7	894474.7	50x50	N	0	med	517	2500	30	19	
ARNG_DGM_G034	2060638.0	889432.5	50x50	N	0	med	517	2500	30	19	
ARNG_DGM_G035	2057845.2	893903.4	50x50	N	0	med	507	2500	29	18	
ARNG_DGM_G036	2063315.8	887452.3	50x50	N	0	med	476	2500	27	17	Historical Analysis Area
ARNG_DGM_G037	2057580.9	896471.5	50x50	N	0	med	475	2500	27	17	
ARNG_DGM_G038	2054637.7	894910.2	50x50	N	0	med	460	2500	26	17	
ARNG_DGM_G039	2061546.5	890570.1	50x50	N	0	med	450	2500	26	16	
ARNG_DGM_G040	2060814.9	896973.9	50x50	N	0	med	436	2500	25	16	
ARNG_DGM_G041	2062161.7	887465.9	50x50	N	0	med	410	2500	24	15	Historical Analysis Area
ARNG_DGM_G042	2061876.2	888918.4	50x50	N	0	med	381	2500	22	14	Historical Analysis Area
ARNG_DGM_G043	2058712.8	892788.6	50x50	N	0	med	380	2500	22	14	
ARNG_DGM_G044	2060206.4	893046.6	50x50	N	0	med	359	2500	21	13	
ARNG_DGM_G045	2061797.4	892928.4	50x50	N	0	med	353	2500	20	13	
ARNG_DGM_G046	2062724.9	895122.2	50x50	N	0	med	344	2500	20	12	
ARNG_DGM_G047	2060958.3	891366.8	10x150	E	90	med	319	1500	11	7	
ARNG_DGM_G048	2059052.2	888932.3	50x50	N	0	med	310	2500	18	11	
ARNG_DGM_G049	2064654.1	888531.4	10x150	N	0	low/med	244	1500	8	5	Munitions Use Area
ARNG_DGM_G050	2059147.3	890969.1	50x50	N	0	med	241	2500	14	9	
ARNG_DGM_G051	2061868.7	898065.1	10x150	N	0	low/med	239	1500	8	5	
ARNG_DGM_G052	2062599.2	896188.5	10x250	E	90	low/med	233	2500	13	8	
ARNG_DGM_G053	2060366.8	890935.1	10x250	E	90	low/med	225	2500	13	8	
ARNG_DGM_G054	2062823.8	888488.9	10x150	N	0	low/med	224	1500	8	5	Historical Analysis Area
ARNG_DGM_G055	2061800.3	894378.0	10x250	NW	315	low/med	223	2500	13	8	
ARNG_DGM_G056	2061034.0	892552.3	10x250	E	90	low/med	222	2500	13	8	
ARNG_DGM_G057	2052892.6	898474.7	50x50	N	0	low	214	2500	12	8	
ARNG_DGM_G058	2055386.5	897122.0	50x50	N	0	low	210	2500	12	8	
ARNG_DGM_G059	2061487.4	896076.5	50x50	N	0	low	176	2500	10	6	
ARNG_DGM_G060	2061053.5	897900.2	50x50	N	0	low	146	2500	8	5	

ARNG_DGM_G061	2060944.8	893906.1	50x50	N	0	low	134	2500	8	5	
ARNG_DGM_G062	2058293.2	889887.5	50x50	N	0	low	129	2500	7	5	
ARNG_DGM_G063	2061871.2	896605.9	50x50	N	0	low	120	2500	7	4	
ARNG_DGM_G064	2059727.3	891643.1	50x50	N	0	low	114	2500	7	4	
ARNG_DGM_G065	2062016.8	895189.9	50x50	N	0	low	104	2500	6	4	
ARNG_DGM_G066	2056167.3	895600.1	50x50	N	0	low	93	2500	5	3	
ARNG_DGM_G067	2059806.7	896354.5	50x50	N	0	low	87	2500	5	3	Historical Analysis Area
ARNG_DGM_G068	2061105.5	894964.7	50x50	N	0	low	75	2500	4	3	
ARNG_DGM_G069	2060861.9	888540.7	50x50	N	0	low	68	2500	4	2	
ARNG_DGM_G070	2059626.2	889818.1	50x50	N	0	low	58	2500	3	2	
ARNG_DGM_G071	2065457.9	887860.3	50x50	N	0	low	54	2500	3	2	Munitions Use Area
ARNG_DGM_G072	2063625.1	888221.3	50x50	N	0	low	52	2500	3	2	Historical Analysis Area
ARNG_DGM_G073	2056961.3	898366.1	50x50	N	0	low	46	2500	3	2	
ARNG_DGM_G074	2059608.2	894872.2	50x50	N	0	low	36	2500	2	1	
ARNG_DGM_G075	2058311.2	895375.1	50x50	N	0	low	33	2500	2	1	
ARNG_DGM_G076	2056379.0	890743.2	50x50	N	0	low	24	2500	1	1	
ARNG_DGM_G077	2057199.5	892198.9	50x50	N	0	low	10	2500	1	0	
ARNG_DGM_G078	2054155.4	896083.8	50x50	N	0	low	8	2500	0	0	
Totals								**165125**	**1594**	**1004**	

** Assumes 73% of selected targets are greater than the 19.5 mV threshold based on a histogram of all ARNG targets. Amounts may vary by area.*

Geostatistical Estimation of Anomaly Density

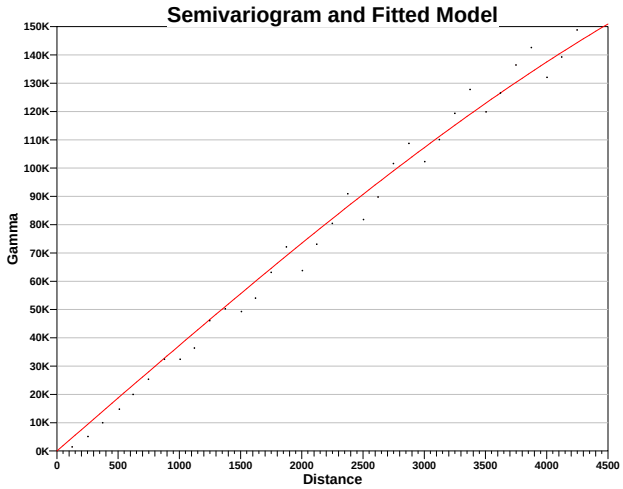
Summary

This report summarizes the parameters and processes used to generate kriging estimates of anomaly density from transect survey samples. The underlying variogram analyses for these results were performed using the GAM/GAMV codes[1]. The graphical user interface for these codes, GAM/GAMV GUI was developed by Sandia National Laboratories.

Variogram

The following table and figure summarize the variogram analysis and model used in the kriging estimation.

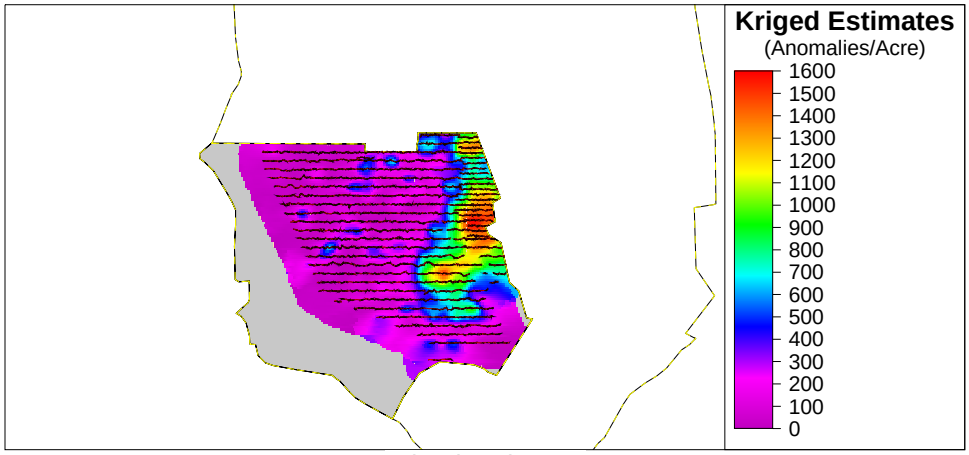
SUMMARY OF VARIOGRAM ANALYSIS	
Run Mode	Advanced
Variogram Data Field	Anomaly Density
Window Diameter	750
Variogram Control Parameters	
Distance Between Lags	276
Lag Tolerance Length	138
Variogram Model	
Nugget	2
Model type 1	Spherical
Range 1	8000
Sill 1	200000



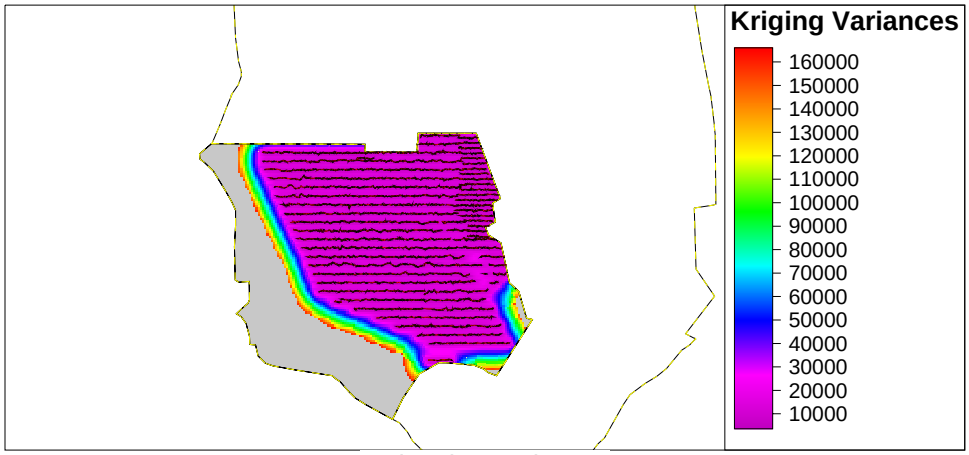
SUMMARY OF KRIGING ESTIMATION	
Run Mode	Advanced
Window Diameter	750
Estimation Type	Anomaly Density
Grid	
Number of X Nodes	154
Number of Y Nodes	133
X Origin	2048699.35
Y Origin	883080.09

X Block Size	125
Y Block Size	125
Search/Discretization	
Use Octant Search	True
Max Number of Neighbors	8
Kriging Minimum	2
Kriging Maximum	50
Max Search Radius	1500
Min Search Radius	1500
Reset Negative Values	True

Site Map With Kriging Results
The following figures show the results from the kriging estimation. The top figure shows the estimate values with the variance of the estimates shown in the lower figure. Areas within the sample area but without color-shading indicate areas where estimation was not possible due to lack of data within the search neighborhood.



Kriged Estimates



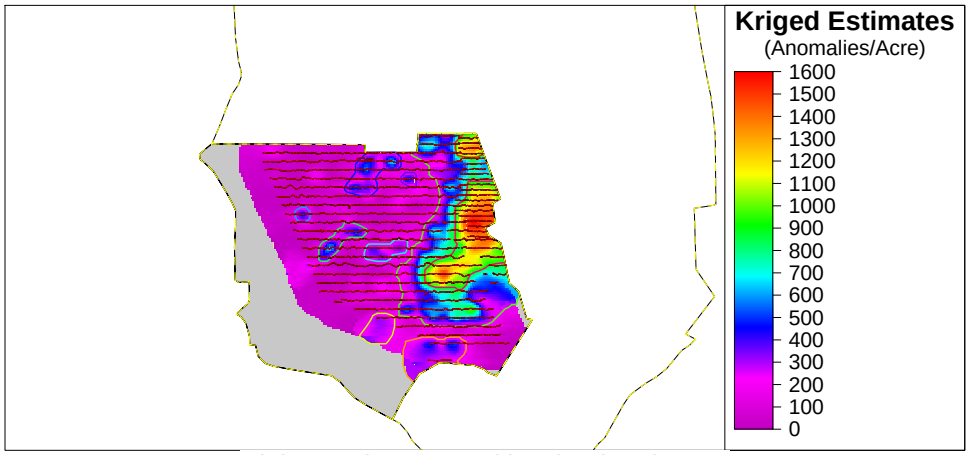
Estimation Variances

Primary Analysis Objective
The primary purpose of this analysis is to generate a continuous estimate of anomaly density for the entire sample site based on limited geophysical transect data

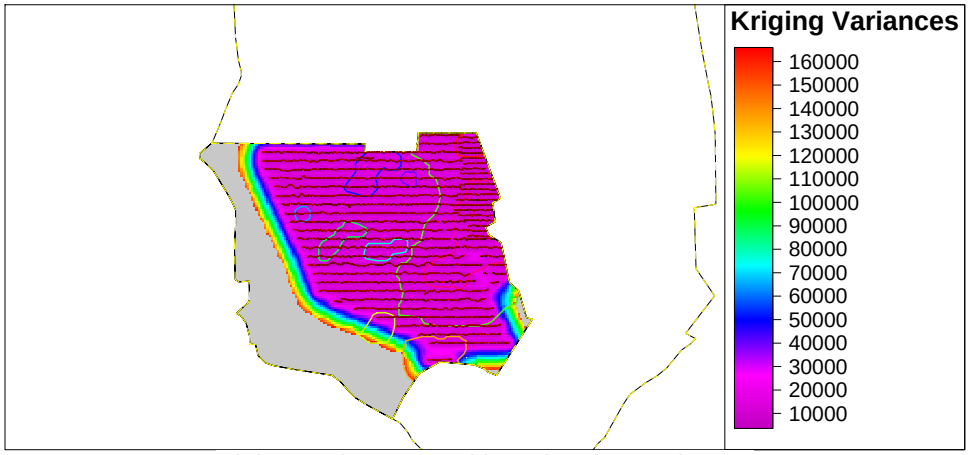
Analytical Approach
The kriging estimate is developed using observational data collected from field surveys along limited sampling transects.

Prior to kriging, the observation data are transformed from location values to density values. This is done using a moving window which is translated along each sample transect. The total anomaly count and total transect sample area within the window area are used to compute a sample anomaly density value at a spacing of 1/6th the averaging window diameter along the transects. These sample anomaly density values are then used as conditioning data within the kriging estimator to estimate anomaly density values at un-sampled locations. The underlying spatial correlation of the sample anomaly density data is modeled with a variogram. The variogram model is then used within the Ordinary Kriging estimator to generate estimates with minimized variance. No estimate is generated for locations with insufficient sample data within the kriging search radius. Estimated anomaly density values are in the units of anomalies per acre.

Delineate High Density Areas Results



High Density Areas with Kriged Estimates



High Density Areas with Estimation Variances

The purpose of the delineation process is to draw reproducible boundaries around high density anomaly regions given user specifications. This module required automatic kriged density estimates data. The delineated high density regions are displayed on the map in different colors.

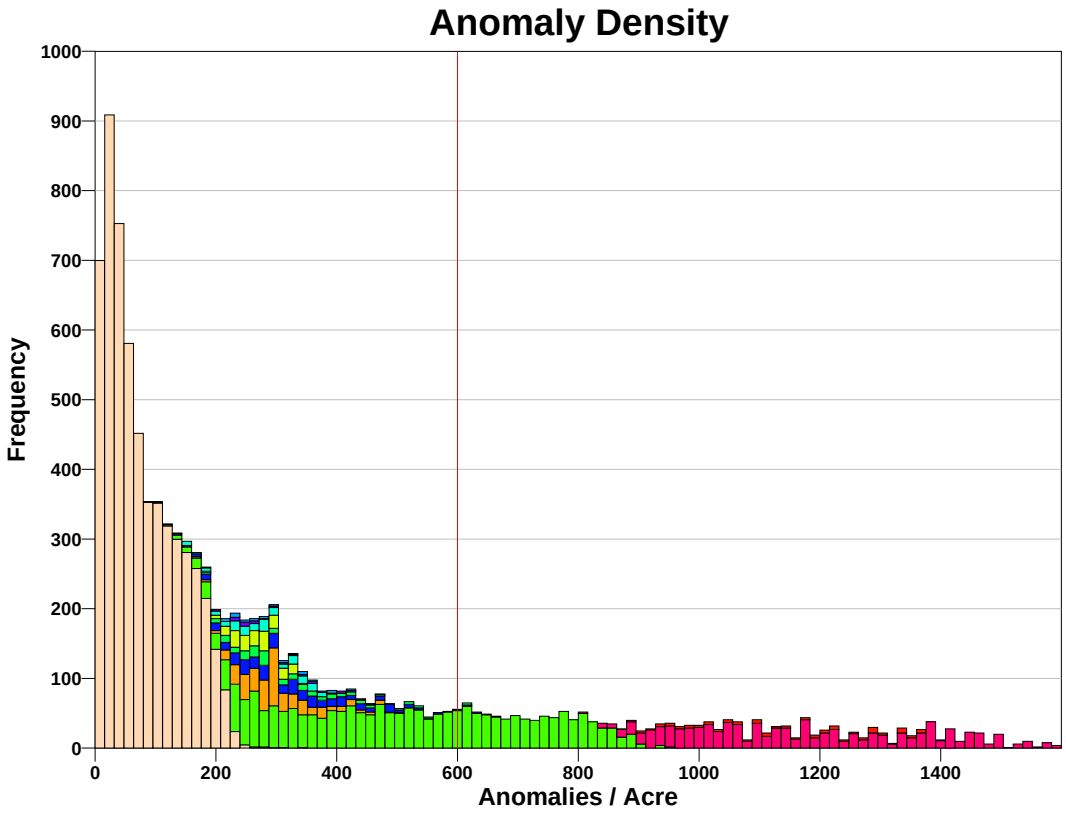
A total of 10regions were delineated. A table that summarizes the attributes of the delineated areas is presented below.

Name	Creation Parameters	Size (acres)	Transect Area (acres)	Anomalies	Kriged Density (per acre)	Potential Anomalies
High Density Area 1	Auto Krig: 900 / acre, 10 acres min	336.86	2.82	3232	1169.63	394001
High Density Area 2	Auto Krig: 900 / acre, 10 acres min	40.87	0.48	452	1139.47	46571
Medium Density Area 3	Auto Krig: 225 / acre, 10 acres min	137.63	0.25	79	300.29	41329
Medium Density Area 4	Auto Krig: 225 / acre, 10 acres min	59.54	0.07	20	267.98	15957
Medium Density Area 5	Auto Krig: 225 / acre, 10 acres min	1162.98	8.26	6248	721.77	839409

Medium Density Area 6	Auto Krig: 225 / acre, 10 acres min	59.90	0.38	153	328.88	19701
Medium Density Area 7	Auto Krig: 225 / acre, 10 acres min	49.32	0.29	89	277.78	13700
Medium Density Area 8	Auto Krig: 225 / acre, 10 acres min	13.99	0.09	35	306.93	4294
Medium Density Area 9	Auto Krig: 225 / acre, 10 acres min	107.03	0.74	263	330.58	35381
Medium Density Area 10	Auto Krig: 225 / acre, 10 acres min	14.35	0.09	30	306.08	4392

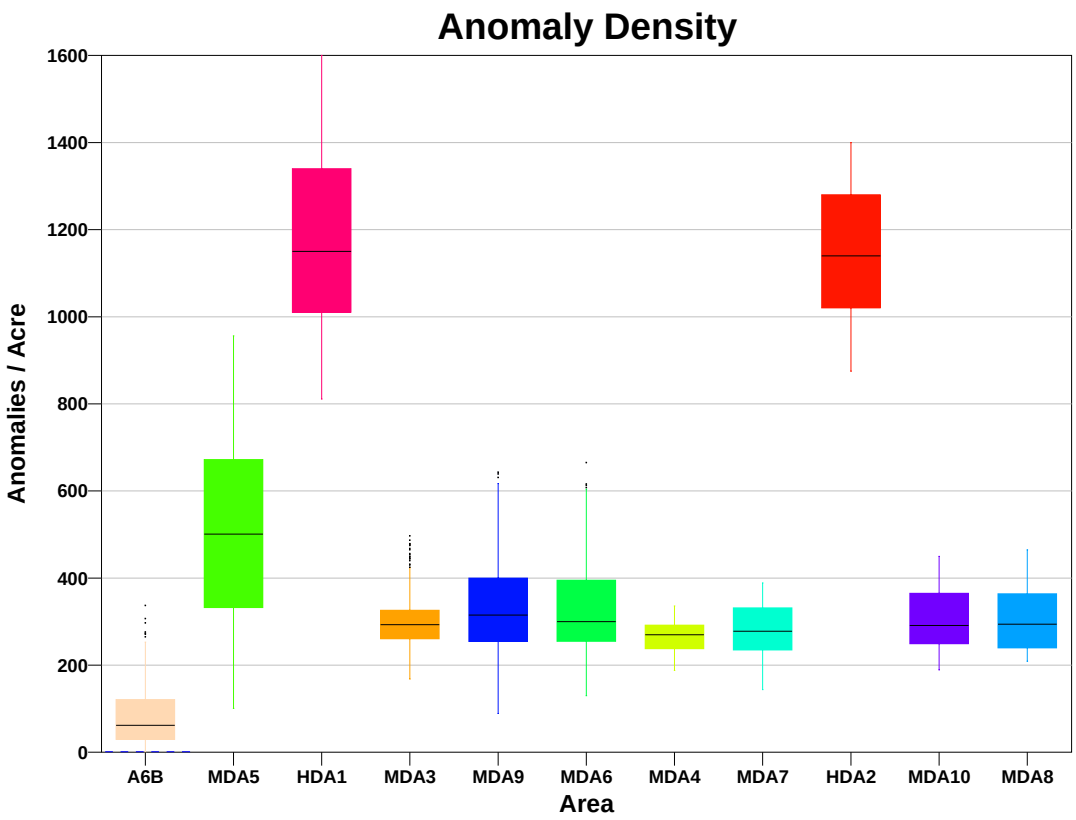
Graphical Summary

Histogram:



The histogram displays the empirical distributions of the flagged anomalies per acre. The delineated high density areas are indicated by their different colors.

Boxplot:



The composite box plot displays box and whisker plots for each selected high density area. The boxplot displays the 25th, 50th and 75th percentiles of the distribution which are represented by the bottom, middle and top lines respectively in the body of the box. A measure of spread using these summaries is the interquartile range (IQR) which is defined as the distance between the 75th and 25th percentiles. The whiskers of the plot extend to 1.5*IQR beyond the 25th or 75th percentiles and represent the body of typical observations. If an observation falls outside of the whiskers then it is considered an outlier (does not fit the overall distribution) and plotted as a single circular point on the graph. The square points are shown for high density areas that do not have enough points to create a boxplot.

Both the histogram and the boxplots are useful for displaying and comparing flagged anomalies among different delineated high density areas. They are also useful for comparing the distribution of anomalies in high density areas to the background distribution.

References

[1]Deutsch, C.V. and A.G. Journel. 1998. *GSLIB Geostatistical Software Library and User's Guide*, 2nd Edition, Applied Geostatistics Series, Oxford University Press, Inc. New York, NY.

This report was automatically produced* by Visual Sample Plan (VSP) software version 6.3.

Software and documentation available at http://vsp.pnnl.gov

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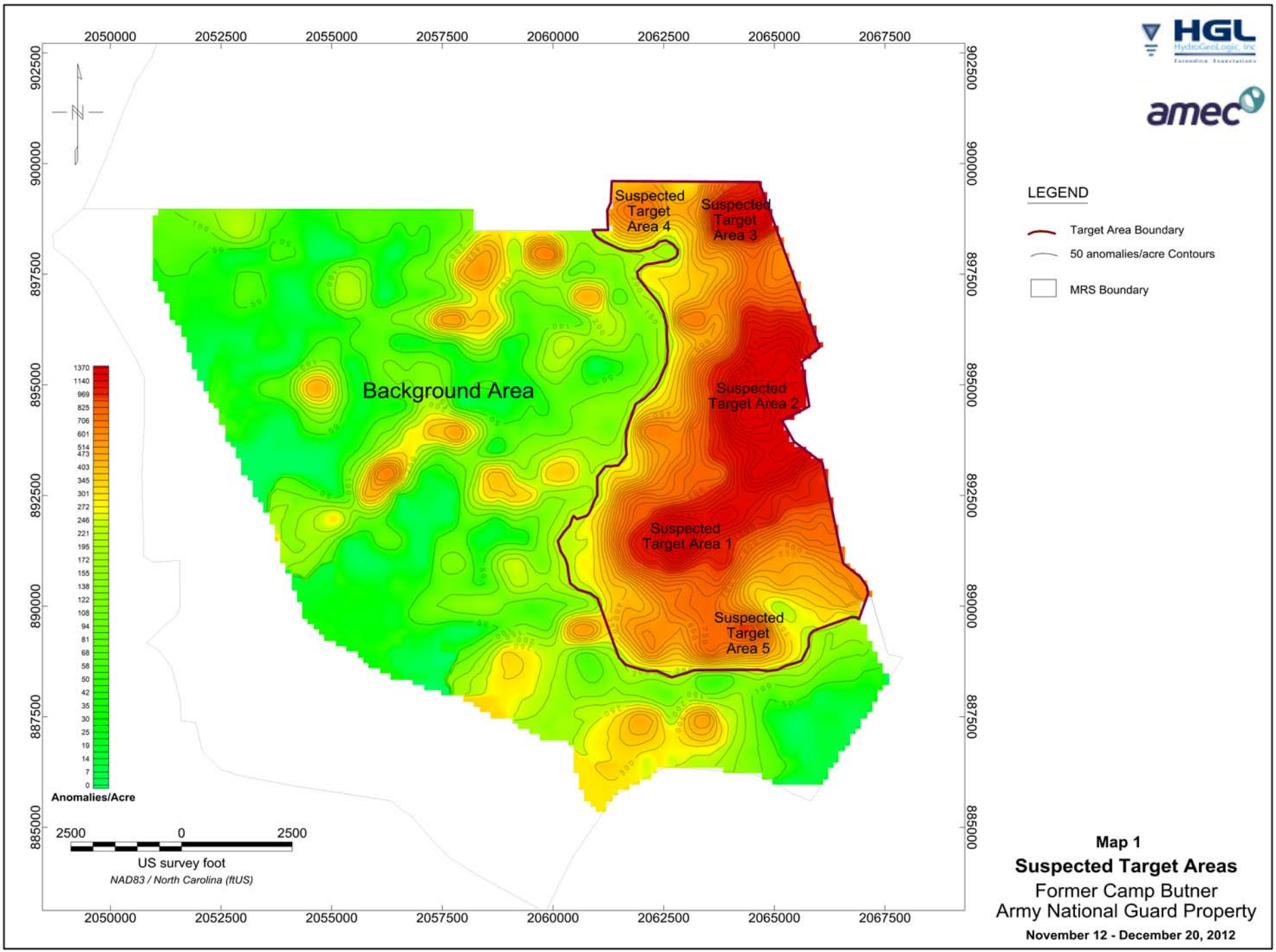
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Suspected Target Area 4
Suspected Target Area 3
Suspected Target Area 2
Suspected Target Area 1
Suspected Target Area 5
Background Area
1370
1140
969
825
706
601
514
473
403
345
301
272
246
221
195
172
155
138
122
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30
25
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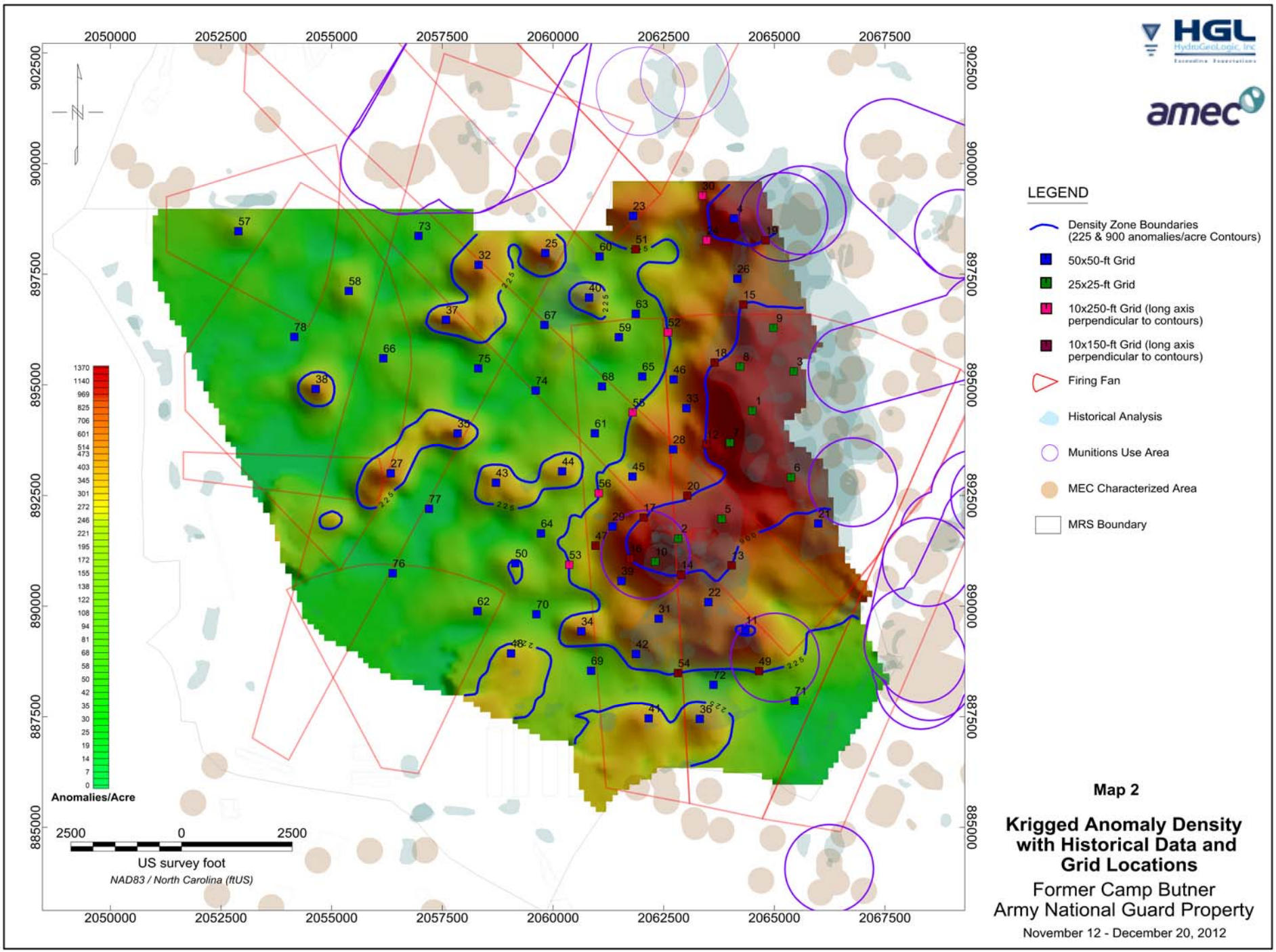
7
0
Anomalies/Acre
2500
0
2500
US survey foot
NAD83 / North Carolina (ftUS)
LEGEND
Target Area Boundary
50 anomalies/acre Contours
MRS Boundary
Map 1
Suspected Target Areas
Former Camp Butner
Army National Guard Property
November 12 - December 20, 2012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30
25
19
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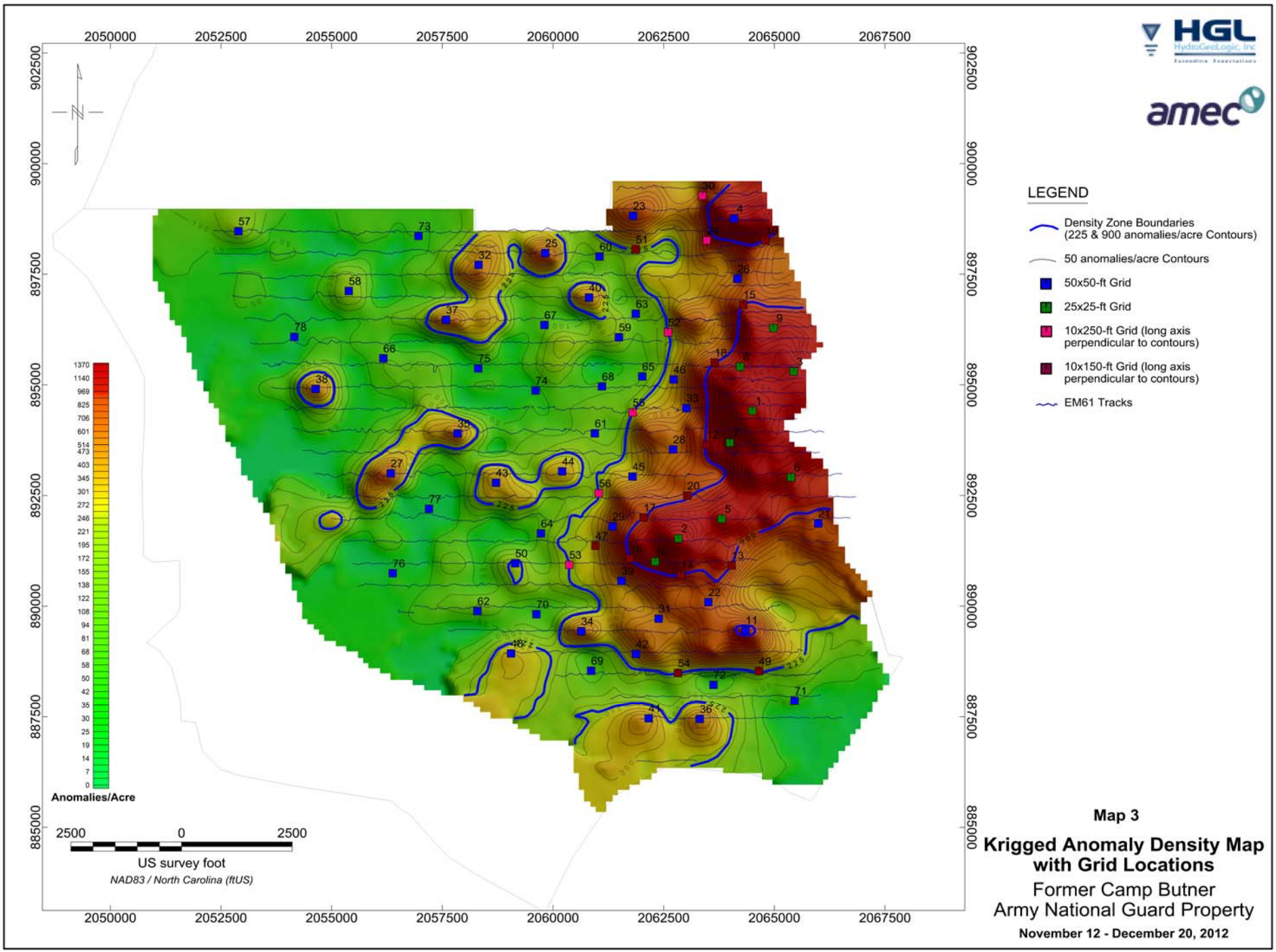
7
0
Anomalies/Acre
2500
0
2500
US survey foot
NAD83 / North Carolina (ftUS)
LEGEND
Density Zone Boundaries
(225 & 900 anomalies/acre Contours)
50x50-ft Grid
25x25-ft Grid
10x250-ft Grid (long axis
perpendicular to contours)
10x150-ft Grid (long axis
perpendicular to contours)
Firing Fan
Historical Analysis
Munitions Use Area
MEC Characterized Area
MRS Boundary
Map 2
Krigged Anomaly Density
with Historical Data and
Grid Locations
Former Camp Butner
Army National Guard Property
November 12 - December 20, 2012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897500
895000
892500
890000
887500
885000
LEGEND
Density Zone Boundaries
(225 & 900 anomalies/acre Contours)
50 anomalies/acre Contours
50x50-ft Grid
25x25-ft Grid
10x250-ft Grid (long axis perpendicular to contours)
10x150-ft Grid (long axis perpendicular to contours)
EM61 Tracks
1370
1140
969
825
706
601
514
473
403
345
301
272
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221
195
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155
138
122
108
94
81
68
58
50
42
35
30
25
19
14
7
0
Anomalies/Acre
2500
0
2500
US survey foot
NAD83 / North Carolina (ftUS)
Map 3
Krigged Anomaly Density Map with Grid Locations
Former Camp Butner
Army National Guard Property
November 12 - December 20, 2012

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APPENDIX F-3

RC1 PROPOSED GRID LOCATIONS MEMO

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April 9, 2013

Ms. Elise Goggin
U.S. Army Corps of Engineers
Huntsville Center
Contract No. W912DY-10-D0023
FUDS Project No. I04NC000902
W912DY-10-D-0023

Subject: Range Complex 1 digital geophysical mapping anomaly density estimates and proposed grid locations for the Former Camp Butner Army National Guard Property, Hand Grenade Range, and Flame Thrower Range Remedial Investigation/Feasibility Study Project, Granville County, North Carolina.

Introduction

The investigation strategy proposed for the Range Complex 1 (RC1) munitions response site includes: (1) DGM characterization along transects that vary in spacing; and (2) placement of full coverage DGM grids in areas of high, medium, and low anomaly density. The selected geophysical transect spacing is based on munitions used and findings from previous site characterizations and removal actions (RA).

The proposed characterization strategy in the approved Work Plan (dependent upon rights-of-entry [ROE] granted) consists of the following:

- Conduct DGM transect survey of 110 miles of 3-foot-wide (40.0 acres) using the Geonics EM61-MK2 in MEC use areas.
- Conduct full coverage DGM surveys to evaluate approximately one hundred and thirty nine (139) 50-foot by 50-foot grids (approximately 8.0 acres) or 20% of the accessible transect coverage, using an EM61-MK2 in MEC use areas.
- Conduct full coverage DGM surveys to evaluate approximately nineteen (19) 50-foot by 50-foot grids (approximately 1.1 acres), using an EM61-MK2 in satellite historical use areas.

Grid locations in satellite historical use areas will be determined after analog geophysical mapping (AGM) is completed and will incorporate the AGM findings as well as the results of the surface reconnaissance transects to be completed.

All MEC-like targets above a threshold defined by the IVS results and 10% of the residual anomalies in the full coverage DGM grids will be intrusively investigated to adequately characterize anomaly sources. Due to several inaccessible DGM areas a minimal portion of DGM transects were selected for AGM surveys. Attachment 1 summarizes the proposed grid coverage.

Data Collection Methods

DGM data was collected using a Geonics, Ltd., EM61-MK2 metal detector with wide area augmentation system (WAAS) capable Global Positioning System (GPS) methods (Camp Butner Final Work Plan 3.2.1). Sixty nine (69) miles of the one hundred and ten (110) proposed transect miles are accessible within RC1 on private properties where ROE were granted. Transects data within about 100 to 300 feet of power lines have been determined to be unreliable due to excessive noise. These transect gaps will be converted to analog geophysical mapping (AGM) if the safe distance from the overhead power lines can be maintained and to reconnaissance survey transects beyond the safe distance.

Data Processing / Target Selection

Raw transect data in the RC1 MRS was processed using Geosoft Oasis Montaj. Data were leveled and drift corrected using a 2-step drift correction. First, the UCEDRIFT GX drift correction tool was used with a 20 second window, ignoring 0% of values, and with the despike option selected to remove low frequency drift and potential signals from the geology. A second UCEDRIFT GX drift correction was applied with a four second window, ignoring 50% of highest values to minimize the occurrence of negative values associated with potential targets of interest. A two to three point non-linear filter was applied to data that were affected by power line noise. A 0.3-second latency correction was applied to all data measurements. Anomalies were visually inspected by the QC geophysicist and compared to the raw, unprocessed signals to ensure there were no missed targets due to significant reductions in anomaly peak values.

Initial targets of interest were selected with the Oasis Montaj USEANOMPICK GX (Pick Peaks Along a Profile tool) using an 11.7 mV sum channel threshold of four time gates as determined during the analysis of the IVS data. Some candidate targets were removed from the initial target list based on their signal attributes (e.g., decay, signal width,). Multiple target picks within 2.5 feet of each other were merged. The RC1 targets were merged and delineated by dataset ID into a master Geosoft database, “AllTargets”.

There is the potential for geologic “noise” within the RC1 area (Attachment 4). Metallic debris located along roads and cultural features such as underground utilities and old building foundations may also have a slight impact on estimated anomaly densities.

VSP Analysis and Results

Pacific Northwest Nation Laboratory’s Visual Sampling Plan (VSP) software was used to produce anomaly density maps from transect anomaly data. The path of the DGM transects and target picks as of April 4, 2013 were imported into VSP and the anomaly density was estimated using Krigging. A 750-foot window size was used to ensure three adjacent transects were used for the estimation of anomaly density. Additional parameters used in VSP are included in Attachment 2.

The analysis of the anomaly density histogram and estimated anomaly density from the Kriging map suggests a maximum low density zone of approximately 225 anomalies per acre over the MRS with an average of 116 anomalies per acre. The low density zones and isolated medium density "islands" were assigned as the background density areas (Attachment 3, Map 3). High density zones were set at a minimum of 900 anomalies per acre, which encompasses two potential target areas. Both potential target areas suspected are also based on the historical information and are located on the south side of the MRS (Attachment 3, Map 3). Elevated anomaly density areas along single transects within the low density zone suggest target areas that are smaller than anticipated and / or are related to cultural features and debris, especially along roads. Full coverage DGM grids have been placed in these areas for further verification where cultural features are not evident from satellite images.

A relatively high background anomaly density can be due to a combination of factors, including the presence of geology/terrain "noise", cultural debris from hunting and other associated activities, historical homestead remnants, and the potential for MEC and MD from RC1 activities associated with live firing at several ranges.

Grid Placement

The objective of the DGM grid investigation is to confirm the nature and extent of the target areas. The anomaly density map from the VSP analysis was used in conjunction with the historical information from previous investigations and the munitions use areas, firing fan locations, geologic maps, and satellite images to select the optimum locations for the full coverage DGM grids (Attachment 3, Map 2). Property ROEs and power lines limit the available grid locations. HGL anticipates brush cutting limitations on some private properties will either lead to a re-evaluation of select grid locations or survey methods may be changed to analog.

Ninety seven (97) grids locations have been established for a total coverage of 5.0 acres, which represents twenty percent of the accessible transect coverage in RC1 as defined in the in the approved Work Plan. Many of these grids are located in historical analysis areas and munitions use areas throughout the RC1 MRS.

The purpose of DGM grid placement in high anomaly density zones is to confirm the historical information and characterize the type, quantity, and depth extent of the munitions within the suspected target areas. Nine (9) 25x25-foot grids have been placed in high anomaly density zones. High density grids represent 2.6% of the total grid coverage in the RC1 MRS.

Seven (7) 10x150-foot grids are distributed along the high/medium density boundary. The elongated geometry of these grids was selected to be parallel to the anomaly density gradient in order to better define the boundaries of the primary target areas. High/medium density grids represent 4.8% of the total grid coverage in the RC1 MRS.

Twenty three (23) 50x50-foot grids of are proposed in the medium anomaly density zone within the anticipated target areas. These grids were selected to provide additional characterization

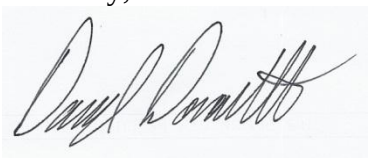
information over different density contours in an attempt to refine target area boundaries. Medium density grids represent 26.3% of the total grid coverage in the RC1 MRS.

Nine (9) 10x250-foot grids span the low/medium density boundary and are parallel to the anomaly density gradient in order to better determine the nature and extent of the suspected target areas. Low/medium density grids represent 10.3% of the total grid coverage in the RC1 MRS.

Forty nine (49) 50x50-foot grids reside in the background area including medium density non-target area "islands". The objective of a larger percentage of grids placed in the background area is to determine the nature of the relatively high average anomaly density in these areas (116 anomalies per acre). Based on the available historical information, the elevated background anomaly density is not anticipated to be related to MEC/MD. Some of the anomaly density patterns in the background area are suspect to be related to cultural features based on satellite images and the characteristics of the anomaly density contours. Grid placements were bypassed in locations where cultural features have been confirmed by field notes or observation. Grids are proposed over the unconfirmed isolated zones, directly on the actual transects, to verify the source of the anomalies that were initially detected. If, however, cultural features or debris is confirmed during the grid setup process, the grid location will be re-evaluated. The locations of the remaining grids in the background area are located randomly in a strategic pattern throughout the low anomaly density areas for background verification. Grid density is greatest near the target area boundary for a higher degree of confidence that the extents of the target areas have been established. Background grids represent 56.0% of the total grid coverage in the RC1 MRS.

To the extent possible, the full coverage DGM grid locations were verified using satellite images to ensure grids do not intersect known cultural features such as buildings and roads, or inaccessible terrain and bodies of water. Satellite images have limitations, and it may be necessary to move some of the grid locations during field activities. Brush cutters and grid setup teams will be provided specific instructions on the procedures for moving the location of a grid, if necessary. If a grid location needs to be modified, the revised location will be sent to the client for concurrence.

Sincerely,



Daryl Donatelli
MMRP Geophysicist
HydroGeoLogic, Inc.

Attachments:

Attachment 1. Detailed Grid Table
Attachment 2. VSP Geostatistical Estimation of Anomaly Density
Attachment 3. Maps

Attachment 4. Geology

Attachment 1. Detailed Grid Table

Unique Target ID	X (center)	Y (center)	Size (*ft*)	Orientation (long axis)	Density Zone	Density (*anomalies/acre*)	Area (ft^2)	Expected # targets	Relocation Leeway
RC1_DGM_G001	2065947	894411	25x25	N-S	hi	1773	625	25	200 ft any direction
RC1_DGM_G002	2067155	895804	25x25	N-S	hi	1301	625	19	200 ft any direction
RC1_DGM_G003	2066542	893597	25x25	N-S	hi	1231	625	18	200 ft any direction
RC1_DGM_G004	2067130	894504	25x25	N-S	hi	1218	625	17	200 ft any direction
RC1_DGM_G005	2064584	899687	25x25	N-S	hi	1172	625	17	200 ft any direction
RC1_DGM_G006	2067333	892559	25x25	N-S	hi	1138	625	16	200 ft any direction
RC1_DGM_G007	2065073	900176	25x25	N-S	hi	1018	625	15	200 ft any direction
RC1_DGM_G008	2066552	898650	25x25	N-S	hi	966	625	14	100 ft any direction
RC1_DGM_G009	2066147	895693	25x25	N-S	hi	955	625	14	200 ft any direction
RC1_DGM_G010	2067842	895174	10x150	E-W	med/hi	907	1500	31	100 ft NNE-SSW
RC1_DGM_G011	2067595	893384	10x150	E-W	med/hi	901	1500	31	100 ft NNW-SSE
RC1_DGM_G012	2066489	892657	10x150	NNW-SSE	med/hi	900	1500	31	ENE-WSW
RC1_DGM_G013	2063812	899759	10x150	NW-SE	med/hi	898	1500	31	100 ft NE-SW
RC1_DGM_G014	2064719	900465	10x150	NNW-SSE	med/hi	898	1500	31	100 ft ENE_WSW
RC1_DGM_G015	2066483	896429	10x150	N-S	med/hi	898	1500	31	100 ft E-W
RC1_DGM_G016	2065933	900356	10x150	NE-SW	med/hi	897	1500	31	100 ft NW-SE
RC1_DGM_G017	2063814	901498	50x50	N-S	med	860	2500	49	100 ft any direction
RC1_DGM_G018	2062491	902363	50x50	N-S	med	843	2500	48	100 ft any direction
RC1_DGM_G019	2065970	896614	50x50	N-S	med	795	2500	46	100 ft any direction
RC1_DGM_G020	2067901	895864	50x50	N-S	med	732	2500	42	100 ft any direction
RC1_DGM_G021	2063919	900516	50x50	N-S	med	649	2500	37	100 ft any direction
RC1_DGM_G022	2062123	903416	50x50	N-S	med	648	2500	37	100 ft any direction
RC1_DGM_G023	2067345	898271	50x50	N-S	med	641	2500	37	100 ft any direction
RC1_DGM_G024	2067456	896924	50x50	N-S	med	597	2500	34	100 ft any direction
RC1_DGM_G025	2068040	894446	50x50	N-S	med	594	2500	34	100 ft any direction
RC1_DGM_G026	2071003	894515	50x50	N-S	med	504	2500	29	100 ft any direction
RC1_DGM_G027	2070160	895724	50x50	N-S	med	482	2500	28	100 ft any direction
RC1_DGM_G028	2057769	908460	50x50	N-S	med	473	2500	27	100 ft any direction
RC1_DGM_G029	2065665	901021	50x50	N-S	med	471	2500	27	100 ft any direction
RC1_DGM_G030	2068270	893443	50x50	N-S	med	462	2500	27	100 ft any direction
RC1_DGM_G031	2068536	896694	50x50	N-S	med	457	2500	26	100 ft any direction
RC1_DGM_G032	2063474	907436	50x50	N-S	med	444	2500	25	100 ft any direction
RC1_DGM_G033	2064932	902407	50x50	N-S	med	431	2500	25	100 ft any direction
RC1_DGM_G034	2055124	910718	50x50	N-S	med	431	2500	25	100 ft any direction

RC1_DGM_G035	2077477	901820	50x50	N-S	med	424	2500	24	100 ft any direction
RC1_DGM_G036	2062371	900506	50x50	N-S	med	419	2500	24	100 ft any direction
RC1_DGM_G037	2066990	891603	50x50	N-S	med	412	2500	24	100 ft any direction
RC1_DGM_G038	2068911	895138	50x50	N-S	med	388	2500	22	100 ft any direction
RC1_DGM_G039	2068244	892484	50x50	N-S	med	339	2500	19	100 ft any direction
RC1_DGM_G040	2066709	900508	50x50	N-S	med	331	2500	19	100 ft any direction
RC1_DGM_G041	2069934	899482	50x50	N-S	med	317	2500	18	100 ft any direction
RC1_DGM_G042	2074290	902453	50x50	N-S	med	316	2500	18	100 ft any direction
RC1_DGM_G043	2056965	909474	50x50	N-S	med	312	2500	18	100 ft any direction
RC1_DGM_G044	2068182	898781	50x50	N-S	med	312	2500	18	100 ft any direction
RC1_DGM_G045	2068749	908241	50x50	N-S	med	301	2500	17	100 ft any direction
RC1_DGM_G046	2057784	901747	50x50	N-S	med	298	2500	17	100 ft any direction
RC1_DGM_G047	2063385	903538	50x50	N-S	med	288	2500	17	100 ft any direction
RC1_DGM_G048	2063165	905653	50x50	N-S	med	273	2500	16	100 ft any direction
RC1_DGM_G049	2071411	899495	50x50	N-S	med	263	2500	15	100 ft any direction
RC1_DGM_G050	2064337	881010	50x50	N-S	med	262	2500	15	100 ft any direction
RC1_DGM_G051	2068842	892967	10x250	NW-SW	med/low	246	2500	14	100 ft NE-SW
RC1_DGM_G052	2069268	894427	10x250	NW-SE	med/low	232	2500	13	200 ft NE-SW
RC1_DGM_G053	2069343	899023	10x250	NW-SE	med/low	229	2500	13	100 ft NE-SW
RC1_DGM_G054	2067907	900557	10x250	NE-SW	med/low	227	2500	13	100 ft ENE-WSW
RC1_DGM_G055	2066668	901617	10x250	NE-SW	med/low	226	2500	13	100 ft NW-SE
RC1_DGM_G056	2067656	890988	10x250	E-W	med/low	226	2500	13	100 ft N-S
RC1_DGM_G057	2069003	897436	10x250	E-W	med/low	226	2500	13	100 ft N-S
RC1_DGM_G058	2061976	904495	10x250	NNE-SSW	med/low	224	2500	13	200 ft ENE-WSW
RC1_DGM_G059	2064156	904025	10x250	NNE-SSW	med/low	219	2500	13	100 ft WNW-ESE
RC1_DGM_G060	2074927	905149	50x50	N-S	low	204	2500	12	100 ft any direction
RC1_DGM_G061	2066227	902390	50x50	N-S	low	200	2500	11	100 ft any direction
RC1_DGM_G062	2074494	907417	50x50	N-S	low	191	2500	11	100 ft any direction
RC1_DGM_G063	2065500	905061	50x50	N-S	low	178	2500	10	100 ft any direction
RC1_DGM_G064	2067627	901493	50x50	N-S	low	178	2500	10	100 ft any direction
RC1_DGM_G065	2071374	895959	50x50	N-S	low	176	2500	10	100 ft any direction
RC1_DGM_G066	2067440	889871	50x50	N-S	low	171	2500	10	100 ft any direction
RC1_DGM_G067	2070798	900921	50x50	N-S	low	163	2500	9	100 ft any direction
RC1_DGM_G068	2062704	906920	50x50	N-S	low	147	2500	8	100 ft any direction
RC1_DGM_G069	2062460	881689	50x50	N-S	low	144	2500	8	100 ft any direction
RC1_DGM_G070	2070468	892619	50x50	N-S	low	141	2500	8	100 ft any direction
RC1_DGM_G071	2070566	890934	50x50	N-S	low	136	2500	8	100 ft any direction
RC1_DGM_G072	2068349	891888	50x50	N-S	low	136	2500	8	100 ft any direction
RC1_DGM_G073	2075691	910496	50x50	N-S	low	128	2500	7	100 ft any direction
RC1_DGM_G074	2075987	893539	50x50	N-S	low	127	2500	7	100 ft any direction

RC1_DGM_G075	2066845	903206	50x50	N-S	low	126	2500	7	100 ft any direction
RC1_DGM_G076	2065193	903469	50x50	N-S	low	112	2500	6	100 ft any direction
RC1_DGM_G077	2055230	909936	50x50	N-S	low	107	2500	6	100 ft any direction
RC1_DGM_G078	2067766	906959	50x50	N-S	low	107	2500	6	100 ft any direction
RC1_DGM_G079	2075994	887878	50x50	N-S	low	107	2500	6	100 ft any direction
RC1_DGM_G080	2065844	884456	50x50	N-S	low	104	2500	6	100 ft any direction
RC1_DGM_G081	2060642	904752	50x50	N-S	low	101	2500	6	100 ft any direction
RC1_DGM_G082	2069096	889112	50x50	N-S	low	94	2500	5	100 ft any direction
RC1_DGM_G083	2073917	893501	50x50	N-S	low	84	2500	5	100 ft any direction
RC1_DGM_G084	2070235	893912	50x50	N-S	low	74	2500	4	100 ft any direction
RC1_DGM_G085	2068828	905016	50x50	N-S	low	69	2500	4	100 ft any direction
RC1_DGM_G086	2055675	903964	50x50	N-S	low	64	2500	4	100 ft any direction
RC1_DGM_G087	2071834	893965	50x50	N-S	low	63	2500	4	100 ft any direction
RC1_DGM_G088	2071067	903514	50x50	N-S	low	62	2500	4	100 ft any direction
RC1_DGM_G089	2074794	891027	50x50	N-S	low	61	2500	3	100 ft any direction
RC1_DGM_G090	2069720	902897	50x50	N-S	low	47	2500	3	100 ft any direction
RC1_DGM_G091	2055479	908568	50x50	N-S	low	43	2500	2	100 ft any direction
RC1_DGM_G092	2070254	898768	50x50	N-S	low	41	2500	2	100 ft any direction
RC1_DGM_G093	2052889	910366	50x50	N-S	low	40	2500	2	100 ft any direction
RC1_DGM_G094	2069988	896653	50x50	N-S	low	38	2500	2	100 ft any direction
RC1_DGM_G095	2069850	901491	50x50	N-S	low	34	2500	2	100 ft any direction
RC1_DGM_G096	2054885	900430	50x50	N-S	low	32	2500	2	100 ft any direction
RC1_DGM_G097	2071093	896994	50x50	N-S	low	8	2500	0	100 ft any direction
Totals							**218625**	**1622**	

Geostatistical Estimation of Anomaly Density

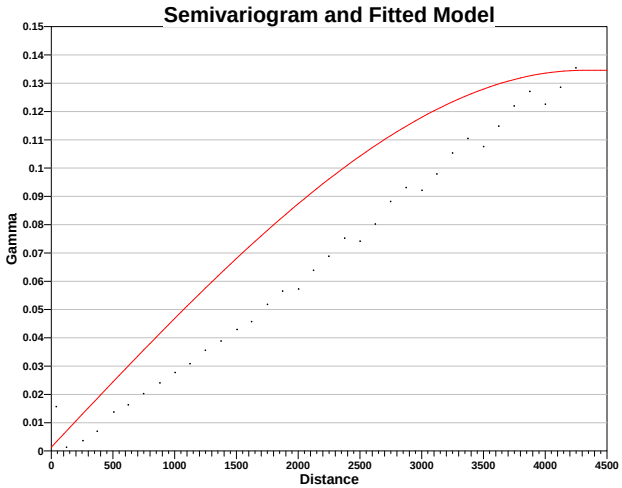
Summary

This report summarizes the parameters and processes used to generate kriging estimates of anomaly density from transect survey samples. The underlying variogram analyses for these results were performed using the GAM/GAMV codes[1]. The graphical user interface for these codes, GAM/GAMV GUI was developed by Sandia National Laboratories.

Variogram

The following table and figure summarize the variogram analysis and model used in the kriging estimation.

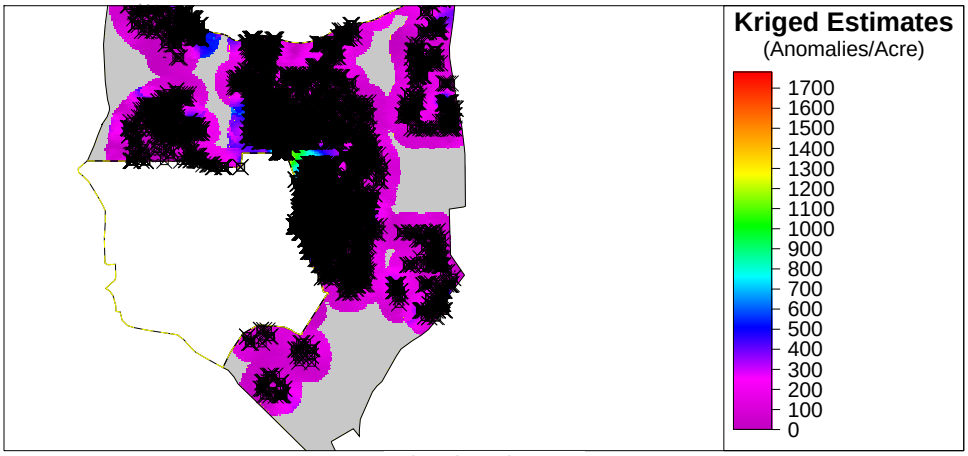
SUMMARY OF VARIOGRAM ANALYSIS	
Run Mode	Advanced
Variogram Data Field	Anomaly Density
Window Diameter	750
Variogram Control Parameters	
Distance Between Lags	2
Lag Tolerance Length	1
Variogram Model	
Nugget	0.00134574
Model type 1	Spherical
Range 1	4312
Sill 1	0.133228



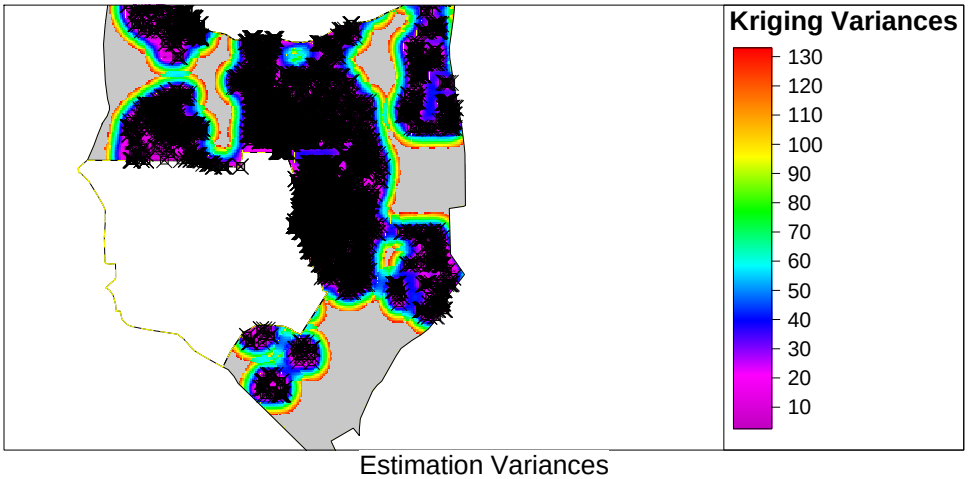
SUMMARY OF KRIGING ESTIMATION	
Run Mode	Advanced
Window Diameter	750
Estimation Type	Anomaly Density
Grid	
Number of X Nodes	233
Number of Y Nodes	304
X Origin	2049388.19
Y Origin	875775.07

X Block Size	125
Y Block Size	125
Search/Discretization	
Use Octant Search	True
Max Number of Neighbors	8
Kriging Minimum	2
Kriging Maximum	50
Max Search Radius	1500
Min Search Radius	1500
Reset Negative Values	True

Site Map With Kriging Results
The following figures show the results from the kriging estimation. The top figure shows the estimate values with the variance of the estimates shown in the lower figure. Areas within the sample area but without color-shading indicate areas where estimation was not possible due to lack of data within the search neighborhood.



Kriged Estimates



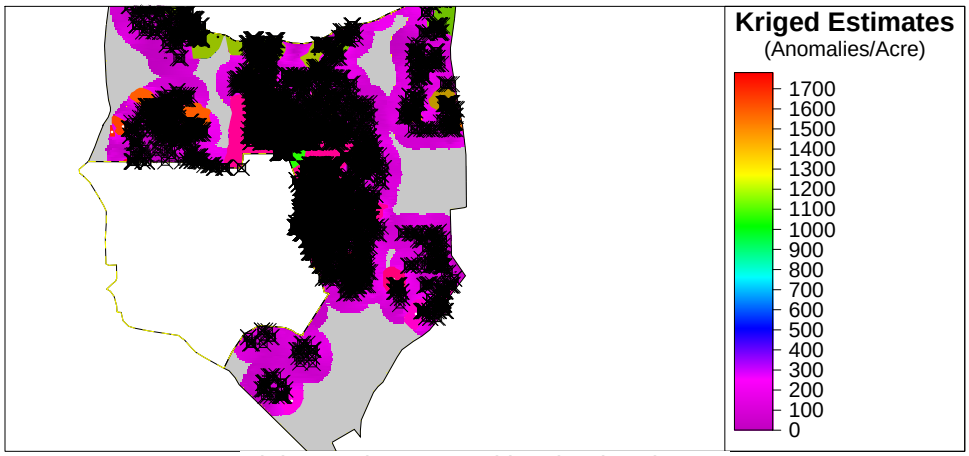
Estimation Variances

Primary Analysis Objective
The primary purpose of this analysis is to generate a continuous estimate of anomaly density for the entire sample site based on limited geophysical transect data

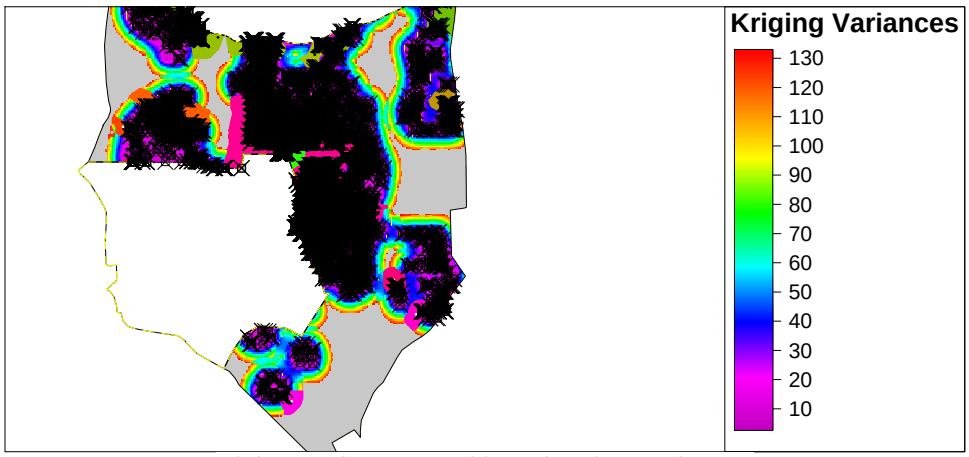
Analytical Approach
The kriging estimate is developed using observational data collected from field surveys along limited sampling transects.

Prior to kriging, the observation data are transformed from location values to density values. This is done using a moving window which is translated along each sample transect. The total anomaly count and total transect sample area within the window area are used to compute a sample anomaly density value at a spacing of 1/6th the averaging window diameter along the transects. These sample anomaly density values are then used as conditioning data within the kriging estimator to estimate anomaly density values at un-sampled locations. The underlying spatial correlation of the sample anomaly density data is modeled with a variogram. The variogram model is then used within the Ordinary Kriging estimator to generate estimates with minimized variance. No estimate is generated for locations with insufficient sample data within the kriging search radius. Estimated anomaly density values are in the units of anomalies per acre.

Delineate High Density Areas Results



High Density Areas with Kriged Estimates



High Density Areas with Estimation Variances

The purpose of the delineation process is to draw reproducible boundaries around high density anomaly regions given user specifications. This module required automatic kriged density estimates data. The delineated high density regions are displayed on the map in different colors.

A total of 56regions were delineated. A table that summarizes the attributes of the delineated areas is presented below.

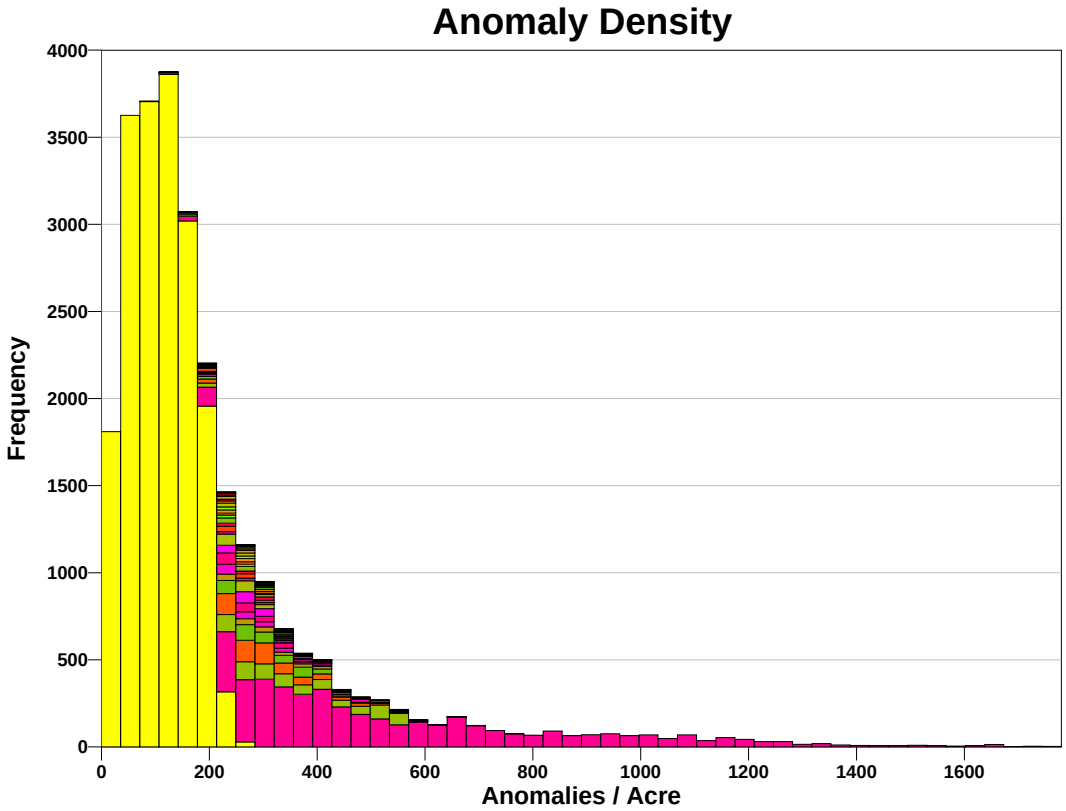
Name	Creation Parameters	Size (acres)	Transect Area (acres)	Anomalies	Kriged Density (per acre)	Potential Anomalies
High Density Area 1	Auto Krig: 225 / acre, 5 acres min	60.08	0.02	8	271.16	16292
High Density Area 2	Auto Krig: 225 / acre, 5 acres min	64.92	0.03	15	281.89	18302
High Density Area 3	Auto Krig: 225 / acre, 5 acres min	43.64	0.10	49	381.24	16636
High Density Area 4	Auto Krig: 225 / acre, 5 acres min	1656.50	7.27	4443	552.30	914880
High Density Area 5	Auto Krig: 225 / acre, 5 acres min	63.85	0.04	12	271.32	17323

High Density Area 6	Auto Krig: 225 / acre, 5 acres min	9.15	0.04	15	271.41	2483
High Density Area 7	Auto Krig: 225 / acre, 5 acres min	33.72	0.12	45	317.32	10699
High Density Area 8	Auto Krig: 225 / acre, 5 acres min	5.63	0.03	11	277.73	1564
High Density Area 9	Auto Krig: 225 / acre, 5 acres min	6.06	0.05	15	245.17	1487
High Density Area 10	Auto Krig: 225 / acre, 5 acres min	12.73	0.06	26	272.00	3464
High Density Area 11	Auto Krig: 225 / acre, 5 acres min	5.56	0.00	0	266.94	1484
High Density Area 12	Auto Krig: 225 / acre, 5 acres min	40.89	0.05	23	273.59	11188
High Density Area 13	Auto Krig: 225 / acre, 5 acres min	208.41	0.73	236	304.56	63472
High Density Area 14	Auto Krig: 225 / acre, 5 acres min	24.25	0.10	31	307.14	7448
High Density Area 15	Auto Krig: 225 / acre, 5 acres min	20.27	0.07	23	269.89	5470
High Density Area 16	Auto Krig: 225 / acre, 5 acres min	15.60	0.06	26	270.36	4219
High Density Area 17	Auto Krig: 225 / acre, 5 acres min	72.10	0.16	56	333.93	24076
High Density Area 18	Auto Krig: 225 / acre, 5 acres min	9.86	0.02	5	250.14	2467
High Density Area 19	Auto Krig: 225 / acre, 5 acres min	16.32	0.06	17	257.34	4200
High Density Area 20	Auto Krig: 225 / acre, 5 acres min	59.35	0.09	30	260.81	15479
High Density Area 21	Auto Krig: 225 / acre, 5 acres min	279.94	0.71	240	363.77	101835
High Density Area 22	Auto Krig: 225 / acre, 5 acres min	28.34	0.08	27	261.94	7423
High Density Area 23	Auto Krig: 225 / acre, 5 acres min	140.71	0.14	49	296.62	41738
High Density Area 24	Auto Krig: 225 / acre, 5 acres min	16.61	0.00	0	271.44	4508
High Density Area 25	Auto Krig: 225 / acre, 5 acres min	24.41	0.05	24	321.67	7851
High Density Area 50	Auto Krig: 900 / acre, 5 acres min	194.37	1.24	1481	1171.22	227652
High Density Area 51	Auto Krig: 900 / acre, 5 acres min	73.10	0.22	218	1025.23	74948
High Density Area 52	Auto Krig: 900 / acre, 5 acres min	6.82	0.06	60	916.42	6246
High Density Area 26	Auto Krig: 225 / acre, 5 acres min	2604.68	14.00	9789	632.23	1646767
High Density Area 27	Auto Krig: 225 / acre, 5 acres min	17.22	0.16	49	287.52	4950
High Density Area 28	Auto Krig: 225 / acre, 5 acres min	72.40	0.03	11	326.79	23659
High Density Area 29	Auto Krig: 225 / acre, 5 acres min	16.67	0.01	1	285.62	4760
High Density Area 30	Auto Krig: 225 / acre, 5 acres min	8.79	0.06	20	260.58	2290
High Density Area 31	Auto Krig: 225 / acre, 5 acres min	73.53	0.04	16	252.93	18598
High Density Area 32	Auto Krig: 225 / acre, 5 acres min	40.22	0.08	26	252.18	10143
High Density Area 33	Auto Krig: 225 / acre, 5 acres min	21.34	0.03	8	226.90	4843
High Density Area 34	Auto Krig: 225 / acre, 5 acres min	107.07	0.19	62	306.43	32811
High Density Area 35	Auto Krig: 225 / acre, 5 acres min	8.07	0.05	18	231.35	1867
High Density Area 36	Auto Krig: 225 / acre, 5 acres min	100.08	0.06	22	308.30	30854
High Density Area 37	Auto Krig: 225 / acre, 5 acres min	9.51	0.10	34	262.77	2498
High Density Area 38	Auto Krig: 225 / acre, 5 acres min	7.53	0.03	15	277.67	2092
High Density Area 39	Auto Krig: 225 / acre, 5 acres min	11.84	0.06	19	263.75	3122
High Density Area 40	Auto Krig: 225 / acre, 5 acres min	174.69	0.12	37	298.79	52196
High Density Area 41	Auto Krig: 225 / acre, 5 acres min	62.59	0.06	27	313.41	19618
High Density Area 53	Auto Krig: 900 / acre, 5 acres min	749.33	4.75	5310	1050.81	787397

High Density Area 54	Auto Krig: 900 / acre, 5 acres min	7.53	0.07	71	944.95	7118
High Density Area 42	Auto Krig: 225 / acre, 5 acres min	111.26	0.25	79	297.64	33116
High Density Area 43	Auto Krig: 225 / acre, 5 acres min	58.47	0.07	18	271.30	15863
High Density Area 44	Auto Krig: 225 / acre, 5 acres min	1233.02	8.91	6514	686.99	847077
High Density Area 45	Auto Krig: 225 / acre, 5 acres min	61.16	0.38	145	324.86	19868
High Density Area 46	Auto Krig: 225 / acre, 5 acres min	50.22	0.30	93	272.31	13675
High Density Area 47	Auto Krig: 225 / acre, 5 acres min	13.27	0.07	29	315.14	4182
High Density Area 48	Auto Krig: 225 / acre, 5 acres min	12.73	0.07	27	320.15	4077
High Density Area 49	Auto Krig: 225 / acre, 5 acres min	8.35	0.04	14	309.69	2587
High Density Area 55	Auto Krig: 900 / acre, 5 acres min	329.52	2.69	3217	1165.98	384214
High Density Area 56	Auto Krig: 900 / acre, 5 acres min	41.86	0.41	476	1133.41	47446

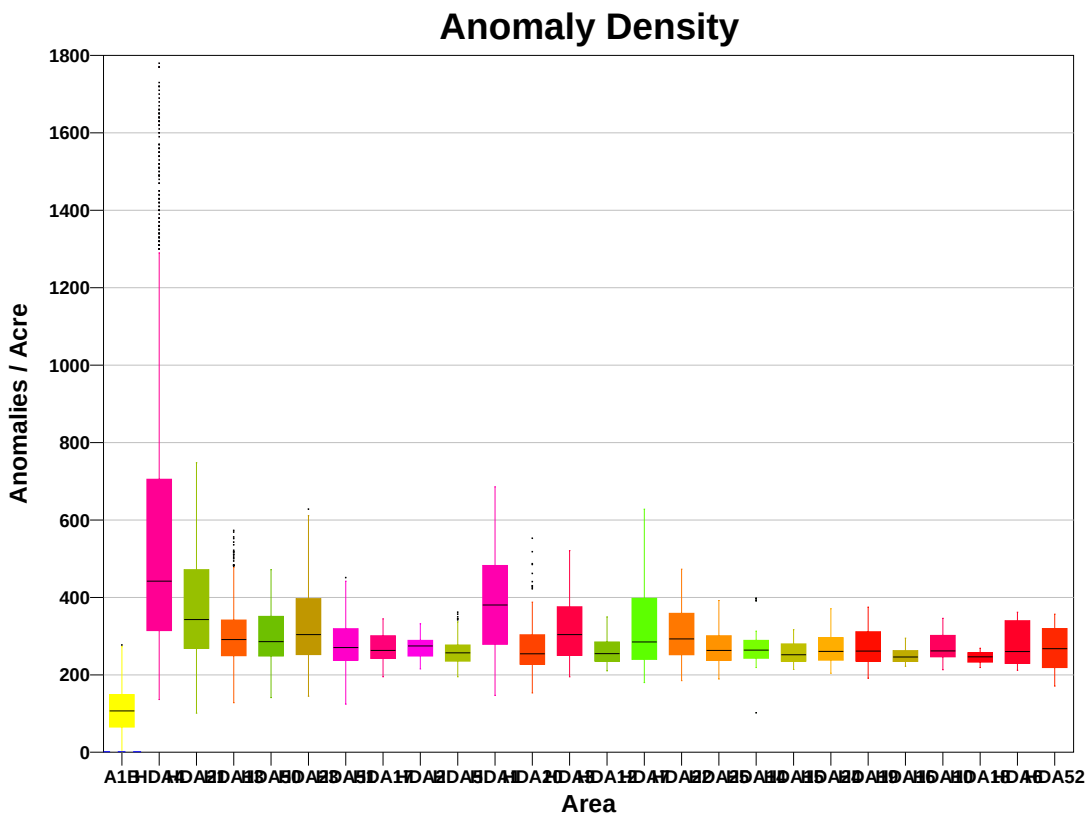
Graphical Summary

Histogram:



The histogram displays the empirical distributions of the flagged anomalies per acre. The delineated high density areas are indicated by their different colors.

Boxplot:



The composite box plot displays box and whisker plots for each selected high density area. The boxplot displays the 25th , 50th and 75th percentiles of the distribution which are represented by the bottom, middle and top lines respectively in the body of the box. A measure of spread using these summaries is the interquartile range (IQR) which is defined as the distance between the 75th and 25th percentiles. The whiskers of the plot extend to 1.5*IQR beyond the 25th or 75th percentiles and represent the body of typical observations. If an observation falls outside of the whiskers then it is considered an outlier (does not fit the overall distribution) and plotted as a single circular point on the graph. The square points are shown for high density areas that do not have enough points to create a boxplot.

Both the histogram and the boxplots are useful for displaying and comparing flagged anomalies among different delineated high density areas. They are also useful for comparing the distribution of anomalies in high density areas to the background distribution.

References

[1]Deutsch, C.V. and A.G. Journel. 1998. *GSLIB Geostatistical Software Library and User's Guide*, 2nd Edition, Applied Geostatistics Series, Oxford University Press, Inc. New York, NY.

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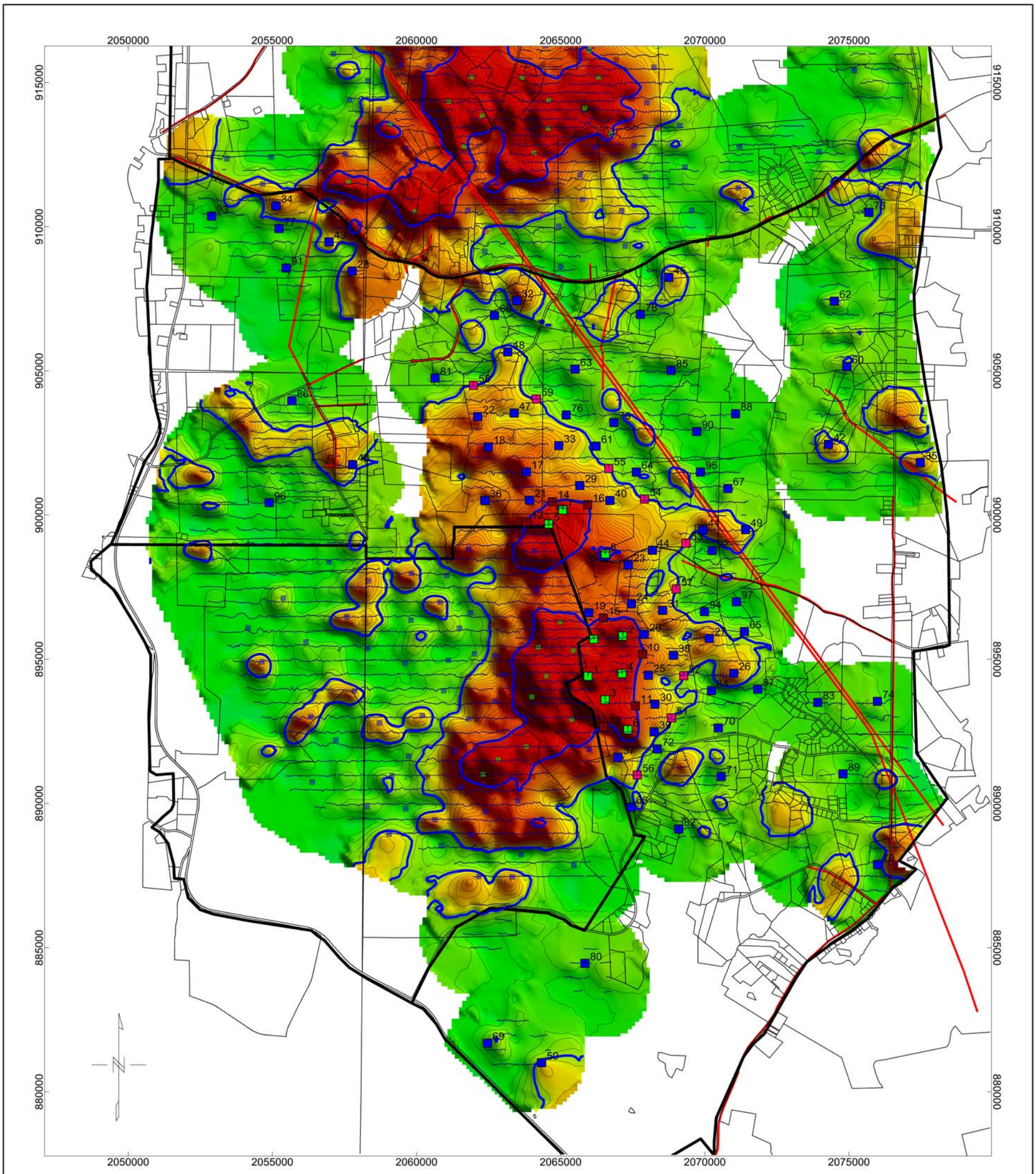
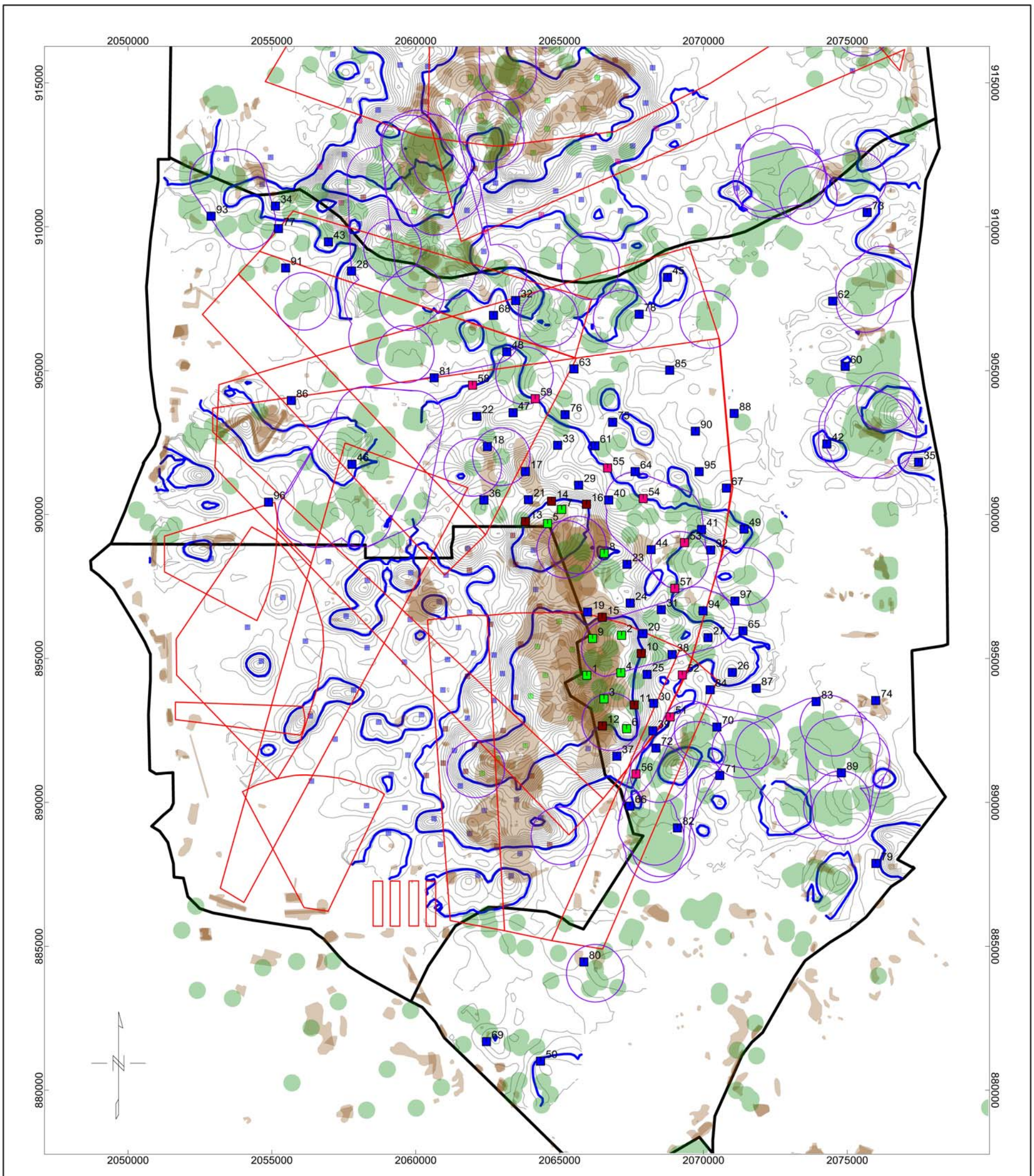


Map 1

Anomaly Density Map with Parcels

Former Camp Butner Range Complex 1



LEGEND

- Density Zone Boundaries (225 & 900 Anomalies/Acre Contours)
- 50 Anomalies/Acre Contours
- 50x50-ft Grid
- 25x25-ft Grid
- 10x250-ft Grid (long axis perpendicular to contours)
- 10x150-ft Grid (long axis perpendicular to contours)
- Firing Fan
- Historical Analysis
- Areas of Munitions Use
- MEC Characterized Area
- MRS Boundary

2500 0 2500

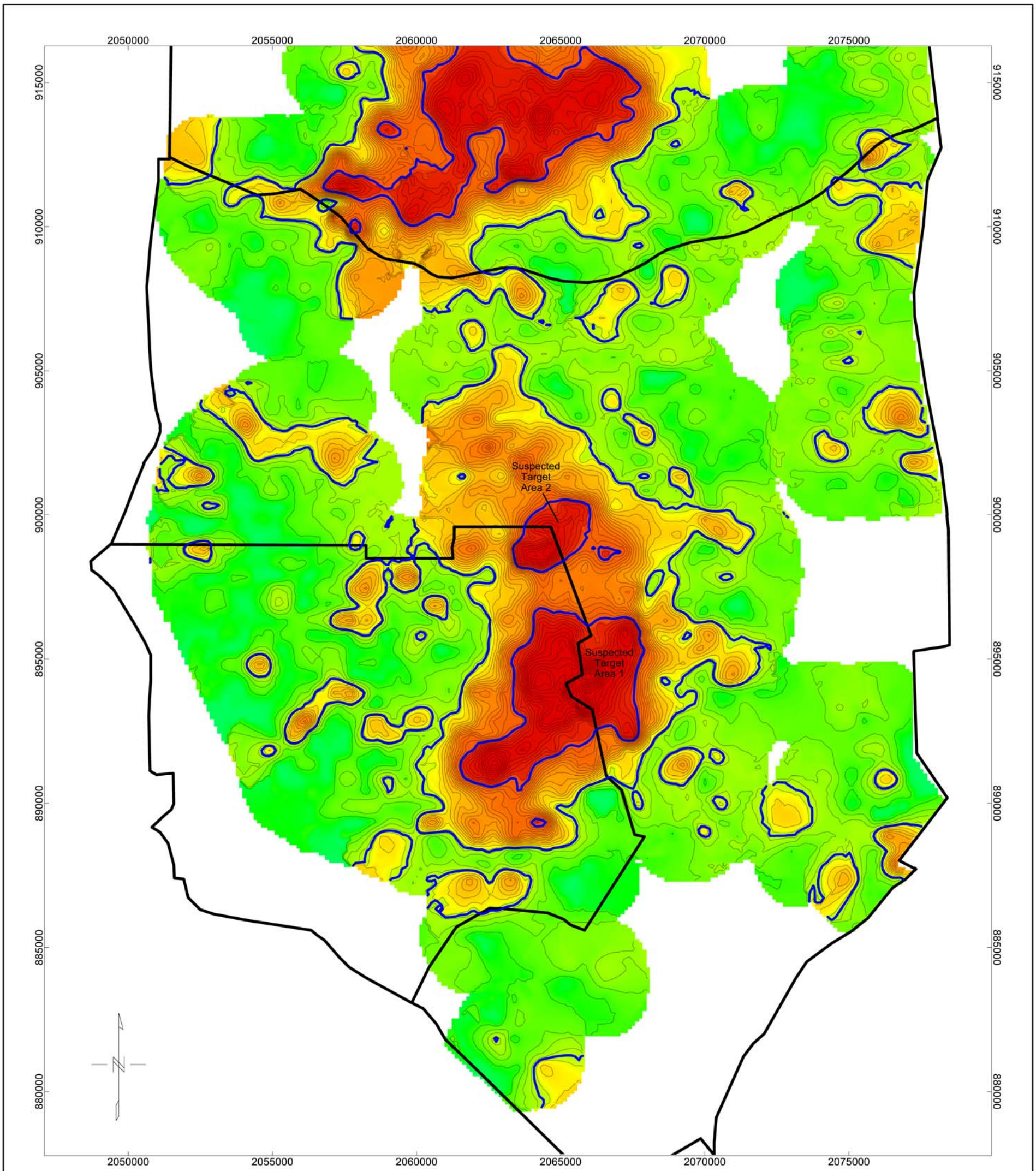
US survey foot

NAD83 / North Carolina (ftUS)

Map 2

Grid Locations with Historical Data

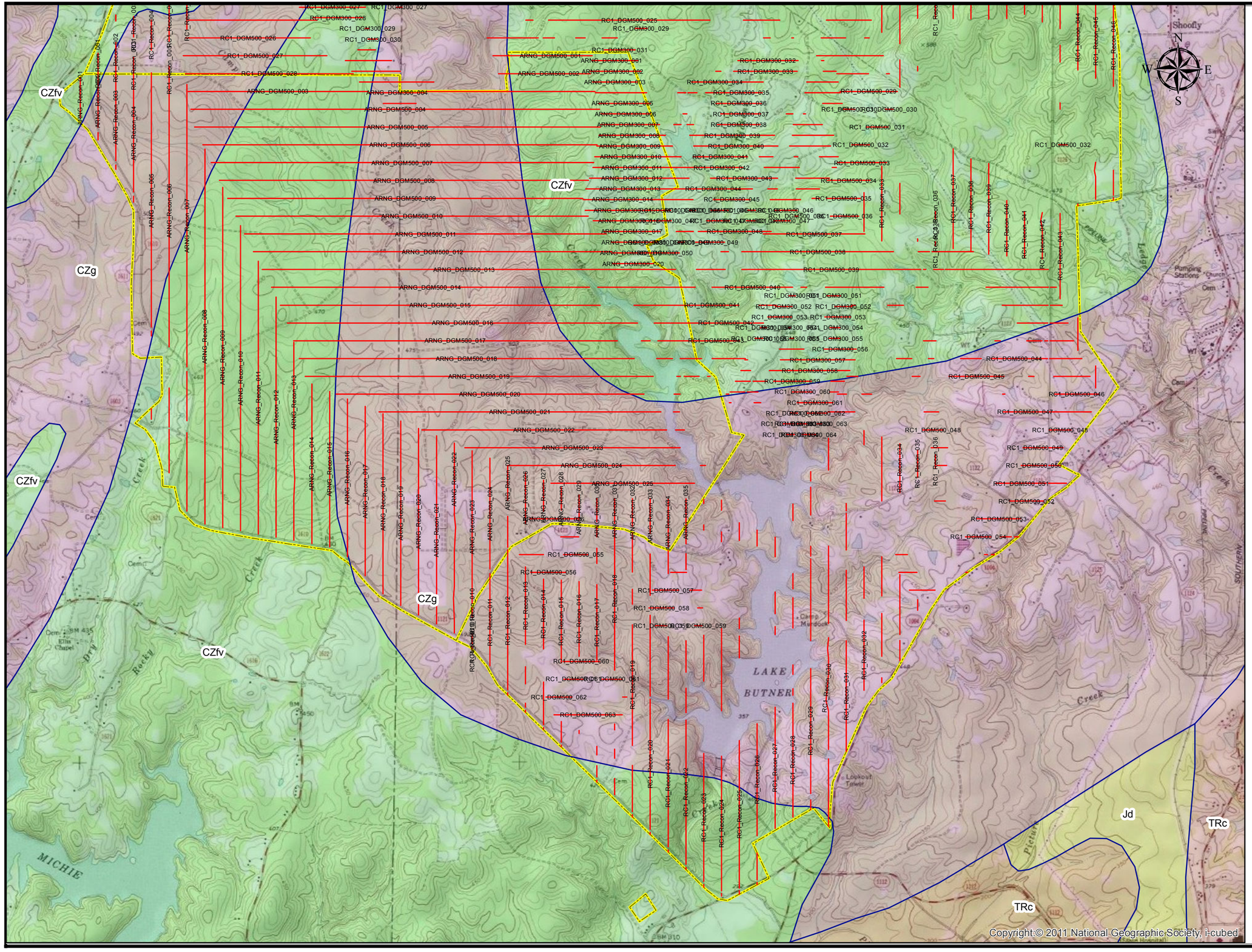
Former Camp Butner Range Complex 1



Map 3

Suspected Target Areas

Former Camp Butner Range Complex 1



1,500 0 1,500

Feet

LEGEND

- proposed_transects
- Sites

Geology

LABEL, ROCKTYPE

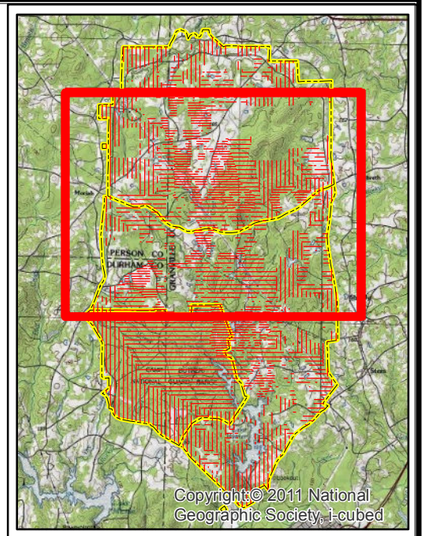
- CZfv, felsic metavolcanic rock
- CZg, metamorphic rock
- CZiv, intermediate metavolcanic rock
- CZve, meta-argillite
- Jd, diabase
- PzZg, metamorphic rock
- TRc, conglomerate

FIGURE 1
Camp Butner
Transects and Geology
Southern Half

amec

Data Sources

1. Preliminary integrated geologic map databases for the United States, USGS (http://mrdata.usgs.gov/geology/state/state.php?state=NC)



1,500 0 1,500

Feet

LEGEND

proposed_transects

Sites

Geology

LABEL, ROCKTYPE

- CZfv, felsic metavolcanic rock
- CZg, metamorphic rock
- CZiv, intermediate metavolcanic rock
- CZve, meta-argillite
- Jd, diabase
- PzZg, metamorphic rock
- TRc, conglomerate

FIGURE 2
Camp Butner
Transects and Geology
Middle

amec

Data Sources

1. Preliminary integrated geologic map databases for the United States, USGS (http://mrdata.usgs.gov/geology/state/state.php?state=NC)

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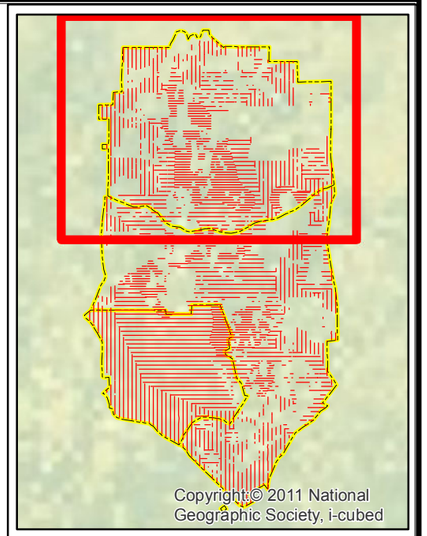

1,500 0 1,500
Feet

LEGEND

proposed_transects

Sites

Geology

LABEL, ROCKTYPE

- CZfv, felsic metavolcanic rock
- CZg, metamorphic rock
- CZiv, intermediate metavolcanic rock
- CZve, meta-argillite
- Jd, diabase
- PzZg, metamorphic rock
- TRc, conglomerate

FIGURE 3
Camp Butner
Transects and Geology
North

amec

Data Sources

1. Preliminary integrated geologic map databases for the United States, USGS (http://mrdata.usgs.gov/geology/state/state.php?state=NC)

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APPENDIX F-4

RC2 PROPOSED GRID LOCATIONS MEMO

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March 25, 2013

Ms. Elise Goggin
U.S. Army Corps of Engineers
Huntsville Center
Contract No. W912DY-10-D0023
FUDS Project No. I04NC000902
W912DY-10-D-0023

Subject: Range Complex 2 digital geophysical mapping anomaly density estimates and proposed grid locations for the Former Camp Butner Army National Guard Property, Hand Grenade Range, and Flame Thrower Range Remedial Investigation/Feasibility Study Project, Granville County, North Carolina.

Introduction

The investigation strategy proposed for the Range Complex 2 (RC2) munitions response site includes: (1) DGM characterization along transects that vary in spacing; and (2) placement of full coverage DGM grids in areas of high, medium, and low anomaly density. The selected geophysical transect spacing is based on munitions used and findings from previous site characterizations and removal actions (RA).

The proposed characterization strategy in the approved Work Plan (dependent upon rights-of-entry [ROE] granted) consists of the following:

- Conduct DGM transect survey of 98 miles of 3-foot-wide (35.6 acres) using the Geonics EM61-MK2 in MEC use areas.
- Conduct full coverage DGM surveys to evaluate approximately one hundred and twenty four (124) 50-foot by 50-foot grids (approximately 7.1 acres) or 20% of the accessible transect coverage, using an EM61-MK2 in MEC use areas.
- Conduct full coverage DGM surveys to evaluate approximately nine (9) 50-foot by 50-foot grids (approximately 0.5 acres), using an EM61-MK2 in satellite historical use areas.

Grid locations in satellite historical use areas will be determined after analog geophysical mapping (AGM) is completed and will incorporate the AGM findings as well as the results of the surface reconnaissance transects to be completed.

All MEC-like targets above a threshold defined by the IVS results and 10% of the residual anomalies in the full coverage DGM grids will be intrusively investigated to adequately characterize anomaly sources. Due to several inaccessible DGM areas a minimal portion of DGM transects were selected for AGM surveys. Attachment 1, Table 1 summarizes the completed transect coverage and proposed grid coverage.

Data Collection Methods

DGM data was collected using a Geonics, Ltd., EM61-MK2 metal detector with wide area augmentation system (WAAS) capable Global Positioning System (GPS) methods (Camp Butner Final Work Plan 3.2.1). Seventy (70) miles of the ninety eight (98) proposed transect miles are accessible within RC2 on private properties where ROE were granted. Transects data within about 100 to 300 feet of power lines have been determined to be unreliable due to excessive noise. These transect gaps will be converted to analog geophysical mapping (AGM), if a safe distance from the overhead power lines can be maintained.

Data Processing / Target Selection

Raw transect data in the RC2 MRS was processed using Geosoft Oasis Montaj. Data were leveled and drift corrected using a 2-step drift correction. First, the UCEDRIFT GX drift correction tool was used with a 20 second window, ignoring 0% of values, and with the despike option selected to remove low frequency drift and potential signals from the geology. A second UCEDRIFT GX drift correction was applied with a four second window, ignoring 50% of highest values to minimize the occurrence of negative values associated with potential targets of interest. A two to three point non-linear filter was applied to data that were affected by power line noise. A 0.3-second latency correction was applied to all data measurements. Anomalies were visually inspected by the QC geophysicist and compared to the raw, unprocessed signals to ensure there were no missed targets due to significant reductions in anomaly peak values.

Initial targets of interest were selected with the Oasis Montaj USEANOMPICK GX (Pick Peaks Along a Profile tool) using an 11.7 mV sum channel threshold of four time gates as determined during the analysis of the IVS data. Some candidate targets were removed from the initial target list based on their signal attributes (e.g., decay, signal width,). Multiple target picks within 2.5 feet of each other were merged. The RC2 targets were merged and delineated by dataset ID into a master Geosoft database, “AllTargets”.

There is the potential for geologic “noise” within the RC2 area (Attachment 4). Metallic debris located along roads and cultural features such as underground utilities and old building foundations may also have a slight impact on estimated anomaly densities.

VSP Analysis and Results

Pacific Northwest Nation Laboratory’s Visual Sampling Plan (VSP) software was used to produce anomaly density maps from transect anomaly data. The path of the DGM transects and target picks as of March 19, 2013 were imported into VSP and the anomaly density was estimated using Krigging. A 750-foot window size was used to ensure three adjacent transects were used for the estimation of anomaly density. Additional parameters used in VSP are included in Attachment 2.

The analysis of the anomaly density histogram and estimated anomaly density from the Kriging map suggests a maximum low density zone of approximately 225 anomalies per acre over the MRS with an average of 106 anomalies per acre. The low density zones and isolated medium density "islands" were assigned as the background density areas (Attachment 3, Map 3). High density zones were set at a minimum of 900 anomalies per acre, which encompasses two potential target areas. Both potential target areas suspected are also based on the historical information and are located on the south side of the MRS (Attachment 3, Map 3). Elevated anomaly density areas along single transects within the low density zone suggest target areas that are smaller than anticipated and / or are related to cultural features and debris, especially along roads. Full coverage DGM grids have been placed in these areas for further verification where cultural features are not evident from satellite images.

A relatively high background anomaly density can be due to a combination of factors, including the presence of geology/terrain "noise", cultural debris from hunting and other associated activities, historical homestead remnants, and the potential for MEC and MD from RC2 activities associated with live firing at several ranges.

Grid Placement

The objective of the DGM grid investigation is to confirm the nature and extent of the target areas. The anomaly density map from the VSP analysis was used in conjunction with the historical information from previous investigations and the munitions use areas, firing fan locations, geologic maps, and satellite images to select the optimum locations for the full coverage DGM grids (Attachment 3, Map 2). Property ROEs and power lines limit the available grid locations. HGL anticipates brush cutting limitations on some private properties will either lead to a re-evaluation of select grid locations or survey methods may be changed to analog.

One hundred and five (105) grids locations have been established for a total coverage of 5.1 acres, which represents twenty percent of the accessible transect coverage in RC2 as defined in the in the approved Work Plan. Many of these grids are located in historical analysis areas and munitions use areas throughout the RC2 MRS.

The purpose of DGM grid placement in high anomaly density zones is to confirm the historical information and characterize the type, quantity, and depth extent of the munitions within the suspected target areas. Fifteen (15) 25x25-foot grids and one (1) 50x50-ft grid have been placed in high anomaly density zones. High density grids represent 5.3% of the total grid coverage in the RC2 MRS.

Ten (10) 10x150-foot grids are distributed along the high/medium density boundary. The elongated geometry of these grids was selected to be parallel to the anomaly density gradient in order to better define the boundaries of the primary target areas. High/medium density grids represent 6.7% of the total grid coverage in the RC2 MRS.

Thirty (30) 50x50-foot grids of various sizes are proposed in the medium anomaly density zone within the anticipated target areas. These grids were selected to provide additional

characterization information over different density contours in an attempt to refine target area boundaries. Medium density grids represent 33.7% of the total grid coverage in the RC2 MRS.

Eight (8) 10x250-foot grids span the low/medium density boundary and are parallel to the anomaly density gradient in order to better determine the nature and extent of the suspected target areas. Low/medium density grids represent 9.0% of the total grid coverage in the RC2 MRS.

Forty one (41) 50x50-foot grids reside in the background area including medium density non-target area "islands". The objective of a larger percentage of grids placed in the background area is to determine the nature of the relatively high average anomaly density in these areas (106 anomalies per acre). Based on the available historical information, the elevated background anomaly density is not anticipated to be related to MEC/MD. Some of the anomaly density patterns in the background area are suspect to be related to cultural features based on satellite images and the characteristics of the anomaly density contours. Grid placements were bypassed in locations where cultural features have been confirmed by field notes or observation. Grids are proposed over the unconfirmed isolated zones, directly on the actual transects, to verify the source of the anomalies that were initially detected. If, however, cultural features or debris is confirmed during the grid setup process, the grid location will be re-evaluated. The locations of the remaining grids in the background area are located randomly in a strategic pattern throughout the low anomaly density areas for background verification. Grid density is greatest near the target area boundary for a higher degree of confidence that the extents of the target areas have been established. Background grids represent 46.0% of the total grid coverage in the RC2 MRS.

To the extent possible, the full coverage DGM grid locations were verified using satellite images to ensure grids do not intersect known cultural features such as buildings and roads, or inaccessible terrain and bodies of water. Satellite images have limitations, and it may be necessary to move some of the grid locations during field activities. Brush cutters and grid setup teams will be provided specific instructions on the procedures for moving the location of a grid, if necessary. If a grid location needs to be modified, the revised location will be sent to the client for concurrence.

Sincerely,

Daryl Donatelli
MMRP Geophysicist
HydroGeoLogic, Inc.

Attachments:

Attachment 1. Detailed Grid Table
Attachment 2. VSP Geostatistical Estimation of Anomaly Density
Attachment 3. Maps
Attachment 4. RC2 Geology

Attachment 1. Detailed Grid Table

Unique Grid ID	X (center)	Y (center)	Size (*ft*)	Orientation (long axis)	Density Zone	Density (*anomalies/acre*)	Area (ft^2)	Expected # targets	Relocation Leeway
RC2_DGM_G001	2061118	914344	25x25	N-S	5	1336	625	19	200 ft E to S to W only
RC2_DGM_G002	2061915	915192	25x25	N-S	5	1305	625	19	200 ft any direction
RC2_DGM_G003	2062277	913846	25x25	N-S	5	1238	625	18	200 ft any direction
RC2_DGM_G004	2057639	911551	25x25	N-S	5	1226	625	18	200 ft any direction
RC2_DGM_G005	2059947	910531	25x25	N-S	5	1201	625	17	200 ft N to NW only
RC2_DGM_G006	2066311	915183	25x25	N-S	5	1177	625	17	200 ft any direction
RC2_DGM_G007	2064582	914384	25x25	N-S	5	1176	625	17	200 ft any direction
RC2_DGM_G008	2064568	913403	25x25	N-S	5	1170	625	17	200 ft any direction
RC2_DGM_G009	2065839	914105	25x25	N-S	5	1158	625	17	200 ft any direction
RC2_DGM_G010	2064081	912565	25x25	N-S	5	1119	625	16	200 ft any direction
RC2_DGM_G011	2061651	912771	25x25	N-S	5	1064	625	15	200 ft N to NW only
RC2_DGM_G012	2063657	915162	25x25	N-S	5	1047	625	15	200 ft any direction
RC2_DGM_G013	2062775	911519	50x50	N-S	5	1028	2500	59	50 ft any direction
RC2_DGM_G014	2061138	916992	25x25	N-S	5	998	625	14	50 ft any direction
RC2_DGM_G015	2059100	913541	25x25	N-S	5	993	625	14	50 ft any direction
RC2_DGM_G016	2066731	913218	25x25	N-S	5	933	625	13	50 ft any direction
RC2_DGM_G017	2065992	916116	25x25	N-S	5	921	625	13	50 ft any direction
RC2_DGM_G018	2066933	915791	10x150	NNE-SSW	4	912	1500	31	200 ft ENE or WSW only
RC2_DGM_G019	2065800	913167	10x150	NNW-SSE	4	910	1500	31	100 ft ENE or WSW only
RC2_DGM_G020	2064381	915614	10x150	NE-SW	4	906	1500	31	100 ft NW or SE only
RC2_DGM_G021	2062790	917286	10x150	NW-SE	4	906	1500	31	50 ft NE or SW only
RC2_DGM_G022	2062059	912027	10x150	WNW-ESE	4	902	1500	31	100 ft NNE only
RC2_DGM_G023	2058178	911020	10x150	NNE-SSW	4	902	1500	31	100 ft NNW or SSE only
RC2_DGM_G024	2063307	912871	10x150	E-W	4	895	1500	31	N or S only
RC2_DGM_G025	2067311	914544	10x150	N-S	4	893	1500	31	50 ft E or W only
RC2_DGM_G026	2060883	910528	10x150	NNW-SSE	4	893	1500	31	50 ft ENE or WSW only
RC2_DGM_G027	2060320	914350	10x150	E-W	4	885	1500	30	50 ft S only
RC2_DGM_G028	2058036	910103	50x50	N-S	3	880	2500	50	100 ft any direction
RC2_DGM_G029	2057527	912513	50x50	N-S	3	825	2500	47	100 ft any direction
RC2_DGM_G030	2060423	915572	50x50	N-S	3	800	2500	46	100 ft any direction
RC2_DGM_G031	2059836	916475	50x50	N-S	3	800	2500	46	100 ft any direction

RC2_DGM_G032	2064040	917066	50x50	N-S	3	793	2500	45	100 ft any direction
RC2_DGM_G033	2066185	912751	50x50	N-S	3	677	2500	39	100 ft any direction
RC2_DGM_G034	2064479	916274	50x50	N-S	3	671	2500	39	100 ft any direction
RC2_DGM_G035	2067996	914300	50x50	N-S	3	662	2500	38	100 ft any direction
RC2_DGM_G036	2059385	917979	50x50	N-S	3	637	2500	37	200 ft any direction
RC2_DGM_G037	2061780	910570	50x50	N-S	3	625	2500	36	100 ft any direction
RC2_DGM_G038	2058430	916947	50x50	N-S	3	590	2500	34	100 ft away from PL
RC2_DGM_G039	2058693	914057	50x50	N-S	3	534	2500	31	100 ft any direction
RC2_DGM_G040	2068747	927997	50x50	N-S	3	523	2500	30	100 ft on transect
RC2_DGM_G041	2059455	915621	50x50	N-S	3	513	2500	29	100 ft away from PL
RC2_DGM_G042	2064450	927036	50x50	N-S	3	510	2500	29	100 ft on transect
RC2_DGM_G043	2061005	918156	50x50	N-S	3	479	2500	27	100 ft any direction
RC2_DGM_G044	2067542	912808	50x50	N-S	3	470	2500	27	100 ft any direction
RC2_DGM_G045	2065672	911789	50x50	N-S	3	455	2500	26	100 ft any direction
RC2_DGM_G046	2064535	918745	50x50	N-S	3	454	2500	26	100 ft E to S to W only
RC2_DGM_G047	2066152	923476	50x50	N-S	3	453	2500	26	100 ft on transect
RC2_DGM_G048	2066865	916790	50x50	N-S	3	444	2500	26	100 ft any direction
RC2_DGM_G049	2065574	917745	50x50	N-S	3	437	2500	25	100 ft any direction
RC2_DGM_G050	2064866	911244	50x50	N-S	3	436	2500	25	100 ft any direction
RC2_DGM_G051	2063434	919159	50x50	N-S	3	428	2500	25	100 ft any direction
RC2_DGM_G052	2061053	920081	50x50	N-S	3	385	2500	22	100 ft on transect
RC2_DGM_G053	2068232	915525	50x50	N-S	3	381	2500	22	100 ft any direction
RC2_DGM_G054	2071159	911347	50x50	N-S	3	377	2500	22	100 ft on transect
RC2_DGM_G055	2063277	910556	50x50	N-S	3	365	2500	21	100 ft any direction
RC2_DGM_G056	2065757	910943	50x50	N-S	3	361	2500	21	100 ft any direction
RC2_DGM_G057	2057721	920983	50x50	N-S	3	342	2500	20	100 ft on transect
RC2_DGM_G058	2054663	911478	50x50	N-S	3	327	2500	19	200 ft any direction
RC2_DGM_G059	2065285	925935	50x50	N-S	3	327	2500	19	100 ft on transect
RC2_DGM_G060	2067837	916369	50x50	N-S	3	324	2500	19	100 ft any direction
RC2_DGM_G061	2067119	910551	50x50	N-S	3	309	2500	18	100 ft any direction
RC2_DGM_G062	2059217	923329	50x50	N-S	3	301	2500	17	100 ft on transect
RC2_DGM_G063	2060164	917412	50x50	N-S	3	292	2500	17	100 ft any direction
RC2_DGM_G064	2059056	909975	50x50	N-S	3	282	2500	16	100 ft any direction
RC2_DGM_G065	2064366	910419	10x250	NNW-SSE	2	230	2500	13	100 ft ENE or WSW only
RC2_DGM_G066	2056663	912087	10x250	NW-SE	2	228	2500	13	100 ft NE or SW only

RC2_DGM_G067	2068358	913413	10x250	WNW_ESE	2	227	2500	13	100 ft NNE or SSW only
RC2_DGM_G068	2058511	919056	10x250	NNE-SSW	2	226	2500	13	100 ft WNW or ESE only
RC2_DGM_G069	2057414	910830	10x250	NE-SW	2	223	2500	13	don't move
RC2_DGM_G070	2058049	913681	10x250	WNW-ESE	2	219	2500	13	100 ft NNW or SSW only
RC2_DGM_G071	2065430	918859	10x250	NE-SW	2	216	2500	12	100 ft SE only
RC2_DGM_G072	2067032	912266	10x250	NW-SE	2	208	2500	12	100 ft NE or SW only
RC2_DGM_G073	2058918	919511	50x50	N-S	1	188	2500	11	200 ft any direction
RC2_DGM_G074	2061503	921109	50x50	N-S	1	188	2500	11	200 ft any direction
RC2_DGM_G075	2062744	925994	50x50	N-S	1	185	2500	11	200 ft any direction
RC2_DGM_G076	2062163	917944	10x250	N-S	2	182	2500	10	don't move
RC2_DGM_G077	2067235	909327	50x50	N-S	1	181	2500	10	200 ft any direction
RC2_DGM_G078	2063361	920565	50x50	N-S	1	178	2500	10	200 ft any direction
RC2_DGM_G079	2061902	919469	50x50	N-S	1	173	2500	10	200 ft any direction
RC2_DGM_G080	2063190	921407	50x50	N-S	1	166	2500	10	200 ft any direction
RC2_DGM_G081	2058499	920961	50x50	N-S	1	162	2500	9	200 ft any direction
RC2_DGM_G082	2053421	912357	50x50	N-S	1	160	2500	9	200 ft any direction
RC2_DGM_G083	2058160	917936	50x50	N-S	1	159	2500	9	200 ft all but NE
RC2_DGM_G084	2064927	910012	50x50	N-S	1	156	2500	9	200 ft any direction
RC2_DGM_G085	2057120	915995	50x50	N-S	1	137	2500	8	200 ft any direction
RC2_DGM_G086	2069130	913505	50x50	N-S	1	135	2500	8	200 ft any direction
RC2_DGM_G087	2062368	909143	50x50	N-S	1	134	2500	8	200 ft any direction
RC2_DGM_G088	2063731	923605	50x50	N-S	1	124	2500	7	200 ft any direction
RC2_DGM_G089	2061807	922481	50x50	N-S	1	110	2500	6	200 ft any direction
RC2_DGM_G090	2058316	915068	50x50	N-S	1	110	2500	6	200 ft any direction
RC2_DGM_G091	2057683	914390	50x50	N-S	1	105	2500	6	200 ft any direction
RC2_DGM_G092	2067937	911716	50x50	N-S	1	103	2500	6	200 ft any direction
RC2_DGM_G093	2075731	917564	50x50	N-S	1	95	2500	5	200 ft any direction
RC2_DGM_G094	2069307	912056	50x50	N-S	1	87	2500	5	200 ft any direction
RC2_DGM_G095	2066361	924424	50x50	N-S	1	87	2500	5	200 ft any direction
RC2_DGM_G096	2075184	915415	50x50	N-S	1	74	2500	4	200 ft any direction
RC2_DGM_G097	2059120	922150	50x50	N-S	1	58	2500	3	200 ft any direction
RC2_DGM_G098	2054957	912413	50x50	N-S	1	37	2500	2	200 ft any direction
RC2_DGM_G099	2073960	912601	50x50	N-S	1	34	2500	2	200 ft any direction
RC2_DGM_G100	2071209	912782	50x50	N-S	1	30	2500	2	200 ft any direction
RC2_DGM_G101	2059404	925955	50x50	N-S	1	22	2500	1	200 ft any direction

RC2_DGM_G102	2061987	924458	50x50	N-S	1	20	2500	1	200 ft any direction
RC2_DGM_G103	2065005	908610	50x50	N-S	1	15	2500	1	200 ft W to N tr E only
RC2_DGM_G104	2069545	910576	50x50	N-S	1	14	2500	1	200 ft any direction
RC2_DGM_G105	2063496	924832	50x50	N-S	1	6	2500	0	200 ft any direction
Totals							**222500**	**1997**	

Geostatistical Estimation of Anomaly Density

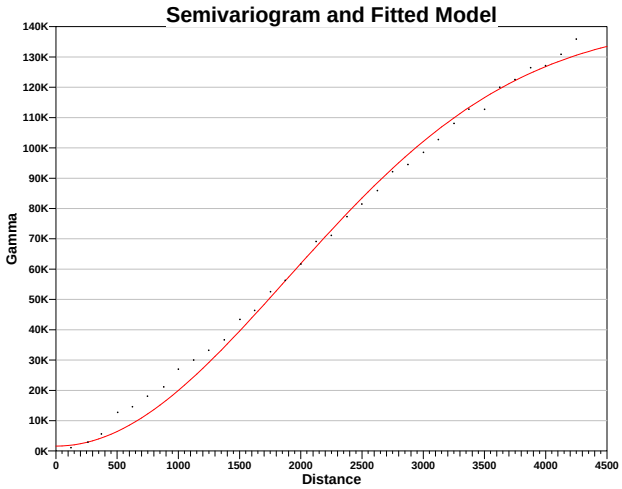
Summary

This report summarizes the parameters and processes used to generate kriging estimates of anomaly density from transect survey samples. The underlying variogram analyses for these results were performed using the GAM/GAMV codes[1]. The graphical user interface for these codes, GAM/GAMV GUI was developed by Sandia National Laboratories.

Variogram

The following table and figure summarize the variogram analysis and model used in the kriging estimation.

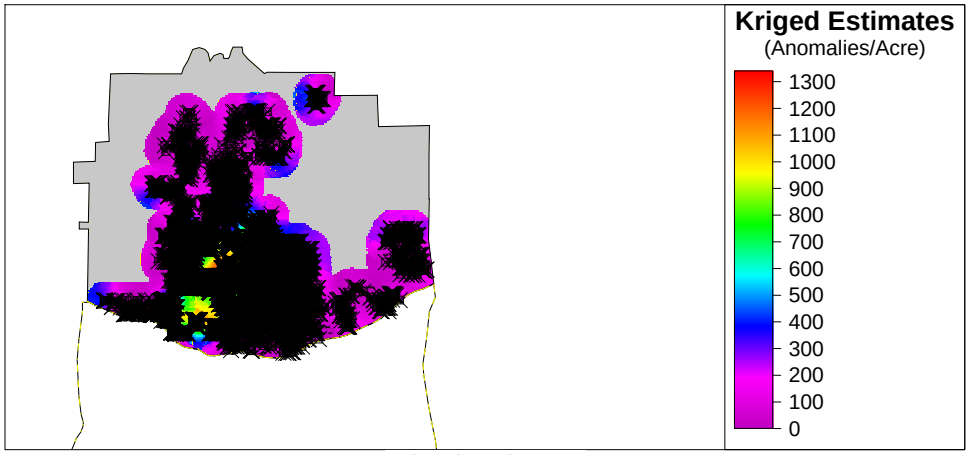
SUMMARY OF VARIOGRAM ANALYSIS	
Run Mode	Automatic
Variogram Data Field	Anomaly Density
Window Diameter	750
Variogram Control Parameters	
Distance Between Lags	2
Lag Tolerance Length	1
Variogram Model	
Nugget	1600
Model type 1	Gaussian
Range 1	8000
Sill 1	140000



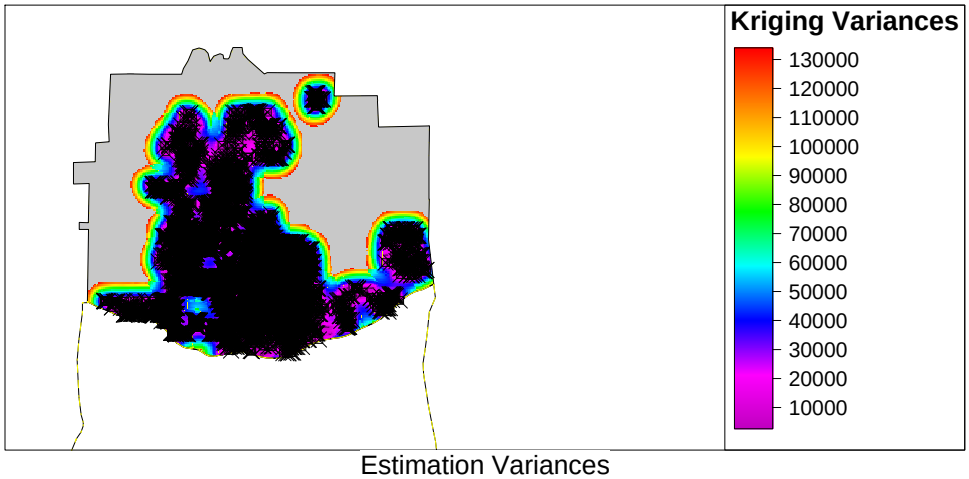
SUMMARY OF KRIGING ESTIMATION	
Run Mode	Automatic
Window Diameter	750
Estimation Type	Anomaly Density
Grid	
Number of X Nodes	222
Number of Y Nodes	192
X Origin	2050362.89
Y Origin	908056.87

X Block Size	125
Y Block Size	125
Search/Discretization	
Use Octant Search	True
Max Number of Neighbors	8
Kriging Minimum	2
Kriging Maximum	50
Max Search Radius	1500
Min Search Radius	1500
Reset Negative Values	True

Site Map With Kriging Results
The following figures show the results from the kriging estimation. The top figure shows the estimate values with the variance of the estimates shown in the lower figure. Areas within the sample area but without color-shading indicate areas where estimation was not possible due to lack of data within the search neighborhood.



Kriged Estimates



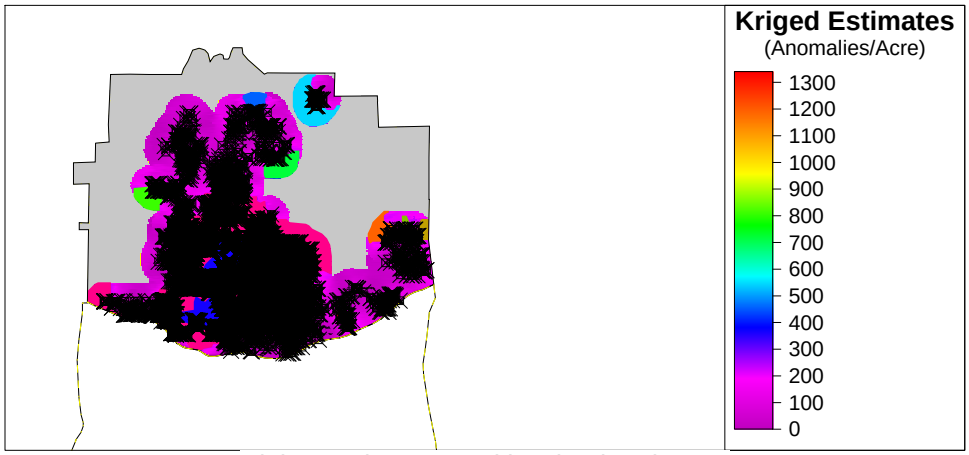
Estimation Variances

Primary Analysis Objective
The primary purpose of this analysis is to generate a continuous estimate of anomaly density for the entire sample site based on limited geophysical transect data

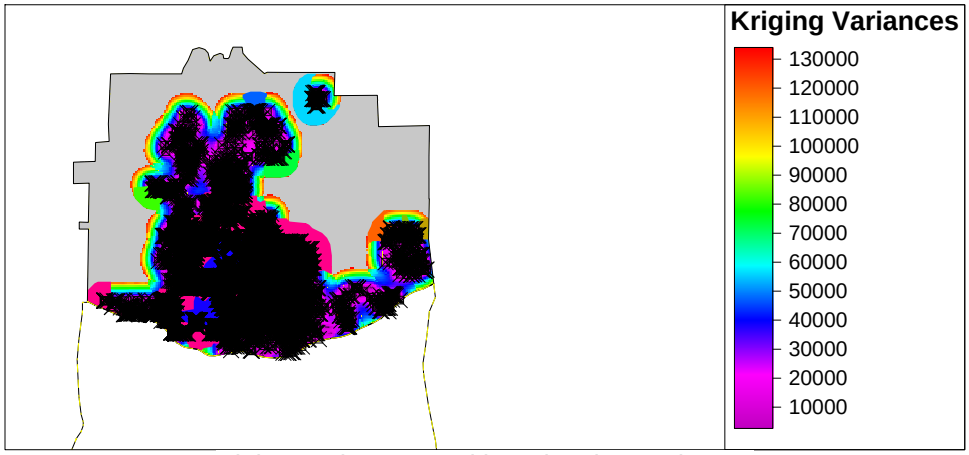
Analytical Approach
The kriging estimate is developed using observational data collected from field surveys along limited sampling transects.

Prior to kriging, the observation data are transformed from location values to density values. This is done using a moving window which is translated along each sample transect. The total anomaly count and total transect sample area within the window area are used to compute a sample anomaly density value at a spacing of 1/6th the averaging window diameter along the transects. These sample anomaly density values are then used as conditioning data within the kriging estimator to estimate anomaly density values at un-sampled locations. The underlying spatial correlation of the sample anomaly density data is modeled with a variogram. The variogram model is then used within the Ordinary Kriging estimator to generate estimates with minimized variance. No estimate is generated for locations with insufficient sample data within the kriging search radius. Estimated anomaly density values are in the units of anomalies per acre.

Delineate High Density Areas Results



High Density Areas with Kriged Estimates



High Density Areas with Estimation Variances

The purpose of the delineation process is to draw reproducible boundaries around high density anomaly regions given user specifications. This module required automatic kriged density estimates data. The delineated high density regions are displayed on the map in different colors.

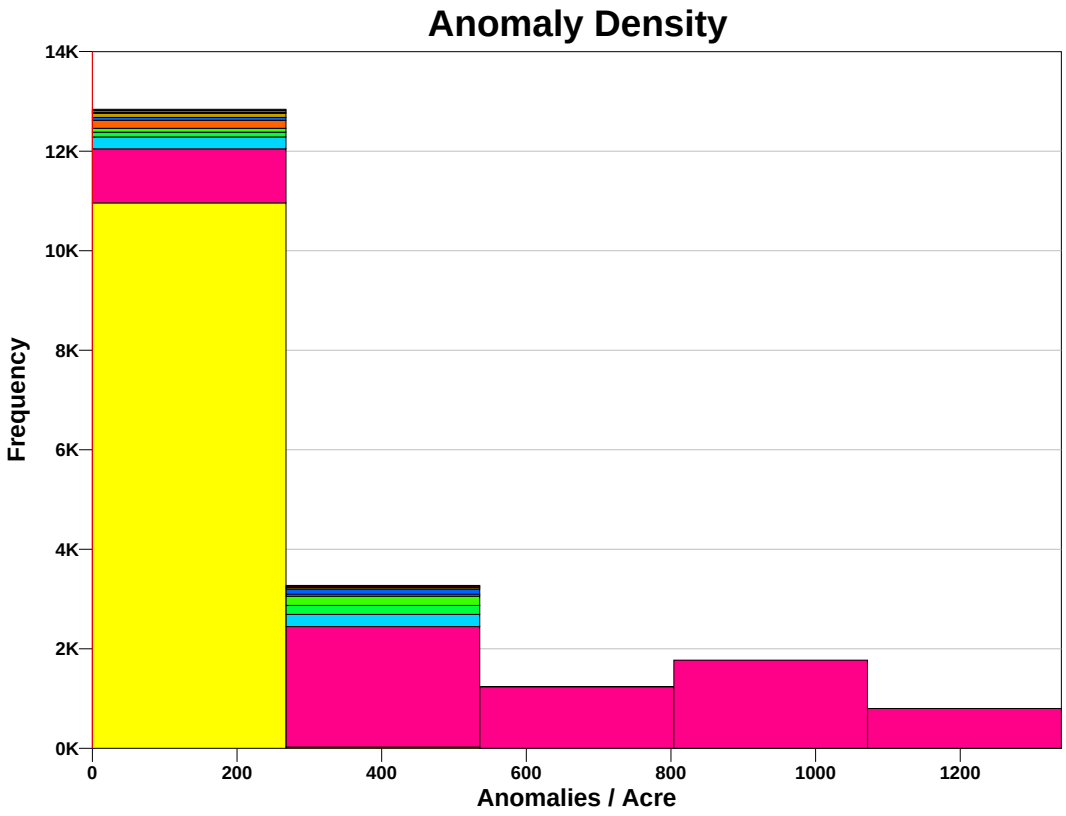
A total of 12regions were delineated. A table that summarizes the attributes of the delineated areas is presented below.

Name	Creation Parameters	Size (acres)	Transect Area (acres)	Anomalies	Kriged Density (per acre)	Potential Anomalies
High Density Area 1	Auto Krig: 225 / acre, 10 acres min	2637.25	12.43	8563	626.68	1652715
High Density Area 2	Auto Krig: 225 / acre, 10 acres min	17.76	0.16	49	287.02	5096
High Density Area 3	Auto Krig: 225 / acre, 10 acres min	72.64	0.05	17	254.15	18461
High Density Area 4	Auto Krig: 225 / acre, 10 acres min	40.25	0.08	27	251.88	10138
High Density Area 5	Auto Krig: 225 / acre, 10 acres min	13.81	0.04	11	231.29	3194

High Density Area 6	Auto Krig: 225 / acre, 10 acres min	97.03	0.18	59	305.12	29605
High Density Area 7	Auto Krig: 225 / acre, 10 acres min	102.23	0.06	22	307.47	31433
High Density Area 8	Auto Krig: 225 / acre, 10 acres min	12.02	0.06	19	261.09	3137
High Density Area 9	Auto Krig: 225 / acre, 10 acres min	180.43	0.13	42	297.95	53758
High Density Area 10	Auto Krig: 225 / acre, 10 acres min	60.80	0.06	27	318.96	19393
High Density Area 11	Auto Krig: 900 / acre, 10 acres min	738.74	4.11	4457	1046.35	772986
High Density Area 12	Auto Krig: 900 / acre, 10 acres min	13.45	0.07	71	928.43	12489

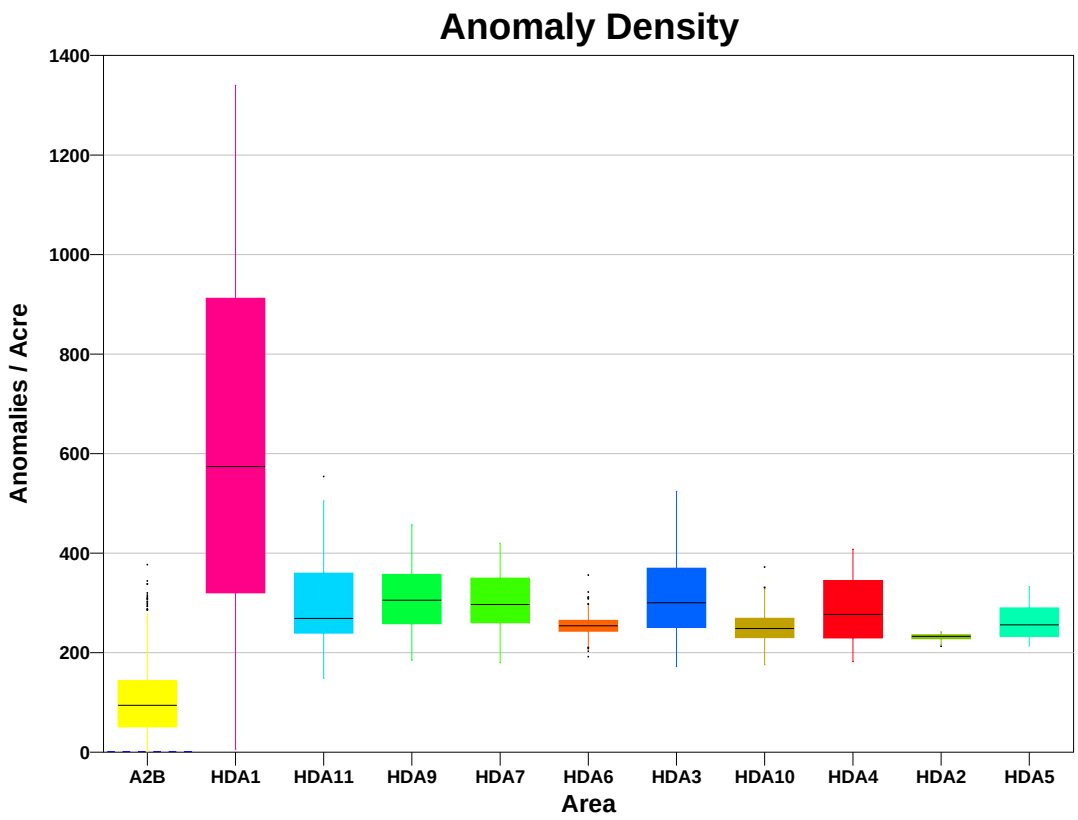
Graphical Summary

Histogram:



The histogram displays the empirical distributions of the flagged anomalies per acre. The delineated high density areas are indicated by their different colors.

Boxplot:



The composite box plot displays box and whisker plots for each selected high density area. The boxplot displays the 25th, 50th and 75th percentiles of the distribution which are represented by the bottom, middle and top lines respectively in the body of the box. A measure of spread using these summaries is the interquartile range (IQR) which is defined as the distance between the 75th and 25th percentiles. The whiskers of the plot extend to 1.5*IQR beyond the 25th or 75th percentiles and represent the body of typical observations. If an observation falls outside of the whiskers then it is considered an outlier (does not fit the overall distribution) and plotted as a single circular point on the graph. The square points are shown for high density areas that do not have enough points to create a boxplot.

Both the histogram and the boxplots are useful for displaying and comparing flagged anomalies among different delineated high density areas. They are also useful for comparing the distribution of anomalies in high density areas to the background distribution.

References

[1]Deutsch, C.V. and A.G. Journel. 1998. *GSLIB Geostatistical Software Library and User's Guide*, 2nd Edition, Applied Geostatistics Series, Oxford University Press, Inc. New York, NY.

This report was automatically produced* by Visual Sample Plan (VSP) software version 6.3.

Software and documentation available at http://vsp.pnnl.gov

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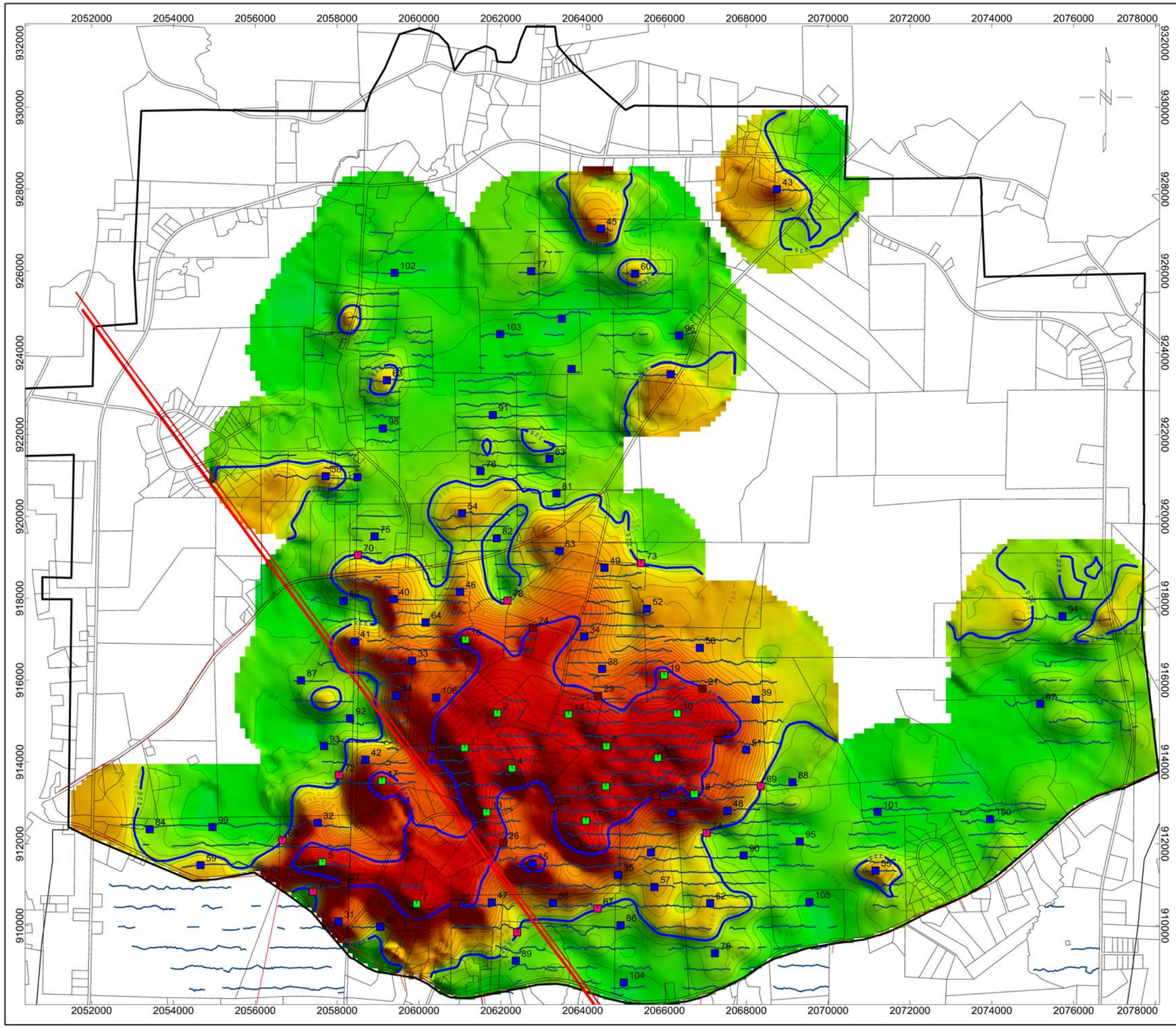


LEGEND

- Density Zone Boundaries (225 & 900 anomalies/acre Contours)
- 50 anomalies/acre Contours
- 50x50-ft Grid
- 25x25-ft Grid
- 10x250-ft Grid (long axis perpendicular to contours)
- 10x150-ft Grid (long axis perpendicular to contours)
- EM61 Tracks
- MRS Boundary
- Overhead Electric Lines

1230
1080
954
848
741
668
588
528
464
412
367
327
297
275
255
236
217
198
181
165
153
140
128
117
106
96
86
76
67
59
53
47
41
36
32
28
24
20
16
11
6
0

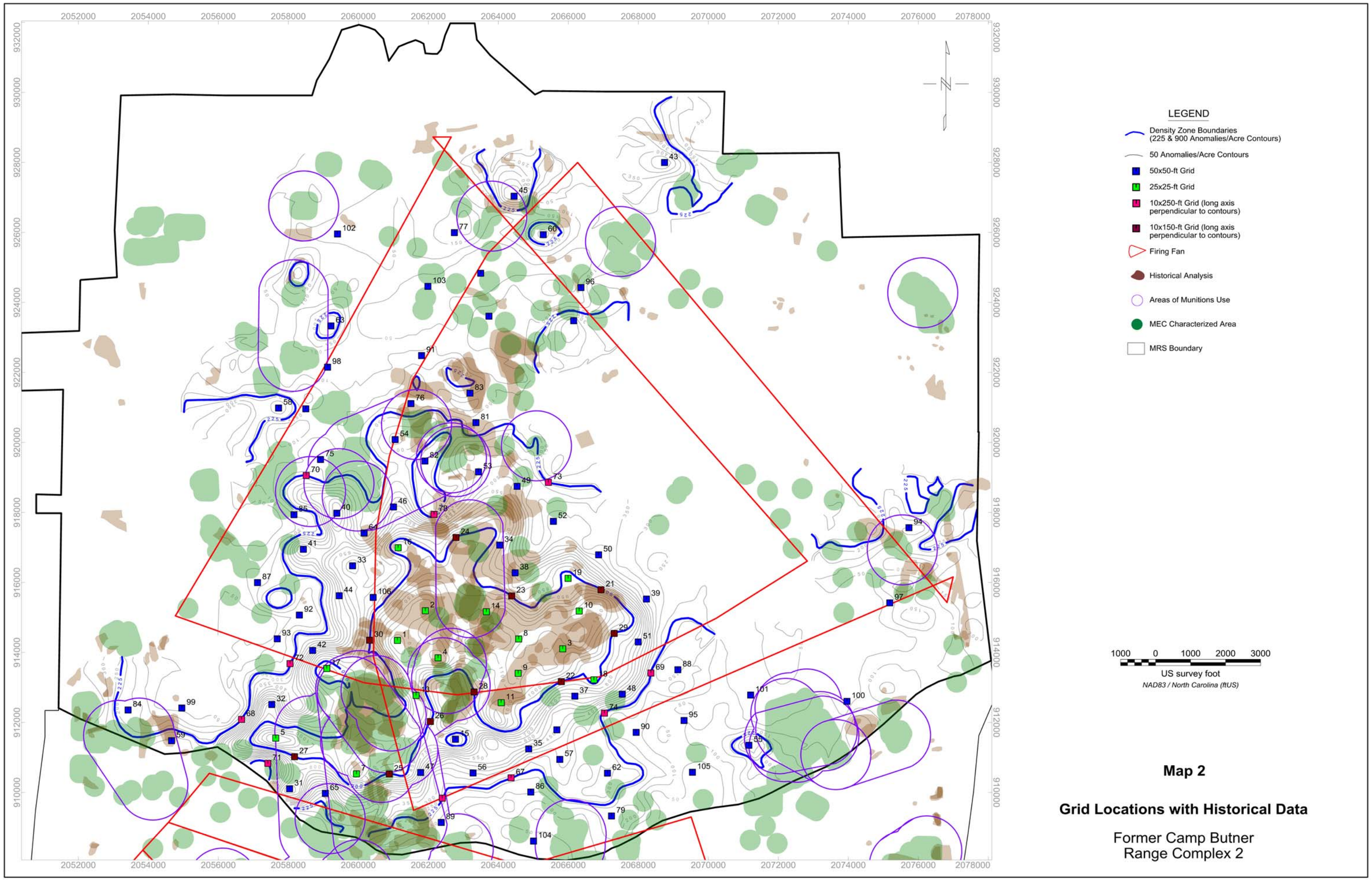
Anomaly Density
Anomalies/Acre

1000 0 1000 2000 3000
US survey foot
NAD83 / North Carolina (ftUS)

Map 1

Anomaly Density Map with Parcels

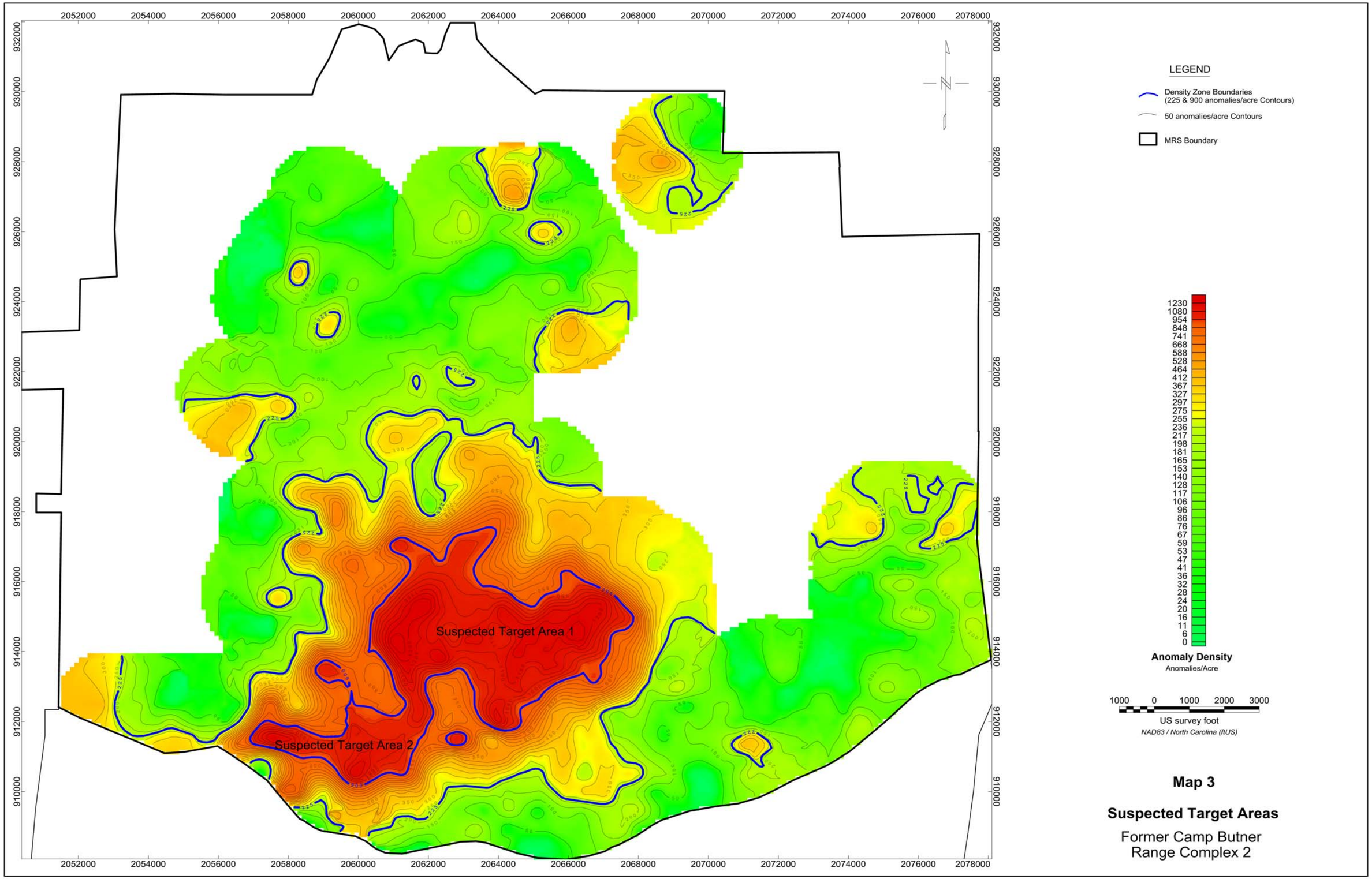
Former Camp Butner
Range Complex 2



Map 2

Grid Locations with Historical Data

Former Camp Butner
Range Complex 2



Map 3

Suspected Target Areas

Former Camp Butner
Range Complex 2



1,500 0 1,500

Feet

LEGEND

- proposed_transects
- Sites

Geology

LABEL, ROCKTYPE

- CZfv, felsic metavolcanic rock
- CZg, metamorphic rock
- CZiv, intermediate metavolcanic rock
- CZve, meta-argillite
- Jd, diabase
- PzZg, metamorphic rock
- TRc, conglomerate

FIGURE 3
Camp Butner
Transects and Geology
North

amec

Data Sources

1. Preliminary integrated geologic map databases for the United States, USGS (http://mrdata.usgs.gov/geology/state/state.php?state=NC)

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APPENDIX F-5

ARNG RECONNAISSANCE SURVEY PROPOSED GRID LOCATIONS

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March 12, 2013

Ms. Elise Goggin
U.S. Army Corps of Engineers
Huntsville Center
Contract No. W912DY-10-D0023
FUDS Project No. I04NC000902
W912DY-10-D-0023

Subject: Army National Guard Property proposed DGM grids in area of Reconnaissance Transects for the Former Camp Butner Army National Guard Property, Hand Grenade Range, and Flame Thrower Range Remedial Investigation/Feasibility Study Project, Granville County, North Carolina.

Introduction

The investigation strategy proposed for the Army National Guard (ARNG) munitions response site includes conducting full coverage digital geophysical mapping (DGM) surveys using an EM61-MK2 to evaluate eleven (11) 50-foot by 50-foot grids (approximately 0.6 acres) in satellite historical use areas. Additional information on this investigation strategy is included in the approved Final Work Plan (HGL, 2012). The proposed DGM full coverage grid locations in satellite historical use areas are based on the results of the surface reconnaissance "recon" transects previously completed (Figure 1).

All MEC-like targets above a threshold defined by the instrument verification strip (IVS) results and 10% of the residual anomalies in the full coverage DGM grids will be intrusively investigated to adequately characterize anomaly sources. Attachment 1, Table 1 summarizes the proposed locations for the full coverage DGM grids based on the information from the recon transects and the historical use areas identified outside the interpreted impact area.

Data Collection Methods

The recon transects acquired within the ARNG property were performed using a Schonstedt magnetic detector with wide area augmentation system (WAAS) capable Global Positioning System (GPS) methods (Camp Butner Final Work Plan 3.2.1). Surface and subsurface anomaly counts were documented over 100 foot intervals by the data collection teams along each transect and the information was used to generate the anomaly count map displayed in Figure 1.

Grid Placement

The locations for the 11 DGM grids were selected based on the analysis of the anomaly counts from the recon survey, presence of potential features related to munitions use identified from aerial photo analysis, potential impact craters identified during the recon survey activities, and boundaries of the project site.

Of the eleven grids, eight were placed where relatively higher anomaly counts occurred, based on the recon survey transects. The remaining three grids were distributed to gain geographic coverage within the project area and to evaluate areas with relatively lower anomaly counts for background verification. Six of the higher anomaly count area grids were placed in areas that correlate with potential munitions features identified from the aerial photo analysis and two of the higher anomaly count area grids were placed coincident with potential impact craters. Of these eight grids, seven are characterized by relatively higher anomaly counts that occur over multiple adjacent 100 foot transect segments.

The proposed full coverage DGM grid locations were assessed using a current satellite image to ensure grids do not intersect known cultural features such as buildings and roads, or inaccessible terrain and bodies of water. Satellite images have limitations, and it may be necessary to move some of the grid locations during field activities. If a grid location needs to be modified, the reason for the location shift will be documented. As grid locations are setup and staked the revised location will be sent to the client for concurrence.

Sincerely,

Kimberly Vaughn
Project Manager
HydroGeoLogic, Inc.

Attachments:
Figure 1 – Proposed DGM Grid Locations Army National Guard
Attachment 1 - Table of Proposed DGM grids in area of ARNG Recon Transects

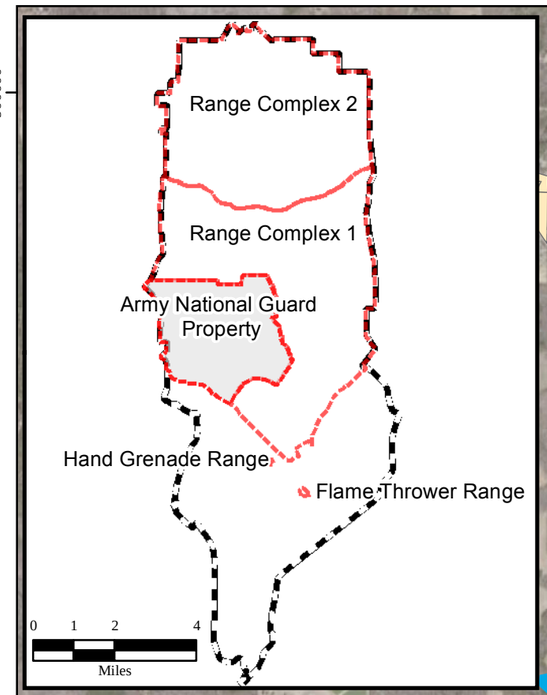
Attachment 1, Table of Proposed DGM grids in area of ARNG Recon Transects

Table 1. Detailed Grid Information

Map ID	Unique_Grid_ID	Easting (center)	Northing (center)	Size *(ft)*	Density (*relative)*	Area Information
1	ARNG_DGM_G079	2061176.28	887401.13	50x50	Medium-High	Elevated surface and subsurface hits during Recon over contiguous area (5-50), presence of feature potentially related to munitions use as designated by USACE TEC aerial photo interpretation
2	ARNG_DGM_G080	2059786.82	888599.64	50x50	High	Highest number of surface and subsurface hits during Recon over contiguous area (51-125)
3	ARNG_DGM_G081	2055301.41	888554.42	50x50	Medium	Elevated surface and subsurface hits during Recon over contiguous area (5-30)
4	ARNG_DGM_G082	2057282.76	886410.32	50x50	Low-Medium	Elevated surface and subsurface hits during Recon over dispersed area (5-12), presence of potential impact crater documented by Recon team
5	ARNG_DGM_G083	2055778.69	885861.34	50x50	Low-Medium	Elevated surface and subsurface hits during Recon over localized area (5-12), presence of potential impact crater documented by Recon team
6	ARNG_DGM_G084	2050738.98	898885.33	50x50	Medium	Elevated surface and subsurface hits during Recon over contiguous area (5-30), directly adjacent to feature potentially related to munitions use as designated by USACE TEC aerial photo interpretation
7	ARNG_DGM_G085	2050773.34	896082.15	50x50	Medium	Elevated surface and subsurface hits during Recon over contiguous area (5-30), directly adjacent to two features potentially related to munitions use as designated by USACE TEC aerial photo interpretation
8	ARNG_DGM_G086	2053380.62	890007.07	50x50	Medium	Elevated surface and subsurface hits during Recon over contiguous area (5-30), provides sampling coverage in central portion of ARNG recon area away from main roads
9	ARNG_DGM_G087	2063744.29	887151.77	50x50	Low-Medium	Elevated surface and subsurface hits during Recon over contiguous area (5-12), directly adjacent to large feature potentially related to munitions use as designated by USACE TEC aerial photo interpretation, provides sampling coverage in southeastern portion of ARNG area
10	ARNG_DGM_G088	2053878.04	892301.52	50x50	Low	Provides sampling coverage in north-central portion of ARNG area, validate historical information on munitions use areas, validate hand held detector and operator in area of background (background surface and subsurface hits during Recon over contiguous area (0-4))
11	ARNG_DGM_G089	2053829.86	886403.77	50x50	Low	Within footprint of feature potentially related to munitions use as designated by USACE TEC aerial photo interpretation, validate hand held detector and operator in area of background (background surface and subsurface hits during Recon over contiguous area (0-4)), allows comparative analysis of detector hits and potential munitions features identified during aerial photo interpretation

Coordinates provided in NAD 83, North Carolina State Plane FIPS 3200 Feet

Figure 1
Proposed DGM Grids
Army National Guard



Legend

Anomaly Counts (Surface and Subsurface Counts):

- 0-4
- 5-12
- 13-30
- 31-50
- 51-125

- Impact Crater
- Proposed DGM Grid (50ft x 50ft)
- 1 Grid Identification
- Brush Clearance
- Recon
- DGM Transect
- Not Executed ROE
- Refused ROE
- MEC Characterized Area
- TEC Historical Analysis
- Water
- Study Area
- MRS
- Former Camp Butner

Notes:
DGM=digital geophysical investigation
FS=feasibility tudy
MRS=munitions response site
RI=remedial investigation
ROE=right of entry

\\gst-srv-01\hglgis\Camp_Butner_Miscellaneous_Figures\(x)Proposed_Grids.mxd
3/13/2013 CNL
Source: HGL, USACE
ESRI Online Bing Maps Aerial
Coordinate System: NAD83, State Plane, North Carolina FIPS 3200, Feet

APPENDIX F-6

RC1 AND RC2 RECONNAISSANCE SURVEY
PROPOSED GRID LOCATIONS

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May 6, 2013

Ms. Elise Goggin
U.S. Army Corps of Engineers
Huntsville Center
Contract No. W912DY-10-D0023
FUDS Project No. I04NC000902
W912DY-10-D-0023

Subject: Proposed DGM grids in area of Reconnaissance Transects (Range Complex 1 and Range Complex 2) for the Former Camp Butner Army National Guard Property, Hand Grenade Range, and Flame Thrower Range Remedial Investigation/Feasibility Study Project, Granville County, North Carolina.

Introduction

The investigation strategy proposed for the Range Complex 1 (RC1) and Range Complex 2 (RC2) munitions response sites (MRS) includes conducting full coverage digital geophysical mapping (DGM) surveys using an EM61-MK2 to evaluate fourteen 50-foot by 50-foot grids (approximately .80 acres) in satellite historical use areas. Additional information on this investigation strategy is included in the approved Final Work Plan (HGL, 2012). The proposed DGM full coverage grid locations in satellite historical use areas are based on the results of the surface reconnaissance "recon" transects previously completed (Figure 1 and Figure 2). Based on the rights-of-entry (ROE) obtained by USACE, 40.03 miles were completed in RC1 and 48.73 miles were completed in RC2.

All MEC-like targets above a threshold defined by the instrument verification strip (IVS) results and 10% of the residual anomalies in the full coverage DGM grids will be intrusively investigated to adequately characterize anomaly sources. Attachment 1, Table 1 summarizes the proposed locations for the full coverage DGM grids based on the information from the recon transects and the historical use areas identified outside the interpreted impact area.

Data Collection Methods

The recon transects acquired within these MRSs were performed using a Schonstedt magnetic detector with wide area augmentation system (WAAS) capable Global Positioning System (GPS) methods (Camp Butner Final Work Plan 3.2.1). Surface and subsurface anomaly counts were documented over 100 foot intervals by the data collection teams along each transect and the information was used to generate the anomaly count map displayed in Figure 1 and Figure 2.

Grid Placement

The locations for the fourteen DGM grids were selected based on the analysis of the anomaly counts from the recon survey, presence of potential features related to munitions use identified from aerial photo analysis, potential impact craters identified during the recon survey activities, and boundaries of the project site.

There were no areas of RC1 and RC2 where craters were identified during Recon transects. No other potential munitions features were identified during Recon transects. Only two locations had counts of over 50 surface and subsurface hits per 100-ft segment. Therefore, the grids were divided between medium to high (31 to 50) and low (5-30) areas based on Recon transect data. Of the fourteen grids, thirteen were placed where elevated anomaly counts occurred based on the recon survey transects. One grid was placed to gain geographic coverage within the project area and to evaluate areas with relatively lower anomaly counts for background verification. Six of the higher anomaly count area grids were placed in areas that correlate with potential munitions features identified from the aerial photo analysis. Of these twelve grids, four are characterized by relatively higher anomaly counts that occur over multiple adjacent 100 foot transect segments.

The proposed full coverage DGM grid locations were assessed using a current satellite image to ensure grids do not intersect known cultural features such as buildings and roads, or inaccessible terrain and bodies of water. Satellite images have limitations, and it may be necessary to move some of the grid locations during field activities. If a grid location needs to be modified, the reason for the location shift will be documented. As grid locations are setup and staked the revised location will be sent to the client for concurrence.

Sincerely,



Kimberly Vaughn
Project Manager
HydroGeoLogic, Inc.

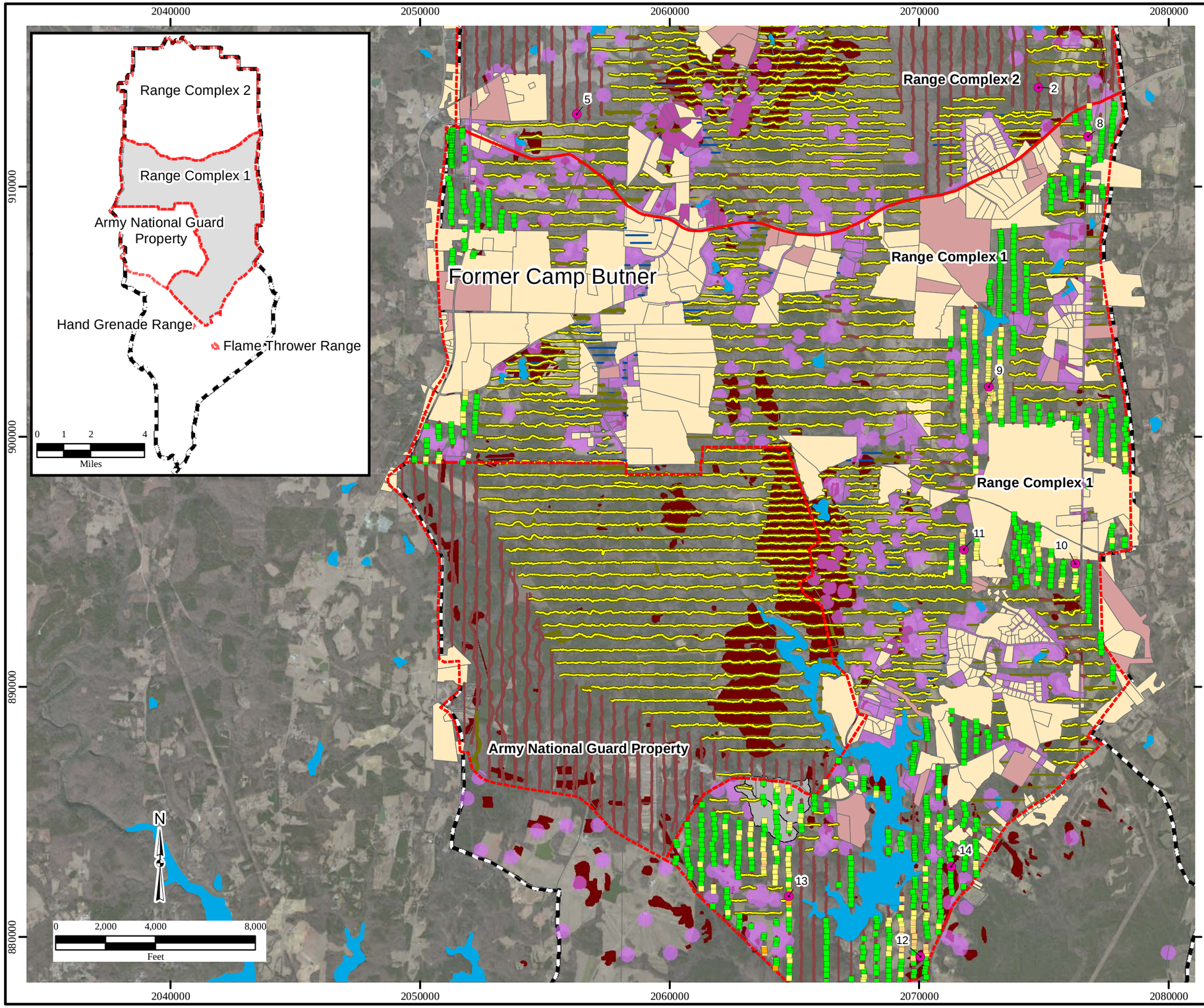
Attachments:
Figure 1 – Proposed DGM Grid Locations RC1
Figure 2 – Proposed DGM Grid Locations RC2
Attachment 1 - Table of Proposed DGM grids in area of RC1 and RC2 Recon Transects

Attachment 1, Table of Proposed DGM grids in area of RC1 and RC2 Recon Transects

Table 1. Detailed Grid Information

Map ID	Unique Grid ID	Easting (center)	Northing (center)	Size *(ft)*	Density (*relative)*	Area Information
1	RC2_DGM_107	2062704.57	928917.26	50x50	Medium	Elevated surface and subsurface hits during Recon over contiguous area (13-30), directly adjacent to feature potentially related to munitions use as designated by USACE TEC aerial photo interpretation
2	RC2_DGM_108	2074776.5	913967.74	50x50	Medium	Elevated surface and subsurface hits during Recon over contiguous area (13-30).
3	RC2_DGM_109	2072534.74	925825.61	50x50	Medium	Low number of surface and subsurface hits during Recon over contiguous area; placed to evaluate USACE TEC aerial photo interpretation of historical use area.
4	RC2_DGM_110	2061222.63	926358.77	50x50	Medium	Elevated surface and subsurface hits during Recon over dispersed area (13-30), repeated over several rows of parallel recon transects.
5	RC2_DGM_111	2056282.65	912890.01	50x50	Medium	Elevated surface and subsurface hits during Recon over contiguous area (5-12).
6	RC2_DGM_112	2052780.56	922398.2	50x50	Medium	Elevated surface and subsurface hits during Recon over contiguous area (13-30), directly adjacent to feature potentially related to munitions use as designated by USACE TEC aerial photo interpretation
7	RC2_DGM_113	2068314.24	923629.95	50x50	Medium	Elevated number of surface and subsurface hits during Recon over contiguous area (5-12); placed to evaluate USACE TEC aerial photo interpretation of historical use area.
8	RC1_DGM_098	2076760.79	911999.24	50x50	Medium	Elevated surface and subsurface hits during Recon over contiguous area (13-30).
9	RC1_DGM_099	2072781.77	902004.16	50x50	Medium	Elevated surface and subsurface hits during Recon over dispersed area (13-30), repeated over several rows of parallel recon transects.
10	RC1_DGM_100	2076256.41	894916.54	50x50	Medium	Elevated surface and subsurface hits during Recon over dispersed area (5-12), repeated over several rows of parallel recon transects.
11	RC1_DGM_101	2071788.51	895497.67	50x50	Medium	Elevated surface and subsurface hits during Recon over dispersed area (5-12); repeated over several rows of parallel recon transects.
12	RC1_DGM_102	2070047.47	879230.79	50x50	Medium	Elevated surface and subsurface hits during Recon over dispersed area (5-12); placed to evaluate USACE TEC aerial photo interpretation of historical use area; repeated over several rows of parallel recon transects.
13	RC1_DGM_103	2064773.12	881635.49	50x50	Medium to High	Elevated surface and subsurface hits during Recon over dispersed area (31-50).
14	RC1_DGM_104	2071283.13	882819.74	50x50	Medium	Elevated surface and subsurface hits during Recon over dispersed area (5-12); placed to evaluate USACE TEC aerial photo interpretation of historical use area.

Coordinates provided in NAD 83, North Carolina State Plane FIPS 3200 Feet



HGL—
Former Camp Butner, NC

Anomaly Counts
Range Complex 1

Legend

Anomaly Counts (Surface and Subsurface Counts)

- 0-4
- 5-12
- 13-30
- 31-50
- 51-125
- Proposed DGM Grid Center Point
- 2 Map Identification
- Brush Clearance
- Recon
- DGM Transect
- Not Executed ROE
- Refused ROE
- MEC Characterized Area
- TEC Historical Analysis
- Water
- Study Area
- MRS
- Former Camp Butner

Notes:
DGM=digital geophysical investigation
MRS=munitions response site
ROE=right of entry

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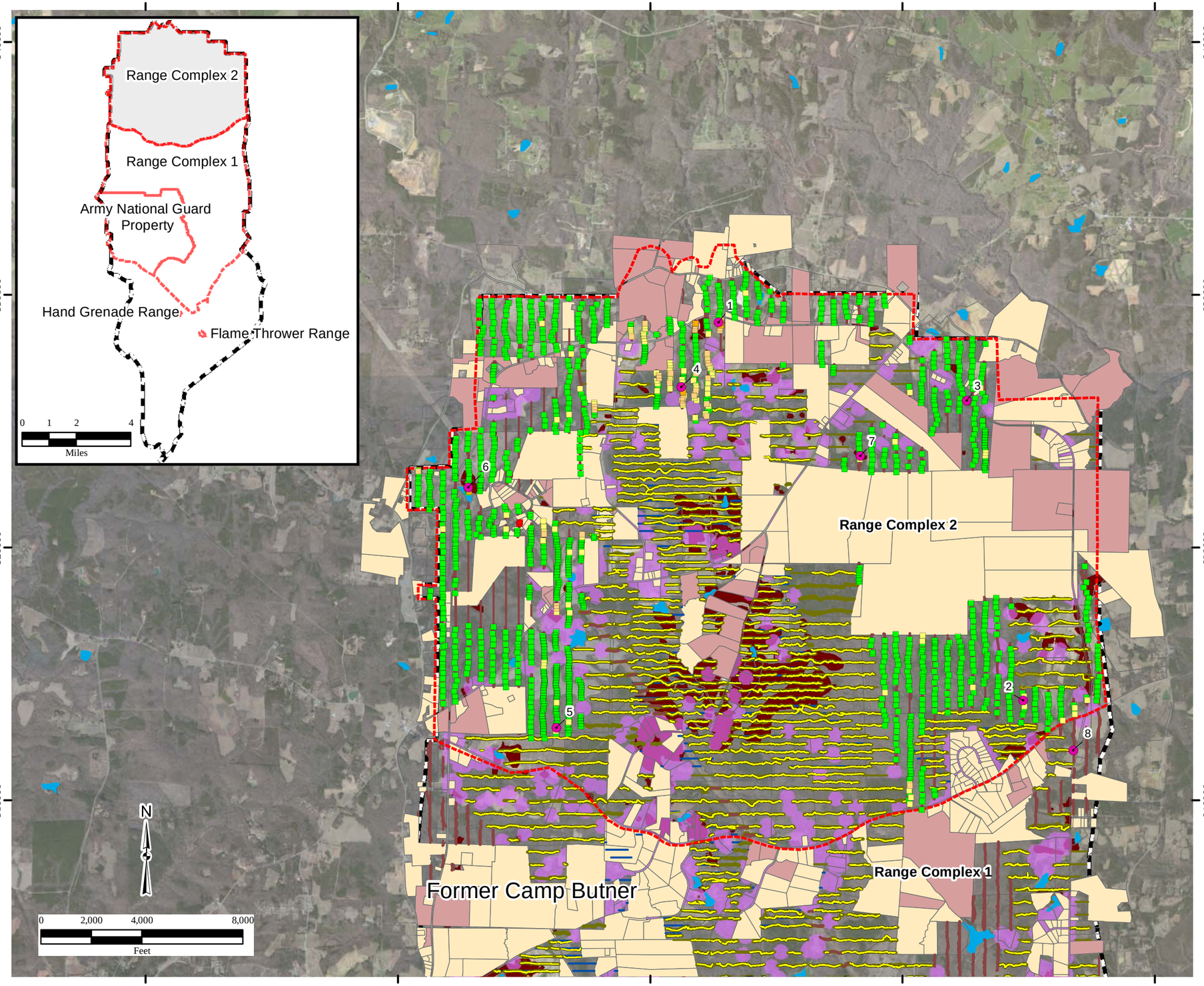
(x)RC1_Anomaly_Counts.mxd
5/6/2013 RB
Source: HGL, USACE
ESRI Online Aerial Imagery
Coordinate System: NAD83, State Plane, North Carolina FIPS 3200, Feet

Anomaly Counts
Range Complex 2



Legend

Anomaly Counts (Surface and Subsurface Counts)

- 0-4
- 5-12
- 13-30
- 31-50
- 51-125
- Proposed DGM Grid Center Point
- 7 Map Identification
- Brush Clearance
- Recon
- DGM Transect
- Not Executed ROE
- Refused ROE
- MEC Characterized Area
- TEC Historical Analysis
- Water
- MRS
- Former Camp Butner

Notes:
DGM=digital geophysical investigation
MRS=munitions response site
ROE=right of entry

\\Gst-srv-01\HGLGIS\Camp_Butner_Miscellaneous_Figures
(x)RC2_Anomaly_Counts.mxd
5/6/2013 RB
Source: HGL, USACE
ESRI Online Aerial Imagery
Coordinate System: NAD83, State Plane, North Carolina FIPS 3200, Feet

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APPENDIX F-7

DID REQUIRED MS ACCESS DATABASE

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APPENDIX F-8

ANALOG TRANSECTS, ANALOG GRIDS MS EXCEL TABLES

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Analog Transect Results

ID	OBJECTID	HGL_swp_dt	other_desc	facil_id	oe_grid_id	MEC_item_c	Surface_ct	Subsurf_ct	HGL_lbsMD	HGL_lbsCD	feat_desc	Rcvr_Type	GPS_Date	GPS_Time	Vert_Prec	Horz_Prec	Northing	Easting	Narrative
1	25	5/10/2013	Team 1	Army National Guard	ARNG-AGM-001-000	0	1	27	1	1	350-400	Unknown	5/10/2013	04:53:24pm	11.1	7.7	886252.796	2057505.858	
2	28	5/10/2013	Team 1	Army National Guard	ARNG-AGM-001-100	0	1	33	1	1	END	Unknown	5/10/2013	05:21:24pm	13.6	7.9	886248.495	2057360.796	
3	29	5/10/2013	Team 1	Army National Guard	ARNG-AGM-001-150	0	0	22	1	1	0-50	Unknown	5/10/2013	05:28:37pm	17.1	8.2	886259.644	2057311.081	
4	30	5/10/2013	Team 1	Army National Guard	ARNG-AGM-001-200	0	0	15	1	0	50-100	Unknown	5/10/2013	05:31:12pm	15.6	6.4	886264.09	2057270.624	
5	31	5/10/2013	Team 1	Army National Guard	ARNG-AGM-001-250	0	0	5	1	0	100-150	Unknown	5/10/2013	05:32:49pm	12.8	7.1	886283.522	2057244.295	
6	32	5/10/2013	Team 1	Army National Guard	ARNG-AGM-001-300	0	0	2	1	0	150-200	Unknown	5/10/2013	05:34:41pm	15.5	7.6	886278.593	2057188.58	
7	33	5/10/2013	Team 1	Army National Guard	ARNG-AGM-001-350	0	0	6	1	0	200-250	Unknown	5/10/2013	05:37:30pm	15.6	7.1	886281.968	2057116.482	
8	34	5/10/2013	Team 1	Army National Guard	ARNG-AGM-001-400	0	0	15	1	0	250-300	Unknown	5/10/2013	05:40:04pm	16.3	7.1	886297.254	2057091.608	
9	35	5/10/2013	Team 1	Army National Guard	ARNG-AGM-001-END	0	1	0	0	0	300-350	Unknown	5/10/2013	05:41:56pm	14.9	6.8	886308.676	2057072.808	
10	27	5/10/2013	Team 1	Army National Guard	ARNG-AGM-001-050	0	0	13	1	1	400-450	Unknown	5/10/2013	05:12:25pm	15.7	7.9	886191.082	2057442.473	
12	82	5/10/2013	Team 1	Army National Guard	ARNG-AGM-002-000	0	0	12	1	0	END	Unknown	5/10/2013	07:49:44pm	13.8	9.1	886342.443	2057528.269	
13	80	5/10/2013	Team 1	Army National Guard	ARNG-AGM-002-100	0	0	23	4	0	50-100	Unknown	5/10/2013	07:43:59pm	12.3	7.8	886333.909	2057414.141	
14	79	5/10/2013	Team 1	Army National Guard	ARNG-AGM-002-150	0	0	23	4	0	0-50	Unknown	5/10/2013	07:41:56pm	12.1	7.8	886311.661	2057381.352	
15	78	5/10/2013	Team 1	Army National Guard	ARNG-AGM-002-200	0	0	24	5	0	END	Unknown	5/10/2013	07:39:49pm	15.1	9.2	886301.985	2057323.942	
16	77	5/10/2013	Team 1	Army National Guard	ARNG-AGM-002-250	0	0	20	3	0	200-250	Unknown	5/10/2013	07:37:13pm	12.5	8.1	886319.269	2057260.737	
17	76	5/10/2013	Team 1	Army National Guard	ARNG-AGM-002-300	0	0	20	3	0	150-200	Unknown	5/10/2013	07:35:46pm	11.5	7.7	886363.465	2057251.624	
18	75	5/10/2013	Team 1	Army National Guard	ARNG-AGM-002-350	0	0	18	3	0	100-150	Unknown	5/10/2013	07:34:01pm	11.4	7.5	886352.391	2057189.512	
19	74	5/10/2013	Team 1	Army National Guard	ARNG-AGM-002-400	0	0	10	2	0	50-100	Unknown	5/10/2013	07:33:00pm	11.8	7.7	886354.3	2057143.418	
21	68	5/10/2013	Team 1	Army National Guard	ARNG-AGM-002-450	0	0	6	1	0	100-150	Unknown	5/10/2013	07:21:57pm	11.7	7.2	886358.605	2057096.508	
22	81	5/10/2013	Team 1	Army National Guard	ARNG-AGM-002-050	0	0	15	2	0	100-150	Unknown	5/10/2013	07:47:53pm	11.4	7.7	886319.064	2057480.911	
23	67	5/10/2013	Team 1	Army National Guard	ARNG-AGM-002-END	0	0	0	0	0	50-100	Unknown	5/10/2013	07:21:00pm	13.9	8.4	886379.788	2057087.932	
25	38	5/10/2013	Team 1	Army National Guard	ARNG-AGM-003-000	0	1	3	1	0	400-450	Unknown	5/10/2013	06:14:44pm	14.5	7.1	886442.3	2057571.312	
26	24	5/10/2013	Team 1	Army National Guard	ARNG-AGM-003-050	0	0	2	1	0	300-350	GeoXH 2005	5/10/2013	06:10:22pm	10.5	6.6	886454.022	2057523.369	
27	23	5/10/2013	Team 1	Army National Guard	ARNG-AGM-003-100	0	0	6	1	0	250-300	GeoXH 2005	5/10/2013	06:08:50pm	10.7	6.2	886476.084	2057466.404	
28	22	5/10/2013	Team 1	Army National Guard	ARNG-AGM-003-150	0	1	4	1	0	200-250	GeoXH 2005	5/10/2013	06:07:47pm	9.7	6.1	886488.728	2057415.9	
29	21	5/10/2013	Team 1	Army National Guard	ARNG-AGM-003-200	0	1	4	1	0	150-200	GeoXH 2005	5/10/2013	06:05:37pm	10.1	6.1	886512.362	2057361.006	
30	20	5/10/2013	Team 1	Army National Guard	ARNG-AGM-003-250	0	0	4	1	0	100-150	GeoXH 2005	5/10/2013	06:02:15pm	11	6.2	886523.266	2057316.678	
31	19	5/10/2013	Team 1	Army National Guard	ARNG-AGM-003-300	0	0	3	1	0	50-100	GeoXH 2005	5/10/2013	06:01:05pm	10.9	6.3	886535.701	2057276.314	
32	18	5/10/2013	Team 1	Army National Guard	ARNG-AGM-003-350	0	1	7	1	2	0-50	GeoXH 2005	5/10/2013	05:58:27pm	10	6.1	886562.445	2057220.179	
33	37	5/10/2013	Team 1	Army National Guard	ARNG-AGM-003-END	0	0	0	0	0	350-400	Unknown	5/10/2013	05:51:13pm	13.8	6.5	886577.848	2057201.749	
35	45	5/10/2013	Team 1	Army National Guard	ARNG-AGM-004-000	0	1	10	1	0	150-200	Unknown	5/10/2013	06:25:24pm	14.2	6.5	886228.78	2057492.499	
36	43	5/10/2013	Team 1	Army National Guard	ARNG-AGM-004-100	0	0	5	1	0	50-100	Unknown	5/10/2013	06:22:19pm	13.6	6.9	886321.05	2057529.479	
37	42	5/10/2013	Team 1	Army National Guard	ARNG-AGM-004-150	0	1	6	1	0	0-50	Unknown	5/10/2013	06:21:04pm	13.1	6.8	886352.102	2057529.717	
38	41	5/10/2013	Team 1	Army National Guard	ARNG-AGM-004-200	0	1	4	1	0	END	Unknown	5/10/2013	06:18:53pm	13.8	6.8	886415.465	2057514.218	
39	44	5/10/2013	Team 1	Army National Guard	ARNG-AGM-004-050	0	0	6	1	0	100-150	Unknown	5/10/2013	06:23:25pm	16	7.5	886255.996	2057487.377	
42	48	5/10/2013	Team 1	Army National Guard	ARNG-AGM-005-050	0	0	21	2	0	250-300	Unknown	5/10/2013	06:34:06pm	16.3	7.6	886307.196	2057329.219	
43	50	5/10/2013	Team 1	Army National Guard	ARNG-AGM-005-150	0	0	16	1	0	350-400	Unknown	5/10/2013	06:40:48pm	15.3	6.7	886401.44	2057383.431	
44	51	5/10/2013	Team 1	Army National Guard	ARNG-AGM-005-200	0	0	21	3	0	END	Unknown	5/10/2013	06:42:12pm	13.6	7.7	886447.724	2057383.043	
45	52	5/10/2013	Team 1	Army National Guard	ARNG-AGM-005-END	0	0	7	1	0	0-50	Unknown	5/10/2013	06:45:24pm	14.5	7	886486.825	2057407.994	
46	49	5/10/2013	Team 1	Army National Guard	ARNG-AGM-005-100	0	0	8	1	0	300-350	Unknown	5/10/2013	06:37:51pm	15.4	7	886359.399	2057369.637	
47	47	5/10/2013	Team 1	Army National Guard	ARNG-AGM-005-000	0	0	0	0	0	200-250	Unknown	5/10/2013	06:27:20pm	17.9	7.2	886253.081	2057356.39	
48	58	5/10/2013	Team 1	Army National Guard	ARNG-AGM-006-000	0	0	15	2	0	0-50	Unknown	5/10/2013	07:05:54pm	14.5	6.6	886267.357	2057209.285	
49	56	5/10/2013	Team 1	Army National Guard	ARNG-AGM-006-100	0	0	23	4	0	200-250	Unknown	5/10/2013	06:55:22pm	9.6	6.6	886380.968	2057210.18	
50	55	5/10/2013	Team 1	Army National Guard	ARNG-AGM-006-150	0	0	15	3	0	150-200	Unknown	5/10/2013	06:52:13pm	13.5	6.9	886454.02	2057252.145	
51	53	5/10/2013	Team 1	Army National Guard	ARNG-AGM-006-200	0	0	9	1	0	50-100	Unknown	5/10/2013	06:48:42pm	11.4	6.9	886462.909	2057220.99	
52	57	5/10/2013	Team 1	Army National Guard	ARNG-AGM-006-050	0	0	19	2	0	END	Unknown	5/10/2013	07:00:29pm	12.6	7	886360.19	2057243.563	
55	61	5/10/2013	Team 1	Army National Guard	ARNG-AGM-007-050	0	1	11	1	0	100-150	Unknown	5/10/2013	07:10:28pm	11.2	6.9	886346.947	2057153.383	
56	63	5/10/2013	Team 1	Army National Guard	ARNG-AGM-007-150	0	0	18	6	0	200-250	Unknown	5/10/2013	07:14:18pm	8.3	6.5	886452.54	2057176.617	
57	64	5/10/2013	Team 1	Army National Guard	ARNG-AGM-007-200	0	0	19	2	0	END	Unknown	5/10/2013	07:16:38pm	8.1	6.3	886480.974	2057193.954	
58	65	5/10/2013	Team 1	Army National Guard	ARNG-AGM-007-END	0	0	16	2	0	0-50	Unknown	5/10/2013	07:18:22pm	11.9	6.9	886547.62	2057220.496	

Analog Transect Results

ID	OBJECTID	HGL_swp_dt	other_desc	facil_id	oe_grid_id	MEC_item_c	Surface_ct	Subsurf_ct	HGL_lbsMD	HGL_lbsCD	feat_desc	Rcvr_Type	GPS_Date	GPS_Time	Vert_Prec	Horz_Prec	Northing	Easting	Narrative
59	62	5/10/2013	Team 1	Army National Guard	ARNG-AGM-007-100	0	0	16	1	0	150-200	Unknown	5/10/2013	07:11:37pm	9.3	6.9	886387.551	2057156.204	
61	60	5/10/2013	Team 1	Army National Guard	ARNG-AGM-007-000	0	0	0	0	0	50-100	Unknown	5/10/2013	07:08:05pm	13.2	7.2	886312.502	2057139.391	
62	72	5/10/2013	Team 1	Army National Guard	ARNG-AGM-008-000	0	1	1	1	0	0-50	Unknown	5/10/2013	07:30:44pm	11.6	8.1	886306.663	2057067.744	
63	70	5/10/2013	Team 1	Army National Guard	ARNG-AGM-008-100	0	0	0	0	0	200-250	Unknown	5/10/2013	07:27:17pm	12.2	8	886389.655	2057082.293	
64	71	5/10/2013	Team 1	Army National Guard	ARNG-AGM-008-050	0	0	2	1	0	END	Unknown	5/10/2013	07:28:45pm	12.8	7.7	886320.234	2057059.878	
66	69	5/10/2013	Team 1	Army National Guard	ARNG-AGM-008-END	0	0	0	0	0	150-200	Unknown	5/10/2013	07:26:27pm	11	8.8	886449.618	2057085.735	
76	135	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-1100	0	1	1	0	1	1100-1200	Unknown	5/21/2013	07:50:47pm	28.9	9.6	924500.294	2077450.085	
77	129	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-0800	0	1	0	0	1	800-900	Unknown	5/21/2013	07:35:12pm	19.9	8.6	924481.534	2077164.057	
80	131	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-0900	0	1	0	0	1	900-1000	Unknown	5/21/2013	07:37:07pm	22.4	9.6	924503.654	2077250.673	
84	137	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-END	0	1	0	0	1	END	Unknown	5/21/2013	07:53:24pm	26.3	9.2	924499.175	2077554.314	
87	133	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-1000	0	1	5	0	3	1000-1100	Unknown	5/21/2013	07:41:21pm	19.7	9	924477.851	2077357.691	
89	121	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-0400	0	1	3	0	3	400-500	Unknown	5/21/2013	07:17:05pm	12.9	8.5	924486.515	2076855.049	
91	123	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-0500	0	1	4	0	1	500-600	Unknown	5/21/2013	07:21:50pm	14.4	8.2	924483.8	2076931.699	
92	125	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-0600	0	1	3	0	2	600-700	Unknown	5/21/2013	07:28:44pm	18.4	7.4	924471.999	2076988.239	
93	115	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-0100	0	1	4	0	2	100-200	Unknown	5/21/2013	06:56:45pm	12.4	8.5	924468.744	2076554.565	
94	114	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-0000	0	0	0	0	0	0-100	Unknown	5/21/2013	06:48:06pm	12	8.1	924501.982	2076489.117	
96	117	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-0200	0	1	2	0	1	200-300	Unknown	5/21/2013	07:05:09pm	12.8	8.5	924506.055	2076645.467	
98	119	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-0300	0	1	2	0	1	300-400	Unknown	5/21/2013	07:10:58pm	16.6	9.5	924475.102	2076709.897	
100	127	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-009-0700	0	1	0	0	1	700-800	Unknown	5/21/2013	07:33:05pm	18.7	9.5	924445.771	2077069.633	
102	139	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-011b-END	0	0	0	0	0	0-100	Unknown	5/21/2013	08:02:25pm	23.7	9.1	923405.251	2077656.474	
103	140	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-011b-0100	0	1	0	0	1	100-200	Unknown	5/21/2013	08:11:04pm	19.1	7.5	923409.162	2077556.091	
104	141	5/21/2013	Team 1	Range Complex 2	RC2-DGM500-011b-0000	0	1	0	0	1	END	Unknown	5/21/2013	08:14:09pm	25.2	8.8	923435.456	2077475.15	
108	161	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-027-0000	0	0	1	0	0	0-100						914981.3106	2075314.783	100' CD 0 MD 0 Anomalies 1
109	162	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-027-0100	0	0	1	0	0	100-200						914993.7614	2075243.457	200' CD 0 MD 0 Anomalies 1
110	163	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-027-0200	0	0	2	0	0	200-300						914993.722	2075159.808	200' CD 0 MD 0 Anomalies 2
111	164	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-027-0300	0	0	1	0	0	300-400						914988.102	2075061.722	400' CD 0 MD 0 Anomalies 1
112	165	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-027-0400	0	0	1	0	0	400-500						914998.9989	2074992.748	500' CD 0 MD 0 Anomalies 1
113	168	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-027-0700	0	0	2	1	0	700-800						914924.4889	2074747.23	800' CD 0 MD .2 lb Anomalies 2
114	169	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-027-0800	0	0	1	0	0	800-900						914967.1617	2074661.376	900' CD 0 MD 0 Anomalies 1
115	170	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-027-0900	0	0	1	0	0	900-1000						915011.6157	2074559.988	1000' CD 0 MD 0 Anomalies 1
116	171	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-027-1000	0	0	1	0	0	1000-1042						915027.5921	2074497.606	1042' CD 0 MD 0 Anomalies 1
117	166	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-027-0500	0	0	1	0	0	500-600						915001.476	2074886.665	600' CD 0 MD 0 Anomalies 1
118	167	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-027-0600	0	0	1	0	0	600-700						914978.5173	2074810.055	700' CD 0 MD 0 Anomalies 1
121	173	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-028-0000	0	0	3	0	2	0-100						914462.3179	2075070.244	100' CD 2lb MD 0 Anomalies 3
122	174	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-028-0100	0	0	4	0	1	100-200						914447.8193	2074966.179	200' CD .5lb MD 0 Anomalies 4
123	175	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-028-0200	0	0	2	0	1	200-300						914465.3448	2074897.552	300' CD .1lb MD 0 Anomalies 2
124	176	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-028-0300	0	0	1	0	0	300-400						914424.3872	2074731.012	500' CD 0lb MD 0 Anomalies 1
125	178	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-028-0400	0	0	2	0	0	400-500						914449.1736	2074823.459	400' CD 0lb MD 0 Anomalies 2
126	177	4/23/2013	Team 1	Range Complex 2	RC2-DGM500-028-0500	0	0	1	0	0	500-574						914486.371	2074713.529	574' CD 0lb MD 0 Anomalies 1
134	40	5/10/2013	Team 1	Army National Guard	ARNG-AGM-004-END	0	0	0	0	0	450-500	Unknown	5/10/2013	06:16:59pm	15.3	6.9	886480.73	2057508.72	
135	54	5/10/2013	Team 1	Army National Guard	ARNG-AGM-006-END	0	0	0	0	0	100-150	Unknown	5/10/2013	06:50:17pm	10.4	7.2	886515.085	2057226.809	

Analog Grids Results

ID	HGL_swp_dt	other_desc	facil_id	oe_grid_id	MEC_item_c	Surface_ct	Subsurf_ct	HGL_lbsMD	HGL_lbsCD	feat_desc	Rcvr_Type	GPS_Date	GPS_Time	Vert_Prec	Horz_Prec	Northing	Easting	Narrative
1	5/14/2013	Team 2	Range Complex 1	RC1_G001	0	0	60	7	1		Unknown	5/14/2013	12:51:19pm	18	8.5	894556.909	2065915.376	
2	5/14/2013	Team 1	Range Complex 1	RC1_G006	0	0	55	8	1	FOUND 1 T-BAR	Unknown	5/14/2013	04:07:25pm	15.7	8.9	892556.2	2067309.54	
3	5/14/2013	Team 2	Range Complex 1	RC1_G008	0	0	55	4	0		Unknown	5/14/2013	02:16:25pm	14.7	9.5	898673.877	2066571.51	
4	5/13/2013	Team 2	Range Complex 1	RC1_G010	0	0	73	9	5		Unknown	5/13/2013	01:07:27pm	23.3	9.4	895177.822	2067820.033	
5	5/13/2013	Team 2	Range Complex 1	RC1_G011	0	0	36	3	0		Unknown	5/13/2013	04:23:53pm	13.9	9.1	893397.914	2067489.637	
6	5/1/2013	Team 1	Range Complex 1	RC1_G017	0	0	329	27	0		Unknown	5/1/2013	08:14:25am	48.5	30.5	901451.823	2063808.655	
7	4/26/2013	Team 1	Range Complex 1	RC1_G021	0	0	213	30	0		Unknown	4/26/2013	08:32:15am	73.7	34.9	900527.037	2063901.711	
8	5/14/2013	Team 2	Range Complex 1	RC1_G023	0	0	78	9	0		Unknown	5/14/2013	03:53:49pm	11.8	8.5	898294.526	2067263.581	
9	5/13/2013	Team 1	Range Complex 1	RC1_G031	0	0	43	1	7	Moved grid S 100ft	Unknown	5/13/2013	01:16:32pm	14.4	7.5	896577.848	2068526.086	
10	5/13/2013	Team 1	Range Complex 1	RC1_G031	0	0	43	1	7	Moved grid S 100ft	Unknown	5/13/2013	02:12:24pm	12.8	9.4	897405.593	2068961.955	
11	5/14/2013	Team 1	Range Complex 1	RC1_G038	0	0	22	3	1		Unknown	5/14/2013	12:51:03pm	14.2	8.3	895139.2	2068909.466	
12	5/13/2013	Team 2	Range Complex 1	RC1_G039	0	0	51	3	0		Unknown	5/13/2013	06:01:58pm	18	8.3	892484.57	2068133.319	
13	5/13/2013	Team 2	Range Complex 1	RC1_G051	0	0	41	5	0		Unknown	5/13/2013	08:13:13pm	15.4	8	893073.092	2068742.909	
14	5/13/2013	Team 1	Range Complex 1	RC1_G052	0	6	16	3	3		Unknown	5/13/2013	07:34:40pm	12.6	8.5	894456.02	2069265.476	
15	5/14/2013	Team 2	Range Complex 1	RC1_G053	0	0	36	3	1		Unknown	5/14/2013	06:31:13pm	13.6	8.1	899026.523	2069365.806	
16	5/13/2013	Team 1	Range Complex 1	RC1_G057	0	2	7	1	2	(50ft)9TOTAL	Unknown	5/13/2013	02:20:19pm	11.4	8.4	897422.829	2068990.224	
17	5/13/2013	Team 1	Range Complex 1	RC1_G057	0	0	3	0	1	(100ft)3TOTAL	Unknown	5/13/2013	02:25:43pm	13.5	8.1	897440.03	2069074.124	
18	5/13/2013	Team 1	Range Complex 1	RC1_G057	0	1	4	1	1	(150ft)5TOTAL	Unknown	5/13/2013	02:29:23pm	14.7	8.6	897421.952	2069119.26	
19	5/13/2013	Team 1	Range Complex 1	RC1_G057	0	0	2	0	1	(200ft)2TOTAL	Unknown	5/13/2013	02:30:37pm	13.6	7.3	897459.123	2069189.501	
20	5/13/2013	Team 1	Range Complex 1	RC1_G057	0	1	7	2	1	(250ft)8TOTAL	Unknown	5/13/2013	02:34:32pm	12.4	7.9	897452.075	2069181.639	
21	5/13/2013	Team 1	Range Complex 1	RC1_G070	0	4	18	4	1		Unknown	5/13/2013	08:31:59pm	14.4	6.5	892614.671	2070458.761	
22	5/14/2013	Team 1	Range Complex 1	RC1_G072	0	0	13	1	1		Unknown	5/14/2013	04:53:35pm	8.3	6.6	891885.918	2068366.473	
23	4/30/2013	Team 2	Range Complex 1	RC1_G074	0	0	53	1	1	Entire grid hot rock	Unknown	4/30/2013	09:27:10am	37.3	25.9	893490.782	2076045.768	
24	4/30/2013	Team 2	Range Complex 1	RC1_G083	0	0	134	0	2	CD 1.25lb SAA	Unknown	4/30/2013	11:10:55am	38	23.5	893509.397	2073956.983	
25	5/14/2013	Team 1	Range Complex 1	RC1_G084	0	0	18	0	2		Unknown	5/14/2013	01:59:32pm	12.7	9.3	893951.91	2070236.901	
26	4/30/2013	Team 2	Range Complex 1	RC1_G092	0	0	38	0	1		Unknown	4/30/2013	02:39:01pm	34.8	19.2	898706.205	2070218.24	
27	5/14/2013	Team 1	Range Complex 1	RC1_G094	0	1	9	1	0		Unknown	5/14/2013	12:30:26pm	13.4	8.6	896644.089	2069979.385	
28	5/20/2013	Team 2	Range Complex 1	RC1_G096	0	0	11	0	1		Unknown	5/20/2013	06:40:33pm	10.4	7	900418.525	2054912.3	
29	5/13/2013	Team 1	Range Complex 1	RC1_G097	0	6	22	0	1		Unknown	5/13/2013	04:38:42pm	12.2	8.4	896922.808	2071113.363	
30	5/21/2013	Team 1	Range Complex 1	RC1_G100	0	4	73	0	1	RC1 SW CORNERGRID100	Unknown	5/21/2013	01:31:03pm	9.8	6.9	883343.401	2063328.681	
31	5/13/2013	Team 1	Range Complex 1	RC1_G101	0	6	9	0	1	RC1 GRID 101	Unknown	5/13/2013	06:24:45pm	14.6	7.4	895558.189	2071764.941	
32	5/20/2013	Team 2	Range Complex 1	RC1_G105	0	0	69	11	11	Grid 105	Unknown	5/20/2013	04:16:48pm	15.3	9.4	899760.97	2063922.925	
33	4/24/2013	Team 2	Range Complex 2	RC2_G014	0	0	35	3	1		Unknown	4/24/2013	02:25:40pm	56.6	26	917103.583	2061141.974	
34	4/22/2013		Range Complex 2	RC2_G023	0	0	0	0	1	CD .2 Anomalies 28	Unknown	4/22/2013	03:16:01pm	40	21.7	910986.8715	2058137.844	
35	4/22/2013		Range Complex 2	RC2_G028	0	0	0	1	0			4/22/2013		0	0	910069.0682	2058063.495	
36	4/24/2013	Team 2	Range Complex 2	RC2_G036	0	0	42	1	0	CD .25 Hot dirt	Unknown	4/24/2013	09:40:05am	42.8	29.1	917952.625	2059273.758	
37	4/24/2013	Team 2	Range Complex 2	RC2_G038	0	0	36	1	0	CD .25 lb	Unknown	4/24/2013	12:20:20pm	32	20.2	916961.482	2058394.883	
38	4/25/2013	Team 2	Range Complex 2	RC2_G051	0	0	68	4	2		Unknown	4/25/2013	01:28:35pm	35.8	24	919004.571	2063368.104	
39	4/22/2013		Range Complex 2	RC2_G069	0	0	0	1	2			4/22/2013		0	0	910987.0467	2057451.198	
40	5/14/2013	Team 1	Range Complex 2	RC2_G072	0	0	4	0	2	RC2 GRID 107	Unknown	5/14/2013	07:21:50pm	8.4	6.7	928936.285	2062733.598	
41	4/24/2013	Team 2	Range Complex 2	RC2_G083	0	0	26	1	3		Unknown	4/24/2013	10:04:16am	44	31.8	917930.017	2058155.226	
42	4/23/2013		Range Complex 2	RC2_G096	0	0	0	0	1			4/23/2013		0	0	915460.5787	2075253.356	
43	4/23/2013		Range Complex 2	RC2_G101	0	0	0	0	1			4/23/2013		0	0	925923.8833	2059462.604	
44	5/20/2013	Team 1	Range Complex 2	RC2_G109	0	0	47	0	2	RC2 GRID 109	Unknown	5/20/2013	07:30:27pm	20.7	9.9	925780.029	2072668.629	

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APPENDIX F-9

GEOPHYSICAL INTRUSIVE RESULTS TABLE

A MS Excel version of the “geophysical intrusive results table” exported from Appendix F-7
(the DID required MS Access database)

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Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
ARNG-001-001	4/9/2013	1			2	CD					SW corner nail		0		0	1	1	lb
ARNG-001-002	4/9/2013	1			2	MD					Frag		12	SW	23	5	0.5	lb
ARNG-001-003	4/9/2013	1			2	MD					Frag		0		0	1	0.25	lb
ARNG-001-004	4/9/2013	1			2	MD					Frag		0		0	4	0.5	lb
ARNG-001-005	4/9/2013	1			2	MD					Frag		0		13	4	0.5	lb
ARNG-001-006	4/9/2013	1			2	MD					Frag		0		12	5	0.75	lb
ARNG-001-007	4/9/2013	1			2	MD, SEED					QC SEED #27, frag		0		0	2	1	lb
ARNG-001-008	4/9/2013	1			2	MD					Frag		0		12	3	1	lb
ARNG-001-009	4/9/2013	1			2	MD					Frag		0		12	2	0.25	lb
ARNG-001-010	4/9/2013	1			2	MD					Frag		0		12	10	1	lb
ARNG-001-011	4/9/2013	1			2	MD					Frag		0		14	4	0.5	lb
ARNG-001-012	4/9/2013	1			2	MD					Frag		0		14	5	0.75	lb
ARNG-002-001	4/2/2013	1			1	MD					Frag--HSH				4	4	1	lb
ARNG-002-002	4/2/2013	1			1	MD					Frag pit--HSH		6	W	7	7	1.5	lb
ARNG-002-003	4/2/2013	1			1	MD					Frag--HSH		0		3	3	0.5	lb
ARNG-002-004	4/2/2013	1			1	MD					Frag--HSH		0		4	5	0.5	lb
ARNG-002-005	4/2/2013	1			1	MD					Frag--HSH		0		2	2	0.5	lb
ARNG-002-006	4/2/2013	1			1	MD					Frag, 75mm projo base, projo T-bar fuze--HSH		0		6	8	1	lb
ARNG-002-007	4/2/2013	1			1	MD					Frag--HSH		6	E	4	4	1	lb
ARNG-002-008	4/2/2013	1			1	MD, SEED					Frag, QC SEED #17--HSH		0		6	4	1	lb
ARNG-002-009	4/2/2013	1			1	MD					Frag, projo T-bar fuze--HSH		0		8	7	3	lb
ARNG-002-010	4/2/2013	1			1	MD					Frag pit--HSH		6	N	6	8	2	lb
ARNG-002-011	4/2/2013	1			1	MD					Frag pit--HSH		0		3	3	1.5	lb
ARNG-002-012	4/2/2013	1			1	MD					Frag pit--HSH		0		6	5	2	lb
ARNG-002-013	4/2/2013	1			1	MD					Frag pit--HSH		0		2	2	0.5	lb
ARNG-002-014	4/2/2013	1			1	MD					Frag pit--HSH		0		6	5	2	lb
ARNG-002-015	4/2/2013	1			1	MD					Frag pit--HSH		0		4	3	1	lb
ARNG-003-001	4/15/2013	1			2	MD, CD					SW corner nail, frag		0		0	2	1.2	lb
ARNG-003-002	4/15/2013	1			2	MD, CD					Wagon leaf spring, frag		0		12	5	40	lb
ARNG-003-003	4/15/2013	1			2	MD					Frag		0		4	6	0.25	lb
ARNG-003-004	4/15/2013	1			2	MD, CD					Wagon leaf spring, frag, rust		0		18	12	8	lb
ARNG-003-005	4/15/2013	1			2	MD					Frag		0		5	5	0.75	lb
ARNG-003-006	4/15/2013	1			2	MD, CD					Frag, small arms		0		16	6	1.5	lb
ARNG-003-007	4/15/2013	1			2	MD					Frag		0		18	4	0.3	lb
ARNG-003-008	4/15/2013	1			2	MD					Frag		0		5	2	0.25	lb
ARNG-003-009	4/15/2013	1			2	MD					Frag		0		14	2	0.25	lb
ARNG-003-010	4/15/2013	1			2	SEED					QC SEED #60		12	NW	0	1	1	lb
ARNG-003-011	4/15/2013	1			2	OTHER					Same as #10		12	SE		0		lb
ARNG-003-012	4/15/2013	1			2	MD					Frag		0		15	4	0.25	lb
ARNG-003-013	4/15/2013	1			2	MD, CD					Frag, bolt		0		16	4	0.35	lb
ARNG-003-014	4/15/2013	1			2	MD					Frag		0		16	4	0.3	lb
ARNG-004-001	4/3/2013	1			1	MD					Frag		0		3	4	3	lb
ARNG-004-002	4/3/2013	1			1	MD					Frag--HSH		0		4	4	1	lb
ARNG-004-003	4/3/2013	1			1	MD					Frag		0		2	1	1	lb
ARNG-004-004	4/3/2013	1			1	MD					Frag--HSH		12	S	4	2	0.5	lb
ARNG-004-005	4/3/2013	1			1	MD					Frag		6	SW	2	3	0.5	lb
ARNG-004-006	4/3/2013	1			1	MD					Frag		6	W	5	3	1	lb
ARNG-004-007	4/3/2013	1			1	MD					37mm exp		6	N	2	1	2	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
ARNG-004-008	4/3/2013	1			1	MD					Frag--HSH		12	S	4	2	1	lb
ARNG-004-009	4/3/2013	1			1	SEED					QC SEED #69		6	NE	0	1	1	lb
ARNG-004-010	4/3/2013	1			1	MD					Frag		6	N	2	1	0.5	lb
ARNG-004-011	4/3/2013	1			1	MD					Frag		6	W	3	2	1.5	lb
ARNG-004-012	4/3/2013	1			1	MD					Frag--HSH		6	N	3	2	0.25	lb
ARNG-004-013	4/3/2013	1			1	MD					Frag		6	NW	6	2	1	lb
ARNG-004-014	4/3/2013	1			1	MD					Frag--HSH		0		3	1	0.25	lb
ARNG-004-015	4/3/2013	1			1	MD					Frag		6	W	2	2	0.5	lb
ARNG-004-016	4/3/2013	1			1	MD					Frag		6	W	2	1	1	lb
ARNG-004-017	4/3/2013	1			1	MD					Frag		0		2	1	0.5	lb
ARNG-004-018	4/3/2013	1			1	MD					Frag		6	W	3	2	0.25	lb
ARNG-004-019	4/3/2013	1			1	MD					Frag		0		3	2	0.5	lb
ARNG-004-020	4/3/2013	1			1	OTHER					Same as #18		6	E				lb
ARNG-004-021	4/3/2013	1			1	MD					Frag		0		1	1	1	lb
ARNG-004-022	4/3/2013	1			1	MD					Frag		12	NE	1	1	0.25	lb
ARNG-004-023	4/3/2013	1			1	MD					Frag--HSH		12	E	1	1	0.25	lb
ARNG-004-024	4/3/2013	1			1	MD					Frag		6	E	0	1	1	lb
ARNG-004-025	4/3/2013	1			1	MD					Frag		0		1	1	1	lb
ARNG-004-026	4/3/2013	1			1	MD					Frag		0		1	1	0.25	lb
ARNG-004-027	4/3/2013	1			1	MD					Frag		0		4	3	0.5	lb
ARNG-004-028	4/3/2013	1			1	MD					Frag		6	E	4	2	0.5	lb
ARNG-004-029	4/3/2013	1			1	MD					Frag--HSH		0		3	1	1	lb
ARNG-004-030	4/3/2013	1			1	MD					Frag		0		3	1	0.25	lb
ARNG-004-031	4/3/2013	1			1	MD					Frag		0		5	5	1	lb
ARNG-004-032	4/3/2013	1			1	MD					Frag		6	NE	3	3	1.5	lb
ARNG-004-033	4/3/2013	1			1	MD					Frag		6	SE	3	4	1	lb
ARNG-004-034	4/3/2013	1			1	MD					Frag		0		3	3	1.5	lb
ARNG-004-035	4/3/2013	1			1	MD					Frag		6	S	6	5	2	lb
ARNG-004-036	4/3/2013	1			1	MD					Frag		6	S	2	1	1	lb
ARNG-004-037	4/3/2013	1			1	MD					Frag--HSH		0		4	5	2.5	lb
ARNG-004-038	4/3/2013	1			1	MD					Frag--HSH		0		2	3	0.5	lb
ARNG-004-039	4/3/2013	1			1	MD					Frag		6	E	3	3	1	lb
ARNG-004-040	4/3/2013	1			1	MD					Frag		0		3	7	2	lb
ARNG-005-001	4/8/2013	1			1	CD					SW corner nail		0		0		1	lb
ARNG-005-002	4/8/2013	1			1	MD					Frag--HSH		6	W	23	3	1	lb
ARNG-005-003	4/8/2013	1			1	MD					Frag		0		24	4	1	lb
ARNG-005-004	4/8/2013	1			1	MD, SEED					QC SEED # 23, frag		6	N	10	2	1	lb
ARNG-005-005	4/8/2013	1			1	MD					Frag pit--HSH		0		22	6	2	lb
ARNG-005-006	4/8/2013	1			1	MD					Frag		0		12	3	1	lb
ARNG-005-007	4/8/2013	1			1	MD					Frag		0		18	1	0.25	lb
ARNG-005-008	4/8/2013	1			1	MD					Frag--HSH		6	W	12	9	1.5	lb
ARNG-005-009	4/8/2013	1			1	MD					Frag		0		14	1	0.5	lb
ARNG-005-010	4/8/2013	1			1	MD					Frag		0		22	1	0.5	lb
ARNG-005-011	4/8/2013	1			1	MD					Frag--HSH		0		13	4	0.25	lb
ARNG-005-012	4/8/2013	1			1	MD					Frag		0		14	2	0.5	lb
ARNG-006-001	4/9/2013	1			2	MD					Frag		0		13	3	0.25	lb
ARNG-006-002	4/9/2013	1			2	MD, CD					SW corner nail, frag		0		2	2	1.25	lb
ARNG-006-003	4/9/2013	1			2	MD					Frag		0		15	3	0.5	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
ARNG-006-004	4/9/2013	1			2	MD					Frag		12	W	9	2	0.25	lb
ARNG-006-005	4/9/2013	1			2	MD					Frag		0		10	3	0.25	lb
ARNG-006-006	4/9/2013	1			2	MD					Frag		0		13	7	0.5	lb
ARNG-006-007	4/9/2013	1			2	MD					Frag		0		15	5	1	lb
ARNG-006-008	4/9/2013	1			2	MD					Frag, nail		0		2	2	0.25	lb
ARNG-006-009	4/9/2013	1			2	MD					Frag		0		6	4	0.5	lb
ARNG-006-010	4/9/2013	1			2	SEED					QC SEED #25		0		0	1	1	lb
ARNG-006-011	4/9/2013	1			2	MD					Frag		0		20	5	0.25	lb
ARNG-006-012	4/9/2013	1			2	MD					Frag		12	NE	6	3	0.5	lb
ARNG-006-013	4/9/2013	1			2	MD					Frag		0		14	7	0.25	lb
ARNG-006-014	4/9/2013	1			2	MD					Frag		0		12	3	0.25	lb
ARNG-007-001	4/9/2013	1			2	CD					SW corner nail		0		0	1	1	lb
ARNG-007-002	4/9/2013	1			2	MD					Frag		0		20	8	1.5	lb
ARNG-007-003	4/9/2013	1			2	MD					Frag		0		13	4	0.75	lb
ARNG-007-004	4/9/2013	1			2	MD					Frag		0		6	2	0.5	lb
ARNG-007-005	4/9/2013	1			2	MD					Frag		0		18	2	0.25	lb
ARNG-007-006	4/9/2013	1			2	MD					Frag		0		13	2	0.5	lb
ARNG-007-007	4/9/2013	1			2	SEED					QC SEED #39		0		0	1	1	lb
ARNG-007-008	4/9/2013	1			2	MD					Frag		0		13	7	1	lb
ARNG-007-009	4/9/2013	1			2	MD					Frag		0		11	4	1	lb
ARNG-007-010	4/9/2013	1			2	MD					Frag		0		14	4	0.5	lb
ARNG-007-011	4/9/2013	1			2	MD					Frag		0		15	4	0.5	lb
ARNG-008-001	3/26/2013	1			1	MD					Frag		0		3	2	0.5	lb
ARNG-008-002	3/26/2013	1			1	MD					Frag		6	W	4	3	1	lb
ARNG-008-003	3/26/2013	1			1	MD, SEED					QC SEED #51, Frag		12	W	0	2	1	lb
ARNG-008-004	3/26/2013	1			1	MD					Frag		12	W	1	1	0.25	lb
ARNG-008-005	3/26/2013	1			1	OTHER					Same as #3		12	E				lb
ARNG-008-006	3/26/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		12	S	3	2	2	lb
ARNG-008-007	3/26/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		12	S	4	4	1.5	lb
ARNG-008-008	3/26/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		6	W	12	7	3	lb
ARNG-009-001	3/26/2013	1			1	MD					Frag		6	S	4	3	1.5	lb
ARNG-009-002	3/26/2013	1			1	MD					Frag, 60mm mortar fuze-expended		6	N	7	2	0.75	lb
ARNG-009-003	3/26/2013	1			1	MD					Frag, 60mm mortar fuze-expended		0		5	3	1	lb
ARNG-009-004	3/26/2013	1			1	MD, SEED					QC SEED # 40, frag		4	W	4	5	3	lb
ARNG-009-005	3/26/2013	1			1	MD					Frag		0		6	6	3	lb
ARNG-009-006	3/26/2013	1			1	MD					Frag		12	N	4	4	1	lb
ARNG-009-007	3/26/2013	1			1	MD					Frag		0		3	2	0.5	lb
ARNG-009-008	3/26/2013	1			1	MD					Frag		6	S	3	2	1	lb
ARNG-009-009	3/26/2013	1			1	MD					Frag, 60mm mortar fuze-expended		12	SE	12	3	0.25	lb
ARNG-009-010	3/26/2013	1			1	MD					Frag		0		5	4	1	lb
ARNG-009-011	3/26/2013	1			1	MD					Frag		6	S	2	3	0.5	lb
ARNG-010-001	3/29/2013	1			1	MD					Frag pit		0		3	7	1.5	lb
ARNG-010-002	3/29/2013	1			1	MD					Frag pit--HSH, bottom of hole checked with Schonstedt		0		3	5	1	lb
ARNG-010-003	3/29/2013	1			1	SEED					QC SEED #41		12	NW	0	1	1	lb
ARNG-010-004	3/29/2013	1			1	MD					Frag		6	E	4	2	0.75	lb
ARNG-010-005	3/29/2013	1			1	MD					Frag		12	NW	4	2	0.4	lb
ARNG-010-006	3/29/2013	1			1	MD					Frag		6	NE	3	1	0.5	lb
ARNG-010-007	3/29/2013	1			1	OTHER					Same as #6		6	SW				lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
ARNG-010-008	3/29/2013	1			1	MD					81mm mortar fin--HSH, bottom of hole checked with Schonstedt and White		12	E	3	1	2	lb
ARNG-010-009	3/29/2013	1			1	OTHER					Same as #8		12	W				lb
ARNG-010-010	3/29/2013	1			1	MD					Frag		12	N	3	2	1	lb
ARNG-010-011	3/29/2013	1			1	MD					Frag		0		4	1	0.25	lb
ARNG-010-012	3/29/2013	1			1	MD					81mm mortar frag--HSH, bottom of hole checked with Schonstedt and White		12	NW	4	1	6	lb
ARNG-010-013	3/29/2013	1			1	OTHER					Same as #12		12	SE				lb
ARNG-011-001	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		18	E	0	2	5	lb
ARNG-011-002	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		24	S	1	2	6	lb
ARNG-011-003	3/22/2013	1			1	MD, CD					60 mm mortar fin, farm equipment--HSH, bottom of hole checked with Schonstedt and White		6	N	2	4	1	lb
ARNG-011-004	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		0		0	3	5	lb
ARNG-011-005	3/22/2013	1			1	CD					Steel bolt, rust flakes--HSH, checked with Schonstedt and White		0		2	3	2	lb
ARNG-011-006	3/22/2013	1			1	CD					Mule shoe pcs--HSH, bottom of hole checked with Schonstedt and White		0		1	1	0.25	lb
ARNG-011-007	3/22/2013	1			1	CD					Roof tin--HSH, bottom of hole checked with Schonstedt and White		6	N	2	3	3	lb
ARNG-011-008	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		0		1	1	1.5	lb
ARNG-011-009	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		6	N	0	1	0.25	lb
ARNG-011-010	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		6	N	3	1	2	lb
ARNG-011-011	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		0		5	11	1.5	lb
ARNG-011-012	3/22/2013	1			1	CD					60mm mortar tail boom--HSH, bottom of hole checked with Schonstedt and White		0		3	2	0.5	lb
ARNG-011-013	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		0		6	3	3	lb
ARNG-011-014	3/22/2013	1			1	CD					Mule shoe--HSH, bottom of hole checked with Schonstedt and White		6	E	3	1	1	lb
ARNG-011-015	3/22/2013	1			1	MD, CD					Frag, nails--HSH, bottom of hole checked with Schonstedt and White		0		4	4	1.25	lb
ARNG-011-016	3/22/2013	1			1	OTHER					Same as #13		10	NE				lb
ARNG-011-017	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		12	W	6	5	10	lb
ARNG-011-018	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		6	SE	3	1	2	lb
ARNG-011-019	3/22/2013	1			1	MD, CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		0		4	2	1	lb
ARNG-011-020	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		0		6	1	1.5	lb
ARNG-011-021	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		0		2	3	5	lb
ARNG-011-022	3/22/2013	1			1	CD					Farm equip, nails--HSH, bottom of hole checked with Schonstedt and White		0		2	7	1.5	lb
ARNG-011-023	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		6	S	8	2	0.5	lb
ARNG-011-024	3/22/2013	1			1	MD, CD					60mm mortar tail boom, Farm equip--HSH, bottom of hole checked with Schonstedt and White		6	E	6	3	0.5	lb
ARNG-011-025	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		8	E	1	1	1	lb
ARNG-011-026	3/22/2013	1			1	MD, CD					Frag, nails, farm equip		18	E	6	10	6	lb
ARNG-011-027	3/22/2013	1			1	MD					60mm mortar frag--HSH, bottom of hole checked with Schonstedt and White		12	SE	6	9	2	lb
ARNG-011-028	3/22/2013	1			1	MD, CD					60mm mortar frag, nails--HSH, bottom of hole checked with Schonstedt and White		0		4	10	3	lb
ARNG-011-029	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		12	S	2	3	7	lb
ARNG-011-030	3/22/2013	1			1	OTHER					Hot rock--HSH, bottom of hole checked with Schonstedt and White		0		0	1	25	lb
ARNG-011-031	3/22/2013	1			1	CD					Farm equip, nails--HSH, bottom of hole checked with Schonstedt and White		0		4	2	0.25	lb
ARNG-011-032	3/22/2013	1			1	MD					60mm mortar frag--HSH, bottom of hole checked with Schonstedt and White		6	N	6	4	2.5	lb
ARNG-011-033	3/22/2013	1			1	OTHER					Same as #26		12	N		0		lb
ARNG-011-034	3/22/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		0		3	5	1	lb
ARNG-011-035	3/22/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		0		0	1	0.5	lb
ARNG-011-036	3/22/2013	1			1	MD, CD					60mm mortar tail boom, nails--HSH, bottom of hole checked with Schonstedt and White		12	W	3	4	0.25	lb
ARNG-011-037	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		12	W	2	7	20	lb
ARNG-011-038	3/22/2013	1			1	MD, CD					60mm mortar frag, nails--HSH, bottom of hole checked with Schonstedt and White		6	W	3	5	1.5	lb
ARNG-011-039	3/22/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		0		3	4	1	lb
ARNG-011-040	3/22/2013	1			1	MD					60mm mortar frag--HSH, bottom of hole checked with Schonstedt and White		0		3	3	1	lb
ARNG-011-041	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		0		2	3	2	lb
ARNG-011-042	3/22/2013	1			1	SEED, CD					QC SEED #73, nails		0		3	2	1	lb

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ARNG-011-043	3/22/2013	1			1	MEC			M48		60mm mortar HE, Cleared with Schonstedt	FALSE	0	E		1		lb
ARNG-011-044	3/22/2013	1			1	MD					Frag, Geo Anonaly--HSH, bottom of hole checked with Schonstedt and White		0		3	1	0.25	lb
ARNG-011-045	3/22/2013	1			1	CD					Farm equip--HSH, bottom of hole checked with Schonstedt and White		0		1	7	1	lb
ARNG-011-046	3/22/2013	1			1	CD					Farm equip		0		2	2	1	lb
ARNG-012-001	4/9/2013	1			2	MD, CD					SW corner nail, frag		0		6	3	1.25	lb
ARNG-012-002	4/9/2013	1			2	MD					Frag		0		16	4	1.5	lb
ARNG-012-003	4/9/2013	1			2	SEED					QC SEED #28		0		0	1	1	lb
ARNG-012-004	4/9/2013	1			2	MD					Frag		0		12	3	0.25	lb
ARNG-012-005	4/9/2013	1			2	MD					Frag		12	S	12	3	0.25	lb
ARNG-012-006	4/9/2013	1			2	MD					Frag		12	S	16	4	3	lb
ARNG-012-007	4/9/2013	1			2	MD					Frag		0		16	4	0.75	lb
ARNG-012-008	4/9/2013	1			2	MD					Frag		0		14	8	1	lb
ARNG-012-009	4/9/2013	1			2	MD					Frag		0		4	3	0.25	lb
ARNG-012-010	4/9/2013	1			2	MD					Frag		0		16	3	0.25	lb
ARNG-012-011	4/9/2013	1			2	MD					Frag		0		15	2	0.25	lb
ARNG-012-012	4/9/2013	1			2	MD					Frag		0		14	2	0.25	lb
ARNG-012-013	4/9/2013	1			2	MD					Frag		0		13	2	0.2	lb
ARNG-012-014	4/9/2013	1			2	MD					Frag		0		14	3	0.5	lb
ARNG-012-015	4/9/2013	1			2	MD					Frag		0		15	5	0.5	lb
ARNG-012-016	4/9/2013	1			2	MD					Frag		0		14	4	0.5	lb
ARNG-013-001	4/2/2013	1			1	MD					Frag		12	E	4	4	3	lb
ARNG-013-002	4/2/2013	1			1	MD					Frag		0		2	3	1.5	lb
ARNG-013-003	4/2/2013	1			1	MD					Frag		0		4	2	1	lb
ARNG-013-004	4/2/2013	1			1	MD					Frag pit--HSH		12	W	4	2	2	lb
ARNG-013-005	4/2/2013	1			1	CD					Farm debris--HSH		12	N	18	10	5	lb
ARNG-013-006	4/2/2013	1			1	MD					Frag		0		5	2	1	lb
ARNG-013-007	4/2/2013	1			1	MD					Frag		6	N	4	2	1	lb
ARNG-013-008	4/2/2013	1			1	CD					Plow tooth		0		6	1	3	lb
ARNG-013-009	4/2/2013	1			1	MD, CD					Frag, nails, 60mm mortar fins		0		5	4	1	lb
ARNG-013-010	4/2/2013	1			1	MD					Frag pit--HSH		0		4	3	0.5	lb
ARNG-013-011	4/2/2013	1			1	MD					Frag, mortar fuze exp		0		4	4	1	lb
ARNG-013-012	4/2/2013	1			1	MD					Frag pit--HSH		6	N	2	3	2	lb
ARNG-013-013	4/2/2013	1			1	OTHER					Same as #12		6	S		0		lb
ARNG-013-014	4/2/2013	1			1	MD					Frag		0		2	3	1	lb
ARNG-013-015	4/2/2013	1			1	MD					60mm mortar tail boom		0		6	1	1	lb
ARNG-013-016	4/2/2013	1			1	MD					Frag pit--HSH		0		3	1	0.25	lb
ARNG-013-017	4/2/2013	1			1	MD					Frag pit--HSH		0		2	1	0.2	lb
ARNG-013-018	4/2/2013	1			1	MD					Frag pit--HSH		0		1	4	0.25	lb
ARNG-013-019	4/2/2013	1			1	MD					Frag pit--HSH		6	N	2	3	0.5	lb
ARNG-013-020	4/2/2013	1			1	MD					Frag pit--HSH		0		3	4	1	lb
ARNG-013-021	4/2/2013	1			1	MD					Frag, 81mm mortar tail boom--HSH		6	N	4	2	1	lb
ARNG-013-022	4/2/2013	1			1	MD					Frag pit--HSH		0		8	7	3	lb
ARNG-013-023	4/2/2013	1			1	MD					Frag pit--HSH		0		4	3	1	lb
ARNG-013-024	4/2/2013	1			1	MD					Frag pit--HSH		0		3	2	0.25	lb
ARNG-013-025	4/2/2013	1			1	SEED					QC SEED #24		6	E	0	1	1	lb
ARNG-013-026	4/2/2013	1			1	MD					Frag		6	W	3	3	0.25	lb
ARNG-014-001	4/2/2013	1			1	CD					Farm debris--HSH		0		2	1	0.25	lb
ARNG-014-002	4/2/2013	1			1	MD					Frag		0		1	2	1	lb

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ARNG-014-003	4/2/2013	1			1	MD					Frag pit--HSH		0		6	7	2	lb
ARNG-014-004	4/2/2013	1			1	MD					Frag		6	N	4	4	0.75	lb
ARNG-014-005	4/2/2013	1			1	MD					Frag		0		4	4	1.5	lb
ARNG-014-006	4/2/2013	1			1	MD					Frag		0		3	5	1.5	lb
ARNG-014-007	4/2/2013	1			1	MD					Frag		0		2	3	0.5	lb
ARNG-014-008	4/2/2013	1			1	MD					Frag--HSH		0		1	3	0.75	lb
ARNG-014-009	4/2/2013	1			1	MD					Frag		0		2	3	0.5	lb
ARNG-014-010	4/2/2013	1			1	MD					Frag		0		4	5	2	lb
ARNG-014-011	4/2/2013	1			1	MD					Frag		0		3	2	1	lb
ARNG-014-012	4/2/2013	1			1	MD					Frag		2	S	3	2	0.01	lb
ARNG-014-013	4/2/2013	1			1	MD					Frag		0		2	1	0.5	lb
ARNG-014-014	4/2/2013	1			1	MD					Frag		6	W	1	1	0.25	lb
ARNG-014-015	4/2/2013	1			1	MD					Frag pit--HSH		0		4	5	0.5	lb
ARNG-014-016	4/2/2013	1			1	MD					Frag		6	N	3	2	0.5	lb
ARNG-014-017	4/2/2013	1			1	MD, CD					Frag, horseshoe part		6	N	4	5	2	lb
ARNG-014-018	4/2/2013	1			1	MEC					60mm mortar HE, Cleared with Schonstedt		6	E	12	2	5	lb
ARNG-014-019	4/2/2013	1			1	MD					Frag		6	E	2	3	1	lb
ARNG-014-020	4/2/2013	1			1	SEED					QC SEED #33		6	W	0	1	1	lb
ARNG-015-001	3/25/2013	1			1	MD					Frag		6	NE	6	4	1	lb
ARNG-015-002	3/25/2013	1			1	MD					Frag		12	S	12	4	1.5	lb
ARNG-015-003	3/25/2013	1			1	MD					Frag		12	S	6	3	0.5	lb
ARNG-015-004	3/25/2013	1			1	MD					Frag		12	NE	4	2	1	lb
ARNG-015-005	3/25/2013	1			1	MD					Frag		12	N	1	4	2	lb
ARNG-015-006	3/25/2013	1			1	MD					Frag		12	NE	6	3	1.5	lb
ARNG-015-007	3/25/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		6	E	15	26	6	lb
ARNG-015-008	3/25/2013	1			1	OTHER					Same as #7		6	S				lb
ARNG-015-009	3/25/2013	1			1	MD					Projectile T-bar fuze, frag--HSH, bottom of hole checked with Schonstedt and White		12	N	3	6	3	lb
ARNG-015-010	3/25/2013	1			1	MD, CD					Frag, horseshoe		6	E	3	5	2	lb
ARNG-015-011	3/25/2013	1			1	MD					Frag		6	E	3	2	2.5	lb
ARNG-015-012	3/25/2013	1			1	SEED					QC SEED #83		0		0	1	0.5	lb
ARNG-015-013	3/25/2013	1			1	MD, CD					Wire, frag		6	N	4	2	0.25	lb
ARNG-015-014	3/25/2013	1			1	MD					Frag		0		4	4	0.5	lb
ARNG-016-001	4/1/2013	1			2	MD					Frag		0		3	5	0.5	lb
ARNG-016-002	4/1/2013	1			2	MD					Frag pit--HSH		6	E	3	5	0.5	lb
ARNG-016-003	4/1/2013	1			2	MD					Frag pit--HSH		0		6	5	1.5	lb
ARNG-016-004	4/1/2013	1			2	MD					Frag		0		3	4	1	lb
ARNG-016-005	4/1/2013	1			2	MD					Frag		0		3	3	0.5	lb
ARNG-016-006	4/1/2013	1			2	SEED					QC SEED #20		0		5	1	0.5	lb
ARNG-016-007	4/1/2013	1			1	MD					Frag pit--HSH		6	E	2	3	0.5	lb
ARNG-016-008	4/1/2013	1			1	MD					Frag pit--HSH		0		3	3	0.5	lb
ARNG-016-009	4/1/2013	1			1	MD					Frag pit--HSH		6	E	3	4	1	lb
ARNG-016-010	4/1/2013	1			1	MD					Frag pit--HSH		0		6	4	1	lb
ARNG-016-011	4/1/2013	1			1	MD					Frag		0		4	3	0.75	lb
ARNG-016-012	4/1/2013	1			1	MD					Frag		0		3	2	1	lb
ARNG-016-013	4/1/2013	1			1	MD					Frag pit--HSH		0		4	3	0.5	lb
ARNG-016-014	4/1/2013	1			1	MD					Frag		0		2	2	0.5	lb
ARNG-016-015	4/1/2013	1			1	MD					Frag		0		3	3	0.5	lb
ARNG-016-016	4/1/2013	1			1	MD					Frag		0		3	3	1	lb

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ARNG-016-017	4/1/2013	1			1	MD					Frag		6	S	2	4	1	lb
ARNG-016-018	4/1/2013	1			1	MD					Frag		0		3	4	1.5	lb
ARNG-017-001	3/29/2013	1			1	MD					Frag		0		3	3	1	lb
ARNG-017-002	3/29/2013	1			1	MD					Frag		6	E	1	3	0.75	lb
ARNG-017-003	3/29/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		0		3	1	0.5	lb
ARNG-017-004	3/29/2013	1			1	SEED					QC SEED #30		0			0		lb
ARNG-017-005	3/29/2013	1			1	OTHER					Same as #4		12	SW	0	1	1	lb
ARNG-017-006	3/29/2013	1			1	MD					Frag		0		2	2	1	lb
ARNG-017-007	3/29/2013	1			1	MD					Frag		0		3	1	0.25	lb
ARNG-017-008	3/29/2013	1			1	MD					Frag		0		2	5	0.75	lb
ARNG-017-009	3/29/2013	1			1	MD					Frag		6	W	1	1	0.25	lb
ARNG-017-010	3/29/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		0		2	2	0.5	lb
ARNG-017-011	3/29/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		12	NE	3	4	0.1	lb
ARNG-017-012	3/29/2013	1			1	MD					Frag		6	N	2	1	0.75	lb
ARNG-017-013	3/29/2013	1			1	OTHER					Same as #12		6	S		0		lb
ARNG-017-014	3/29/2013	1			1	MD					Frag		6	S	4	1	0.5	lb
ARNG-017-015	3/29/2013	1			1	MD					Frag		0		1	1	0.5	lb
ARNG-017-016	3/29/2013	1			1	MD					Frag		0		2	2	1	lb
ARNG-017-017	3/29/2013	1			1	MD					Frag		12	N	7	3	1	lb
ARNG-018-001	3/26/2013	1			1	MD					Frag		12	W	1	1	1	lb
ARNG-018-002	3/26/2013	1			1	MD					Frag		12	N	3	4	0.5	lb
ARNG-018-003	3/26/2013	1			1	SEED					QC SEED #48		12	N	0	1	1	lb
ARNG-018-004	3/26/2013	1			1	MD, CD					Steel bar, frag		12	E	4	2	1	lb
ARNG-018-005	3/26/2013	1			1	MD, CD					Steel bar, frag		12	N	6	2	3	lb
ARNG-018-006	3/26/2013	1			1	CD					Plow tooth		12	W	3	1	2	lb
ARNG-018-007	3/26/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		12	N	6	1	1	lb
ARNG-018-008	3/26/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		6	N	5	2	1	lb
ARNG-018-009	3/26/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		6	S	12	3	1	lb
ARNG-018-010	3/26/2013	1			1	MD					Frag		0		3	1	0.25	lb
ARNG-018-011	3/26/2013	1			1	MD, CD					Shackle, frag		6	N	3	2	2	lb
ARNG-018-012	3/26/2013	1			1	MD					Frag		0		3	3	0.5	lb
ARNG-019-001	4/4/2013	1			2	MD					Frag		12	W	3	1	1	lb
ARNG-019-002	4/4/2013	1			2	MD					Frag		12	N	3	10	1.5	lb
ARNG-019-003	4/4/2013	1			2	MD					Frag		0		4	4	1	lb
ARNG-019-004	4/4/2013	1			2	MD					Frag		12	W	3	4	1	lb
ARNG-019-005	4/4/2013	1			2	MD					Frag		12	NE	3	6	0.5	lb
ARNG-019-006	4/4/2013	1			2	MD					Frag		0		1	1	0.1	lb
ARNG-019-007	4/4/2013	1			2	MD					Frag		0		2	5	1	lb
ARNG-019-008	4/4/2013	1			2	MD					Frag		0		4	8	1.5	lb
ARNG-019-009	4/4/2013	1			2	MD					Frag		0		4	6	1.5	lb
ARNG-019-010	4/4/2013	1			2	MD					Frag		0		2	2	0.75	lb
ARNG-019-011	4/4/2013	1			2	SEED					QC SEED #43		0		5	1	1	lb
ARNG-019-012	4/4/2013	1			2	MD					Frag		0		4	2	1	lb
ARNG-019-013	4/4/2013	1			2	MD, OTHER					Frag, hot rocks, checked with White		0		4	3	1.2	lb
ARNG-019-014	4/4/2013	1			2	MD					Frag		0		4	2	1.5	lb
ARNG-019-015	4/4/2013	1			2	MD					Frag		0		2	1	0.2	lb
ARNG-019-016	4/4/2013	1			2	MD					Frag		0		3	5	0.5	lb
ARNG-019-017	4/4/2013	1			2	MD					Frag		0		4	2	0.5	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
ARNG-019-018	4/4/2013	1			2	MD					Frag		0		2	1	2	lb
ARNG-019-019	4/4/2013	1			2	MD, OTHER					Frag, hot rocks, checked with White--HSH		0		3	2	0.75	lb
ARNG-019-020	4/4/2013	1			2	OTHER					Hot rocks, checked with White--HSH		0		5	7		lb
ARNG-020-001	4/8/2013	1			1	MD, CD					SW corner nail, frag		0		4	4	1.25	lb
ARNG-020-002	4/8/2013	1			1	MD					Frag		0		3	5	1	lb
ARNG-020-003	4/8/2013	1			1	MD					Frag pit		0		14	4	1	lb
ARNG-020-004	4/8/2013	1			1	MD					Frag pit--HSH		6	E	24	4	1	lb
ARNG-020-005	4/8/2013	1			1	MD					Frag		12	N	11	6	1.5	lb
ARNG-020-006	4/8/2013	1			1	MD					Frag		0		12	3	1	lb
ARNG-020-007	4/8/2013	1			1	MD					Frag		6	S	19	4	1	lb
ARNG-020-008	4/8/2013	1			1	MD					Frag		6	E	20	5	2	lb
ARNG-020-009	4/8/2013	1			1	MD					Frag pit--HSH		0		22	7	3	lb
ARNG-020-010	4/8/2013	1			1	MD					Frag pit--HSH		0		26	8	2	lb
ARNG-020-011	4/8/2013	1			1	MD					Frag pit		0		19	3	1	lb
ARNG-020-012	4/8/2013	1			1	MD					Frag pit		0		14	5	1	lb
ARNG-020-013	4/8/2013	1			1	MD					Frag pit--HSH, T-bar		0		23	5	3	lb
ARNG-020-014	4/8/2013	1			1	MD					Frag		0		12	2	1	lb
ARNG-020-015	4/8/2013	1			1	MD					Frag		0		2	3	1	lb
ARNG-020-016	4/8/2013	1			1	SEED					QC SEED #6		0		0	1	1	lb
ARNG-020-017	4/8/2013	1			1	MD					Frag		0		12	2	0.5	lb
ARNG-020-018	4/8/2013	1			1	MD					Frag		12	S	13	2	1	lb
ARNG-020-019	4/8/2013	1			1	MD					Frag		0		12	4	1.75	lb
ARNG-020-020	4/8/2013	1			1	MD					Frag		6	W	2	1	1	lb
ARNG-020-021	4/8/2013	1			1	MD					Frag		6	S	3	1	0.5	lb
ARNG-020-022	4/8/2013	1			1	CD					Debris		6	S	4	1	1	lb
ARNG-020-023	4/8/2013	1			1	MD					Frag		0		2	2	1	lb
ARNG-020-024	4/8/2013	1			1	MD					Frag		0		12	3	0.5	lb
ARNG-020-025	4/8/2013	1			1	MD					Frag		0		4	3	1	lb
ARNG-020-026	4/8/2013	1			1	MD					Frag		0		2	2	0.5	lb
ARNG-020-027	4/8/2013	1			1	MD					Frag		0		13	3	1.5	lb
ARNG-021-001	4/15/2013	1			2	CD					SW corner nail		0		0	1	1	lb
ARNG-021-002	4/15/2013	1			2	MD					Frag		0		24	12	2	lb
ARNG-021-003	4/15/2013	1			2	MD					Frag pit, frag in walls, bottom not hot		0		24	25	5	lb
ARNG-021-004	4/15/2013	1			2	SEED					QC SEED #22		0		0	1	1	lb
ARNG-021-005	4/15/2013	1			2	MD					Frag		0		4	4	0.25	lb
ARNG-021-006	4/15/2013	1			2	MD					Frag		0		4	4	0.5	lb
ARNG-021-007	4/15/2013	1			2	MD					Frag		0		3	2	0.2	lb
ARNG-021-008	4/15/2013	1			2	MD					Frag		0		4	3	1	lb
ARNG-021-009	4/15/2013	1			2	MD					Frag		0		6	2	0.2	lb
ARNG-021-010	4/15/2013	1			2	MD					Frag		0		5	4	0.5	lb
ARNG-021-011	4/15/2013	1			2	MD					Frag		0		4	2	0.5	lb
ARNG-021-012	4/15/2013	1			2	MD					Frag		0		4	4	0.3	lb
ARNG-021-013	4/15/2013	1			2	MD					Frag		0		6	7	0.75	lb
ARNG-021-014	4/15/2013	1			2	MD					Frag		0		3	5	0.5	lb
ARNG-021-015	4/15/2013	1			2	MD					Frag		0		3	2	0.25	lb
ARNG-021-016	4/15/2013	1			2	MD, CD					Frag, pipe		0		8	5	0.5	lb
ARNG-021-017	4/15/2013	1			2	MD					Frag		0		3	3	0.25	lb
ARNG-021-018	4/15/2013	1			2	MD					Frag		0		10	10	0.75	lb

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ARNG-021-019	4/15/2013	1			2	MD					Frag		0		10	21	2	lb
ARNG-021-020	4/15/2013	1			2	MD					Frag		0		8	3	0.25	lb
ARNG-022-001	3/20/2013	1			1	MD					Frag		0		6		0.75	lb
ARNG-022-002	3/20/2013	1			1	SEED			QC-SEED		QC SEED #50		18	NE	2		1	lb
ARNG-022-003	3/20/2013	1			1	MD					Frag		12	W	2		0.3	lb
ARNG-022-004	3/21/2013	1			1	CD					Metal angle iron		0		3		2.8	lb
ARNG-022-005	3/20/2013	1			1	MD					Frag		3	SE	3		1.75	lb
ARNG-022-006	3/21/2013	1			1	MD					Frag		0		3		0.35	lb
ARNG-022-007	3/20/2013	1			1	MD					Frag-HSH, bottom of hole checked with Schonstedt and White		3	S	6		2	lb
ARNG-022-008	3/21/2013	1			1	MD					Frag, 60mm mortar fin--HSH, bottom of hole checked with Schonstedt and White		0		2		1.5	lb
ARNG-022-009	3/21/2013	1			1	MD					Frag		0		6		0.5	lb
ARNG-022-010	3/20/2013	1			1	MD					Frag		12	W	3		0.25	lb
ARNG-022-011	3/21/2013	1			1	MD					Frag pit-HSH, bottom of hole checked with Schonstedt and White		0		3		0.8	lb
ARNG-022-012	3/21/2013	1			1	MD					Frag		0		6		0.3	lb
ARNG-022-013	3/21/2013	1			1	MD					Frag		0		2		0.25	lb
ARNG-022-014	3/21/2013	1			1	MD					Frag		0		3		0.3	lb
ARNG-022-015	3/21/2013	1			1	MD					Frag		0		2		0.8	lb
ARNG-022-016	3/21/2013	1			1	MD					Frag		0		2		0.25	lb
ARNG-022-017	3/21/2013	1			1	MD					Frag		0		0		0.25	lb
ARNG-022-018	3/21/2013	1			1	MD					Frag		0		2		0.25	lb
ARNG-022-019	3/21/2013	1			1	MD					Frag		0		4		0.5	lb
ARNG-022-020	3/21/2013	1			1	MD					Frag		0		1		1.75	lb
ARNG-022-021	3/21/2013	1			1	MD					Frag		0		0		0.5	lb
ARNG-023-001	4/3/2013	1			2	CD					SWC Nail		0			1	1	lb
ARNG-023-002	4/3/2013	1			2	MD					Frag		0		2	2	2	lb
ARNG-023-003	4/3/2013	1			2	MD					Frag, nail		12	NE	3	2	0.25	lb
ARNG-023-004	4/4/2013	1			2	SEED					QC SEED #79		12	NE		1	1	lb
ARNG-023-005	4/3/2013	1			2	OTHER					Same as #3		12	W	3	0	0.25	lb
ARNG-023-006	4/4/2013	1			2	OTHER					Same as #4		12	SW		0	1	lb
ARNG-023-007	4/4/2013	1			2	MD					Frag		12	SW	2	1	0.2	lb
ARNG-023-008	4/4/2013	1			2	OTHER					Same as #3		12	SW	3	0	0.25	lb
ARNG-023-009	4/4/2013	1			2	CD					Horseshoe nail		0		3	1	0.01	lb
ARNG-023-010	4/4/2013	1			2	CD					Nail		0		4	2	0.01	lb
ARNG-023-011	4/4/2013	1			2	CD					Plow part		0		4	1	3	lb
ARNG-023-012	4/4/2013	1			2	CD					Nail, strap metal		0		5	2	0.1	lb
ARNG-023-013	4/4/2013	1			2	OTHER					Geo, hot soil, rocks, checked with white		0		8	0	0	lb
ARNG-023-014	4/4/2013	1			2	MD					Frag, hot rock, checked with white		12	S	2	1	0.25	lb
ARNG-023-015	4/4/2013	1			2	MD					Frag		0		1	1	0.01	lb
ARNG-023-016	4/4/2013	1			2	MD					Frag		12	S	5	1	0.25	lb
ARNG-023-017	4/4/2013	1			2	MD					Frag		0		3	1	0.25	lb
ARNG-023-018	4/4/2013	1			2	OTHER					Geo, hot soil, checked with white		0		6	0	0	lb
ARNG-023-019	4/4/2013	1			2	CD					Nail		0		3	2	0.1	lb
ARNG-023-020	4/4/2013	1			2	MD					Frag		0		3	3	0.5	lb
ARNG-023-021	4/3/2013	1			2	CD					Nail		0		3	2	0.1	lb
ARNG-024-001	4/4/2013	1			2	MD					Frag		12	E	3	2	0.25	lb
ARNG-024-002	4/4/2013	1			2	MD					Frag		12	W	6	4	0.25	lb
ARNG-024-003	4/4/2013	1			2	MD					Frag		0		3	2	0.5	lb
ARNG-024-004	4/4/2013	1			2	OTHER					Same as #3		12	E	3	0		lb

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ARNG-024-005	4/4/2013	1			2	MD					Frag		0		2	2	0.25	lb
ARNG-024-006	4/4/2013	1			2	MD					Frag		0		2	1	0.05	lb
ARNG-024-007	4/4/2013	1			2	SEED					QC SEED #38		0			1	1	lb
ARNG-024-008	4/4/2013	1			2	CD					Barbed wire		0		1	6	1	lb
ARNG-024-009	4/4/2013	1			2	CD					Barbed wire--HSH + LIP		0		1	6	1	lb
ARNG-025-001	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		6	E	22	3	0.25	lb
ARNG-025-002	4/8/2013	1			1	CD					Wire, checked with Schonstedt & White--HSH		0		13	2	0.25	lb
ARNG-025-003	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		13	6	0.5	lb
ARNG-025-004	4/8/2013	1			1	CD					Wire, checked with Schonstedt & White--HSH + LIP		6	S	12	1	0.5	lb
ARNG-025-005	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		14	7	3	lb
ARNG-025-006	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		6	W	14	5	0.75	lb
ARNG-025-007	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		14	8	2	lb
ARNG-025-008	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		6	E	13	8	3	lb
ARNG-025-009	4/8/2013	1			1	OTHER					Same as #8		6	W	13	0	3	lb
ARNG-025-010	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		6	W	23	3	1	lb
ARNG-025-011	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		6	S	16	5	2	lb
ARNG-025-012	4/8/2013	1			1	CD					Nails, checked with Schonstedt & White--HSH		0		23	5	0.5	lb
ARNG-025-013	4/8/2013	1			1	MD, CD					Nails, frag, checked with Schonstedt & White--HSH		0		22	5	0.75	lb
ARNG-025-014	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		13	12	1	lb
ARNG-025-015	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		6	S	14	4	2	lb
ARNG-025-016	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		14	6	0.5	lb
ARNG-025-017	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH + LIP		0		22	2	0.5	lb
ARNG-025-018	4/8/2013	1			1	CD					Horseshoe debris, checked with Schonstedt & White--HSH		0		16	1	1	lb
ARNG-025-019	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		24	4	0.75	lb
ARNG-025-020	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		24	4	1	lb
ARNG-025-021	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		23	5	1	lb
ARNG-025-022	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		23	4	1	lb
ARNG-025-023	4/8/2013	1			1	CD					Debris		0		14	3	1	lb
ARNG-025-024	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		23	1	0.5	lb
ARNG-025-025	4/8/2013	1			1	CD					Barbed wire, checked with Schonstedt & White--HSH		0		23	1	0.5	lb
ARNG-025-026	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		13	3	1	lb
ARNG-025-027	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		23	3	1	lb
ARNG-025-028	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		23	2	2	lb
ARNG-025-029	4/8/2013	1			1	MD, CD					Frag, debris		0		6	4	2	lb
ARNG-025-030	4/8/2013	1			1	SEED					QC SEED #90		0		0	1	1	lb
ARNG-025-031	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		13	3	2	lb
ARNG-025-032	4/8/2013	1			1	SEED					Same as #30		0		0	0	1	lb
ARNG-025-033	4/8/2013	1			1	CD					Debris		0		13	2	0.25	lb
ARNG-025-034	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		21	2	0.5	lb
ARNG-025-035	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		6	W	4	3	0.5	lb
ARNG-025-036	4/8/2013	1			1	MD					Frag		6	W	3	2	1	lb
ARNG-025-037	4/8/2013	1			1	CD					Horseshoe piece		0		2	1	0.5	lb
ARNG-025-038	4/8/2013	1			1	CD					Debris		0		2	1	1	lb
ARNG-025-039	4/8/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		0		22	1	5	lb
ARNG-025-040	4/8/2013	1			1	OTHER					Same as #39		0		12	0	5	lb
ARNG-025-041	4/8/2013	1			1	CD					Horseshoe piece, checked with Schonstedt & White--HSH		0		12	1	0.5	lb
ARNG-025-042	4/8/2013	1			1	CD					Wire, checked with Schonstedt & White--HSH + LIP		0		13	1	0.5	lb
ARNG-026-001	4/5/2013	1			2	MD					Frag		0		13	3	0.25	lb

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ARNG-026-002	4/5/2013	1			2	MD					Frag		0		12	2	0.5	lb
ARNG-026-003	4/5/2013	1			2	MD					Frag		5	NW	6	3	0.5	lb
ARNG-026-004	4/5/2013	1			2	MD					Frag		0		2	2	0.5	lb
ARNG-026-005	4/5/2013	1			2	MD					Frag		0		13	6	1	lb
ARNG-026-006	4/5/2013	1			2	MD					Frag		24	SW	6	2	0.25	lb
ARNG-026-007	4/5/2013	1			2	MD					Frag		0		13	2	0.25	lb
ARNG-026-008	4/5/2013	1			2	MD					Frag		0		16	2	0.5	lb
ARNG-026-009	4/5/2013	1			2	MD					Frag, SAA		0		12	1	0.25	lb
ARNG-026-010	4/5/2013	1			2	MD					Frag		0		8	2	0.25	lb
ARNG-026-011	4/5/2013	1			2	MD					Frag, fuze		0		6	2	0.5	lb
ARNG-026-012	4/5/2013	1			2	MD					Frag		0		6	2	0.5	lb
ARNG-026-013	4/5/2013	1			2	MD					Frag, hot rocks, checked with White--HSH		0		16	3	0.25	lb
ARNG-026-014	4/5/2013	1			2	MD					Frag		0		3	1	0.25	lb
ARNG-026-015	4/5/2013	1			2	MD					Frag		0		15	2	1	lb
ARNG-026-016	4/5/2013	1			2	MD					Frag		0		12	2	0.75	lb
ARNG-026-017	4/5/2013	1			2	MD					Frag		0		13	2	0.5	lb
ARNG-026-018	4/8/2013	1			2	MD					Frag		0		13	1	0.25	lb
ARNG-026-019	4/8/2013	1			2	SEED					QC SEED #91		0		0	1	1	lb
ARNG-026-020	4/8/2013	1			2	MD					Frag		0		2	1	0.25	lb
ARNG-026-021	4/8/2013	1			2	MD					Frag		0		4	3	0.5	lb
ARNG-026-022	4/8/2013	1			2	MD					Frag		0		0	1	0.1	lb
ARNG-026-023	4/8/2013	1			2	MD					Frag		0		12	2	0.25	lb
ARNG-026-024	4/8/2013	1			2	MD					Frag		0		13	2	0.5	lb
ARNG-026-025	4/8/2013	1			2	MD					Frag		0		12	2	0.25	lb
ARNG-026-026	4/8/2013	1			2	MD					Frag		0		14	3	0.25	lb
ARNG-026-027	4/8/2013	1			2	MD					Frag		0		14	3	0.25	lb
ARNG-026-028	4/8/2013	1			2	MD					Frag		0		13	4	0.25	lb
ARNG-026-029	4/8/2013	1			2	MD					Frag		0		13	2	0.25	lb
ARNG-026-030	4/8/2013	1			2	MD					Frag		0		11	1	0.1	lb
ARNG-026-031	4/8/2013	1			2	MD					Frag		0		12	2	0.25	lb
ARNG-026-032	4/8/2013	1			2	MD					Frag		0		16	3	0.3	lb
ARNG-026-033	4/8/2013	1			2	MD					Frag, frag pit, bottom not hot, checked with Schonstedt & White--HSH + LIP		0		26	16	0.25	lb
ARNG-027-001	3/29/2013	1			2	CD					Nail		0		0	1	0.01	lb
ARNG-027-002	3/29/2013	1			2	CD					Wire--LIP & HSH		12	S	0	6	0.75	lb
ARNG-027-003	3/29/2013	1			2	CD					Nail, rust--LIP & HSH		3	S	0	2	0.01	lb
ARNG-027-004	3/29/2013	1			2	CD					Nail, plow blade--LIP & HSH		12	S	3	2	4	lb
ARNG-027-005	3/29/2013	1			2	CD					Wire--LIP & HSH		12	W	2	4	0.2	lb
ARNG-027-006	3/29/2013	1			2	SEED					QC SEED #16		0		0	1	1	lb
ARNG-027-007	3/29/2013	1			2	CD					Wire--LIP & HSH		0		0	2	0.02	lb
ARNG-027-008	3/29/2013	1			2	CD					Wire--LIP & HSH		4	W	4	3	0.25	lb
ARNG-027-009	3/29/2013	1			2	CD					Wire--LIP & HSH		6	E	1	1	0.5	lb
ARNG-027-010	3/29/2013	1			2	CD					Wire--LIP & HSH		0		1	1	0.02	lb
ARNG-027-011	3/29/2013	1			2	CD					Chain, wire--LIP & HSH		5	S	1	2	0.25	lb
ARNG-027-012	3/29/2013	1			2	CD					Blow blade pieces--LIP & HSH		12	S	4	2	3	lb
ARNG-027-013	3/29/2013	1			2	CD					Nail, rust--LIP & HSH		6	S	3	2	0.1	lb
ARNG-027-014	3/29/2013	1			2	CD					Wire, rust--LIP & HSH		0		2	2	0.2	lb
ARNG-027-015	3/29/2013	1			2	CD					Nail, rust--LIP & HSH		6	E	1	3	0.1	lb
ARNG-027-016	3/29/2013	1			2	CD					Horseshoe		0		4	1	0.5	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
ARNG-027-017	3/29/2013	1			2	CD					Metal, rust--LIP & HSH		12	W	3	1	0.5	lb
ARNG-027-018	3/29/2013	1			2	CD					Nail, rust--LIP & HSH		0		3	2	0.1	lb
ARNG-027-019	3/29/2013	1			2	CD					Nail, rust--LIP & HSH		0		6	2	0.1	lb
ARNG-027-020	3/29/2013	1			2	CD					Plow part, rust--LIP & HSH		0		2	1	0.75	lb
ARNG-027-021	3/29/2013	1			2	CD					Sheet metal, rust--LIP & HSH		0		1	2	0.5	lb
ARNG-027-022	3/29/2013	1			2	CD					Wire, rust--LIP & HSH		6	SE	1	2	0.1	lb
ARNG-027-023	3/29/2013	1			2	CD					Nail, rust--LIP & HSH		0		1	2	0.1	lb
ARNG-027-024	3/29/2013	1			2	CD					Horseshoe		0		2	1	0.25	lb
ARNG-027-025	3/29/2013	1			2	CD					Nail, rust--LIP & HSH		0		1	2	0.1	lb
ARNG-027-026	3/29/2013	1			2	CD					Nail, rust--LIP & HSH		0		1	2	0.25	lb
ARNG-027-027	3/29/2013	1			2	CD					Sheet metal, rust--LIP & HSH		0		1	1	0.25	lb
ARNG-027-028	3/29/2013	1			2	CD					Nail, rust--LIP & HSH		6	S	0	2	0.1	lb
ARNG-027-029	3/29/2013	1			2	CD					Scrap metal, rust--LIP & HSH		0		2	4	0.25	lb
ARNG-027-030	3/29/2013	1			2	CD					Nail, scrap metal--LIP & HSH		0		3	3	0.25	lb
ARNG-027-031	3/29/2013	1			2	CD					Metal stake		3	W	6	1	4	lb
ARNG-027-032	3/29/2013	1			2	CD					Nails, rust--LIP & HSH		0		3	2	0.1	lb
ARNG-027-033	3/29/2013	1			2	CD					Sheet metal, rust, steel plate--LIP & HSH		0		4	3	3	lb
ARNG-027-034	3/29/2013	1			2	CD					SAA		0		4	1	0.25	lb
ARNG-027-035	3/29/2013	1			2	CD					Nail, rust--LIP & HSH		0		1	2	0.1	lb
ARNG-027-036	3/29/2013	1			2	CD					Scrap metal, rust		0		3	1	2	lb
ARNG-028-001	4/5/2013	1			1	MD					Frag		12	S	3	2	2	lb
ARNG-028-002	4/5/2013	1			1	MD					Frag pit		0		4	4	1.5	lb
ARNG-028-003	4/5/2013	1			1	MD					Frag pit		0		4	4	2	lb
ARNG-028-004	4/5/2013	1			1	MD					Frag pit--HSH		6	N	2	3	0.5	lb
ARNG-028-005	4/5/2013	1			1	MD					Frag pit		0		3	3	1	lb
ARNG-028-006	4/5/2013	1			1	MD					Frag pit		0		2	5	2	lb
ARNG-028-007	4/5/2013	1			1	MD					Frag pit		0		5	5	0.5	lb
ARNG-028-008	4/5/2013	1			1	MD					Frag pit		0		4	4	0.5	lb
ARNG-028-009	4/5/2013	1			1	MD					Frag pit--HSH		0		2	4	0.5	lb
ARNG-028-010	4/5/2013	1			1	MD					Frag		0		1	1	3	lb
ARNG-028-011	4/5/2013	1			1	MD					Frag		0		2	1	0.5	lb
ARNG-028-012	4/5/2013	1			1	MD					Frag		6	E	3	2	1.5	lb
ARNG-028-013	4/5/2013	1			1	MD					Frag pit		0		2	4	2	lb
ARNG-028-014	4/5/2013	1			1	SEED					QC SEED #61		0		0	3	1	lb
ARNG-028-015	4/5/2013	1			1	MD					Frag		6	S	3	3	0.5	lb
ARNG-028-016	4/5/2013	1			1	MD					Frag		0		4	1	0.5	lb
ARNG-029-001	3/29/2013	1			1	CD					SAA		12	N	3	1	0.25	lb
ARNG-029-002	3/29/2013	1			1	MD					Frag		0		1	1	0.25	lb
ARNG-029-003	3/29/2013	1			1	MD					Frag		6	E	3	3	1	lb
ARNG-029-004	3/29/2013	1			1	MD					Frag		0		3	2	0.5	lb
ARNG-029-005	3/29/2013	1			1	MD					Frag		6	W	4	2	1	lb
ARNG-029-006	3/29/2013	1			1	MD					Frag--HSH		6	W	2	1	0.25	lb
ARNG-029-007	3/29/2013	1			1	MD					Frag		6	E	2	2	1.5	lb
ARNG-029-008	3/29/2013	1			1	MD					Frag		0		3	2	1	lb
ARNG-029-009	3/29/2013	1			1	MD					Frag		0		2	2	0.5	lb
ARNG-029-010	3/29/2013	1			1	MD					Frag		0		2	2	0.75	lb
ARNG-029-011	3/29/2013	1			1	MD					Frag		6	W	2	2	1.25	lb
ARNG-029-012	3/29/2013	1			1	MD					Frag--HSH		0		3	1	0.5	lb

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ARNG-029-013	3/29/2013	1			1	MD					Frag		6	E	3	1	0.5	lb
ARNG-029-014	3/29/2013	1			1	MD					Frag--HSH		0		3	1	0.25	lb
ARNG-029-015	3/29/2013	1			1	MD					Frag		6	E	0	2	0.5	lb
ARNG-029-016	3/29/2013	1			1	MD					Frag		6	E	1	3	1	lb
ARNG-029-017	3/29/2013	1			1	MD					Frag		0		3	3	0.3	lb
ARNG-029-018	3/29/2013	1			1	MD					Frag		0		4	2	1.5	lb
ARNG-029-019	3/29/2013	1			1	MD					Frag--HSH		6	N	2	1	0.25	lb
ARNG-029-020	3/29/2013	1			1	MD, SEED					QC SEED #7 , Frag		0		0	2	1.5	lb
ARNG-029-021	3/29/2013	1			1	MD, CD					Frag, Debris		0		2	2	1	lb
ARNG-029-022	3/29/2013	1			1	OTHER					Same as #23		0			0		lb
ARNG-029-023	3/29/2013	1			1	MD					Frag		0		3	1	0.4	lb
ARNG-029-024	3/29/2013	1			1	MD					Frag		6	W	2	1	0.25	lb
ARNG-029-025	3/29/2013	1			1	MD					Frag		6	E	3	1	0.5	lb
ARNG-029-026	3/29/2013	1			1	MD					Frag		6	E	2	2	0.5	lb
ARNG-029-027	3/29/2013	1			1	MD					Frag		0		3	2	0.25	lb
ARNG-029-028	3/29/2013	1			1	MD					Frag		12	W	2	3	1	lb
ARNG-030-001	4/3/2013	1			1	SEED					QC SEED #75		0		0	1	1	lb
ARNG-030-002	4/3/2013	1			1	MD					FRAG		12	S	2	1	0.25	lb
ARNG-030-003	4/3/2013	1			1	MD					FRAG		12	N	2	4	1	lb
ARNG-030-004	4/3/2013	1			1	MD					FRAG		6	S	1	3	0.75	lb
ARNG-030-005	4/3/2013	1			1	MD					FRAG		0		4	3	1.5	lb
ARNG-030-006	4/3/2013	1			1	MD					FRAG		0		1	2	1	lb
ARNG-030-007	4/3/2013	1			1	MD					FRAG		0		3	2	2	lb
ARNG-030-008	4/3/2013	1			1	MD					FRAG		6	N	4	3	2	lb
ARNG-030-009	4/3/2013	1			1	MD					FRAG		0		4	1	0.5	lb
ARNG-030-010	4/3/2013	1			1	MD					FRAG--HSH		0		2	2	1	lb
ARNG-030-011	4/3/2013	1			1	MD					FRAG--HSH		6	W	12	3	2	lb
ARNG-030-012	4/3/2013	1			1	MD					FRAG--HSH		0		1	1	0.25	lb
ARNG-030-013	4/3/2013	1			1	MD					FRAG		0		3	1	0.5	lb
ARNG-030-014	4/3/2013	1			1	MD					FRAG		6	N	2	2	0.25	lb
ARNG-030-015	4/3/2013	1			1	MD					FRAG		12	W	2	1	0.75	lb
ARNG-030-016	4/3/2013	1			1	MD					FRAG		12	N	3	2	1	lb
ARNG-030-017	4/3/2013	1			1	MD					FRAG		6	N	3	1	1.5	lb
ARNG-030-018	4/3/2013	1			1	MD					FRAG		12	W	1	1	1	lb
ARNG-030-019	4/3/2013	1			1	MD					FRAG		12	S	2	2	1	lb
ARNG-030-020	4/3/2013	1			1	MD					FRAG		6	N	4	4	1.5	lb
ARNG-031-001	3/21/2013	1			1	MD					Frag		0		2	3	0.65	lb
ARNG-031-002	3/21/2013	1			1	MD					Frag		0		3	2	0.3	lb
ARNG-031-003	3/21/2013	1			1	MD					Frag		0		2	2	0.2	lb
ARNG-031-004	3/21/2013	1			1	MD					Frag		0		6	4	1.25	lb
ARNG-031-005	3/21/2013	1			1	CD					Metal		0		3	1	3.5	lb
ARNG-031-006	3/21/2013	1			1	MD					Frag		0		4	2	0.4	lb
ARNG-031-007	3/21/2013	1			1	MD, SEED					QC SEED #47, Frag-HSH, bottom of hole checked with Schonstedt and White		0		0	2	0.8	lb
ARNG-031-008	3/21/2013	1			1	MD					Frag		0		0	4	1.25	lb
ARNG-031-009	3/21/2013	1			1	MD					Frag		0		4	1	0.2	lb
ARNG-031-010	3/21/2013	1			1	MD					Frag		0		4	1	0.2	lb
ARNG-031-011	3/21/2013	1			1	MD					Frag		3	E	1.5	2	0.7	lb
ARNG-031-012	3/21/2013	1			1	MD					Frag		5	W	5	1	0.5	lb

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ARNG-031-013	3/21/2013	1			1	MD					60mm Mortar tail boom		0		2	1	1.25	lb
ARNG-032-001	4/4/2013	1			2	CD					SWC Nail		0			1	1	lb
ARNG-032-002	4/4/2013	1			2	MD					Frag		8	SE	2	1	0.25	lb
ARNG-032-003	4/4/2013	1			2	MD					Frag		0		4	1	0.25	lb
ARNG-032-004	4/4/2013	1			2	MD					Frag		6	SW	2	1	0.1	lb
ARNG-032-005	4/4/2013	1			2	SEED					QC SEED #4		0			1	1	lb
ARNG-032-006	4/4/2013	1			2	MD					Frag		0		2	1	0.25	lb
ARNG-033-001	4/9/2013	1			1	CD					SW corner nail		0		0	2	1	lb
ARNG-033-002	4/9/2013	1			1	MD					Frag				12	2	1	lb
ARNG-033-003	4/9/2013	1			1	MD					Frag				12	2	1	lb
ARNG-033-004	4/9/2013	1			1	MD					Frag				12	2	1	lb
ARNG-033-005	4/9/2013	1			1	MD					Frag		2	N	12	1	1.5	lb
ARNG-033-006	4/9/2013	1			1	MD					Frag				9	3	1	lb
ARNG-033-007	4/9/2013	1			1	MD					Frag				2	1	1	lb
ARNG-033-008	4/9/2013	1			1	MD					Frag		2	S	3	1	2	lb
ARNG-033-009	4/9/2013	1			1	MD					Frag		2	N	1	1	0.5	lb
ARNG-033-010	4/9/2013	1			1	MD					Frag				12	1	1.5	lb
ARNG-033-011	4/9/2013	1			1	MD					Frag				12	3	2	lb
ARNG-033-012	4/9/2013	1			1	MD					Frag				14	2	1	lb
ARNG-033-013	4/9/2013	1			1	MD, SEED					QC SEED # 76, frag				0	2	1	lb
ARNG-033-014	4/9/2013	1			1	MD					Frag				12	2	4	lb
ARNG-033-015	4/9/2013	1			1	MD					Frag				12	3	2	lb
ARNG-033-016	4/9/2013	1			1	MD					Frag				13	3	1	lb
ARNG-033-017	4/9/2013	1			1	MD					Frag				12	2	0.25	lb
ARNG-033-018	4/9/2013	1			1	MD					Frag		6	E	13	2	2	lb
ARNG-033-019	4/9/2013	1			1	MD					Frag		6	S	2	1	0.25	lb
ARNG-034-001	3/25/2013	1			1	CD, OTHER					Farm equipment, Geo		0		3	1	0.5	lb
ARNG-034-002	3/25/2013	1			1	CD					Farm equipment		6	E	4	1	2	lb
ARNG-034-003	3/25/2013	1			1	CD, OTHER					Farm equipment, Geo--HSH, bottom of hole checked with Schonstedt and White		6	N	2	1	1	lb
ARNG-034-004	3/25/2013	1			1	CD					Horseshoe part		10	W	6	1	0.5	lb
ARNG-034-005	3/25/2013	1			1	CD					Farm equipment, 2 bottle caps		0		3	3	0.5	lb
ARNG-034-006	3/25/2013	1			1	CD					Horseshoe part		0		2	1	0.5	lb
ARNG-034-007	3/25/2013	1			1	CD					Hinge		6	N	3	1	0.5	lb
ARNG-034-008	3/25/2013	1			1	CD					Horseshoe part		0		3	1	2	lb
ARNG-034-009	3/25/2013	1			1	CD					Farm equipment		6	W	2	1	0.5	lb
ARNG-034-010	3/25/2013	1			1	CD					Horseshoe		6	W	5	1	1	lb
ARNG-034-011	3/25/2013	1			1	CD					Farm equipment		12	N	3	1	0.25	lb
ARNG-034-012	3/25/2013	1			1	CD					Horseshoe		10	E	3	1	0.5	lb
ARNG-034-013	3/25/2013	1			1	CD					Farm equipment		12	E	3	1	0.5	lb
ARNG-034-014	3/25/2013	1			1	OTHER					Same as #12		10	W	3	1	0.5	lb
ARNG-034-015	3/25/2013	1			1	OTHER					Same as #13		12	S	3	1	0.5	lb
ARNG-034-016	3/25/2013	1			1	OTHER					Same as #13		12	W	3	1	0.5	lb
ARNG-034-017	3/25/2013	1			1	CD					Wire handle--HSH, bottom of hole checked with Schonstedt and White		6	E	4		0.25	lb
ARNG-034-018	3/25/2013	1			1	SEED					QC SEED #18		10	E	0	1	0.5	lb
ARNG-034-019	3/25/2013	1			1	CD					Farm equipment, horseshoe		6	W	4	2	0.5	lb
ARNG-034-020	3/25/2013	1			1	OTHER					Same as #18		10	W	0	1	0.5	lb
ARNG-034-021	3/25/2013	1			1	MD					Frag		4	W	4	1	0.5	lb
ARNG-035-001	4/2/2013	1			2	OTHER					Geo, hot rocks, cleared with white--HSH		0		10	4	0	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
ARNG-035-002	4/2/2013	1			2	OTHER					Geo, hot rocks, cleared with white--HSH		0		6	2	0	lb
ARNG-035-003	4/2/2013	1			2	OTHER					Geo, hot rocks, cleared with white--HSH		0		6	3	0	lb
ARNG-035-004	4/2/2013	1			2	SEED					QC SEED #34		12	N	0	1	1	lb
ARNG-035-005	4/2/2013	1			2	CD					Wire, rust flakes		0		0	2	0.1	lb
ARNG-035-006	4/2/2013	1			2	CD					Wire, rust flakes--HSH		0		2	2	0.1	lb
ARNG-035-007	4/2/2013	1			2	CD					Wire, rust flakes--HSH		0		0	1	0.2	lb
ARNG-035-008	4/2/2013	1			2	CD					Wire, rust flakes--HSH		0		5	3	0.5	lb
ARNG-035-009	4/2/2013	1			2	CD					Wire, rust flakes--HSH		0		0	3	0.1	lb
ARNG-036-001	3/22/2013	1			2	CD					Barbed wire		0		3	3	0.15	lb
ARNG-036-002	3/22/2013	1			2	CD					Wire hanger		8	N	0	1	0.1	lb
ARNG-036-003	3/22/2013	1			2	CD					Barbed wire		6	SE	0	3	0.2	lb
ARNG-036-004	3/22/2013	1			2	CD					Barbed wire		0		4	1	0.1	lb
ARNG-036-005	3/22/2013	1			2	CD					Barbed wire, LIP & HSH conntected to #6		0		2	6	0.25	lb
ARNG-036-006	3/22/2013	1			2	CD					Barbed wire, LIP & HSH conntected to #7		0		3	3	1	lb
ARNG-036-007	3/22/2013	1			2	CD					Barbed wire, LIP & HSH connected to #6		0		5	5	1.5	lb
ARNG-036-008	3/22/2013	1			2	CD					Barbed wire, LIP & HSH		0		4	2	0.5	lb
ARNG-036-009	3/22/2013	1			2	CD					Barbed wire		0		3	2	0.15	lb
ARNG-036-010	3/22/2013	1			2	CD					Barbed wire, LIP & HSH		0		4	4	0.5	lb
ARNG-036-011	3/22/2013	1			2	CD					Barbed wire, LIP & HSH connected to #17		2	SE	3	4	0.5	lb
ARNG-036-012	3/22/2013	1			2	CD					Barbed wire, LIP & HSH		0		4	1	1	lb
ARNG-036-013	3/22/2013	1			2	CD					Barbed wire, LIP & HSH		6	S	2	1	1	lb
ARNG-036-014	3/22/2013	1			2	CD					Barbed wire, LIP & HSH connected to #19		0		2	1	1	lb
ARNG-036-015	3/22/2013	1			2	CD					Barbed wire, LIP & HSH connected to #19		0		3	6	0.75	lb
ARNG-036-016	3/22/2013	1			2	CD					Barbed wire		4	E	3	1	0.25	lb
ARNG-036-017	3/22/2013	1			2	CD					Barbed wire, LIP & HSH connected to #11		0		4	4	0.25	lb
ARNG-036-018	3/22/2013	1			2	SEED					QC SEED #58		5	NW	0	1	1	lb
ARNG-036-019	3/22/2013	1			2	CD					Barbed wire, LIP & HSH connected to #15		0		4	6	0.5	lb
ARNG-036-020	3/22/2013	1			2	CD					Barbed wire, LIP & HSH		0		5	7	1	lb
ARNG-036-021	3/22/2013	1			2	CD					Barbed wire, LIP & HSH		0		0	3	1.5	lb
ARNG-036-022	3/22/2013	1			2	CD					Barbed wire		2	W	3	2	0.5	lb
ARNG-036-023	3/22/2013	1			2	CD					Chain		8	SW	3	1	0.5	lb
ARNG-036-024	3/22/2013	1			2	CD					Barbed wire, LIP & HSH connected to #28		0		4	6	0.25	lb
ARNG-036-025	3/22/2013	1			2	CD					Barbed wire		4	W	3	2	0.25	lb
ARNG-036-026	3/22/2013	1			2	CD					Barbed wire		0		4	3	0.25	lb
ARNG-036-027	3/22/2013	1			2	CD					Barbed wire		0		3	3	0.25	lb
ARNG-036-028	3/22/2013	1			2	CD					Barbed wire, LIP & HSH connected to #24		0		4	6	1	lb
ARNG-036-029	3/22/2013	1			2	CD					Barbed wire, LIP & HSH		4	E	4	4	1.5	lb
ARNG-036-030	3/22/2013	1			2	CD					Ammo clip, metal square 1.5" x 1.5"		0		4	2	0.25	lb
ARNG-036-031	3/22/2013	1			2	CD					Chain, plow blade		0		4	2	3.5	lb
ARNG-037-001	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		0		4	2	0.25	lb
ARNG-037-002	3/28/2013	1			1	CD					Nail pit--HSH, bottom of hole checked with Schonstedt and White		0		2	2	0.1	lb
ARNG-037-003	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		4	5	3	lb
ARNG-037-004	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		3	3	1	lb
ARNG-037-005	3/28/2013	1			1	CD					Nails		0		2	1	0.25	lb
ARNG-037-006	3/28/2013	1			1	CD					Lid, horseshoe--HSH, bottom of hole checked with Schonstedt and White		12	E	3	2	0.5	lb
ARNG-037-007	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		12	E	4	3	1.5	lb
ARNG-037-008	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		0		4	1	0.25	lb
ARNG-037-009	3/28/2013	1			1	CD					Nail pit--HSH, bottom of hole checked with Schonstedt and White		6	W	3	3	0.5	lb

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ARNG-037-010	3/28/2013	1			1	OTHER					Same as #7		0			0		lb
ARNG-037-011	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		4	10	2.5	lb
ARNG-037-012	3/28/2013	1			1	CD					Nail pit--HSH, bottom of hole checked with Schonstedt and White		0		6	5	0.75	lb
ARNG-037-013	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		6	N	3	4	1.5	lb
ARNG-037-014	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		6	S	2	1	0.25	lb
ARNG-037-015	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		0		3	1	0.25	lb
ARNG-037-016	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		0		2	5	1	lb
ARNG-037-017	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		6	5	6	lb
ARNG-037-018	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		6	S	2	5	0.75	lb
ARNG-037-019	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		6	N	6	3	1	lb
ARNG-037-020	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		0		2	2	0.25	lb
ARNG-037-021	3/28/2013	1			1	CD					Farm debris		0		4	2	0.25	lb
ARNG-037-022	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		6	S	1	1	1	lb
ARNG-037-023	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		12	E	4	4	0.5	lb
ARNG-037-024	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		12	W	2	5	1	lb
ARNG-037-025	3/28/2013	1			1	CD					Horseshoe, nails--HSH, bottom of hole checked with Schonstedt and White		6	W	2	2	1.5	lb
ARNG-037-026	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		6	E	2	3	0.25	lb
ARNG-037-027	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		6	4	2	lb
ARNG-037-028	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		12	E	5	6	8	lb
ARNG-037-029	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		4	3	1	lb
ARNG-037-030	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		12	N	5	5	6	lb
ARNG-037-031	3/28/2013	1			1	SEED, CD					QC SEED #68, Farm debris--HSH, bottom of hole checked with Schonstedt and White		12	W	5	3	1	lb
ARNG-037-032	3/28/2013	1			1	CD					Nail pit, horseshoe--HSH, bottom of hole checked with Schonstedt and White		6	N	2	5	1	lb
ARNG-037-033	3/28/2013	1			1	CD					Nails, wire--HSH, bottom of hole checked with Schonstedt and White		12	W	2	2	0.5	lb
ARNG-037-034	3/28/2013	1			1	OTHER					Same as #31		0			0		lb
ARNG-037-035	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		0		2	5	0.5	lb
ARNG-037-036	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		4	5	1	lb
ARNG-037-037	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		6	S	2	5	0.25	lb
ARNG-037-038	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		6	W	2	2	4	lb
ARNG-037-039	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		12	E	5	5	1	lb
ARNG-037-040	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		6	N	4	3	0.25	lb
ARNG-037-041	3/28/2013	1			1	OTHER					Same as #38		0					lb
ARNG-037-042	3/28/2013	1			1	CD					Nail pit--HSH, bottom of hole checked with Schonstedt and White		0		5	4	0.5	lb
ARNG-037-043	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		3	3	0.5	lb
ARNG-037-044	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		8	5	3	lb
ARNG-037-045	3/28/2013	1			1	CD					Nail--HSH, bottom of hole checked with Schonstedt and White		6	W	2	1	0.25	lb
ARNG-037-046	3/28/2013	1			1	CD					Nails, spark plug--HSH, bottom of hole checked with Schonstedt and White		0		2	4	0.25	lb
ARNG-037-047	3/28/2013	1			1	OTHER					Same as #42		0					lb
ARNG-037-048	3/28/2013	1			1	OTHER					Same as #42		0					lb
ARNG-037-049	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		2	2	1	lb
ARNG-037-050	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		3	7	5	lb
ARNG-037-051	3/28/2013	1			1	CD					Nail--HSH, bottom of hole checked with Schonstedt and White		0		1	1	0.25	lb
ARNG-037-052	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		6	W	3	3	0.5	lb
ARNG-037-053	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		12	S	2	2	0.25	lb
ARNG-037-054	3/28/2013	1			1	CD					Wire, stove parts--HSH, bottom of hole checked with Schonstedt and White		12	N	2	6	1	lb
ARNG-037-055	3/28/2013	1			1	CD					Drums--HSH, bottom of hole checked with Schonstedt and White		6	W	2	6	0.5	lb
ARNG-037-056	3/28/2013	1			1	CD					Farm debris, wire, left in place--HSH, bottom of hole checked with Schonstedt and White		12	S	2	2	0.25	lb
ARNG-037-057	3/28/2013	1			1	CD					Small arms ammo--HSH, bottom of hole checked with Schonstedt and White		6	E	2	1	0.1	lb

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ARNG-037-058	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		12	W	1	2	6	lb
ARNG-037-059	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		6	S	3	3	0.25	lb
ARNG-037-060	3/28/2013	1			1	OTHER					Same as #58		0					lb
ARNG-037-061	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		6	W	4	5	2	lb
ARNG-037-062	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		6	S	2	3	0.5	lb
ARNG-037-063	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		6	W	3	3	0.75	lb
ARNG-037-064	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		2	3	4	lb
ARNG-037-065	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		6	E	3	1	3	lb
ARNG-037-066	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		4	3	0.5	lb
ARNG-037-067	3/28/2013	1			1	CD					Farm debris, nails--HSH, bottom of hole checked with Schonstedt and White		6	S	2	4	1.5	lb
ARNG-037-068	3/28/2013	1			1	CD					Trash pit--HSH, bottom of hole checked with Schonstedt and White		0		3	6	1	lb
ARNG-037-069	3/28/2013	1			1	CD					Trash pit--HSH, bottom of hole checked with Schonstedt and White		0		2	10	1	lb
ARNG-037-070	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		2	7	3	lb
ARNG-037-071	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		12	NW	3	2	4	lb
ARNG-037-072	3/28/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		4	6	1	lb
ARNG-037-073	3/28/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		0		3	3	0.25	lb
ARNG-037-074	3/28/2013	1			1	OTHER					Same as #71		0					lb
ARNG-038-001	3/29/2013	1			2	CD					Can		12	S	5	1	0.25	lb
ARNG-038-002	3/29/2013	1			2	CD					Plow part		12	SW	6	1	0.3	lb
ARNG-038-003	3/29/2013	1			2	SEED					QC SEED #63		12	N	5	1	1	lb
ARNG-038-004	3/29/2013	1			2	CD					Nail		12	NW	1	1	0.01	lb
ARNG-038-005	3/29/2013	1			2	CD					Horseshoe		12	NW	1	1	1	lb
ARNG-038-006	3/29/2013	1			2	OTHER					Same as #5		0			0		lb
ARNG-038-007	3/29/2013	1			2	CD					Bolt		0		3	1	0.25	lb
ARNG-038-008	3/29/2013	1			2	OTHER					Same as #7		6	NE		0		lb
ARNG-038-009	3/29/2013	1			2	OTHER					Same as #7		12	W		0		lb
ARNG-038-010	3/29/2013	1			2	CD					Wire		4	NE	2	3	0.1	lb
ARNG-038-011	3/29/2013	1			2	CD					Plow parts		8	NE	3	2	1.5	lb
ARNG-038-012	3/29/2013	1			2	OTHER					Same as #11		0			0		lb
ARNG-038-013	3/29/2013	1			2	CD					Horseshoe		0		2	1	1	lb
ARNG-038-014	3/29/2013	1			2	CD					Nail		8	NW	2	1	0.01	lb
ARNG-038-015	3/29/2013	1			2	OTHER					Same as #14		10	E		0		lb
ARNG-039-001	4/1/2013	1			1	MD					Frag		6	E	2	5	1.5	lb
ARNG-039-002	4/1/2013	1			1	MD					Frag		0		2	2	0.5	lb
ARNG-039-003	4/1/2013	1			1	MD					Frag		0		1	3	0.5	lb
ARNG-039-004	4/1/2013	1			1	MD					Frag pit--HSH		6	E	2	4	1	lb
ARNG-039-005	4/1/2013	1			1	MD					Frag		0		2	1	1	lb
ARNG-039-006	4/1/2013	1			1	MD					Frag--HSH		6	S	2	3	0.5	lb
ARNG-039-007	4/1/2013	1			1	MD					Frag		0		4	5	2	lb
ARNG-039-008	4/1/2013	1			1	MD					Frag pit--HSH		0		2	3	2	lb
ARNG-039-009	4/1/2013	1			1	OTHER					Same as #8		0			0		lb
ARNG-039-010	4/1/2013	1			1	MD					Frag		0		4	1	0.75	lb
ARNG-039-011	4/1/2013	1			1	MD					Frag		6	E	3	1	1	lb
ARNG-039-012	4/1/2013	1			1	CD					Farm debris		12	NE	3	1	3	lb
ARNG-039-013	4/1/2013	1			1	MD					Frag		0		2	1	0.5	lb
ARNG-039-014	4/1/2013	1			1	OTHER					Same as #12		12	SW		0		lb
ARNG-039-015	4/1/2013	1			1	MD					Frag		6	S	2	1	0.5	lb
ARNG-039-016	4/1/2013	1			1	MD					Frag		0		2	1	0.5	lb

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ARNG-039-017	4/1/2013	1			1	MD					Frag		6	N	3	1	1	lb
ARNG-039-018	4/1/2013	1			1	MD					Frag		0		2	2	0.25	lb
ARNG-039-019	4/1/2013	1			1	MD					Expended fuze, frag		0		3	2	3	lb
ARNG-039-020	4/1/2013	1			1	SEED					QC SEED #5		6	W	0	1	0.5	lb
ARNG-039-021	4/1/2013	1			1	MD					Frag		0		1	3	0.25	lb
ARNG-039-022	4/1/2013	1			1	OTHER					Same as #20		6	E		0		lb
ARNG-039-023	4/1/2013	1			1	MD					Frag		6	E	1	2	0.25	lb
ARNG-039-024	4/1/2013	1			1	OTHER					Same as #23		6	W		0		lb
ARNG-039-025	4/1/2013	1			1	MD					Frag		0		6	5	1	lb
ARNG-039-026	4/1/2013	1			1	MD					Frag		6	N	3	5	1	lb
ARNG-040-001	4/2/2013	1			2	CD					Nails, hot rocks, rust flakes--HSH + LIP		0		8	8	0.1	lb
ARNG-040-002	4/2/2013	1			2	CD					Plow part, nails, rust flakes--HSH + LIP		0		4	4	5	lb
ARNG-040-003	4/2/2013	1			2	CD					Nails--HSH + LIP		0		3	2	0.02	lb
ARNG-040-004	4/2/2013	1			2	CD					Nails, rust flakes--HSH + LIP		0		3	3	0.02	lb
ARNG-040-005	4/2/2013	1			2	CD					Nails, rust flakes--HSH + LIP		0		2	4	0.02	lb
ARNG-040-006	4/2/2013	1			2	CD					Nails, rust flakes--HSH + LIP		0		2	5	0.03	lb
ARNG-040-007	4/2/2013	1			2	CD					Nails, rust flakes--HSH + LIP		0		3	3	0.02	lb
ARNG-040-008	4/2/2013	1			2	CD					Tire, rust flakes--HSH + LIP		0		12	1		lb
ARNG-040-009	4/2/2013	1			2	CD					Nails, rust flakes--HSH + LIP		0		8	3	0.02	lb
ARNG-040-010	4/2/2013	1			2	CD					Nails, rust flakes--HSH + LIP		0		3	4	0.02	lb
ARNG-040-011	4/2/2013	1			2	CD					Nails, rust flakes--HSH + LIP		0		3	6	0.1	lb
ARNG-040-012	4/2/2013	1			2	CD					Nails, rust flakes--HSH + LIP		0		3	4	0.02	lb
ARNG-040-013	4/2/2013	1			2	CD					Nails, rust flakes--HSH + LIP		0		3	2	0.02	lb
ARNG-040-014	4/2/2013	1			2	CD					Nails, rust flakes		0		3	3	0.02	lb
ARNG-040-015	4/2/2013	1			2	SEED					QC SEED #81		0		0	1	1	lb
ARNG-040-016	4/2/2013	1			2	OTHER					Geo, hot rock, large--HSH + LIP		0		12	0		lb
ARNG-041-001	3/27/2013	1			1	CD					Farm debris		0		2	1	1	lb
ARNG-041-002	3/27/2013	1			1	CD					SAA--HSH, bottom of hole checked with Schonstedt and White		12	W	5	3	0.25	lb
ARNG-041-003	3/27/2013	1			1	CD					Farm debris		0		6	4	3	lb
ARNG-041-004	3/27/2013	1			1	CD					SAA, farm debris--HSH, bottom of hole checked with Schonstedt and White		0		3	4	0.75	lb
ARNG-041-005	3/27/2013	1			1	CD					Horseshoe		0		3	1	0.25	lb
ARNG-041-006	3/27/2013	1			1	CD					Farm debris		6	N	5	1	0.5	lb
ARNG-041-007	3/27/2013	1			1	CD					Farm debris		0		4	1	0.75	lb
ARNG-041-008	3/27/2013	1			1	CD					SAA, farm debris--HSH, bottom of hole checked with Schonstedt and White		6	N	4	2	2	lb
ARNG-041-009	3/27/2013	1			1	CD					Wire in ground, farm debris--HSH, bottom of hole checked with Schonstedt and White		0		2	2	1	lb
ARNG-041-010	3/27/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		12	S	6	1	1	lb
ARNG-041-011	3/27/2013	1			1	MD, CD					60mm mortar tail boom, farm debris		0		3	2	1.5	lb
ARNG-041-012	3/27/2013	1			1	CD					Farm debris		12	NE	3	1	1	lb
ARNG-041-013	3/27/2013	1			1	OTHER					Same as #12		12	SW	3	0	1	lb
ARNG-041-014	3/27/2013	1			1	CD					Farm debris		6	S	4	1	0.25	lb
ARNG-041-015	3/27/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		4	1	0.25	lb
ARNG-041-016	3/27/2013	1			1	CD					Nail		12	W	2	1	0.1	lb
ARNG-041-017	3/27/2013	1			1	CD					Farm debris		12	N	2	1	0.5	lb
ARNG-041-018	3/27/2013	1			1	CD					Farm debris--HSH, bottom of hole checked with Schonstedt and White		0		4	6	0.25	lb
ARNG-041-019	3/27/2013	1			1	SEED					QC SEED #74		0		0	1	1	lb
ARNG-041-020	3/27/2013	1			1	CD					Farm debris		12	E	1	1	3	lb
ARNG-041-021	3/27/2013	1			1	OTHER					Same as #20		12	W	1	0	3	lb
ARNG-041-022	3/27/2013	1			1	CD					Farm debris		6	W	1	1	1.5	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
ARNG-041-023	3/27/2013	1			1	CD					Nail pit--HSH, bottom of hole checked with Schonstedt and White		12	NE	3	4	0.25	lb
ARNG-042-001	3/20/2013	1			1	CD					Horseshoe piece		0		2	1	0.5	lb
ARNG-042-002	3/20/2013	1			1	MD					Frag		12	E	96	5	0.5	lb
ARNG-042-003	3/20/2013	1			1	MD					Frag		0		3	3	0.5	lb
ARNG-042-004	3/20/2013	1			1	MD					Frag		0		6	3	0.5	lb
ARNG-042-005	3/20/2013	1			1	MD					Frag		7	N	7	3	0.5	lb
ARNG-042-006	3/20/2013	1			1	CD					SAA		0		6	1	0.5	lb
ARNG-042-007	3/20/2013	1			1	MD					Frag		0		3	5	0.5	lb
ARNG-042-008	3/20/2013	1			1	SEED					QC SEED #49		4	NE	2	1	0.5	lb
ARNG-042-009	3/20/2013	1			1	OTHER					Hot Rock-Geo, checked with White		12	E	6	0		lb
ARNG-043-001	3/25/2013	1			1	SEED					QC SEED #67		12	N	0	1	1	lb
ARNG-043-002	3/25/2013	1			1	OTHER					Geo, checked with White--HSH		0		6			lb
ARNG-043-003	3/25/2013	1			1	OTHER					Geo, checked with White--HSH		0		2			lb
ARNG-043-004	3/25/2013	1			1	OTHER					Geo, checked with White--HSH		0		3			lb
ARNG-043-005	3/25/2013	1			1	OTHER					Geo, checked with White--HSH		12	S	3	1		lb
ARNG-043-006	3/25/2013	1			1	CD					Farm equipment--HSH, bottom of hole checked with Schonstedt and White		0		2	1	0.25	lb
ARNG-043-007	3/25/2013	1			1	MD					Frag--HSH, bottom of hole checked with Schonstedt and White		0		4	2	0.25	lb
ARNG-043-008	3/25/2013	1			1	CD					Farm equipment--HSH, bottom of hole checked with Schonstedt and White		0		2	1	0.25	lb
ARNG-043-009	3/25/2013	1			1	CD					Farm equipment		0		5	3	2	lb
ARNG-044-001	4/2/2013	1			2	MD					Frag		0		3	1	0.25	lb
ARNG-044-002	4/2/2013	1			2	OTHER					Geo, cleared with white--HSH		0		5	0	0	lb
ARNG-044-003	4/2/2013	1			2	SEED					QC SEED #44		0		1	1	1	lb
ARNG-044-004	4/2/2013	1			2	OTHER					Geo, cleared with white--HSH		0		6	0	0	lb
ARNG-044-005	4/2/2013	1			2	OTHER					Geo, cleared with white--HSH		0		6	0	0	lb
ARNG-044-006	4/2/2013	1			2	OTHER					Geo, cleared with white		0		5	0	0	lb
ARNG-044-007	4/2/2013	1			2	OTHER					Geo, cleared with white--HSH		0		7	0	0	lb
ARNG-044-008	4/2/2013	1			2	OTHER					Geo, cleared with white--HSH		0		12	0	0	lb
ARNG-044-009	4/2/2013	1			2	CD					SAA, hot rocks, cleared with white--HSH		0		2	3	0.01	lb
ARNG-044-010	4/2/2013	1			2	OTHER					Geo, cleared with white--HSH		0		9	4	0	lb
ARNG-044-011	4/2/2013	1			2	OTHER					Geo, cleared with white--HSH		0		6	3	0	lb
ARNG-044-012	4/2/2013	1			2	OTHER					Geo, cleared with white--HSH		0		5	5	0	lb
ARNG-045-001	4/5/2013	1			1	MD					Frag pit--HSH		6	N	2	4	0.5	lb
ARNG-045-002	4/5/2013	1			1	MD					Frag pit		0		2	5	0.1	lb
ARNG-045-003	4/5/2013	1			1	MD					Frag pit--HSH		0		4	5	2	lb
ARNG-045-004	4/5/2013	1			1	MD					Frag pit--HSH		0		2	5	1	lb
ARNG-045-005	4/5/2013	1			1	MD					Frag pit--HSH		0		4	6	2	lb
ARNG-045-006	4/5/2013	1			1	MD					Frag pit--HSH		12	W	4	3	1	lb
ARNG-045-007	4/5/2013	1			1	MD					Frag pit--HSH		0		2	3	1	lb
ARNG-045-008	4/5/2013	1			1	MD					Frag pit--HSH		0		2	4	1	lb
ARNG-045-009	4/5/2013	1			1	MD					Frag, 60mm fuze pieces		12	W	2	4	1	lb
ARNG-045-010	4/5/2013	1			1	MD					Frag, 60mm fuze		6	E	2	3	1	lb
ARNG-045-011	4/5/2013	1			1	MD					Frag pit		6	W	3	2	2	lb
ARNG-045-012	4/5/2013	1			1	MD					Frag		6	N	2	2	1	lb
ARNG-045-013	4/5/2013	1			1	MD, SEED					Frag, QC SEED #36		0		0	2	1	lb
ARNG-045-014	4/5/2013	1			1	MD					Frag pit		0		4	3	0.5	lb
ARNG-045-015	4/5/2013	1			1	MD					Frag pit--HSH		12	W	3	4	2	lb
ARNG-045-016	4/5/2013	1			1	OTHER					Same as #14		0			0		lb
ARNG-045-017	4/5/2013	1			1	MD					Frag		0		2	3	0.75	lb

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ARNG-045-018	4/5/2013	1			1	MD					Frag pit--HSH		0		2	2	2	lb
ARNG-045-019	4/5/2013	1			1	MD					Frag pit--HSH		0		2	4	3	lb
ARNG-045-020	4/5/2013	1			1	MD					Frag		0		3	3	0.5	lb
ARNG-045-021	4/5/2013	1			1	MD					Frag pit		0		3	3	0.75	lb
ARNG-045-022	4/5/2013	1			1	MD					Frag pit--HSH		6	W	6	4	0.5	lb
ARNG-045-023	4/5/2013	1			1	MD					Frag pit		0		2	3	1	lb
ARNG-045-024	4/5/2013	1			1	MD					Frag pit		0		2	3	1	lb
ARNG-045-025	4/5/2013	1			1	MD					Frag pit		0		2	3	1.5	lb
ARNG-045-026	4/5/2013	1			1	MD					Frag pit		0		2	3	1	lb
ARNG-045-027	4/5/2013	1			1	MD					Frag pit		0		3	3	1	lb
ARNG-045-028	4/5/2013	1			1	MD					Frag		0		4	4	1	lb
ARNG-045-029	4/5/2013	1			1	MD					Frag		0		2	2	0.5	lb
ARNG-045-030	4/5/2013	1			1	MD					Frag		0		3	3	1	lb
ARNG-045-031	4/5/2013	1			1	MD					Frag		12	W	4	2	0.5	lb
ARNG-045-032	4/5/2013	1			1	CD					Debris		0		2	1	2	lb
ARNG-045-033	4/5/2013	1			1	MD					Frag--HSH		0		2	4	0.5	lb
ARNG-046-001	4/4/2013	1			1	CD					corner stake, checked with Schonstedt & White		0			0		lb
ARNG-046-002	4/4/2013	1			1	MD					Frag		4	NE	2	1	1.5	lb
ARNG-046-003	4/4/2013	1			1	MD					Frag		0		1	1	0.5	lb
ARNG-046-004	4/4/2013	1			1	SEED					QC SEED #72		4	N	0	1	1	lb
ARNG-046-005	4/4/2013	1			1	MD					Frag		0		6	1	1	lb
ARNG-046-006	4/4/2013	1			1	MD					Frag		0		4	1	0.5	lb
ARNG-046-007	4/4/2013	1			1	MD					Frag		6	W	3	2	2	lb
ARNG-046-008	4/4/2013	1			1	MD					Frag		0		1	1	2	lb
ARNG-046-009	4/4/2013	1			1	MD					Frag--HSH		0		2	1	1	lb
ARNG-046-010	4/4/2013	1			1	MD					Frag		12	N	2	1	1	lb
ARNG-046-011	4/4/2013	1			1	MD					Frag		6	E	2	1	0.25	lb
ARNG-046-012	4/4/2013	1			1	MD					Frag		0		4	1	1	lb
ARNG-046-013	4/4/2013	1			1	MD					Frag--HSH		4	N	4	2	0.5	lb
ARNG-046-014	4/4/2013	1			1	MD					Frag		6	N	6	1	1	lb
ARNG-046-015	4/4/2013	1			1	MD					Frag		12	W	3	1	1	lb
ARNG-047-001	3/29/2013	1			1	MD					Frag		6	E	2	2	1	lb
ARNG-047-002	3/29/2013	1			1	MD					Frag		0		3	3	1	lb
ARNG-047-003	3/29/2013	1			1	SEED					QC SEED #59		0		0	1	1	lb
ARNG-048-001	4/1/2013	1			2	CD					Plow parts, rust flakes--HSH		6	N	6	2	2	lb
ARNG-048-002	4/1/2013	1			2	CD					Nail, rust flakes--HSH		0		2	1	0.02	lb
ARNG-048-003	4/1/2013	1			2	CD					Wire, metal banding--HSH + LIP		0		1	3	0.25	lb
ARNG-048-004	4/1/2013	1			2	CD					Plow parts		0		3	1	1	lb
ARNG-048-005	4/1/2013	1			2	CD					Metal banding--LIP		0		2	1	3	lb
ARNG-048-006	4/1/2013	1			2	CD					Wire, rust flakes--HSH + LIP		0		3	2	0.05	lb
ARNG-048-007	4/1/2013	1			2	CD					Plow parts, wire, rust flakes--HSH + LIP		0		6	4	5	lb
ARNG-048-008	4/1/2013	1			2	CD					Chain		0		6	1	1	lb
ARNG-048-009	4/1/2013	1			2	CD					Metal, rust flakes--HSH + LIP		0		6	1	0.01	lb
ARNG-048-010	4/1/2013	1			2	CD					Hoe head		0		10	1	1	lb
ARNG-048-011	4/1/2013	1			2	CD					Sheet metal		0		5	1	1	lb
ARNG-048-012	4/1/2013	1			2	CD					Horseshoe part		0		4	1	0.25	lb
ARNG-048-013	4/1/2013	1			2	SEED					QC SEED #26		0		0	1	1	lb
ARNG-048-014	4/1/2013	1			2	CD					Horseshoe, shared with #16, #17		0		3	1	0.25	lb

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ARNG-048-015	4/1/2013	1			2	OTHER					Same as #12		0			0		lb
ARNG-048-016	4/1/2013	1			2	OTHER					Same as #14		0			0		lb
ARNG-048-017	4/1/2013	1			2	OTHER					Same as #14		0			0		lb
ARNG-048-018	4/1/2013	1			2	CD					Nail, rust flakes--HSH + LIP		0		2	1	0.01	lb
ARNG-048-019	4/1/2013	1			2	CD					Nail		0		4	1	0.01	lb
ARNG-048-020	4/1/2013	1			2	CD					Metal ring		0		2	1	0.5	lb
ARNG-048-021	4/1/2013	1			2	CD					Wire, rust flakes--HSH + LIP		0		4	2	0.1	lb
ARNG-048-022	4/1/2013	1			2	OTHER					Same as #20		0			0		lb
ARNG-048-023	4/1/2013	1			2	CD					Nail		0		5	1	0.01	lb
ARNG-049-001	4/1/2013	1			1	SEED					QC SEED #29		6	S	5	1	0.5	lb
ARNG-049-002	4/1/2013	1			1	CD					Plow tooth		6	E	3	2	3	lb
ARNG-049-003	4/1/2013	1			1	OTHER					Same as #2		6	W				lb
ARNG-049-004	4/1/2013	1			1	CD					Plow tooth		0		4	1	2	lb
ARNG-049-005	4/1/2013	1			1	CD					Farm debris		6	W	5	2	3	lb
ARNG-049-006	4/1/2013	1			1	OTHER					Same as #7		6	NW				lb
ARNG-049-007	4/1/2013	1			1	MD, CD					Farm debris, frag		12	E	3	3	15	lb
ARNG-049-008	4/1/2013	1			1	OTHER					Same as #7		6	S				lb
ARNG-049-009	4/1/2013	1			1	CD					Farm debris		6	S	4	1	3	lb
ARNG-049-010	4/1/2013	1			1	MD					Frag 60mm mortar fin		0		6	4	2	lb
ARNG-049-011	4/1/2013	1			1	MD					Frag--HSH		6	E	3	2	0.25	lb
ARNG-049-012	4/1/2013	1			1	CD					SAA		6	N	4	2	0.2	lb
ARNG-049-013	4/1/2013	1			1	MD					60mm mortar tali boom		0		2	1	0.5	lb
ARNG-050-001	4/1/2013	1			2	OTHER					Hot rocks, checked with white		0		8	5	0	lb
ARNG-050-002	4/1/2013	1			2	SEED					QC SEED #82		12	N	1	1	1	lb
ARNG-050-003	4/1/2013	1			2	OTHER					Hot rocks, checked with white		0		3	3	0	lb
ARNG-050-004	4/1/2013	1			2	OTHER					Hot rocks, checked with white		0		9	2	0	lb
ARNG-050-005	4/1/2013	1			2	OTHER					Hot rocks, checked with white		0		6	3	0	lb
ARNG-050-006	4/1/2013	1			2	OTHER					Hot rocks, checked with white		0		3	4	0	lb
ARNG-050-007	4/1/2013	1			2	CD					Nail		0		3	1	0.1	lb
ARNG-050-008	4/1/2013	1			2	OTHER					Hot rocks, checked with white		0		2	2	0	lb
ARNG-050-009	4/1/2013	1			2	CD					Nails		8	W	2	3	0.1	lb
ARNG-050-010	4/1/2013	1			2	OTHER					Hot rocks, checked with white--HSH		0		5	2	0	lb
ARNG-050-011	4/1/2013	1			2	CD					Nail		0		4	1	0.01	lb
ARNG-050-012	4/1/2013	1			2	CD					Scrap metal, rust flakes		0		2	3	0.1	lb
ARNG-050-013	4/1/2013	1			2	OTHER					Hot rocks, checked with white--HSH		8	S	5	3	0	lb
ARNG-051-001	4/3/2013	1			2	CD					Snap hook, Rust		6	N	3	1	0.25	lb
ARNG-051-002	4/3/2013	1			2	MD					Frag		0		5	1	0.5	lb
ARNG-051-003	4/3/2013	1			2	SEED					QC SEED #53		12	S	5	1	1	lb
ARNG-051-004	4/3/2013	1			2	MD					Frag		8	S	4	1	0.25	lb
ARNG-051-005	4/3/2013	1			2	MD					Frag		6	E	5	1	0.5	lb
ARNG-051-006	4/3/2013	1			2	MD					Frag		0		4	1	0.5	lb
ARNG-051-007	4/3/2013	1			2	MD					Frag		0		3	1	0.25	lb
ARNG-051-008	4/3/2013	1			2	MD					Frag, rust--HSH + LIP		0		6	1	0.25	lb
ARNG-051-009	4/3/2013	1			2	OTHER					Geo, hot rocks, cleared with white		0		10	0	0	lb
ARNG-051-010	4/3/2013	1			2	OTHER					Geo, hot rocks, cleared with white		0		6	0	0	lb
ARNG-051-011	4/3/2013	1			2	OTHER					Geo, hot rocks, cleared with white		0		8	0	0	lb
ARNG-051-012	4/3/2013	1			2	OTHER					Geo, hot rocks, cleared with white		0		4	0	0	lb
ARNG-051-013	4/3/2013	1			2	OTHER					Geo, hot rocks, cleared with white		0		3	0	0	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
ARNG-052-001	4/5/2013	1			1	MD					Frag pit--HSH		12	W	3	1	4	lb
ARNG-052-002	4/5/2013	1			1	MD					Frag pit--HSH		0		2	1	0.25	lb
ARNG-052-003	4/5/2013	1			1	MD					Frag pit--HSH		6	W	2	2	1	lb
ARNG-052-004	4/5/2013	1			1	MD					Frag pit--HSH		12	SE	3	3	3	lb
ARNG-052-005	4/5/2013	1			1	MD					Frag pit--HSH		0		2	4	0.5	lb
ARNG-052-006	4/5/2013	1			1	MD					Frag pit--HSH		12	S	3	1	1	lb
ARNG-052-007	4/5/2013	1			1	MD					Frag pit--HSH		12	S	6	2	1	lb
ARNG-052-008	4/5/2013	1			1	MD					Frag pit--HSH		5	W	4	2	0.25	lb
ARNG-052-009	4/5/2013	1			1	MD					Frag pit--HSH		12	E	5	2	0.5	lb
ARNG-052-010	4/5/2013	1			1	MD, SEED					Frag, QC SEED #37--HSH		0		0	5	1	lb
ARNG-053-001	4/1/2013	1			2	CD, OTHER					Sheet metal, Hot rock, checked with white--HSH		0		2	2	0.2	lb
ARNG-053-002	4/1/2013	1			2	CD, OTHER					Small arms ammo, hot rock, checked with white--HSH		12	E	3	2	0.5	lb
ARNG-053-003	4/1/2013	1			2	CD, OTHER					Small arms ammo, hot rock, checked with white--HSH		0		2	3	0.25	lb
ARNG-053-004	4/1/2013	1			2	CD					Plow part--HSH		0		4	1	0.25	lb
ARNG-053-005	4/1/2013	1			2	OTHER					Hot rock, checked with white--HSH		0		6	3		lb
ARNG-053-006	4/1/2013	1			2	OTHER					Hot rock, checked with white--HSH		12	W	4	5		lb
ARNG-053-007	4/1/2013	1			2	OTHER					Horseshoe, hot rock, checked with white--HSH		6	S	8	2	0.25	lb
ARNG-053-008	4/1/2013	1			2	OTHER					Hot rock, checked with white--HSH		0		6	4		lb
ARNG-053-009	4/1/2013	1			2	CD					Sheet metal--HSH		12	N	8	2	0.5	lb
ARNG-053-010	4/1/2013	1			2	CD, OTHER					Nail, hot rock, checked with white--HSH		3	N	6	1	0.02	lb
ARNG-053-011	4/1/2013	1			2	SEED, OTHER					QC SEED #35, Geo hot--HSH		12	N	5	1	1	lb
ARNG-053-012	4/1/2013	1			2	OTHER					Same as #11		0					lb
ARNG-053-013	4/1/2013	1			2	CD					Wire--HSH		0		2	1	0.25	lb
ARNG-054-001	3/20/2013	1			1	NC					No Find with Schonstedt or EM-61		0					lb
ARNG-054-002	3/20/2013	1			1	MD					60mm mortar tailboom		0		2		0.5	lb
ARNG-054-003	3/20/2013	1			1	MD					Frag		0		4		1.5	lb
ARNG-054-004	3/20/2013	1			1	MD					Frag		0		2		0.4	lb
ARNG-054-005	3/20/2013	1			1	MD					Frag		2	SE	2		0.75	lb
ARNG-054-006	3/20/2013	1			1	MD					Frag		3	SW	2		0.3	lb
ARNG-054-007	3/20/2013	1			1	SEED					QC SEED #15		4	SE	0		1	lb
ARNG-054-008	3/20/2013	1			1	MD					Frag		12	SE	2		0.6	lb
ARNG-054-009	3/20/2013	1			1	MD					Frag		9	E	2		0.3	lb
ARNG-054-010	3/20/2013	1			1	MD					60mm mortar fin		12	E	0	1	1	lb
ARNG-054-011	3/20/2013	1			1	MD					30mm HE projo expended		12	SE	3	1	1	lb
ARNG-054-012	3/20/2013	1			1	MD					60mm mortar fin		0		2	3	0.1	lb
ARNG-055-001	4/4/2013	1			1	MD					Frag		12	N	2	2	1	lb
ARNG-055-002	4/4/2013	1			1	MD					Frag pit--HSH		6	W	2	1	0.5	lb
ARNG-055-003	4/4/2013	1			1	MD					Frag pit--HSH		6	E	3	1	0.25	lb
ARNG-055-004	4/4/2013	1			1	MD					Frag pit--HSH		6	W	2	1	0.5	lb
ARNG-055-005	4/4/2013	1			1	MD					Frag pit--HSH		0		1	2	0.25	lb
ARNG-055-006	4/4/2013	1			1	MD					Projectile T-bar fuze, frag--HSH		0		3	2	2	lb
ARNG-055-007	4/4/2013	1			1	CD					Farm debris		0		1	4	4	lb
ARNG-055-008	4/4/2013	1			1	MD					Frag pit--HSH		6	W	7	9	0.75	lb
ARNG-055-009	4/4/2013	1			1	CD					Farm debris--HSH		0		2	2	1	lb
ARNG-055-010	4/4/2013	1			1	MD					Frag pit--HSH		0		5	8	0.75	lb
ARNG-055-011	4/4/2013	1			1	MD					Frag pit--HSH		0		2	6	1.25	lb
ARNG-055-012	4/4/2013	1			1	MD					Frag pit--HSH		0		3	5	0.25	lb
ARNG-055-013	4/4/2013	1			1	MD					Frag pit--HSH		0		2	4	0.25	lb

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ARNG-055-014	4/4/2013	1			1	MD					Frag pit--HSH		0		4	4	0.25	lb
ARNG-055-015	4/4/2013	1			1	MD					Frag pit--HSH		0		12	4	0.5	lb
ARNG-055-016	4/4/2013	1			1	MD					Frag pit--HSH		0		4	5	0.25	lb
ARNG-055-017	4/4/2013	1			1	MD					Frag-HSH		0		3	2	1	lb
ARNG-055-018	4/4/2013	1			1	MD					Frag pit--HSH		12	W	3	2	0.25	lb
ARNG-055-019	4/4/2013	1			1	MD					Frag		0		2	2	0.5	lb
ARNG-055-020	4/4/2013	1			1	MD					Frag		0		3	2	1	lb
ARNG-055-021	4/4/2013	1			1	MD					Frag pit		6	W	3	7	0.5	lb
ARNG-055-022	4/4/2013	1			1	MD					Frag pit--HSH		0		3	2	1	lb
ARNG-055-023	4/4/2013	1			1	MD					Frag pit--HSH		6	E	2	3	0.25	lb
ARNG-055-024	4/4/2013	1			1	MD					Frag pit--HSH		0		12	3	0.5	lb
ARNG-055-025	4/4/2013	1			1	MD					Frag pit--HSH		0		2	4	0.5	lb
ARNG-055-026	4/4/2013	1			1	SEED					QC SEED #2		0		0	1	1	lb
ARNG-055-027	4/4/2013	1			1	MD					Frag		0		3	1	0.5	lb
ARNG-056-001	4/2/2013	1			2	MD					Frag		0		2	2	0.25	lb
ARNG-056-002	4/2/2013	1			2	CD					SAA		0		2	1	0.01	lb
ARNG-056-003	4/2/2013	1			2	CD					Metal strap		12	S	3	1	0.25	lb
ARNG-056-004	4/2/2013	1			2	MD					Frag		6	E	2	1	0.25	lb
ARNG-056-005	4/2/2013	1			2	MD					Frag		0		2	1	0.25	lb
ARNG-056-006	4/2/2013	1			2	MD					Frag		0		5	1	0.25	lb
ARNG-056-007	4/2/2013	1			2	MD					Frag		0		2	1	1	lb
ARNG-056-008	4/2/2013	1			2	MD					Frag		0		3	3	0.75	lb
ARNG-056-009	4/2/2013	1			2	OTHER					Hot rocks, checked with white		0		6	4	0	lb
ARNG-056-010	4/2/2013	1			2	OTHER					Same as #11		0					lb
ARNG-056-011	4/2/2013	1			2	SEED					QC SEED #13		12	W	1	1	1	lb
ARNG-057-001	3/29/2013	1			2	CD					Plow part		12	E	1	1	3	lb
ARNG-057-002	3/29/2013	1			2	OTHER					Same as #1		0			0		lb
ARNG-057-003	3/29/2013	1			2	CD					Nail		0		2	1	0.01	lb
ARNG-057-004	3/29/2013	1			2	SEED					QC SEED #54		0		5	1	1	lb
ARNG-057-005	3/29/2013	1			2	CD					Plow blade		0		3	1	0.5	lb
ARNG-057-006	3/29/2013	1			2	CD					Wire		3	S	1	3	0.1	lb
ARNG-057-007	3/29/2013	1			2	CD					Nail		0		1	1	0.01	lb
ARNG-057-008	3/29/2013	1			2	CD					Seel bar, plow part		12	W	3	2	0.75	lb
ARNG-057-009	3/29/2013	1			2	CD					Wire		0		3	1	0.02	lb
ARNG-057-010	3/29/2013	1			2	CD					Wire		0		1	2	0.01	lb
ARNG-057-011	3/29/2013	1			2	CD					Scrap metal		3	N	2	1	0.25	lb
ARNG-057-012	3/29/2013	1			2	CD					Plow blade		0		1	1	0.3	lb
ARNG-058-001	3/27/2013	1			1	CD					Nail, metal ring--HSH, bottom of hole checked with Schonstedt and White		0		1	2	0.25	lb
ARNG-058-002	3/27/2013	1			1	CD					Farm equipment--HSH, bottom of hole checked with Schonstedt and White		12	SW	3	4	5	lb
ARNG-058-003	3/27/2013	1			1	MD, CD					Frag, nail		0		3	2	0.5	lb
ARNG-058-004	3/27/2013	1			1	OTHER					Same as #2		12	SW				lb
ARNG-058-005	3/27/2013	1			1	CD					Farm equipment--HSH, bottom of hole checked with Schonstedt and White		6	N	3	1	2	lb
ARNG-058-006	3/27/2013	1			1	CD					Plow tooth, wire		12	W	3	2	3	lb
ARNG-058-007	3/27/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		6	N	2	2	0.25	lb
ARNG-058-008	3/27/2013	1			1	CD					Farm equipment--HSH, bottom of hole checked with Schonstedt and White		12	S	3	3	1.5	lb
ARNG-058-009	3/27/2013	1			1	CD					Wire, left in place--HSH, bottom of hole checked with Schonstedt and White		12	W	4			lb
ARNG-058-010	3/27/2013	1			1	CD					Wire, nails, farm equipment--HSH, bottom of hole checked with Schonstedt and White		6	N	4	5	0.25	lb
ARNG-058-011	3/27/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		12	E	3	3	0.25	lb

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ARNG-058-012	3/27/2013	1			1	CD					Clock, farm equipment--HSH, bottom of hole checked with Schonstedt and White		12	W	3	3	1	lb
ARNG-058-013	3/27/2013	1			1	CD					Ax, hoe, farm equipment		0		6	3	5	lb
ARNG-058-014	3/27/2013	1			1	CD					Plow tooth, nails--HSH, bottom of hole checked with Schonstedt and White		0		6	4	1	lb
ARNG-058-015	3/27/2013	1			1	SEED, CD					QC SEED #57, metal bar--HSH, bottom of hole checked with Schonstedt and White		0		3	2	1.5	lb
ARNG-058-016	3/27/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		12	W	2	2	0.25	lb
ARNG-058-017	3/27/2013	1			1	CD					Hammer, plow tooth--HSH, bottom of hole checked with Schonstedt and White		12	S	4	2	4	lb
ARNG-058-018	3/27/2013	1			1	CD					Wire, left in place--HSH, bottom of hole checked with Schonstedt and White		0		2			lb
ARNG-058-019	3/27/2013	1			1	CD					Farm equipment--HSH, bottom of hole checked with Schonstedt and White		6	E	4	7	2.5	lb
ARNG-058-020	3/27/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		12	N	2	4	0.25	lb
ARNG-058-021	3/27/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		12	E	2	2	0.25	lb
ARNG-058-022	3/27/2013	1			1	CD					Farm equipment--HSH, bottom of hole checked with Schonstedt and White		0		4	3	2	lb
ARNG-058-023	3/27/2013	1			1	CD					Farm equipment--HSH, bottom of hole checked with Schonstedt and White		0		3	1	1.25	lb
ARNG-058-024	3/27/2013	1			1	CD					Nails, farm equipment--HSH, bottom of hole checked with Schonstedt and White		12	N	5	3	2	lb
ARNG-058-025	3/27/2013	1			1	CD					Wire		0		4	8	1	lb
ARNG-058-026	3/27/2013	1			1	CD					Nails		6	S	2	2	0.25	lb
ARNG-058-027	3/27/2013	1			1	CD					Nails, farm equipment--HSH, bottom of hole checked with Schonstedt and White		12	W	6	5	2	lb
ARNG-058-028	3/27/2013	1			1	CD					Farm equipment--HSH, bottom of hole checked with Schonstedt and White		12	S	4	1	2.5	lb
ARNG-058-029	3/27/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		0		2	5	0.5	lb
ARNG-058-030	3/27/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		12	S		11		lb
ARNG-058-031	3/27/2013	1			1	CD					Nail		0		0	1	0.25	lb
ARNG-058-032	3/27/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		6	N	6	3	0.25	lb
ARNG-058-033	3/27/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		0		3	8	0.5	lb
ARNG-058-034	3/27/2013	1			1	CD					Nails--HSH, bottom of hole checked with Schonstedt and White		12	N	6	6	0.5	lb
ARNG-058-035	3/27/2013	1			1	CD					Hook		6	E	3	1	0.75	lb
ARNG-058-036	3/27/2013	1			1	CD					Lock, nails--HSH, bottom of hole checked with Schonstedt and White		0		5	3	1	lb
ARNG-058-037	3/27/2013	1			1	CD					Farm equipment--HSH, bottom of hole checked with Schonstedt and White		0		6	2	1	lb
ARNG-059-001	4/4/2013	1			1	NC					No Find, checked with Schonstedt & White		0			0		lb
ARNG-059-002	4/4/2013	1			1	SEED, CD					QC SEED #64, farm debris		0		0	2	1	lb
ARNG-059-003	4/4/2013	1			1	MD					Frag		12	N	3	1	2	lb
ARNG-059-004	4/4/2013	1			1	CD					Farm debris		0		2	1	0.25	lb
ARNG-059-005	4/4/2013	1			1	NC					No Find, checked with Schonstedt & White		0			0		lb
ARNG-060-001	3/4/2013	1			2	MD					Frag		0		3	1	0.5	lb
ARNG-060-002	3/4/2013	1			2	OTHER					Same as #1		0		3	0	0	lb
ARNG-060-003	3/4/2013	1			2	MD					Frag, rotating band		6	SE	1	1	0.2	lb
ARNG-060-004	3/4/2013	1			2	MD					Frag		0		6	1	0.75	lb
ARNG-060-005	3/4/2013	1			2	MD					Frag, hot rocks, cleared with White				1	1	0.1	lb
ARNG-060-006	3/4/2013	1			2	SEED					QC SEED #32		0			1	1	lb
ARNG-060-007	3/4/2013	1			2	MD					Frag		0		2	2	0.25	lb
ARNG-060-008	3/4/2013	1			2	OTHER					Geo, hot rocks, cleared with White		0		3	3	0	lb
ARNG-060-009	3/4/2013	1			2	MD					Frag		0		1	1	0.25	lb
ARNG-060-010	3/4/2013	1			2	OTHER					Same as #9		12	N		0		lb
ARNG-060-011	3/4/2013	1			2	OTHER					Hot rocks, cleared with White		0		4	4	0	lb
ARNG-060-012	3/4/2013	1			2	OTHER					Hot rock		0		6	1	0	lb
ARNG-060-013	3/4/2013	1			2	OTHER					Hot rocks		0		2	2	0	lb
ARNG-060-014	3/4/2013	1			2	OTHER					Hot rocks, cleared with White		0		3	5	0	lb
ARNG-060-015	3/4/2013	1			2	OTHER					Hot rocks, cleared with White		0		3	2	0	lb
ARNG-060-016	3/4/2013	1			2	OTHER					Hot rocks		0			2	0	lb
ARNG-060-017	3/4/2013	1			2	OTHER					Same as #16		0			0	0	lb

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ARNG-060-018	3/4/2013	1			2	OTHER					Hot rocks		0		6	3	0	lb
ARNG-060-019	3/4/2013	1			2	OTHER					Hot rock		0		4	1	0	lb
ARNG-060-020	3/4/2013	1			2	OTHER					Same as #16		0			0	0	lb
ARNG-060-021	3/4/2013	1			2	OTHER					Hot rocks, cleared with White		0			3	0	lb
ARNG-060-022	3/4/2013	1			2	OTHER					Hot rocks		0		6	2	0	lb
ARNG-060-023	3/4/2013	1			2	OTHER					Hot rocks, cleared with White		0		3	4	0	lb
ARNG-060-024	3/4/2013	1			2	MD					Frag		0		5	1	0.1	lb
ARNG-060-025	3/4/2013	1			2	MD					PD fuze nose, hot rocks, cleared with White		0		10	1	0.25	lb
ARNG-060-026	3/4/2013	1			2	MD					Frag		0		3	1	0.2	lb
ARNG-060-027	3/4/2013	1			2	OTHER					Hot rocks, cleared with White		0		2	2	0	lb
ARNG-060-028	3/4/2013	1			2	OTHER					Hot rocks, cleared with White		12	E	4	2	0	lb
ARNG-060-029	3/4/2013	1			2	OTHER					Hot rocks		0		2	3	0	lb
ARNG-060-030	3/4/2013	1			2	OTHER					Hot rocks, cleared with White		0		3	2	0	lb
ARNG-061-001	4/4/2013	1			1	SEED					QC SEED #19		0		0	1	1	lb
ARNG-061-002	4/4/2013	1			1	MD					Frag--HSH		0		3	2	1	lb
ARNG-061-003	4/4/2013	1			1	CD					Farm debris		6	W	4	1	1	lb
ARNG-062-001	4/1/2013	1			2	SEED					QC SEED #78		0		0	1	1	lb
ARNG-062-002	4/1/2013	1			2	CD					SAA		0		0	1	0.1	lb
ARNG-063-001	4/5/2013	1			1	CD					Wire		12	E	2	3	0.01	lb
ARNG-063-002	4/5/2013	1			1	SEED					QC SEED #11		0		5	1	1	lb
ARNG-063-003	4/5/2013	1			1	MD					Frag		0		6	1	0.25	lb
ARNG-063-004	4/5/2013	1			1	MD					Frag		12	SW	8	1	0.25	lb
ARNG-063-005	4/5/2013	1			1	MD					Frag		0		5	1	0.25	lb
ARNG-064-001	4/1/2013	1			2	SEED					QC SEED #52		0		0	1	1	lb
ARNG-064-002	4/1/2013	1			2	CD					Plow part		0			1		lb
ARNG-064-003	4/1/2013	1			2	OTHER					Hot rock, cleared with white	FALSE	0			1		lb
ARNG-064-004	4/1/2013	1			2	OTHER					Hot rock, cleared with white	FALSE	0			1		lb
ARNG-064-005	4/1/2013	1			2	OTHER					Hot rock, cleared with white	FALSE	0			1		lb
ARNG-065-001	4/4/2013	1			1	MD					Frag		0		2	1	1	lb
ARNG-065-002	4/4/2013	1			1	CD					Nail		12	E	1	1	0.25	lb
ARNG-065-003	4/4/2013	1			1	SEED					QC SEED #70		0			1		lb
ARNG-065-004	4/4/2013	1			1	NC					No Find, checked with Schonstedt & White		0			0		lb
ARNG-065-005	4/4/2013	1			1	CD					Horseshoe		0		4	1	0.5	lb
ARNG-065-006	4/4/2013	1			1	NC					No Find, checked with Schonstedt & White		0			0		lb
ARNG-065-007	4/4/2013	1			1	NC					No Find, checked with Schonstedt & White		0			0		lb
ARNG-066-001	3/28/2013	1			1	CD					SAA		0		3	1	0.5	lb
ARNG-066-002	3/28/2013	1			1	CD					Bolt		0		2	1	0.5	lb
ARNG-066-003	3/28/2013	1			1	SEED					QC SEED #84	FALSE	0			1		lb
ARNG-067-001	4/5/2013	1			2	CD					Chain		0		3	1	1.25	lb
ARNG-067-002	4/5/2013	1			2	OTHER					Hot rock, checked with White		0		2	3		lb
ARNG-067-003	4/5/2013	1			2	OTHER					Same as #5		0			0		lb
ARNG-067-004	4/5/2013	1			2	SEED					QC SEED #12		0		5	1	1	lb
ARNG-067-005	4/5/2013	1			2	CD					Plow part		0		2	1	2	lb
ARNG-067-006	4/5/2013	1			2	MD					Frag		0		4	1	0.5	lb
ARNG-067-007	4/5/2013	1			2	MD					Frag		0		3	1	0.25	lb
ARNG-068-001	4/8/2013	1			1	CD					SW corner nail		0		0	1	1	lb
ARNG-068-002	4/8/2013	1			1	CD					SAA		0		3	1	0.25	lb
ARNG-068-003	4/8/2013	1			1	CD					SAA		6	NE	3	1	0.25	lb

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ARNG-068-004	4/8/2013	1			1	SEED					QC SEED #89		0		0	1	1	lb
ARNG-068-005	4/8/2013	1			1	CD					SAA		0		1	1	0.25	lb
ARNG-069-001	4/1/2013	1			2	CD					Horseshoe part		0		1	1	0.25	lb
ARNG-069-002	4/1/2013	1			2	CD, OTHER					Horseshoe part, hot rock, checked with white		0		2	1	0.25	lb
ARNG-069-003	4/1/2013	1			2	CD					Frag		0		3	1	0.5	lb
ARNG-069-004	4/1/2013	1			2	CD					Horseshoe		0		6	1	1	lb
ARNG-069-005	4/1/2013	1			2	SEED					QC SEED #66		0		0	1	1	lb
ARNG-069-006	4/1/2013	1			2	CD					Horseshoe part		0		4	1	0.5	lb
ARNG-070-001	4/1/2013	1			2	CD					SAA		0		3	1	0.01	lb
ARNG-070-002	4/1/2013	1			2	SEED					QC SEED #65		6	E	0	1	1	lb
ARNG-070-003	4/1/2013	1			2	OTHER					Same as #2		6	W		0		lb
ARNG-071-001	4/1/2013	1			1	CD					Horseshoe part		0		4	1	0.5	lb
ARNG-071-002	4/1/2013	1			1	CD					SAA		0		1	2	0.25	lb
ARNG-071-003	4/1/2013	1			1	CD					Farm debris		6	N	2	2	0.5	lb
ARNG-071-004	4/1/2013	1			1	CD					Plow tooth, SAA		0		4	2	3	lb
ARNG-071-005	4/1/2013	1			1	CD					Plow tooth, SAA--HSH		0		4	2	2	lb
ARNG-071-006	4/1/2013	1			1	CD					Farm debris		6	N	6	1	0.6	lb
ARNG-071-007	4/1/2013	1			1	SEED					QC SEED #77		0		0	1	0.5	lb
ARNG-071-008	4/1/2013	1			1	CD					Farm debris		6	N	12	1	1.5	lb
ARNG-071-009	4/1/2013	1			1	CD					Farm debris		6	W	18	1	3	lb
ARNG-072-001	4/1/2013	1			1	MD					Frag		6	W	3	4	0.5	lb
ARNG-072-002	4/1/2013	1			1	MD					Frag		0		2	3	0.25	lb
ARNG-072-003	4/1/2013	1			1	SEED					QC SEED #7		6	N	5	1	0.5	lb
ARNG-072-004	4/1/2013	1			1	MD					Frag		0		3	1	0.5	lb
ARNG-072-005	4/1/2013	1			1	MD					Illum spent rifle grenade		6	E	2	1	3	lb
ARNG-073-001	4/5/2013	1			2	MD					Frag		0		3	2	0.25	lb
ARNG-073-002	4/5/2013	1			2	MD					Frag		0		5	2	0.5	lb
ARNG-073-003	4/5/2013	1			2	OTHER					Same as #4		12	E		0	1	lb
ARNG-073-004	4/5/2013	1			2	SEED					QC SEED #46		12	W		1	1	lb
ARNG-074-001	3/25/2013	1			1	CD					Horseshoe part		12	E	4	1	1	lb
ARNG-074-002	3/25/2013	1			1	MD					Frag		6	W	3	1	1.5	lb
ARNG-074-003	3/25/2013	1			1	CD					Nail--HSH, bottom of hole checked with Schonstedt and White		0		3	1	0.5	lb
ARNG-074-004	3/25/2013	1			1	OTHER					Geo, checked with white		6	N				lb
ARNG-074-005	3/25/2013	1			1	OTHER					Geo, checked with white		12	W				lb
ARNG-074-006	3/25/2013	1			1	SEED					QC SEED #45		6	E	0	1	1	lb
ARNG-074-007	3/25/2013	1			1	CD					Farm equipment		6	N	3	1	2	lb
ARNG-074-008	3/25/2013	1			1	OTHER					Same as #6	FALSE		W		1		lb
ARNG-075-001	3/28/2013	1			1	SEED					QC SEED #42		0		0	1	1	lb
ARNG-076-001	4/8/2013	1			2	OTHER					SW corner nail. Removed SWC nail and got a Post Dig Resp (mV) of 0.9/2.8		0		0	1	1	lb
ARNG-076-002	4/8/2013	1			2	SEED					QC SEED #21		0		0	1	1	lb
ARNG-077-001	4/2/2013	1			1	SEED					QC SEED #8		12	N	0	1	1	lb
ARNG-078-001	3/27/2013	1			1	SEED					QC SEED #55		0		0	1	1	lb
ARNG-079-001	4/16/2013	1			2	CD					SW corner nail		0		0	1	1	lb
ARNG-079-002	4/16/2013	1			2	CD					Barbed wire		0		0	5	2	lb
ARNG-079-003	4/16/2013	1			2	SEED					QC SEED #131		0		0	1	1	lb
ARNG-079-004	4/16/2013	1			2	CD					Barbed wire, nail		0		0	2	0.5	lb
ARNG-080-001	4/8/2013	1			2	CD					SW corner nail. Removed SWC nail and got a Post Dig Resp (mV) of 1.1/2.9		0		0	1	1	lb
ARNG-080-002	4/8/2013	1			2	CD					Nails		0		4	2	0.25	lb

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ARNG-080-003	4/8/2013	1			2	CD					Screwdriver		0		1	1	1	lb
ARNG-080-004	4/8/2013	1			2	OTHER					Same as #5		24	W	0	0		lb
ARNG-080-005	4/8/2013	1			2	SEED					QC SEED #93		6	E	0	1	1	lb
ARNG-080-006	4/8/2013	1			2	CD					Nails, SAA		0		13	5	0.25	lb
ARNG-080-007	4/8/2013	1			2	CD					Nails		0		13	3	0.01	lb
ARNG-080-008	4/8/2013	1			2	CD					Spark plugs, wires		0		5	5	1	lb
ARNG-080-009	4/8/2013	1			2	CD					SAA		0		1	1	0.01	lb
ARNG-080-010	4/8/2013	1			2	CD					Plow part		0		5	1	2	lb
ARNG-080-011	4/8/2013	1			2	CD					Nails, SAA		0		3	4	0.5	lb
ARNG-080-012	4/8/2013	1			2	CD					Nails		0		3	3	0.25	lb
ARNG-081-001	4/8/2013	1			2	CD					SWC nail. Removed SWC nail and got a Post Dig Resp (mV) of 2.4/6.1		0		0	1	1	lb
ARNG-081-002	4/8/2013	1			2	SEED					QC SEED #88		0		0	1	1	lb
ARNG-081-003	4/8/2013	1			2	MD					Slap flare		0		1	1	0.25	lb
ARNG-081-004	4/8/2013	1			2	OTHER					Same as #3		0			0		lb
ARNG-082-001	4/25/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
ARNG-082-002	4/25/2013	1			2	MD					Frag		6	N	12	13	3	lb
ARNG-082-003	4/25/2013	1			2	CD					Nails		18	NE	8	4	0.25	lb
ARNG-082-004	4/25/2013	1			2	MEC			MK2		Hand grenade		0		10	1	1.5	lb
ARNG-082-005	4/25/2013	1			2	MD					Frag		0		18	12	3	lb
ARNG-082-006	4/25/2013	1			2	OTHER					Same as #3		18	E	8	0	0.25	lb
ARNG-082-007	4/25/2013	1			2	MD					Frag		0		12	8	3	lb
ARNG-082-008	4/25/2013	1			2	CD					Wood splitting maul		12	SW	12	1	5	lb
ARNG-082-009	4/25/2013	1			2	MD, CD					Nails, frag		0		12	8	2	lb
ARNG-082-010	4/25/2013	1			2	MD					Frag		0		10	6	0.5	lb
ARNG-082-011	4/25/2013	1			2	MD					Frag, walls hot, bottom not hot		0		10	6	0.5	lb
ARNG-082-012	4/25/2013	1			2	MD					Frag, walls hot, bottom not hot		6	S	12	4	0.25	lb
ARNG-082-013	4/25/2013	1			2	MD					Frag, walls hot, bottom not hot		0		12	5	0.25	lb
ARNG-082-014	4/25/2013	1			2	MD					Frag, walls hot, bottom not hot		0		18	10	1	lb
ARNG-082-015	4/25/2013	1			2	MD					Frag		0		10	8	0.5	lb
ARNG-082-016	4/25/2013	1			2	MEC			MK2		Hand grenade		0		5	1	1.5	lb
ARNG-082-017	4/25/2013	1			2	MD					Frag, walls hot, bottom not hot		0		8	4	0.25	lb
ARNG-082-018	4/25/2013	1			2	MD, CD					Nails, frag		0		6	7	1	lb
ARNG-082-019	4/25/2013	1			2	MD					Frag, pieces of rifle grenade		0		6	6	0.25	lb
ARNG-082-020	4/25/2013	1			2	MEC, MD, CD			MK2		Hand grenade, nails, frag, bottom of hole cleared White and Schonstedt		0		18	18	2.5	lb
ARNG-082-021	4/25/2013	1			2	MD					Frag, walls hot, bottom not hot		0		8	2	0.2	lb
ARNG-082-022	4/25/2013	1			2	MD					Frag, walls hot, bottom not hot		0		10	10	1	lb
ARNG-082-023	4/25/2013	1			2	CD					Nail		0		7	1	0.25	lb
ARNG-082-024	4/25/2013	1			2	MD					Frag		0		10	5	0.5	lb
ARNG-082-025	4/25/2013	1			2	MD					Frag		12	NW	10	6	0.8	lb
ARNG-082-026	4/25/2013	1			2	MD					Frag		0		10	7	0.5	lb
ARNG-082-027	4/25/2013	1			2	MD					Frag, walls hot, bottom not hot		6	W	12	12	1	lb
ARNG-082-028	4/25/2013	1			2	OTHER					Same as #25		18	SE	10	0	0.8	lb
ARNG-082-029	4/25/2013	1			2	MD					Frag, walls hot, bottom not hot		0		10	6	1	lb
ARNG-082-030	4/25/2013	1			2	MD					Frag		0		12	27	4	lb
ARNG-082-031	4/25/2013	1			2	SEED					QC SEED #127		6	S	0	1	1	lb
ARNG-082-032	4/25/2013	1			2	MD					Frag		0		10	6	0.5	lb
ARNG-082-033	4/25/2013	1			2	MD					Frag		0		12	9	0.75	lb
ARNG-082-034	4/25/2013	1			2	MD					Frag		0		5	1	1	lb

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ARNG-082-035	4/25/2013	1			2	MD, CD					Nails, frag		0		10	13	2	lb
ARNG-082-036	4/25/2013	1			2	MD, CD					Frag, nails		0		12	6	0.5	lb
ARNG-082-037	4/25/2013	1			2	MD					Frag		0		10	12	2	lb
ARNG-082-038	4/25/2013	1			2	MD, CD					Wire, frag		0		4	4	0.25	lb
ARNG-083-001	4/9/2013	1			1	CD					SW corner nail		0		0	1	1	lb
ARNG-083-002	4/9/2013	1			1	CD					Debris		0		14	2	2	lb
ARNG-083-003	4/9/2013	1			1	CD					Nail		12	N	4	1	0.25	lb
ARNG-083-004	4/9/2013	1			1	CD					Nail		6	N	3	1	0.25	lb
ARNG-083-005	4/9/2013	1			1	OTHER					Same as #6		0			0		lb
ARNG-083-006	4/9/2013	1			1	CD					Debris		2	N	18	2	4	lb
ARNG-083-007	4/9/2013	1			1	SEED, CD					QC Seed #1, brass		0		0	3	1	lb
ARNG-083-008	4/9/2013	1			1	CD					Nail, brass		6	E	3	3	0.5	lb
ARNG-084-001	4/5/2013	1			2	CD					SWC Nail		0			1		lb
ARNG-084-002	4/5/2013	1			2	SEED					QC SEED #3	FALSE	0			1		lb
ARNG-084-003	4/5/2013	1			2	CD					Nail		3	NW	2	1	0.01	lb
ARNG-084-004	4/5/2013	1			2	CD					Nail		12	SW	4	1	0.01	lb
ARNG-084-005	4/5/2013	1			2	CD					Nail		8	NW	2	1	0.01	lb
ARNG-084-006	4/5/2013	1			2	CD					Nail, can top, checked with Schonstedt & White		0		5	2	0.1	lb
ARNG-084-007	4/5/2013	1			2	CD					Nail, rust, checked with Schonstedt & White--HSH		0		3	2	0.1	lb
ARNG-084-008	4/5/2013	1			2	CD					Nail, rust, checked with Schonstedt & White--HSH		0		5	4	0.1	lb
ARNG-084-009	4/5/2013	1			2	CD					Nails, cans, rust, checked with Schonstedt & White--HSH	FALSE				5		lb
ARNG-085-001	4/9/2013	1			1	NC					No contact					0		lb
ARNG-085-002	4/9/2013	1			1	CD					SW corner nail		0		0	1	1	lb
ARNG-085-003	4/9/2013	1			1	SEED					QC SEED #85		4	W	0	1	1	lb
ARNG-085-004	4/9/2013	1			1	MD					Frag		8	E	12	1	5	lb
ARNG-085-005	4/9/2013	1			1	OTHER					Same as #4		8	W		0		lb
ARNG-086-001	4/8/2013	1			2	CD					Plow parts		0		1	2	1	lb
ARNG-086-002	4/8/2013	1			2	CD					SW corner nail		0		0	1	1	lb
ARNG-086-003	4/8/2013	1			2	OTHER					Rust flakes, hot rocks, checked with White--HSH		0		16	2		lb
ARNG-086-004	4/8/2013	1			2	CD					Barbed wire, plow parts		0		13	3	1.25	lb
ARNG-086-005	4/8/2013	1			2	CD					Nails, rust		0		3	3	0.1	lb
ARNG-086-006	4/8/2013	1			2	CD					Plow part		0		6	1	0.5	lb
ARNG-086-007	4/8/2013	1			2	CD					Horseshoe		0		3	2	0.5	lb
ARNG-086-008	4/8/2013	1			2	CD					Nails, rust		0		18	2	0.1	lb
ARNG-086-009	4/8/2013	1			2	CD					Nail, rust		0		15	1	0.01	lb
ARNG-086-010	4/8/2013	1			2	SEED					QC SEED #14		0		0	1	1	lb
ARNG-086-011	4/8/2013	1			2	OTHER					Hot rocks, checked with White		6	N	20	2		lb
ARNG-086-012	4/8/2013	1			2	OTHER					Rust flakes, hot rocks, checked with White		0		15	3		lb
ARNG-086-013	4/8/2013	1			2	CD					Horseshoe		0		2	1	0.5	lb
ARNG-086-014	4/8/2013	1			2	CD					Plow part		0		5	1	1.5	lb
ARNG-086-015	4/8/2013	1			2	CD					Nails, rust		0		2	4	0.02	lb
ARNG-086-016	4/8/2013	1			2	OTHER					Geo, hot rocks, checked with White--HSH		0		22	2		lb
ARNG-086-017	4/8/2013	1			2	CD					Horseshoe		0		2	1	0.5	lb
ARNG-086-018	4/8/2013	1			2	CD					Nails, rust		0		12	3	0.01	lb
ARNG-086-019	4/8/2013	1			2	OTHER					Geo, hot rocks, checked with White		0		18	3	0	lb
ARNG-086-020	4/8/2013	1			2	CD					Nails, rust, metal		0		12	3	0.25	lb
ARNG-086-021	4/8/2013	1			2	CD					Nails, metal		0		3	2	0.25	lb
ARNG-086-022	4/8/2013	1			2	CD					Plow part, nail		0		13	2	0.5	lb

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ARNG-086-023	4/8/2013	1			2	CD					Nails, rust		12	W	12	5	0.25	lb
ARNG-086-024	4/8/2013	1			2	CD					Nails, rust		0		10	3	0.1	lb
ARNG-086-025	4/8/2013	1			2	CD					Chain link, nail		0		12	2	0.25	lb
ARNG-086-026	4/8/2013	1			2	CD					Horseshoe		12	E	3	1	1	lb
ARNG-086-027	4/8/2013	1			2	CD					Scrap metal		0		4	1	0.25	lb
ARNG-086-028	4/8/2013	1			2	CD					Metal bar, nail		0		3	2	2	lb
ARNG-087-001	4/8/2013	1			1	CD					Barbed wire--HSH + LIP		0		0	4	0.75	lb
ARNG-087-002	4/8/2013	1			1	CD					Barbed wire--HSH + LIP		12	S	1	6	0.5	lb
ARNG-087-003	4/8/2013	1			1	CD					Debris		12	S	1	6	0.25	lb
ARNG-087-004	4/8/2013	1			1	CD					Rommel stake, debris--HSH		6	E	2	4	2	lb
ARNG-087-005	4/8/2013	1			1	CD					Rommel stake, debris--HSH		0		0	1	3	lb
ARNG-087-006	4/8/2013	1			1	CD					Barbed wire, brass		6	S	1	4	0.5	lb
ARNG-087-007	4/8/2013	1			1	CD					Barbed wire--HSH + LIP		6	E	0	2	0.5	lb
ARNG-087-008	4/8/2013	1			1	CD					Barbed wire, debris--HSH + LIP		6	S	1	4	0.5	lb
ARNG-087-009	4/8/2013	1			1	OTHER					Same as #7		12	S		0		lb
ARNG-087-010	4/8/2013	1			1	CD					Barbed wire--LIP		12	SW	0	1	0.25	lb
ARNG-087-011	4/8/2013	1			1	CD					Barbed wire		0		1	3	0.25	lb
ARNG-087-012	4/8/2013	1			1	CD					Debris		6	E	1	4	0.5	lb
ARNG-087-013	4/8/2013	1			1	CD					Nails		12	S	2	3	0.5	lb
ARNG-087-014	4/8/2013	1			1	SEED					QC SEED #92		0		0	1	1	lb
ARNG-087-015	4/8/2013	1			1	CD					Barbed wire--HSH + LIP		0		2	3	0.25	lb
ARNG-087-016	4/8/2013	1			1	CD					Barbed wire		6	E	0	1	0.5	lb
ARNG-087-017	4/8/2013	1			1	OTHER					Same as #16		6	W		0		lb
ARNG-087-018	4/8/2013	1			1	CD					Debris, brass		0		2	5	0.5	lb
ARNG-087-019	4/8/2013	1			1	CD					Debris, barbed wire, brass		0		2	5	0.5	lb
ARNG-088-001	4/16/2013	1			2	CD					Nails		0		6	4	0.1	lb
ARNG-088-002	4/16/2013	1			2	CD					Nails		0		4	8	0.25	lb
ARNG-088-003	4/16/2013	1			2	CD					Nails		0		2	2	0.1	lb
ARNG-088-004	4/16/2013	1			2	CD					Nails		0		3	2	0.1	lb
ARNG-088-005	4/16/2013	1			2	CD					Nails		0		0	1	0.1	lb
ARNG-088-006	4/16/2013	1			2	CD					Nails		0		4	5	0.25	lb
ARNG-088-007	4/16/2013	1			2	CD					Nails		0		4	2	0.1	lb
ARNG-088-008	4/16/2013	1			2	SEED					QC SEED #87		0		0	1	1	lb
ARNG-089-001	4/8/2013	1			2	CD					SWC nail.Removed SWC nail and got a Post Dig Resp (mV) of 1.1/3.5		0		0	1	1	lb
ARNG-089-002	4/8/2013	1			2	CD					Chain link		0		2	1	0.25	lb
ARNG-089-003	4/8/2013	1			2	SEED					QC SEED #9		0		0	1	1	lb
ARNG-23-034	4/3/2013	1			2	MD					57mm AP-T M70 found in data gap, checked with Schonstedt & White				2	1	15	lb
ARNG-82-039	4/25/2013	1			2	MEC			MK2		Hand grenade		0		8	1	1.5	lb
RC1-002-001	5/17/2013	1			1	CD					Metal bar, southwest corner nail		0		13	2	1.5	lb
RC1-002-002	5/17/2013	1			1	CD					Metal bar		6	E	7	1	2	lb
RC1-002-003	5/17/2013	1			1	CD					Plow tooth		0		9	1	2	lb
RC1-002-004	5/17/2013	1			1	CD					Plow tooth		6	N	12	1	2	lb
RC1-002-005	5/17/2013	1			1	OTHER					Hot dirt		0			0		lb
RC1-002-006	5/17/2013	1			1	CD					Plow tooth		6	W	7	1	2	lb
RC1-002-007	5/17/2013	1			1	OTHER					Same as #6		6	E				lb
RC1-002-008	5/17/2013	1			1	SEED					QC SEED #288		0		0	1	1	lb
RC1-002-009	5/17/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC1-002-010	5/17/2013	1			1	CD					Nail		0		8	1	0.25	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC1-003-001	5/17/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-003-002	5/17/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC1-003-003	5/17/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC1-003-004	5/17/2013	1			1	CD					Nail		0		6	1	0.25	lb
RC1-003-005	5/17/2013	1			1	SEED					QC SEED #284		0		0	1	1	lb
RC1-004-001	5/17/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-004-002	5/17/2013	1			1	CD					Can		0		2	1	0.25	lb
RC1-004-003	5/17/2013	1			1	SEED					QC SEED #289		0		0	1	1	lb
RC1-004-004	5/17/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC1-004-005	5/17/2013	1			1	CD					Plow tooth		0		16	1	2	lb
RC1-004-006	5/17/2013	1			1	CD					Sheet metal		6	W	6	7	1	lb
RC1-004-007	5/17/2013	1			1	CD					Plow tooth		0		15	2	3	lb
RC1-004-008	5/17/2013	1			1	CD					Sheet metal, rusty pieces, HSH		0		21	8	2	lb
RC1-004-009	5/17/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC1-004-010	5/17/2013	1			1	CD					Wire		0		6	1	0.5	lb
RC1-004-011	5/17/2013	1			1	CD					Metal Strap		0		6	2	1	lb
RC1-004-012	5/17/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC1-005-001	5/7/2013	1			2	MD					Frag		0		4	2	0.25	lb
RC1-005-002	5/7/2013	1			2	MD					Frag		0		8	2	0.5	lb
RC1-005-003	5/7/2013	1			2	MD					Frag		0		8	2	0.25	lb
RC1-005-004	5/7/2013	1			2	MD					Frag		0		6	3	1	lb
RC1-005-005	5/7/2013	1			2	MD					Frag		0		4	1	0.5	lb
RC1-005-006	5/7/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC1-005-007	5/7/2013	1			2	MD					Frag		0		12	6	1.5	lb
RC1-005-008	5/7/2013	1			2	MD					Frag		0		4	2	0.25	lb
RC1-005-009	5/7/2013	1			2	MD, SEED					QC SEED #227, frag		0		0	2	1	lb
RC1-005-010	5/7/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC1-005-011	5/7/2013	1			2	NC					No contact		0			0		lb
RC1-005-012	5/7/2013	1			2	MD					Frag		0		6	4	0.5	lb
RC1-005-013	5/7/2013	1			2	MD					Frag		0		8	5	0.5	lb
RC1-007-001	5/6/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-007-002	5/6/2013	1			2	MD					Frag		0		5	2	0.25	lb
RC1-007-003	5/6/2013	1			2	MD					Frag		0		3	2	0.25	lb
RC1-007-004	5/6/2013	1			2	MD					Frag		0		3	2	0.25	lb
RC1-007-005	5/6/2013	1			2	MD					Frag		0		4	2	0.25	lb
RC1-007-006	5/6/2013	1			2	MD					Frag		0		4	1	0.2	lb
RC1-007-007	5/6/2013	1			2	MD					Frag		0		3	2	0.2	lb
RC1-007-008	5/6/2013	1			2	MD					Frag		0		4	8	1	lb
RC1-007-009	5/6/2013	1			2	MD			M63, Mod 1		Frag, 37mm practice expended		2	E	4	5	1.25	lb
RC1-007-010	5/6/2013	1			2	OTHER					Same as #9		12	W	4	0	1.25	lb
RC1-007-011	5/6/2013	1			2	MD					Frag		0		3	2	0.2	lb
RC1-007-012	5/6/2013	1			2	MD					Frag		0		5	3	0.25	lb
RC1-007-013	5/6/2013	1			2	SEED					QC SEED #188		6	SE	0	1	1	lb
RC1-007-014	5/6/2013	1			2	MD					Frag		6	S	2	2	1	lb
RC1-007-015	5/6/2013	1			2	MD					Frag		0		2	2	0.25	lb
RC1-007-016	5/6/2013	1			2	MD					Frag		0		2	2	0.5	lb
RC1-007-017	5/6/2013	1			2	MD					Frag		0		4	2	0.5	lb
RC1-012-001	5/16/2013	1			2	CD					Southwest corner nail, plow part		0		6	3	1.5	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC1-012-002	5/16/2013	1			2	MD					Frag		12	W	6	2	0.25	lb
RC1-012-003	5/16/2013	1			2	MD					Frag		0		7	1	0.25	lb
RC1-012-004	5/16/2013	1			2	MD					Frag, bottom not hot		0		6	5	0.25	lb
RC1-012-005	5/16/2013	1			2	MD					Frag		0		8	3	0.5	lb
RC1-012-006	5/16/2013	1			2	MD, CD					Frag, plow parts		12	NE	8	3	1	lb
RC1-012-007	5/16/2013	1			2	CD					Plow part		12	E	7	1	1	lb
RC1-012-008	5/16/2013	1			2	MD					Frag		12	N	8	1	0.25	lb
RC1-012-009	5/16/2013	1			2	CD					Plow part		6	SW	6	1	1	lb
RC1-012-010	5/16/2013	1			2	MD					Frag		0		7	7	0.5	lb
RC1-012-011	5/16/2013	1			2	CD					Plow part		18	NE	6	1	0.25	lb
RC1-012-012	5/16/2013	1			2	CD					Plow part, hook		8	N	10	2	0.5	lb
RC1-012-013	5/16/2013	1			2	OTHER					Hot dirt, rock		0		12	0		lb
RC1-012-014	5/16/2013	1			2	MD, CD					Frag, plow part		0		6	2	0.5	lb
RC1-012-015	5/16/2013	1			2	MD					Frag		6	N	6	1	0.5	lb
RC1-012-016	5/16/2013	1			2	MD, SEED					QC SEED #283, Frag		0		0	2	1	lb
RC1-012-017	5/16/2013	1			2	MD					Frag		12	SW	6	1	0.5	lb
RC1-012-018	5/16/2013	1			2	MD					Frag		0		8	4	0.75	lb
RC1-012-019	5/16/2013	1			2	MD					Frag		0		10	5	1	lb
RC1-012-020	5/16/2013	1			2	MD					Frag		6	S	8	6	0.75	lb
RC1-012-021	5/16/2013	1			2	MD, CD					Plow partm frag		0		6	4	0.5	lb
RC1-012-022	5/16/2013	1			2	MD, CD					Frag, horseshoe		0		6	2	0.75	lb
RC1-012-023	5/16/2013	1			2	MD					Frag		12	W	12	7	1	lb
RC1-012-024	5/16/2013	1			2	OTHER					Same as #23		10	E	12	0	1	lb
RC1-012-025	5/16/2013	1			2	MD					Frag		0		6	2	2	lb
RC1-012-026	5/16/2013	1			2	MD					Frag		0		4	1	0.5	lb
RC1-012-027	5/16/2013	1			2	MD					Frag		0		7	2	0.25	lb
RC1-012-028	5/16/2013	1			2	CD					Plow part		6	W	5	1	0.25	lb
RC1-012-029	5/16/2013	1			2	MD					Frag		0		6	3	0.5	lb
RC1-013-001	5/6/2013	1			2	MD, CD					Southwest corner nail, frag		0		6	2	1.25	lb
RC1-013-002	5/6/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC1-013-003	5/6/2013	1			2	MD, SEED					QC SEED #213, frag		0		6	2	1.5	lb
RC1-013-004	5/6/2013	1			2	MD					Frag		12	E	6	1	0.5	lb
RC1-013-005	5/6/2013	1			2	MD					Frag		0		4	4	0.5	lb
RC1-013-006	5/6/2013	1			2	MD					Frag		12	SW	6	2	0.5	lb
RC1-013-007	5/7/2013	1			2	CD					Tin roofing material		0		4	8	10	lb
RC1-013-008	5/6/2013	1			2	MD					Frag		6	W	2	1	0.2	lb
RC1-013-009	5/6/2013	1			2	MD					Frag		0		6	3	0.25	lb
RC1-013-010	5/6/2013	1			2	MD					Frag		6	W	4	3	0.25	lb
RC1-013-011	5/6/2013	1			2	MD					Frag		0		4	1	0.2	lb
RC1-013-012	5/6/2013	1			2	CD					Nails		0		4	7	0.1	lb
RC1-013-013	5/6/2013	1			2	CD					Can parts		0		3	2	0.1	lb
RC1-013-014	5/6/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC1-013-015	5/6/2013	1			2	CD					Can lid		0		4	1	0.1	lb
RC1-013-016	5/6/2013	1			2	CD					Horseshoe		0		4	1	0.5	lb
RC1-013-017	5/7/2013	1			2	MD, CD					Frag, plow part		0		6	3	2	lb
RC1-014-001	5/6/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-014-002	5/6/2013	1			2	MD					Frag		0		6	5	0.5	lb
RC1-014-003	5/6/2013	1			2	MD					Frag		0		6	2	0.25	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC1-014-004	5/6/2013	1			2	MD					Frag		0		3	3	0.75	lb
RC1-014-005	5/6/2013	1			2	CD					Plow part		6	N	6	2	1	lb
RC1-014-006	5/6/2013	1			2	MD					Frag		0		3	1	0.25	lb
RC1-014-007	5/6/2013	1			2	MD					Frag		12	E	2	1	0.2	lb
RC1-014-008	5/6/2013	1			2	MD					Frag		6	E	3	1	0.5	lb
RC1-014-009	5/6/2013	1			2	MD					Frag		0		3	1	0.25	lb
RC1-014-010	5/6/2013	1			2	MD					Frag		0		4	1	0.5	lb
RC1-014-011	5/6/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC1-014-012	5/6/2013	1			2	MD					Frag		6	SE	4	1	0.25	lb
RC1-014-013	5/6/2013	1			2	MD, CD					Frag, bolt		0		6	2	0.25	lb
RC1-014-014	5/6/2013	1			2	MD					Frag		0		8	2	0.5	lb
RC1-014-015	5/6/2013	1			2	MD					Frag		0		3	2	0.2	lb
RC1-014-016	5/6/2013	1			2	MD					Frag		0		6	3	0.25	lb
RC1-014-017	5/6/2013	1			2	MD					Frag		0		3	1	0.2	lb
RC1-014-018	5/6/2013	1			2	MD, CD					Frag, metal pin		12	W	6	2	0.25	lb
RC1-014-019	5/6/2013	1			2	MD, CD, OTHER					Frag (1), nails (3), hot rock, checked with White		0		5	4	0.5	lb
RC1-014-020	5/6/2013	1			2	MD, CD, OTHER					Frag (2), nails (4), hot rock, bottom not hot, checked with White--HSH		0		24	6	1	lb
RC1-014-021	5/6/2013	1			2	CD					Nails		0		8	8	0.5	lb
RC1-014-022	5/6/2013	1			2	CD, OTHER					Nails, hot rock, checked with White--HSH		0		18	6	0.25	lb
RC1-014-023	5/6/2013	1			2	CD, OTHER					Nails, hot rocks, bottom not hot, checked with White--HSH		0		18	7	0.25	lb
RC1-014-024	5/6/2013	1			2	MD, CD, OTHER					Frag, nails, hot rock, checked with White--HSH		0		18	5	1	lb
RC1-014-025	5/6/2013	1			2	MD, CD, OTHER					Frag, nails, hot rock, checked with White--HSH		0		18	3	0.5	lb
RC1-014-026	5/6/2013	1			2	MD, OTHER					Frag, hot rocks/dirt, bottom not hot, checked with White--HSH		0		28	3	1	lb
RC1-014-027	5/6/2013	1			2	MD					Frag		0		6	2	0.5	lb
RC1-014-028	5/6/2013	1			2	MD, SEED					QC SEED #223, frag		0		6	2	1.25	lb
RC1-016-001	5/3/2013	1			2	MD, CD					Southwest corner nail, frag		0		0	2	1	lb
RC1-016-002	5/3/2013	1			2	SEED					QC SEED #198		0		0	1	1	lb
RC1-016-003	5/3/2013	1			2	NC					No contact, checked with Schonstedt & White--HSH				16	0		lb
RC1-016-004	5/3/2013	1			2	MD					Frag		6	S	4	2	2	lb
RC1-016-006	5/3/2013	1			2	MD					Frag		0		6	4	1	lb
RC1-016-007	5/3/2013	1			2	MD					Frag		6	W	6	2	1	lb
RC1-016-008	5/3/2013	1			2	MD					Frag		0		4	1	1	lb
RC1-016-009	5/3/2013	1			2	MD					Frag		0		3	1	1	lb
RC1-016-010	5/3/2013	1			2	MD					Frag		0		8	2	1	lb
RC1-016-011	5/3/2013	1			2	MD					Frag		0		6	1	1	lb
RC1-016-012	5/3/2013	1			2	MD					Frag		12	E	2	2	3	lb
RC1-016-013	5/3/2013	1			2	OTHER					Same as #12		0			0		lb
RC1-016-014	5/3/2013	1			2	MD					Frag		6	S	6	1	1	lb
RC1-016-015	5/3/2013	1			2	MD					Frag		0		4	1	1	lb
RC1-016-016	5/3/2013	1			2	MD					T-bar fuze		0		3	1	1	lb
RC1-016-017	5/3/2013	1			2	MD					Frag		3	E	4	1	1	lb
RC1-016-018	5/3/2013	1			2	MD					Frag		0		4	2	0.5	lb
RC1-016-019	5/3/2013	1			2	MD					Frag		0		4	1	0.5	lb
RC1-016-020	5/3/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC1-016-021	5/3/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC1-016-022	5/3/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC1-018-001	5/8/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-018-002	5/8/2013	1			2	CD					Nails, wire		6	E	1	3	0.25	lb

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RC1-018-003	5/8/2013	1			2	CD					Barbed wire		0		2	2	0.2	lb
RC1-018-004	5/8/2013	1			2	OTHER					Same as #2		6	W	1	0	0.25	lb
RC1-018-005	5/8/2013	1			2	CD					Plow part, wire		0		8	2	0.25	lb
RC1-018-006	5/8/2013	1			2	CD					Barbed wire		6	E	1	2	0.2	lb
RC1-018-007	5/8/2013	1			2	CD					Barbed wire		0		1	3	0.2	lb
RC1-018-008	5/8/2013	1			2	CD					Barbed wire		6	N	0	1	0.2	lb
RC1-018-009	5/8/2013	1			2	CD					Metal bar		0		24	2	1.5	lb
RC1-018-010	5/8/2013	1			2	CD					Plow part		6	N	4	1	1	lb
RC1-018-011	5/8/2013	1			2	CD					Wire		0		5	4	0.1	lb
RC1-018-012	5/8/2013	1			2	CD					Barbed wire, walls hot, bottom not hot--HSH		0		12	2	0.1	lb
RC1-018-013	5/8/2013	1			2	MD, CD					Frag, wire, walls hot, bottom not hot--HSH		0		18	10	0.2	lb
RC1-018-014	5/8/2013	1			2	CD					Wire pipe		0		20	3	0.75	lb
RC1-018-015	5/8/2013	1			2	CD					Barbed wire		12	W	12	4	0.2	lb
RC1-018-016	5/8/2013	1			2	CD					Nails		0		6	3	0.1	lb
RC1-018-017	5/8/2013	1			2	CD					Nails, plow part		0		14	3	0.25	lb
RC1-018-018	5/8/2013	1			2	CD					Nails, chain link		0		12	5	0.25	lb
RC1-018-019	5/8/2013	1			2	CD					Wire, walls hot, bottom not hot--HSH		0		24	6	0.25	lb
RC1-018-020	5/8/2013	1			2	CD					Wire		0		5	3	0.1	lb
RC1-018-021	5/8/2013	1			2	CD					Wire		0		20	7	0.2	lb
RC1-018-022	5/8/2013	1			2	CD					Nails, wire		0		8	5	0.25	lb
RC1-018-023	5/8/2013	1			2	CD					Nails, wire		6	NW	4	6	0.25	lb
RC1-018-024	5/8/2013	1			2	CD					Strap metal, metal fence post, wire, bottom not hot--HSH		0		18	14	5	lb
RC1-018-025	5/8/2013	1			2	CD					Nails, bracket, chain		0		12	10	2.5	lb
RC1-018-026	5/8/2013	1			2	CD					Wire		18	N	10	3	0.2	lb
RC1-018-027	5/8/2013	1			2	CD					Chain, nails		0		5	4	0.25	lb
RC1-018-028	5/8/2013	1			2	CD					Wire, nails		0		22	5	0.2	lb
RC1-018-029	5/8/2013	1			2	CD					Wire, walls hot, bottom not hot--HSH		0		20	6	0.2	lb
RC1-018-030	5/8/2013	1			2	CD					Nails, plow part, wire		12	NE	4	5	0.25	lb
RC1-018-031	5/8/2013	1			2	OTHER					Same as #30		12	SW	4	0	0.25	lb
RC1-018-032	5/8/2013	1			2	CD					Nails, wire		0		8	3	0.25	lb
RC1-018-033	5/8/2013	1			2	CD					Bolt, wire		0		4	4	0.2	lb
RC1-018-034	5/8/2013	1			2	CD					Wire, bolt		0		4	6	0.25	lb
RC1-018-035	5/8/2013	1			2	CD					Nails, wire		0		12	9	0.5	lb
RC1-018-036	5/8/2013	1			2	CD					Metal strap, wire		0		3	8	1	lb
RC1-018-037	5/8/2013	1			2	CD					Nails, wire		0		4	6	0.25	lb
RC1-018-038	5/8/2013	1			2	OTHER					Same as #39		6	NE	12	0	10	lb
RC1-018-039	5/8/2013	1			2	MD			M70		57mm AP-T projectile		0		12	1	10	lb
RC1-018-040	5/8/2013	1			2	CD					Chain		0		3	2	0.5	lb
RC1-018-041	5/8/2013	1			2	CD					Hook, valve handle		8	NE	4	2	0.25	lb
RC1-018-042	5/8/2013	1			2	CD					Starter handle, wire		0		6	4	1.5	lb
RC1-018-043	5/8/2013	1			2	MD, CD					Frag, wire		0		8	2	0.25	lb
RC1-018-044	5/8/2013	1			2	NC					No contact		0			0		lb
RC1-018-045	5/8/2013	1			2	OTHER					Same as #41		12	SW	4	0	0.25	lb
RC1-018-046	5/8/2013	1			2	CD					Barbed wire, bolt		12	N	4	5	0.25	lb
RC1-018-047	5/8/2013	1			2	CD					Wire		8	NE	6	4	0.2	lb
RC1-018-048	5/8/2013	1			2	CD, OTHER					Hot dirt, barbed wire, walls hot, bottom not hot--HSH		6	SW	18	6	0.25	lb
RC1-018-049	5/8/2013	1			2	CD					Horseshoe, wire		6	NE	6	3	2	lb
RC1-018-050	5/8/2013	1			2	CD					Horseshoe, wire		12	NE	6	4	1	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC1-018-051	5/8/2013	1			2	CD					Horseshoe, nails		0		8	3	0.5	lb
RC1-018-052	5/8/2013	1			2	CD					Hinge, wire, nails		0		4	12	0.5	lb
RC1-018-053	5/8/2013	1			2	CD					Horseshoe, plow part		0		8	2	0.5	lb
RC1-018-054	5/8/2013	1			2	SEED, CD					QC SEED #216, spoon		0		4	2	1	lb
RC1-018-055	5/8/2013	1			2	CD					Barbed wire, walls hot, bottom not hot--HSH		24	N	24	10	0.25	lb
RC1-018-056	5/8/2013	1			2	CD					Barbed wire, walls hot, bottom not hot--HSH		12	E	24	4	0.25	lb
RC1-022-001	5/20/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-022-002	5/20/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC1-022-003	5/20/2013	1			2	SEED					QC SEED #244		0		0	1	1	lb
RC1-022-004	5/20/2013	1			2	MD					Frag		0		6	2	0.5	lb
RC1-022-005	5/20/2013	1			2	OTHER					Hot rock, checked with White		0		7	0		lb
RC1-022-006	5/20/2013	1			2	MD					Frag		6	E	6	1	0.25	lb
RC1-022-007	5/20/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC1-022-008	5/20/2013	1			2	MD					Frag		6	NE	2	1	0.25	lb
RC1-022-009	5/20/2013	1			2	MD					Frag		0		2	1	0.5	lb
RC1-022-010	5/20/2013	1			2	MD					Frag		0		6	2	0.5	lb
RC1-022-011	5/20/2013	1			2	OTHER					Hot rock, checked with White		0		8	0		lb
RC1-022-012	5/20/2013	1			2	OTHER					Hot rock, checked with White		0		14	0		lb
RC1-022-013	5/20/2013	1			2	OTHER					Hot rock, checked with White		0		9	0		lb
RC1-022-014	5/20/2013	1			2	MD					Frag		0		6	2	0.5	lb
RC1-022-015	5/20/2013	1			2	CD					Horseshoe		0		3	1	0.25	lb
RC1-022-016	5/20/2013	1			2	OTHER					Hot rock, checked with White		0		8	0		lb
RC1-022-017	5/20/2013	1			2	MD					Frag		0		6	2	0.5	lb
RC1-022-018	5/20/2013	1			2	OTHER					Hot rock, checked with White		0		8	0		lb
RC1-022-019	5/20/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC1-022-020	5/20/2013	1			2	OTHER					Hot rock, checked with White		0		4	0		lb
RC1-022-021	5/20/2013	1			2	OTHER					Hot rock, checked with White		0			0		lb
RC1-022-022	5/20/2013	1			2	OTHER					Hot rock, checked with White		0		8	0		lb
RC1-022-023	5/20/2013	1			2	OTHER					Hot rock, checked with White		0		12	0		lb
RC1-022-024	5/20/2013	1			2	MD					Frag		0		7	1	0.25	lb
RC1-022-025	5/20/2013	1			2	MD					Frag		12	NE	6	1	0.5	lb
RC1-022-026	5/20/2013	1			2	OTHER					Hot rock, checked with White		0		6	0		lb
RC1-022-027	5/20/2013	1			2	MD, OTHER					Frag, hot rock, checked with White, bottom not hot		0		4	1	0.25	lb
RC1-022-028	5/20/2013	1			2	OTHER					Hot rock, checked with White, bottom not hot		0		9	0		lb
RC1-022-029	5/20/2013	1			2	OTHER					Same as #25		12	SW	6	0	0.5	lb
RC1-028-001	5/3/2013	1			2	CD					Southwest corner nail--HSH		0		0	1	1	lb
RC1-028-002	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		20	0		lb
RC1-028-003	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		20	0		lb
RC1-028-004	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		24	0		lb
RC1-028-005	5/3/2013	1			2	MD					Frag--HSH		2	E	6	1	0.25	lb
RC1-028-006	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		20	0		lb
RC1-028-009	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		6	W	24	0		lb
RC1-028-010	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		24	0		lb
RC1-028-011	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		20	0		lb
RC1-028-012	5/3/2013	1			2	MD					Frag--HSH		0		4	1	0.25	lb
RC1-028-013	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		20	0		lb
RC1-028-014	5/3/2013	1			2	CD					Debris, metal hook--HSH		0		6	1	0.25	lb
RC1-028-015	5/3/2013	1			2	CD					Debris, nail--HSH		12	N	6	1	0.25	lb

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RC1-028-016	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		20	0		lb
RC1-028-017	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		12	S	3	0		lb
RC1-028-018	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		6	0		lb
RC1-028-019	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		20	0		lb
RC1-028-020	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		18	0		lb
RC1-028-021	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		24	0		lb
RC1-028-022	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		24	0		lb
RC1-028-023	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		24	0		lb
RC1-028-024	5/3/2013	1			2	CD					Stake nail--HSH		0		1	1	1	lb
RC1-028-025	5/3/2013	1			2	SEED					QC SEED #193--HSH		0		0	1	1	lb
RC1-028-026	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		20	0		lb
RC1-028-027	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		20	0		lb
RC1-028-028	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		24	0		lb
RC1-028-029	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		18	0		lb
RC1-028-030	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		18	0		lb
RC1-028-031	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		18	0		lb
RC1-028-032	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		20	0		lb
RC1-028-033	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		24	0		lb
RC1-028-034	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		18	0		lb
RC1-028-035	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		24	0		lb
RC1-028-036	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		18	0		lb
RC1-028-037	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		18	0		lb
RC1-028-038	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		24	0		lb
RC1-028-039	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		24	0		lb
RC1-028-041	5/3/2013	1			2	OTHER					Hot geo, checked with Schonstedt & White--HSH		0		24	0		lb
RC1-029-001	5/9/2013	1			1	MD, CD					Frag, southwest corner nail		0		6	2	0.25	lb
RC1-029-002	5/9/2013	1			1	MD					Frag		0		6	3	0.5	lb
RC1-029-003	5/9/2013	1			1	MD					Frag		1	W	7	2	0.25	lb
RC1-029-004	5/9/2013	1			1	MD					Frag		6	E	5	3	0.5	lb
RC1-029-005	5/9/2013	1			1	MD					Frag		0		6	3	1	lb
RC1-029-006	5/9/2013	1			1	MD					Frag		0		7	3	0.5	lb
RC1-029-007	5/9/2013	1			1	MD					Frag		1	W	8	1	0.5	lb
RC1-029-008	5/9/2013	1			1	MD					Fuze, frag		0		6	5	1	lb
RC1-029-009	5/9/2013	1			1	MD					Frag		0		6	1	0.25	lb
RC1-029-010	5/9/2013	1			1	MD					Frag		0		7	1	0.25	lb
RC1-029-011	5/9/2013	1			1	MD					Frag		0		4	2	0.5	lb
RC1-029-012	5/9/2013	1			1	MD					Frag		3	W	4	2	0.5	lb
RC1-029-013	5/9/2013	1			1	MD					Frag		0		5	1	0.5	lb
RC1-029-014	5/9/2013	1			1	MD					Frag		0		5	1	0.25	lb
RC1-029-015	5/9/2013	1			1	MD					Frag		0		2	3	1	lb
RC1-029-016	5/9/2013	1			1	MD					Frag		0		12	1	0.5	lb
RC1-029-017	5/9/2013	1			1	MD					Frag		0		5	1	0.5	lb
RC1-029-018	5/9/2013	1			1	MD					Frag		0		7	1	0.5	lb
RC1-029-019	5/9/2013	1			1	MD					Frag		0		3	1	0.25	lb
RC1-029-020	5/9/2013	1			1	MD			M63, Mod 1		37mm projectile expended		0		2	1	2	lb
RC1-029-021	5/9/2013	1			1	SEED					QC SEED #186		0		0	1	1	lb
RC1-029-022	5/9/2013	1			1	MD					Frag		0		7	2	0.25	lb
RC1-029-023	5/9/2013	1			1	MD					Frag		0		4	2	0.5	lb

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RC1-029-024	5/9/2013	1			1	MD					Frag		0		6	1	0.25	lb
RC1-029-025	5/9/2013	1			1	MD					Frag		0		6	2	0.25	lb
RC1-029-026	5/9/2013	1			1	MD					Frag		0		6	1	0.25	lb
RC1-029-027	5/9/2013	1			1	MD					Frag		0		8	1	1	lb
RC1-029-028	5/9/2013	1			1	MD			M81		40mm projectile expended		8	S	6	1	2	lb
RC1-032-001	5/9/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-032-002	5/9/2013	1			2	SEED					QC SEED # 214		0		0	1	1	lb
RC1-032-003	5/9/2013	1			2	CD					Plow part		0		10	1	1	lb
RC1-032-004	5/9/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC1-032-005	5/9/2013	1			2	CD					Wire		0		6	1	0.1	lb
RC1-032-006	5/9/2013	1			2	OTHER					Hot rocks, checked with White		0		14	0		lb
RC1-032-007	5/9/2013	1			2	MD					Frag		0		8	1	0.25	lb
RC1-032-008	5/9/2013	1			2	MD					Frag		0		4	1	0.5	lb
RC1-033-001	5/9/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-033-002	5/9/2013	1			1	MD					Frag		0		9	2	1	lb
RC1-033-003	5/9/2013	1			1	MD					Frag		0		5	1	1	lb
RC1-033-004	5/9/2013	1			1	MD					Frag		6	E	6	2	0.5	lb
RC1-033-005	5/9/2013	1			1	MD					Frag		6	S	8	1	1	lb
RC1-033-006	5/9/2013	1			1	MD					Frag		6	N	8	2	1	lb
RC1-033-007	5/9/2013	1			1	MD					Frag		6	N	1	1	0.25	lb
RC1-033-008	5/9/2013	1			1	MD					Frag		0		6	3	1	lb
RC1-033-009	5/9/2013	1			1	MD					Frag		0		6	2	0.5	lb
RC1-033-010	5/9/2013	1			1	MD					Frag		3	N	7	2	1	lb
RC1-033-011	5/9/2013	1			1	MD					Frag		0		5	1	1	lb
RC1-033-012	5/9/2013	1			1	MD					Frag		0		6	1	1	lb
RC1-033-013	5/9/2013	1			1	MD					Frag		0		8	1	1	lb
RC1-033-014	5/9/2013	1			1	MD					Frag		0		8	2	1	lb
RC1-033-015	5/9/2013	1			1	SEED					QC SEED #219		0		0	1	1	lb
RC1-033-016	5/9/2013	1			1	MD					Frag		0		7	2	1	lb
RC1-033-017	5/9/2013	1			1	MD					Frag		3	E	6	2	0.5	lb
RC1-033-018	5/9/2013	1			1	MD					Frag		0		6	1	0.5	lb
RC1-033-019	5/9/2013	1			1	MD					Frag		4	W	6	2	0.5	lb
RC1-033-020	5/9/2013	1			1	MD					Frag		4	N	8	2	1	lb
RC1-033-021	5/9/2013	1			1	MD					Frag		4	N	6	1	0.5	lb
RC1-033-022	5/9/2013	1			1	MD					T-bar fuze, frag		0		3	2	1	lb
RC1-033-023	5/9/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC1-033-024	5/9/2013	1			1	MD					Frag		8	E	6	1	0.5	lb
RC1-033-025	5/9/2013	1			1	MD					Frag		0		6	1	0.5	lb
RC1-034-001	5/3/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-034-002	5/3/2013	1			2	CD					Shotgun shell		0		0	1	0.1	lb
RC1-034-003	5/3/2013	1			2	CD					Shotgun shell		0		0	1	0.1	lb
RC1-034-004	5/3/2013	1			2	CD					Shotgun shell		0		0	1	0.1	lb
RC1-034-005	5/3/2013	1			2	CD					Shotgun shell		0		0	1	0.1	lb
RC1-034-006	5/3/2013	1			2	CD					Nail		6	S	4	1	0.2	lb
RC1-034-007	5/3/2013	1			2	NC					No contact		0			0		lb
RC1-034-008	5/3/2013	1			2	CD					Metal ring		0		3	1	0.2	lb
RC1-034-009	5/3/2013	1			2	SEED					QC SEED #195		0		0	1	1	lb
RC1-034-010	5/3/2013	1			2	NC					No contact		0			0		lb

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RC1-034-011	5/3/2013	1			2	CD					Plow part		0		3	1	0.25	lb
RC1-034-012	5/3/2013	1			2	CD					Horseshoe		0		6	1	0.25	lb
RC1-034-013	5/3/2013	1			2	CD					Nails		0		3	2	0.1	lb
RC1-034-014	5/3/2013	1			2	CD					Wire		12	SW	4	3	0.1	lb
RC1-034-015	5/3/2013	1			2	CD					Plow part		0		2	1	0.25	lb
RC1-035-001	5/10/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-035-002	5/10/2013	1			2	SEED					QC SEED #232		0		0	1	1	lb
RC1-035-003	5/10/2013	1			2	NC					No contact		0		3	0		lb
RC1-035-004	5/10/2013	1			2	CD					Horseshoe		0		3	1	0.5	lb
RC1-035-005	5/10/2013	1			2	CD					Hoe part		0		3	1	0.5	lb
RC1-035-006	5/10/2013	1			2	CD					Plow part		0		5	1	2	lb
RC1-035-007	5/10/2013	1			2	CD					Plow part		12	W	3	1	1	lb
RC1-035-008	5/10/2013	1			2	CD					Steel plate		0		3	1	1	lb
RC1-035-009	5/10/2013	1			2	CD					Plow part		0		12	1	1	lb
RC1-035-010	5/10/2013	1			2	CD					Bolt		0		8	1	1	lb
RC1-037-001	5/16/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-037-002	5/16/2013	1			2	MD					Frag		0		8	1	0.25	lb
RC1-037-003	5/16/2013	1			2	MD					Frag		0		4	1	1	lb
RC1-037-004	5/16/2013	1			2	SEED					QC SEED #285		6	S	0	1	1	lb
RC1-037-005	5/16/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC1-037-006	5/16/2013	1			2	MD					Frag		0		5	1	0.25	lb
RC1-037-007	5/16/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC1-037-008	5/16/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC1-037-009	5/16/2013	1			2	MD					Frag		6	SE	12	1	0.5	lb
RC1-037-010	5/16/2013	1			2	MD					Frag		0		12	1	0.25	lb
RC1-037-011	5/16/2013	1			2	MD					Frag		0		6	2	1.25	lb
RC1-040-001	5/2/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-040-002	5/2/2013	1			1	MD					Frag		0		4	1	0.5	lb
RC1-040-003	5/2/2013	1			1	MD					Frag--HSH		0		18	1	0.25	lb
RC1-040-004	5/2/2013	1			1	MD					Frag		0		6	2	2	lb
RC1-040-005	5/2/2013	1			1	MD					Frag--HSH		0		18	1	0.25	lb
RC1-040-006	5/2/2013	1			1	MD					Frag		0		1	1	0.25	lb
RC1-040-007	5/2/2013	1			1	MD					Frag--HSH		0		18	1	0.25	lb
RC1-040-008	5/2/2013	1			1	MD					Frag--HSH		0		18	2	0.25	lb
RC1-040-009	5/2/2013	1			1	MD					Frag		0		1	1	0.25	lb
RC1-040-011	5/2/2013	1			1	MD					Frag		0		8	4	2	lb
RC1-040-012	5/2/2013	1			1	MD					Frag		12	N	6	1	1	lb
RC1-040-014	5/2/2013	1			1	OTHER					Same as #12		6	S		0		lb
RC1-040-015	5/2/2013	1			1	MD					Frag, fuze parts		0		6	1	0.5	lb
RC1-040-016	5/2/2013	1			1	MD					Frag		0		6	3	1	lb
RC1-040-018	5/2/2013	1			1	MD					Frag		0		5	1	1	lb
RC1-040-019	5/2/2013	1			1	MD					Frag		6	W	6	1	0.5	lb
RC1-040-020	5/2/2013	1			1	MD					Frag		0		6	1	0.5	lb
RC1-040-021	5/2/2013	1			1	MD					Frag		0		4	2	1	lb
RC1-040-022	5/2/2013	1			1	SEED					QC SEED #201		0		0	1	1	lb
RC1-041-001	5/15/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-041-002	5/15/2013	1			2	CD					Plow part		12	W	8	1	3	lb
RC1-041-003	5/15/2013	1			2	OTHER					Same as #2		6	E	8	0	3	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC1-041-004	5/15/2013	1			2	CD					Horseshoe		0		4	1	0.25	lb
RC1-041-005	5/15/2013	1			2	MD			M51		37mm AP-T		0		4	1	2	lb
RC1-041-006	5/15/2013	1			2	SEED					QC SEED #231		0		0	1	1	lb
RC1-041-007	5/15/2013	1			2	MD					Frag		0		6	1	0.2	lb
RC1-042-001	5/17/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-042-002	5/17/2013	1			2	NC					No find, checked with Schonstedt & White		0		0	0		lb
RC1-042-003	5/17/2013	1			2	OTHER					Hot rocks, checked with White		0		8	0		lb
RC1-042-004	5/17/2013	1			2	SEEd					QC SEED #236		0		0	1	1	lb
RC1-043-001	5/15/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-043-002	5/15/2013	1			2	OTHER					Hot rocks, bottom not hot, checked with White		0		22	0		lb
RC1-043-003	5/15/2013	1			2	OTHER					Hot rocks, bottom not hot, checked with White		0		24	0		lb
RC1-043-004	5/15/2013	1			2	SEED					QC SEED #203		0		0	1	1	lb
RC1-043-005	5/15/2013	1			2	CD					Wire		0		5	7	0.1	lb
RC1-043-006	5/15/2013	1			2	MD					Frag		0		3	1	0.25	lb
RC1-045-001	5/10/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-045-002	5/10/2013	1			2	NC					No contact		0			0		lb
RC1-045-003	5/10/2013	1			2	NC					No contact		0			0		lb
RC1-045-004	5/10/2013	1			2	NC					No contact		0			0		lb
RC1-045-005	5/10/2013	1			2	NC					No contact		0			0		lb
RC1-045-006	5/10/2013	1			2	SEED					QC SEED #210		0		0	1	1	lb
RC1-045-007	5/10/2013	1			2	MD					Frag		0		4	1	0.75	lb
RC1-045-008	5/10/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC1-046-001	5/16/2013	1			1	CD					SAA, southwest corner nail		0		6	2	0.5	lb
RC1-046-002	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		2	1		lb
RC1-046-003	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		4	1		lb
RC1-046-004	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		4	1		lb
RC1-046-005	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		2	1		lb
RC1-046-006	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		2	1		lb
RC1-046-007	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		4	1		lb
RC1-046-008	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		4	1		lb
RC1-046-009	5/16/2013	1			1	MD					Frag		0		5	1	1	lb
RC1-046-010	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		2	1	0.5	lb
RC1-046-011	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		3	1		lb
RC1-046-012	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		4	1		lb
RC1-046-013	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		2	1	0.5	lb
RC1-046-014	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		2	1		lb
RC1-046-015	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		2	1		lb
RC1-046-016	5/16/2013	1			1	CD					Barbed wire, LIP, HSH		0		4	1		lb
RC1-046-017	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC1-046-018	5/16/2013	1			1	SEED					QC SEED #202		0		0	1	1	lb
RC1-046-019	5/16/2013	1			1	MD					Frag		0		0	1	5	lb
RC1-046-020	5/16/2013	1			1	CD					Debris		0		6	1	0.5	lb
RC1-046-021	5/16/2013	1			1	CD					Metal disc		0		2	1	1	lb
RC1-046-022	5/16/2013	1			1	CD					Small arms ammo		0		6	1	0.5	lb
RC1-046-023	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC1-046-024	5/16/2013	1			1	OTHER					Hot rocks		0		22	0		lb
RC1-046-025	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC1-046-026	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0		0	0		lb

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RC1-046-027	5/16/2013	1			1	CD					Metal bar		6	E	4	1	0.5	lb
RC1-047-001	5/9/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-047-002	5/9/2013	1			2	CD					Plow part		0		4	1	0.25	lb
RC1-047-003	5/9/2013	1			2	OTHER					Hot rocks, checked with White		8	S	3	0		lb
RC1-047-004	5/9/2013	1			2	OTHER					Hot rocks, checked with White		10	E	12	0		lb
RC1-047-005	5/9/2013	1			2	CD					Aluminum bracket		0		6	1	0.25	lb
RC1-047-006	5/9/2013	1			2	OTHER					Hot rocks, checked with White		0		10	0		lb
RC1-047-007	5/9/2013	1			2	CD					Tiller blade		0		14	1	0.5	lb
RC1-047-008	5/9/2013	1			2	OTHER					Hot rocks, dirt, checked with White		0		8	0		lb
RC1-047-009	5/9/2013	1			2	OTHER					Hot rocks, dirt, checked with White		8	SW	8	0		lb
RC1-047-010	5/9/2013	1			2	SEED					QC SEED #230		0		0	1	1	lb
RC1-047-011	5/9/2013	1			2	OTHER					Hot rocks, dirt, checked with White		0		12	0		lb
RC1-047-012	5/9/2013	1			2	OTHER					Hot rocks, dirt, checked with White		0		12	0		lb
RC1-047-013	5/9/2013	1			2	OTHER					Hot rocks, dirt, checked with White		0		14	0		lb
RC1-047-014	5/9/2013	1			2	OTHER					Hot rocks, dirt, checked with White		0		10	0		lb
RC1-047-015	5/9/2013	1			2	CD					Banding strap		12	N	0	1	0.5	lb
RC1-047-016	5/9/2013	1			2	OTHER					Hot rocks, dirt, checked with White		0		10	0		lb
RC1-047-017	5/9/2013	1			2	OTHER					Hot rocks, dirt, checked with White		0		4	0		lb
RC1-047-018	5/9/2013	1			2	OTHER					Hot rocks, dirt, checked with White		0		0	0		lb
RC1-047-019	5/9/2013	1			2	OTHER					Hot rocks, dirt, checked with White		10	SE	8	0		lb
RC1-047-020	5/9/2013	1			2	OTHER					Hot rocks, dirt, checked with White		6	N	8	0		lb
RC1-048-001	5/9/2013	1			2	CD					Southwest corner nail, can, nail		0		0	3	1	lb
RC1-048-002	5/9/2013	1			2	CD					Stake		0		2	1	0.25	lb
RC1-048-003	5/9/2013	1			2	CD					Plow part, nails		12	E	3	4	1	lb
RC1-048-004	5/9/2013	1			2	CD					Plow part, nails		0		4	5	0.5	lb
RC1-048-005	5/9/2013	1			2	CD					Metal rod		6	NE	3	1	1	lb
RC1-048-006	5/9/2013	1			2	CD					Tool, nails		0		6	3	0.5	lb
RC1-048-007	5/9/2013	1			2	CD					Metal strap, nail		0		7	2	0.25	lb
RC1-048-008	5/9/2013	1			2	OTHER					Same as #6		0		6	0	0.5	lb
RC1-048-009	5/9/2013	1			2	CD					Nails		0		12	6	0.25	lb
RC1-048-010	5/9/2013	1			2	CD					Banding strap		0		5	3	1.25	lb
RC1-048-011	5/9/2013	1			2	SEED					QC SEED #215		0		0	1	1	lb
RC1-048-012	5/9/2013	1			2	CD					Nails, bolt		0		14	3	0.25	lb
RC1-048-013	5/9/2013	1			2	CD					Plow part		0		6	1	2	lb
RC1-048-014	5/9/2013	1			2	CD					Metal rod, rust, bottom not hot		0		2	1	1.5	lb
RC1-048-015	5/9/2013	1			2	CD					Banding strap		0		4	2	0.25	lb
RC1-048-016	5/9/2013	1			2	CD					Tool handle, nails, bottom not hot--HSH		0		8	3	2	lb
RC1-048-017	5/9/2013	1			2	CD					Chain		6	NW	6	1	1.5	lb
RC1-048-018	5/9/2013	1			2	CD					Nails, bottom not hot--HSH		0		14	5	0.2	lb
RC1-048-019	5/9/2013	1			2	CD					Door handle		0		6	1	1	lb
RC1-048-020	5/9/2013	1			2	CD					Lock		0		8	1	1	lb
RC1-048-021	5/9/2013	1			2	CD					Nails, rust, bottom not hot--HSH		6	W	10	6	0.25	lb
RC1-048-022	5/9/2013	1			2	OTHER					Same as #23		12	W	10	0	5	lb
RC1-048-023	5/9/2013	1			2	CD					Axe head		12	E	10	1	5	lb
RC1-048-024	5/9/2013	1			2	CD					Nails, wire, bottom not hot		6	NE	12	4	0.25	lb
RC1-048-025	5/9/2013	1			2	CD					Nails		0		12	6	0.25	lb
RC1-048-026	5/9/2013	1			2	CD					Nails		6	SE	10	4	0.25	lb
RC1-048-027	5/9/2013	1			2	CD					Nails, wire		0		10	4	0.25	lb

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RC1-048-028	5/9/2013	1			2	CD					Nails, wire		0		12	4	0.25	lb
RC1-048-029	5/9/2013	1			2	CD					Nails, bottom not hot		0		10	5	0.25	lb
RC1-048-030	5/9/2013	1			2	CD					Barbed wire		0		4	2	0.25	lb
RC1-048-031	5/9/2013	1			2	CD					Nails, barbed wire, bottom not hot		0		22	6	0.5	lb
RC1-048-032	5/9/2013	1			2	CD					Horseshoe, nail		0		10	6	1	lb
RC1-048-033	5/9/2013	1			2	CD					Horseshoe		0		8	1	1	lb
RC1-048-034	5/9/2013	1			2	CD					Nails, wire		0		10	4	0.25	lb
RC1-048-035	5/9/2013	1			2	CD					Nails, wire, bottom not hot--HSH		0		10	4	0.5	lb
RC1-048-036	5/9/2013	1			2	CD					Nails, wire, bottom not hot--HSH		0		12	5	0.25	lb
RC1-048-037	5/9/2013	1			2	CD					Nails, bottom not hot--HSH		0		10	6	0.25	lb
RC1-048-038	5/9/2013	1			2	CD					Nails		0		6	4	0.1	lb
RC1-048-039	5/9/2013	1			2	CD					Nails		0		6	1	1	lb
RC1-048-040	5/9/2013	1			2	CD					Nails, bottom not hot--HSH		0		10	6	0.25	lb
RC1-048-041	5/9/2013	1			2	CD					Nails, bottom not hot--HSH		0		12	5	0.25	lb
RC1-049-001	5/17/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-049-002	5/17/2013	1			2	CD					Bonding strip		6	SE	3	1	0.25	lb
RC1-049-003	5/17/2013	1			2	CD					Chain link		6	SW	5	1	0.25	lb
RC1-049-004	5/17/2013	1			2	CD					Plow parts		0		12	5	0.1	lb
RC1-049-005	5/17/2013	1			2	NC					No find, checked with White		0		4	0		lb
RC1-049-006	5/17/2013	1			2	CD, OTHER					Plow part, HSH, hot dirt, checked with White		0		8	1	0.25	lb
RC1-049-007	5/17/2013	1			2	CD					Horseshoe		0		2	1	1	lb
RC1-049-008	5/17/2013	1			2	CD					Horseshoe		8	W	6	1	1	lb
RC1-049-009	5/17/2013	1			2	CD					Steel bar		12	E	6	1	1.5	lb
RC1-049-010	5/17/2013	1			2	CD					Hook		0		10	1	0.25	lb
RC1-049-011	5/17/2013	1			2	CD					Nail		0		3	1	0.1	lb
RC1-049-012	5/17/2013	1			2	OTHER					Hot rocks, checked with White		0		7	0		lb
RC1-049-013	5/17/2013	1			2	CD					Walls hot, bottom not hot, nails		0		12	17	0.25	lb
RC1-049-014	5/17/2013	1			2	CD					Banding strips		0		12	3	1	lb
RC1-049-015	5/17/2013	1			2	CD					Metal strap		0		12	3	2	lb
RC1-049-016	5/17/2013	1			2	SEED					QC SEED #249		0		0	1	1	lb
RC1-049-017	5/17/2013	1			2	CD					Horseshoe		0		8	1	0.25	lb
RC1-050-001	5/17/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-050-002	5/17/2013	1			1	SEED					QC SEED #247		0		0	1	1	lb
RC1-050-003	5/17/2013	1			1	NC					No find, checked with Schonstedt & White		0		0	0		lb
RC1-050-004	5/17/2013	1			1	NC					No find, checked with Schonstedt & White		0		0	0		lb
RC1-050-005	5/17/2013	1			1	OTHER					Hot dirt		0		26	0		lb
RC1-050-006	5/17/2013	1			1	OTHER					Hot dirt		0		28	0		lb
RC1-050-007	5/17/2013	1			1	OTHER					Hot dirt		0		16	0		lb
RC1-050-008	5/17/2013	1			1	OTHER					Hot dirt (dirt moved)		0		12	0		lb
RC1-050-009	5/17/2013	1			1	NC					No find, checked with Schonstedt & White		0		0	0		lb
RC1-050-010	5/17/2013	1			1	OTHER					Hot dirt		0		18	0		lb
RC1-050-011	5/17/2013	1			1	OTHER					Hot dirt		0		16	0		lb
RC1-050-012	5/17/2013	1			1	OTHER					Hot dirt		0		17	0		lb
RC1-054-001	5/7/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-054-002	5/7/2013	1			2	SEED					QC SEED #185		0		0	1	1	lb
RC1-054-004	5/7/2013	1			2	CD, OTHER					Hot dirt, metal ring, bottom not hot, checked with White		12	W	18	1	0.25	lb
RC1-054-005	5/7/2013	1			2	MD, OTHER					Hot dirt, frag, checked with White		12	W	18	1	0.25	lb
RC1-054-006	5/7/2013	1			2	MD					Frag		12	SW	6	1	0.25	lb

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RC1-054-007	5/7/2013	1			2	MD, CD					Frag, plow parts		12	SW	6	3	0.5	lb
RC1-055-001	5/7/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-055-002	5/7/2013	1			2	MD					Frag		0		2	1	0.2	lb
RC1-055-003	5/7/2013	1			2	NC					No contact		0			0		lb
RC1-055-004	5/7/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC1-055-005	5/7/2013	1			2	MD					Frag		6	W	3	1	0.5	lb
RC1-055-006	5/7/2013	1			2	OTHER					Geo, hot rock		12	W	5	0		lb
RC1-055-007	5/7/2013	1			2	MD					Frag		0		4	2	0.25	lb
RC1-055-008	5/7/2013	1			2	MD			M70		57mm AP-T projectile		0		6	1	10	lb
RC1-055-009	5/7/2013	1			2	SEED					QC SEED #199		0		0	1	1	lb
RC1-055-010	5/7/2013	1			2	MD					Frag		0		8	1	0.25	lb
RC1-056-001	5/16/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-056-002	5/16/2013	1			2	SEED					QC SEED #282		12	S	0	1	1	lb
RC1-056-003	5/16/2013	1			2	MD					Frag		0		8	1	0.25	lb
RC1-056-004	5/16/2013	1			2	MD					Frag		0		1	1	0.5	lb
RC1-056-005	5/16/2013	1			2	NC					No find		0			0		lb
RC1-056-006	5/16/2013	1			2	NC					No find		0			0		lb
RC1-056-007	5/16/2013	1			2	MD					Frag		0		8	3	0.25	lb
RC1-056-008	5/16/2013	1			2	CD					Farm debris		6	S	14	1	3	lb
RC1-056-009	5/16/2013	1			2	MD					Frag		0		16	1	0.5	lb
RC1-056-010	5/16/2013	1			2	MD					Frag		0		15	1	0.25	lb
RC1-056-011	5/16/2013	1			2	NC					No find		0			0		lb
RC1-056-012	5/16/2013	1			2	NC					No find		0			0		lb
RC1-058-001	5/9/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-058-002	5/9/2013	1			2	SEED					QC SEED #243		0		0	1	1	lb
RC1-058-003	5/9/2013	1			2	CD					Plow part		0		10	1	1.5	lb
RC1-058-004	5/9/2013	1			2	CD					Nails		0		6	3	0.2	lb
RC1-058-005	5/9/2013	1			2	MD					Frag		12	E	8	1	0.25	lb
RC1-058-006	5/9/2013	1			2	OTHER					Hot rocks, checked with White		0		3	0		lb
RC1-058-007	5/9/2013	1			2	MD					Frag		0		12	1	0.25	lb
RC1-058-008	5/9/2013	1			2	CD					Barbed wire		0		6	1	0.25	lb
RC1-058-009	5/9/2013	1			2	CD					Barbed wire fence--LIP		0		1	1	0.5	lb
RC1-058-010	5/9/2013	1			2	CD					Steel fence post--LIP		0		0	0		lb
RC1-058-011	5/9/2013	1			2	CD					Barbed wire fence--LIP		0		0	0		lb
RC1-058-012	5/9/2013	1			2	CD					Barbed wire		6	NE	0	1	0.25	lb
RC1-058-013	5/9/2013	1			2	CD					Barbed wire		0		0	1	0.2	lb
RC1-058-014	5/9/2013	1			2	CD					Fence staple		0		3	1	0.1	lb
RC1-058-015	5/9/2013	1			2	OTHER					Same as #12		6	SW	3	0	0.1	lb
RC1-058-016	5/9/2013	1			2	OTHER					Hot rocks, checked with White		0		6	0		lb
RC1-059-001	5/9/2013	1			1	CD					Southwest corner nail, hot dirt--HSH		0		0	1	1	lb
RC1-059-002	5/9/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White--HSH		0		18	0		lb
RC1-059-003	5/9/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White--HSH		0		19	0		lb
RC1-059-004	5/9/2013	1			1	MD					Frag		0		6	1	0.25	lb
RC1-059-005	5/9/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White--HSH		0		18	0		lb
RC1-059-006	5/9/2013	1			1	MD, SEED					QC SEED #222, frag		0		0	3	1	lb
RC1-059-007	5/9/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White--HSH		0		18	0		lb
RC1-059-008	5/9/2013	1			1	MD					Frag		0		5	1	1	lb
RC1-059-009	5/9/2013	1			1	MD					Frag		0		6	1	0.5	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC1-059-010	5/9/2013	1			1	MD			M70		57mm exp, frag		12	E	8	3	4	lb
RC1-059-011	5/9/2013	1			1	OTHER					Same as #10		12	W		0		lb
RC1-059-012	5/9/2013	1			1	OTHER					Hot dirt--HSH		0		28	0		lb
RC1-059-013	5/9/2013	1			1	MD					Frag		0		4	1	0.5	lb
RC1-059-014	5/9/2013	1			1	MD					Frag		0		7	1	1	lb
RC1-059-015	5/9/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC1-059-016	5/9/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White		0		20	0		lb
RC1-060-001	5/17/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-060-002	5/17/2013	1			2	SEED					QC SEED #237		0		0	1	1	lb
RC1-060-003	5/17/2013	1			2	NC					No find, checked with Schonstedt & White		0			0		lb
RC1-061-001	5/7/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-061-002	5/7/2013	1			2	MD					Frag		0		8	1	0.2	lb
RC1-061-003	5/7/2013	1			2	SEED					QC SEED #208		0		0	1	1	lb
RC1-061-004	5/7/2013	1			2	CD					Nail, bracket		0		4	2	0.25	lb
RC1-061-005	5/7/2013	1			2	CD					Nail		0		3	1	0.1	lb
RC1-061-006	5/7/2013	1			2	CD					Horseshoe		6	W	4	1	0.5	lb
RC1-061-007	5/7/2013	1			2	CD					Horseshoe		0		3	1	0.25	lb
RC1-061-008	5/7/2013	1			2	MD					Frag		6	SE	4	1	0.2	lb
RC1-061-009	5/7/2013	1			2	MD					Frag		0		4	3	0.5	lb
RC1-061-010	5/7/2013	1			2	NC					No contact		0			0		lb
RC1-062-001	5/16/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-062-002	5/16/2013	1			2	NC					No find, checked with Schonstedt & White		0		0	0		lb
RC1-062-003	5/16/2013	1			2	SEED					QC SEED #220		0		0	1	1	lb
RC1-062-004	5/16/2013	1			2	NC					No find, checked with Schonstedt & White		0		0	0		lb
RC1-063-001	5/9/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-063-002	5/9/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC1-063-003	5/9/2013	1			1	SEED					QC SEED #226		0		0	1	1	lb
RC1-063-004	5/9/2013	1			1	MD					Frag, fuze pieces		0		4	1	1	lb
RC1-064-001	5/2/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-064-002	5/2/2013	1			1	MD					Frag		0		5	1	0.5	lb
RC1-064-003	5/2/2013	1			1	MD					Frag		0		5	1	0.5	lb
RC1-064-004	5/2/2013	1			1	MD					Frag		0		6	2	0.5	lb
RC1-064-005	5/2/2013	1			1	SEED					QC SEED #205		3	S	0	1	1	lb
RC1-064-006	5/2/2013	1			1	MD					Frag		0		8	1	1	lb
RC1-066-001	5/16/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-066-002	5/16/2013	1			2	CD					Plow part		0		6	1	0.5	lb
RC1-066-003	5/16/2013	1			2	NC					No find		0			0		lb
RC1-066-004	5/16/2013	1			2	NC					No find		0			0		lb
RC1-066-005	5/16/2013	1			2	SEED					QC SEED #238		0		0	1	1	lb
RC1-066-006	5/16/2013	1			2	OTHER					Hot rocks, checked with White		0		20	0		lb
RC1-066-007	5/16/2013	1			2	NC					No find		0			0		lb
RC1-066-008	5/16/2013	1			2	NC					No find		0			0		lb
RC1-067-001	5/10/2013	1			1	CD					Southwest corner nail, metal flakes		0		18	5	1	lb
RC1-067-002	5/10/2013	1			1	OTHER					Hot rocks		8	W	12	2		lb
RC1-067-003	5/10/2013	1			1	CD, OTHER					.50 cal, hot rock		0		6	2	0.25	lb
RC1-067-004	5/10/2013	1			1	SEED					QC SEED #246		0		0	1	1	lb
RC1-068-001	5/9/2013	1			2	CD					Nail		0		4	1	0.1	lb
RC1-068-002	5/9/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb

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RC1-068-003	5/9/2013	1			2	CD					Horseshoe		0		4	1	0.5	lb
RC1-068-004	5/9/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC1-068-005	5/9/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC1-068-006	5/9/2013	1			2	MD					Frag		0		3	1	0.2	lb
RC1-068-007	5/9/2013	1			2	MD					Frag		6	N	3	1	0.25	lb
RC1-068-008	5/9/2013	1			2	SEED					QC SEED #212		0		0	1	1	lb
RC1-068-009	5/9/2013	1			2	OTHER					Same as #11		0		3	0	0.5	lb
RC1-068-010	5/9/2013	1			2	MD					Frag		0		8	2	0.5	lb
RC1-068-011	5/9/2013	1			2	CD					Horseshoe		0		3	1	0.5	lb
RC1-068-012	5/9/2013	1			2	MD					Frag		0		8	1	0.25	lb
RC1-069-001	5/17/2013	1			1	CD					Plow tooth		0		6	1	0.5	lb
RC1-069-002	5/17/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-069-003	5/17/2013	1			1	CD					Horseshoe		0		8	1	1	lb
RC1-069-004	5/17/2013	1			1	CD					Metal bar		0		6	1	1	lb
RC1-069-005	5/17/2013	1			1	SEED					QC SEED #162		0		0	1	1	lb
RC1-069-006	5/17/2013	1			1	CD					Metal stake		0		7	1	1	lb
RC1-071-001	5/16/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-071-002	5/16/2013	1			2	CD					Chain		0		6	1	1.5	lb
RC1-071-003	5/16/2013	1			2	SEED					QC SEED #233		0		0	1	1	lb
RC1-071-004	5/16/2013	1			2	CD					Horseshoe		0		3	1	1	lb
RC1-071-005	5/16/2013	1			2	CD					Horseshoe		0		4	1	1	lb
RC1-071-006	5/16/2013	1			2	OTHER					Same as #4		0		3	0	1	lb
RC1-071-007	5/16/2013	1			2	CD					Plow part		0		6	1	1.5	lb
RC1-073-001	5/10/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-073-002	5/10/2013	1			1	SEED					QC SEED #181		0		0	1	1	lb
RC1-075-001	5/3/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-075-002	5/3/2013	1			2	CD					Small arms ammo		0		0	1	0.25	lb
RC1-075-003	5/3/2013	1			2	NC					No contact, checked with Schonstedt & White				24	0		lb
RC1-075-004	5/3/2013	1			2	OTHER					Same as #6		12	NE		0		lb
RC1-075-005	5/3/2013	1			2	SEED					QC SEED #207		0		0	1	1	lb
RC1-075-006	5/3/2013	1			2	MD					Frag		12	SE	6	1	0.5	lb
RC1-075-007	5/3/2013	1			2	CD					Small arms ammo		0		6	1	0.25	lb
RC1-076-001	5/9/2013	1			1	MD					Frag		0		8	1	1	lb
RC1-076-002	5/9/2013	1			1	MD					Frag		0		7	1	1	lb
RC1-076-003	5/9/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-076-004	5/9/2013	1			1	MD					Frag		6	S	10	2	1	lb
RC1-076-005	5/9/2013	1			1	SEED					QC SEED #224		0		0	1	1	lb
RC1-076-006	5/9/2013	1			1	MD					Frag		2	E	11	3	1	lb
RC1-076-007	5/9/2013	1			1	MD					Frag		2	N	8	2	1	lb
RC1-076-008	5/9/2013	1			1	MD					Frag		0		7	2	1	lb
RC1-077-001	5/3/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-077-002	5/3/2013	1			2	SEED					QC SEED #204		0		0	1	1	lb
RC1-077-003	5/3/2013	1			2	NC					No contact		0			0		lb
RC1-077-004	5/3/2013	1			2	NC					No contact		0			0		lb
RC1-077-005	5/3/2013	1			2	CD					Tree stand hook		6	SE	0	1	0.2	lb
RC1-077-006	5/3/2013	1			2	CD					Tree stand hook		12	SE	0	1	0.2	lb
RC1-077-007	5/3/2013	1			2	CD					Tree stand hook		0		0	1	0.2	lb
RC1-078-001	5/10/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb

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RC1-078-002	5/10/2013	1			1	SEED					QC SEED #229		0		0	1	1	lb
RC1-079-001	5/17/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-079-002	5/17/2013	1			2	CD					Washers (2), hinge, bolt		0		4	4	1	lb
RC1-079-003	5/17/2013	1			2	SEED					QC SEED #235		0		0	1	1	lb
RC1-080-001	5/16/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-080-002	5/16/2013	1			2	NC					No find		0			0		lb
RC1-080-003	5/16/2013	1			2	SEED					QC SEED #175		0		0	1	1	lb
RC1-080-004	5/16/2013	1			2	OTHER					Hot rocks		0		22	0		lb
RC1-081-001	5/20/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-081-002	5/20/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC1-081-003	5/20/2013	1			2	OTHER					Hot rocks		0		3	0		lb
RC1-081-004	5/20/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC1-081-005	5/20/2013	1			2	SEED					QC SEED #234		0		0	1	1	lb
RC1-081-006	5/20/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC1-082-001	5/20/2013	1			1	CD					Soutwest corner nail		0		0	1	1	lb
RC1-082-002	5/20/2013	1			1	CD					Bolt		0		4	1	0.5	lb
RC1-082-003	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC1-082-004	5/20/2013	1			1	SEED					QC SEED #290		0		0	1	1	lb
RC1-082-005	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC1-085-001	5/16/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-085-002	5/16/2013	1			2	NC					No find		0		6	0	0	lb
RC1-085-003	5/16/2013	1			2	SEED					QC SEED #242		0		0	1	1	lb
RC1-085-004	5/16/2013	1			2	MD					Frag		0		8	1	0.25	lb
RC1-086-001	5/16/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-086-002	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC1-086-003	5/16/2013	1			1	OTHER					Same as #004		10	W		0		lb
RC1-086-004	5/16/2013	1			1	CD					Pipe		10	E	5	1	2	lb
RC1-086-005	5/16/2013	1			1	MEC			M6		2.36 inch rocket warhead		0		2	1	2	lb
RC1-086-006	5/16/2013	1			1	CD					Metal strap, can		0		8	2	1	lb
RC1-086-007	5/16/2013	1			1	SEED					QC SEED #190		0		0	1	1	lb
RC1-086-008	5/16/2013	1			1	CD					Metal rod		0		6	1	2	lb
RC1-086-009	5/16/2013	1			1	CD					Metal pipe		0		0	1	4	lb
RC1-088-001	5/10/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC1-088-002	5/10/2013	1			1	CD					2" metal strap		12	W		1	1	lb
RC1-088-004	5/10/2013	1			1	SEED					QC SEED #239		0		0	1	1	lb
RC1-089-001	5/16/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-089-002	5/16/2013	1			2	CD					Wire		0		4	4	0.2	lb
RC1-089-003	5/16/2013	1			2	CD					Wire		0		2	2	0.1	lb
RC1-089-004	5/16/2013	1			2	SEED					QC SEED #281		6	W	0	1	1	lb
RC1-089-005	5/16/2013	1			2	CD					Wire		0		12	1	0.2	lb
RC1-089-006	5/16/2013	1			2	CD					Nail		0		5	1	0.1	lb
RC1-089-007	5/16/2013	1			2	NC					No find		0		6	0		lb
RC1-090-001	5/15/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-090-002	5/15/2013	1			2	NC					No find		0			0		lb
RC1-090-003	5/15/2013	1			2	SEED					QC SEED #250		0		0	1	1	lb
RC1-090-004	5/15/2013	1			2	CD					Nail		0		6	1	0.1	lb
RC1-090-005	5/15/2013	1			2	CD					Horseshoe		0		4	1	0.5	lb
RC1-091-001	5/15/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC1-091-002	5/15/2013	1			2	SEED					QC SEED #192		0		0	1	1	lb
RC1-093-001	5/3/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-093-002	5/3/2013	1			2	CD					Plow parts		0		8	6	1	lb
RC1-093-003	5/3/2013	1			2	SEED					QC SEED #206		6	E	0	1	1	lb
RC1-093-004	5/3/2013	1			2	CD					Wire, can, nails		0		3	7	2	lb
RC1-095-001	5/15/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-095-002	5/15/2013	1			2	MD					57mm AP-T projectile		6	W	14	1	10	lb
RC1-095-003	5/15/2013	1			2	OTHER					Hot rocks, checked with White		12	S	18	0		lb
RC1-095-004	5/15/2013	1			2	SEED					QC SEED #240		0		0	1	1	lb
RC1-095-005	5/15/2013	1			2	NC					No find		0			0		lb
RC1-098-001	5/16/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-098-002	5/16/2013	1			2	CD					Metal plate		0		6	1	0.25	lb
RC1-098-003	5/16/2013	1			2	SEED					QC SEED #286		0		0	1	1	lb
RC1-099-001	5/17/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC1-099-002	5/17/2013	1			2	OTHER					Hot rocks, dirt, checked with White, HSH		0		20	0		lb
RC1-099-003	5/17/2013	1			2	OTHER					Hot rocks, dirt, checked with White		0		14	0		lb
RC1-099-004	5/17/2013	1			2	OTHER					Hot rocks, dirt, checked with White		0		12	0		lb
RC1-099-005	5/17/2013	1			2	SEED					QC SEED #287		0		0	1	1	lb
RC1-099-006	5/17/2013	1			2	OTHER					Hot rocks, dirt, checked with White		0		12	0		lb
RC2-000-001	5/2/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-000-002	5/2/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-000-003	5/2/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-000-004	5/2/2013	1			1	MD					37 mm projo		0		2	1	2	lb
RC2-000-005	5/2/2013	1			1	CD					Debris braided hose		0		0	1	2	lb
RC2-000-006	5/2/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-000-007	5/2/2013	1			1	CD					Debis chain		0		0	1	3	lb
RC2-000-008	5/2/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-000-009	5/2/2013	1			1	CD					Debris braided hose		0		0	1	1.5	lb
RC2-000-010	5/2/2013	1			1	SEED					QC SEED #146		0		0	1	1	lb
RC2-000-011	5/2/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-000-012	5/2/2013	1			1	CD					Debis can		0		4	1	2	lb
RC2-002-001	5/2/2013	1			2	OTHER					Southwest corner nail		0		0	1	1	lb
RC2-002-002	5/2/2013	1			2	MD					Frag		0		4	3	1	lb
RC2-002-003	5/2/2013	1			2	MD					Frag, walls hot, bottom not hot		12	N	3	9	2	lb
RC2-002-004	5/2/2013	1			2	MD					Frag		0		3	2	0.25	lb
RC2-002-005	5/2/2013	1			2	SEED					QC SEED #149		0		0	1	1	lb
RC2-002-006	5/2/2013	1			2	OTHER					Same as #3		12	S		0		lb
RC2-002-007	5/2/2013	1			2	MD					Frag		0		9	1	0.5	lb
RC2-002-008	5/2/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC2-002-009	5/2/2013	1			2	MD					Frag, walls hot, bottom not hot		0		18	2	0.25	lb
RC2-002-010	5/2/2013	1			2	MD					Frag		0		3	2	0.25	lb
RC2-002-011	5/2/2013	1			2	MD					Frag		0		3	2	0.25	lb
RC2-002-012	5/2/2013	1			2	MD					Frag, checked with White--HSH		0		6	5	1	lb
RC2-002-013	5/2/2013	1			2	MD					Frag		0		5	1	1	lb
RC2-002-014	5/2/2013	1			2	MD					Frag		0		5	3	1	lb
RC2-002-015	5/2/2013	1			2	MD					Frag		0		6	2	0.5	lb
RC2-002-016	5/2/2013	1			2	MD					Frag		8	E	6	4	1	lb
RC2-002-017	5/2/2013	1			2	MD					Frag		0		6	4	0.5	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-002-018	5/2/2013	1			2	MD					Frag		0		5	2	0.5	lb
RC2-002-019	5/2/2013	1			2	MD					Frag		0		6	2	0.5	lb
RC2-002-020	5/2/2013	1			2	MD					Frag		0		10	5	2	lb
RC2-002-021	5/2/2013	1			2	MD					Frag		0		7	2	2	lb
RC2-002-022	5/2/2013	1			2	MD, CD					Frag (2), plow part (1)		6	N	14	3	1	lb
RC2-002-023	5/2/2013	1			2	MD					Frag		0		26	30	20	lb
RC2-004-001	5/1/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-004-002	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-004-003	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		16	0		lb
RC2-004-004	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		19	0		lb
RC2-004-005	5/1/2013	1			1	SEED					QC SEED #200		0		0	1		lb
RC2-004-006	5/1/2013	1			1	CD					Aluminum can, checked with Schonstedt & White		0		3	1	0.25	lb
RC2-005-001	4/29/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-005-002	4/29/2013	1			2	MD, CD					Wire, cartridge, frag		0		3	3	0.1	lb
RC2-005-003	4/29/2013	1			2	MD					Frag		0		4	6	1.5	lb
RC2-005-004	4/29/2013	1			2	MD, CD					Nail, frag		0		3	2	0.25	lb
RC2-005-005	4/29/2013	1			2	MD, CD					Cartridge (12), frag (3)		0		4	15	1	lb
RC2-005-006	4/29/2013	1			2	MD, CD					Cartridge (10), frag (2)		0		6	12	1.5	lb
RC2-005-007	4/29/2013	1			2	MD					Frag		0		6	3	0.5	lb
RC2-005-008	4/29/2013	1			2	MD					Frag		0		6	6	0.5	lb
RC2-005-009	4/29/2013	1			2	MD, CD					Cartridge (4), frag (1)		0		6	5	0.5	lb
RC2-005-010	4/29/2013	1			2	SEED					QC SEED #144		0		0	1	1	lb
RC2-006-001	4/15/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				12	3	0.5	lb
RC2-006-002	4/15/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				18	4	3	lb
RC2-006-003	4/15/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				14	4	0.5	lb
RC2-006-004	4/15/2013	1			1	MD, SEED, CD					Debris, Frag, QC SEED #10				14	3	0.25	lb
RC2-006-005	4/15/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				26	4	0.5	lb
RC2-006-006	4/15/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				14	2	5	lb
RC2-006-007	4/15/2013	1			1	MD, CD					Debris, frag				13	5	1	lb
RC2-006-008	4/15/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				28	3	1	lb
RC2-006-009	4/15/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				22	2	5	lb
RC2-006-010	4/15/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				12	20	10	lb
RC2-006-011	4/15/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				5	3	0.5	lb
RC2-006-012	4/15/2013	1			1	CD					Debris				13	5	0.25	lb
RC2-006-013	4/15/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				12	12	5	lb
RC2-006-014	4/15/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				14	2	0.5	lb
RC2-006-015	4/15/2013	1			1	MD, CD					Debris, frag--HSH				26	8	5.5	lb
RC2-006-016	4/15/2013	1			1	MD					Frag, checked with Schonstedt & White--HSH				24	4	0.25	lb
RC2-006-017	4/15/2013	1			1	CD					Debris				24	1	0.5	lb
RC2-006-018	4/15/2013	1			1	MD					Frag, checked with Schonstedt & White--HSH				23	1	0.25	lb
RC2-006-019	4/15/2013	1			1	MD, CD					Debris, frag, checked with Schonstedt & White--HSH				24	3	1.5	lb
RC2-006-020	5/15/2013	1			2	MD					Frag		0		6	1	1	lb
RC2-006-021	5/15/2013	1			2	MD					Frag		0		8	1	0.25	lb
RC2-006-022	5/15/2013	1			2	MD					Frag		0		10	2	1	lb
RC2-006-023	5/15/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC2-006-024	5/15/2013	1			2	MD, SEED					QC SEED #241, frag		0		10	3	1.5	lb
RC2-006-025	5/15/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-007-001	4/11/2013	1			1	MD, CD					SW corner nail, frag				3	2	1.25	lb

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RC2-007-002	4/11/2013	1			1	MD					Frag				4	4	1	lb
RC2-007-003	4/11/2013	1			1	MD					Frag				14	3	1	lb
RC2-007-004	4/11/2013	1			1	MD					Frag				16	8	0.75	lb
RC2-007-005	4/11/2013	1			1	MD					Frag				4	3	0.5	lb
RC2-007-006	4/11/2013	1			1	MD					Frag		6	E	2	3	0.25	lb
RC2-007-007	4/11/2013	1			1	MD					Frag, checked with Schonstedt & White--HSH				16	7	0.75	lb
RC2-007-008	4/11/2013	1			1	MD					Frag				6	3	1	lb
RC2-007-009	4/11/2013	1			1	MD					Frag				3	3	0.25	lb
RC2-007-010	4/11/2013	1			1	MD					Frag		2	E	12	4	0.25	lb
RC2-007-011	4/11/2013	1			1	MD					Frag				13	4	0.5	lb
RC2-007-012	4/11/2013	1			1	MD					Frag		6	N	14	2	0.25	lb
RC2-007-013	4/11/2013	1			1	MD, SEED					QC SEED #117, frag				16	4	0.5	lb
RC2-007-014	4/11/2013	1			1	MD					Frag		6	W	14	4	0.25	lb
RC2-007-015	4/11/2013	1			1	MD					Frag		6	N	15	2	0.5	lb
RC2-007-016	4/11/2013	1			1	OTHER					Same as #15		6	S				lb
RC2-007-017	4/11/2013	1			1	MD					Frag				16	7	1.5	lb
RC2-007-018	4/11/2013	1			1	MD					Frag				14	1	1	lb
RC2-007-019	4/11/2013	1			1	MD					Frag				14	3	0.25	lb
RC2-007-020	4/11/2013	1			1	MD					Frag		6	S	13	1	0.25	lb
RC2-007-021	4/11/2013	1			1	MD					Frag				14	4	0.25	lb
RC2-008-001	4/11/2013	1			1	MD, CD					SW corner nail, frag				1	2	1	lb
RC2-008-002	4/11/2013	1			1	MD					Frag				4	3	0.25	lb
RC2-008-003	4/11/2013	1			1	SEED					QC SEED #96				0	1	1	lb
RC2-008-004	4/11/2013	1			1	MD					Frag pit		3	N	16	5	1.25	lb
RC2-008-005	4/11/2013	1			1	MD					Frag		6	E	13	1	0.25	lb
RC2-008-006	4/11/2013	1			1	MD					Frag pit		3	E	6	4	0.5	lb
RC2-008-007	4/11/2013	1			1	MD					Frag		3	S	13	3	0.25	lb
RC2-008-008	4/11/2013	1			1	MD					Frag				4	3	0.5	lb
RC2-008-009	4/11/2013	1			1	MD					Frag				8	3	0.25	lb
RC2-008-010	4/11/2013	1			1	MD					Frag pit				9	4	0.25	lb
RC2-008-011	4/11/2013	1			1	MD					Frag				10	3	0.5	lb
RC2-008-012	4/11/2013	1			1	MD					Frag				22	3	1	lb
RC2-008-013	4/11/2013	1			1	MD					Frag				25	4	1.25	lb
RC2-009-001	4/11/2013	1			1	MD					Frag				13	3	1.5	lb
RC2-009-002	4/11/2013	1			1	MD					Frag		12	N	4	4	1	lb
RC2-009-003	4/11/2013	1			1	MD					Frag		12	W	5	4	1.5	lb
RC2-009-004	4/11/2013	1			1	MD					Frag , checked with Schonstedt & White--HSH				23	3	1	lb
RC2-009-005	4/11/2013	1			1	MD					Frag , checked with Schonstedt & White--HSH				16	9	1.5	lb
RC2-009-006	4/11/2013	1			1	MD					Frag				24	6	1.5	lb
RC2-009-007	4/11/2013	1			1	MD					Frag				4	4	1.5	lb
RC2-009-008	4/11/2013	1			1	MD					Frag , checked with Schonstedt & White--HSH				16	3	2	lb
RC2-009-009	4/11/2013	1			1	MD					Frag				24	3	1	lb
RC2-009-010	4/11/2013	1			1	SEED					QC SEED #115, frag		12	S	6	9	1.5	lb
RC2-009-011	4/11/2013	1			1	MD					Frag				24	3	0.5	lb
RC2-009-012	4/11/2013	1			1	MD					Frag		6	E	6	8	1.5	lb
RC2-009-013	4/11/2013	1			1	MD					Frag				3	3	0.5	lb
RC2-010-001	4/11/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				2	3	1	lb
RC2-010-002	4/11/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				4	4	1	lb

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RC2-010-003	4/11/2013	1			1	MD, CD					Debris, frag, checked with Schonstedt & White--HSH				3	3	0.25	lb
RC2-010-004	4/11/2013	1			1	MD, CD					Debris, frag, checked with Schonstedt & White--HSH				4	7	0.25	lb
RC2-010-005	4/11/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				3	2	1	lb
RC2-010-006	4/11/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				2	1	1	lb
RC2-010-007	4/11/2013	1			1	MD, CD					Debris, frag, checked with Schonstedt & White--HSH				5	5	2	lb
RC2-010-008	4/11/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				4	3	0.25	lb
RC2-010-009	4/11/2013	1			1	MD, CD					Debris, frag, checked with Schonstedt & White--HSH				4	5	2	lb
RC2-010-010	4/11/2013	1			1	MD, CD					Debris, frag, checked with Schonstedt & White--HSH				4	2	1	lb
RC2-010-011	4/11/2013	1			1	MD, CD					Debris, frag, checked with Schonstedt & White--HSH				6	8	1	lb
RC2-010-012	4/11/2013	1			1	CD					Debris				6	2	0.5	lb
RC2-010-013	4/11/2013	1			1	CD					Nails, checked with Schonstedt & White--HSH				3	7	0.25	lb
RC2-010-014	4/11/2013	1			1	CD					Debris, nails, checked with Schonstedt & White--HSH				4	6	1	lb
RC2-010-015	4/11/2013	1			1	CD					Debris, nails, checked with Schonstedt & White--HSH				4	5	0.25	lb
RC2-010-016	4/11/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				12	13	0.5	lb
RC2-010-017	4/11/2013	1			1	MD, CD					Debris, frag, checked with Schonstedt & White--HSH				3	3	1	lb
RC2-010-018	4/11/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				4	2	4	lb
RC2-010-019	4/11/2013	1			1	MD, CD					Debris, frag, checked with Schonstedt & White--HSH				5	8	1	lb
RC2-010-020	4/11/2013	1			1	MD, CD					Debris, frag, checked with Schonstedt & White--HSH				4	5	0.25	lb
RC2-010-021	4/11/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				3	3	1	lb
RC2-010-022	4/11/2013	1			1	MD, CD					Rotating band, 155mm, debris, checked with Schonstedt & White--HSH				3	3	5	lb
RC2-010-026	4/11/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				3	4	0.5	lb
RC2-010-027	4/11/2013	1			1	SEED					QC SEED #107, debris, checked with Schonstedt & White--HSH				0	3	1	lb
RC2-010-028	4/11/2013	1			1	MD, CD					Debris, frag, checked with Schonstedt & White--HSH				6	3	0.25	lb
RC2-011-001	4/19/2013	1			1	CD					SW corner nail		0		8	1	1	lb
RC2-011-002	4/19/2013	1			1	MD					Frag		6	W	6	4	1	lb
RC2-011-003	4/19/2013	1			1	MD					Frag		2	E	6	5	1	lb
RC2-011-006	4/19/2013	1			1	MD					Frag		6	E	6	5	2	lb
RC2-011-007	4/19/2013	1			1	MD					Frag		2	S	3	3	1	lb
RC2-011-008	4/19/2013	1			1	MD					Frag		0		4	3	1	lb
RC2-011-009	4/19/2013	1			1	NC					No contact, checked with Shconstedt & White		6	N				lb
RC2-011-010	4/19/2013	1			1	SEED					QC SEED #111, frag		0		0	3	1	lb
RC2-011-011	4/19/2013	1			1	MD					Frag		6	E	6	1	0.5	lb
RC2-011-012	4/19/2013	1			1	MD					Frag		6	W	6	2	0.75	lb
RC2-011-013	4/19/2013	1			1	MD					Frag				12	1	0.25	lb
RC2-011-015	4/19/2013	1			1	MD					Frag				6	1	0.25	lb
RC2-011-016	4/19/2013	1			1	CD					Metal bar between #16 & #20.Two mV readings because under #16 bar was deeper and #20 was at a 45 degree an		6	N	24	1	0.5	lb
RC2-011-017	4/19/2013	1			1	MD					Frag		12	W	4	1	0.25	lb
RC2-011-019	4/19/2013	1			1	MD					Frag		2	S	6	2	1	lb
RC2-011-020	4/19/2013	1			1	OTHER					Same as #16		0			0		lb
RC2-012-001	4/19/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-012-002	4/19/2013	1			2	MD					Frag		0		14	5	0.25	lb
RC2-012-003	4/19/2013	1			2	MD					Frag		0		12	2	0.2	lb
RC2-012-004	4/19/2013	1			2	MD					Frag		0		8	6	1	lb
RC2-012-005	4/19/2013	1			2	MD					Frag		0		10	6	3	lb
RC2-012-006	4/19/2013	1			2	MD					Frag		0		8	2	0.25	lb
RC2-012-007	4/19/2013	1			2	MD					Frag		0		10	7	0.75	lb
RC2-012-008	4/19/2013	1			2	MD					Frag		0		10	4	0.5	lb
RC2-012-011	4/19/2013	1			2	MD, SEED					Frag, QC SEED #112		0		2	2	1.2	lb

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RC2-012-012	4/19/2013	1			2	MD					Frag		0		10	4	0.5	lb
RC2-012-014	4/19/2013	1			2	MD					Frag		0		10	10	0.5	lb
RC2-012-016	4/19/2013	1			2	MD					Frag		0		12	6	1	lb
RC2-012-017	4/19/2013	1			2	MD					Frag, walls hot bottom not hot		6	S	24	7	0.5	lb
RC2-012-018	4/19/2013	1			2	MD					Frag		0		12	5	0.5	lb
RC2-012-019	4/19/2013	1			2	MD, CD					Frag, nail		0		6	2	0.5	lb
RC2-012-020	4/19/2013	1			2	MD					Frag		0		6	1	1	lb
RC2-012-021	4/19/2013	1			2	MD					Frag		0		10	6	0.5	lb
RC2-013-001	4/15/2013	1			1	MD, CD					SW corner stake pin, frag				4	2	0.25	lb
RC2-013-002	4/15/2013	1			1	MD					Frag				7	1	1	lb
RC2-013-003	4/15/2013	1			1	MD					Frag				7	3	1	lb
RC2-013-004	4/15/2013	1			1	MD, SEED					Frag, QC SEED #116				0	2	0.1	lb
RC2-013-005	4/15/2013	1			1	MD					Frag		6	S	6	4	1	lb
RC2-013-006	4/15/2013	1			1	MD					Frag				7	2	0.5	lb
RC2-013-007	4/15/2013	1			1	MD					Frag				15	2	0.5	lb
RC2-013-008	4/15/2013	1			1	MD					Frag, bottom checked with Schonstedt & White				28	1	0.5	lb
RC2-013-009	4/15/2013	1			1	MD					Frag				12	1	0.25	lb
RC2-013-010	4/15/2013	1			1	MD					Frag				15	2	1	lb
RC2-013-011	4/15/2013	1			1	MD					Frag				6	3	1	lb
RC2-013-012	4/15/2013	1			1	MD					Frag				14	2	0.5	lb
RC2-013-013	4/15/2013	1			1	MD					Frag				13	2	1	lb
RC2-013-014	4/15/2013	1			1	MD					Frag				14	2	1	lb
RC2-013-015	4/15/2013	1			1	MD					Frag				6	2	2	lb
RC2-013-016	4/15/2013	1			1	MD					Frag		2	N	12	1	1	lb
RC2-013-017	4/15/2013	1			1	MD					Frag		6	N	14	3	2	lb
RC2-013-018	4/15/2013	1			1	MD					Frag		6	N	6	3	1	lb
RC2-013-019	4/15/2013	1			1	MD					Frag		6	N	6	5	2	lb
RC2-013-020	4/15/2013	1			1	MD					Frag				12	1	1	lb
RC2-013-021	4/15/2013	1			1	MD					Frag				8	1	1	lb
RC2-013-022	4/15/2013	1			1	MD					Frag				13	2	0.5	lb
RC2-013-023	4/15/2013	1			1	MD					Frag		6	N	12	1	0.5	lb
RC2-016-001	4/16/2013	1			1	MD					Frag		0		16	5	1	lb
RC2-016-002	4/16/2013	1			1	MD					Frag		0		17	4	1	lb
RC2-016-003	4/16/2013	1			1	MD					Frag		0		17	3	1	lb
RC2-016-004	4/16/2013	1			1	MD					Frag		6	N	6	4	2	lb
RC2-016-005	4/16/2013	1			1	MD, SEED					QC SEED #125, frag		6	E	0	3	1	lb
RC2-016-006	4/16/2013	1			1	MD					Frag		0		5	4	1	lb
RC2-016-007	4/16/2013	1			1	MD					Frag		0		6	3	1	lb
RC2-016-008	4/16/2013	1			1	MD					Frag		6	W	4	2	0.25	lb
RC2-016-009	4/16/2013	1			1	MD					Frag		0		4	3	1	lb
RC2-016-010	4/16/2013	1			1	MD					Frag		6	E	6	4	0.5	lb
RC2-016-011	4/16/2013	1			1	MD					Frag, fuze		2	N	4	3	1	lb
RC2-016-012	4/16/2013	1			1	MD					Frag				4	3	0.5	lb
RC2-018-001	4/15/2013	1			1	MD					SW corner nail frag		0		4	8	2.5	lb
RC2-018-002	4/15/2013	1			1	MD					Frag		0		6	8	2	lb
RC2-018-003	4/15/2013	1			1	MD, SEED					QC SEED #114, frag		2	N	0	2	1	lb
RC2-018-004	4/15/2013	1			1	MD					Frag		0		5	2	0.25	lb
RC2-018-005	4/15/2013	1			1	MD					Frag		0		3	3	0.5	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-018-006	4/15/2013	1			1	MD					Frag		0		3	1	0.5	lb
RC2-018-007	4/15/2013	1			1	MD					Frag		0		4	4	0.5	lb
RC2-018-008	4/15/2013	1			1	MD					Frag pit, checked with Schonstedt & White--HSH		6	E	14	8	0.5	lb
RC2-018-009	4/15/2013	1			1	MD					Frag pit, checked with Schonstedt & White--HSH		0		14	8	0.5	lb
RC2-018-010	4/15/2013	1			1	MD					Frag		6	N	2	1	1	lb
RC2-018-011	4/15/2013	1			1	MD					Frag		0		3	3	0.5	lb
RC2-018-012	4/15/2013	1			1	MD					Frag		6	E	3	3	0.5	lb
RC2-018-013	4/15/2013	1			1	MD					Frag		0		4	3	0.5	lb
RC2-018-014	4/15/2013	1			1	MD					Frag		0		2	3	0.5	lb
RC2-018-015	4/15/2013	1			1	MD					Frag		2	W	2	2	0.5	lb
RC2-018-016	4/15/2013	1			1	MD					Frag		0		4	1	0.5	lb
RC2-018-017	4/15/2013	1			1	MD					Frag		2	N	2	2	0.5	lb
RC2-018-018	4/15/2013	1			1	MD					Frag		2	S	6	9	2	lb
RC2-019-001	4/26/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-019-002	4/26/2013	1			2	MD, SEED					QC SEED #123, frag		0		3	3	1.25	lb
RC2-019-003	4/26/2013	1			2	MD					Frag		6	NW	6	5	1.5	lb
RC2-019-004	4/26/2013	1			2	OTHER					Same as #3		6	SE	6	0	1.5	lb
RC2-019-005	4/26/2013	1			2	MD					Frag		0		8	3	0.75	lb
RC2-019-006	4/26/2013	1			2	MD					Frag		0		12	3	2	lb
RC2-019-007	4/26/2013	1			2	MD					Frag		0		2	4	1.5	lb
RC2-019-008	4/26/2013	1			2	MD					Frag		0		10	3	0.75	lb
RC2-019-009	5/1/2013	1			2	MD					Frag		0		6	3	0.25	lb
RC2-019-010	5/1/2013	1			2	MD					Frag		0		22	12	1.5	lb
RC2-019-011	5/1/2013	1			2	MD					Frag		12	NE	4	6	1	lb
RC2-019-012	5/1/2013	1			2	MEC, MD			M63		Frag, 37mm projo		12	E	3	6	1.5	lb
RC2-019-013	5/1/2013	1			2	MD					Frag		0		18	7	0.5	lb
RC2-019-014	5/1/2013	1			2	MD					Frag		0		15	5	0.5	lb
RC2-019-015	5/1/2013	1			2	MD					Frag		0		10	3	0.5	lb
RC2-019-016	5/1/2013	1			2	MD					Frag		0		21	6	1	lb
RC2-019-017	5/1/2013	1			2	MD					Frag		0		10	3	0.5	lb
RC2-019-018	5/1/2013	1			2	MD					Frag		0		13	4	0.5	lb
RC2-019-019	5/1/2013	1			2	MD					Frag		0		2	5	0.5	lb
RC2-019-020	5/1/2013	1			2	MD					Frag		0		26	5	0.5	lb
RC2-019-021	5/1/2013	1			2	MD					Frag		0		3	6	0.5	lb
RC2-019-022	5/1/2013	1			2	MD					Frag		0		12	8	0.25	lb
RC2-019-023	5/1/2013	1			2	MD					Frag		0		3	6	0.5	lb
RC2-021-001	4/16/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-021-002	4/16/2013	1			2	SEED					QC SEED #153		12	SE	0	1	1	lb
RC2-021-003	4/16/2013	1			2	MD					Frag		6	E	3	1	1	lb
RC2-021-004	4/16/2013	1			2	MD					Frag		0		8	2	0.25	lb
RC2-021-005	4/16/2013	1			2	MD					Frag		12	E	6	4	0.75	lb
RC2-021-006	4/16/2013	1			2	MD					Frag		0		5	2	0.5	lb
RC2-021-007	4/16/2013	1			2	MD					Frag		0		18	7	0.75	lb
RC2-021-008	4/16/2013	1			2	MD					Frag		0		4	5	0.5	lb
RC2-021-009	4/16/2013	1			2	MD					Frag		0		6	3	0.5	lb
RC2-021-010	4/16/2013	1			2	MD					Frag		0		8	8	0.75	lb
RC2-021-011	4/16/2013	1			2	MD					Frag		0		16	4	1.25	lb
RC2-021-012	4/16/2013	1			2	MD					Frag, rust		0		13	6	0.25	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-021-013	4/16/2013	1			2	MD					Frag, rust		0		4	9	1	lb
RC2-021-014	4/16/2013	1			2	MD					Frag		0		3	1	0.1	lb
RC2-021-015	4/16/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC2-021-016	4/16/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC2-021-017	4/16/2013	1			2	MD					Frag		0		2	2	0.25	lb
RC2-021-018	4/16/2013	1			2	MD					Frag		0		2	3	0.25	lb
RC2-024-001	4/11/2013	1			1	CD					SW corner nail				0	1	1	lb
RC2-024-002	4/11/2013	1			1	MD					Frag		6	N	3	3	0.25	lb
RC2-024-003	4/11/2013	1			1	MD					Frag				3	3	0.5	lb
RC2-024-004	4/11/2013	1			1	MD					Frag				2	1	0.5	lb
RC2-024-005	4/11/2013	1			1	MD					Frag				13	5	1.25	lb
RC2-024-006	4/11/2013	1			1	MD					Frag				13	4	1	lb
RC2-024-007	4/11/2013	1			1	MD					Frag pit--HSH				26	8	1.5	lb
RC2-024-008	4/11/2013	1			1	MD					Frag				6	3	0.25	lb
RC2-024-009	4/11/2013	1			1	MD					Frag				14	2	0.25	lb
RC2-024-010	4/11/2013	1			1	MD					Frag		12	W	13	3	1	lb
RC2-024-011	4/11/2013	1			1	MD					Frag		4	W	14	3	0.5	lb
RC2-024-012	4/11/2013	1			1	MD					Frag				16	4	0.5	lb
RC2-024-013	4/11/2013	1			1	MD, SEED					QC SEED #99, Frag				0	2	1	lb
RC2-025-001	4/12/2013	1			1	CD					SW corner nail				0	1	1	lb
RC2-025-002	4/12/2013	1			1	MD					Frag				3	2	0.5	lb
RC2-025-003	4/12/2013	1			1	MD					Frag		12	W	4	5	1	lb
RC2-025-004	4/12/2013	1			1	MD					Frag pit				18	6	1	lb
RC2-025-005	4/12/2013	1			1	MD					Frag				4	6	0.5	lb
RC2-025-006	4/12/2013	1			1	MD					Frag				6	4	0.5	lb
RC2-025-007	4/12/2013	1			1	MD					Frag				6	8	1	lb
RC2-025-008	4/12/2013	1			1	MD					Frag				6	4	1	lb
RC2-025-009	4/12/2013	1			1	MD					Frag				3	4	1	lb
RC2-025-010	4/12/2013	1			1	MD					Frag				6	4	1	lb
RC2-025-011	4/12/2013	1			1	MD					Frag				14	3	1	lb
RC2-025-012	4/12/2013	1			1	MD					Frag				4	3	1.5	lb
RC2-025-013	4/12/2013	1			1	MD					Frag				4	6	1	lb
RC2-025-014	4/12/2013	1			1	MD					Frag				3	6	1	lb
RC2-025-015	4/12/2013	1			1	MD					Frag pit--HSH				14	6	1	lb
RC2-025-016	4/12/2013	1			1	SEED					QC SEED #120				0	1	1	lb
RC2-027-001	4/19/2013	1			1	MD, CD					Southwest corner nail		0		8	2	2	lb
RC2-027-002	4/19/2013	1			1	MD					Frag		0		4	3	2	lb
RC2-027-004	4/19/2013	1			1	MD					Frag		0		6	3	1	lb
RC2-027-005	4/19/2013	1			1	SEED					QC SEED #167		2	S	0	1	1	lb
RC2-027-007	4/19/2013	1			1	MD					Frag		0		6	4	4	lb
RC2-027-008	4/19/2013	1			1	MD					Frag		0		7	6	1	lb
RC2-027-009	4/19/2013	1			1	MD					Frag, fuze part		0		12	2	0.5	lb
RC2-027-012	4/19/2013	1			1	MD					Frag		0		6	2	0.5	lb
RC2-027-014	4/19/2013	1			1	MD					Frag		0		6	1	1	lb
RC2-027-015	4/19/2013	1			1	MD					Frag		0		6	2	1	lb
RC2-027-017	4/19/2013	1			1	MD					Frag		0		6	4	1	lb
RC2-027-018	4/19/2013	1			1	MD					Frag		0		7	5	2	lb
RC2-027-019	4/19/2013	1			1	MD					Frag		0		8	5	1	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-027-020	4/19/2013	1			1	MD					Frag		0		4	4	0.5	lb
RC2-027-021	4/19/2013	1			1	MD					Frag		0		9	4	0.5	lb
RC2-027-023	4/19/2013	1			1	MD					Frag		0		8	5	0.5	lb
RC2-027-024	4/19/2013	1			1	MD, CD					Frag, debris		0		12	2	5	lb
RC2-027-025	4/19/2013	1			1	MD					Frag		0		8	1	0.5	lb
RC2-027-026	4/19/2013	1			1	MD					Frag		2	W	18	1	0.25	lb
RC2-027-027	4/19/2013	1			1	MD					Frag		0		6	3	1	lb
RC2-027-028	4/19/2013	1			1	MD					Frag		0		8	5	1	lb
RC2-027-029	4/19/2013	1			1	MD					Frag		0		4	3	0.5	lb
RC2-027-030	4/19/2013	1			1	MD					Frag		0		6	3	1.5	lb
RC2-027-031	4/19/2013	1			1	MD					Frag		0		8	3	0.5	lb
RC2-027-032	4/19/2013	1			1	MD					Frag		0		18	2	0.25	lb
RC2-027-033	4/19/2013	1			1	MD					Frag		0		12	2	0.5	lb
RC2-027-034	4/19/2013	1			1	MD					Frag		2	W	6	2	1	lb
RC2-027-036	4/19/2013	1			1	MD					Frag		0		6	2	0.25	lb
RC2-027-037	4/19/2013	1			1	MD					Frag		0		6	6	1	lb
RC2-027-038	4/19/2013	1			1	MD					Frag		12	N	14	2	1	lb
RC2-029-001	5/1/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-029-002	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-029-003	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		17	0		lb
RC2-029-004	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		20	0		lb
RC2-029-005	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-029-006	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		21	0		lb
RC2-029-007	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		14	0		lb
RC2-029-008	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		4	S	18	0		lb
RC2-029-009	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		2	E	18	0		lb
RC2-029-010	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-029-011	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		20	0		lb
RC2-029-012	5/1/2013	1			1	SEED					QC SEED #171, checked with Schonstedt & White		0		0	1	1	lb
RC2-029-013	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		17	0		lb
RC2-030-001	4/19/2013	1			1	MD, CD					Frag, SW corner nail				6	2	1	lb
RC2-030-003	4/19/2013	1			1	MD					Frag		2	E	12	2	1.5	lb
RC2-030-004	4/19/2013	1			1	MD					Frag		6	E	5	2	1	lb
RC2-030-005	4/19/2013	1			1	MD					Frag				6	5	2	lb
RC2-030-006	4/19/2013	1			1	MD					Frag				8	3	1	lb
RC2-030-011	4/19/2013	1			1	MD					Frag		2	E	5	3	1	lb
RC2-030-013	4/19/2013	1			1	MD					Frag		2	S	8	3	1	lb
RC2-030-015	4/19/2013	1			1	MD					Frag				6	1	0.5	lb
RC2-030-016	4/19/2013	1			1	CD					Bolt		2	E	8	1	0.5	lb
RC2-030-017	4/19/2013	1			1	MD					Frag		2	E	7	1	0.25	lb
RC2-030-018	4/19/2013	1			1	MD					Frag		12	E	6	2	1	lb
RC2-030-019	4/19/2013	1			1	MD					Frag				8	1	0.5	lb
RC2-030-020	4/19/2013	1			1	MD					Frag		2	S	6	1	0.5	lb
RC2-030-021	4/19/2013	1			1	MD					Frag				7	4	1	lb
RC2-030-022	4/19/2013	1			1	MD					Frag		4	N	6	1	0.5	lb
RC2-030-023	4/19/2013	1			1	MD, CD					Debris, frag		8	N	4	4	2	lb
RC2-030-024	4/19/2013	1			1	CD					Debris		12	E	4	1	0.5	lb
RC2-030-025	4/19/2013	1			1	MD					T-bar fuze		3	S	12	1	1	lb

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RC2-030-026	4/19/2013	1			1	MD					Frag		2	N	12	1	0.25	lb
RC2-030-027	4/19/2013	1			1	NC					No contact, checked with Schonstedt & White					0		lb
RC2-030-028	4/19/2013	1			1	MD					Frag		24	E	12	3	1.5	lb
RC2-030-029	4/19/2013	1			1	SEED					QC SEED #170		2	E	0	1	1	lb
RC2-030-030	4/19/2013	1			1	MD					Frag		12	E	5	3	1	lb
RC2-030-031	4/19/2013	1			1	MD					Frag		12	S	4	2	1	lb
RC2-030-032	4/19/2013	1			1	MD					Frag		12	E	3	1	1	lb
RC2-030-033	4/19/2013	1			1	MD					Frag		2	N	5	3	0.5	lb
RC2-030-034	4/19/2013	1			1	CD					Horseshoe		12	N	2	1	2	lb
RC2-030-037	4/19/2013	1			1	MD					Frag		12	N	6	2	1.5	lb
RC2-030-038	4/19/2013	1			1	MD, CD					Frag, debris		18	N	10	2	1	lb
RC2-030-039	4/19/2013	1			1	MD					Frag		8	N	6	1	0.5	lb
RC2-031-001	4/22/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-031-003	4/22/2013	1			1	MD					Frag--HSH		12	S	12	4	1.5	lb
RC2-031-004	4/22/2013	1			1	MD					Frag		4	E	5	4	1	lb
RC2-031-006	4/22/2013	1			1	MD					Frag		2	S	3	1	2	lb
RC2-031-007	4/22/2013	1			1	MD					Frag		0		3	3	0.5	lb
RC2-031-009	4/22/2013	1			1	MD					Frag		6	E	12	1	1	lb
RC2-031-010	4/22/2013	1			1	MD					Frag		4	S	4	5	1	lb
RC2-031-011	4/22/2013	1			1	MD					Frag		0		6	3	1	lb
RC2-031-012	4/22/2013	1			1	MD					Frag		0		6	4	2	lb
RC2-031-013	4/22/2013	1			1	MD					Frag		0		6	5	1	lb
RC2-031-014	4/22/2013	1			1	MD					Frag		0		4	6	2	lb
RC2-031-015	4/22/2013	1			1	MD, SEED					QC SEED #163, frag		0		0	7	1	lb
RC2-031-016	4/22/2013	1			1	MD					Frag		6	W	12	3	1	lb
RC2-031-017	4/22/2013	1			1	CD					Horseshoe--HSH		4	S	16	1	2	lb
RC2-031-018	4/22/2013	1			1	MD					Frag		12	W	2	1	0.5	lb
RC2-031-019	4/22/2013	1			1	OTHER					Same as #18		12	S		0		lb
RC2-031-020	4/22/2013	1			1	MD					Tail boom		2	S	1	1	3	lb
RC2-031-021	4/22/2013	1			1	MD					Frag		12	N	6	1	0.5	lb
RC2-031-022	4/22/2013	1			1	OTHER					Same as #21		12	S		0		lb
RC2-031-023	4/22/2013	1			1	MD					Frag		0		7	3	1.5	lb
RC2-031-024	4/22/2013	1			1	MD					Frag--HSH		16	S	7	4	1.5	lb
RC2-031-025	4/22/2013	1			1	MD					Frag		0		6	3	1	lb
RC2-031-026	4/22/2013	1			1	MD					Frag		0		7	2	1	lb
RC2-031-027	4/22/2013	1			1	MD					Frag		0		7	6	1	lb
RC2-031-028	4/22/2013	1			1	MD					Frag--HSH		8	E	16	3	1	lb
RC2-031-029	4/22/2013	1			1	MD					Fuze, frag--HSH		0		16	4	1.5	lb
RC2-031-030	4/22/2013	1			1	MD					Frag--HSH		12	S	6	4	1.75	lb
RC2-031-031	4/22/2013	1			1	MD					Frag		0		4	4	1	lb
RC2-031-033	4/22/2013	1			1	MD					Frag--HSH		0		18	2	1.75	lb
RC2-031-034	4/22/2013	1			1	MD					Frag		0		6	5	1.5	lb
RC2-031-035	4/22/2013	1			1	MD					Frag		0		3	1	1	lb
RC2-031-036	4/22/2013	1			1	MD					Frag		2	E	4	1	2	lb
RC2-031-037	4/22/2013	1			1	CD					Debris--HSH		6	N	18	1	1	lb
RC2-031-038	4/22/2013	1			1	MD					Frag--HSH		0		16	3	2	lb
RC2-031-039	4/22/2013	1			1	MD					Frag--HSH		0		16	3	3	lb
RC2-031-040	4/22/2013	1			1	MD					Frag		2	S	3	1	3	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-031-041	4/22/2013	1			1	MD					Frag--HSH		0		16	2	1.5	lb
RC2-031-042	4/22/2013	1			1	MD					Frag		0		6	2	1.5	lb
RC2-031-044	4/22/2013	1			1	CD					Debris--HSH		6	E	18	4	20	lb
RC2-031-046	4/22/2013	1			1	MD, CD					Frag, nail--HSH		0		16	2	2	lb
RC2-031-047	4/22/2013	1			1	MD					Frag		0		7	5	1	lb
RC2-032-001	4/19/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-032-002	4/19/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-032-003	4/19/2013	1			2	MD					Frag		0		10	1	0.5	lb
RC2-032-004	4/19/2013	1			2	MD, OTHER					Frag, hot red brick in walls, bottom not hot, checked with White		0		30	1	0.5	lb
RC2-032-005	4/19/2013	1			2	MD					Frag		6	N	10	1	0.25	lb
RC2-032-006	4/19/2013	1			2	MD					Frag		0		7	1	0.1	lb
RC2-032-007	4/19/2013	1			2	MD, CD					Plow part, frag (2)		0		10	3	1.5	lb
RC2-032-008	4/19/2013	1			2	MD, OTHER					Frag, hot rock in wall, bottom not hot, checked with White		0		10	2	2	lb
RC2-032-009	4/19/2013	1			2	SEED					QC SEED #101		0		0	1	1	lb
RC2-032-010	4/19/2013	1			2	MD					Frag		6	N	10	1	0.25	lb
RC2-032-011	4/19/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC2-032-012	4/19/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-032-013	4/19/2013	1			2	OTHER					Hot rocks, checked with White		0		3	3		lb
RC2-032-014	4/19/2013	1			2	MD					Frag		0		5	1	0.25	lb
RC2-032-015	4/19/2013	1			2	MD					Frag, fuze, walls hot bottom not		0		36	30	4	lb
RC2-032-016	4/19/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-032-017	4/19/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC2-032-018	4/19/2013	1			2	MD					Frag		12	E	4	1	0.75	lb
RC2-032-019	4/19/2013	1			2	MD					Frag		0		6	1	0.75	lb
RC2-032-020	4/19/2013	1			2	OTHER					Same as #18		12	W		0		lb
RC2-032-021	4/19/2013	1			2	MD					Frag		0		6	2	1.5	lb
RC2-032-022	4/19/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-032-023	4/19/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-032-024	4/19/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-033-001	4/26/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-033-002	4/26/2013	1			2	MD					Frag		0		3	1	0.1	lb
RC2-033-003	4/26/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC2-033-004	4/26/2013	1			2	MD					Frag		0		4	4	0.5	lb
RC2-033-005	4/26/2013	1			2	MD					Frag		0		5	2	0.25	lb
RC2-033-006	4/26/2013	1			2	MD					Frag		0		4	2	0.25	lb
RC2-033-007	4/26/2013	1			2	MD					Frag		0		3	1	0.2	lb
RC2-033-008	4/26/2013	1			2	MD					Frag		0		5	2	0.25	lb
RC2-033-009	4/26/2013	1			2	MD					Frag		0		5	2	0.25	lb
RC2-033-010	4/26/2013	1			2	MD, SEED					QC SEED #183, frag		0		4	2	1	lb
RC2-033-011	4/26/2013	1			2	MD					Frag		0		5	2	0.25	lb
RC2-033-012	4/26/2013	1			2	MD					Frag		0		4	1	0.2	lb
RC2-033-013	4/26/2013	1			2	MD					Frag		0		3	2	0.2	lb
RC2-033-014	4/26/2013	1			2	MD					Frag		0		3	2	0.25	lb
RC2-033-015	4/26/2013	1			2	MD					Frag		10	NW	3	4	0.5	lb
RC2-033-016	4/26/2013	1			2	MD					Frag		0		6	3	0.5	lb
RC2-033-017	4/26/2013	1			2	MD					Frag		6	SE	3	1	0.25	lb
RC2-033-018	4/26/2013	1			2	MD					Frag		6	SW	4	1	0.5	lb
RC2-033-019	4/26/2013	1			2	MD					Frag		0		2	2	0.5	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-033-020	4/26/2013	1			2	MD					Frag		0		3	1	0.25	lb
RC2-033-021	4/26/2013	1			2	MD					Frag		12	SE	2	1	0.2	lb
RC2-033-022	4/26/2013	1			2	MD					Frag		0		2	2	0.5	lb
RC2-033-023	4/26/2013	1			2	MD					Frag		10	SE	3	1	0.2	lb
RC2-033-024	4/26/2013	1			2	MD					Frag		0		1	1	0.25	lb
RC2-033-025	4/26/2013	1			2	MD					Frag		10	SW	3	2	0.5	lb
RC2-033-026	4/26/2013	1			2	MD					Frag		6	SE	4	3	0.5	lb
RC2-033-027	4/26/2013	1			2	MD					Frag		0		6	4	0.75	lb
RC2-033-028	4/26/2013	1			2	MD					Frag		6	NE	4	4	0.75	lb
RC2-033-029	4/26/2013	1			2	MD					Frag		0		3	3	0.25	lb
RC2-033-030	4/26/2013	1			2	MD					Frag		0		6	4	1.5	lb
RC2-033-031	4/26/2013	1			2	MD					Frag		0		4	2	0.5	lb
RC2-034-001	5/2/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-034-007	5/2/2013	1			2	SEED					QC SEED #154		0		0	1	1	lb
RC2-034-009	5/2/2013	1			2	MD					Frag		0		4	2	0.25	lb
RC2-034-010	5/2/2013	1			2	MD					Frag		0		3	1	0.25	lb
RC2-034-013	5/2/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-035-001	4/12/2013	1			1	CD					SW corner nail				0	1	1	lb
RC2-035-002	4/12/2013	1			1	MD					Frag				3	2	0.5	lb
RC2-035-003	4/12/2013	1			1	MD					Frag				4	3	1	lb
RC2-035-004	4/12/2013	1			1	MD					Frag				7	3	1	lb
RC2-035-005	4/12/2013	1			1	MD					Frag				4	2	1	lb
RC2-035-006	4/12/2013	1			1	MD					Frag				3	2	0.5	lb
RC2-035-007	4/12/2013	1			1	MD					Frag				5	2	0.5	lb
RC2-035-008	4/12/2013	1			1	MD					Frag				6	4	3	lb
RC2-035-009	4/12/2013	1			1	MD					Frag				3	2	1	lb
RC2-035-010	4/12/2013	1			1	MD					Frag				4	3	1	lb
RC2-035-011	4/12/2013	1			1	MD, SEED					QC SEED #106, frag				0	2	1	lb
RC2-035-012	4/12/2013	1			1	MD					Frag				4	2	0.5	lb
RC2-035-013	4/12/2013	1			1	MD					Frag				3	5	2	lb
RC2-035-014	4/12/2013	1			1	MD					Frag				5	2	1.5	lb
RC2-035-015	4/12/2013	1			1	MD					Frag				4	1	0.25	lb
RC2-035-016	4/12/2013	1			1	MD					Frag				5	3	1	lb
RC2-035-017	4/12/2013	1			1	MD					Frag				4	2	0.5	lb
RC2-035-018	4/12/2013	1			1	MD					Frag				4	1	0.5	lb
RC2-035-019	4/12/2013	1			1	MD					Frag				7	2	0.5	lb
RC2-035-020	4/12/2013	1			1	MD					Frag				3	3	1	lb
RC2-035-021	4/12/2013	1			1	MD					Frag				4	4	1	lb
RC2-035-022	4/12/2013	1			1	MD					Frag				3	3	1	lb
RC2-035-023	4/12/2013	1			1	MD					Frag				6	3	1	lb
RC2-035-024	4/12/2013	1			1	MD					Frag				4	4	1	lb
RC2-035-025	4/12/2013	1			1	MD					Frag		12	E	4	3	1	lb
RC2-037-001	5/20/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-037-002	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-037-003	5/20/2013	1			1	MD					Frag		0		6	1	0.25	lb
RC2-037-004	5/20/2013	1			1	MD					Frag		12	S	7	2	0.5	lb
RC2-037-005	5/20/2013	1			1	MD					Frag		0		3	1	0.5	lb
RC2-037-006	5/20/2013	1			1	MD					Frag		0		8	1	1	lb

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RC2-037-007	5/20/2013	1			1	MD					Frag		6	E	6	1	0.5	lb
RC2-037-008	5/20/2013	1			1	SEED					QC SEED #301		0		0	1	1	lb
RC2-037-009	5/20/2013	1			1	MD					Frag		6	S	4	1	0.5	lb
RC2-037-010	5/20/2013	1			1	MD					Frag		0		3	1	0.5	lb
RC2-037-011	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-037-012	5/20/2013	1			1	MD					Frag		0		6	3	0.5	lb
RC2-037-013	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-037-014	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-037-015	5/20/2013	1			1	MD					Frag		6	E	3	1	0.25	lb
RC2-037-016	5/20/2013	1			1	MD					Frag		0		5	2	0.5	lb
RC2-039-001	4/24/2013	1			1	MD					Frag		6	E	4	1	0.5	lb
RC2-039-002	4/24/2013	1			1	MD, CD					Southwest corner nail		0		8	2	1	lb
RC2-039-003	4/24/2013	1			1	MD					Frag		4	W	4	3	0.5	lb
RC2-039-004	4/24/2013	1			1	MD					Frag		6	E	6	2	1	lb
RC2-039-005	4/24/2013	1			1	MD					Frag		0		5	3	1	lb
RC2-039-006	4/24/2013	1			1	MD					Frag		6	N	4	2	1	lb
RC2-039-007	4/24/2013	1			1	MD					Frag		4	N	4	1	0.5	lb
RC2-039-008	4/24/2013	1			1	MD					Frag		0		5	2	1	lb
RC2-039-009	4/24/2013	1			1	MD					Frag		0		6	3	1	lb
RC2-039-010	4/24/2013	1			1	MD					Frag		4	E	4	1	0.5	lb
RC2-039-011	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White					0		lb
RC2-039-012	4/24/2013	1			1	MD					Frag		6	W	6	1	1	lb
RC2-039-013	4/24/2013	1			1	MD					Frag		2	S	6	1	1	lb
RC2-039-014	4/24/2013	1			1	MD					Frag				6	2	1	lb
RC2-039-015	4/24/2013	1			1	MD					Frag		6	W	6	1	1	lb
RC2-039-016	4/24/2013	1			1	MD					Frag		4	W	6	1	1	lb
RC2-039-017	4/24/2013	1			1	MD					Frag		0		2	1	0.5	lb
RC2-039-018	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White					0		lb
RC2-039-019	4/24/2013	1			1	MD					Frag		0		6	1	1	lb
RC2-039-020	4/24/2013	1			1	SEED					QC SEED #169		0		0	1	1	lb
RC2-039-021	4/24/2013	1			1	MD					Frag		4	S	6	1	1.5	lb
RC2-040-001	4/29/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-040-002	4/29/2013	1			2	OTHER					Hot rocks, checked with Schonstedt & White		0		16	0		lb
RC2-040-003	4/29/2013	1			2	CD					Rail road spike		12	E	12	2	0.5	lb
RC2-040-004	4/29/2013	1			2	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-040-005	4/29/2013	1			2	SEED					QC SEED #165		0		0	1	1	lb
RC2-040-006	4/29/2013	1			2	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-040-007	4/29/2013	1			2	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-040-008	4/29/2013	1			2	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-040-009	4/29/2013	1			2	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-040-010	4/29/2013	1			2	OTHER					Hot rocks, checked with Schonstedt & White		0		24	0		lb
RC2-040-011	4/29/2013	1			2	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-040-012	4/29/2013	1			2	CD					File		6	W	4	1	0.5	lb
RC2-041-001	5/1/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-041-002	5/1/2013	1			1	MD					Frag		12	N	6	3	0.5	lb
RC2-041-003	5/1/2013	1			1	MD					Frag		0		6	1	2	lb
RC2-041-004	5/1/2013	1			1	MD					Frag pit--HSH		5	N	30	5	1	lb
RC2-041-005	5/1/2013	1			1	MD					Frag		6	W	4	4	0.5	lb

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RC2-041-006	5/1/2013	1			1	MD					Frag		0		8	2	1	lb
RC2-041-007	5/1/2013	1			1	MD					Frag		12	E	6	4	0.5	lb
RC2-041-008	5/1/2013	1			1	MD					Frag		0		6	3	0.5	lb
RC2-041-009	5/1/2013	1			1	MD					Frag		12	E	6	2	0.5	lb
RC2-041-010	5/1/2013	1			1	MD					Frag		0		12	5	0.5	lb
RC2-041-011	5/1/2013	1			1	MD					Frag		0		12	4	1	lb
RC2-041-012	5/1/2013	1			1	MD					Frag		0		4	2	0.25	lb
RC2-041-013	5/1/2013	1			1	MD					Frag		12	S	5	3	0.25	lb
RC2-041-014	5/1/2013	1			1	MD					Frag		0		5	2	0.5	lb
RC2-041-015	5/1/2013	1			1	MD					Frag		6	E	12	5	1.5	lb
RC2-041-016	5/1/2013	1			1	MD					Frag pit--HSH		6	N	30	5	1	lb
RC2-041-017	5/1/2013	1			1	MD					Frag, fuze piece		0		6	4	1	lb
RC2-041-018	5/1/2013	1			1	MD					Frag pit--HSH		6	N	24	3	1.5	lb
RC2-041-019	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-041-020	5/1/2013	1			1	MD					Frag		0		6	5	1	lb
RC2-041-021	5/1/2013	1			1	MD					Frag		0		4	3	0.5	lb
RC2-041-022	5/1/2013	1			1	MD					Frag		6	S	6	2	1	lb
RC2-041-023	5/1/2013	1			1	MD					Frag		6	E	6	1	1	lb
RC2-041-024	5/1/2013	1			1	MD					Frag		12	E	6	5	0.75	lb
RC2-041-025	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-041-026	5/1/2013	1			1	MD					Frag		6	E	4	1	0.5	lb
RC2-041-027	5/1/2013	1			1	MD					Frag		3	E	6	1	0.25	lb
RC2-041-028	5/1/2013	1			1	MD					Frag		0		12	6	0.75	lb
RC2-041-029	5/1/2013	1			1	MD					Frag		4	W	6	2	0.5	lb
RC2-041-030	5/1/2013	1			1	MD					Frag pit--HSH		0		24	5	1	lb
RC2-041-031	5/1/2013	1			1	MD					Frag pit--HSH		0		24	6	1.5	lb
RC2-041-032	5/1/2013	1			1	MD					Frag		0		24	7	1.25	lb
RC2-041-033	5/1/2013	1			1	MD					Frag pit		0		24	5	1	lb
RC2-041-034	5/1/2013	1			1	MD, SEED					QC SEED #161, frag		0		0	3	1.5	lb
RC2-041-035	5/1/2013	1			1	MD					Frag pit		0		24	7	1.5	lb
RC2-041-036	5/1/2013	1			1	MD					Frag		0		6	1	0.25	lb
RC2-041-037	5/1/2013	1			1	MD					Frag pit--HSH		0		24	6	1.5	lb
RC2-041-038	5/1/2013	1			1	MD					Frag		0		4	1	0.25	lb
RC2-041-039	5/1/2013	1			1	MD					Frag		6	W	6	3	1	lb
RC2-041-040	5/1/2013	1			1	MD					Frag		12	W	6	1	0.5	lb
RC2-041-041	5/1/2013	1			1	MD					Frag pit		0		14	5	1	lb
RC2-041-042	5/1/2013	1			1	MD					Frag pit		12	N	12	5	0.25	lb
RC2-041-043	5/1/2013	1			1	MD					Frag		0		6	5	0.5	lb
RC2-041-044	5/1/2013	1			1	MD					Frag		6	E	6	3	1	lb
RC2-041-045	5/1/2013	1			1	MD					Frag pit--HSH		0		24	5	1.5	lb
RC2-042-001	5/10/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-042-002	5/10/2013	1			2	CD					Plow part		0		6	1	1.5	lb
RC2-042-003	5/10/2013	1			2	CD					Wire, nails		0		6	2	0.5	lb
RC2-042-004	5/10/2013	1			2	SEED					QC SEED #103		0		0	1	1	lb
RC2-042-005	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-042-006	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-042-007	5/10/2013	1			2	CD					Plow part		12	NW	12	1	4	lb
RC2-042-008	5/10/2013	1			2	CD					Chain		0		4	1	2	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-042-009	5/10/2013	1			2	CD					Plow parts		0		2	2	5	lb
RC2-042-010	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-042-011	5/10/2013	1			2	CD					Plow part		0		12	1	4	lb
RC2-042-012	5/10/2013	1			2	CD					Plow parts		0		8	2	5	lb
RC2-042-013	5/10/2013	1			2	CD					Plow part, metal plate		0		3	2	6	lb
RC2-042-014	5/10/2013	1			2	CD					Horseshoe		0		6	1	0.5	lb
RC2-042-015	5/10/2013	1			2	CD					Metal rod		0		6	1	1	lb
RC2-042-016	5/10/2013	1			2	CD					Plow part		0		6	1	0.25	lb
RC2-042-017	5/10/2013	1			2	OTHER					Same as #19		6	W	12	0	5	lb
RC2-042-018	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-042-019	5/10/2013	1			2	CD					Plow part		6	E	12	1	5	lb
RC2-042-020	5/10/2013	1			2	CD					Plow part		0		10	1	2	lb
RC2-042-021	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-042-022	5/10/2013	1			2	CD					Caster		0		12	1	0.25	lb
RC2-042-023	5/10/2013	1			2	CD					Horseshoe, nails		0		8	3	0.75	lb
RC2-042-024	5/10/2013	1			2	CD					Plow parts		0		12	3	5	lb
RC2-042-025	5/10/2013	1			2	OTHER					Hot rock, bottom not hot, checked with White		0		12	0		lb
RC2-042-026	5/10/2013	1			2	CD					Horseshoe		0		10	1	0.5	lb
RC2-042-027	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-042-028	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-042-029	5/10/2013	1			2	CD					Strap metal, nails		0		6	3	1.5	lb
RC2-042-030	5/10/2013	1			2	CD					Plow part, nails		0		6	4	2	lb
RC2-042-031	5/10/2013	1			2	CD					Plow part		0		12	1	6	lb
RC2-042-032	5/10/2013	1			2	OTHER					Same as #33		12	N	12	0	3	lb
RC2-042-033	5/10/2013	1			2	CD					Steel bar		0		12	1	3	lb
RC2-042-034	5/10/2013	1			2	CD					Plow parts, metal rod		0		10	6	5	lb
RC2-042-035	5/10/2013	1			2	CD					Shackle		0		12	1	1	lb
RC2-042-036	5/10/2013	1			2	CD					Plow part		0		12	1	5	lb
RC2-042-037	5/10/2013	1			2	CD					Wire		0		2	4	0.2	lb
RC2-042-038	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-042-039	5/10/2013	1			2	CD					Plow part, nails		0		16	7	8	lb
RC2-042-040	5/10/2013	1			2	CD					Plow parts		0		10	2	5	lb
RC2-042-041	5/10/2013	1			2	CD					Plow part		0		8	1	4	lb
RC2-043-001	4/16/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-043-002	4/16/2013	1			2	MD					Frag		0		4	2	0.5	lb
RC2-043-003	4/16/2013	1			2	MD					Frag		0		8	2	0.75	lb
RC2-043-004	4/16/2013	1			2	MD					Frag		0		14	2	0.5	lb
RC2-043-005	4/16/2013	1			2	CD					Nail		0		13	1	0.1	lb
RC2-043-006	4/16/2013	1			2	MD, CD					Frag, nail		0		6	2	0.2	lb
RC2-043-007	4/16/2013	1			2	CD					Nail		0		7	2	0.1	lb
RC2-043-008	4/16/2013	1			2	MD					Frag		0		6	1	0.1	lb
RC2-043-009	4/16/2013	1			2	MD					Frag		0		24	1	0.25	lb
RC2-043-010	4/16/2013	1			2	MD					Frag		0		9	2	0.5	lb
RC2-043-011	4/16/2013	1			2	CD					Wire		0		6	4	0.1	lb
RC2-043-012	4/16/2013	1			2	MD, SEED					QC SEED #137, frag		0		0	4	1	lb
RC2-043-013	4/16/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-043-014	4/16/2013	1			2	CD					Plow part		0		0	1	2	lb
RC2-044-001	4/16/2013	1			1	CD					SW corner nail		0		0	1	1	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-044-002	4/16/2013	1			1	MD					Frag		0		4	1	0.5	lb
RC2-044-003	4/16/2013	1			1	MD					Frag		2	N	3	1	0.5	lb
RC2-044-004	4/16/2013	1			1	MD					Frag		0		5	3	0.5	lb
RC2-044-005	4/16/2013	1			1	MD					Frag		3	N	4	4	1	lb
RC2-044-006	4/16/2013	1			1	MD					Frag		0		6	3	1	lb
RC2-044-007	4/16/2013	1			1	MD					Frag		0		2	1	1	lb
RC2-044-008	4/16/2013	1			1	MD					Frag		0		3	2	0.5	lb
RC2-044-009	4/16/2013	1			1	MD					Frag		2	E	3	2	0.5	lb
RC2-044-010	4/16/2013	1			1	NC					No contact		0			0		lb
RC2-044-011	4/16/2013	1			1	MD					Frag		0		2	2	1.5	lb
RC2-044-012	4/16/2013	1			1	MD					Frag		0		4	3	1	lb
RC2-044-013	4/16/2013	1			1	MD					Frag		0		2	1	0.75	lb
RC2-044-014	4/16/2013	1			1	MD					Frag		0		16	3	1	lb
RC2-044-015	4/16/2013	1			1	MD					Frag		0		2	2	0.75	lb
RC2-044-016	4/16/2013	1			1	MD					Frag		0		3	2	1	lb
RC2-044-017	4/16/2013	1			1	MD					Frag		0		4	1	0.75	lb
RC2-044-018	4/16/2013	1			1	NC					No contact		0			0		lb
RC2-044-019	4/16/2013	1			1	MD					Frag		0		12	3	0.5	lb
RC2-044-020	4/16/2013	1			1	SEED					QC SEED #130		6	S	0	1	1	lb
RC2-044-021	4/16/2013	1			1	MD					Frag		0		3	2	1	lb
RC2-044-022	4/16/2013	1			1	MD					Frag		6	N	3	1	0.5	lb
RC2-044-023	4/16/2013	1			1	MD					Frag		0		4	1	0.5	lb
RC2-044-024	4/16/2013	1			1	MD					Frag		6	N	16	3	1	lb
RC2-045-001	4/26/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-045-002	4/26/2013	1			2	MD					Frag		0		8	3	0.25	lb
RC2-045-003	4/26/2013	1			2	MD					Frag		0		4	2	0.25	lb
RC2-045-004	4/26/2013	1			2	MD					Frag		0		3	2	0.25	lb
RC2-045-005	4/26/2013	1			2	MD					Frag		0		5	1	0.25	lb
RC2-045-007	4/26/2013	1			2	OTHER					Same as #11		12	E	5	0	4	lb
RC2-045-008	4/26/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC2-045-011	4/26/2013	1			2	MD					Frag, 37mm projo		12	W	5	4	4	lb
RC2-045-012	4/26/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC2-045-013	4/26/2013	1			2	MD					Frag		0		4	2	0.5	lb
RC2-045-014	4/26/2013	1			2	MD					Frag		0		3	1	0.5	lb
RC2-045-015	4/26/2013	1			2	MD					Frag		0		8	1	0.5	lb
RC2-045-016	4/26/2013	1			2	MD					Frag		0		3	1	0.1	lb
RC2-045-017	4/26/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC2-045-018	4/26/2013	1			2	MD					Frag		0		12	4	0.5	lb
RC2-045-019	4/26/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-045-020	4/26/2013	1			2	SEED					QC SEED #209		0		0	1	1	lb
RC2-045-021	4/26/2013	1			2	MD					Frag		6	E	3	2	0.5	lb
RC2-045-022	4/26/2013	1			2	MD					Frag		0		4	1	0.5	lb
RC2-045-023	4/26/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-046-001	5/2/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-046-002	5/2/2013	1			2	MD					Frag		0		24	15	0.25	lb
RC2-046-003	5/2/2013	1			2	MD					Frag		0		6	2	2	lb
RC2-046-004	5/2/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-046-005	5/2/2013	1			2	MD					Frag		0		4	1	0.25	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-046-006	5/2/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-046-007	5/2/2013	1			2	MD					Frag		12	SE	4	2	0.25	lb
RC2-046-008	5/2/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-046-009	5/2/2013	1			2	MD					Frag		0		5	1	0.25	lb
RC2-046-010	5/2/2013	1			2	MD					Frag		12	W	24	6	2	lb
RC2-046-011	5/2/2013	1			2	OTHER					Same as #10		10	E	24	0	2	lb
RC2-046-012	5/2/2013	1			2	MD					Frag		0		14	3	1	lb
RC2-046-013	5/2/2013	1			2	MD					Frag		0		6	2	0.5	lb
RC2-046-014	5/2/2013	1			2	MD					Frag		0		3	2	0.25	lb
RC2-046-015	5/2/2013	1			2	MD					Frag		6	NE	4	2	0.5	lb
RC2-046-016	5/2/2013	1			2	SEED					QC SEED #129		0		0	1	1	lb
RC2-046-017	5/2/2013	1			2	MD					Frag		0		3	2	0.5	lb
RC2-047-001	4/17/2013	1			1	CD					SW corner nail		0		0	1	1	lb
RC2-047-002	4/17/2013	1			1	SEED					QC SEED #109		0		0	1	1	lb
RC2-047-003	4/17/2013	1			1	OTHER					Same as #2		2	S		0		lb
RC2-049-001	5/3/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-049-002	5/3/2013	1			2	MD					Frag		0		4	1	0.5	lb
RC2-049-003	5/3/2013	1			2	MD					Frag		0		4	3	0.5	lb
RC2-049-004	5/3/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC2-049-005	5/3/2013	1			2	OTHER					Same as #3		0		4	0	0.5	lb
RC2-049-006	5/3/2013	1			2	NC					No contact		0			0		lb
RC2-049-007	5/3/2013	1			2	MD					Frag		0		4	2	0.5	lb
RC2-049-008	5/3/2013	1			2	MD					Frag		0		6	3	0.5	lb
RC2-049-009	5/3/2013	1			2	MD					Frag		0		6	1	0.2	lb
RC2-049-010	5/3/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-049-011	5/3/2013	1			2	MD					Frag		12	S	6	1	0.25	lb
RC2-049-012	5/3/2013	1			2	NC					No contact		0			0		lb
RC2-049-013	5/3/2013	1			2	MD					Frag		0		6	1	0.2	lb
RC2-049-014	5/3/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-049-015	5/3/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-049-016	5/3/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-049-017	5/3/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC2-049-018	5/3/2013	1			2	NC					No contact		0			0		lb
RC2-049-019	5/3/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-049-020	5/3/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC2-049-021	5/3/2013	1			2	SEED					QC SEED #172		0		0	1	1	lb
RC2-049-022	5/3/2013	1			2	MD					Frag		12	SW	5	1	0.5	lb
RC2-050-001	4/26/2013	1			2	MD					Frag		0		2	2	0.25	lb
RC2-050-002	4/26/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC2-050-003	4/26/2013	1			2	MD					Frag		0		3	2	0.1	lb
RC2-050-004	4/26/2013	1			2	MD					Frag		0		3	13	1.5	lb
RC2-050-005	4/26/2013	1			2	SEED					QC SEED #189		6	E	0	1	1	lb
RC2-050-006	4/26/2013	1			2	MD					Frag		6	S	5	3	0.5	lb
RC2-050-007	4/26/2013	1			2	MD					Frag		0		4	1	0.5	lb
RC2-050-008	4/26/2013	1			2	MD					Frag		4	N	2	1	0.2	lb
RC2-050-009	4/26/2013	1			2	MD					Frag		6	E	1	3	0.5	lb
RC2-050-010	4/26/2013	1			2	MD					Frag		2	W	4	1	0.25	lb
RC2-050-011	4/26/2013	1			2	MD					Frag		6	W	0	1	0.25	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-050-012	4/26/2013	1			2	MD					Frag		0		3	2	0.25	lb
RC2-050-013	4/26/2013	1			2	MD					Frag		0		4	2	0.5	lb
RC2-050-014	4/26/2013	1			2	MD					Frag		0		2	1	0.1	lb
RC2-050-015	4/26/2013	1			2	MD					Frag		2	N	2	2	0.25	lb
RC2-050-016	4/26/2013	1			2	MD					Frag		6	E	2	1	0.1	lb
RC2-050-017	4/26/2013	1			2	MD					Frag		12	E	5	1	0.25	lb
RC2-050-018	4/26/2013	1			2	MD					Frag		3	S	12	2	0.5	lb
RC2-050-019	4/26/2013	1			2	MD					Frag		0		8	2	0.5	lb
RC2-050-020	4/26/2013	1			2	MD					Frag		2	E	4	2	0.75	lb
RC2-050-021	4/26/2013	1			2	MD					Frag		3	W	3	2	0.2	lb
RC2-050-022	4/26/2013	1			2	MD					Frag		6	E	4	2	1	lb
RC2-050-023	4/26/2013	1			2	MD					Frag		3	E	4	2	0.75	lb
RC2-050-024	4/26/2013	1			2	MD					Frag		6	E	6	2	1	lb
RC2-050-025	4/26/2013	1			2	MD					Frag		2	E	2	1	0.25	lb
RC2-050-026	4/26/2013	1			2	MD					Frag		0		2	1	0.5	lb
RC2-050-027	4/26/2013	1			2	MD					Frag		12	N	6	2	1.5	lb
RC2-050-028	4/26/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-050-029	4/26/2013	1			2	MD					Frag		0		6	2	0.5	lb
RC2-050-030	4/26/2013	1			2	OTHER					Same as #27		6	S	6	0	1.5	lb
RC2-052-001	4/22/2013	1			1	CD					SW corner nail		0		0	1	1	lb
RC2-052-002	4/22/2013	1			1	MD					Frag		0		8	4	2	lb
RC2-052-003	4/22/2013	1			1	MD					Frag		0		8	3	0.25	lb
RC2-052-004	4/22/2013	1			1	MD					Frag		2	N	6	4	1	lb
RC2-052-005	4/22/2013	1			1	MD					Frag		2	N	6	1	0.5	lb
RC2-052-006	4/22/2013	1			1	MD, SEED					Frag, QC SEED #105		0		0	3	1	lb
RC2-052-007	4/22/2013	1			1	MD					Frag		0		6	1	0.5	lb
RC2-052-008	4/22/2013	1			1	MD					Frag		6	S	6	1	0.5	lb
RC2-052-009	4/22/2013	1			1	MD					Frag		6	E	8	1	0.5	lb
RC2-052-010	4/22/2013	1			1	MD					Frag		3	E	6	1	0.5	lb
RC2-052-011	4/22/2013	1			1	MD					Frag		2	W	6	2	0.5	lb
RC2-052-012	4/22/2013	1			1	MD					Fuze parts		2	E	6	1	0.5	lb
RC2-052-013	4/22/2013	1			1	MD					Frag		0		8	2	0.5	lb
RC2-052-014	4/22/2013	1			1	CD					Horseshoes		6	E	8	2	2	lb
RC2-054-001	5/15/2013	1			2	CD, OTHER					Southwest corner nail, hot rocks, bottom not hot, checked with White		0		10	1	1	lb
RC2-054-002	5/15/2013	1			2	CD, OTHER					Barbed wire		0		8	1	0.2	lb
RC2-054-003	5/15/2013	1			2	NC					No find		0			0		lb
RC2-054-004	5/15/2013	1			2	OTHER					Hot rocks, bottom not hot, checked with White		0		23	0		lb
RC2-054-005	5/15/2013	1			2	NC					No find		0			0		lb
RC2-054-006	5/15/2013	1			2	OTHER					Hot rocks, bottom not hot, checked with White		0		12	0		lb
RC2-054-007	5/15/2013	1			2	NC					No find		0			0		lb
RC2-054-008	5/15/2013	1			2	NC					No find		0			0		lb
RC2-054-009	5/15/2013	1			2	SEED					QC SEED #141		0		0	1	1	lb
RC2-054-010	5/15/2013	1			2	NC					No find		0			0		lb
RC2-054-011	5/15/2013	1			2	NC					No find		0			0		lb
RC2-054-012	5/15/2013	1			2	NC					No find		0			0		lb
RC2-054-013	5/15/2013	1			2	NC					No find		0			0		lb
RC2-054-014	5/15/2013	1			2	NC					No find		0			0		lb
RC2-054-015	5/15/2013	1			2	NC					No find		0			0		lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-055-001	5/20/2013	1			1	CD					Nail		0		0	1	1	lb
RC2-055-002	5/20/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-055-003	5/20/2013	1			1	CD					Farm debris		2	S	8	1	1	lb
RC2-055-004	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-055-005	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-055-006	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-055-007	5/20/2013	1			1	CD					Farm debris		0		8	1	1	lb
RC2-055-008	5/20/2013	1			1	SEED					QC SEED #303		0		0	1	1	lb
RC2-055-009	5/20/2013	1			1	CD					Beer can		0		3	1	0.25	lb
RC2-056-001	4/26/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-056-005	4/26/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC2-056-006	4/26/2013	1			2	MD					Frag		0		2	1	0.1	lb
RC2-056-007	4/26/2013	1			2	MD, OTHER					Frag, hot rocks, bottom not hot, checked with White		0		10	1	0.25	lb
RC2-056-009	4/26/2013	1			2	MD					Frag		0		6	3	0.25	lb
RC2-056-010	4/26/2013	1			2	MD, OTHER					Frag, hot rocks, checked with White		0		6	1	0.25	lb
RC2-056-011	4/26/2013	1			2	MD					Frag		12	SE	5	3	0.2	lb
RC2-056-012	4/26/2013	1			2	MD					Frag		12	E	3	1	0.25	lb
RC2-056-013	4/26/2013	1			2	SEED					QC SEED #187		0		0	1	1	lb
RC2-056-014	4/26/2013	1			2	MD					Frag		0		4	3	0.25	lb
RC2-056-015	4/26/2013	1			2	MD					Frag		0		3	1	0.25	lb
RC2-056-017	4/26/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-056-018	4/26/2013	1			2	MD					Frag		12	S	3	2	0.25	lb
RC2-056-020	4/26/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-057-001	4/9/2013	1			1	CD					SW corner nail		0		0	1	1	lb
RC2-057-002	4/9/2013	1			1	MD					Frag		0		24	4	5	lb
RC2-057-003	4/9/2013	1			1	CD					Debris		0		13	1	1	lb
RC2-057-004	4/9/2013	1			1	SEED					QC SEED #86		0		0	1	1	lb
RC2-057-005	4/9/2013	1			1	CD					Barbed wire		0		13	2	0.5	lb
RC2-058-001	4/19/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-058-002	4/19/2013	1			2	MD					Frag		0		4	2	0.5	lb
RC2-058-003	4/19/2013	1			2	OTHER					Hot rock, checked with White		0		4	2		lb
RC2-058-004	4/19/2013	1			2	MD					Frag		0		3	1	0.25	lb
RC2-058-005	4/19/2013	1			2	MD					Frag		0		1	1	0.5	lb
RC2-058-006	4/19/2013	1			2	SEED					QC SEED #140		0		0	1	1	lb
RC2-058-007	4/19/2013	1			2	OTHER					Hot rocks, checked with White		0		6	3		lb
RC2-058-008	4/19/2013	1			2	OTHER					Hot rock, checked with White		0		3	1		lb
RC2-058-009	4/19/2013	1			2	MD					Frag		0		4	1	0.5	lb
RC2-058-010	4/19/2013	1			2	CD, OTHER					Hot rock, tool handle, checked with White		0		6	3	0.5	lb
RC2-058-011	4/19/2013	1			2	OTHER					Hot rock, checked with White		0		6	1		lb
RC2-058-012	4/19/2013	1			2	MD					Frag		0		12	1	1	lb
RC2-058-013	4/19/2013	1			2	OTHER					Hot rock, checked with White		0		3	2		lb
RC2-058-014	4/19/2013	1			2	MD					Frag		0		8	1	0.75	lb
RC2-058-015	4/19/2013	1			2	MD					Frag		0		4	1	1.5	lb
RC2-058-016	4/19/2013	1			2	OTHER					Hot rock, checked with White		0		5	2		lb
RC2-058-017	4/19/2013	1			2	OTHER					Hot rock, checked with White		0		4	1		lb
RC2-058-018	4/19/2013	1			2	MD					Frag		0		4	1	0.75	lb
RC2-058-019	4/19/2013	1			2	OTHER					Hot rock, checked with White		0		5	2		lb
RC2-059-001	5/10/2013	1			2	NC					No contact		0			0		lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-059-002	5/10/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-059-003	5/10/2013	1			2	OTHER					Same as #4		0		4	0	2	lb
RC2-059-004	5/10/2013	1			2	CD					Plow part		0		4	1	2	lb
RC2-059-005	5/10/2013	1			2	CD					Bolt		0		4	1	0.2	lb
RC2-059-006	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-059-007	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-059-008	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-059-009	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-059-010	5/10/2013	1			2	CD					Plow part		0		6	1	1	lb
RC2-059-011	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-059-012	5/10/2013	1			2	SEED					QC SEED #98		0		0	1	1	lb
RC2-059-013	5/10/2013	1			2	CD					Plow part		0		4	1	1.5	lb
RC2-059-014	5/10/2013	1			2	NC					No contact		0			0		lb
RC2-059-015	5/10/2013	1			2	CD					Plow part		6	W	6	1	1	lb
RC2-059-016	5/10/2013	1			2	OTHER					Same as #15		12	E	6	0	1	lb
RC2-059-017	5/10/2013	1			2	CD					Plow part		0		4	1	1	lb
RC2-059-018	5/10/2013	1			2	CD					Plow part		0		6	1	5	lb
RC2-061-001	5/1/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-061-002	5/1/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-061-003	5/1/2013	1			2	MD					Frag		10	SW	6	1	0.25	lb
RC2-061-004	5/1/2013	1			2	SEED					QC SEED #100		0		0	1	1	lb
RC2-061-005	5/1/2013	1			2	MD					Frag		0		6	4	0.5	lb
RC2-061-006	5/1/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-061-007	5/1/2013	1			2	MD					Frag		0		3	1	0.2	lb
RC2-061-008	5/1/2013	1			2	MD					Frag		0		12	1	0.2	lb
RC2-061-009	5/1/2013	1			2	NC					No contact		0			0		lb
RC2-061-010	5/1/2013	1			2	MD					Frag		0		3	1	0.25	lb
RC2-061-011	5/1/2013	1			2	MD					Frag		0		2	1	0.1	lb
RC2-061-012	5/1/2013	1			2	NC					No contact		0			0		lb
RC2-061-013	5/1/2013	1			2	MD					Frag		0		3	1	0.1	lb
RC2-061-014	5/1/2013	1			2	MD					Frag		0		4	1	0.5	lb
RC2-062-001	4/22/2013	1			1	CD					Southwest corner nail					1		lb
RC2-062-002	4/22/2013	1			1	CD					Debris		2	N	4	1	2	lb
RC2-062-003	4/22/2013	1			1	MD					Frag		6	S	6	1	0.25	lb
RC2-062-004	4/22/2013	1			1	MD					Frag		6	W	6	2	1	lb
RC2-062-005	4/22/2013	1			1	CD					Debris				8	2	2	lb
RC2-062-006	4/22/2013	1			1	CD					Debris		8	S	12	3	1.5	lb
RC2-062-007	4/22/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		6	N	6	2	1	lb
RC2-062-008	4/22/2013	1			1	CD					Debris		2	N	2	1	1	lb
RC2-062-009	4/22/2013	1			1	MD, CD					Debris, frag, bottom cleared, checked with Schonstedt & White--HSH		12	E	36	8	5	lb
RC2-062-010	4/22/2013	1			1	CD					Debris				8	2	1.5	lb
RC2-062-011	4/22/2013	1			1	MD					Frag				11	1	1	lb
RC2-062-012	4/22/2013	1			1	CD					Debris				12	1	2	lb
RC2-062-013	4/22/2013	1			1	CD					Debris		12	W	6	2	2	lb
RC2-062-014	4/22/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		3	W	15	2	4	lb
RC2-062-015	4/22/2013	1			1	MD					Frag		12	N	8	2	1	lb
RC2-062-016	4/22/2013	1			1	CD					Debris		8	N	8	3	1	lb
RC2-062-017	4/22/2013	1			1	CD					Debris				12	4	9	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-062-018	4/22/2013	1			1	CD					Debris				12	3	4	lb
RC2-062-019	4/22/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				12	2	0.5	lb
RC2-062-020	4/22/2013	1			1	SEED, CD					Debris, QC SEED #119		6	N	8	1	1	lb
RC2-062-021	4/22/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		6	N	8	2	1	lb
RC2-062-022	4/22/2013	1			1	CD					Debris		2	E	12	2	1	lb
RC2-062-023	4/22/2013	1			1	CD					Debris		4	S	5	4	1	lb
RC2-062-024	4/22/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				18	7	4	lb
RC2-062-025	4/22/2013	1			1	CD					Debris				6	4	2	lb
RC2-062-026	4/22/2013	1			1	CD					Debris				8	6	2	lb
RC2-062-027	4/22/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH				6	2	1	lb
RC2-062-028	4/22/2013	1			1	CD					Debris, checked with Schonstedt & White--HSH		6	W	6	1	1	lb
RC2-062-029	4/22/2013	1			1	CD					Debris				9	2	2	lb
RC2-062-030	4/22/2013	1			1	CD					Debris, bottom cleared--HSH		6	N	13	6	6	lb
RC2-062-031	4/22/2013	1			1	CD					Debris				9	3	2	lb
RC2-062-032	4/22/2013	1			1	CD					Debris burn pit, checked with Schonstedt & White--HSH		12	N	12	8	5	lb
RC2-063-001	4/24/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-063-002	4/24/2013	1			1	OTHER					Hot rock, checked with Schonstedt & White--HSH		0		36	0		lb
RC2-063-003	4/24/2013	1			1	OTHER					Hot rock, checked with Schonstedt & White		0		28	0		lb
RC2-063-004	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White		0		28	0		lb
RC2-063-005	4/24/2013	1			1	MD					Frag		6	S	26	1	0.5	lb
RC2-063-006	4/24/2013	1			1	OTHER					Hot rock, checked with Schonstedt & White		0		24	0		lb
RC2-063-007	4/24/2013	1			1	MD					Frag		0		26	1	0.5	lb
RC2-063-008	4/24/2013	1			1	CD					Can tab		0		8	1	0.25	lb
RC2-063-009	4/24/2013	1			1	MD					Frag		6	E	18	1	2	lb
RC2-063-010	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White		0		24	0		lb
RC2-063-011	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White		0		18	0		lb
RC2-063-012	4/24/2013	1			1	MD					Frag		4	N	16	2	0.25	lb
RC2-063-013	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White		0		24	0		lb
RC2-063-014	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White		0		24	0		lb
RC2-063-015	4/24/2013	1			1	SEED					QC SEED #164		0		0	1	1	lb
RC2-063-016	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White		0		12	0		lb
RC2-063-017	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White		0		18	0		lb
RC2-063-018	4/24/2013	1			1	MD					Frag		0		12	1	0.75	lb
RC2-063-019	4/24/2013	1			1	MD					Frag		0		8	1	1	lb
RC2-063-020	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White		0		16	0		lb
RC2-063-021	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White		0		18	0		lb
RC2-063-022	4/24/2013	1			1	MD					Frag		0		8	1	0.25	lb
RC2-063-023	4/24/2013	1			1	OTHER					Hot rock, checked with Schonstedt & White		6	W	24	0		lb
RC2-063-024	4/24/2013	1			1	OTHER					Hot rock, checked with Schonstedt & White		0		24	0		lb
RC2-063-025	4/24/2013	1			1	OTHER					Hot dirt, checked with Schonstedt & White--HSH		0		24	0		lb
RC2-063-026	4/24/2013	1			1	MD					Frag, checked with Schonstedt & White--HSH		0		40	1	1	lb
RC2-063-027	4/24/2013	1			1	MD					Frag		0		3	1	0.5	lb
RC2-063-028	4/24/2013	1			1	MD					Frag		0		4	1	0.5	lb
RC2-063-029	4/24/2013	1			1	OTHER					Hot rock, checked with Schonstedt & White		0		24	0		lb
RC2-064-001	4/29/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-064-002	4/29/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-064-003	4/29/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-064-004	4/29/2013	1			2	MD					Frag		0		0	1	0.25	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-064-005	4/29/2013	1			2	OTHER					Same as #2		0			0		lb
RC2-064-006	4/29/2013	1			2	MD					Frag		0		6	2	1	lb
RC2-064-007	4/29/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-064-008	4/29/2013	1			2	SEED					QC SEED #180		0		0	1	1	lb
RC2-064-009	4/29/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-064-010	4/29/2013	1			2	MD					Frag		0		12	1	0.5	lb
RC2-064-011	4/29/2013	1			2	MD					Frag		0		10	1	0.5	lb
RC2-064-012	4/29/2013	1			2	MD					Frag		0		4	1	1	lb
RC2-064-013	4/29/2013	1			2	MD					Frag		0		4	1	0.5	lb
RC2-064-014	4/29/2013	1			2	MD					Frag		0		8	1	0.25	lb
RC2-064-015	4/29/2013	1			2	MD					Frag		0		4	2	0.5	lb
RC2-064-016	4/29/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC2-064-017	4/29/2013	1			2	MD					Frag		6	NE	1	1	0.25	lb
RC2-064-018	4/29/2013	1			2	MD					Frag		0		8	2	0.5	lb
RC2-064-019	4/29/2013	1			2	MD					Frag		0		2	1	0.2	lb
RC2-064-020	4/29/2013	1			2	MD					Frag		0		8	1	0.25	lb
RC2-064-021	4/29/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC2-064-022	4/29/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC2-064-023	4/29/2013	1			2	MD					Frag		0		8	1	0.5	lb
RC2-064-024	4/29/2013	1			2	MD					Frag		0		8	1	0.5	lb
RC2-064-025	4/29/2013	1			2	MD					Frag		0		2	2	0.5	lb
RC2-065-001	5/20/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-065-002	5/20/2013	1			1	SEED					QC SEED #302		12	N	0	1	1	lb
RC2-065-003	5/20/2013	1			1	MD					Frag		0		8	2	0.5	lb
RC2-065-004	5/20/2013	1			1	MD					Frag		0		7	3	0.5	lb
RC2-065-005	5/20/2013	1			1	MD					Frag		8	SW	8	2	0.5	lb
RC2-065-006	5/20/2013	1			1	MD					Frag		12	SW	8	3	1	lb
RC2-065-007	5/20/2013	1			1	OTHER					Same as #6		12	N		0		lb
RC2-065-008	5/20/2013	1			1	MD					Frag		6	SW	8	3	0.5	lb
RC2-065-009	5/20/2013	1			1	MD					Frag		4	SW	7	2	1	lb
RC2-065-010	5/20/2013	1			1	MD					Frag		12	SW	4	1	0.25	lb
RC2-065-011	5/20/2013	1			1	MD					Frag		4	SW	3	2	1	lb
RC2-065-012	5/20/2013	1			1	MD					Frag		4	W	3	1	1	lb
RC2-065-013	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-065-014	5/20/2013	1			1	MD					Frag		0		6	1	0.5	lb
RC2-065-015	5/20/2013	1			1	MD					Frag		0		6	1	0.5	lb
RC2-065-016	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-065-017	5/20/2013	1			1	MD					Frag		3	W	4	2	0.5	lb
RC2-065-018	5/20/2013	1			1	NC					No contact, checked with Schonstedt & White		0			0		lb
RC2-066-001	5/1/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-066-002	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-066-003	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		6	N	24	0		lb
RC2-066-004	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-066-005	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-066-006	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		24	0		lb
RC2-066-007	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-066-008	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-066-009	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-066-010	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-066-011	5/1/2013	1			1	SEED					QC SEED #176		0		0	1	1	lb
RC2-067-001	4/16/2013	1			1	CD					SW corner nail		0		0	1	1	lb
RC2-067-002	4/16/2013	1			1	MD					Frag		0		6	2	1	lb
RC2-067-003	4/16/2013	1			1	MD					Frag		0		4	2	1	lb
RC2-067-004	4/16/2013	1			1	MD					Frag		6	E	6	2	0.5	lb
RC2-067-005	4/16/2013	1			1	MD					Frag		0		6	1	0.5	lb
RC2-067-006	4/16/2013	1			1	MD					Frag		0		5	1	1.5	lb
RC2-067-007	4/16/2013	1			1	MD					Frag		0		3	1	0.25	lb
RC2-067-008	4/16/2013	1			1	SEED					QC SEED #145		0		0	1	1	lb
RC2-067-009	4/16/2013	1			1	MD					Frag		0		3	1	0.25	lb
RC2-068-001	4/18/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-068-002	4/18/2013	1			2	SEED					QC SEED #126		0		0	1	1	lb
RC2-068-003	4/18/2013	1			2	MD					Frag		0		8	1	0.5	lb
RC2-070-001	5/6/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-070-002	5/6/2013	1			1	MD					Frag		0		7	1	0.5	lb
RC2-070-003	5/6/2013	1			1	MD					Frag		0		6	1	0.5	lb
RC2-070-004	5/6/2013	1			1	MD, SEED					QC SEED #178, frag		0		0	2	1	lb
RC2-070-005	5/6/2013	1			1	MD					Frag		0		3	1	1	lb
RC2-070-006	5/6/2013	1			1	MD					Frag		0		3	1	1	lb
RC2-070-007	5/6/2013	1			1	MD					Frag		6	N	2	1	0.25	lb
RC2-070-008	5/6/2013	1			1	MD					Frag		0		3	1	1	lb
RC2-070-009	5/6/2013	1			1	MD					Frag		0		3	2	0.5	lb
RC2-070-010	5/6/2013	1			1	MD					Frag		0		6	1	1	lb
RC2-071-001	5/6/2013	1			1	MD					Frag		12	N	13	1	1	lb
RC2-071-002	5/6/2013	1			1	MD, SEED					QC SEED #248, frag		0		0	2	1	lb
RC2-071-003	5/6/2013	1			1	MD					Frag		0		19	2	1	lb
RC2-071-004	5/6/2013	1			1	MD					T-bar fuze, frag		0		23	4	2	lb
RC2-071-005	5/6/2013	1			1	MD					Frag pit--HSH		2	W	23	7	1.5	lb
RC2-071-006	5/6/2013	1			1	MD					Frag		0		16	2	1	lb
RC2-071-007	5/6/2013	1			1	MD					Fuze, frag pit--HSH		2	W	25	7	2	lb
RC2-071-008	5/6/2013	1			1	OTHER					Same as #7		12	E		0		lb
RC2-071-009	5/6/2013	1			1	MD					Frag		6	S	18	3	1	lb
RC2-072-001	5/1/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-072-002	5/1/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-072-003	5/1/2013	1			2	MD					Frag		12	SE	4	1	0.5	lb
RC2-072-004	5/1/2013	1			2	MD					Frag		0		5	1	0.5	lb
RC2-072-005	5/1/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-072-006	5/1/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC2-072-007	5/1/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC2-072-008	5/1/2013	1			2	MD					Frag		0		24	3	0.5	lb
RC2-072-009	5/1/2013	1			2	MD					Frag		0		21	2	0.25	lb
RC2-072-010	5/1/2013	1			2	MD					Frag		0		18	2	0.25	lb
RC2-072-011	5/1/2013	1			2	MD					Frag		0		3	1	0.2	lb
RC2-072-012	5/1/2013	1			2	MD, SEED					QC SEED #184		0		3	1	1.25	lb
RC2-072-013	5/1/2013	1			2	MD					Frag		0		13	2	0.25	lb
RC2-072-014	5/1/2013	1			2	MD					Frag		0		3	1	0.25	lb
RC2-072-015	5/1/2013	1			2	MD					Frag		0		2	1	0.25	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-072-016	5/1/2013	1			2	OTHER					Same as #15		0		2	0	0.25	lb
RC2-073-001	4/18/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-073-002	4/18/2013	1			2	SEED					QC SEED #138		0		0	1	1	lb
RC2-074-001	5/2/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-074-002	5/2/2013	1			2	CD					Cartridge		0		4	1	0.1	lb
RC2-074-003	5/2/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-074-004	5/2/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-074-005	5/2/2013	1			2	MD, CD					Frag, tool part		0		4	2	0.25	lb
RC2-074-006	5/2/2013	1			2	MD					Frag		0		6	1	0.2	lb
RC2-074-007	5/2/2013	1			2	MD, CD					Frag, knife handle		0		6	2	0.5	lb
RC2-074-008	5/2/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-074-009	5/2/2013	1			2	MD					Frag		0		4	2	0.25	lb
RC2-074-010	5/2/2013	1			2	MD					Frag		0		5	1	0.25	lb
RC2-074-011	5/2/2013	1			2	SEED					QC SEED #122		0		0	1	1	lb
RC2-075-001	4/17/2013	1			1	CD					SW corner nail		0		0	1	1	lb
RC2-075-002	4/17/2013	1			1	CD					Debris		0		3	3	0.25	lb
RC2-075-003	4/17/2013	1			1	CD					Debris		0		3	1	0.25	lb
RC2-075-004	4/17/2013	1			1	SEED					QC SEED #113		0		0	1	1	lb
RC2-075-005	4/17/2013	1			1	CD					Nail		2	E	8	1	1	lb
RC2-076-001	5/17/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-076-002	5/17/2013	1			1	NC					No find		0		0	0		lb
RC2-076-003	5/17/2013	1			1	MD					Frag		6	N	4	1	1	lb
RC2-076-004	5/17/2013	1			1	NC					No find		0		0	0		lb
RC2-076-005	5/17/2013	1			1	MD					Frag		0		5	1	1	lb
RC2-076-006	5/17/2013	1			1	MD					Frag		0		17	1	0.25	lb
RC2-076-007	5/17/2013	1			1	NC					No find		0		0	0		lb
RC2-076-008	5/17/2013	1			1	CD					Metal tag		0		4	1	0.5	lb
RC2-076-009	5/17/2013	1			1	MD, CD					Metal bar, frag		0		16	2	1	lb
RC2-076-010	5/17/2013	1			1	CD					Piece of metal		0		14	1	0.5	lb
RC2-076-011	5/17/2013	1			1	SEED					QC SEED #157		0		0	1	1	lb
RC2-077-001	5/1/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-077-002	5/1/2013	1			2	MD, SEED					Frag, QC SEED #148		0		0	2	1	lb
RC2-077-003	5/1/2013	1			2	MD					Frag		6	W	3	1	0.2	lb
RC2-077-004	5/1/2013	1			2	MD					Frag		0		3	1	0.2	lb
RC2-077-005	5/1/2013	1			2	MD					Frag		0		2	1	0.25	lb
RC2-078-001	4/18/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-078-002	4/18/2013	1			2	MD					Frag		0		6	2	0.25	lb
RC2-078-003	4/18/2013	1			2	MD					Frag		0		6	3	0.25	lb
RC2-078-004	4/18/2013	1			2	MD					Frag		0		5	2	0.5	lb
RC2-078-005	4/18/2013	1			2	MD					Frag		0		5	3	0.5	lb
RC2-078-006	4/18/2013	1			2	MD					Frag		0		3	1	0.25	lb
RC2-078-007	4/18/2013	1			2	MD					Frag		0		2	2	0.5	lb
RC2-078-008	4/18/2013	1			2	MD					Frag		0		3	1	0.25	lb
RC2-078-009	4/18/2013	1			2	MD					Frag		0		2	2	0.25	lb
RC2-078-010	4/18/2013	1			2	MD					Frag		0		3	2	0.25	lb
RC2-078-011	4/18/2013	1			2	MD					Frag		0		1	1	0.35	lb
RC2-078-012	4/18/2013	1			2	MD					Frag		0		3	3	0.35	lb
RC2-078-013	4/18/2013	1			2	MD					Frag		0		1	1	0.25	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-078-014	4/18/2013	1			2	SEED					QC SEED #133		0		0	1	1	lb
RC2-079-001	5/1/2013	1			1	CD					Steel bar		0		0	1	1	lb
RC2-079-002	5/1/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-079-003	5/1/2013	1			1	MD					Frag		0		6	1	1	lb
RC2-079-004	5/1/2013	1			1	SEED					QC SEED #128		0		0	1	1	lb
RC2-079-005	5/1/2013	1			1	MD					Frag		0		6	1	1	lb
RC2-079-006	5/1/2013	1			1	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-079-007	5/1/2013	1			1	MD					Frag		0		5	1	1	lb
RC2-079-008	5/1/2013	1			1	MD					Frag		6	N	5	1	1	lb
RC2-080-001	4/22/2013	1			1	CD					SW corner nail		0		0	1	1	lb
RC2-080-002	4/22/2013	1			1	MD					Frag		0		12	1	0.5	lb
RC2-080-003	4/22/2013	1			1	MD					Frag		0		6	1	0.5	lb
RC2-080-004	4/22/2013	1			1	MD					Frag		2	E	6	1	0.25	lb
RC2-080-005	4/22/2013	1			1	MD					Frag		0		8	2	0.5	lb
RC2-080-006	4/22/2013	1			1	MD					Frag		0		8	1	0.5	lb
RC2-080-007	4/22/2013	1			1	MD					Frag		2	E	12	2	0.5	lb
RC2-080-008	4/22/2013	1			1	MD					Frag		2	N	6	1	0.5	lb
RC2-080-009	4/22/2013	1			1	CD					Debris		0		3	1	3	lb
RC2-080-010	4/22/2013	1			1	SEED					QC SEED #135		0		0	1	1	lb
RC2-080-011	4/22/2013	1			1	CD					Debris		0		6	3	5	lb
RC2-080-012	4/22/2013	1			1	OTHER					Same as #11		0			0		lb
RC2-081-001	4/23/2013	1			1	CD					Southwest corner nail		0		8	1	1	lb
RC2-081-002	4/23/2013	1			1	OTHER					Hot rock, checked with Schonstedt & White		0		6	2	0.25	lb
RC2-081-003	4/23/2013	1			1	MD					Frag		0		4	1	1	lb
RC2-081-004	4/23/2013	1			1	OTHER					Hot rock, checked with Schonstedt & White		2	N	6	2	0.25	lb
RC2-081-005	4/23/2013	1			1	SEED					QC SEED #80		6	N	0	1	1	lb
RC2-081-006	4/23/2013	1			1	OTHER					Hot rock, checked with Schonstedt & White		2	N	6	1	0.25	lb
RC2-082-001	4/19/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-082-002	4/19/2013	1			2	OTHER					Hot rocks		0		1	2		lb
RC2-082-003	4/19/2013	1			2	SEED					QC SEED #132		0		0	1	1	lb
RC2-082-004	4/19/2013	1			2	CD					Plow part		18	NE	5	1	3	lb
RC2-082-005	4/19/2013	1			2	OTHER					Same as #4		18	SW		0		lb
RC2-082-006	4/19/2013	1			2	OTHER					Hot rock		6	W	8	1		lb
RC2-082-007	4/19/2013	1			2	OTHER					Hot rock		0		3	3		lb
RC2-082-008	4/19/2013	1			2	OTHER					Hot rocks		0		1	4		lb
RC2-082-009	4/19/2013	1			2	OTHER					Hot rock		0		0	1		lb
RC2-082-010	4/19/2013	1			2	CD					Plow part		0		1	1	4	lb
RC2-084-001	4/29/2013	1			2	MD, CD					Southwest corner nail		0		0	2	1	lb
RC2-084-003	4/29/2013	1			2	SEED					QC SEED #191		0		0	1	1	lb
RC2-085-001	4/24/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-085-002	4/24/2013	1			1	CD					Link		0		8	1	0.25	lb
RC2-085-003	4/24/2013	1			1	MD					Frag		6	E	3	1	0.5	lb
RC2-085-004	4/24/2013	1			1	CD					Plow tooth		0		8	1	0.5	lb
RC2-085-005	4/24/2013	1			1	SEED					QC SEED #142		0		0	1	1	lb
RC2-086-001	4/16/2013	1			1	CD					SW corner nail		0		0	1	1	lb
RC2-086-002	4/16/2013	1			1	MD					Frag		0		3	2	1	lb
RC2-086-003	4/16/2013	1			1	MD					Frag		0		2	1	0.5	lb
RC2-086-004	4/16/2013	1			1	SEED					QC SEED #156		6	W	0	1	1	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-086-005	4/16/2013	1			1	OTHER					Same as #4		6	E		0		lb
RC2-086-006	4/16/2013	1			1	MD					Frag		0		3	2	1	lb
RC2-086-007	4/16/2013	1			1	MD					T-bar fuze		0		0	1	0.1	lb
RC2-086-008	4/16/2013	1			1	MD					Frag		6	E	4	1	0.25	lb
RC2-086-009	4/16/2013	1			1	MD					Frag		0		3	1	0.25	lb
RC2-087-001	4/29/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-087-002	4/29/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-087-003	4/29/2013	1			2	MD					Frag		0		6	1	0.5	lb
RC2-087-004	4/29/2013	1			2	MD					Frag		0		5	1	1	lb
RC2-087-005	4/29/2013	1			2	OTHER					Same as #4		4	SE		0		lb
RC2-087-006	4/29/2013	1			2	MD					Frag		0		7	1	0.5	lb
RC2-087-007	4/29/2013	1			2	MD					Frag		0		6	2	0.5	lb
RC2-087-008	4/29/2013	1			2	MD, SEED					QC SEED #179, frag		0		12	2	1	lb
RC2-088-001	4/12/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-088-002	4/12/2013	1			2	SEED					QC SEED #110		0		0	1	1	lb
RC2-089-001	4/17/2013	1			1	CD					SW corner nail		0		0	1	1	lb
RC2-089-002	4/17/2013	1			1	MD					Frag		0		4	2	1	lb
RC2-089-003	4/17/2013	1			1	MD					Frag		2	W	4	2	0.5	lb
RC2-089-004	4/17/2013	1			1	MD					Frag		0		3	2	0.5	lb
RC2-089-005	4/17/2013	1			1	MD					Frag		0		4	1	1	lb
RC2-089-006	4/17/2013	1			1	MD					Frag		0		8	5	1	lb
RC2-089-007	4/17/2013	1			1	MD					Frag		6	S	5	3	1	lb
RC2-089-008	4/17/2013	1			1	SEED					QC SEED #104		6	NE	0	1	1	lb
RC2-089-009	4/17/2013	1			1	OTHER					Same as #8		6	SW		0		lb
RC2-089-010	4/17/2013	1			1	MD					Frag		0		1	1	0.5	lb
RC2-090-001	4/24/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-090-002	4/24/2013	1			1	SEED					QC SEED #147		12	N	0	1	1	lb
RC2-090-003	4/24/2013	1			1	MD					Frag		0		2	1	0.5	lb
RC2-090-004	4/24/2013	1			1	MD					Frag		0		4	3	1	lb
RC2-090-005	4/24/2013	1			1	MD					Frag		0		3	1	0.5	lb
RC2-090-006	4/24/2013	1			1	MD					Frag		6	W	3	1	0.5	lb
RC2-090-007	4/24/2013	1			1	MD					Frag		0		4	1	0.25	lb
RC2-090-008	4/24/2013	1			1	MD					Frag		0		10	1	0.5	lb
RC2-090-009	4/24/2013	1			1	MD					Frag		6	E	10	1	0.5	lb
RC2-090-010	4/24/2013	1			1	MD					Frag		0		4	1	0.5	lb
RC2-091-001	5/6/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-091-002	5/6/2013	1			1	MD, CD					Debris, frag		6	SW	6	2	0.25	lb
RC2-091-003	5/6/2013	1			1	MD, SEED					QC SEED #245, frag		6	N	0	2	1	lb
RC2-091-004	5/6/2013	1			1	MD					Frag		6	E	6	1	1	lb
RC2-091-005	5/6/2013	1			1	MD					Frag		0		4	2	1	lb
RC2-091-006	5/6/2013	1			1	CD					Debris, peg		0		4	2	0.5	lb
RC2-092-001	4/17/2013	1			1	CD					SW corner nail		0		0	1	1	lb
RC2-092-002	4/17/2013	1			1	NC					No contact, checked with Schonstedt & White					0		lb
RC2-092-003	4/17/2013	1			1	MD					Frag		2	E	5	2	1	lb
RC2-092-004	4/17/2013	1			1	NC					No contact, checked with Schonstedt & White					0		lb
RC2-092-005	4/17/2013	1			1	MD					Frag		0		3	1	0.25	lb
RC2-092-006	4/17/2013	1			1	NC					No contact, checked with Schonstedt & White					0		lb
RC2-092-007	4/17/2013	1			1	SEED					QC SEED #121		0		0	1	1	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-092-008	4/17/2013	1			1	MD					Frag		0		3	1	0.25	lb
RC2-092-009	4/17/2013	1			1	MD					Frag		6	N	7	1	1	lb
RC2-092-010	4/17/2013	1			1	NC					No contact, checked with Schonstedt & White					0		lb
RC2-092-011	4/17/2013	1			1	NC					No contact, checked with Schonstedt & White					0		lb
RC2-093-001	4/12/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-093-002	4/12/2013	1			2	SEED					QC SEED #94		0		0	1	1	lb
RC2-094-001	4/17/2013	1			1	CD					SW corner nail		0		0	1	1	lb
RC2-094-002	4/17/2013	1			1	SEED					QC SEED #124		0		0	1	1	lb
RC2-094-003	4/17/2013	1			1	MD					Frag		0		4	1	0.5	lb
RC2-095-001	4/24/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-095-002	4/24/2013	1			1	MD					Frag		0		6	1	2	lb
RC2-095-003	4/24/2013	1			1	CD					Plow tooth		12	E	6	1	5	lb
RC2-095-004	4/24/2013	1			1	OTHER					Same as #3		6	SW		0		lb
RC2-095-005	4/24/2013	1			1	CD					Plow tooth		12	NE	12	1	3	lb
RC2-095-006	4/24/2013	1			1	OTHER					Same as #5		6	NW		0		lb
RC2-095-007	4/24/2013	1			1	OTHER					Same as #5		6	SE		0		lb
RC2-095-008	4/24/2013	1			1	SEED					QC SEED #159		0		0	1	1	lb
RC2-095-009	4/24/2013	1			1	CD					Plow tooth		6	E	6	1	2	lb
RC2-097-001	4/12/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-097-002	4/12/2013	1			2	SEED					QC SEED #118		0		0	1	1	lb
RC2-097-003	4/12/2013	1			2	CD					Bolt		12	S	2	1	0.5	lb
RC2-098-001	4/22/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-098-002	4/22/2013	1			2	SEED					QC SEED #136		0		0	1	1	lb
RC2-098-003	4/22/2013	1			2	CD					Nail		0		0	1	0.5	lb
RC2-099-001	5/1/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-099-002	5/1/2013	1			2	OTHER					Geo, hot rocks, checked with White		0		8	0		lb
RC2-099-003	5/1/2013	1			2	MD					Frag		0		6	1	0.1	lb
RC2-099-004	5/1/2013	1			2	SEED					QC SEED #102		0		0	1	1	lb
RC2-099-005	5/1/2013	1			2	MD					Frag		0		6	1	0.25	lb
RC2-099-006	5/1/2013	1			2	OTHER					Geo, hot rocks, checked with White		0		6	0		lb
RC2-099-007	5/1/2013	1			2	MD					Frag		0		3	1	0.1	lb
RC2-099-008	5/1/2013	1			2	MD					Frag		0		3	2	0.2	lb
RC2-102-001	4/12/2013	1			2	CD					SW corner nail		0		0	1	1	lb
RC2-102-002	4/12/2013	1			2	SEED					QC SEED #108		0		0	1	1	lb
RC2-102-003	4/12/2013	1			2	OTHER					Same as #2		12	E				lb
RC2-103-001	5/2/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-103-002	5/2/2013	1			2	MD					Frag		6	E	6	1	0.5	lb
RC2-103-003	5/2/2013	1			2	CD					Barbed wire		0		8	4	0.1	lb
RC2-103-004	5/2/2013	1			2	MD					Frag		0		8	1	1	lb
RC2-103-005	5/2/2013	1			2	CD					Barbed wire		0		6	7	0.1	lb
RC2-103-006	5/2/2013	1			2	CD					Barbed wire		0		5	6	0.1	lb
RC2-103-007	5/2/2013	1			2	CD					Barbed wire		0		7	5	0.1	lb
RC2-103-008	5/2/2013	1			2	MD					Frag		0		4	1	0.25	lb
RC2-103-009	5/2/2013	1			2	SEED					QC SEED #173		0		0	1	1	lb
RC2-103-010	5/2/2013	1			2	NC					No contact, checked with Schonstedt & White		0		18	0		lb
RC2-104-001	5/1/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-104-002	5/1/2013	1			2	MD					Frag		0		4	1	0.1	lb
RC2-104-003	5/1/2013	1			2	NC					No contact		0			0		lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-104-004	5/1/2013	1			2	SEED					QC SEED #194		0		0	1	1	lb
RC2-105-001	4/24/2013	1			1	OTHER					Southwest corner nail		0		0	1	1	lb
RC2-105-002	4/24/2013	1			1	MD					Frag		0		6	1	0.5	lb
RC2-105-003	4/24/2013	1			1	SEED					QC SEED #134		0		0	1	1	lb
RC2-106-001	5/10/2013	1			2	MD					Frag		0		8	2	0.5	lb
RC2-106-002	5/10/2013	1			2	CD					Southwest corner nail		0		0	1	1	lb
RC2-106-003	5/10/2013	1			2	MD					Frag		0		6	2	0.5	lb
RC2-106-004	5/10/2013	1			2	MD					Frag		0		3	1	0.5	lb
RC2-106-005	5/10/2013	1			2	MD					Frag		0		5	5	1	lb
RC2-106-006	5/10/2013	1			2	MD					Frag		0		4	5	1.5	lb
RC2-106-007	5/10/2013	1			2	MD					Frag		0		8	1	1	lb
RC2-106-008	5/10/2013	1			2	MD					Frag		0		6	2	1	lb
RC2-106-009	5/10/2013	1			2	MD					Frag		0		4	3	1	lb
RC2-106-010	5/10/2013	1			2	MD					Frag		0		10	2	0.5	lb
RC2-106-011	5/10/2013	1			2	MD					Frag		0		8	3	0.5	lb
RC2-106-012	5/15/2013	1			2	MEC			M63 MOD 1		37mm practice projo with M58 practice fuze		0		6	1	1.5	lb
RC2-106-013	5/10/2013	1			2	MD					Frag		0		10	5	0.75	lb
RC2-106-014	5/10/2013	1			2	MD					Frag		0		4	3	1	lb
RC2-106-015	5/10/2013	1			2	CD					Barbed wire		0		0	3	0.25	lb
RC2-106-016	5/10/2013	1			2	CD					Barbed wire		0		0	2	0.25	lb
RC2-106-017	5/10/2013	1			2	CD					Barbed wire		0		6	3	0.5	lb
RC2-106-018	5/10/2013	1			2	MD					Frag		0		6	7	2	lb
RC2-106-019	5/10/2013	1			2	MD, CD					Barbed wire, frag		0		6	2	1	lb
RC2-108-001	5/16/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-108-002	5/16/2013	1			1	CD					Metal spike		0		3	1	1	lb
RC2-108-003	5/16/2013	1			1	CD					Metal trap		0		4	1	1	lb
RC2-108-004	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC2-108-005	5/16/2013	1			1	CD					Horseshoe		6	E	4	1	1	lb
RC2-108-006	5/16/2013	1			1	SEED					QC SEED #292		0		0	1	1	lb
RC2-108-007	5/16/2013	1			1	CD					Horseshoe		0		4	1	1	lb
RC2-108-008	5/16/2013	1			1	CD					Debris		0		4	1	0.5	lb
RC2-110-001	5/16/2013	1			1	CD					Wire LIP, southwest corner nail, HSH		0		6	2	0.25	lb
RC2-110-002	5/16/2013	1			1	CD					Barbed wire		2	N	6	1	0.25	lb
RC2-110-003	5/16/2013	1			1	CD					Barbed wire		0		12	1	0.25	lb
RC2-110-004	5/16/2013	1			1	CD					Barbed wire LIP, HSH		0		14	1	0.25	lb
RC2-110-005	5/16/2013	1			1	CD					Wire		0		12	2	0.25	lb
RC2-110-006	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC2-110-007	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC2-110-008	5/16/2013	1			1	CD					Wire		0		14	3	0.5	lb
RC2-110-009	5/16/2013	1			1	CD					Nails, wire		0		12	4	0.25	lb
RC2-110-010	5/16/2013	1			1	CD					Nails, HSH		0		25	7	0.5	lb
RC2-110-011	5/16/2013	1			1	CD					Barbed wire		0		22	1	0.5	lb
RC2-110-012	5/16/2013	1			1	CD					Nails		0		15	5	0.5	lb
RC2-110-013	5/16/2013	1			1	CD					Barbed wire LIP, nails, HSH		0		23	5	0.5	lb
RC2-110-014	5/16/2013	1			1	SEED					QC SEED #294		0		0	1	1	lb
RC2-110-015	5/16/2013	1			1	CD					Nails pit, HSH		0		24	7	0.5	lb
RC2-110-016	5/16/2013	1			1	CD					Nails		0		4	4	0.25	lb
RC2-110-017	5/16/2013	1			1	CD					Nails pit		0		14	8	0.5	lb

Target_ID	Dig_date	Recovered_Item_Count	Location	Intrusive_Lot_ID	Dig_team	Anomaly_Type	MEC_Type	MD_Type	Nomenclature	Mark_Model	Description	Evidence_HE	Offset_Distance	Offset_Direction	Depth	Quantity	Weight	Weight_Unit
RC2-110-018	5/16/2013	1			1	CD					Plow tooth, nail pit		6	N	6	5	1	lb
RC2-110-019	5/16/2013	1			1	CD					Nails pit		0		9	5	0.5	lb
RC2-110-020	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC2-111-001	5/17/2013	1			1	CD					Southwest corner nail		0		0	1	1	lb
RC2-111-002	5/17/2013	1			1	SEED					QC SEED #296		0		0	1	1	lb
RC2-111-003	5/17/2013	1			1	MD					Frag		6	W	7	1	1	lb
RC2-111-004	5/17/2013	1			1	OTHER					Same as #3		6	E		0		lb
RC2-111-005	5/17/2013	1			1	OTHER					Same as #3		6	S		0		lb
RC2-112-001	5/16/2013	1			1	CD					Southwest corner nail		0			0		lb
RC2-112-002	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC2-112-003	5/16/2013	1			1	CD					Bracket		0		3	1	0.5	lb
RC2-112-004	5/16/2013	1			1	SEED					QC SEED #298		0		0	1	1	lb
RC2-112-005	5/16/2013	1			1	CD					Nail		0		14	4	0.5	lb
RC2-112-006	5/16/2013	1			1	CD					Hose pipe, nail pit, HSH		0		26	8	0.5	lb
RC2-112-007	5/16/2013	1			1	CD					Nails pit, HSH		0		23	13	0.5	lb
RC2-112-008	5/16/2013	1			1	CD					Nail pit/burn pit, HSH		0		28	300	1.5	lb
RC2-112-009	5/16/2013	1			1	CD					Punch		0		2	1	1	lb
RC2-112-010	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC2-112-011	5/16/2013	1			1	NC					No find, checked with Schonstedt & White		0			0		lb
RC2-113-001	5/16/2013	1			1	MD					Frag		2	E	7	2	1	lb
RC2-113-002	5/16/2013	1			1	OTHER					Same as #3		10	E		0		lb
RC2-113-003	5/16/2013	1			1	CD					Plow tooth		10	W	5	1	2	lb
RC2-113-004	5/16/2013	1			1	MD					Frag		0		6	1	0.5	lb
RC2-113-005	5/16/2013	1			1	SEED, CD					QC SEED #291, nails		6	W	0	4	1	lb
RC2-113-006	5/16/2013	1			1	OTHER					Same as #5		6	E		0		lb
RC2-113-007	5/16/2013	1			1	CD					Nails		0		4	5	0.5	lb

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-001-001	V		FALSE			155.1	CH2					CH2		SUM							
ARNG-001-002	H		FALSE			9.1	CH2			4.3/16.2	4.3	CH2	16.2	SUM							
ARNG-001-003	V		FALSE			44.4	CH2			2.3/7.5	2.3	CH2	7.5	SUM							
ARNG-001-004	V		FALSE			47.8	CH2			4.7/8.1	4.7	CH2	8.1	SUM							
ARNG-001-005	H		FALSE			15.5	CH2			0.4/1.4	0.4	CH2	1.4	SUM							
ARNG-001-006	H		FALSE			30.2	CH2			2.1/7.5	2.1	CH2	7.5	SUM							
ARNG-001-007	V		FALSE			137.7	CH2			3.7/13.1	3.7	CH2	13.1	SUM							
ARNG-001-008	H		FALSE			18.3	CH2			0.8/1.3	0.8	CH2	1.3	SUM							
ARNG-001-009	H		FALSE			36.1	CH2			1.3/7.5	1.3	CH2	7.5	SUM							
ARNG-001-010	H		FALSE			36.6	CH2			2.6/6.4	2.6	CH2	6.4	SUM							
ARNG-001-011	V		FALSE			33.2	CH2			3.5/7.8	3.5	CH2	7.8	SUM							
ARNG-001-012	H		FALSE			24.4	CH2			3.5/6.4	3.5	CH2	6.4	SUM							
ARNG-002-001	H		FALSE			19.2	CH2			13.7/40.6	13.7	CH2	40.6	SUM							
ARNG-002-002	H		FALSE			24.5	CH2			9.7/29.3	9.7	CH2	29.3	SUM							
ARNG-002-003	H		FALSE			25.2	CH2			17.4/54.0	17.4	CH2	54	SUM							
ARNG-002-004	H		FALSE			19.1	CH2			18.0/54.0	18	CH2	54	SUM							
ARNG-002-005	H		FALSE			21.2	CH2			13.1/41.1	13.1	CH2	41.1	SUM							
ARNG-002-006	H		FALSE			46.5	CH2			8.7/21.2	8.7	CH2	21.2	SUM							
ARNG-002-007	H		FALSE			48.9	CH2			23.1/73.6	23.1	CH2	73.6	SUM							
ARNG-002-008	H		FALSE			112.2	CH2			16.0/46.6	16	CH2	46.6	SUM							
ARNG-002-009	H		FALSE			107.4	CH2			10.9/29.8	10.9	CH2	29.8	SUM							
ARNG-002-010	H		FALSE			22.1	CH2			4.2/8.1	4.2	CH2	8.1	SUM							
ARNG-002-011	H		FALSE			30.5	CH2			37.5/122.5	37.5	CH2	122.5	SUM							
ARNG-002-012	H		FALSE			112.6	CH2			42.1/136.2	42.1	CH2	136.2	SUM							
ARNG-002-013	H		FALSE			12.5	CH2			15.4/51.5	15.4	CH2	51.5	SUM							
ARNG-002-014	H		FALSE			10	CH2			14.1/41.9	14.1	CH2	41.9	SUM							
ARNG-002-015	H		FALSE			15.5	CH2			24.5/73.1	24.5	CH2	73.1	SUM							
ARNG-003-001	V		FALSE			270.1	CH2				11.8	SUM									
ARNG-003-002	H		FALSE			630.4	CH2				9.3	SUM									
ARNG-003-003	H		FALSE			24.6	CH2				15.2	SUM									
ARNG-003-004	H		FALSE			124.3	CH2				9.9	SUM									
ARNG-003-005	H		FALSE			11.2	CH2				11.3	SUM									
ARNG-003-006	H		FALSE			20.9	CH2				5.1	SUM									
ARNG-003-007	H		FALSE			14.3	CH2				6.5	SUM									
ARNG-003-008	H		FALSE			23.2	CH2				12.4	SUM									
ARNG-003-009	H		FALSE			16.8	CH2				4.6	SUM									
ARNG-003-010	V		FALSE			103.6	CH2				4.8	SUM									
ARNG-003-011			FALSE			103.6	CH2				4.8	SUM									
ARNG-003-012	H		FALSE			17.1	CH2				13.1	SUM									
ARNG-003-013	H		FALSE			65.6	CH2				6.3	SUM									
ARNG-003-014	H		FALSE			19.7	CH2				18.6	SUM									
ARNG-004-001	H		FALSE			13.1	CH2			3.4/10.2	3.4	CH2	10.2	SUM							
ARNG-004-002	H		FALSE			24.4	CH2			5.7/16.2	5.7	CH2	16.2	SUM							
ARNG-004-003	H		FALSE			20.6	CH2			3.8/10.7	3.8	CH2	10.7	SUM							
ARNG-004-004	H		FALSE			10.8	CH2			6.6/23.2	6.6	CH2	23.2	SUM							
ARNG-004-005	H		FALSE			95.4	CH2			4.2/13.1	4.2	CH2	13.1	SUM							
ARNG-004-006	H		FALSE			27.2	CH2			5.1/15.9	5.1	CH2	15.9	SUM							
ARNG-004-007	H		FALSE			60.7	CH2			3.8/11.1	3.8	CH2	11.1	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-004-008	H		FALSE			41.8	CH2			7.4/24.6	7.4	CH2	24.6	SUM							
ARNG-004-009	V		FALSE			95.4	CH2			4.2/13.1	4.2	CH2	13.1	SUM							
ARNG-004-010	H		FALSE			16.4	CH2			3.8/12.2	3.8	CH2	12.2	SUM							
ARNG-004-011	H		FALSE			20.9	CH2			3.8/12.5	3.8	CH2	12.5	SUM							
ARNG-004-012	H		FALSE			18.1	CH2			11.3/34.9	11.3	CH2	34.9	SUM							
ARNG-004-013	H		FALSE			19.7	CH2			4.2/14.4	4.2	CH2	14.4	SUM							
ARNG-004-014	H		FALSE			7.4	CH2			6.8/19.9	6.8	CH2	19.9	SUM							
ARNG-004-015	H		FALSE			14.7	CH2			4.6/15.1	4.6	CH2	15.1	SUM							
ARNG-004-016	H		FALSE			29.7	CH2			2.9/4.5	2.9	CH2	4.5	SUM							
ARNG-004-017	H		FALSE			17.7	CH2			3.2/10.7	3.2	CH2	10.7	SUM							
ARNG-004-018	H		FALSE			23.2	CH2			2.3/3.8	2.3	CH2	3.8	SUM							
ARNG-004-019	H		FALSE			26.1	CH2			1.4/3.6	1.4	CH2	3.6	SUM							
ARNG-004-020			FALSE			23.2	CH2			2.3/3.8	2.3	CH2	3.8	SUM							
ARNG-004-021	H		FALSE			21	CH2			1.1/2.2	1.1	CH2	2.2	SUM							
ARNG-004-022	H		FALSE			10.1	CH2			2.2/5.2	2.2	CH2	5.2	SUM							
ARNG-004-023	H		FALSE			17.7	CH2			11.7/36.4	11.7	CH2	36.4	SUM							
ARNG-004-024	H		FALSE			33.2	CH2			3.7/9.0	3.7	CH2	9	SUM							
ARNG-004-025	H		FALSE			26.8	CH2			4.6/11.8	4.6	CH2	11.8	SUM							
ARNG-004-026	H		FALSE			35.2	CH2			2.1/3.2	2.1	CH2	3.2	SUM							
ARNG-004-027	H		FALSE			12.6	CH2			2.1/7.2	2.1	CH2	7.2	SUM							
ARNG-004-028	H		FALSE			14.5	CH2			1.3/2.2	1.3	CH2	2.2	SUM							
ARNG-004-029	H		FALSE			10.9	CH2			17.6/52.2	17.6	CH2	52.2	SUM							
ARNG-004-030	H		FALSE			9.7	CH2			2.0/2.7	2	CH2	2.7	SUM							
ARNG-004-031	H		FALSE			29.2	CH2			1.9/8.2	1.9	CH2	8.2	SUM							
ARNG-004-032	H		FALSE			13.4	CH2			2.1/3.8	2.1	CH2	3.8	SUM							
ARNG-004-033	H		FALSE			12.6	CH2			3.4/7.7	3.4	CH2	7.7	SUM							
ARNG-004-034	H		FALSE			25.9	CH2			1.2/1.8	1.2	CH2	1.8	SUM							
ARNG-004-035	H		FALSE			13.2	CH2			2.7/6.4	2.7	CH2	6.4	SUM							
ARNG-004-036	H		FALSE			47.6	CH2			3.0/6.0	3	CH2	6	SUM							
ARNG-004-037	H		FALSE			60.2	CH2			39.9/129.4	39.9	CH2	129.4	SUM							
ARNG-004-038	H		FALSE			30.2	CH2			42.0/137.8	42	CH2	137.8	SUM							
ARNG-004-039	H		FALSE			8.3	CH2			4.8/13.2	4.8	CH2	13.2	SUM							
ARNG-004-040	H		FALSE			18.4	CH2			1.8/4.2	1.8	CH2	4.2	SUM							
ARNG-005-001	V		FALSE			235.4	CH2			0.1/0.4	0.1	CH2	0.4	SUM							
ARNG-005-002	H		FALSE			35.3	CH2			9.8/29.4	9.8	CH2	29.4	SUM							
ARNG-005-003	H		FALSE			19.9	CH2			6.7/18.2	6.7	CH2	18.2	SUM							
ARNG-005-004	V		FALSE			136.2	CH2			5.2/18.1	5.2	CH2	18.1	SUM							
ARNG-005-005	H		FALSE			70.1	CH2			22.1/68.0	22.1	CH2	68	SUM							
ARNG-005-006	H		FALSE			15.7	CH2			4.1/17.9	4.1	CH2	17.9	SUM							
ARNG-005-007	H		FALSE			13.1	CH2			5.6/18.2	5.6	CH2	18.2	SUM							
ARNG-005-008	H		FALSE			49.6	CH2			13.2/48.5	13.2	CH2	48.5	SUM							
ARNG-005-009	H		FALSE			16	CH2			2.1/3.3	2.1	CH2	3.3	SUM							
ARNG-005-010	H		FALSE			12.3	CH2			7.1/19.2	7.1	CH2	19.2	SUM							
ARNG-005-011	H		FALSE			33	CH2			22.2/81.2	22.2	CH2	81.2	SUM							
ARNG-005-012	H		FALSE			10.2	CH2			4.0/12.8	4	CH2	12.8	SUM							
ARNG-006-001	H		FALSE			24.3	CH2			0.6/2.4	0.6	CH2	2.4	SUM							
ARNG-006-002	H		FALSE			218.5	CH2			1.6/6.1	1.6	CH2	6.1	SUM							
ARNG-006-003	H		FALSE			30.1	CH2			1.1/3.2	1.1	CH2	3.2	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-006-004	H		FALSE			14.8	CH2			3.2/17.4	3.2	CH2	17.4	SUM							
ARNG-006-005	H		FALSE			23.6	CH2			0.9/7.9	0.9	CH2	7.9	SUM							
ARNG-006-006	H		FALSE			19.1	CH2			2.6/14.2	2.6	CH2	14.2	SUM							
ARNG-006-007	H		FALSE			22.6	CH2			0.5/3.2	0.5	CH2	3.2	SUM							
ARNG-006-008	H		FALSE			36.3	CH2			2.4/9.4	2.4	CH2	9.4	SUM							
ARNG-006-009	H		FALSE			21.9	CH2			1.8/5.9	1.8	CH2	5.9	SUM							
ARNG-006-010	V		FALSE			141.3	CH2			3.2/11.7	3.2	CH2	11.7	SUM							
ARNG-006-011	V		FALSE			21.6	CH2			1.1/4.6	1.1	CH2	4.6	SUM							
ARNG-006-012	H		FALSE			42.1	CH2			4.1/16.1	4.1	CH2	16.1	SUM							
ARNG-006-013	H		FALSE			22.3	CH2			3.5/11.5	3.5	CH2	11.5	SUM							
ARNG-006-014	H		FALSE			26.8	CH2			2.2/7.5	2.2	CH2	7.5	SUM							
ARNG-007-001	V		FALSE			153.7	CH2			0.5/2.0	0.5	CH2	2	SUM							
ARNG-007-002	H		FALSE			22.1	CH2			1.3/4.9	1.3	CH2	4.9	SUM							
ARNG-007-003	H		FALSE			28.9	CH2			4.6/14.5	4.6	CH2	14.5	SUM							
ARNG-007-004	H		FALSE			20.2	CH2			0.5/1.9	0.5	CH2	1.9	SUM							
ARNG-007-005	H		FALSE			22.1	CH2			2.9/10.3	2.9	CH2	10.3	SUM							
ARNG-007-006	H		FALSE			42.3	CH2			0.7/2.3	0.7	CH2	2.3	SUM							
ARNG-007-007	V		FALSE			75.3	CH2			2.9/8.2	2.9	CH2	8.2	SUM							
ARNG-007-008	H		FALSE			19.1	CH2			2.1/6.8	2.1	CH2	6.8	SUM							
ARNG-007-009	H		FALSE			58.1	CH2			2.9/8.9	2.9	CH2	8.9	SUM							
ARNG-007-010	H		FALSE			26.1	CH2			2.8/10.5	2.8	CH2	10.5	SUM							
ARNG-007-011	H		FALSE			23.3	CH2			0.4/1.6	0.4	CH2	1.6	SUM							
ARNG-008-001	H		FALSE			6	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
ARNG-008-002	H		FALSE			7.1	CH2			1.4/4.2	1.4	CH2	4.2	SUM							
ARNG-008-003	V		FALSE			109.6	CH2			4.8/10.7	4.8	CH2	10.7	SUM							
ARNG-008-004	H		FALSE			19.7	CH2			1.4/3.9	1.4	CH2	3.9	SUM							
ARNG-008-005			FALSE			109.6	CH2			4.8/10.7	4.8	CH2	10.7	SUM							
ARNG-008-006	H		FALSE			20.2	CH2			7.4/23.7	7.4	CH2	23.7	SUM							
ARNG-008-007	H		FALSE			24.1	CH2			8.8/25.6	8.8	CH2	25.6	SUM							
ARNG-008-008	H		FALSE			12.2	CH2			12.2/36.1	12.2	CH2	36.1	SUM							
ARNG-009-001	H		FALSE			12.7	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
ARNG-009-002			FALSE			20.2	CH2			1.2/4.3	1.2	CH2	4.3	SUM							
ARNG-009-003	H		FALSE			11.5	CH2			1.3/3.5	1.3	CH2	3.5	SUM							
ARNG-009-004	V		FALSE			61.2	CH2			1.1/4.3	1.1	CH2	4.3	SUM		recorded as 79 on digsheet, should be 40					
ARNG-009-005	H		FALSE			10.4	CH2			5/14.2	5	CH2	14.2	SUM							
ARNG-009-006	H		FALSE			17.1	CH2			5.8/17.7	5.8	CH2	17.7	SUM							
ARNG-009-007	V		FALSE			35.4	CH2			3.5/7.3	3.5	CH2	7.3	SUM							
ARNG-009-008	V		FALSE			20.4	CH2			1.9/6.3	1.9	CH2	6.3	SUM							
ARNG-009-009	H		FALSE			24.5	CH2			3.6/10.5	3.6	CH2	10.5	SUM							
ARNG-009-010	H		FALSE			27.2	CH2			1.4/4.3	1.4	CH2	4.3	SUM							
ARNG-009-011	V		FALSE			30.3	CH2			3.7/11.3	3.7	CH2	11.3	SUM							
ARNG-010-001	H		FALSE			11.1	CH2			1.2/3.2	1.2	CH2	3.2	SUM							
ARNG-010-002	H		FALSE			50.4	CH2			42.4/140.1	42.4	CH2	140.1	SUM							
ARNG-010-003	V		FALSE			113.7	CH2			2.2/10.1	2.2	CH2	10.1	SUM							
ARNG-010-004	H		FALSE			21.2	CH2			3.5/10.2	3.5	CH2	10.2	SUM							
ARNG-010-005	H		FALSE			12.2	CH2			6.1/18.2	6.1	CH2	18.2	SUM							
ARNG-010-006	H		FALSE			40.1	CH2			2.7/5.6	2.7	CH2	5.6	SUM							
ARNG-010-007			FALSE			40.1	CH2			2.7/5.6	2.7	CH2	5.6	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-010-008	H		FALSE			48.6	CH2			12.7/37.3	12.7	CH2	37.3	SUM							
ARNG-010-009			FALSE			48.6	CH2			12.7/37.3	12.7	CH2	37.3	SUM							
ARNG-010-010	H		FALSE			31.3	CH2			5.9/19.2	5.9	CH2	19.2	SUM							
ARNG-010-011	H		FALSE			9.5	CH2			5.2/15.2	5.2	CH2	15.2	SUM							
ARNG-010-012			FALSE			191.2	CH2			22.2/75.6	22.2	CH2	75.6	SUM							
ARNG-010-013			FALSE			191.2	CH2			22.2/75.6	22.2	CH2	75.6	SUM							
ARNG-011-001	H		FALSE			270	CH2			7.1/10.4	7.1	CH2	10.4	SUM							
ARNG-011-002	H		FALSE			360	CH2			42.7/128.6	42.7	CH2	128.6	SUM							
ARNG-011-003	H		FALSE			50	CH2			21.5/50.8	21.5	CH2	50.8	SUM							
ARNG-011-004	H		FALSE			350	CH2			13.6/32.4	13.6	CH2	32.4	SUM							
ARNG-011-005	H		FALSE			72	CH2			50.7/158.6	50.7	CH2	158.6	SUM							
ARNG-011-006	H		FALSE			1670	CH2			95.5/171.2	95.5	CH2	171.2	SUM							
ARNG-011-007	H		FALSE			1670	CH2			250/762.1	250	CH2	762.1	SUM							
ARNG-011-008	H		FALSE			110	CH2			160.1/502.6	160.1	CH2	502.6	SUM							
ARNG-011-009	H		FALSE			26	CH2			17.3/51.4	17.3	CH2	51.4	SUM							
ARNG-011-010	H		FALSE			47	CH2			38/114.6	38	CH2	114.6	SUM							
ARNG-011-011	H		FALSE			113	CH2			77.1/248.2	77.1	CH2	248.2	SUM							
ARNG-011-012	H		FALSE			34	CH2			38.4/117	38.4	CH2	117	SUM							
ARNG-011-013	H		FALSE			98	CH2			70.1/247.2	70.1	CH2	247.2	SUM							
ARNG-011-014			FALSE			35	CH2			6.3/21.1	6.3	CH2	21.1	SUM							
ARNG-011-015			FALSE			61	CH2			32.1/104.6	32.1	CH2	104.6	SUM							
ARNG-011-016			FALSE			98	CH2			70.1/247.2	70.1	CH2	247.2	SUM							
ARNG-011-017	H		FALSE			860	CH2			36.4/124.5	36.4	CH2	124.5	SUM							
ARNG-011-018	H		FALSE			349	CH2			67/208	67	CH2	208	SUM							
ARNG-011-019	H		FALSE			22	CH2			5/21.5	5	CH2	21.5	SUM							
ARNG-011-020	H		FALSE			52	CH2			12.8/43.5	12.8	CH2	43.5	SUM							
ARNG-011-021	H		FALSE			372	CH2			259/838.8	259	CH2	838.8	SUM							
ARNG-011-022			FALSE			67	CH2			29.8/99.1	29.8	CH2	99.1	SUM							
ARNG-011-023	H		FALSE			139	CH2			103/338.8	103	CH2	338.8	SUM							
ARNG-011-024	H		FALSE			183	CH2			185.5/507.5	185.5	CH2	507.5	SUM							
ARNG-011-025	H		FALSE			126	CH2			18.8/53.41	18.8	CH2	53.41	SUM							
ARNG-011-026	H		FALSE			412	CH2			176.1/576.3	176.1	CH2	576.3	SUM							
ARNG-011-027	H		FALSE			81	CH2			18.5/91.6	18.5	CH2	91.6	SUM							
ARNG-011-028			FALSE			110	CH2			415/137.4	415	CH2	137.4	SUM							
ARNG-011-029	H		FALSE			210	CH2			127.2/404.3	127.2	CH2	404.3	SUM							
ARNG-011-030	H		FALSE			135	CH2			47.1/154.9	47.1	CH2	154.9	SUM							
ARNG-011-031	H		FALSE			199	CH2			173.5/874.8	173.5	CH2	874.8	SUM							
ARNG-011-032	V		FALSE			35	CH2			16.1/56	16.1	CH2	56	SUM							
ARNG-011-033			FALSE			412	CH2			229.1/760.3	176.1	CH2	576.3	SUM							
ARNG-011-034			FALSE			280	CH2			154/520.8	154	CH2	520.8	SUM							
ARNG-011-035	H		FALSE			72	CH2			50.9/166.2	50.9	CH2	166.2	SUM							
ARNG-011-036	H		FALSE			150	CH2			137.4/439.2	137.4	CH2	439.2	SUM							
ARNG-011-037	H		FALSE			1160	CH2			94.9/314.6	94.9	CH2	314.6	SUM							
ARNG-011-038	H		FALSE			25	CH2			15.5/54.2	15.5	CH2	54.2	SUM							
ARNG-011-039	H		FALSE			1100	CH2			86.1/285.6	86.1	CH2	285.6	SUM							
ARNG-011-040	H		FALSE			33	CH2			20.4/68.6	20.4	CH2	68.6	SUM							
ARNG-011-041	H		FALSE			220	CH2			82.1/169.9	82.1	CH2	169.9	SUM							
ARNG-011-042	V		FALSE			146	CH2			35.1/138.2	35.1	CH2	138.2	SUM							

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ARNG-011-043			FALSE			198	CH2			204.4/	204.4	CH2									
ARNG-011-044	V		FALSE			29	CH2			14.1/91.2	14.1	CH2	91.2	SUM							
ARNG-011-045	H		FALSE			30	CH2			15.3/54.8	15.3	CH2	54.8	SUM							
ARNG-011-046	H		FALSE			62	CH2			2/9	2	CH2	9	SUM							
ARNG-012-001	V		FALSE			170.3	CH2			2.5/15.6	2.5	CH2	15.6	SUM							
ARNG-012-002	H		FALSE			16.8	CH2			1.0/3.5	1	CH2	3.5	SUM							
ARNG-012-003	V		FALSE			107.3	CH2			0.6/1.8	0.6	CH2	1.8	SUM							
ARNG-012-004	H		FALSE			19.3	CH2			1.6/4.2	1.6	CH2	4.2	SUM							
ARNG-012-005	H		FALSE			21.5	CH2			1.7/8.9	1.7	CH2	8.9	SUM							
ARNG-012-006	H		FALSE			87.6	CH2			1.4/4.7	1.4	CH2	4.7	SUM							
ARNG-012-007	H		FALSE			18.1	CH2			1.7/6.1	1.7	CH2	6.1	SUM							
ARNG-012-008	H		FALSE			19.1	CH2			2.2/8.2	2.2	CH2	8.2	SUM							
ARNG-012-009	H		FALSE			15.3	CH2			1.3/4.8	1.3	CH2	4.8	SUM							
ARNG-012-010	H		FALSE			22.8	CH2			1.3/4.1	1.3	CH2	4.1	SUM							
ARNG-012-011	H		FALSE			39.2	CH2			2.2/7.9	2.2	CH2	7.9	SUM							
ARNG-012-012	H		FALSE			15.8	CH2			4.8/16.6	4.8	CH2	16.6	SUM							
ARNG-012-013	H		FALSE			9.5	CH2			3.2/9.2	3.2	CH2	9.2	SUM							
ARNG-012-014	H		FALSE			32.4	CH2			2.1/6.7	2.1	CH2	6.7	SUM							
ARNG-012-015	H		FALSE			17.7	CH2			1.7/7.7	1.7	CH2	7.7	SUM							
ARNG-012-016	H		FALSE			37.6	CH2			1.9/4.2	1.9	CH2	4.2	SUM							
ARNG-013-001	H		FALSE			19.3	CH2			3.9/5.1	3.9	CH2	5.1	SUM							
ARNG-013-002	H		FALSE			28.2	CH2			3.5/10.1	3.5	CH2	10.1	SUM							
ARNG-013-003	H		FALSE			20.1	CH2			3.8/9.7	3.8	CH2	9.7	SUM							
ARNG-013-004	H		FALSE			69.7	CH2			31.2/104.8	31.2	CH2	104.8	SUM							
ARNG-013-005			FALSE			115.5	CH2			156.9/550.6	156.9	CH2	550.6	SUM							
ARNG-013-006	H		FALSE			25.2	CH2			4.5/13.5	4.5	CH2	13.5	SUM							
ARNG-013-007	H		FALSE			56	CH2			2.0/8.3	2	CH2	8.3	SUM							
ARNG-013-008	H		FALSE			79.6	CH2			2.8/8.1	2.8	CH2	8.1	SUM							
ARNG-013-009	H		FALSE			44.2	CH2			2.9/18.1	2.9	CH2	18.1	SUM							
ARNG-013-010	H		FALSE			39.4	CH2			36.2/123.1	36.2	CH2	123.1	SUM							
ARNG-013-011	H		FALSE			33.1	CH2			1.9/7.2	1.9	CH2	7.2	SUM							
ARNG-013-012	H		FALSE			56.5	CH2			7.5/23.6	7.5	CH2	23.6	SUM							
ARNG-013-013			FALSE			56.5	CH2			7.5/23.6	7.5	CH2	23.6	SUM							
ARNG-013-014	H		FALSE			39	CH2			3.9/8.2	3.9	CH2	8.2	SUM							
ARNG-013-015	V		FALSE			41.9	CH2			2.9/6.1	2.9	CH2	6.1	SUM							
ARNG-013-016	H		FALSE			19.4	CH2			6.9/16.2	6.9	CH2	16.2	SUM							
ARNG-013-017	H		FALSE			14.9	CH2			8.0/36.2	8	CH2	36.2	SUM							
ARNG-013-018	V		FALSE			18.2	CH2			15.2/52.3	15.2	CH2	52.3	SUM							
ARNG-013-019	H		FALSE			24.2	CH2			14.3/56.2	14.3	CH2	56.2	SUM							
ARNG-013-020	H		FALSE			14	CH2			11.1/47.2	11.1	CH2	47.2	SUM							
ARNG-013-021	H		FALSE			41.5	CH2			26.2/88.6	26.2	CH2	88.6	SUM							
ARNG-013-022	H		FALSE			41.4	CH2			22.5/81.9	22.5	CH2	81.9	SUM							
ARNG-013-023	H		FALSE			39.5	CH2			7.2/31.0	7.2	CH2	31	SUM							
ARNG-013-024	H		FALSE			32	CH2			9.6/38.3	9.6	CH2	38.3	SUM							
ARNG-013-025	V		FALSE			112.1	CH2			5.2/24.3	5.2	CH2	24.3	SUM							
ARNG-013-026	H		FALSE			51.7	CH2			4.0/23.1	4	CH2	23.1	SUM							
ARNG-014-001	H		FALSE			54.3	CH2			15.0/47.3	15	CH2	47.3	SUM							
ARNG-014-002	H		FALSE			19.3	CH2			1.6/4.3	1.6	CH2	4.3	SUM							

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ARNG-014-003	H		FALSE			88.1	CH2			22.7/73.0	22.7	CH2	73	SUM							
ARNG-014-004	H		FALSE			14.5	CH2			3.5/7.1	3.5	CH2	7.1	SUM							
ARNG-014-005	H		FALSE			42	CH2			3.5/8.2	3.5	CH2	8.2	SUM							
ARNG-014-006	H		FALSE			29.3	CH2			2.8/3.4	2.8	CH2	3.4	SUM							
ARNG-014-007	H		FALSE			13.4	CH2			3.0/6.1	3	CH2	6.1	SUM							
ARNG-014-008	H		FALSE			16.5	CH2			14.0/40.5	14	CH2	40.5	SUM							
ARNG-014-009	H		FALSE			38.3	CH2			2.5/7.1	2.5	CH2	7.1	SUM							
ARNG-014-010	H		FALSE			49.9	CH2			2.1/5.6	2.1	CH2	5.6	SUM							
ARNG-014-011	H		FALSE			11.5	CH2			2.3/4.6	2.3	CH2	4.6	SUM							
ARNG-014-012	H		FALSE			8.7	CH2			4.5/8.9	4.5	CH2	8.9	SUM							
ARNG-014-013	H		FALSE			19	CH2			4.0/10.2	4	CH2	10.2	SUM							
ARNG-014-014	H		FALSE			16.1	CH2			5.9/22.3	5.9	CH2	22.3	SUM							
ARNG-014-015	H		FALSE			39.9	CH2			13.0/46.1	13	CH2	46.1	SUM							
ARNG-014-016	H		FALSE			48.3	CH2			4.8/22.9	4.8	CH2	22.9	SUM							
ARNG-014-017	H		FALSE			25.9	CH2			0.9/1.6	0.9	CH2	1.6	SUM							
ARNG-014-018			FALSE			121.6	CH2			1.2/3.6	1.2	CH2	3.6	SUM							
ARNG-014-019	H		FALSE			24.3	CH2			3.5/11.1	3.5	CH2	11.1	SUM							
ARNG-014-020	V		FALSE			94.1	CH2			4.9/16.8	4.9	CH2	16.8	SUM							
ARNG-015-001	H		FALSE			7.4	CH2			1.4/22	1.4	CH2	22	SUM							
ARNG-015-002			FALSE			23.1	CH2			4.3/13.1	4.3	CH2	13.1	SUM							
ARNG-015-003	H		FALSE			27.9	CH2			1.6/4.2	1.6	CH2	4.2	SUM							
ARNG-015-004	H		FALSE			19.2	CH2			1.2/2.9	1.2	CH2	2.9	SUM							
ARNG-015-005	H		FALSE			29.1	CH2			1.8/3.2	1.8	CH2	3.2	SUM							
ARNG-015-006	H		FALSE			10.2	CH2			1.5/3.1	1.5	CH2	3.1	SUM							
ARNG-015-007	H		FALSE			37.4	CH2			10.5/30.1	10.5	CH2	30.1	SUM							
ARNG-015-008			FALSE			33.1	CH2			10.5/30.1	10.5	CH2	30.1	SUM							
ARNG-015-009	H		FALSE			26.1	CH2			6.1/15.5	6.1	CH2	15.5	SUM							
ARNG-015-010	H		FALSE			168.7	CH2			1.3/5.3	1.3	CH2	5.3	SUM							
ARNG-015-011	H		FALSE			7.1	CH2			2/5.5	2	CH2	5.5	SUM							
ARNG-015-012	V		FALSE			101.1	CH2			2.1/6.3	2.1	CH2	6.3	SUM							
ARNG-015-013	H		FALSE			13.1	CH2			6.5/19.5	6.5	CH2	19.5	SUM							
ARNG-015-014	H		FALSE			12	CH2			1.4/14.4	1.4	CH2	14.4	SUM							
ARNG-016-001	H		FALSE			16.9	CH2			3.5/14.4	3.5	CH2	14.4	SUM							
ARNG-016-002	H		FALSE			19.9	CH2			5.6/27.0	5.6	CH2	27	SUM							
ARNG-016-003	H		FALSE			13.1	CH2			12.9/25.9	12.9	CH2	25.9	SUM							
ARNG-016-004	H		FALSE			23.2	CH2			13.1/8.5	13.1	CH2	8.5	SUM							
ARNG-016-005	H		FALSE			9.5	CH2			1.2/2.3	1.2	CH2	2.3	SUM							
ARNG-016-006	V		FALSE			93.3	CH2			3.0/8.1	3	CH2	8.1	SUM							
ARNG-016-007	H		FALSE			7.6	CH2			5.5/23.7	5.5	CH2	23.7	SUM							
ARNG-016-008	H		FALSE			22.5	CH2			18.3/59.6	18.3	CH2	59.6	SUM							
ARNG-016-009	H		FALSE			17.8	CH2			7.7/25.2	7.7	CH2	25.2	SUM							
ARNG-016-010	H		FALSE			32.5	CH2			6.3/20.4	6.3	CH2	20.4	SUM							
ARNG-016-011	H		FALSE			13.5	CH2			1.5/5.1	1.5	CH2	5.1	SUM							
ARNG-016-012	H		FALSE			14.9	CH2			3.3/14.0	3.3	CH2	14	SUM							
ARNG-016-013	H		FALSE			30.7	CH2			8.6/33.0	8.6	CH2	33	SUM							
ARNG-016-014	H		FALSE			16	CH2			1.5/5.2	1.5	CH2	5.2	SUM							
ARNG-016-015	V		FALSE			21.5	CH2			2.4/6.5	2.4	CH2	6.5	SUM							
ARNG-016-016	H		FALSE			11.9	CH2			2.3/3.2	2.3	CH2	3.2	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-016-017	H		FALSE			20.5	CH2			1.8/6.5	1.8	CH2	6.5	SUM							
ARNG-016-018	H		FALSE			31.5	CH2			1.2/4.3	1.2	CH2	4.3	SUM							
ARNG-017-001	H		FALSE			35	CH2			1.2/2.3	1.2	CH2	2.3	SUM							
ARNG-017-002	H		FALSE			9.2	CH2			0/0	0	CH2	0	SUM							
ARNG-017-003	H		FALSE			22.8	CH2			10.2/30.2	10.2	CH2	30.2	SUM							
ARNG-017-004			FALSE			161.5	CH2			4.5/10.2	4.5	CH2	10.2	SUM							
ARNG-017-005	V		FALSE			161.5	CH2			4.5/10.2	4.5	CH2	10.2	SUM							
ARNG-017-006	H		FALSE			15.2	CH2			4.2/8.2	4.2	CH2	8.2	SUM							
ARNG-017-007	H		FALSE			7.1	CH2			5.1/12.3	5.1	CH2	12.3	SUM							
ARNG-017-008	H		FALSE			23.4	CH2			5.2/9.1	5.2	CH2	9.1	SUM							
ARNG-017-009	H		FALSE			20.1	CH2			4.5/13.6	4.5	CH2	13.6	SUM							
ARNG-017-010	H		FALSE			32.1	CH2			7.2/21.3	7.2	CH2	21.3	SUM							
ARNG-017-011	H		FALSE			33.2	CH2			9.0/23.2	9	CH2	23.2	SUM							
ARNG-017-012	H		FALSE			36.8	CH2			4.9/19.2	4.9	CH2	19.2	SUM							
ARNG-017-013			FALSE			36.8	CH2			4.9/19.2	4.9	CH2	19.2	SUM							
ARNG-017-014	H		FALSE			18.2	CH2			3.6/13.6	3.6	CH2	13.6	SUM							
ARNG-017-015	H		FALSE			14.7	CH2			3.2/10.9	3.2	CH2	10.9	SUM							
ARNG-017-016	H		FALSE			16.5	CH2			1.8/3.4	1.8	CH2	3.4	SUM							
ARNG-017-017	H		FALSE			10.8	CH2			1.3/3.7	1.3	CH2	3.7	SUM							
ARNG-018-001	H		FALSE			16.4	CH2			1.2/3.8	1.2	CH2	3.8	SUM							
ARNG-018-002	H		FALSE			20.2	CH2			3.2/10.1	3.2	CH2	10.1	SUM							
ARNG-018-003	V		FALSE			110.1	CH2			3.7/11.2	3.7	CH2	11.2	SUM							
ARNG-018-004	H		FALSE			103.5	CH2			1.2/3.6	1.2	CH2	3.6	SUM							
ARNG-018-005	H		FALSE			332.2	CH2			1.7/6.1	1.7	CH2	6.1	SUM							
ARNG-018-006	H		FALSE			90.2	CH2			2.1/6.2	2.1	CH2	6.2	SUM							
ARNG-018-007	H		FALSE			32.3	CH2			8.7/24.2	8.7	CH2	24.2	SUM							
ARNG-018-008	H		FALSE			13.2	CH2			10/32.3	10	CH2	32.3	SUM							
ARNG-018-009	H		FALSE			12.3	CH2			10.2/32.4	10.2	CH2	32.4	SUM							
ARNG-018-010	H		FALSE			7.2	CH2			4/13.1	4	CH2	13.1	SUM							
ARNG-018-011	H		FALSE			23.6	CH2			4.5/14.2	4.5	CH2	14.2	SUM							
ARNG-018-012	H		FALSE			7.7	CH2			3.1/8.2	3.1	CH2	8.2	SUM							
ARNG-019-001	H		FALSE			12.7	CH2			3.4/3.7	3.4	CH2	3.7	SUM							
ARNG-019-002	H		FALSE			10.8	CH2			1.3/4.6	1.3	CH2	4.6	SUM							
ARNG-019-003	H		FALSE			31.4	CH2			1.6/4.6	1.6	CH2	4.6	SUM							
ARNG-019-004	H		FALSE			19.2	CH2			2.1/4.6	2.1	CH2	4.6	SUM							
ARNG-019-005	H		FALSE			16.3	CH2			0.6/2.9	0.6	CH2	2.9	SUM							
ARNG-019-006	H		FALSE			23.2	CH2			1.2/3.2	1.2	CH2	3.2	SUM							
ARNG-019-007	H		FALSE			50.9	CH2			0.9/2.8	0.9	CH2	2.8	SUM							
ARNG-019-008	H		FALSE			31.3	CH2			1.7/5.2	1.7	CH2	5.2	SUM							
ARNG-019-009	H		FALSE			43.5	CH2			3.6/12.2	3.6	CH2	12.2	SUM							
ARNG-019-010	H		FALSE			43.5	CH2			2.7/7.9	2.7	CH2	7.9	SUM							
ARNG-019-011	V		FALSE			91.1	CH2			1.7/4.5	1.7	CH2	4.5	SUM							
ARNG-019-012	H		FALSE			66.1	CH2			4.1/11.8	4.1	CH2	11.8	SUM							
ARNG-019-013	H		FALSE			25.1	CH2			5.6/14.9	5.6	CH2	14.9	SUM							
ARNG-019-014	H		FALSE			28.9	CH2			3.2/12.1	3.2	CH2	12.1	SUM							
ARNG-019-015	H		FALSE			14.8	CH2			1.9/12.1	1.9	CH2	12.1	SUM							
ARNG-019-016	H		FALSE			13.8	CH2			4.6/13.4	4.6	CH2	13.4	SUM							
ARNG-019-017	H		FALSE			11.3	CH2			2.5/6.1	2.5	CH2	6.1	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-019-018	H		FALSE			80.2	CH2			1.3/3.1	1.3	CH2	3.1	SUM							
ARNG-019-019	H		FALSE			17.1	CH2			11.9/38.4	11.9	CH2	38.4	SUM							
ARNG-019-020			FALSE			11.9	CH2			14.6/47.4	14.6	CH2	47.4	SUM							
ARNG-020-001	H		FALSE			175.6	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
ARNG-020-002	H		FALSE			21.2	CH2			4.5/14.1	4.5	CH2	14.1	SUM							
ARNG-020-003	H		FALSE			14.1	CH2			1.3/5.4	1.3	CH2	5.4	SUM							
ARNG-020-004	H		FALSE			12.7	CH2			15.4/46.4	15.4	CH2	46.4	SUM							
ARNG-020-005	H		FALSE			11.1	CH2			1.2/4.3	1.2	CH2	4.3	SUM							
ARNG-020-006	H		FALSE			29.7	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
ARNG-020-007	H		FALSE			13.1	CH2			1.5/3.8	1.5	CH2	3.8	SUM							
ARNG-020-008	H		FALSE			14.1	CH2			2.1/4.5	2.1	CH2	4.5	SUM							
ARNG-020-009	H		FALSE			24.8	CH2			16.6/51.5	16.6	CH2	51.5	SUM							
ARNG-020-010	H		FALSE			35.6	CH2			18.1/57.6	18.1	CH2	57.6	SUM							
ARNG-020-011	H		FALSE			18.4	CH2			4.1/15.1	4.1	CH2	15.1	SUM							
ARNG-020-012	H		FALSE			10.8	CH2			3.7/12.1	3.7	CH2	12.1	SUM							
ARNG-020-013	H		FALSE			56.1	CH2			13.1/42.1	13.1	CH2	42.1	SUM							
ARNG-020-014	V		FALSE			30.9	CH2			2.2/7.1	2.2	CH2	7.1	SUM							
ARNG-020-015	H		FALSE			19.9	CH2			1.2/3.6	1.2	CH2	3.6	SUM							
ARNG-020-016	V		FALSE			104.1	CH2			1.3/4.1	1.3	CH2	4.1	SUM							
ARNG-020-017	H		FALSE			28.6	CH2			2.5/5.2	2.5	CH2	5.2	SUM							
ARNG-020-018	H		FALSE			25.7	CH2			3.8/11.2	3.8	CH2	11.2	SUM							
ARNG-020-019	H		FALSE			15.9	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
ARNG-020-020	H		FALSE			18.2	CH2			1.3/3.4	1.3	CH2	3.4	SUM							
ARNG-020-021	H		FALSE			20.1	CH2			2.1/5.6	2.1	CH2	5.6	SUM							
ARNG-020-022	H		FALSE			26.5	CH2			4.4/12.1	4.4	CH2	12.1	SUM							
ARNG-020-023	H		FALSE			17.5	CH2			4.7/10.1	4.7	CH2	10.1	SUM							
ARNG-020-024	H		FALSE			18.1	CH2			5.0/15.3	5	CH2	15.3	SUM							
ARNG-020-025	H		FALSE			19.1	CH2			2.5/12.1	2.5	CH2	12.1	SUM							
ARNG-020-026	H		FALSE			26.1	CH2			1.7/4.5	1.7	CH2	4.5	SUM							
ARNG-020-027	H		FALSE			29.1	CH2			1.2/6.5	1.2	CH2	6.5	SUM							
ARNG-021-001	V		FALSE			175.9	CH2				3.1	SUM									
ARNG-021-002	H		FALSE			51.6	CH2				3.5	SUM									
ARNG-021-003	H		FALSE			38.9	CH2				35.7	SUM									
ARNG-021-004	V		FALSE			82.4	CH2				4.2	SUM									
ARNG-021-005	H		FALSE			13.1	CH2				7.3	SUM									
ARNG-021-006	H		FALSE			17.3	CH2				4.7	SUM									
ARNG-021-007	H		FALSE			15.9	CH2				14.1	SUM									
ARNG-021-008	H		FALSE			17.8	CH2				8.7	SUM									
ARNG-021-009	H		FALSE			16.9	CH2				14.2	SUM									
ARNG-021-010	H		FALSE			10.8	CH2				4.3	SUM									
ARNG-021-011	H		FALSE			10.7	CH2				6.2	SUM									
ARNG-021-012	H		FALSE			7.4	CH2				3.4	SUM									
ARNG-021-013	H		FALSE			13.9	CH2				1.3	SUM									
ARNG-021-014	H		FALSE			14.4	CH2				4.1	SUM									
ARNG-021-015	H		FALSE			12.6	CH2				6.2	SUM									
ARNG-021-016	H		FALSE			14.9	CH2				2.4	SUM									
ARNG-021-017	H		FALSE			12.8	CH2				3.6	SUM									
ARNG-021-018	H		FALSE			12.6	CH2				14.2	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-021-019	H		FALSE			44.3	CH2				12.2	SUM									
ARNG-021-020	H		FALSE			13.2	CH2				2.8	SUM									
ARNG-022-001	H		FALSE			8.2	CH2			2.5/	2.5	CH2									
ARNG-022-002	V		FALSE			84.1	CH2			1.9/	1.9	CH2									
ARNG-022-003	H		FALSE			5.7	CH2			2.3/	2.3	CH2									
ARNG-022-004	H		FALSE			130	CH2			3.2/	3.2	CH2									
ARNG-022-005	H		FALSE			23.3	CH2			2.4/	2.4	CH2									
ARNG-022-006	H		FALSE			13.6	CH2			3.6/	3.6	CH2									
ARNG-022-007	V		FALSE			23.8	CH2			8.5/	8.5	CH2									
ARNG-022-008	H		FALSE			13.1	CH2			2.2/	2.2	CH2									
ARNG-022-009			FALSE			13.2	CH2			1.5/	1.5	CH2									
ARNG-022-010	H		FALSE			12.1	CH2			1.8/	1.8	CH2									
ARNG-022-011			FALSE			44.6	CH2			13/	13	CH2									
ARNG-022-012	H		FALSE			26.3	CH2			1.8/	1.8	CH2									
ARNG-022-013	V		FALSE			10.5	CH2			4.3/	4.3	CH2									
ARNG-022-014	H		FALSE			29.3	CH2			1.4/	1.4	CH2									
ARNG-022-015	H		FALSE			8.1	CH2			3.5/	3.5	CH2									
ARNG-022-016	H		FALSE			8.7	CH2			2.1/	2.1	CH2									
ARNG-022-017	H		FALSE			15.3	CH2			2.8/	2.8	CH2									
ARNG-022-018			FALSE			16.5	CH2			1.2/	1.2	CH2									
ARNG-022-019			FALSE			8.9	CH2			1.4/	1.4	CH2									
ARNG-022-020	V		FALSE			79.2	CH2			2/	2	CH2									
ARNG-022-021	H		FALSE			25.7	CH2			3.8/	3.8	CH2									
ARNG-023-001	V		FALSE			166.4	CH2			361.2/883.2	2.3	CH2	6.3	SUM							
ARNG-023-002	H		FALSE			12.8	CH2			2.1/6.2	2.1	CH2	6.2	SUM							
ARNG-023-003	H		FALSE			7.8	CH2			4.9/15.1	4.9	CH2	15.1	SUM							
ARNG-023-004	V		FALSE			110.1	CH2			2.3/5.7	2.3	CH2	5.7	SUM							
ARNG-023-005	H		FALSE			21.5	CH2			4.9/15.1	4.9	CH2	15.1	SUM							
ARNG-023-006	V		FALSE			71.5	CH2			3.8/11.7	3.8	CH2	11.7	SUM							
ARNG-023-007	H		FALSE			11.3	CH2			5.5/18.8	5.5	CH2	18.8	SUM							
ARNG-023-008	H		FALSE			18.8	CH2			4.9/15.1	4.9	CH2	15.1	SUM							
ARNG-023-009	H		FALSE			73.1	CH2			3.4/11.6	3.4	CH2	11.6	SUM							
ARNG-023-010	H		FALSE			8.3	CH2			4.8/15.2	4.8	CH2	15.2	SUM							
ARNG-023-011	H		FALSE			233.6	CH2			4.4/14.2	4.4	CH2	14.2	SUM							
ARNG-023-012	H		FALSE			17.7	CH2			1.9/5.4	1.9	CH2	5.4	SUM							
ARNG-023-013			FALSE			7.3	CH2			4.3/13.5	4.3	CH2	13.5	SUM							
ARNG-023-014	H		FALSE			6.7	CH2			5.6/18.4	5.6	CH2	18.4	SUM							
ARNG-023-015	H		FALSE			15.8	CH2			4.1/14.2	4.1	CH2	14.2	SUM							
ARNG-023-016	H		FALSE			10.2	CH2			1.6/5.4	1.6	CH2	5.4	SUM							
ARNG-023-017	H		FALSE			11.4	CH2			5.6/17.4	5.6	CH2	17.4	SUM							
ARNG-023-018			FALSE			13.4	CH2			4.2/14.3	4.2	CH2	14.3	SUM							
ARNG-023-019	H		FALSE			27.3	CH2			2.3/5.4	2.3	CH2	5.4	SUM							
ARNG-023-020	H		FALSE			14.8	CH2			2.1/6.3	2.1	CH2	6.3	SUM							
ARNG-023-021	H		FALSE			15.9	CH2			4.2/10.8	4.2	CH2	10.8	SUM							
ARNG-024-001	H		FALSE			11.2	CH2			0.6/1.5	0.6	CH2		SUM							
ARNG-024-002	H		FALSE			18.2	CH2			4.5/14.5	4.5	CH2	14.5	SUM							
ARNG-024-003	H		FALSE			84.1	CH2			3.8/12.6	3.8	CH2	12.6	SUM							
ARNG-024-004	H		FALSE			84.1	CH2			3.8/12.6	3.8	CH2	12.6	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-024-005	H		FALSE			7.7	CH2			2.7/10.2	2.7	CH2	10.2	SUM							
ARNG-024-006	H		FALSE			7.9	CH2			4.8/13.1	4.8	CH2	13.1	SUM							
ARNG-024-007	V		FALSE			96.8	CH2			1.9/5.0	1.9	CH2	5	SUM							
ARNG-024-008	H		FALSE			123.6	CH2			6.5/18.5	6.5	CH2	18.5	SUM							
ARNG-024-009	H		FALSE			163.2	CH2			24.8/76.9	24.8	CH2	76.9	SUM							
ARNG-025-001	H		FALSE			14.1	CH2			12.2/24.3	12.2	CH2	24.3	SUM							
ARNG-025-002	H		FALSE			9.2	CH2			8.6/32.3	8.6	CH2	32.3	SUM							
ARNG-025-003	H		FALSE			342.1	CH2			80.2/255	80.2	CH2	255	SUM							
ARNG-025-004	H		FALSE			45.1	CH2			101.0/332.3	101	CH2	332.3	SUM							
ARNG-025-005	H		FALSE			122.5	CH2			12.2/40.3	12.2	CH2	40.3	SUM							
ARNG-025-006	H		FALSE			101.1	CH2			22.9/75.3	22.9	CH2	75.3	SUM							
ARNG-025-007	H		FALSE			42.6	CH2			7.7/25.1	7.7	CH2	25.1	SUM							
ARNG-025-008	H		FALSE			66.1	CH2			12.2/40.3	12.2	CH2	40.3	SUM							
ARNG-025-009	H		FALSE			66.1	CH2			12.2/40.3	12.2	CH2	40.3	SUM							
ARNG-025-010	H		FALSE			114.2	CH2			23.4/77.6	23.4	CH2	77.6	SUM							
ARNG-025-011	H		FALSE			7.5	CH2			4.4/14.6	4.4	CH2	14.6	SUM							
ARNG-025-012	H		FALSE			23.1	CH2			4.5/12.4	4.5	CH2	12.4	SUM							
ARNG-025-013	H		FALSE			13.1	CH2			4.5/13.9	4.5	CH2	13.9	SUM							
ARNG-025-014	H		FALSE			24.1	CH2			6.7/22.4	6.7	CH2	22.4	SUM							
ARNG-025-015	H		FALSE			13	CH2			5.2/14.3	5.2	CH2	14.3	SUM							
ARNG-025-016	H		FALSE			42.3	CH2			9.5/31.2	9.5	CH2	31.2	SUM							
ARNG-025-017	H		FALSE			63.7	CH2			60.5/195.4	60.5	CH2	195.4	SUM							
ARNG-025-018	H		FALSE			73.2	CH2			6.0/20.5	6	CH2	20.5	SUM							
ARNG-025-019	H		FALSE			10.5	CH2			8.4/26.9	8.4	CH2	26.9	SUM							
ARNG-025-020	H		FALSE			100.2	CH2			11.8/35.8	11.8	CH2	35.8	SUM							
ARNG-025-021	H		FALSE			9.5	CH2			6.2/19.5	6.2	CH2	19.5	SUM							
ARNG-025-022	H		FALSE			130.1	CH2			19.4/61.2	19.4	CH2	61.2	SUM							
ARNG-025-023	H		FALSE			10	CH2			2.3/5.7	2.3	CH2	5.7	SUM							
ARNG-025-024	H		FALSE			63.2	CH2			8.5/28.7	8.5	CH2	28.7	SUM							
ARNG-025-025	H		FALSE			40.2	CH2			9.5/30.8	9.5	CH2	30.8	SUM							
ARNG-025-026	H		FALSE			143.1	CH2			17.1/59.6	17.1	CH2	59.6	SUM							
ARNG-025-027	H		FALSE			19.5	CH2			5.5/18.6	5.5	CH2	18.6	SUM							
ARNG-025-028	H		FALSE			132.2	CH2			10.9/34.2	10.9	CH2	34.2	SUM							
ARNG-025-029	H		FALSE			13.7	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
ARNG-025-030	V		FALSE			64.3	CH2			2.5/8.4	2.5	CH2	8.4	SUM							
ARNG-025-031	H		FALSE			16.9	CH2			6.2/14.9	6.2	CH2	14.9	SUM							
ARNG-025-032	V		FALSE			35.6	CH2			2.8/8.9	2.8	CH2	8.9	SUM							
ARNG-025-033	H		FALSE			10.2	CH2			3.2/9.9	3.2	CH2	9.9	SUM							
ARNG-025-034	H		FALSE			147.3	CH2			5.4/17.9	5.4	CH2	17.9	SUM							
ARNG-025-035	H		FALSE			27.4	CH2			5.6/18.1	5.6	CH2	18.1	SUM							
ARNG-025-036	H		FALSE			6.3	CH2			1.2/5.6	1.2	CH2	5.6	SUM							
ARNG-025-037	H		FALSE			27.6	CH2			9.0/34.3	9	CH2	34.3	SUM							
ARNG-025-038	H		FALSE			15.2	CH2			2.0/5.9	2	CH2	5.9	SUM							
ARNG-025-039	H		FALSE			346.7	CH2			11.2/34.1	11.2	CH2	34.1	SUM							
ARNG-025-040	H		FALSE			346.7	CH2			11.2/34.1	11.2	CH2	34.1	SUM							
ARNG-025-041	H		FALSE			35.2	CH2			11.2/35.4	11.2	CH2	35.4	SUM							
ARNG-025-042	H		FALSE			18.2	CH2			9.5/30.2	9.5	CH2	30.2	SUM							
ARNG-026-001	H		FALSE			15.1	CH2			4.9/17.6	4.9	CH2	17.6	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-026-002	H		FALSE			30.8	CH2			1.6/4.8	1.6	CH2	4.8	SUM							
ARNG-026-003	V		FALSE			24.3	CH2			1.6/4.2	1.6	CH2	4.2	SUM							
ARNG-026-004	H		FALSE			31.3	CH2			0.6/2.1	0.6	CH2	2.1	SUM							
ARNG-026-005	V		FALSE			34.2	CH2			3.1/9.9	3.1	CH2	9.9	SUM							
ARNG-026-006	H		FALSE			21.6	CH2			1.4/4.1	1.4	CH2	4.1	SUM							
ARNG-026-007	H		FALSE			55.6	CH2			0.6/1.1	0.6	CH2	1.1	SUM							
ARNG-026-008	H		FALSE			38.2	CH2			3.2/10.8	3.2	CH2	10.8	SUM							
ARNG-026-009	H		FALSE			12.1	CH2			2.3/4.9	2.3	CH2	4.9	SUM							
ARNG-026-010	H		FALSE			14.2	CH2			4.3/13.2	4.3	CH2	13.2	SUM							
ARNG-026-011	H		FALSE			11.4	CH2			1.7/4.1	1.7	CH2	4.1	SUM							
ARNG-026-012	H		FALSE			49.7	CH2			1.1/2.1	1.1	CH2	2.1	SUM							
ARNG-026-013	H		FALSE			20.6	CH2			14.5/39.6	14.5	CH2	39.6	SUM							
ARNG-026-014	H		FALSE			13.2	CH2			3.6/10.1	3.6	CH2	10.1	SUM							
ARNG-026-015	H		FALSE			54.1	CH2			4.5/16.4	4.5	CH2	16.4	SUM							
ARNG-026-016	H		FALSE			55.4	CH2			1.8/5.4	1.8	CH2	5.4	SUM							
ARNG-026-017	H		FALSE			16.4	CH2			3.6/8.1	3.6	CH2	8.1	SUM							
ARNG-026-018	H		FALSE			16.1	CH2			4.9/16.6	4.9	CH2	16.6	SUM							
ARNG-026-019	V		FALSE			158.3	CH2			2.6/7.1	2.6	CH2	7.1	SUM							
ARNG-026-020	H		FALSE			10.1	CH2			1.4/6.1	1.4	CH2	6.1	SUM							
ARNG-026-021	H		FALSE			48.3	CH2			4.1/10.4	4.1	CH2	10.4	SUM							
ARNG-026-022	H		FALSE			19.1	CH2			2.5/5.1	2.5	CH2	5.1	SUM							
ARNG-026-023	H		FALSE			14.9	CH2			3.1/9.1	3.1	CH2	9.1	SUM							
ARNG-026-024	H		FALSE			14.9	CH2			3.8/7.3	3.8	CH2	7.3	SUM							
ARNG-026-025	H		FALSE			20.1	CH2			2.1/6.9	2.1	CH2	6.9	SUM							
ARNG-026-026	H		FALSE			22.1	CH2			1.9/4.8	1.9	CH2	4.8	SUM							
ARNG-026-027	H		FALSE			9.2	CH2			0.6/4.8	0.6	CH2	4.8	SUM							
ARNG-026-028	H		FALSE			10.6	CH2			2.1/4.1	2.1	CH2	4.1	SUM							
ARNG-026-029	H		FALSE			15.7	CH2			3.1/5.1	3.1	CH2	5.1	SUM							
ARNG-026-030	H		FALSE			9.6	CH2			1.9/3.7	1.9	CH2	3.7	SUM							
ARNG-026-031	H		FALSE			24.4	CH2			2.1/6.8	2.1	CH2	6.8	SUM							
ARNG-026-032	H		FALSE			23.4	CH2			2.1/4.9	2.1	CH2	4.9	SUM							
ARNG-026-033	H		FALSE			78.8	CH2			63.1/201.2	63.1	CH2	201.2	SUM							
ARNG-027-001	H		FALSE			63.4	CH2			4.6/12.1	4.6	CH2	12.1	SUM							
ARNG-027-002	H		FALSE			130.4	CH2			163.3/545.6	163.3	CH2	545.6	SUM							
ARNG-027-003	H		FALSE			64.6	CH2			55.2/167.4	55.2	CH2	167.4	SUM							
ARNG-027-004	H		FALSE			188.2	CH2			132.2/437.1	132.2	CH2	437.1	SUM							
ARNG-027-005	H		FALSE			230.5	CH2			181.2/610.7	181.2	CH2	610.7	SUM							
ARNG-027-006	V		FALSE			129.4	CH2			5.6/12.4	5.6	CH2	12.4	SUM							
ARNG-027-007	H		FALSE			12.9	CH2			11.1/22.4	11.1	CH2	22.4	SUM							
ARNG-027-008	H		FALSE			104.8	CH2			81.3/238.3	81.3	CH2	238.3	SUM							
ARNG-027-009	H		FALSE			79.3	CH2			51.6/162.9	51.6	CH2	162.9	SUM							
ARNG-027-010	H		FALSE			124.7	CH2			127.1/404.3	127.1	CH2	404.3	SUM							
ARNG-027-011	H		FALSE			32.6	CH2			24.1/75.1	24.1	CH2	75.1	SUM							
ARNG-027-012	V		FALSE			305.4	CH2			38.1/123.6	38.1	CH2	123.6	SUM							
ARNG-027-013	H		FALSE			156.8	CH2			149.6/494.4	149.6	CH2	494.4	SUM							
ARNG-027-014	H		FALSE			48.7	CH2			23.3/68.9	23.3	CH2	68.9	SUM							
ARNG-027-015	H		FALSE			28.7	CH2			22.1/65.4	22.1	CH2	65.4	SUM							
ARNG-027-016	V		FALSE			39.5	CH2			1.1/1.7	1.1	CH2	1.7	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-027-017	V		FALSE			78.9	CH2			66.1/203.4	66.1	CH2	203.4	SUM							
ARNG-027-018	H		FALSE			126.6	CH2			140.5/420.1	140.5	CH2	420.1	SUM							
ARNG-027-019	H		FALSE			39.1	CH2			36.1/102.1	36.1	CH2	102.1	SUM							
ARNG-027-020	H		FALSE			43.5	CH2			13.3/42.3	13.3	CH2	42.3	SUM							
ARNG-027-021	H		FALSE			38.8	CH2			29.4/83.7	29.4	CH2	83.7	SUM							
ARNG-027-022	H		FALSE			31.2	CH2			26.8/87.9	26.8	CH2	87.9	SUM							
ARNG-027-023	H		FALSE			27.2	CH2			21.5/69.3	21.5	CH2	69.3	SUM							
ARNG-027-024	H		FALSE			17.4	CH2			4.7/8.9	4.7	CH2	8.9	SUM							
ARNG-027-025	H		FALSE			11.6	CH2			8.2/26.4	8.2	CH2	26.4	SUM							
ARNG-027-026	H		FALSE			30.6	CH2			25.2/89.2	25.2	CH2	89.2	SUM							
ARNG-027-027	H		FALSE			43.7	CH2			35.6/103.9	35.6	CH2	103.9	SUM							
ARNG-027-028	H		FALSE			23.6	CH2			19.5/60.2	19.5	CH2	60.2	SUM							
ARNG-027-029	H		FALSE			51.6	CH2			42.1/134.2	42.1	CH2	134.2	SUM							
ARNG-027-030	H		FALSE			51.3	CH2			45.2/142.7	45.2	CH2	142.7	SUM							
ARNG-027-031	V		FALSE			89.7	CH2			0.3/1.3	0.3	CH2	1.3	SUM							
ARNG-027-032	H		FALSE			172.1	CH2			102.4/327.3	102.4	CH2	327.3	SUM							
ARNG-027-033	H		FALSE			43.4	CH2			20.2/67.4	20.2	CH2	67.4	SUM							
ARNG-027-034	H		FALSE			12.1	CH2			2.9/5.7	2.9	CH2	5.7	SUM							
ARNG-027-035	H		FALSE			26.5	CH2			21.1/63.2	21.1	CH2	63.2	SUM							
ARNG-027-036	H		FALSE			24.1	CH2			7.1/14.8	7.1	CH2	14.8	SUM							
ARNG-028-001	H		FALSE			15.4	CH2			4.1/13.2	4.1	CH2	13.2	SUM							
ARNG-028-002	H		FALSE			72.1	CH2			4.5/15.4	4.5	CH2	15.4	SUM							
ARNG-028-003	H		FALSE			30.8	CH2			1.8/7.2	1.8	CH2	7.2	SUM							
ARNG-028-004	H		FALSE			11.7	CH2			6.3/23.8	6.3	CH2	23.8	SUM							
ARNG-028-005	H		FALSE			29.2	CH2			4.5/17.8	4.5	CH2	17.8	SUM							
ARNG-028-006	H		FALSE			31.8	CH2			1.5/5.4	1.5	CH2	5.4	SUM							
ARNG-028-007	H		FALSE			15.2	CH2			2.4/8.7	2.4	CH2	8.7	SUM							
ARNG-028-008	H		FALSE			33.9	CH2			1.6/5.8	1.6	CH2	5.8	SUM							
ARNG-028-009	H		FALSE			22.9	CH2			9.9/23.2	9.9	CH2	23.2	SUM							
ARNG-028-010	H		FALSE			120.2	CH2			3.1/5.1	3.1	CH2	5.1	SUM							
ARNG-028-011	H		FALSE			17.1	CH2			2.2/4.0	2.2	CH2	4	SUM							
ARNG-028-012	H		FALSE			42.2	CH2			2.2/4.2	2.2	CH2	4.2	SUM							
ARNG-028-013	H		FALSE			45.2	CH2			2.5/5.4	2.5	CH2	5.4	SUM							
ARNG-028-014	V		FALSE			110.4	CH2			2.1/6.8	2.1	CH2	6.8	SUM							
ARNG-028-015	H		FALSE			19.4	CH2			1.3/2.4	1.3	CH2	2.4	SUM							
ARNG-028-016	H		FALSE			8.4	CH2			1.5/2.8	1.5	CH2	2.8	SUM							
ARNG-029-001	H		FALSE			23.5	CH2			2.0/4.6	2	CH2	4.6	SUM							
ARNG-029-002	H		FALSE			31.2	CH2			2.0/5.6	2	CH2	5.6	SUM							
ARNG-029-003	H		FALSE			21.8	CH2			3.8/7.6	3.8	CH2	7.6	SUM							
ARNG-029-004	H		FALSE			17.1	CH2			4.7/14.2	4.7	CH2	14.2	SUM							
ARNG-029-005	H		FALSE			21.2	CH2			3.0/6.2	3	CH2	6.2	SUM							
ARNG-029-006	H		FALSE			19.2	CH2			13.7/33.6	13.7	CH2	33.6	SUM							
ARNG-029-007	H		FALSE			35.7	CH2			2.3/4.6	2.3	CH2	4.6	SUM							
ARNG-029-008	H		FALSE			39.9	CH2			3.2/5.0	3.2	CH2	5	SUM							
ARNG-029-009	H		FALSE			65.7	CH2			1.3/3.4	1.3	CH2	3.4	SUM							
ARNG-029-010	H		FALSE			13.2	CH2			3.4/8.2	3.4	CH2	8.2	SUM							
ARNG-029-011	H		FALSE			16.4	CH2			4.2/11.6	4.2	CH2	11.6	SUM							
ARNG-029-012	H		FALSE			51.6	CH2			15.1/45.6	15.1	CH2	45.6	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-029-013	H		FALSE			18.7	CH2			1.2/2.2	1.2	CH2	2.2	SUM							
ARNG-029-014	H		FALSE			29.8	CH2			13.1/36.4	13.1	CH2	36.4	SUM							
ARNG-029-015	H		FALSE			71.2	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
ARNG-029-016	H		FALSE			7.4	CH2			1.2/2.3	1.2	CH2	2.3	SUM							
ARNG-029-017	H		FALSE			16.1	CH2			2.0/2.4	2	CH2	2.4	SUM							
ARNG-029-018	H		FALSE			13.5	CH2			1.8/5.6	1.8	CH2	5.6	SUM							
ARNG-029-019	H		FALSE			14.8	CH2			13.9/42.6	13.9	CH2	42.6	SUM							
ARNG-029-020	V		FALSE			77.2	CH2			4.0/9.6	4	CH2	9.6	SUM		dig team mistakenly wrote seed #7, should have been 71					
ARNG-029-021	H		FALSE			98.5	CH2			3.3/13.2	3.3	CH2	13.2	SUM							
ARNG-029-022			FALSE			20.2	CH2			1.1/3.2	1.1	CH2	3.2	SUM							
ARNG-029-023	H		FALSE			13.8	CH2			1.4/3.2	1.1	CH2	3.2	SUM							
ARNG-029-024	H		FALSE			15.5	CH2			5.2/24.2	5.2	CH2	24.2	SUM							
ARNG-029-025	H		FALSE			11.5	CH2			4.1/10.3	4.1	CH2	10.3	SUM							
ARNG-029-026	H		FALSE			12.2	CH2			4.0/10.2	4	CH2	10.2	SUM							
ARNG-029-027	H		FALSE			11.2	CH2			3.4/9.2	3.4	CH2	9.2	SUM							
ARNG-029-028	H		FALSE			32.4	CH2			3.5/11.6	3.5	CH2	11.6	SUM							
ARNG-030-001	V		FALSE			91.1	CH2			2.4/8.2	2.4	CH2	8.2	SUM							
ARNG-030-002	H		FALSE			11.2	CH2			1.6/3.4	1.6	CH2	3.4	SUM							
ARNG-030-003	H		FALSE			35.9	CH2			2.1/4.5	2.1	CH2	4.5	SUM							
ARNG-030-004	H		FALSE			25.1	CH2			2.8/10.4	2.8	CH2	10.4	SUM							
ARNG-030-005	H		FALSE			131.7	CH2			1.3/5.4	1.3	CH2	5.4	SUM							
ARNG-030-006	H		FALSE			15.1	CH2			4.1/14.1	4.1	CH2	14.1	SUM							
ARNG-030-007	H		FALSE			37.6	CH2			2.5/5.4	2.5	CH2	5.4	SUM							
ARNG-030-008	H		FALSE			59.1	CH2			4.2/14.7	4.2	CH2	14.7	SUM							
ARNG-030-009	H		FALSE			22.8	CH2			3.1/10.2	3.1	CH2	10.2	SUM							
ARNG-030-010	H		FALSE			12.9	CH2			7.1/23.6	7.1	CH2	23.6	SUM							
ARNG-030-011	H		FALSE			42.2	CH2			5.6/17.7	5.6	CH2	17.7	SUM							
ARNG-030-012	H		FALSE			17.3	CH2			5.4/17.6	5.4	CH2	17.6	SUM							
ARNG-030-013	H		FALSE			14.4	CH2			2.5/7.2	2.5	CH2	7.2	SUM							
ARNG-030-014	H		FALSE			13.6	CH2			1.4/3.2	1.4	CH2	3.2	SUM							
ARNG-030-015	H		FALSE			47	CH2			1.8/3.6	1.8	CH2	3.6	SUM							
ARNG-030-016	H		FALSE			21.6	CH2			2.4/5.1	2.4	CH2	5.1	SUM							
ARNG-030-017	H		FALSE			18.4	CH2			3.2/8.8	3.2	CH2	8.8	SUM							
ARNG-030-018	H		FALSE			14.1	CH2			1.5/2.6	1.5	CH2	2.6	SUM							
ARNG-030-019	H		FALSE			19.1	CH2			3.1/8.4	3.1	CH2	8.4	SUM							
ARNG-030-020	H		FALSE			10.9	CH2			2.0/4.2	2	CH2	4.2	SUM							
ARNG-031-001	H		FALSE			12.7	CH2			1.2/1.8	1.2	CH2	1.8	SUM							
ARNG-031-002	H		FALSE			5.8	CH2			2.3/6.8	2.3	CH2	6.8	SUM							
ARNG-031-003	H		FALSE			7.1	CH2			1.3/4.2	1.3	CH2	4.2	SUM							
ARNG-031-004			FALSE			24.1	CH2			1.6/3.2	1.6	CH2	3.2	SUM							
ARNG-031-005			FALSE			114.5	CH2			2.4/5.1	2.4	CH2	5.1	SUM							
ARNG-031-006			FALSE			11.4	CH2			6.3/14.2	6.3	CH2	14.2	SUM							
ARNG-031-007	H		FALSE			93.2	CH2			7.5/25.8	7.5	CH2	25.8	SUM							
ARNG-031-008	H		FALSE			11.8	CH2			4.4/11.1	4.4	CH2	11.1	SUM							
ARNG-031-009			FALSE			18	CH2			2.3/4.2	2.3	CH2	4.2	SUM							
ARNG-031-010	H		FALSE			13.8	CH2			10.3/14.2	10.3	CH2	14.2	SUM							
ARNG-031-011	H		FALSE			26.6	CH2			2.3/11.1	2.3	CH2	11.1	SUM							
ARNG-031-012	H		FALSE			20.4	CH2			1.9/5.2	1.9	CH2	5.2	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-031-013	V		FALSE			52.8	CH2			1.4/3.0	1.4	CH2	3	SUM							
ARNG-032-001	V		FALSE			169.2	CH2			169.2/405.1	2.2	CH2	5.6	SUM							
ARNG-032-002	H		FALSE			60.4	CH2			2.1/5.2	2.1	CH2	5.2	SUM							
ARNG-032-003	V		FALSE			28.5	CH2			1.5/5.2	1.5	CH2	5.2	SUM							
ARNG-032-004	H		FALSE			6.6	CH2			1.9/6.7	1.9	CH2	6.7	SUM							
ARNG-032-005	V		FALSE			95.1	CH2			1.2/3.7	1.2	CH2	3.7	SUM							
ARNG-032-006	H		FALSE			11.7	CH2			2.3/5.3	2.3	CH2	5.3	SUM							
ARNG-033-001	V		FALSE			195	CH2			2.7/13.4	2.7	CH2	13.4	SUM							
ARNG-033-002	H		FALSE			10.9	CH2			1.2/5.4	1.2	CH2	5.4	SUM							
ARNG-033-003	H		FALSE			8.7	CH2			3.3/5.7	3.3	CH2	5.7	SUM							
ARNG-033-004	H		FALSE			8.1	CH2			1.6/2.3	1.6	CH2	2.3	SUM							
ARNG-033-005	H		FALSE			28.2	CH2			1.5/3.4	1.5	CH2	3.4	SUM							
ARNG-033-006	H		FALSE			10.8	CH2			3.1/10.8	3.1	CH2	10.8	SUM							
ARNG-033-007	H		FALSE			22.3	CH2			0.6/2.4	0.6	CH2	2.4	SUM							
ARNG-033-008	H		FALSE			37.7	CH2			1.2/5.7	1.2	CH2	5.7	SUM							
ARNG-033-009	H		FALSE			11.2	CH2			0.7/7.2	0.7	CH2	7.2	SUM							
ARNG-033-010	H		FALSE			48.8	CH2			1.5/2.3	1.5	CH2	2.3	SUM							
ARNG-033-011	H		FALSE			27.3	CH2			0.5/1.2	0.5	CH2	1.2	SUM							
ARNG-033-012	H		FALSE			28	CH2			0.4/5.2	0.4	CH2	5.2	SUM							
ARNG-033-013	V		FALSE			126.5	CH2			1.8/3.5	1.8	CH2	3.5	SUM							
ARNG-033-014	V		FALSE			205.4	CH2			0.8/1.2	0.8	CH2	1.2	SUM							
ARNG-033-015	H		FALSE			34.2	CH2			1.9/7.8	1.9	CH2	7.8	SUM							
ARNG-033-016	H		FALSE			33.4	CH2			1.4/7.8	1.4	CH2	7.8	SUM							
ARNG-033-017	H		FALSE			10.4	CH2			0.6/2.1	0.6	CH2	2.1	SUM							
ARNG-033-018	H		FALSE			53.8	CH2			3.3/13.2	3.3	CH2	13.2	SUM							
ARNG-033-019	H		FALSE			9.8	CH2			1.4/3.5	1.4	CH2	3.5	SUM							
ARNG-034-001	H		FALSE			52.1	CH2			1.9/5.3	1.9	CH2	5.3	SUM							
ARNG-034-002	H		FALSE			40.6	CH2			1.3/3.1	1.3	CH2	3.1	SUM							
ARNG-034-003	H		FALSE			20.4	CH2			7.5/26.1	7.5	CH2	26.1	SUM							
ARNG-034-004	H		FALSE			14.1	CH2			2.5/7.1	2.5	CH2	7.1	SUM							
ARNG-034-005	H		FALSE			7.1	CH2			4.2/16.1	4.2	CH2	16.1	SUM							
ARNG-034-006	H		FALSE			10.2	CH2			2.8/8.2	2.8	CH2	8.2	SUM							
ARNG-034-007	H		FALSE			22.1	CH2			3.5/12.2	3.5	CH2	12.2	SUM							
ARNG-034-008	H		FALSE			73.4	CH2			2.8/8.6	2.8	CH2	8.6	SUM							
ARNG-034-009	H		FALSE			34.1	CH2			3.0/10.5	3	CH2	10.5	SUM							
ARNG-034-010	H		FALSE			20.2	CH2			2.2/8.1	2.2	CH2	8.1	SUM							
ARNG-034-011	H		FALSE			14.9	CH2			3.6/13.1	3.6	CH2	13.1	SUM							
ARNG-034-012	H		FALSE			35.1	CH2			1.2/2.4	1.2	CH2	2.4	SUM							
ARNG-034-013	V		FALSE			35.6	CH2			2.4/7.2	2.4	CH2	7.2	SUM							
ARNG-034-014	H		FALSE			35.1	CH2			1.2/2.4	1.2	CH2	2.4	SUM							
ARNG-034-015	V		FALSE			35.6	CH2			2.4/7.2	2.4	CH2	7.2	SUM							
ARNG-034-016	V		FALSE			35.6	CH2			2.4/7.2	2.4	CH2	7.2	SUM							
ARNG-034-017	V		FALSE			10.2	CH2			7.3/23.6	7.3	CH2	23.6	SUM							
ARNG-034-018	V		FALSE			10.7	CH2			1.3/4.3	1.3	CH2	4.3	SUM							
ARNG-034-019	H		FALSE			26.8	CH2			1.2/4.5	1.2	CH2	4.5	SUM							
ARNG-034-020	V		FALSE			10.7	CH2			1.3/4.3	1.3	CH2	4.3	SUM							
ARNG-034-021	V		FALSE			12.2	CH2			2.3/4.2	2.3	CH2	4.2	SUM							
ARNG-035-001			FALSE			6.2	CH2			8.1/30.1	8.1	CH2	30.1	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-035-002			FALSE			6.4	CH2			8.1/33.6	8.1	CH2	33.6	SUM							
ARNG-035-003			FALSE			6.3	CH2			6.3/25.7	6.3	CH2	25.7	SUM							
ARNG-035-004	V		FALSE			106.1	CH2			3.7/11.9	3.7	CH2	11.9	SUM							
ARNG-035-005	H		FALSE			58.1	CH2			3.9/16.5	3.9	CH2	16.5	SUM							
ARNG-035-006	H		FALSE			64.1	CH2			4.9/20.2	4.9	CH2	20.2	SUM							
ARNG-035-007	H		FALSE			66.2	CH2			5.6/23.8	5.6	CH2	23.8	SUM							
ARNG-035-008	H		FALSE			19.2	CH2			4.6/21.3	4.6	CH2	21.3	SUM							
ARNG-035-009	H		FALSE			49.7	CH2			7.8/30.1	7.8	CH2	30.1	SUM							
ARNG-036-001	H		FALSE			10.1	CH2			2.9/11.9	2.9	CH2	11.9	SUM							
ARNG-036-002	H		FALSE			19.5	CH2			1.7/4.2	1.7	CH2	4.2	SUM							
ARNG-036-003	H		FALSE			15.7	CH2			-0.6/-6.2	-0.6	CH2	-6.2	SUM							
ARNG-036-004	H		FALSE			21.1	CH2			2.8/7.4	2.8	CH2	7.4	SUM							
ARNG-036-005	H		FALSE			95.7	CH2			39.6/210.2	39.6	CH2	210.2	SUM							
ARNG-036-006	H		FALSE			30.1	CH2			14.6/39.7	14.6	CH2	39.7	SUM							
ARNG-036-007	H		FALSE			74.9	CH2			10.1/34.9	10.1	CH2	34.9	SUM							
ARNG-036-008	H		FALSE			39.3	CH2			23.1/73.6	23.1	CH2	73.6	SUM							
ARNG-036-009	H		FALSE			26.3	CH2			2.1/4.6	2.1	CH2	4.6	SUM							
ARNG-036-010	H		FALSE			70.4	CH2			25.1/90.6	25.1	CH2	90.6	SUM							
ARNG-036-011	H		FALSE			30.8	CH2			9.2/32.4	9.2	CH2	32.4	SUM							
ARNG-036-012	H		FALSE			43.1	CH2			31.1/150.3	31.1	CH2	150.3	SUM							
ARNG-036-013	H		FALSE			80.3	CH2			83.4/330.1	83.4	CH2	330.1	SUM							
ARNG-036-014	H		FALSE			54.7	CH2			16.4/46.4	16.4	CH2	46.4	SUM							
ARNG-036-015	H		FALSE			75.8	CH2			5.7/57.2	5.7	CH2	57.2	SUM							
ARNG-036-016	H		FALSE			51.8	CH2			2.1/-7.6	2.1	CH2	-7.6	SUM							
ARNG-036-017	H		FALSE			51.3	CH2			32.3/105.8	32.3	CH2	105.8	SUM							
ARNG-036-018	V		FALSE			101.7	CH2			3.5/15.3	3.5	CH2	15.3	SUM							
ARNG-036-019	H		FALSE			100.5	CH2			27.9/85.4	27.9	CH2	85.4	SUM							
ARNG-036-020	H		FALSE			68.5	CH2			45.6/134.3	45.6	CH2	134.3	SUM							
ARNG-036-021	H		FALSE			123.1	CH2			9.5/27.4	9.5	CH2	27.4	SUM							
ARNG-036-022	H		FALSE			54.1	CH2			4.6/-0.4	4.6	CH2	-0.4	SUM							
ARNG-036-023	H		FALSE			10.3	CH2			1.2/3.1	1.2	CH2	3.1	SUM							
ARNG-036-024	H		FALSE			89.7	CH2			67.1/214.8	67.1	CH2	214.8	SUM							
ARNG-036-025	H		FALSE			25.6	CH2			2.3/6.2	2.3	CH2	6.2	SUM							
ARNG-036-026	H		FALSE			11.8	CH2			2.5/2.6	2.5	CH2	2.6	SUM							
ARNG-036-027	H		FALSE			26.1	CH2			7.6/12.7	7.6	CH2	12.7	SUM							
ARNG-036-028	H		FALSE			47.4	CH2			12.2/41.6	12.2	CH2	41.6	SUM							
ARNG-036-029	H		FALSE			23.2	CH2			14.1/47.9	14.1	CH2	47.9	SUM							
ARNG-036-030	H		FALSE			17.1	CH2			1.3/3.2	1.3	CH2	3.2	SUM							
ARNG-036-031	H		FALSE			197.5	CH2			1.2/5.3	1.2	CH2	5.3	SUM							
ARNG-037-001	H		FALSE			13.8	CH2			8.3/30.2	8.3	CH2	30.2	SUM							
ARNG-037-002	H		FALSE			153.1	CH2			100.5/335.2	100.5	CH2	335.2	SUM							
ARNG-037-003	H		FALSE			230.2	CH2			26.4/88.3	26.4	CH2	88.3	SUM							
ARNG-037-004	H		FALSE			9.9	CH2			6.8/21.2	6.8	CH2	21.2	SUM							
ARNG-037-005	H		FALSE			14.1	CH2			2.3/5.2	2.3	CH2	5.2	SUM							
ARNG-037-006	H		FALSE			75.4	CH2			63.7/214.4	63.7	CH2	214.4	SUM							
ARNG-037-007	H		FALSE			47	CH2			7.0/24.2	7	CH2	24.2	SUM							
ARNG-037-008	H		FALSE			22.1	CH2			10.5/31.3	10.5	CH2	31.3	SUM							
ARNG-037-009	H		FALSE			35.2	CH2			23.2/81.2	23.2	CH2	81.2	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-037-010			FALSE			47	CH2			7.0/24.2	7	CH2	24.2	SUM							
ARNG-037-011	H		FALSE			24.1	CH2			6.5/22.2	6.5	CH2	22.2	SUM							
ARNG-037-012	H		FALSE			31.5	CH2			26.2/84.3	26.2	CH2	84.3	SUM							
ARNG-037-013	H		FALSE			117.4	CH2			17.3/56.2	17.3	CH2	56.2	SUM							
ARNG-037-014	H		FALSE			9.8	CH2			7.2/31.2	7.2	CH2	31.2	SUM							
ARNG-037-015	H		FALSE			16.3	CH2			14.1/44.3	14.1	CH2	44.3	SUM							
ARNG-037-016	H		FALSE			22.7	CH2			12.4/38.6	12.4	CH2	38.6	SUM							
ARNG-037-017	H		FALSE			197.1	CH2			120.2/395.4	120.2	CH2	395.4	SUM							
ARNG-037-018	H		FALSE			46.3	CH2			29.4/100.5	29.4	CH2	100.5	SUM							
ARNG-037-019	H		FALSE			142.1	CH2			70.3/220.2	70.3	CH2	220.2	SUM							
ARNG-037-020	H		FALSE			58.3	CH2			32.1/98.2	32.1	CH2	98.2	SUM							
ARNG-037-021	H		FALSE			24.9	CH2			4.9/12.2	4.9	CH2	12.2	SUM							
ARNG-037-022	H		FALSE			104.1	CH2			10.1/39.2	10.1	CH2	39.2	SUM							
ARNG-037-023	H		FALSE			220.2	CH2			152.8/505.1	152.8	CH2	505.1	SUM							
ARNG-037-024	H		FALSE			36.4	CH2			9.1/35.2	9.1	CH2	35.2	SUM							
ARNG-037-025	H		FALSE			52.1	CH2			7.1/23.2	7.1	CH2	23.2	SUM							
ARNG-037-026	H		FALSE			48.1	CH2			6.5/26.3	6.5	CH2	26.3	SUM							
ARNG-037-027	H		FALSE			216.1	CH2			9.6/35.3	9.6	CH2	35.3	SUM							
ARNG-037-028	H		FALSE			320.2	CH2			70.3/240.1	70.3	CH2	240.1	SUM							
ARNG-037-029	H		FALSE			110.4	CH2			9.1/31.2	9.1	CH2	31.2	SUM							
ARNG-037-030	H		FALSE			475.3	CH2			183.7/430.2	183.7	CH2	430.2	SUM							
ARNG-037-031	V		FALSE			142.1	CH2			24.2/85.6	24.2	CH2	85.6	SUM							
ARNG-037-032	H		FALSE			276.3	CH2			121.8/410.2	121.8	CH2	410.2	SUM							
ARNG-037-033	H		FALSE			36.6	CH2			15.2/66.3	15.2	CH2	66.3	SUM							
ARNG-037-034			FALSE			142.1	CH2			24.2/85.6	24.2	CH2	85.6	SUM							
ARNG-037-035	H		FALSE			97.2	CH2			70.6/230.6	70.6	CH2	230.6	SUM							
ARNG-037-036	H		FALSE			411.2	CH2			163.4/510.9	163.4	CH2	510.9	SUM							
ARNG-037-037	H		FALSE			107.2	CH2			47.3/161.2	47.3	CH2	161.2	SUM							
ARNG-037-038	H		FALSE			155.9	CH2			8.6/28.2	8.6	CH2	28.2	SUM							
ARNG-037-039	H		FALSE			176.1	CH2			30.2/105.2	30.2	CH2	105.2	SUM							
ARNG-037-040	H		FALSE			59.7	CH2			25.6/80.2	25.6	CH2	80.2	SUM							
ARNG-037-041			FALSE			138.8	CH2			10.9/38.2	10.9	CH2	38.2	SUM							
ARNG-037-042	H		FALSE			24.2	CH2			10.3/48.2	10.3	CH2	48.2	SUM							
ARNG-037-043	H		FALSE			35.6	CH2			25.3/80.2	25.3	CH2	80.2	SUM							
ARNG-037-044	V		FALSE			152	CH2			100.1/336.2	100.1	CH2	336.2	SUM							
ARNG-037-045	H		FALSE			246.1	CH2			30.2/105.2	30.2	CH2	105.2	SUM							
ARNG-037-046	H		FALSE			112.2	CH2			54.8/180.3	54.8	CH2	180.3	SUM							
ARNG-037-047			FALSE			22.9	CH2			17.2/66.3	17.2	CH2	66.3	SUM							
ARNG-037-048			FALSE			46.1	CH2			32.1/112.2	32.1	CH2	112.2	SUM							
ARNG-037-049	H		FALSE			28.2	CH2			19.7/62.3	19.7	CH2	62.3	SUM							
ARNG-037-050	H		FALSE			252.1	CH2			140.5/470.2	140.5	CH2	470.2	SUM							
ARNG-037-051	H		FALSE			152.1	CH2			83.4/265.4	83.4	CH2	265.4	SUM							
ARNG-037-052	H		FALSE			8.9	CH2			6.3/27.2	6.3	CH2	27.2	SUM							
ARNG-037-053	H		FALSE			154.5	CH2			75.8/255.6	75.8	CH2	255.6	SUM							
ARNG-037-054	H		FALSE			399.2	CH2			163.6/530.6	163.6	CH2	530.6	SUM							
ARNG-037-055	H		FALSE			208.3	CH2			122.1/405.2	122.1	CH2	405.2	SUM							
ARNG-037-056	H		FALSE			43.8	CH2			122.9/410.3	122.9	CH2	410.3	SUM							
ARNG-037-057	H		FALSE			30.5	CH2			16.2/51.2	16.2	CH2	51.2	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-037-058	H		FALSE			318.2	CH2			19.5/65.2	19.5	CH2	65.2	SUM							
ARNG-037-059	H		FALSE			102.1	CH2			84.3/288.2	84.3	CH2	288.2	SUM							
ARNG-037-060			FALSE			318.2				19.5/65.2	19.5	CH2	65.2	SUM							
ARNG-037-061	H		FALSE			121.1	CH2			104.7/390.2	104.7	CH2	390.2	SUM							
ARNG-037-062	H		FALSE			331.2	CH2			122.1/407.2	122.1	CH2	407.2	SUM							
ARNG-037-063	H		FALSE			38.5	CH2			19.4/58.2	19.4	CH2	58.2	SUM							
ARNG-037-064	H		FALSE			102.4	CH2			85.6/310.2	85.6	CH2	310.2	SUM							
ARNG-037-065	H		FALSE			440.8	CH2			122.1/407.2	122.1	CH2	407.2	SUM							
ARNG-037-066	H		FALSE			11.1	CH2			8.2/23.2	8.2	CH2	23.2	SUM							
ARNG-037-067	H		FALSE			20.5	CH2			16.8/54.2	16.8	CH2	54.2	SUM							
ARNG-037-068	H		FALSE			186.2	CH2			110.3/397.2	110.3	CH2	397.2	SUM							
ARNG-037-069	H		FALSE			186.5	CH2			150.2/503.2	150.2	CH2	503.2	SUM							
ARNG-037-070	H		FALSE			151.7	CH2			142.5/462.1	142.5	CH2	462.1	SUM							
ARNG-037-071			FALSE			222.2	CH2			50.4/180.4	50.4	CH2	180.4	SUM							
ARNG-037-072	H		FALSE			153.8	CH2			140.1/443.6	140.1	CH2	443.6	SUM							
ARNG-037-073	H		FALSE			205.2	CH2			138.1/420.1	138.1	CH2	420.1	SUM							
ARNG-037-074			FALSE			222.2				50.4/180.4	50.4	CH2	180.4	SUM							
ARNG-038-001	V		FALSE			210.6	CH2			1.1/5.6	1.1	CH2	5.6	SUM							
ARNG-038-002	H		FALSE			66.4	CH2			1.4/5.8	1.4	CH2	5.8	SUM							
ARNG-038-003	V		FALSE			70.1	CH2			1.2/4.9	1.2	CH2	4.9	SUM							
ARNG-038-004	H		FALSE			7.7	CH2			0.9/2.1	0.9	CH2	2.1	SUM							
ARNG-038-005	H		FALSE			17.2	CH2			0.4/1.5	0.4	CH2	1.5	SUM							
ARNG-038-006			FALSE			17.2				0.4/1.5	0.4	CH2	1.5	SUM							
ARNG-038-007	H		FALSE			30.9	CH2			1.1/5.2	1.1	CH2	5.2	SUM							
ARNG-038-008			FALSE			30.9				1.1/5.2	1.1	CH2	5.2	SUM							
ARNG-038-009			FALSE			30.9				1.1/5.2	1.1	CH2	5.2	SUM							
ARNG-038-010	H		FALSE			15.6	CH2			1.2/5.3	1.2	CH2	5.3	SUM							
ARNG-038-011	V		FALSE			101.1	CH2			0.5/1.7	0.5	CH2	1.7	SUM							
ARNG-038-012			FALSE			101.1				0.5/1.7	0.5	CH2	1.7	SUM							
ARNG-038-013	H		FALSE			24.5	CH2			5.5/14.3	5.5	CH2	14.3	SUM							
ARNG-038-014	H		FALSE			9.1	CH2			1.3/2.5	1.3	CH2	2.5	SUM							
ARNG-038-015			FALSE			9.1				1.3/2.5	1.3	CH2	2.5	SUM							
ARNG-039-001	H		FALSE			32	CH2			2.2/6.3	2.2	CH2	6.3	SUM							
ARNG-039-002	H		FALSE			8.5	CH2			4.4/13.1	4.4	CH2	13.1	SUM							
ARNG-039-003	H		FALSE			18	CH2			5.3/16.4	5.3	CH2	16.4	SUM							
ARNG-039-004	H		FALSE			17.4	CH2			5.5/19.9	5.5	CH2	19.9	SUM							
ARNG-039-005	H		FALSE			8.1	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
ARNG-039-006	H		FALSE			15.7	CH2			6.5/20.6	6.5	CH2	20.6	SUM							
ARNG-039-007	H		FALSE			30.8	CH2			3.3/10.2	3.3	CH2	10.2	SUM							
ARNG-039-008	H		FALSE			17.8	CH2			15.5/45.6	15.5	CH2	45.6	SUM							
ARNG-039-009			FALSE			17.8	CH2			15.5/45.6	15.5	CH2	45.6	SUM							
ARNG-039-010	H		FALSE			30.9	CH2			1.9/6.5	1.9	CH2	6.5	SUM							
ARNG-039-011	H		FALSE			18.5	CH2			3.7/11.5	3.7	CH2	11.5	SUM							
ARNG-039-012	H		FALSE			85.1	CH2			1.2/2.8	1.2	CH2	2.8	SUM							
ARNG-039-013	H		FALSE			13.1	CH2			1.1/2.7	1.1	CH2	2.7	SUM							
ARNG-039-014			FALSE			85.1	CH2			1.2/2.8	1.2	CH2	2.8	SUM							
ARNG-039-015	H		FALSE			15.6	CH2			3.4/11.6	3.4	CH2	11.6	SUM							
ARNG-039-016	H		FALSE			18	CH2			2.1/6.7	2.1	CH2	6.7	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-039-017	H		FALSE			8.5	CH2			1.2/10.2	1.2	CH2	10.2	SUM							
ARNG-039-018	H		FALSE			17.5	CH2			1.2/6.3	1.2	CH2	6.3	SUM							
ARNG-039-019	H		FALSE			32.2	CH2			3.5/8.6	3.5	CH2	8.6	SUM							
ARNG-039-020	V		FALSE			50	CH2			1.2/2.3	1.2	CH2	2.3	SUM							
ARNG-039-021	H		FALSE			42.6	CH2			4.1/9.0	4.1	CH2	9	SUM							
ARNG-039-022			FALSE			50	CH2			1.2/2.3	1.2	CH2	2.3	SUM							
ARNG-039-023	H		FALSE			23.7	CH2			3.5/7.2	3.5	CH2	7.2	SUM							
ARNG-039-024			FALSE			23.7	CH2			3.5/7.2	3.5	CH2	7.2	SUM							
ARNG-039-025	H		FALSE			24.8	CH2			4.0/7.3	4	CH2	7.3	SUM							
ARNG-039-026	H		FALSE			12.5	CH2			1.3/3.4	1.3	CH2	3.4	SUM							
ARNG-040-001	H		FALSE			78.2	CH2			63.1/206.7	63.1	CH2	206.7	SUM							
ARNG-040-002	H		FALSE			402.4	CH2			23.1/64.2	23.1	CH2	64.2	SUM							
ARNG-040-003	H		FALSE			19.6	CH2			17.2/52.3	17.2	CH2	52.3	SUM							
ARNG-040-004	H		FALSE			19.1	CH2			17.1/52.3	17.1	CH2	52.3	SUM							
ARNG-040-005	H		FALSE			15.9	CH2			10.6/28.5	10.6	CH2	28.5	SUM							
ARNG-040-006	H		FALSE			27.1	CH2			14.3/42.5	14.3	CH2	42.5	SUM							
ARNG-040-007	H		FALSE			23.9	CH2			18.1/58.2	18.1	CH2	58.2	SUM							
ARNG-040-008	H		FALSE			10.9	CH2			12.5/36.6	12.5	CH2	36.6	SUM							
ARNG-040-009	H		FALSE			21.3	CH2			20.1/60.2	20.1	CH2	60.2	SUM							
ARNG-040-010	H		FALSE			23.2	CH2			22.1/66.2	22.1	CH2	66.2	SUM							
ARNG-040-011	H		FALSE			38.1	CH2			23.5/57.4	23.5	CH2	57.4	SUM							
ARNG-040-012	H		FALSE			22.3	CH2			12.2/27.6	12.2	CH2	27.6	SUM							
ARNG-040-013	H		FALSE			13.6	CH2			10.1/16.4	10.1	CH2	16.4	SUM							
ARNG-040-014	H		FALSE			12.7	CH2			5.9/18.7	5.9	CH2	18.7	SUM							
ARNG-040-015	V		FALSE			108.8	CH2			2.1/12.6	2.1	CH2	12.6	SUM							
ARNG-040-016	H		FALSE			13.1	CH2			8.7/22.6	8.7	CH2	22.6	SUM							
ARNG-041-001	H		FALSE			35.5	CH2			1.9/2.3	1.9	CH2	2.3	SUM							
ARNG-041-002	H		FALSE			17.1	CH2			7.9/20.4	7.9	CH2	20.4	SUM							
ARNG-041-003	H		FALSE			56.2	CH2			5.0/22.3	5	CH2	22.3	SUM							
ARNG-041-004	H		FALSE			13.1	CH2			18.9/35.2	18.9	CH2	35.2	SUM							
ARNG-041-005	H		FALSE			15.5	CH2			2.0/6.2	2	CH2	6.2	SUM							
ARNG-041-006	H		FALSE			50.2	CH2			1.3/3.2	1.3	CH2	3.2	SUM							
ARNG-041-007	H		FALSE			19.6	CH2			1.4/3.1	1.4	CH2	3.1	SUM							
ARNG-041-008	H		FALSE			191.7	CH2			10.1/35.2	10.1	CH2	35.2	SUM							
ARNG-041-009	H		FALSE			165.4	CH2			106.1/335.0	106.1	CH2	335	SUM							
ARNG-041-010	H		FALSE			41.2	CH2			9.2/31.3	9.2	CH2	31.3	SUM							
ARNG-041-011	V		FALSE			30.8	CH2			2.2/3.4	2.2	CH2	3.4	SUM							
ARNG-041-012	H		FALSE			95.6	CH2			6.5/18.3	6.5	CH2	18.3	SUM							
ARNG-041-013	H		FALSE			95.6	CH2			6.5/18.3	6.5	CH2	18.3	SUM							
ARNG-041-014	V		FALSE			20.3	CH2			2.0/4.6	2	CH2	4.6	SUM							
ARNG-041-015	H		FALSE			14.2	CH2			7.1/22.3	7.1	CH2	22.3	SUM							
ARNG-041-016	H		FALSE			9.1	CH2			3.9/12.1	3.9	CH2	12.1	SUM							
ARNG-041-017	H		FALSE			62.5	CH2			1.2/3.8	1.2	CH2	3.8	SUM							
ARNG-041-018	H		FALSE			10.4	CH2			10.5/37.3	10.5	CH2	37.3	SUM							
ARNG-041-019	V		FALSE			87.7	CH2			1.3/3.4	1.3	CH2	3.4	SUM							
ARNG-041-020	H		FALSE			143.5	CH2			1.2/3.1	1.2	CH2	3.1	SUM							
ARNG-041-021	H		FALSE			143.5	CH2			1.2/3.1	1.2	CH2	3.1	SUM							
ARNG-041-022	H		FALSE			44.2	CH2			1.3/2.4	1.3	CH2	2.4	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-041-023	H		FALSE			11.7	CH2			12.6/48.2	12.6	CH2	48.2	SUM							
ARNG-042-001			FALSE			13	CH2			1.1/	1.1	CH2									
ARNG-042-002			FALSE			9.5	CH2			0/	0	CH2									
ARNG-042-003			FALSE			7.5	CH2			1.8/	1.8	CH2									
ARNG-042-004			FALSE			12.1	CH2			3.2/	3.2	CH2									
ARNG-042-005			FALSE			10.1	CH2			4.1/	4.1	CH2									
ARNG-042-006	H		FALSE			6.2	CH2			4.1/	4.1	CH2									
ARNG-042-007			FALSE			29	CH2			7.9/	7.9	CH2									
ARNG-042-008	V		FALSE			98	CH2			0/	0	CH2									
ARNG-042-009			FALSE			9	CH2			0/	9	CH2									
ARNG-043-001	V		FALSE			73.5	CH2			0.6/3.0	0.6	CH2	3	SUM							
ARNG-043-002			FALSE			17.9	CH2			11.6/28.6	11.6	CH2	28.6	SUM							
ARNG-043-003			FALSE			42.8	CH2			38.8/139.7	38.8	CH2	139.7	SUM							
ARNG-043-004			FALSE			13.2	CH2			11.1/37.6	11.1	CH2	37.6	SUM							
ARNG-043-005			FALSE			12.3	CH2			17.2/46.1	17.2	CH2	46.1	SUM							
ARNG-043-006	H		FALSE			14.9	CH2			13.4/44	13.4	CH2	44	SUM							
ARNG-043-007	H		FALSE			13.1	CH2			13.2/47.6	13.2	CH2	47.6	SUM							
ARNG-043-008	H		FALSE			13.3	CH2			14.2/46.5	14.2	CH2	46.5	SUM							
ARNG-043-009			FALSE			27.2	CH2			4.3/14.6	4.3	CH2	14.6	SUM							
ARNG-044-001	V		FALSE			9.3	CH2			4.1/13.8	4.1	CH2	13.8	SUM							
ARNG-044-002			FALSE			10.6	CH2			7.5/25.2	7.5	CH2	25.2	SUM							
ARNG-044-003	V		FALSE			111.1	CH2			1.1/4.6	1.1	CH2	4.6	SUM							
ARNG-044-004			FALSE			12.1	CH2			10.4/21.1	10.4	CH2	21.1	SUM							
ARNG-044-005			FALSE			10.7	CH2			10.9/32.7	10.9	CH2	32.7	SUM							
ARNG-044-006			FALSE			11.1	CH2			8.2/18.9	8.2	CH2	18.9	SUM							
ARNG-044-007			FALSE			11.8	CH2			9.5/25.2	9.5	CH2	25.2	SUM							
ARNG-044-008			FALSE			9.8	CH2			9.1/24.2	9.1	CH2	24.2	SUM							
ARNG-044-009			FALSE			11.1	CH2			11.3/32.9	11.3	CH2	32.9	SUM							
ARNG-044-010			FALSE			11.9	CH2			12.2/34.6	12.2	CH2	34.6	SUM							
ARNG-044-011			FALSE			11.5	CH2			12.6/37.5	12.6	CH2	37.5	SUM							
ARNG-044-012			FALSE			9.1	CH2			9.3/25.1	9.3	CH2	25.1	SUM							
ARNG-045-001	H		FALSE			32.5	CH2			18.7/57.6	18.7	CH2	57.6	SUM							
ARNG-045-002	H		FALSE			21.4	CH2			4.1/8.2	4.1	CH2	8.2	SUM							
ARNG-045-003	H		FALSE			100.8	CH2			8.9/24.6	8.9	CH2	24.6	SUM							
ARNG-045-004	H		FALSE			29.2	CH2			31.6/99.3	31.6	CH2	99.3	SUM							
ARNG-045-005	H		FALSE			135.6	CH2			33.2/103.7	33.2	CH2	103.7	SUM							
ARNG-045-006	H		FALSE			16.4	CH2			8.2/18.3	8.2	CH2	18.3	SUM							
ARNG-045-007	H		FALSE			10.3	CH2			17.2/53.1	17.2	CH2	53.1	SUM							
ARNG-045-008	H		FALSE			90.7	CH2			38.6/126.4	38.6	CH2	126.4	SUM							
ARNG-045-009	H		FALSE			28.9	CH2			1.6/3.2	1.6	CH2	3.2	SUM							
ARNG-045-010	H		FALSE			26.9	CH2			4.4/13.7	4.4	CH2	13.7	SUM							
ARNG-045-011	H		FALSE			64.7	CH2			5.3/17.1	5.3	CH2	17.1	SUM							
ARNG-045-012	H		FALSE			9.7	CH2			3.9/9.2	3.9	CH2	9.2	SUM							
ARNG-045-013	V		FALSE			50.9	CH2			4.5/13.7	4.5	CH2	13.7	SUM							
ARNG-045-014	H		FALSE			16.1	CH2			3.1/9.4	3.1	CH2	9.4	SUM							
ARNG-045-015	H		FALSE			60	CH2			22.4/67.3	22.4	CH2	67.3	SUM							
ARNG-045-016			FALSE			16.1	CH2			4.9/9.8	4.9	CH2	9.8	SUM							
ARNG-045-017	H		FALSE			18.2	CH2			2.9/8.6	2.9	CH2	8.6	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-045-018	H		FALSE			48.7	CH2			9.2/20.8	9.2	CH2	20.8	SUM							
ARNG-045-019	H		FALSE			15.3	CH2			8.8/28.1	8.8	CH2	28.1	SUM							
ARNG-045-020	H		FALSE			14.6	CH2			2.6/4.1	2.6	CH2	4.1	SUM							
ARNG-045-021	H		FALSE			33.9	CH2			2.4/4.4	2.4	CH2	4.4	SUM							
ARNG-045-022	H		FALSE			31.2	CH2			24.8/74.3	24.8	CH2	74.3	SUM							
ARNG-045-023	H		FALSE			22.6	CH2			3.2/4.9	3.2	CH2	4.9	SUM							
ARNG-045-024	H		FALSE			9.4	CH2			6.9/17.2	6.9	CH2	17.2	SUM							
ARNG-045-025	H		FALSE			52.9	CH2			2.2/3.6	2.2	CH2	3.6	SUM							
ARNG-045-026	H		FALSE			25.8	CH2			2.6/3.1	2.6	CH2	3.1	SUM							
ARNG-045-027	H		FALSE			11.4	CH2			5.3/15.8	5.3	CH2	15.8	SUM							
ARNG-045-028	H		FALSE			11.2	CH2			4.4/15.2	4.4	CH2	15.2	SUM							
ARNG-045-029	H		FALSE			12.4	CH2			2.3/7.5	2.3	CH2	7.5	SUM							
ARNG-045-030	H		FALSE			14.5	CH2			4.4/8.3	4.4	CH2	8.3	SUM							
ARNG-045-031	H		FALSE			20.1	CH2			3.3/4.8	3.3	CH2	4.8	SUM							
ARNG-045-032	H		FALSE			61.2	CH2			4.6/13.4	4.6	CH2	13.4	SUM							
ARNG-045-033	H		FALSE			33.9	CH2			24.1/77.3	24.1	CH2	77.3	SUM							
ARNG-046-001			FALSE			180.2	CH2				1.1	CH2	4.6	SUM							
ARNG-046-002	H		FALSE			23.1	CH2			1.1/4.5	1.1	CH2	4.5	SUM							
ARNG-046-003	H		FALSE			11.5	CH2			2.7/4.9	2.7	CH2	4.9	SUM							
ARNG-046-004	V		FALSE			104.1	CH2			1.6/5.8	1.6	CH2	5.8	SUM							
ARNG-046-005	H		FALSE			12.9	CH2			3.5/9.1	3.5	CH2	9.1	SUM							
ARNG-046-006	H		FALSE			28.2	CH2			1.7/8.2	1.7	CH2	8.2	SUM							
ARNG-046-007	H		FALSE			62.4	CH2			1.4/7.9	1.4	CH2	7.9	SUM							
ARNG-046-008	H		FALSE			53.3	CH2			2.4/7.6	2.4	CH2	7.6	SUM							
ARNG-046-009	H		FALSE			11.4	CH2			6.8/24.5	6.8	CH2	24.5	SUM							
ARNG-046-010	H		FALSE			10.4	CH2			2.5/7.4	2.5	CH2	7.4	SUM							
ARNG-046-011	H		FALSE			24.9	CH2			2.1/8.7	2.1	CH2	8.7	SUM							
ARNG-046-012	H		FALSE			12.7	CH2			1.6/9.8	1.6	CH2	9.8	SUM							
ARNG-046-013	H		FALSE			9.5	CH2			6.3/22.8	6.3	CH2	22.8	SUM							
ARNG-046-014	H		FALSE			50.1	CH2			5.2/21.9	5.2	CH2	21.9	SUM							
ARNG-046-015	H		FALSE			25.7	CH2			1.5/6.8	1.5	CH2	6.8	SUM							
ARNG-047-001	H		FALSE			17.2	CH2			1.1/2.3	1.1	CH2	2.3	SUM							
ARNG-047-002	H		FALSE			8.2	CH2			1.4/3.2	1.4	CH2	3.2	SUM							
ARNG-047-003	V		FALSE			97.2	CH2			1.5/7.2	1.5	CH2	7.2	SUM							
ARNG-048-001	H		FALSE			189.7	CH2			30.2/98.6	30.2	CH2	98.6	SUM							
ARNG-048-002	H		FALSE			45.1	CH2			38.1/119.8	38.1	CH2	119.8	SUM							
ARNG-048-003	V		FALSE			688.6	CH2			67.8/226.3	67.8	CH2	226.3	SUM							
ARNG-048-004	H		FALSE			216.8	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
ARNG-048-005	H		FALSE			161.7	CH2			158.2/504.9	158.2	CH2	504.9	SUM							
ARNG-048-006	V		FALSE			165.4	CH2			170.3/548.8	170.3	CH2	548.8	SUM							
ARNG-048-007	H		FALSE			343.9	CH2			62.2/193.4	62.2	CH2	193.4	SUM							
ARNG-048-008	V		FALSE			11.5	CH2			1.6/4.1	1.6	CH2	4.1	SUM							
ARNG-048-009	H		FALSE			8.7	CH2			12.1/35.3	12.1	CH2	35.3	SUM							
ARNG-048-010	V		FALSE			17.4	CH2			1.2/3.1	1.2	CH2	3.1	SUM							
ARNG-048-011	H		FALSE			163.1	CH2			3.8/14.6	3.8	CH2	14.6	SUM							
ARNG-048-012	H		FALSE			18.1	CH2			3.2/12.7	3.2	CH2	12.7	SUM							
ARNG-048-013	V		FALSE			106.6	CH2			2.5/10.9	2.5	CH2	10.9	SUM							
ARNG-048-014	H		FALSE			10.6	CH2			2.6/9.2	2.6	CH2	9.2	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-048-015			FALSE			18.1	CH2			3.2/12.7	3.2	CH2	12.7	SUM							
ARNG-048-016			FALSE			10.6	CH2			2.6/9.2	2.6	CH2	9.2	SUM							
ARNG-048-017			FALSE			10.6	CH2			2.6/9.2	2.6	CH2	9.2	SUM							
ARNG-048-018	H		FALSE			7.5	CH2			7.5/24.2	7.5	CH2	24.2	SUM							
ARNG-048-019	H		FALSE			36.2	CH2			2.3/8.2	2.3	CH2	8.2	SUM							
ARNG-048-020	H		FALSE			18.7	CH2			4.0/15.2	4	CH2	15.2	SUM							
ARNG-048-021	H		FALSE			10.1	CH2			8.1/28.4	8.1	CH2	28.4	SUM							
ARNG-048-022			FALSE			18.7	CH2			4.0/15.2	4	CH2	15.2	SUM							
ARNG-048-023	H		FALSE			6.4	CH2			1.3/5.3	1.3	CH2	5.3	SUM							
ARNG-049-001	V		FALSE			112.1	CH2			3.2/8.9		CH2		SUM							
ARNG-049-002	H		FALSE			116.6	CH2			3.0/6.9		CH2		SUM							
ARNG-049-003			FALSE			116.6	CH2			3.0/6.9		CH2		SUM							
ARNG-049-004	H		FALSE			60.6	CH2			2.2/7.6		CH2		SUM							
ARNG-049-005	H		FALSE			32.2	CH2			2.5/4.1		CH2		SUM							
ARNG-049-006			FALSE			958.4	CH2					CH2		SUM							
ARNG-049-007	H		FALSE			958.4	CH2			3.3/11.1		CH2		SUM							
ARNG-049-008			FALSE			958.4	CH2			3.3/11.1		CH2		SUM							
ARNG-049-009	H		FALSE			107.4	CH2			4.9/16.5		CH2		SUM							
ARNG-049-010	H		FALSE			19.9	CH2			4.4/16.9		CH2		SUM							
ARNG-049-011	H		FALSE			11.2	CH2			7.1/25.5		CH2		SUM							
ARNG-049-012	H		FALSE			11.5	CH2			4.1/15.4		CH2		SUM							
ARNG-049-013	H		FALSE			21.5	CH2			2.1/9.1		CH2		SUM							
ARNG-050-001	H		FALSE			9.9	CH2			3.1/7.6	3.1	CH2	7.6	SUM							
ARNG-050-002	V		FALSE			111.3	CH2			1.4/5.1	1.4	CH2	5.1	SUM							
ARNG-050-003	H		FALSE			7.6	CH2			3.6/9.2	3.6	CH2	9.2	SUM							
ARNG-050-004	H		FALSE			8.1	CH2			5.2/14.9	5.2	CH2	14.9	SUM							
ARNG-050-005	H		FALSE			6.4	CH2			3.8/9.6	3.8	CH2	9.6	SUM							
ARNG-050-006	H		FALSE			7.1	CH2			5.2/15.9	5.2	CH2	15.9	SUM							
ARNG-050-007	H		FALSE			7.5	CH2			3.3/10.6	3.3	CH2	10.6	SUM							
ARNG-050-008	H		FALSE			8.2	CH2			4.1/12.6	4.1	CH2	12.6	SUM							
ARNG-050-009	H		FALSE			12.3	CH2			4.5/11.6	4.5	CH2	11.6	SUM							
ARNG-050-010	H		FALSE			11.1	CH2			9.1/22.4	9.1	CH2	22.4	SUM							
ARNG-050-011	H		FALSE			11.1	CH2			5.6/15.6	5.6	CH2	15.6	SUM							
ARNG-050-012	H		FALSE			10.1	CH2			4.3/12.7	4.3	CH2	12.7	SUM							
ARNG-050-013	H		FALSE			7.2	CH2			6.9/22.6	6.9	CH2	22.6	SUM							
ARNG-051-001	H		FALSE			13.1	CH2			1.1/3.1	1.1	CH2	3.1	SUM							
ARNG-051-002	H		FALSE			19.5	CH2			1.1/2.9	1.1	CH2	2.9	SUM							
ARNG-051-003	V		FALSE			10.1	CH2			1.1/4.5	1.1	CH2	4.5	SUM							
ARNG-051-004	H		FALSE			9.2	CH2			0.6/1.0	0.6	CH2	1	SUM							
ARNG-051-005	H		FALSE			10.2	CH2			3.1/10.1	3.1	CH2	10.1	SUM							
ARNG-051-006	H		FALSE			29.6	CH2			4.9/16.2	4.9	CH2	16.2	SUM							
ARNG-051-007	H		FALSE			18.3	CH2			4.5/14.2	4.5	CH2	14.2	SUM							
ARNG-051-008	H		FALSE			12.6	CH2			7.3/21.3	7.3	CH2	21.3	SUM							
ARNG-051-009			FALSE			14.4	CH2			4.1/12.4	4.1	CH2	12.4	SUM							
ARNG-051-010			FALSE			12.2	CH2			3.3/10.4	3.3	CH2	10.4	SUM							
ARNG-051-011			FALSE			10.5	CH2			1.1/3.2	1.1	CH2	3.2	SUM							
ARNG-051-012			FALSE			12.5	CH2			2.7/10.1	2.7	CH2	10.1	SUM							
ARNG-051-013			FALSE			11.5	CH2			3.2/10.8	3.2	CH2	10.8	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-052-001	H		FALSE			79.3	CH2			7.9/25.3	7.9	CH2	25.3	SUM							
ARNG-052-002	H		FALSE			14.2	CH2			10.7/35.4	10.7	CH2	35.4	SUM							
ARNG-052-003	H		FALSE			15.1	CH2			8.6/28.1	8.6	CH2	28.1	SUM							
ARNG-052-004	H		FALSE			48.8	CH2			14.1/43.1	14.1	CH2	43.1	SUM							
ARNG-052-005	H		FALSE			12	CH2			17.1/30.1	17.1	CH2	30.1	SUM							
ARNG-052-006	H		FALSE			23.1	CH2			18.5/61.2	18.5	CH2	61.2	SUM							
ARNG-052-007	H		FALSE			32	CH2			13.8/44.1	13.8	CH2	44.1	SUM							
ARNG-052-008	H		FALSE			11.8	CH2			35.4/117.2	35.4	CH2	117.2	SUM							
ARNG-052-009	H		FALSE			12.4	CH2			15.6/47.5	15.6	CH2	47.5	SUM							
ARNG-052-010	V		FALSE			93.4	CH2			15.5/46.8	15.5	CH2	46.8	SUM							
ARNG-053-001	H		FALSE			26.2	CH2			27.1/85.8	27.1	CH2	85.8	SUM							
ARNG-053-002	H		FALSE			22.6	CH2			28.6/87.1	28.6	CH2	87.1	SUM							
ARNG-053-003	H		FALSE			30.3	CH2			44.6/143.4	44.6	CH2	143.4	SUM							
ARNG-053-004	H		FALSE			40.1	CH2			27.3/89.2	27.3	CH2	89.2	SUM							
ARNG-053-005			FALSE			43.5	CH2			49.2/162.3	49.2	CH2	162.3	SUM							
ARNG-053-006			FALSE			52.4	CH2			28.8/94.7	28.8	CH2	94.7	SUM							
ARNG-053-007	V		FALSE			50.1	CH2			27.3/87.5	27.3	CH2	87.5	SUM							
ARNG-053-008	H		FALSE			26.1	CH2			37.5/116.8	37.5	CH2	116.8	SUM							
ARNG-053-009	H		FALSE			52.1	CH2			30.2/99.4	30.2	CH2	99.4	SUM							
ARNG-053-010	H		FALSE			29.2	CH2			34.5/115.3	34.5	CH2	115.3	SUM							
ARNG-053-011	V		FALSE			113.2	CH2			27.1/86.6	27.1	CH2	86.6	SUM							
ARNG-053-012			FALSE			113.2	CH2			27.1/86.6	27.1	CH2	86.6	SUM							
ARNG-053-013			FALSE			66.5	CH2			32.1/103.4	32.1	CH2	103.4	SUM							
ARNG-054-001			FALSE			3.6	CH2			3.5/	3.5	CH2									
ARNG-054-002			FALSE			22.2	CH2			3.2/	3.2	CH2									
ARNG-054-003	H		FALSE			52	CH2			2.3/	2.3	CH2									
ARNG-054-004			FALSE			12.1	CH2			2.8/	2.8	CH2									
ARNG-054-005			FALSE			6.3	CH2			2.9/	2.9	CH2									
ARNG-054-006			FALSE			5.4	CH2			1.6/	1.6	CH2									
ARNG-054-007	V		FALSE			76.4	CH2			1.6/	1.6	CH2									
ARNG-054-008			FALSE			25.1	CH2			1.3/	1.3	CH2									
ARNG-054-009			FALSE			5.9	CH2			1.2/	1.2	CH2									
ARNG-054-010	V		FALSE			49	CH2			1/	1	CH2									
ARNG-054-011	V		FALSE			49	CH2			4.7/	4.7	CH2									
ARNG-054-012	V		FALSE			9	CH2			1.4/	1.4	CH2									
ARNG-055-001	H		FALSE			19.3	CH2			2.2/9.8	2.2	CH2	9.8	SUM							
ARNG-055-002	H		FALSE			21.2	CH2			12.9/42.1	12.9	CH2	42.1	SUM							
ARNG-055-003	H		FALSE			20.2	CH2			11.5/49.8	11.5	CH2	49.8	SUM							
ARNG-055-004	H		FALSE			18.1	CH2			5.6/26.4	5.6	CH2	26.4	SUM							
ARNG-055-005	H		FALSE			22.7	CH2			15.2/51.2	15.2	CH2	51.2	SUM							
ARNG-055-006	H		FALSE			48.3	CH2			8.4/26.2	8.4	CH2	26.2	SUM							
ARNG-055-007	H		FALSE			259.9	CH2			6.1/15.9	6.1	CH2	15.9	SUM							
ARNG-055-008	H		FALSE			21.7	CH2			10.2/32.7	10.2	CH2	32.7	SUM							
ARNG-055-009	H		FALSE			34.1	CH2			20.5/70.8	20.5	CH2	70.8	SUM							
ARNG-055-010	H		FALSE			29.2	CH2			22.1/80.7	22.1	CH2	80.7	SUM							
ARNG-055-011	H		FALSE			23.4	CH2			16.5/62.8	16.5	CH2	62.8	SUM							
ARNG-055-012	H		FALSE			26.7	CH2			16.8/68.7	16.8	CH2	68.7	SUM							
ARNG-055-013	H		FALSE			21.7	CH2			16.6/66.9	16.6	CH2	66.9	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-055-014	H		FALSE			22.2	CH2			16.4/62.2	16.4	CH2	62.2	SUM							
ARNG-055-015	H		FALSE			20.2	CH2			12.7/42.9	12.7	CH2	42.9	SUM							
ARNG-055-016	H		FALSE			21.9	CH2			12.5/49.6	12.5	CH2	49.6	SUM							
ARNG-055-017	H		FALSE			29.6	CH2			15.4/54.8	15.4	CH2	54.8	SUM							
ARNG-055-018	H		FALSE			18.4	CH2			10.7/41.2	10.7	CH2	41.2	SUM							
ARNG-055-019	H		FALSE			11	CH2			4.4/23.1	4.4	CH2	23.1	SUM							
ARNG-055-020	H		FALSE			16.1	CH2			4.2/18.2	4.2	CH2	18.2	SUM							
ARNG-055-021	H		FALSE			21.2	CH2			3.4/17.9	3.4	CH2	17.9	SUM							
ARNG-055-022	H		FALSE			14.1	CH2			7.8/33.2	7.8	CH2	33.2	SUM							
ARNG-055-023	H		FALSE			19.8	CH2			17.7/62.2	17.7	CH2	62.2	SUM							
ARNG-055-024	H		FALSE			15.2	CH2			6.9/29.3	6.9	CH2	29.3	SUM							
ARNG-055-025	H		FALSE			28.6	CH2			11.4/39.2	11.4	CH2	39.2	SUM							
ARNG-055-026	V		FALSE			85.6	CH2			2.4/9.1	2.4	CH2	9.1	SUM							
ARNG-055-027	H		FALSE			16.2	CH2			1.2/9.8	1.2	CH2	9.8	SUM							
ARNG-056-001	H		FALSE			10.6	CH2			1.6/5.3	1.6	CH2	5.3	SUM							
ARNG-056-002	H		FALSE			9.3	CH2			4.3/10.4	4.3	CH2	10.4	SUM							
ARNG-056-003	V		FALSE			8.1	CH2			3.1/6.8	3.1	CH2	6.8	SUM							
ARNG-056-004	H		FALSE			13.4	CH2			3.2/6.9	3.2	CH2	6.9	SUM							
ARNG-056-005	H		FALSE			16.6	CH2			2.3/7.5	2.3	CH2	7.5	SUM							
ARNG-056-006	H		FALSE			16.1	CH2			3.4/8.6	3.4	CH2	8.6	SUM							
ARNG-056-007	H		FALSE			19.4	CH2			1.1/5.3	1.1	CH2	5.3	SUM							
ARNG-056-008	H		FALSE			11.6	CH2			0.8/3.2	0.8	CH2	3.2	SUM							
ARNG-056-009	H		FALSE			16.1	CH2			2.8/8.4	2.8	CH2	8.4	SUM							
ARNG-056-010			FALSE			123.2	CH2			2.6/5.1	2.6	CH2	5.1	SUM							
ARNG-056-011	V		FALSE			123.2	CH2			2.6/5.1	2.6	CH2	5.1	SUM							
ARNG-057-001	H		FALSE			203.6	CH2			2.3/6.7	2.3	CH2	6.7	SUM							
ARNG-057-002			FALSE				CH2					CH2		SUM							
ARNG-057-003	H		FALSE			10.4	CH2			1.7/4.3	1.7	CH2	4.3	SUM							
ARNG-057-004	V		FALSE			105.6	CH2			2.1/5.7	2.1	CH2	5.7	SUM							
ARNG-057-005	H		FALSE			81.2	CH2			2.1/8.5	2.1	CH2	8.5	SUM							
ARNG-057-006	H		FALSE			14.5	CH2			1.6/6.7	1.6	CH2	6.7	SUM							
ARNG-057-007	H		FALSE			14.4	CH2			2.2/10.4	2.2	CH2	10.4	SUM							
ARNG-057-008	H		FALSE			49.3	CH2			2.1/8.8	2.1	CH2	8.8	SUM							
ARNG-057-009	H		FALSE			8.3	CH2			2.1/8.3	2.1	CH2	8.3	SUM							
ARNG-057-010	H		FALSE			8.7	CH2			1.7/10.4	1.7	CH2	10.4	SUM							
ARNG-057-011	V		FALSE			39.7	CH2			2.2/11.2	2.2	CH2	11.2	SUM							
ARNG-057-012	H		FALSE			15.1	CH2			3.1/12.7	3.1	CH2	12.7	SUM							
ARNG-058-001	H		FALSE			13.1	CH2			9.2/24.1	9.2	CH2	24.1	SUM							
ARNG-058-002	H		FALSE			148.6	CH2			17.1/59.2	17.1	CH2	59.2	SUM							
ARNG-058-003	H		FALSE			10.5	CH2			2.2/6.4	2.2	CH2	6.4	SUM							
ARNG-058-004			FALSE			148.2	CH2			17.2/69.2	17.2	CH2	69.2	SUM							
ARNG-058-005	H		FALSE			106.2	CH2			38.3/120.1	38.3	CH2	120.1	SUM							
ARNG-058-006	H		FALSE			69.7	CH2			1.6/13.1	1.6	CH2	13.1	SUM							
ARNG-058-007	H		FALSE			101.2	CH2			42.2/137.1	42.2	CH2	137.1	SUM							
ARNG-058-008	H		FALSE			64.3	CH2			10.4/42.1	10.4	CH2	42.1	SUM							
ARNG-058-009	H		FALSE			198.2	CH2			215.1/720	215.1	CH2	720	SUM							
ARNG-058-010	H		FALSE			101.4	CH2			45.1/149.6	45.1	CH2	149.6	SUM							
ARNG-058-011	H		FALSE			12.7	CH2			10.5/39.2	10.5	CH2	39.2	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-058-012	H		FALSE			170.1	CH2			17.2/62.4	17.2	CH2	62.4	SUM							
ARNG-058-013	H		FALSE			175.2	CH2			5.0/26.4	5	CH2	26.4	SUM							
ARNG-058-014	H		FALSE			18.5	CH2			6.9/25.2	6.9	CH2	25.2	SUM							
ARNG-058-015	H, V		FALSE			132.3	CH2			26.1/79.9	26.1	CH2	79.9	SUM							
ARNG-058-016	H		FALSE			15.1	CH2			16.7/47.2	16.7	CH2	47.2	SUM							
ARNG-058-017	H		FALSE			182.4	CH2			5.2/29.1	5.2	CH2	29.1	SUM							
ARNG-058-018	H		FALSE			42.2	CH2			58.1/189.2	58.1	CH2	189.2	SUM							
ARNG-058-019	H		FALSE			145.4	CH2			10.2/24.5	10.2	CH2	24.5	SUM							
ARNG-058-020	H		FALSE			169.7	CH2			178.3/500	178.3	CH2	500	SUM							
ARNG-058-021	H		FALSE			36.8	CH2			9.3/26.2	9.3	CH2	26.2	SUM							
ARNG-058-022	H		FALSE			48.1	CH2			10.1/33.1	10.1	CH2	33.1	SUM							
ARNG-058-023	H		FALSE			63.2	CH2			17.1/53.4	17.1	CH2	53.4	SUM							
ARNG-058-024	H		FALSE			286.2	CH2			80.2/252	80.2	CH2	252	SUM							
ARNG-058-025	H		FALSE			97.3	CH2			2.2/6.1	2.2	CH2	6.1	SUM							
ARNG-058-026	H		FALSE			10.1	CH2			2.4/6.3	2.4	CH2	6.3	SUM							
ARNG-058-027	H		FALSE			49.4	CH2			24.5/72.4	24.5	CH2	72.4	SUM							
ARNG-058-028	H		FALSE			246.3	CH2			43.2/143.2	43.2	CH2	143.2	SUM							
ARNG-058-029	H		FALSE			19.9	CH2			13.1/41.6	13.1	CH2	41.6	SUM							
ARNG-058-030			FALSE			280.6	CH2			233/657	233	CH2	657	SUM							
ARNG-058-031	H		FALSE			12.4	CH2			1.7/5.2	1.7	CH2	5.2	SUM							
ARNG-058-032	H		FALSE			32.8	CH2			34/104.3	34	CH2	104.3	SUM							
ARNG-058-033	H		FALSE			53.6	CH2			34/104.3	34	CH2	104.3	SUM							
ARNG-058-034	H		FALSE			63.4	CH2			34.1/105	34.1	CH2	105	SUM							
ARNG-058-035	H		FALSE			42.1	CH2			1.7/9.6	1.7	CH2	9.6	SUM							
ARNG-058-036	H		FALSE			26.1	CH2			13.1/41.2	13.1	CH2	41.2	SUM							
ARNG-058-037	H		FALSE			26.9	CH2			7.5/28.3	7.5	CH2	28.3	SUM							
ARNG-059-001			FALSE			7.1	CH2			6.9/22.0	6.9	CH2	22	SUM							
ARNG-059-002	V		FALSE			82.5	CH2			3.4/16.2	3.4	CH2	16.2	SUM							
ARNG-059-003	H		FALSE			26.2	CH2			3.2/13.1	3.2	CH2	13.1	SUM							
ARNG-059-004	H		FALSE			8.1	CH2			2.6/11.2	2.6	CH2	11.2	SUM							
ARNG-059-005			FALSE			4.1	CH2			4.7/16.5	4.7	CH2	16.5	SUM							
ARNG-060-001	H		FALSE			23.2	CH2			0.9/3.1	0.9	CH2	3.1	SUM							
ARNG-060-002	H		FALSE			27.3	CH2			1.2/3.3	1.2	CH2	3.3	SUM							
ARNG-060-003	H		FALSE			17.2	CH2			3.4/12.4	3.4	CH2	12.4	SUM							
ARNG-060-004	V		FALSE			19.1	CH2			1.3/3.5	1.3	CH2	3.5	SUM							
ARNG-060-005	H		FALSE			6.2	CH2			1.2/6.5	1.2	CH2	6.5	SUM							
ARNG-060-006	V		FALSE			80.3	CH2			0.8/1.9	0.8	CH2	1.9	SUM							
ARNG-060-007	H		FALSE			6.3	CH2			1.3/7.6	1.3	CH2	7.6	SUM							
ARNG-060-008	H		FALSE			11.2	CH2			6.6/19.3	6.6	CH2	19.3	SUM							
ARNG-060-009	H		FALSE			19.8	CH2			3.6/11.1	3.6	CH2	11.1	SUM							
ARNG-060-010			FALSE			19.8	CH2			3.6/11.1	3.6	CH2	11.1	SUM							
ARNG-060-011			FALSE			11.6	CH2			6.1/17.8	6.1	CH2	17.8	SUM							
ARNG-060-012			FALSE			5.5	CH2			2.6/8.3	2.6	CH2	8.3	SUM							
ARNG-060-013			FALSE			7.8	CH2			1.2/5.7	1.2	CH2	5.7	SUM							
ARNG-060-014			FALSE			10.8	CH2			5.6/15.1	5.6	CH2	15.1	SUM							
ARNG-060-015			FALSE			12.3	CH2			5.8/15.4	5.8	CH2	15.4	SUM							
ARNG-060-016			FALSE			8.3	CH2			3.8/7.4	3.8	CH2	7.4	SUM							
ARNG-060-017			FALSE			9.2	CH2			3.8/7.4	3.8	CH2	7.4	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-060-018			FALSE			10.9	CH2			3.6/9.8	3.6	CH2	9.8	SUM							
ARNG-060-019			FALSE			5.4	CH2			2.3/6.8	2.3	CH2	6.8	SUM							
ARNG-060-020			FALSE			9.2	CH2			3.8/7.4	3.8	CH2	7.4	SUM							
ARNG-060-021			FALSE			11.6	CH2			7.6/20.3	7.6	CH2	20.3	SUM							
ARNG-060-022			FALSE			8.1	CH2			4.2/11.9	4.2	CH2	11.9	SUM							
ARNG-060-023			FALSE			12.4	CH2			8.7/25.4	8.7	CH2	25.4	SUM							
ARNG-060-024	H		FALSE			8.7	CH2			2.5/6.1	2.5	CH2	6.1	SUM							
ARNG-060-025	V		FALSE			13.9	CH2			5.7/16.4	5.7	CH2	16.4	SUM							
ARNG-060-026	H		FALSE			8.9	CH2			2.8/8.3	2.8	CH2	8.3	SUM							
ARNG-060-027			FALSE			11.4	CH2			9.2/30.9	9.2	CH2	30.9	SUM							
ARNG-060-028			FALSE			15.1	CH2			10.2/34.1	10.2	CH2	34.1	SUM							
ARNG-060-029			FALSE			9.6	CH2			3.5/11.1	3.5	CH2	11.1	SUM							
ARNG-060-030			FALSE			12.6	CH2			6.2/19.2	6.2	CH2	19.2	SUM							
ARNG-061-001	V		FALSE			116.2	CH2			7.6/17.8	7.6	CH2	17.8	SUM							
ARNG-061-002	H		FALSE			12.4	CH2			5.8/21.7	5.8	CH2	21.7	SUM							
ARNG-061-003	H		FALSE			17.6	CH2			7.6/17.3	7.6	CH2	17.3	SUM							
ARNG-062-001	V		FALSE			104.8	CH2			0.6/2.4	0.6	CH2	2.4	SUM							
ARNG-062-002	H		FALSE			1.6	CH2			1.6/5.1	1.6	CH2	5.1	SUM							
ARNG-063-001	H		FALSE			5.1	CH2			4.1/12.7	4.1	CH2	12.7	SUM							
ARNG-063-002	V		FALSE			96.1	CH2			1.2/4.2	1.2	CH2	4.2	SUM							
ARNG-063-003	H		FALSE			20.4	CH2			1.1/2.1	1.1	CH2	2.1	SUM							
ARNG-063-004	H		FALSE			13.6	CH2			1.2/5.4	1.2	CH2	5.4	SUM							
ARNG-063-005	H		FALSE			23.9	CH2			1.2/4.8	1.2	CH2	4.8	SUM							
ARNG-064-001	V		FALSE			109.3	CH2			2.6/5.5	2.6	CH2	5.5	SUM							
ARNG-064-002			FALSE			22.3	CH2			3.4/7.3	3.4	CH2	7.3	SUM							
ARNG-064-003			FALSE			24.7	CH2			2.5/5.3	2.5	CH2	5.3	SUM							
ARNG-064-004			FALSE			4.3	CH2			3.9/8.3	3.9	CH2	8.3	SUM							
ARNG-064-005			FALSE			5.4	CH2			4.6/11.5	4.6	CH2	11.5	SUM							
ARNG-065-001	H		FALSE			7.5	CH2			2.9/9.4	2.9	CH2	9.4	SUM							
ARNG-065-002	H		FALSE			32.7	CH2			3.7/10.1	3.7	CH2	10.1	SUM							
ARNG-065-003	V		FALSE			67.4	CH2			2.8/9.9	2.8	CH2	9.9	SUM							
ARNG-065-004			FALSE			5.3	CH2			2.2/4.6	2.2	CH2	4.6	SUM							
ARNG-065-005	H		FALSE			27.9	CH2			4.6/9.5	4.6	CH2	9.5	SUM							
ARNG-065-006			FALSE			5.6	CH2			5.6/13.4	5.6	CH2	13.4	SUM							
ARNG-065-007			FALSE			5.4	CH2			5.4/12.1	5.4	CH2	12.1	SUM							
ARNG-066-001	H		FALSE			10	CH2			2.0/5.2	2	CH2	5.2	SUM							
ARNG-066-002	H		FALSE			8.1	CH2			1.1/4.2	1.1	CH2	4.2	SUM							
ARNG-066-003	V		FALSE			112	CH2			2.2/7.8	2.2	CH2	7.8	SUM							
ARNG-067-001	H		FALSE			62.2	CH2			1.3/4.5	1.3	CH2	4.5	SUM							
ARNG-067-002			FALSE			82.4	CH2			1.1/4.1	1.1	CH2	4.1	SUM							
ARNG-067-003	H		FALSE			117.1	CH2			0.4/2.5	0.4	CH2	2.5	SUM							
ARNG-067-004	V		FALSE			108.3	CH2			0.5/3.1	0.5	CH2	3.1	SUM							
ARNG-067-005	H		FALSE			208.5	CH2			0.8/2.7	0.8	CH2	2.7	SUM							
ARNG-067-006	H		FALSE			21.4	CH2			0.5/1.8	0.5	CH2	1.8	SUM							
ARNG-067-007	H		FALSE			10.5	CH2			0.6/2.1	0.6	CH2	2.1	SUM							
ARNG-068-001	V		FALSE			114.7	CH2			0.2/0.9	0.2	CH2	0.9	SUM							
ARNG-068-002	H		FALSE			10	CH2			1.4/3.6	1.4	CH2	3.6	SUM							
ARNG-068-003	H		FALSE			7.7	CH2			1.8/7.7	1.8	CH2	7.7	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-068-004	V		FALSE			150.4	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
ARNG-068-005	H		FALSE			9.9	CH2			3.5/11.9	3.5	CH2	11.9	SUM							
ARNG-069-001	H		FALSE			18.3	CH2			3.2/9.4	3.2	CH2	9.4	SUM							
ARNG-069-002	H		FALSE			14.3	CH2			4.3/12.6	4.3	CH2	12.6	SUM							
ARNG-069-003	H		FALSE			20.2	CH2			2.6/6.7	2.6	CH2	6.7	SUM							
ARNG-069-004	H		FALSE			10.2	CH2			1.2/4.7	1.2	CH2	4.7	SUM							
ARNG-069-005	V		FALSE			112.4	CH2			1.9/6.2	1.9	CH2	6.2	SUM							
ARNG-069-006	H		FALSE			25.2	CH2			1.2/4.6	1.2	CH2	4.6	SUM							
ARNG-070-001	H		FALSE			6.3	CH2			0.5/3.8	0.5	CH2	3.8	SUM							
ARNG-070-002	V		FALSE			137.8	CH2			0.7/2.1	0.7	CH2	2.1	SUM							
ARNG-070-003			FALSE			137.8	CH2				0.7	CH2	2.1	SUM							
ARNG-071-001	H		FALSE			14	CH2			4.5/12.0	4.5	CH2	12	SUM							
ARNG-071-002	H		FALSE			14.6	CH2			5.0/14.0	5	CH2	14	SUM							
ARNG-071-003	H		FALSE			99	CH2			4.9/14.0	4.9	CH2	14	SUM							
ARNG-071-004	H		FALSE			142.3	CH2			5.9/16.0	5.9	CH2	16	SUM							
ARNG-071-005	H		FALSE			96.5	CH2			26.7/85.1	26.7	CH2	85.1	SUM							
ARNG-071-006	H		FALSE			7.7	CH2			2.3/3.4	2.3	CH2	3.4	SUM							
ARNG-071-007	V		FALSE			102.3	CH2			2.5/4.2	2.5	CH2	4.2	SUM							
ARNG-071-008	H		FALSE			29.3	CH2			1.0/3.0	1	CH2	3	SUM							
ARNG-071-009	H		FALSE			24.3	CH2			2.5/5.3	2.5	CH2	5.3	SUM							
ARNG-072-001	H		FALSE			17.1	CH2			1.1/2.2	1.1	CH2	2.2	SUM							
ARNG-072-002	H		FALSE			6.1	CH2			1.1/2.3	1.1	CH2	2.3	SUM							
ARNG-072-003	V		FALSE			108.4	CH2			1.1/7.2	1.1	CH2	7.2	SUM							
ARNG-072-004	V		FALSE			8.5	CH2			1.9/10.0	1.9	CH2	10	SUM							
ARNG-072-005	H		FALSE			148.5	CH2			2.7/9.8	2.7	CH2	9.8	SUM							
ARNG-073-001	H		FALSE			8.9	CH2			1.2/4.3	1.2	CH2	4.3	SUM							
ARNG-073-002	H		FALSE			6.2	CH2			0.9/2.1	0.9	CH2	2.1	SUM							
ARNG-073-003	V		FALSE			98.1	CH2			0.6/1.1	0.6	CH2	1.1	SUM							
ARNG-073-004	V		FALSE			98.1	CH2			0.6/1.1	0.6	CH2	1.1	SUM							
ARNG-074-001	H		FALSE			16.1	CH2			1.2/3.1	1.2	CH2	3.1	SUM							
ARNG-074-002	H		FALSE			28.2	CH2			2.5/8.1	2.5	CH2	8.1	SUM							
ARNG-074-003	H		FALSE			6.4	CH2			5.3/21.2	5.3	CH2	21.2	SUM							
ARNG-074-004			FALSE			6.2	CH2			5.3/13.3	5.3	CH2	13.3	SUM							
ARNG-074-005			FALSE			8.3	CH2			5.6/14.4	5.6	CH2	14.4	SUM							
ARNG-074-006	V		FALSE			35.6	CH2			3/9.2	3	CH2	9.2	SUM							
ARNG-074-007	H		FALSE			123.2	CH2			1/4.3	1	CH2	4.3	SUM							
ARNG-074-008			FALSE			95.7	CH2			3/9.2	3	CH2	9.2	SUM							
ARNG-075-001	V		FALSE			83.2	CH2			1.3/4.2	1.3	CH2	4.2	SUM							
ARNG-076-001	V		FALSE			181.8	CH2			1.5/4.3	1.5	CH2	4.3	SUM							
ARNG-076-002	V		FALSE			63.5	CH2			1.6/4.7	1.6	CH2	4.7	SUM							
ARNG-077-001	V		FALSE			111.4	CH2			4.3/9.2	4.3	CH2	9.2	SUM							
ARNG-078-001	V		FALSE			78.6	CH2			1.2/3.2	1.2	CH2	3.2	SUM		dig team mistakenly recorded or seed was labeled incorrectly as #5, should have been 55.					
ARNG-079-001	V		FALSE			153.4	CH2				1.7	SUM									
ARNG-079-002	H		FALSE			134.1	CH2				4.2	SUM									
ARNG-079-003	V		FALSE			114.4	CH2				0.7	SUM									
ARNG-079-004	H		FALSE			20.3	CH2				3.4	SUM									
ARNG-080-001	V		FALSE			171.4	CH2			1.1/2.9	1.1	CH2	2.9	SUM							
ARNG-080-002	H		FALSE			7.9	CH2			4.3/7.8	4.3	CH2	7.8	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-080-003	V		FALSE			27.1	CH2			3.5/12.6	3.5	CH2	12.6	SUM							
ARNG-080-004			FALSE			108.1	CH2			1.4/2.6	1.4	CH2	2.6	SUM							
ARNG-080-005	V		FALSE			108.1	CH2			1.4/2.6	1.4	CH2	2.6	SUM							
ARNG-080-006	H		FALSE			8.8	CH2			4.8/14.1	4.8	CH2	14.1	SUM							
ARNG-080-007	H		FALSE			12.2	CH2			2.9/7.1	2.9	CH2	7.1	SUM							
ARNG-080-008	H		FALSE			11.8	CH2			4.7/11.3	4.7	CH2	11.3	SUM							
ARNG-080-009	H		FALSE			6.7	CH2			1.3/3.8	1.3	CH2	3.8	SUM							
ARNG-080-010	H		FALSE			100.2	CH2			3.4/7.1	3.4	CH2	7.1	SUM							
ARNG-080-011	H		FALSE			12.5	CH2			4.8/10.7	4.8	CH2	10.7	SUM							
ARNG-080-012	H		FALSE			17.1	CH2			4.7/11.9	4.7	CH2	11.9	SUM							
ARNG-081-001	V		FALSE			175.9	CH2			2.4/6.1	2.4	CH2	6.1	SUM							
ARNG-081-002	V		FALSE			107.1	CH2			0.3/1.1	0.3	CH2	1.1	SUM							
ARNG-081-003	H		FALSE			68.3	CH2			1.5/4.9	1.5	CH2	4.9	SUM							
ARNG-081-004			FALSE			68.1	CH2			1.5/4.9	1.5	CH2	4.9	SUM							
ARNG-082-001	V		FALSE			473.2	SUM				17.5	SUM									
ARNG-082-002	H		FALSE			58.2	SUM				8.3	SUM									
ARNG-082-003	H		FALSE			24.1	SUM				18.7	SUM									
ARNG-082-004	V		TRUE			49.1	SUM				45.6	SUM									
ARNG-082-005	H		FALSE			34.2	SUM				16.2	SUM									
ARNG-082-006	H		FALSE			24.1	SUM				18.7	SUM									
ARNG-082-007	H		FALSE			19.2	SUM				13.8	SUM									
ARNG-082-008	V		FALSE			217.3	SUM				14.7	SUM									
ARNG-082-009	H		FALSE			20.1	SUM				16.8	SUM									
ARNG-082-010	H		FALSE			20.7	SUM				19.1	SUM									
ARNG-082-011	H		FALSE			21.1	SUM				34.4	SUM									
ARNG-082-012	H		FALSE			54.8	SUM				45.3	SUM									
ARNG-082-013	H		FALSE			28.9	SUM				24.2	SUM									
ARNG-082-014	H		FALSE			49.8	SUM				43.2	SUM									
ARNG-082-015	H		FALSE			42.3	SUM				15.7	SUM									
ARNG-082-016			TRUE			251.7	SUM				29.7	SUM									
ARNG-082-017	H		FALSE			120.6	SUM				45.1	SUM									
ARNG-082-018	H		FALSE			82.1	SUM				9.7	SUM									
ARNG-082-019	H		FALSE			54.7	SUM				14.2	SUM									
ARNG-082-020	H		TRUE			157.6	SUM				62.4	SUM									
ARNG-082-021	H		FALSE			24.1	SUM				23.7	SUM									
ARNG-082-022	H		FALSE			39.9	SUM				31.2	SUM									
ARNG-082-023	H		FALSE			54.6	SUM				5.6	SUM									
ARNG-082-024	H		FALSE			33.9	SUM				25.2	SUM									
ARNG-082-025	H		FALSE			32.8	SUM				5.4	SUM									
ARNG-082-026	H		FALSE			31.4	SUM				17.4	SUM									
ARNG-082-027	H		FALSE			140.5	SUM				91.4	SUM									
ARNG-082-028	H		FALSE			32.8	SUM				5.4	SUM									
ARNG-082-029	H		FALSE			43.2	SUM				34.5	SUM									
ARNG-082-030	H		FALSE			46.2	SUM				9.1	SUM									
ARNG-082-031	V		FALSE			498.4	SUM				8.4	SUM									
ARNG-082-032	H		FALSE			14.5	SUM				8.3	SUM									
ARNG-082-033	H		FALSE			18.4	SUM				7.1	SUM									
ARNG-082-034	H		FALSE			20.6	SUM				5.2	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-082-035	H		FALSE			68.2	SUM				2.7	SUM									
ARNG-082-036	H		FALSE			31.2	SUM				10.8	SUM									
ARNG-082-037	H		FALSE			36.3	SUM				4.7	SUM									
ARNG-082-038	H		FALSE			40.1	SUM				2.7	SUM									
ARNG-083-001	V		FALSE			176.2	CH2			1.3/3.8	1.3	CH2	3.8	SUM							
ARNG-083-002	H		FALSE			43.1	CH2			2.5/7.4	2.5	CH2	7.4	SUM							
ARNG-083-003	H		FALSE			7.1	CH2			4.1/15.8	4.1	CH2	15.8	SUM							
ARNG-083-004	H		FALSE			8.5	CH2			1.3/3.4	1.3	CH2	3.4	SUM							
ARNG-083-005			FALSE			89.1	CH2			4.1/12.8	4.1	CH2	12.8	SUM							
ARNG-083-006	H		FALSE			89.1	CH2			4.1/12.8	4.1	CH2	12.8	SUM							
ARNG-083-007	V		FALSE			113.2	CH2			1.2/2.3	1.2	CH2	2.3	SUM							
ARNG-083-008	H		FALSE			9.7	CH2			2.2/6.7	2.2	CH2	6.7	SUM							
ARNG-084-001	V		FALSE			152.4	CH2				4.1	CH2	9.2	SUM							
ARNG-084-002	V		FALSE			102.1	CH2			4.2/9.3	4.2	CH2	9.3	SUM		entered into DB incorrectly as #83. 8 was scratched out and 3 written to the side					
ARNG-084-003	H		FALSE			7.3	CH2			3.1/8.5	3.1	CH2	8.5	SUM							
ARNG-084-004	H		FALSE			12.8	CH2			3.9/9.6	3.9	CH2	9.6	SUM							
ARNG-084-005	H		FALSE			14.4	CH2			2.5/5.4	2.5	CH2	5.4	SUM							
ARNG-084-006	H		FALSE			9.1	CH2			4.8/12.2	4.8	CH2	12.2	SUM							
ARNG-084-007	H		FALSE			13.2	CH2			10.1/28.1	10.1	CH2	28.1	SUM							
ARNG-084-008	H		FALSE			51.4	CH2			12.9/35.1	12.9	CH2	35.1	SUM							
ARNG-084-009			FALSE			19.1	CH2			19.7/62.5	19.7	CH2	62.5	SUM							
ARNG-085-001			FALSE			1.2	CH2			1.2/4.0	1.2	CH2	4	SUM							
ARNG-085-002	V		FALSE			155.1	CH2			0.9/2.3	0.9	CH2	2.3	SUM							
ARNG-085-003	V		FALSE			110.2	CH2			2.2/8.9	2.2	CH2	8.9	SUM							
ARNG-085-004	H		FALSE			17.5	CH2			0.9/2.2	0.9	CH2	2.2	SUM							
ARNG-085-005			FALSE			15.1	CH2			0.9/2.2	0.9	CH2	2.2	SUM							
ARNG-086-001	H		FALSE			213.6	CH2			4.7/16.3	4.7	CH2	16.3	SUM							
ARNG-086-002	V		FALSE			209.1	CH2			2.1/4.9	2.1	CH2	4.9	SUM							
ARNG-086-003			FALSE			13.2	CH2			9.2/28.9	9.2	CH2	28.9	SUM							
ARNG-086-004	H		FALSE			149.9	CH2			4.8/18.7	4.8	CH2	18.7	SUM							
ARNG-086-005	H		FALSE			27.8	CH2			4.9/17.1	4.9	CH2	17.1	SUM							
ARNG-086-006	H		FALSE			17.5	CH2			1.1/2.3	1.1	CH2	2.3	SUM							
ARNG-086-007	H		FALSE			32.9	CH2			3.2/15.3	3.2	CH2	15.3	SUM							
ARNG-086-008	H		FALSE			24.3	CH2			4.1/14.6	4.1	CH2	14.6	SUM							
ARNG-086-009	H		FALSE			28.1	CH2			4.8/14.9	4.8	CH2	14.9	SUM							
ARNG-086-010	V		FALSE			147.5	CH2			0.7/1.7	0.7	CH2	1.7	SUM							
ARNG-086-011			FALSE			23.9	CH2			1.2/3.6	1.2	CH2	3.6	SUM							
ARNG-086-012			FALSE			26.7	CH2			8.7/14.8	8.7	CH2	14.8	SUM							
ARNG-086-013	H		FALSE			27.5	CH2			1.1/4.1	1.1	CH2	4.1	SUM							
ARNG-086-014	V		FALSE			89.4	CH2			4.9/15.7	4.9	CH2	15.7	SUM							
ARNG-086-015	H		FALSE			12.4	CH2			3.4/11.1	3.4	CH2	11.1	SUM							
ARNG-086-016			FALSE			12.3	CH2			12.1/29.1	12.1	CH2	29.1	SUM							
ARNG-086-017	H		FALSE			16.4	CH2			2.9/9.7	2.9	CH2	9.7	SUM							
ARNG-086-018	H		FALSE			6.9	CH2			3.6/11.5	3.6	CH2	11.5	SUM							
ARNG-086-019			FALSE			25.3	CH2			4.1/14.2	4.1	CH2	14.2	SUM							
ARNG-086-020	H		FALSE			19.1	CH2			4.6/14.2	4.6	CH2	14.2	SUM							
ARNG-086-021	H		FALSE			5.4	CH2			3.2/8.7	3.2	CH2	8.7	SUM							
ARNG-086-022	H		FALSE			4.3	CH2			1.1/1.7	1.1	CH2	1.7	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
ARNG-086-023	H		FALSE			41.4	CH2			4.5/14.1	4.5	CH2	14.1	SUM							
ARNG-086-024	H		FALSE			11.2	CH2			3.8/10.1	3.8	CH2	10.1	SUM							
ARNG-086-025	H		FALSE			14.1	CH2			4.2/15.1	4.2	CH2	15.1	SUM							
ARNG-086-026	H		FALSE			25.3	CH2			4.3/13.4	4.3	CH2	13.4	SUM							
ARNG-086-027	H		FALSE			12.1	CH2			1.5/4.1	1.5	CH2	4.1	SUM							
ARNG-086-028	H		FALSE			261.7	CH2			1.6/6.2	1.6	CH2	6.2	SUM							
ARNG-087-001	H		FALSE			242.6	CH2			128.2/414.4	128.2	CH2	414.4	SUM							
ARNG-087-002	H		FALSE			280.2	CH2			29.1/98.0	29.1	CH2	98	SUM							
ARNG-087-003	H		FALSE			29.2	CH2			3.1/10.3	3.1	CH2	10.3	SUM							
ARNG-087-004	H		FALSE			222.1	CH2			12.2/40.1	12.2	CH2	40.1	SUM							
ARNG-087-005	V		FALSE			1080	CH2			6.0/25.3	6	CH2	25.3	SUM							
ARNG-087-006	H		FALSE			16.3	CH2			3.4/8.6	3.4	CH2	8.6	SUM							
ARNG-087-007	H		FALSE			56.3	CH2			11.0/55.3	11	CH2	55.3	SUM							
ARNG-087-008	H		FALSE			191.2	CH2			96.1/319.8	96.1	CH2	319.8	SUM							
ARNG-087-009			FALSE			56.3	CH2			11.0/55.3	11	CH2	55.3	SUM							
ARNG-087-010	H		FALSE			179.1	CH2			2.3/5.9	2.3	CH2	5.9	SUM							
ARNG-087-011	H		FALSE			20	CH2			3.4/8.2	3.4	CH2	8.2	SUM							
ARNG-087-012	H		FALSE			7.1	CH2			2.3/8.2	2.3	CH2	8.2	SUM							
ARNG-087-013	H		FALSE			26.6	CH2			2.2/6.8	2.2	CH2	6.8	SUM							
ARNG-087-014	V		FALSE			107.7	CH2			3.7/7.0	3.7	CH2	7	SUM							
ARNG-087-015	H		FALSE			12.8	CH2			6.7/22.0	6.7	CH2	22	SUM							
ARNG-087-016	H		FALSE			7.8	CH2			4.3/13.8	4.3	CH2	13.8	SUM							
ARNG-087-017			FALSE			17.1	CH2			4.3/13.8	4.3	CH2	13.8	SUM							
ARNG-087-018	H		FALSE			16.6	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
ARNG-087-019	H		FALSE			23.8	CH2			2.3/6.4	2.3	CH2	6.4	SUM							
ARNG-088-001	H		FALSE			225.4	CH2				17.3	SUM									
ARNG-088-002	H		FALSE			50.1	CH2				13.2	SUM									
ARNG-088-003	H		FALSE			10.5	CH2				2.3	SUM									
ARNG-088-004	H		FALSE			7.5	CH2				17.2	SUM									
ARNG-088-005	H		FALSE			2.7	CH2				3.2	SUM									
ARNG-088-006	H		FALSE			40.4	CH2				10.6	SUM									
ARNG-088-007	H		FALSE			8.2	CH2				15.5	SUM									
ARNG-088-008	V		FALSE			98.5	CH2				7.6	SUM									
ARNG-089-001	V		FALSE			179.6	CH2			1.1/3.5	1.1	CH2	3.5	SUM							
ARNG-089-002	H		FALSE			9.6	CH2			0.6/2.3	0.6	CH2	2.3	SUM							
ARNG-089-003	V		FALSE			111.7	CH2			0.6/3.8	0.6	CH2	3.8	SUM							
ARNG-23-034	H		FALSE				CH2					CH2		SUM							
ARNG-82-039	H		TRUE				SUM				12.5	SUM									
RC1-002-001	V		FALSE			766.1	SUM				3.3	SUM									
RC1-002-002	H		FALSE			119.7	SUM				4.7	SUM									
RC1-002-003	H		FALSE			372.7	SUM				1.3	SUM									
RC1-002-004	H		FALSE			64.1	SUM				2.3	SUM									
RC1-002-005			FALSE			32.7	SUM				18.7	SUM									
RC1-002-006	H		FALSE			334.7	SUM				1.4	SUM									
RC1-002-007			FALSE			334.7	SUM				1.4	SUM									
RC1-002-008	V		FALSE			254.6	SUM				1.1	SUM									
RC1-002-009			FALSE			14.6	SUM				14.6	SUM									
RC1-002-010	H		FALSE			27.9	SUM				2.2	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-003-001	V		FALSE			556.2	SUM				14.2	SUM									
RC1-003-002			FALSE			152	SUM				15.2	SUM									
RC1-003-003			FALSE			13.1	SUM				13.1	SUM									
RC1-003-004	H		FALSE			40.2	SUM				7.2	SUM									
RC1-003-005	V		FALSE			391.1	SUM				4.6	SUM									
RC1-004-001	V		FALSE			682.6	SUM				3.3	SUM									
RC1-004-002	H		FALSE			31.6	SUM				1.6	SUM									
RC1-004-003	V		FALSE			360.2	SUM				1.2	SUM									
RC1-004-004			FALSE			5.2	SUM				5.2	SUM									
RC1-004-005	H		FALSE			61.2	SUM				2.6	SUM									
RC1-004-006	H		FALSE			282.1	SUM				1.7	SUM									
RC1-004-007	H		FALSE			372.3	SUM				2.3	SUM									
RC1-004-008	H		FALSE			392.2	SUM				164.2	SUM									
RC1-004-009			FALSE			5.6	SUM				5.6	SUM									
RC1-004-010	H		FALSE			53.7	SUM				6.7	SUM									
RC1-004-011	H		FALSE			307.8	SUM				10.8	SUM									
RC1-004-012			FALSE			15.2	SUM				15.2	SUM									
RC1-005-001	H		FALSE			70.1	SUM				1.6	SUM									
RC1-005-002	H		FALSE			46.8	SUM				9.7	SUM									
RC1-005-003	H		FALSE			59.8	SUM				8.5	SUM									
RC1-005-004	H		FALSE			239.6	SUM				1.2	SUM									
RC1-005-005	H		FALSE			62.3	SUM				2.1	SUM									
RC1-005-006	H		FALSE			24.7	SUM				3.4	SUM									
RC1-005-007	H		FALSE			45.6	SUM				2.7	SUM									
RC1-005-008	H		FALSE			34.3	SUM				9.6	SUM									
RC1-005-009	H, V		FALSE			342.2	SUM				2.3	SUM									
RC1-005-010	H		FALSE			79.8	SUM				2.3	SUM									
RC1-005-011			FALSE			4.3	SUM				4.3	SUM									
RC1-005-012	H		FALSE			30.4	SUM				3.1	SUM									
RC1-005-013	H		FALSE			50.1	SUM				4.1	SUM									
RC1-007-001	V		FALSE			396.2	SUM				1.2	SUM									
RC1-007-002	H		FALSE			68.4	SUM				4.4	SUM									
RC1-007-003	H		FALSE			47.8	SUM				1.1	SUM									
RC1-007-004	H		FALSE			36.4	SUM				2.9	SUM									
RC1-007-005	H		FALSE			160.1	SUM				2.3	SUM									
RC1-007-006	H		FALSE			19.4	SUM				1.7	SUM									
RC1-007-007	H		FALSE			44.1	SUM				1.9	SUM									
RC1-007-008	H		FALSE			54.3	SUM				3.2	SUM									
RC1-007-009	H		FALSE			101.5	SUM				1.3	SUM									
RC1-007-010	H		FALSE			101.5	SUM				1.3	SUM									
RC1-007-011	H		FALSE			30.2	SUM				9.6	SUM									
RC1-007-012	H		FALSE			31.4	SUM				14.2	SUM									
RC1-007-013	V		FALSE			242.2	SUM				2.1	SUM									
RC1-007-014	H		FALSE			122.3	SUM				1.4	SUM									
RC1-007-015	H		FALSE			31.2	SUM				2.4	SUM									
RC1-007-016	H		FALSE			41.4	SUM				14.4	SUM									
RC1-007-017	H		FALSE			24.8	SUM				2.4	SUM									
RC1-012-001	H, V		FALSE			672.8	SUM				1.2	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-012-002	H		FALSE			73.7	SUM				12.8	SUM									
RC1-012-003	H		FALSE			30.1	SUM				2.1	SUM									
RC1-012-004	H		FALSE			85.5	SUM				19.1	SUM									
RC1-012-005	H		FALSE			130.6	SUM				2.1	SUM									
RC1-012-006	H		FALSE			112.8	SUM				11.6	SUM									
RC1-012-007	H		FALSE			278.3	SUM				10.4	SUM									
RC1-012-008	H		FALSE			55.4	SUM				10.1	SUM									
RC1-012-009	H		FALSE			240.6	SUM				17.9	SUM									
RC1-012-010	H		FALSE			64.2	SUM				10.7	SUM									
RC1-012-011	H		FALSE			89.1	SUM				17.2	SUM									
RC1-012-012	H		FALSE			88.9	SUM				14.3	SUM									
RC1-012-013			FALSE			40.1	SUM				19.4	SUM									
RC1-012-014	H		FALSE			50.2	SUM				15.8	SUM									
RC1-012-015	H		FALSE			53.5	SUM				15.6	SUM									
RC1-012-016	H, V		FALSE			326.2	SUM				5.1	SUM									
RC1-012-017	H		FALSE			79.8	SUM				11.2	SUM									
RC1-012-018	H		FALSE			126.4	SUM				7.2	SUM									
RC1-012-019	H		FALSE			146.2	SUM				12.1	SUM									
RC1-012-020	H		FALSE			49.9	SUM				6.2	SUM									
RC1-012-021	H		FALSE			89.7	SUM				16.4	SUM									
RC1-012-022	H		FALSE			101.2	SUM				13.4	SUM									
RC1-012-023	H		FALSE			33.6	SUM				12.6	SUM									
RC1-012-024	H		FALSE			33.6	SUM				12.6	SUM									
RC1-012-025	H		FALSE			208.1	SUM				10.6	SUM									
RC1-012-026	H		FALSE			45.6	SUM				1.5	SUM									
RC1-012-027	H		FALSE			30.1	SUM				15.2	SUM									
RC1-012-028	H		FALSE			33.8	SUM				15.3	SUM									
RC1-012-029	H		FALSE			29.5	SUM				4.4	SUM									
RC1-013-001	H, V		FALSE			520.6	SUM				1.8	SUM									
RC1-013-002	H		FALSE			68.1	SUM				2.1	SUM									
RC1-013-003	H, V		FALSE			336.4	SUM				4.3	SUM									
RC1-013-004	H		FALSE			137.2	SUM				1.4	SUM									
RC1-013-005	H		FALSE			41.5	SUM				4.5	SUM									
RC1-013-006	H		FALSE			65.4	SUM				1.1	SUM									
RC1-013-007	H		FALSE			176.6	SUM				18.8	SUM									
RC1-013-008	H		FALSE			54.2	SUM				4.6	SUM									
RC1-013-009	H		FALSE			22.5	SUM				6.4	SUM									
RC1-013-010	H		FALSE			70.7	SUM				5.2	SUM									
RC1-013-011	H		FALSE			37.8	SUM				2.1	SUM									
RC1-013-012	H		FALSE			34.2	SUM				9.2	SUM									
RC1-013-013	H		FALSE			15.2	SUM				1.8	SUM									
RC1-013-014	H		FALSE			22.6	SUM				4.3	SUM									
RC1-013-015	H		FALSE			26.2	SUM				14.2	SUM									
RC1-013-016	H		FALSE			84.2	SUM				3.2	SUM									
RC1-013-017	H		FALSE			118.2	SUM				1.3	SUM									
RC1-014-001	V		FALSE			448.3	SUM				2.3	SUM									
RC1-014-002	V		FALSE			14.7	SUM				8.1	SUM									
RC1-014-003	H		FALSE			52.4	SUM				2.3	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-014-004	H		FALSE			85.2	SUM				8.4	SUM									
RC1-014-005	H		FALSE			194.5	SUM				5.8	SUM									
RC1-014-006	H		FALSE			49.2	SUM				10.5	SUM									
RC1-014-007	H		FALSE			64.7	SUM				3.3	SUM									
RC1-014-008	H		FALSE			32.2	SUM				3.8	SUM									
RC1-014-009	H		FALSE			59.5	SUM				16.7	SUM									
RC1-014-010	H		FALSE			108.6	SUM				15.6	SUM									
RC1-014-011	H		FALSE			23.5	SUM				17.4	SUM									
RC1-014-012	H		FALSE			59.8	SUM				15.4	SUM									
RC1-014-013	H		FALSE			44.7	SUM				9.8	SUM									
RC1-014-014	H		FALSE			29.8	SUM				2.3	SUM									
RC1-014-015	H		FALSE			41.6	SUM				4.5	SUM									
RC1-014-016	H		FALSE			27.8	SUM				12.5	SUM									
RC1-014-017	H		FALSE			38.3	SUM				1.9	SUM									
RC1-014-018	H		FALSE			102.4	SUM				11.2	SUM									
RC1-014-019	H		FALSE			144.2	SUM				47.8	SUM									
RC1-014-020	H		FALSE			430.3	SUM				58.3	SUM									
RC1-014-021	H		FALSE			100.1	SUM				19.4	SUM									
RC1-014-022	H		FALSE			95.6	SUM				48.9	SUM									
RC1-014-023	H		FALSE			145.5	SUM				64.2	SUM									
RC1-014-024	H		FALSE			72.8	SUM				39.2	SUM									
RC1-014-025	H		FALSE			87.2	SUM				42.2	SUM									
RC1-014-026	H		FALSE			120.4	SUM				59.1	SUM									
RC1-014-027	H		FALSE			54.2	SUM				12.4	SUM									
RC1-014-028	H, V		FALSE			457.8	SUM				14.6	SUM									
RC1-016-001	V		FALSE			447.1	1				4.8	SUM									
RC1-016-002	V		FALSE			414.1	1				2.2	SUM									
RC1-016-003			FALSE			50.7	1				28.2	SUM									
RC1-016-004	H		FALSE			216.2	1				2.6	SUM									
RC1-016-006	H		FALSE			69.7	1				3.4	SUM									
RC1-016-007	H		FALSE			74.1	1				5	SUM									
RC1-016-008	H		FALSE			26.5	1				4.1	SUM									
RC1-016-009	H		FALSE			37.2	1				4.6	SUM									
RC1-016-010	H		FALSE			37.6	1				8.9	SUM									
RC1-016-011	H		FALSE			42.3	1				12.2	SUM									
RC1-016-012	H		FALSE			122.2	1				8.7	SUM									
RC1-016-013			FALSE				1					SUM									
RC1-016-014	H		FALSE			50.1	1				10.2	SUM									
RC1-016-015	H		FALSE			42.6	1				11.1	SUM									
RC1-016-016	H		FALSE			223.3	1				8.3	SUM									
RC1-016-017	H		FALSE			136.7	1				7.1	SUM									
RC1-016-018	H		FALSE			147.8	1				17.2	SUM									
RC1-016-019	H		FALSE			78.6	1				18.9	SUM									
RC1-016-020	H		FALSE			33.2	1				15.7	SUM									
RC1-016-021	H		FALSE			53.6	1				13.1	SUM									
RC1-016-022	H		FALSE			107.2	1				13.4	SUM									
RC1-018-001	V		FALSE			964.3	SUM				6.1	SUM									
RC1-018-002	H		FALSE			110.2	SUM				14.6	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-018-003	H		FALSE			164.6	SUM				9.2	SUM									
RC1-018-004	H		FALSE			110.2	SUM				14.6	SUM									
RC1-018-005	H		FALSE			120.2	SUM				5.2	SUM									
RC1-018-006	H		FALSE			58.3	SUM				14.1	SUM									
RC1-018-007	H		FALSE			50.6	SUM				7.9	SUM									
RC1-018-008	H		FALSE			276.3	SUM				8.4	SUM									
RC1-018-009	H		FALSE			135.7	SUM				1.8	SUM									
RC1-018-010	H		FALSE			360.2	SUM				17.6	SUM									
RC1-018-011	H		FALSE			38	SUM				4.3	SUM									
RC1-018-012	H		FALSE			92.6	SUM				29.9	SUM									
RC1-018-013	H		FALSE			476.3	SUM				92.2	SUM									
RC1-018-014	H		FALSE			284.6	SUM				2.1	SUM									
RC1-018-015	H		FALSE			311.5	SUM				18.2	SUM									
RC1-018-016	H		FALSE			41.2	SUM				14.1	SUM									
RC1-018-017	H		FALSE			33.9	SUM				16.4	SUM									
RC1-018-018	H		FALSE			23.4	SUM				7.6	SUM									
RC1-018-019	H		FALSE			811.9	SUM				65.2	SUM									
RC1-018-020	H		FALSE			124.6	SUM				19.1	SUM									
RC1-018-021	H		FALSE			182.2	SUM				1.9	SUM									
RC1-018-022	H		FALSE			31.6	SUM				6.5	SUM									
RC1-018-023	H		FALSE			51.2	SUM				11.2	SUM									
RC1-018-024	H		FALSE			816.3	SUM				151.8	SUM									
RC1-018-025	H		FALSE			91.4	SUM				17.2	SUM									
RC1-018-026	H		FALSE			238.8	SUM				15.4	SUM									
RC1-018-027	H		FALSE			31.2	SUM				18.6	SUM									
RC1-018-028	H		FALSE			39.4	SUM				15.7	SUM									
RC1-018-029	H		FALSE			719.6	SUM				266.9	SUM									
RC1-018-030	H		FALSE			131.8	SUM				2.9	SUM									
RC1-018-031	H		FALSE			131.8	SUM				2.9	SUM									
RC1-018-032	H		FALSE			35.2	SUM				2.4	SUM									
RC1-018-033	H		FALSE			74.6	SUM				16.3	SUM									
RC1-018-034	H		FALSE			72.5	SUM				2.4	SUM									
RC1-018-035	H		FALSE			24.2	SUM				8.9	SUM									
RC1-018-036	H		FALSE			211.7	SUM				18.4	SUM									
RC1-018-037	H		FALSE			69.8	SUM				1.8	SUM									
RC1-018-038			FALSE			149.7	SUM				1.2	SUM									
RC1-018-039			FALSE			157.2	SUM				1.2	SUM									
RC1-018-040	H		FALSE			46.6	SUM				9.9	SUM									
RC1-018-041	H		FALSE			214.6	SUM				4.8	SUM									
RC1-018-042	H		FALSE			98.6	SUM				14.7	SUM									
RC1-018-043	H		FALSE			31.3	SUM				14.7	SUM									
RC1-018-044			FALSE			3.8	SUM				3.8	SUM									
RC1-018-045	H		FALSE			214.6	SUM				4.8	SUM									
RC1-018-046	H		FALSE			75.4	SUM				2.8	SUM									
RC1-018-047	H		FALSE			83.1	SUM				1.9	SUM									
RC1-018-048	H		FALSE			55.1	SUM				20.4	SUM									
RC1-018-049	H		FALSE			160.3	SUM				1.3	SUM									
RC1-018-050	H		FALSE			99.2	SUM				9.8	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-018-051	H		FALSE			91.9	SUM				5.3	SUM									
RC1-018-052	H		FALSE			198.4	SUM				16.9	SUM									
RC1-018-053	H		FALSE			190.8	SUM				3.4	SUM									
RC1-018-054	H, V		FALSE			224.2	SUM				2.1	SUM									
RC1-018-055	H		FALSE			465.5	SUM				132.6	SUM									
RC1-018-056	H		FALSE			327.8	SUM				89.4	SUM									
RC1-022-001	V		FALSE			483.5	SUM				14.2	SUM									
RC1-022-002	H		FALSE			60.3	SUM				12.6	SUM									
RC1-022-003	V		FALSE			359.6	SUM				17.4	SUM									
RC1-022-004	H		FALSE			86.7	SUM				5.4	SUM									
RC1-022-005			FALSE			28.6	SUM				9.6	SUM									
RC1-022-006	H		FALSE			31.2	SUM				1.2	SUM									
RC1-022-007	H		FALSE			45.6	SUM				7.5	SUM									
RC1-022-008	H		FALSE			54.5	SUM				2.1	SUM									
RC1-022-009	H		FALSE			47.2	SUM				10.4	SUM									
RC1-022-010	H		FALSE			35.7	SUM				2.3	SUM									
RC1-022-011			FALSE			34.2	SUM				1.8	SUM									
RC1-022-012			FALSE			31.2	SUM				7.8	SUM									
RC1-022-013			FALSE			24.9	SUM				2.3	SUM									
RC1-022-014	H		FALSE			22.4	SUM				16.2	SUM									
RC1-022-015	H		FALSE			65.4	SUM				6.8	SUM									
RC1-022-016			FALSE			23.9	SUM				15.2	SUM									
RC1-022-017	H		FALSE			90.1	SUM				18.4	SUM									
RC1-022-018			FALSE			23.2	SUM				10.2	SUM									
RC1-022-019	H		FALSE			32.7	SUM				19.5	SUM									
RC1-022-020			FALSE			24.3	SUM				7.4	SUM									
RC1-022-021			FALSE			28.3	SUM				5.7	SUM									
RC1-022-022			FALSE			31.5	SUM				19.4	SUM									
RC1-022-023			FALSE			19.6	SUM				13.2	SUM									
RC1-022-024	H		FALSE			23.2	SUM				5.6	SUM									
RC1-022-025	H		FALSE			55.4	SUM				1.3	SUM									
RC1-022-026			FALSE			14.9	SUM				1.4	SUM									
RC1-022-027	H		FALSE			40.2	SUM				19.1	SUM									
RC1-022-028			FALSE			37.2	SUM				18.7	SUM									
RC1-022-029	H		FALSE			55.4	SUM				1.3	SUM									
RC1-028-001	V		FALSE			480.4	1				52.3	SUM									
RC1-028-002			FALSE			50.1	1				48.1	SUM									
RC1-028-003			FALSE			54.2	1				41.3	SUM									
RC1-028-004			FALSE			66.1	1				60.2	SUM									
RC1-028-005	H		FALSE			53.2	1				48.7	SUM									
RC1-028-006			FALSE			66.2	1				59.3	SUM									
RC1-028-009			FALSE			59.2	1				57.1	SUM									
RC1-028-010			FALSE			62.2	1				57.8	SUM									
RC1-028-011			FALSE			56.3	1				54.7	SUM									
RC1-028-012	H		FALSE			38.2	1				36.1	SUM									
RC1-028-013			FALSE			48.7	1				43.8	SUM									
RC1-028-014	H		FALSE			135.2	1				59.2	SUM									
RC1-028-015	H		FALSE			63.2	1				52.1	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-028-016			FALSE			69.2	1				61.7	SUM									
RC1-028-017			FALSE			48.2	1				40.2	SUM									
RC1-028-018			FALSE				1					SUM									
RC1-028-019			FALSE			63.2	1				59.1	SUM									
RC1-028-020			FALSE			97.6	1				90.3	SUM									
RC1-028-021			FALSE			66.7	1				60.7	SUM									
RC1-028-022			FALSE			56.3	1				51.7	SUM									
RC1-028-023			FALSE			63.6	1				52.1	SUM									
RC1-028-024	H		FALSE			220.6	1				67.2	SUM									
RC1-028-025	V		FALSE			475.2	1				69.3	SUM									
RC1-028-026			FALSE			39.3	1				33.1	SUM									
RC1-028-027			FALSE			73.2	1				61.3	SUM									
RC1-028-028			FALSE			30.2	1				27.1	SUM									
RC1-028-029			FALSE			50.7	1				48.6	SUM									
RC1-028-030			FALSE			31.4	1				28.7	SUM									
RC1-028-031			FALSE			53.2	1				50.1	SUM									
RC1-028-032			FALSE			23.4	1				22.8	SUM									
RC1-028-033			FALSE			60.3	1				56.3	SUM									
RC1-028-034			FALSE			49.7	1				48.8	SUM									
RC1-028-035			FALSE			49.9	1				44.3	SUM									
RC1-028-036			FALSE			69.3	1				42.1	SUM									
RC1-028-037			FALSE			61.2	1				57.2	SUM									
RC1-028-038			FALSE			51.3	1				43.7	SUM									
RC1-028-039			FALSE			30.7	1				25.4	SUM									
RC1-028-041			FALSE			48.1	1				44.3	SUM									
RC1-029-001	H		FALSE			709.4	SUM				7.8	SUM									
RC1-029-002	H		FALSE			37.4	SUM				16.7	SUM									
RC1-029-003	H		FALSE			231.6	SUM				7.8	SUM									
RC1-029-004	H		FALSE			47.7	SUM				2.5	SUM									
RC1-029-005	H		FALSE			63.1	SUM				1.8	SUM									
RC1-029-006	H		FALSE			49.9	SUM				3.4	SUM									
RC1-029-007	H		FALSE			25.5	SUM				2.6	SUM									
RC1-029-008	H		FALSE			52.3	SUM				2.3	SUM									
RC1-029-009	H		FALSE			28.4	SUM				5.6	SUM									
RC1-029-010	H		FALSE			32.6	SUM				19.1	SUM									
RC1-029-011	H		FALSE			89.3	SUM				2.3	SUM									
RC1-029-012	H		FALSE			31.8	SUM				4.3	SUM									
RC1-029-013	H		FALSE			54.3	SUM				6.2	SUM									
RC1-029-014	V		FALSE			120.7	SUM				9.9	SUM									
RC1-029-015	V		FALSE			121.2	SUM				8.6	SUM									
RC1-029-016	H		FALSE			27.9	SUM				19.5	SUM									
RC1-029-017	H		FALSE			70.9	SUM				6.7	SUM									
RC1-029-018	H		FALSE			24.5	SUM				8.9	SUM									
RC1-029-019	H		FALSE			42.1	SUM				9.2	SUM									
RC1-029-020			FALSE			221	SUM				9.6	SUM									
RC1-029-021	V		FALSE			438.1	SUM				5.9	SUM									
RC1-029-022	V		FALSE			120.8	SUM				7.8	SUM									
RC1-029-023	H		FALSE			53.2	SUM				15.6	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-029-024	H		FALSE			122.2	SUM				12.2	SUM									
RC1-029-025	H		FALSE			25.1	SUM				7.2	SUM									
RC1-029-026	H		FALSE			46.9	SUM				7.2	SUM									
RC1-029-027	H		FALSE			66.6	SUM				11.7	SUM									
RC1-029-028			FALSE			197.1	SUM				6.8	SUM									
RC1-032-001	V		FALSE			805.2	SUM				2.1	SUM									
RC1-032-002	V		FALSE			338.1	SUM				1.3	SUM									
RC1-032-003	H		FALSE			42.5	SUM				3.4	SUM									
RC1-032-004	H		FALSE			84.6	SUM				2.1	SUM									
RC1-032-005	H		FALSE			19.5	SUM				1.7	SUM									
RC1-032-006			FALSE			29.5	SUM				6.1	SUM									
RC1-032-007	H		FALSE			67.8	SUM				1.8	SUM									
RC1-032-008	H		FALSE			189.7	SUM				3.1	SUM									
RC1-033-001	V		FALSE			586.6	SUM				13.2	SUM									
RC1-033-002	H		FALSE			77.1	SUM				14.2	SUM									
RC1-033-003	H		FALSE			58.7	SUM				12.2	SUM									
RC1-033-004	H		FALSE			25.6	SUM				5.4	SUM									
RC1-033-005	H		FALSE			44.4	SUM				4.6	SUM									
RC1-033-006	H		FALSE			36.1	SUM				2.3	SUM									
RC1-033-007	H		FALSE			12.5	SUM				7.5	SUM									
RC1-033-008	H		FALSE			57.2	SUM				7.6	SUM									
RC1-033-009	H		FALSE			21.4	SUM				3.4	SUM									
RC1-033-010	H		FALSE			58.5	SUM				7.2	SUM									
RC1-033-011	H		FALSE			52.7	SUM				2.4	SUM									
RC1-033-012	H		FALSE			91.6	SUM				6.4	SUM									
RC1-033-013	V		FALSE			90.2	SUM				14.7	SUM									
RC1-033-014	H		FALSE			69.6	SUM				12.2	SUM									
RC1-033-015	V		FALSE			457.2	SUM				6.1	SUM									
RC1-033-016	H		FALSE			109.7	SUM				12.2	SUM									
RC1-033-017	H		FALSE			53.1	SUM				15.8	SUM									
RC1-033-018	H		FALSE			41.6	SUM				18.2	SUM									
RC1-033-019	H		FALSE			95.5	SUM				10.7	SUM									
RC1-033-020	H		FALSE			30.1	SUM				12.4	SUM									
RC1-033-021	H		FALSE			51.2	SUM				13.8	SUM									
RC1-033-022	H		FALSE			141.2	SUM				12.6	SUM									
RC1-033-023			FALSE			10.4	SUM				10.4	SUM									
RC1-033-024	H		FALSE			33.1	SUM				10.3	SUM									
RC1-033-025	H		FALSE			30.2	SUM				6.8	SUM									
RC1-034-001	V		FALSE			389.3	1				2.3	SUM									
RC1-034-002	H		FALSE			21.7	1				2.1	SUM									
RC1-034-003	H		FALSE			24.6	1				1.9	SUM									
RC1-034-004	H		FALSE			20.2	1				2.3	SUM									
RC1-034-005	H		FALSE			19.9	1				3.2	SUM									
RC1-034-006	H		FALSE			22.8	1				2.6	SUM									
RC1-034-007			FALSE			9.7	1				9.7	SUM									
RC1-034-008	H		FALSE			21.2	1				8.3	SUM									
RC1-034-009	V		FALSE			270.4	1				1.2	SUM									
RC1-034-010			FALSE			9.8	1				9.8	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-034-011	H		FALSE			19.4	1				12.4	SUM									
RC1-034-012	H		FALSE			54.6	1				2.2	SUM									
RC1-034-013	H		FALSE			13.6	1				3.5	SUM									
RC1-034-014	H		FALSE			69.2	1				4.7	SUM									
RC1-034-015	H		FALSE			21.4	1				8.2	SUM									
RC1-035-001	V		FALSE			432.8	SUM				2.6	SUM									
RC1-035-002	V		FALSE			293.7	SUM				5.1	SUM									
RC1-035-003			FALSE			21.6	SUM				7.2	SUM									
RC1-035-004	H		FALSE			43.9	SUM				2.3	SUM									
RC1-035-005	H		FALSE			58.6	SUM				3.1	SUM									
RC1-035-006	H		FALSE			624.3	SUM				8.2	SUM									
RC1-035-007	H		FALSE			129.7	SUM				9.3	SUM									
RC1-035-008	H		FALSE			84.6	SUM				7.2	SUM									
RC1-035-009	H		FALSE			17.5	SUM				10.2	SUM									
RC1-035-010	H		FALSE			68.2	SUM				2.7	SUM									
RC1-037-001	V		FALSE			351.6	SUM				16.4	SUM									
RC1-037-002	H		FALSE			42.4	SUM				3.7	SUM									
RC1-037-003	H		FALSE			56.7	SUM				4.1	SUM									
RC1-037-004	V		FALSE			305.2	SUM				5.1	SUM									
RC1-037-005	H		FALSE			33.6	SUM				1.3	SUM									
RC1-037-006	H		FALSE			56.1	SUM				1.8	SUM									
RC1-037-007	H		FALSE			64.3	SUM				2.4	SUM									
RC1-037-008	H		FALSE			46.9	SUM				2.3	SUM									
RC1-037-009	H		FALSE			36.6	SUM				2.6	SUM									
RC1-037-010	H		FALSE			48.9	SUM				1.4	SUM									
RC1-037-011	H		FALSE			31.6	SUM				3.1	SUM									
RC1-040-001	V		FALSE			850.2	1				17.3	SUM									
RC1-040-002	H		FALSE			104.3	1				5.4	SUM									
RC1-040-003	H		FALSE			40.8	1				31.4	SUM									
RC1-040-004	H		FALSE			139.8	1				6.5	SUM									
RC1-040-005	H		FALSE			65.6	1				48.2	SUM									
RC1-040-006	H		FALSE			45.6	1				15.6	SUM									
RC1-040-007	H		FALSE			63.4	1				39.7	SUM									
RC1-040-008	H		FALSE			38.7	1				26.2	SUM									
RC1-040-009	H		FALSE			33.2	1				13.2	SUM									
RC1-040-011	H		FALSE			48.2	1				4.3	SUM									
RC1-040-012	H		FALSE			66.2	1				7.2	SUM									
RC1-040-014			FALSE				1					SUM									
RC1-040-015	H		FALSE			101.2	1				6.1	SUM									
RC1-040-016	H		FALSE			107.2	1				7.3	SUM									
RC1-040-018	H		FALSE			78.7	1				5.4	SUM									
RC1-040-019	H		FALSE			94.2	1				8.1	SUM									
RC1-040-020	H		FALSE			67.5	1				8.1	SUM									
RC1-040-021	H		FALSE			65.2	1				7.2	SUM									
RC1-040-022	V		FALSE			455.8	1				8.5	SUM									
RC1-041-001	V		FALSE			574.3	SUM				1.4	SUM									
RC1-041-002	H		FALSE			206.7	SUM				2.1	SUM									
RC1-041-003	H		FALSE			146.7	SUM				2.1	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-041-004	H		FALSE			63.7	SUM				1.8	SUM									
RC1-041-005	H		FALSE			122.3	SUM				1.3	SUM									
RC1-041-006	V		FALSE			372.6	SUM				3.2	SUM									
RC1-041-007	H		FALSE			14.9	SUM				1.3	SUM									
RC1-042-001	V		FALSE			343.6	SUM				1.8	SUM									
RC1-042-002			FALSE			14.3	SUM				14.3	SUM									
RC1-042-003			FALSE			18.8	SUM				14.2	SUM									
RC1-042-004	V		FALSE			296.4	SUM				12.4	SUM									
RC1-043-001	V		FALSE			423.8	SUM				14.5	SUM									
RC1-043-002			FALSE			36.4	SUM				15.1	SUM									
RC1-043-003			FALSE			22.5	SUM				17.8	SUM									
RC1-043-004	V		FALSE			325.6	SUM				3.4	SUM									
RC1-043-005	H		FALSE			30.4	SUM				12.5	SUM									
RC1-043-006	H		FALSE			96.8	SUM				8.7	SUM									
RC1-045-001	V		FALSE			461.7	SUM				4.1	SUM									
RC1-045-002			FALSE			6.7	SUM				6.7	SUM									
RC1-045-003			FALSE			7.4	SUM				7.4	SUM									
RC1-045-004			FALSE			3.1	SUM				3.1	SUM									
RC1-045-005			FALSE			1.6	SUM				1.6	SUM									
RC1-045-006	V		FALSE			292.3	SUM				2.2	SUM									
RC1-045-007	H		FALSE			98.3	SUM				3.1	SUM									
RC1-045-008	H		FALSE			19.4	SUM				14.1	SUM									
RC1-046-001	H		FALSE			782.1	SUM				2.3	SUM									
RC1-046-002	H		FALSE			145.3	SUM				145.3	SUM									
RC1-046-003	H		FALSE			192	SUM				182.1	SUM									
RC1-046-004	H		FALSE			211.3	SUM				165.3	SUM									
RC1-046-005	H		FALSE			226	SUM				192.3	SUM									
RC1-046-006	H		FALSE			94	SUM				94	SUM									
RC1-046-007	H		FALSE			163	SUM				142.1	SUM									
RC1-046-008	H		FALSE			342.1	SUM				200.1	SUM									
RC1-046-009	H		FALSE			63.3	SUM				8.1	SUM									
RC1-046-010	H		FALSE			63.1	SUM				42.1	SUM									
RC1-046-011	H		FALSE			73.3	SUM				73.1	SUM									
RC1-046-012	H		FALSE			97.8	SUM				71.1	SUM									
RC1-046-013	H		FALSE			69.2	SUM				29.2	SUM									
RC1-046-014	H		FALSE			116.3	SUM				116.5	SUM									
RC1-046-015	H		FALSE			164.3	SUM				140.6	SUM									
RC1-046-016	H		FALSE			143.1	SUM				99.9	SUM									
RC1-046-017			FALSE			163	SUM				16.3	SUM									
RC1-046-018	V		FALSE			332.7	SUM				7.1	SUM									
RC1-046-019	H		FALSE			1291.1	SUM				3.2	SUM									
RC1-046-020	H		FALSE			32.7	SUM				7.6	SUM									
RC1-046-021	H		FALSE			194.6	SUM				5.3	SUM									
RC1-046-022	H		FALSE			27.6	SUM				16.3	SUM									
RC1-046-023			FALSE			7.3	SUM				7.3	SUM									
RC1-046-024			FALSE			56.3	SUM				18.3	SUM									
RC1-046-025			FALSE			17.3	SUM				17.3	SUM									
RC1-046-026			FALSE			15.9	SUM				15.9	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-046-027	H		FALSE			28.2	SUM				13.4	SUM									
RC1-047-001	V		FALSE			460.2	SUM				2.7	SUM									
RC1-047-002	H		FALSE			21.2	SUM				7.8	SUM									
RC1-047-003			FALSE			27.2	SUM				10.2	SUM									
RC1-047-004			FALSE			18.3	SUM				14.6	SUM									
RC1-047-005	H		FALSE			583.2	SUM				8.4	SUM									
RC1-047-006			FALSE			25.6	SUM				18.2	SUM									
RC1-047-007	V		FALSE			42.7	SUM				1.1	SUM									
RC1-047-008			FALSE			13.5	SUM				1.2	SUM									
RC1-047-009			FALSE			24.8	SUM				12.2	SUM									
RC1-047-010	V		FALSE			350.1	SUM				4.3	SUM									
RC1-047-011			FALSE			25.2	SUM				2.3	SUM									
RC1-047-012			FALSE			30.2	SUM				17.2	SUM									
RC1-047-013			FALSE			22.6	SUM				7.9	SUM									
RC1-047-014			FALSE			19.4	SUM				2.1	SUM									
RC1-047-015	H		FALSE			350.2	SUM				2.8	SUM									
RC1-047-016			FALSE			26.1	SUM				6.1	SUM									
RC1-047-017			FALSE			28.3	SUM				5.1	SUM									
RC1-047-018			FALSE			27.8	SUM				10.2	SUM									
RC1-047-019			FALSE			21.2	SUM				2.3	SUM									
RC1-047-020			FALSE			29.3	SUM				17.4	SUM									
RC1-048-001	V		FALSE			512.4	SUM				15.8	SUM									
RC1-048-002	H		FALSE			26.8	SUM				1.2	SUM									
RC1-048-003	H		FALSE			211.4	SUM				1.9	SUM									
RC1-048-004	H		FALSE			127.6	SUM				4.2	SUM									
RC1-048-005	H		FALSE			188.4	SUM				6.2	SUM									
RC1-048-006	H		FALSE			102.4	SUM				11.2	SUM									
RC1-048-007	H		FALSE			176.4	SUM				3.5	SUM									
RC1-048-008	H		FALSE			112.2	SUM				1.3	SUM									
RC1-048-009	H		FALSE			21.8	SUM				14.7	SUM									
RC1-048-010	H		FALSE			265.2	SUM				1.3	SUM									
RC1-048-011	V		FALSE			312.6	SUM				1.4	SUM									
RC1-048-012	H		FALSE			33.6	SUM				7.2	SUM									
RC1-048-013	H		FALSE			498.3	SUM				1.2	SUM									
RC1-048-014	H		FALSE			238.7	SUM				60.1	SUM									
RC1-048-015	H		FALSE			30.9	SUM				0.8	SUM									
RC1-048-016	H		FALSE			204.8	SUM				24.9	SUM									
RC1-048-017	H		FALSE			40.3	SUM				18.6	SUM									
RC1-048-018	H		FALSE			87.9	SUM				50.2	SUM									
RC1-048-019	H		FALSE			40.8	SUM				1.4	SUM									
RC1-048-020	H		FALSE			36.6	SUM				7	SUM									
RC1-048-021	H		FALSE			72.3	SUM				46.2	SUM									
RC1-048-022	H		FALSE			406.2	SUM				12.8	SUM									
RC1-048-023	H		FALSE			406.2	SUM				12.8	SUM									
RC1-048-024	H		FALSE			81.4	SUM				28.1	SUM									
RC1-048-025	H		FALSE			97.8	SUM				18.8	SUM									
RC1-048-026	H		FALSE			141.8	SUM				1.8	SUM									
RC1-048-027	H		FALSE			69.6	SUM				3.2	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-048-028	H		FALSE			67.4	SUM				19.1	SUM									
RC1-048-029	H		FALSE			81.2	SUM				30.1	SUM									
RC1-048-030	H		FALSE			45.3	SUM				19.4	SUM									
RC1-048-031	H		FALSE			113.2	SUM				38.6	SUM									
RC1-048-032	H		FALSE			316.2	SUM				10.7	SUM									
RC1-048-033	H		FALSE			148.2	SUM				1.9	SUM									
RC1-048-034	H		FALSE			82.4	SUM				15.7	SUM									
RC1-048-035	H		FALSE			45.6	SUM				31.5	SUM									
RC1-048-036	H		FALSE			130.7	SUM				52.4	SUM									
RC1-048-037	H		FALSE			139.4	SUM				80.6	SUM									
RC1-048-038	H		FALSE			40.1	SUM				12.8	SUM									
RC1-048-039	H		FALSE			118.6	SUM				2.1	SUM									
RC1-048-040	H		FALSE			146.8	SUM				50.3	SUM									
RC1-048-041	H		FALSE			100.2	SUM				71.2	SUM									
RC1-049-001	V		FALSE			1162.3	SUM				16.2	SUM									
RC1-049-002	H		FALSE			84.2	SUM				18.9	SUM									
RC1-049-003	H		FALSE			93.5	SUM				10.3	SUM									
RC1-049-004	H		FALSE			37.4	SUM				8.9	SUM									
RC1-049-005			FALSE			13.6	SUM				13.6	SUM									
RC1-049-006	H		FALSE			49.2	SUM				1.1	SUM									
RC1-049-007	H		FALSE			77.4	SUM				1.2	SUM									
RC1-049-008	H		FALSE			96.8	SUM				2.1	SUM									
RC1-049-009	H		FALSE			464.9	SUM				16.4	SUM									
RC1-049-010	H		FALSE			14.2	SUM				1.2	SUM									
RC1-049-011	H		FALSE			28.5	SUM				8.1	SUM									
RC1-049-012			FALSE			21.2	SUM				9.1	SUM									
RC1-049-013	H		FALSE			64.6	SUM				8.3	SUM									
RC1-049-014	H		FALSE			242.3	SUM				13.4	SUM									
RC1-049-015	H		FALSE			294.3	SUM				4.6	SUM									
RC1-049-016	V		FALSE			242.3	SUM				1.8	SUM									
RC1-049-017	H		FALSE			61.2	SUM				1.7	SUM									
RC1-050-001	V		FALSE			882.3	SUM				6.7	SUM									
RC1-050-002	V		FALSE			310.2	SUM				12.8	SUM									
RC1-050-003			FALSE			19.1	SUM				19.1	SUM									
RC1-050-004			FALSE			16.2	SUM				16.2	SUM									
RC1-050-005			FALSE			24.6	SUM				17.1	SUM									
RC1-050-006			FALSE			52.7	SUM				16.5	SUM									
RC1-050-007			FALSE			23.2	SUM				8.1	SUM									
RC1-050-008			FALSE			160.7	SUM				7.5	SUM									
RC1-050-009			FALSE			19.2	SUM				19.2	SUM									
RC1-050-010			FALSE			48.1	SUM				11.1	SUM									
RC1-050-011			FALSE			27.1	SUM				8.1	SUM									
RC1-050-012			FALSE			28.4	SUM				7.5	SUM									
RC1-054-001	V		FALSE			582.6	SUM				18.7	SUM									
RC1-054-002	V		FALSE			312.5	SUM				9.6	SUM									
RC1-054-004	H		FALSE			34.7	SUM				22.3	SUM									
RC1-054-005	H		FALSE			38.9	SUM				28.7	SUM									
RC1-054-006	H		FALSE			45.4	SUM				1.4	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-054-007	H		FALSE			31.3	SUM				6.2	SUM									
RC1-055-001	V		FALSE			540.1	SUM				3.2	SUM									
RC1-055-002	H		FALSE			16.2	SUM				2.2	SUM									
RC1-055-003			FALSE			12.1	SUM				12.1	SUM									
RC1-055-004	H		FALSE			22.4	SUM				9.8	SUM									
RC1-055-005	H		FALSE			38.2	SUM				1.3	SUM									
RC1-055-006			FALSE			27.2	SUM				1.8	SUM									
RC1-055-007	H		FALSE			45.7	SUM				2.4	SUM									
RC1-055-008			FALSE			612.1	SUM				1.6	SUM									
RC1-055-009	V		FALSE			289.8	SUM				2.1	SUM									
RC1-055-010	H		FALSE			38.6	SUM				3.3	SUM									
RC1-056-001	V		FALSE			433.6	SUM				3.8	SUM									
RC1-056-002	V		FALSE			293.4	SUM				1.8	SUM									
RC1-056-003	H		FALSE			32.6	SUM				2.1	SUM									
RC1-056-004	H		FALSE			92.4	SUM				1.3	SUM									
RC1-056-005			FALSE			2.6	SUM				2.6	SUM									
RC1-056-006			FALSE			3.1	SUM				3.1	SUM									
RC1-056-007	H		FALSE			30.6	SUM				4.8	SUM									
RC1-056-008			FALSE			52.3	SUM				12.1	SUM									
RC1-056-009	H		FALSE			103.6	SUM				15.6	SUM									
RC1-056-010	H		FALSE			24.3	SUM				6.2	SUM									
RC1-056-011			FALSE			8.1	SUM				8.1	SUM									
RC1-056-012			FALSE			3.1	SUM				3.1	SUM									
RC1-058-001	V		FALSE			390.5	SUM				1.8	SUM									
RC1-058-002	V		FALSE			366.2	SUM				3.1	SUM									
RC1-058-003	H		FALSE			183.2	SUM				5.6	SUM									
RC1-058-004	H		FALSE			34.2	SUM				8.5	SUM									
RC1-058-005	H		FALSE			25.6	SUM				10.6	SUM									
RC1-058-006			FALSE			16.4	SUM				7.4	SUM									
RC1-058-007	H		FALSE			19.4	SUM				10.4	SUM									
RC1-058-008	H		FALSE			34.6	SUM				13.3	SUM									
RC1-058-009	H		FALSE			700.1	SUM				604.3	SUM									
RC1-058-010			FALSE			30689.2	SUM				30689.2	SUM									
RC1-058-011			FALSE			14920.5	SUM				14920.5	SUM									
RC1-058-012	H		FALSE			71.4	SUM				15.2	SUM									
RC1-058-013	H		FALSE			60.4	SUM				12.8	SUM									
RC1-058-014	H		FALSE			66.4	SUM				13.7	SUM									
RC1-058-015	H		FALSE			71.4	SUM				15.2	SUM									
RC1-058-016			FALSE			19.4	SUM				19.2	SUM									
RC1-059-001	V		FALSE			561.2	SUM				22.1	SUM									
RC1-059-002			FALSE			36.7	SUM				35.5	SUM									
RC1-059-003			FALSE			27.1	SUM				36.6	SUM									
RC1-059-004	H		FALSE			19.2	SUM				13.7	SUM									
RC1-059-005			FALSE			31.2	SUM				30.5	SUM									
RC1-059-006	V		FALSE			336.1	SUM				22.2	SUM									
RC1-059-007			FALSE			23.2	SUM				23.4	SUM									
RC1-059-008	H		FALSE			103.7	SUM				5.6	SUM									
RC1-059-009	H		FALSE			35.5	SUM				9.6	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-059-010	H		FALSE			684	SUM				7.2	SUM									
RC1-059-011			FALSE			694	SUM				7.2	SUM									
RC1-059-012			FALSE			56.5	SUM				19.9	SUM									
RC1-059-013	H		FALSE			53.8	SUM				12.7	SUM									
RC1-059-014	H		FALSE			116.2	SUM				14.9	SUM									
RC1-059-015			FALSE			16.3	SUM				14.8	SUM									
RC1-059-016			FALSE			26.1	SUM				18.9	SUM									
RC1-060-001	V		FALSE			452.2	SUM				1.8	SUM									
RC1-060-002	V		FALSE			185.1	SUM				7.6	SUM									
RC1-060-003			FALSE			16.8	SUM				16.8	SUM									
RC1-061-001	V		FALSE			420.3	SUM				2.7	SUM									
RC1-061-002	V		FALSE			15.6	SUM				1.4	SUM									
RC1-061-003	V		FALSE			295.6	SUM				3.1	SUM									
RC1-061-004	H		FALSE			59.7	SUM				2.4	SUM									
RC1-061-005	H		FALSE			25.2	SUM				2.4	SUM									
RC1-061-006	H		FALSE			29.3	SUM				1.3	SUM									
RC1-061-007	H		FALSE			89.8	SUM				1.6	SUM									
RC1-061-008	H		FALSE			33.6	SUM				2.6	SUM									
RC1-061-009	H		FALSE			82.6	SUM				6.2	SUM									
RC1-061-010			FALSE			11.5	SUM				11.5	SUM									
RC1-062-001	V		FALSE			393.1	SUM				4.8	SUM									
RC1-062-002			FALSE			9.4	SUM				9.4	SUM									
RC1-062-003	V		FALSE			292.2	SUM				1.8	SUM									
RC1-062-004			FALSE			12.4	SUM				12.4	SUM									
RC1-063-001	V		FALSE			740.1	SUM				10.8	SUM									
RC1-063-002			FALSE			5.9	SUM				5.9	SUM									
RC1-063-003	V		FALSE			336.2	SUM				5.7	SUM									
RC1-063-004	H		FALSE			56.2	SUM				3.6	SUM									
RC1-064-001	V		FALSE			374	1				7.6	SUM									
RC1-064-002	H		FALSE			18.9	1				6.5	SUM									
RC1-064-003	H		FALSE			78.2	1				13.2	SUM									
RC1-064-004	H		FALSE			24.1	1				5.2	SUM									
RC1-064-005	V		FALSE			341	1				6.9	SUM									
RC1-064-006	H		FALSE			42.3	1				4.3	SUM									
RC1-066-001	V		FALSE			354.6	SUM				6.1	SUM									
RC1-066-002	H		FALSE			52.2	SUM				12.4	SUM									
RC1-066-003			FALSE			2.1	SUM				2.1	SUM									
RC1-066-004			FALSE			3.1	SUM				3.1	SUM									
RC1-066-005	V		FALSE			251.7	SUM				13.3	SUM									
RC1-066-006			FALSE			29.4	SUM				14.8	SUM									
RC1-066-007			FALSE			3.7	SUM				3.7	SUM									
RC1-066-008			FALSE			7.3	SUM				7.3	SUM									
RC1-067-001	V		FALSE			487.2	SUM				8.7	SUM									
RC1-067-002			FALSE			75.3	SUM				15.3	SUM									
RC1-067-003			FALSE			42.1	SUM				12.6	SUM									
RC1-067-004	V		FALSE			519.6	SUM				5.5	SUM									
RC1-068-001	H		FALSE			30.2	SUM				15.5	SUM									
RC1-068-002	V		FALSE			624.5	SUM				1.8	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-068-003	H		FALSE			52.8	SUM				7.4	SUM									
RC1-068-004	H		FALSE			80.2	SUM				5.1	SUM									
RC1-068-005	H		FALSE			60.4	SUM				15.6	SUM									
RC1-068-006	H		FALSE			66.7	SUM				12.4	SUM									
RC1-068-007	H		FALSE			33.4	SUM				6.3	SUM									
RC1-068-008	V		FALSE			322.7	SUM				10.3	SUM									
RC1-068-009	H		FALSE			71.8	SUM				2.8	SUM									
RC1-068-010	H		FALSE			56.5	SUM				1.3	SUM									
RC1-068-011	H		FALSE			98.6	SUM				2.8	SUM									
RC1-068-012	H		FALSE			24.7	SUM				8.9	SUM									
RC1-069-001	H		FALSE			130.1	SUM				1.2	SUM									
RC1-069-002	V		FALSE			768.1	SUM				2.3	SUM									
RC1-069-003	H		FALSE			52.1	SUM				3.4	SUM									
RC1-069-004	H		FALSE			66.4	SUM				2.3	SUM									
RC1-069-005	V		FALSE			369.7	SUM				5.2	SUM									
RC1-069-006	H		FALSE			64.1	SUM				1.4	SUM									
RC1-071-001	V		FALSE			465.2	SUM				12.5	SUM									
RC1-071-002	H		FALSE			25.6	SUM				10.2	SUM									
RC1-071-003	V		FALSE			343.9	SUM				1.8	SUM									
RC1-071-004	H		FALSE			129.6	SUM				3.1	SUM									
RC1-071-005	H		FALSE			66.4	SUM				7.2	SUM									
RC1-071-006	H		FALSE			129.6	SUM				3.1	SUM									
RC1-071-007	H		FALSE			162.8	SUM				2.7	SUM									
RC1-073-001	V		FALSE			399.1	SUM				5.9	SUM									
RC1-073-002	V		FALSE			310.6	SUM				12.1	SUM				entered into DB incorrectly as 151, should be 181					
RC1-075-001	V		FALSE			740	1				16.2	SUM									
RC1-075-002	H		FALSE			25.2	1				4.6	SUM									
RC1-075-003			FALSE			18.9	1				15.6	SUM									
RC1-075-004			FALSE			50.7	1				3.7	SUM									
RC1-075-005	V		FALSE			447.6	1				6.2	SUM									
RC1-075-006	H		FALSE			50.7	1				3.7	SUM									
RC1-075-007	H		FALSE			33.4	1				4.2	SUM									
RC1-076-001	H		FALSE			65.6	SUM				11.6	SUM									
RC1-076-002	H		FALSE			73.8	SUM				10.3	SUM									
RC1-076-003	V		FALSE			625	SUM				8.2	SUM									
RC1-076-004	H		FALSE			40.2	SUM				8.2	SUM									
RC1-076-005	V		FALSE			410	SUM				13.6	SUM									
RC1-076-006	H		FALSE			94.6	SUM				4.7	SUM									
RC1-076-007	H		FALSE			58.4	SUM				5.6	SUM									
RC1-076-008	H		FALSE			56.3	SUM				5.6	SUM									
RC1-077-001	V		FALSE			492.9	1				1.2	SUM									
RC1-077-002	V		FALSE			297.4	1				1.3	SUM									
RC1-077-003			FALSE			8.2	1				8.2	SUM									
RC1-077-004			FALSE			5.6	1				5.6	SUM									
RC1-077-005	H		FALSE			115.5	1				3.4	SUM									
RC1-077-006	H		FALSE			88.2	1				1.3	SUM									
RC1-077-007	H		FALSE			67.9	1				4.2	SUM									
RC1-078-001	V		FALSE			502.1	SUM				12.3	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-078-002	V		FALSE			345.2	SUM				9.6	SUM									
RC1-079-001	V		FALSE			551.9	SUM				4.3	SUM									
RC1-079-002	H		FALSE			42.7	SUM				1.9	SUM									
RC1-079-003	V		FALSE			319.8	SUM				2.5	SUM									
RC1-080-001	V		FALSE			474.8	SUM				11.8	SUM									
RC1-080-002			FALSE			14.8	SUM				14.8	SUM									
RC1-080-003	V		FALSE			284.9	SUM				1.3	SUM									
RC1-080-004			FALSE			22.8	SUM				18.9	SUM									
RC1-081-001	V		FALSE			593.4	SUM				18.2	SUM									
RC1-081-002	H		FALSE			58.6	SUM				17.8	SUM									
RC1-081-003			FALSE			18.4	SUM				16.3	SUM									
RC1-081-004	H		FALSE			16.2	SUM				4.2	SUM									
RC1-081-005	V		FALSE			286.9	SUM				6.1	SUM									
RC1-081-006	H		FALSE			34.5	SUM				1.1	SUM									
RC1-082-001	V		FALSE			780.1	SUM				3.4	SUM									
RC1-082-002	H		FALSE			25.3	SUM				2.3	SUM									
RC1-082-003			FALSE			10.9	SUM				10.9	SUM									
RC1-082-004	V		FALSE			379.6	SUM				6.6	SUM									
RC1-082-005			FALSE			5.3	SUM				5.3	SUM									
RC1-085-001	V		FALSE			243.2	SUM				12.2	SUM									
RC1-085-002			FALSE			19.4	SUM				19.4	SUM									
RC1-085-003	V		FALSE			283.1	SUM				4.1	SUM									
RC1-085-004	H		FALSE			18.9	SUM				1.8	SUM									
RC1-086-001	V		FALSE			722.1	SUM				2.3	SUM									
RC1-086-002			FALSE			13.1	SUM				13.1	SUM									
RC1-086-003			FALSE			562.2	SUM				4.3	SUM									
RC1-086-004	H		FALSE			562.2	SUM				4.3	SUM									
RC1-086-005	H		FALSE			276.2	SUM				4.6	SUM									
RC1-086-006	H		FALSE			1232.7	SUM				3.5	SUM									
RC1-086-007	V		FALSE			303.6	SUM				3.7	SUM				recorded as 61 on digsheet, no idea why, should have been 190					
RC1-086-008	H		FALSE			104.7	SUM				2.3	SUM									
RC1-086-009	H		FALSE			82.2	SUM				3.9	SUM									
RC1-088-001	V		FALSE			581.1	SUM				4.1	SUM									
RC1-088-002	H		FALSE			385.1	SUM				13.2	SUM									
RC1-088-004	V		FALSE			410.9	SUM				5.6	SUM									
RC1-089-001	V		FALSE			536.8	SUM				12.3	SUM									
RC1-089-002	H		FALSE			38.9	SUM				4.4	SUM									
RC1-089-003	H		FALSE			36.2	SUM				3.8	SUM									
RC1-089-004	V		FALSE			316.8	SUM				1.9	SUM									
RC1-089-005	H		FALSE			18.9	SUM				10.1	SUM									
RC1-089-006	H		FALSE			22.3	SUM				6.3	SUM									
RC1-089-007			FALSE			16.2	SUM				9.6	SUM									
RC1-090-001	V		FALSE			624.4	SUM				1.9	SUM									
RC1-090-002			FALSE			14.6	SUM				14.6	SUM									
RC1-090-003	V		FALSE			305.7	SUM				3.8	SUM									
RC1-090-004	H		FALSE			23.6	SUM				6.4	SUM									
RC1-090-005	H		FALSE			82.4	SUM				3.7	SUM									
RC1-091-001	V		FALSE			572.6	SUM				9.2	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC1-091-002	V		FALSE			201.3	SUM				5.7	SUM									
RC1-093-001	V		FALSE			392.5	SUM				10.4	SUM									
RC1-093-002	H		FALSE			36.2	SUM				9.8	SUM									
RC1-093-003	V		FALSE			285.2	SUM				2.7	SUM									
RC1-093-004	H		FALSE			32.4	SUM				12.3	SUM									
RC1-095-001	V		FALSE			567.2	SUM				1.6	SUM									
RC1-095-002			FALSE			116.1	SUM				3.8	SUM									
RC1-095-003			FALSE			16.4	SUM				12.2	SUM									
RC1-095-004	V		FALSE			482.3	SUM				2.1	SUM									
RC1-095-005			FALSE			13.2	SUM				13.2	SUM									
RC1-098-001	V		FALSE			372.8	SUM				5.4	SUM									
RC1-098-002	H		FALSE			35.3	SUM				2.3	SUM									
RC1-098-003	V		FALSE			238.8	SUM				4.1	SUM									
RC1-099-001	V		FALSE			443.6	SUM				6.4	SUM									
RC1-099-002			FALSE			44.3	SUM				18.6	SUM									
RC1-099-003			FALSE			46.23	SUM				18.4	SUM									
RC1-099-004			FALSE			32.6	SUM				12.2	SUM									
RC1-099-005	V		FALSE			263.7	SUM				4.5	SUM				Upon DB entry, this item was mistakenly classified as CD, not SEED, corrected					
RC1-099-006			FALSE			36.3	SUM				15.2	SUM									
RC2-000-001	V		FALSE			760	1				5.6	SUM									
RC2-000-002			FALSE			13.2	1				13.2	SUM									
RC2-000-003			FALSE			5.6	1				5.6	SUM									
RC2-000-004			FALSE			131.2	1				5.2	SUM									
RC2-000-005	H		FALSE			801.2	1				13.6	SUM									
RC2-000-006			FALSE			8.1	1				8.1	SUM									
RC2-000-007	H		FALSE			956	1				3.6	SUM									
RC2-000-008			FALSE			7.9	1				7.9	SUM									
RC2-000-009	H		FALSE			220	1				7.2	SUM									
RC2-000-010	V		FALSE			296.4	1				7.2	SUM				recorded on digsheet incorrectly as #145					
RC2-000-011			FALSE			8.2	1				8.2	SUM									
RC2-000-012	H		FALSE			176.3	1				9.2	SUM									
RC2-002-001	V		FALSE			628.4	SUM				7.2	SUM									
RC2-002-002	H		FALSE			132.7	SUM				17.8	SUM									
RC2-002-003	H		FALSE			122.3	SUM				31.6	SUM									
RC2-002-004	H		FALSE			39.2	SUM				11.1	SUM									
RC2-002-005	V		FALSE			274.3	SUM				12.4	SUM									
RC2-002-006			FALSE			122.3	SUM				31.6	SUM									
RC2-002-007	H		FALSE			69.8	SUM				14.1	SUM									
RC2-002-008	H		FALSE			45.8	SUM				11.4	SUM									
RC2-002-009	H		FALSE			63.4	SUM				45.2	SUM									
RC2-002-010	H		FALSE			22.4	SUM				5.2	SUM									
RC2-002-011	H		FALSE			66.2	SUM				1.9	SUM									
RC2-002-012	H		FALSE			148.3	SUM				31.2	SUM									
RC2-002-013	H		FALSE			162.3	SUM				1.4	SUM									
RC2-002-014	H		FALSE			191.1	SUM				16.2	SUM									
RC2-002-015	H		FALSE			28.6	SUM				2.4	SUM									
RC2-002-016	H		FALSE			68.1	SUM				8.9	SUM									
RC2-002-017	H		FALSE			365.4	SUM				1.9	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-002-018	H		FALSE			50.1	SUM				19.4	SUM									
RC2-002-019	H		FALSE			72.5	SUM				7.8	SUM									
RC2-002-020	H		FALSE			80.3	SUM				18.9	SUM									
RC2-002-021	H		FALSE			117.8	SUM				6.2	SUM									
RC2-002-022	H		FALSE			59.6	SUM				17.4	SUM									
RC2-002-023	H, V		FALSE			115.6	SUM				10.1	SUM									
RC2-004-001	V		FALSE			79	1				16	SUM									
RC2-004-002			FALSE			17.3	1				9.2	SUM									
RC2-004-003			FALSE			13.4	1				12.7	SUM									
RC2-004-004			FALSE			19.9	1				15	SUM									
RC2-004-005			FALSE			375.8	1				17.3	SUM									
RC2-004-006	H		FALSE			42.7	1				16.2	SUM									
RC2-005-001	V		FALSE			641.2	SUM				1.4	SUM									
RC2-005-002	H		FALSE			33.2	SUM				10.4	SUM									
RC2-005-003	H		FALSE			61.8	SUM				7.2	SUM									
RC2-005-004	H		FALSE			19.8	SUM				4.2	SUM									
RC2-005-005	H		FALSE			35.6	SUM				11.1	SUM									
RC2-005-006	H		FALSE			41.2	SUM				3.6	SUM									
RC2-005-007	H		FALSE			63.2	SUM				5.4	SUM									
RC2-005-008	H		FALSE			26.2	SUM				11.2	SUM									
RC2-005-009	H		FALSE			38.7	SUM				9.2	SUM									
RC2-005-010	V		FALSE			364.4	SUM				1.4	SUM									
RC2-006-001	H		FALSE			3837.5	CH2				138.1	SUM									
RC2-006-002	H		FALSE			13198.7	CH2				56.1	SUM									
RC2-006-003	H		FALSE			31.8	CH2				42.1	SUM									
RC2-006-004	H		FALSE			122.7	CH2				13.1	SUM									
RC2-006-005	H		FALSE			54.2	CH2				36.1	SUM									
RC2-006-006	H		FALSE			102.3	CH2				26.1	SUM									
RC2-006-007	H		FALSE			7.8	CH2				6.9	SUM									
RC2-006-008	H		FALSE			59.2	CH2				52.5	SUM									
RC2-006-009	H		FALSE			155.3	CH2				21.5	SUM									
RC2-006-010	H		FALSE			408.1	CH2				136.5	SUM									
RC2-006-011	H		FALSE			40.1	CH2				5.9	SUM									
RC2-006-012	H		FALSE			28.8	CH2				112.9	SUM									
RC2-006-013	H		FALSE			57.2	CH2				55.5	SUM									
RC2-006-014	H		FALSE			35.1	CH2				39.9	SUM									
RC2-006-015	H		FALSE			347.3	CH2				55.1	SUM									
RC2-006-016	H		FALSE			24.3	CH2				9.9	SUM									
RC2-006-017	H		FALSE			36.1	CH2				38.5	SUM									
RC2-006-018	H		FALSE			25.1	CH2				24.7	SUM									
RC2-006-019	H		FALSE			42.6	CH2				36.5	SUM									
RC2-006-020	H		FALSE			37.4	SUM				6.7	SUM									
RC2-006-021	H		FALSE			45.9	SUM				2.8	SUM									
RC2-006-022	H		FALSE			38.7	SUM				9.4	SUM									
RC2-006-023	H		FALSE			42.1	SUM				8.7	SUM									
RC2-006-024	H, V		FALSE			163.7	SUM				6.1	SUM									
RC2-006-025	H		FALSE			24.3	SUM				5.5	SUM									
RC2-007-001	V		FALSE			189.9	CH2			7.5/19.5	7.5	CH2	19.5	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-007-002	H		FALSE			24.8	CH2			3.5/10.8	3.5	CH2	10.8	SUM							
RC2-007-003	H		FALSE			34.1	CH2			0.8/1.2	0.8	CH2	1.2	SUM							
RC2-007-004	H		FALSE			23.2	CH2			3.5/9.0	3.5	CH2	9	SUM							
RC2-007-005	H		FALSE			28.1	CH2			2.9/7.8	2.9	CH2	7.8	SUM							
RC2-007-006	H		FALSE			13.1	CH2			1.5/3.3	1.5	CH2	3.3	SUM							
RC2-007-007	H		FALSE			15.6	CH2			9.7/28.7	9.7	CH2	28.7	SUM							
RC2-007-008	H		FALSE			82.7	CH2			3.2/8.7	3.2	CH2	8.7	SUM							
RC2-007-009	H		FALSE			26.9	CH2			6.1/18.7	6.1	CH2	18.7	SUM							
RC2-007-010	H		FALSE			13.5	CH2			0.2/0.8	0.2	CH2	0.8	SUM							
RC2-007-011	H		FALSE			13.1	CH2			2.3/3.0	2.3	CH2	3	SUM							
RC2-007-012	H		FALSE			20.4	CH2			5.4/13.4	5.4	CH2	13.4	SUM							
RC2-007-013	H		FALSE			125.8	CH2			1.1/3.2	1.1	CH2	3.2	SUM							
RC2-007-014	H		FALSE			14.8	CH2			3.5/9.8	3.5	CH2	9.8	SUM							
RC2-007-015	H		FALSE			30.2	CH2			4.5/13.5	4.5	CH2	13.5	SUM							
RC2-007-016			FALSE			30.2	CH2			4.5/13.5	4.5	CH2	13.5	SUM							
RC2-007-017	H		FALSE			37.1	CH2			7.9/18.2	7.9	CH2	18.2	SUM							
RC2-007-018	H		FALSE			15.4	CH2			0.8/1.2	0.8	CH2	1.2	SUM							
RC2-007-019	H		FALSE			18.8	CH2			0.7/2.1	0.7	CH2	2.1	SUM							
RC2-007-020	H		FALSE			17.8	CH2			3.3/9.5	3.3	CH2	9.5	SUM							
RC2-007-021	H		FALSE			16.6	CH2			7.5/18.2	7.5	CH2	18.2	SUM							
RC2-008-001	V		FALSE			226.5	CH2			8.5/26.2	8.5	CH2	26.2	SUM							
RC2-008-002	H		FALSE			9.3	CH2			2.2/7.8	2.2	CH2	7.8	SUM							
RC2-008-003	V		FALSE			110.8	CH2			3.5/11.4	3.5	CH2	11.4	SUM							
RC2-008-004	H		FALSE			81.7	CH2			1.3/2.8	1.3	CH2	2.8	SUM							
RC2-008-005	H		FALSE			18.8	CH2			5.2/17.9	5.2	CH2	17.9	SUM							
RC2-008-006	H		FALSE			11.1	CH2			3.3/11.7	3.3	CH2	11.7	SUM							
RC2-008-007	H		FALSE			21.7	CH2			2.6/8.4	2.6	CH2	8.4	SUM							
RC2-008-008	H		FALSE			22.5	CH2			5.7/18.8	5.7	CH2	18.8	SUM							
RC2-008-009	H		FALSE			32.7	CH2			3.1/9.7	3.1	CH2	9.7	SUM							
RC2-008-010	H		FALSE			28.8	CH2			5.1/16.5	5.1	CH2	16.5	SUM							
RC2-008-011	H		FALSE			19.1	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
RC2-008-012	H		FALSE			21.2	CH2			12.4/37.1	12.4	CH2	37.1	SUM							
RC2-008-013	H		FALSE			19.9	CH2			17.1/52.4	17.1	CH2	52.4	SUM							
RC2-009-001	H		FALSE			10.4	CH2			3.9/11.7	3.9	CH2	11.7	SUM							
RC2-009-002	H		FALSE			19.1	CH2			6.2/16.7	6.2	CH2	16.7	SUM							
RC2-009-003	H		FALSE			16.1	CH2			0.8/1.2	0.8	CH2	1.2	SUM							
RC2-009-004	H		FALSE			11.9	CH2			11.5/35.2	11.5	CH2	35.2	SUM							
RC2-009-005	H		FALSE			41.2	CH2			12.2/32.4	12.2	CH2	32.4	SUM							
RC2-009-006	H		FALSE			27.4	CH2			2.0/5.2	2	CH2	5.2	SUM							
RC2-009-007	H		FALSE			22.8	CH2			4.4/12.2	4.4	CH2	12.2	SUM							
RC2-009-008	H		FALSE			51.5	CH2			27.5/81.3	27.5	CH2	81.3	SUM							
RC2-009-009	H		FALSE			47.1	CH2			7.1/19.2	7.1	CH2	19.2	SUM							
RC2-009-010	H		FALSE			130.1	CH2			1.8/4.9	1.8	CH2	4.9	SUM							
RC2-009-011	H		FALSE			18.6	CH2			6.1/15.9	6.1	CH2	15.9	SUM							
RC2-009-012	H		FALSE			24.8	CH2			0.2/0.9	0.2	CH2	0.9	SUM							
RC2-009-013	H		FALSE			12.4	CH2			6.2/18.1	6.2	CH2	18.1	SUM							
RC2-010-001	H		FALSE			251.2	CH2			88.0/269.0	88	CH2	269	SUM							
RC2-010-002	H		FALSE			221.4	CH2			22.1/65.9	22.1	CH2	65.9	SUM							

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-010-003	H		FALSE			115.8	CH2			22.3/77.1	22.3	CH2	77.1	SUM							
RC2-010-004	H		FALSE			253.4	CH2			13.1/40.1	13.1	CH2	40.1	SUM							
RC2-010-005	H		FALSE			140.2	CH2			102.0/312.0	102	CH2	312	SUM							
RC2-010-006	H		FALSE			152.4	CH2			22.2/62.8	22.2	CH2	62.8	SUM							
RC2-010-007	H		FALSE			125.4	CH2			40.8/120.0	40.8	CH2	120	SUM							
RC2-010-008	H		FALSE			632.4	CH2			61.2/135.4	61.2	CH2	135.4	SUM							
RC2-010-009	H		FALSE			596.8	CH2			14.5/39.1	14.5	CH2	39.1	SUM							
RC2-010-010	H		FALSE			42.3	CH2			16.8/36.4	16.8	CH2	36.4	SUM							
RC2-010-011	H		FALSE			182.3	CH2			13.2/39.4	13.2	CH2	39.4	SUM							
RC2-010-012	H		FALSE			86.1	CH2			5.6/15.0	5.6	CH2	15	SUM							
RC2-010-013	H		FALSE			51.3	CH2			37.1/114.2	37.1	CH2	114.2	SUM							
RC2-010-014	H		FALSE			121.5	CH2			7.5/25.1	7.5	CH2	25.1	SUM							
RC2-010-015	H		FALSE			32.6	CH2			11.5/32.6	11.5	CH2	32.6	SUM							
RC2-010-016	H		FALSE			59.9	CH2			14.1/41.5	14.1	CH2	41.5	SUM							
RC2-010-017	H		FALSE			152.4	CH2			126.5/374.8	126.5	CH2	374.8	SUM							
RC2-010-018	H		FALSE			92.4	CH2			18.4/32.7	18.4	CH2	32.7	SUM							
RC2-010-019	H		FALSE			52.7	CH2			47.1/141.9	47.1	CH2	141.9	SUM							
RC2-010-020	H		FALSE			71.6	CH2			18.1/53.3	18.1	CH2	53.3	SUM							
RC2-010-021	H		FALSE			110.8	CH2			16.0/50.7	16	CH2	50.7	SUM							
RC2-010-022	H		FALSE			300.1	CH2			19.4/61.4	19.4	CH2	61.4	SUM							
RC2-010-026	H		FALSE			110.1	CH2			11.5/32.9	11.5	CH2	32.9	SUM							
RC2-010-027	V		FALSE			135.4	CH2			9.7/25.1	9.7	CH2	25.1	SUM							
RC2-010-028	V		FALSE			35.9	CH2			27.9/83.6	27.9	CH2	83.6	SUM							
RC2-011-001	V		FALSE			100.2	CH2			0.20000000000	0.2	SUM									
RC2-011-002	H		FALSE			44.1	CH2			4.20000000000	4.2	SUM									
RC2-011-003	H		FALSE			6.8	CH2			1.2	1.2	SUM									
RC2-011-006	H		FALSE			32.4	CH2			2.29999999999	2.3	SUM									
RC2-011-007	H		FALSE			26.9	CH2			3.39999999999	3.4	SUM									
RC2-011-008	H		FALSE			17.9	CH2			8.30000000000	8.3	SUM									
RC2-011-009			FALSE			5	CH2			10.1	10.1	SUM									
RC2-011-010	V		FALSE			113.8	CH2			12.6	12.6	SUM									
RC2-011-011	H		FALSE			18.1	CH2			10.9	10.9	SUM									
RC2-011-012	H		FALSE			19.5	CH2			10.7000000000	10.7	SUM									
RC2-011-013	H		FALSE			12.2	CH2			13.2000000000	13.2	SUM									
RC2-011-015	H		FALSE			24.2	CH2			5.70000000000	5.7	SUM									
RC2-011-016	H, I		FALSE			68.5	CH2			6.40000000000	6.4	SUM									
RC2-011-017	H		FALSE			6.9	CH2			2.29999999999	2.3	SUM									
RC2-011-019	H		FALSE			31.5	CH2			10.1999999999	10.2	SUM									
RC2-011-020			FALSE			80.1	CH2			7.10000000000	7.1	SUM									
RC2-012-001	V		FALSE			244.1	CH2			5.60000000000	5.6	SUM									
RC2-012-002	H		FALSE			13.8	CH2			14.2000000000	14.2	SUM									
RC2-012-003	H		FALSE			13.1	CH2			2.89999999999	2.9	SUM									
RC2-012-004	H		FALSE			28.9	CH2			17.6000000000	17.6	SUM									
RC2-012-005	H, V		FALSE			19.2	CH2			8.09999999999	8.1	SUM									
RC2-012-006	H		FALSE			17.9	CH2			14.6	14.6	SUM									
RC2-012-007	H		FALSE			15.1	CH2			17.8999999999	17.9	SUM									
RC2-012-008	H		FALSE			12.2	CH2			16.1000000000	16.1	SUM									
RC2-012-011	H, V		FALSE			90.1	CH2			4.20000000000	4.2	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-012-012	H		FALSE			18.7	CH2			15.9	15.9	SUM									
RC2-012-014	H		FALSE			8.1	CH2			16.1999999999	16.2	SUM									
RC2-012-016	H		FALSE			11.1	CH2			9.80000000000	9.8	SUM									
RC2-012-017	H		FALSE			8.1	CH2			10.6	10.6	SUM									
RC2-012-018	H		FALSE			12.2	CH2			9.5	9.5	SUM									
RC2-012-019	H		FALSE			11.2	CH2			3.60000000000	3.6	SUM									
RC2-012-020	H		FALSE			47.1	CH2			9.09999999999	9.1	SUM									
RC2-012-021	H, V		FALSE			13.2	CH2			9.69999999999	9.7	SUM									
RC2-013-001	H		FALSE			105.1	CH2			5.5	5.5	SUM									
RC2-013-002	H		FALSE			9.1	CH2			10.1	10.1	SUM									
RC2-013-003	H		FALSE			19.3	CH2			7.90000000000	7.9	SUM									
RC2-013-004	V		FALSE			105.5	CH2			6.5	6.5	SUM				seed likely mislabeled prior to burial as #3 (old grid ID), should have been 116					
RC2-013-005	H		FALSE			18.6	CH2			4.5	4.5	SUM									
RC2-013-006	H		FALSE			8.8	CH2			12.2000000000	12.2	SUM									
RC2-013-007	H		FALSE			9.1	CH2			5.5	5.5	SUM									
RC2-013-008	H		FALSE			9.1	CH2			25.4000000000	25.4	SUM									
RC2-013-009	H		FALSE			7	CH2			5	5	SUM									
RC2-013-010	H		FALSE			8	CH2			3.39999999999	3.4	SUM									
RC2-013-011	H		FALSE			12.6	CH2			8.90000000000	8.9	SUM									
RC2-013-012	H		FALSE			14.7	CH2			14	14	SUM									
RC2-013-013	H		FALSE			8.9	CH2			3.20000000000	3.2	SUM									
RC2-013-014	H		FALSE			8.5	CH2			12.1	12.1	SUM									
RC2-013-015	H		FALSE			37.3	CH2			5.60000000000	5.6	SUM									
RC2-013-016	H		FALSE			10.1	CH2			2	2	SUM									
RC2-013-017	H		FALSE			22.5	CH2			5.5	5.5	SUM									
RC2-013-018	H		FALSE			16.1	CH2			6.79999999999	6.8	SUM									
RC2-013-019	H		FALSE			27.5	CH2			6.70000000000	6.7	SUM									
RC2-013-020	H		FALSE			8.6	CH2			4.5	4.5	SUM									
RC2-013-021	H		FALSE			6.9	CH2			3.20000000000	3.2	SUM									
RC2-013-022	H		FALSE			9.9	CH2			2.29999999999	2.3	SUM									
RC2-013-023	H		FALSE			18.5	CH2			3.80000000000	3.8	SUM									
RC2-016-001	H		FALSE			225.8	CH2				2.8	SUM									
RC2-016-002	H		FALSE			9.1	CH2				1.3	SUM									
RC2-016-003	H		FALSE			24.1	CH2				2.4	SUM									
RC2-016-004	H		FALSE			15.5	CH2				2.3	SUM									
RC2-016-005	V		FALSE			112.1	CH2				3.5	SUM									
RC2-016-006	H		FALSE			12.1	CH2				5.9	SUM									
RC2-016-007	H		FALSE			13.1	CH2				7.1	SUM									
RC2-016-008	H		FALSE			15.9	CH2				10.3	SUM									
RC2-016-009	H		FALSE			8.1	CH2				3.9	SUM									
RC2-016-010	H		FALSE			19.5	CH2				6.5	SUM									
RC2-016-011	H		FALSE			21.9	CH2				4.5	SUM									
RC2-016-012	H		FALSE			10.6	CH2				9.6	SUM									
RC2-018-001			FALSE			176	CH2				2.2	SUM									
RC2-018-002	H		FALSE			15	CH2				3.1	SUM									
RC2-018-003	V		FALSE			113	CH2				4.2	SUM									
RC2-018-004	H		FALSE			12.1	CH2				5.6	SUM									
RC2-018-005	H		FALSE			13.1	CH2				1.3	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-018-006	H		FALSE			13.9	CH2				5.5	SUM									
RC2-018-007	H		FALSE			17.5	CH2				6.3	SUM									
RC2-018-008	H		FALSE			21.6	CH2				55.6	SUM									
RC2-018-009	H		FALSE			45.1	CH2				62.2	SUM									
RC2-018-010	H		FALSE			17.1	CH2				5.5	SUM									
RC2-018-011	H		FALSE			10	CH2				5.8	SUM									
RC2-018-012	H		FALSE			12.1	CH2				3.2	SUM									
RC2-018-013	H		FALSE			15.7	CH2				10.2	SUM									
RC2-018-014	H		FALSE			10	CH2				13.3	SUM									
RC2-018-015	H		FALSE			9.9	CH2				3.2	SUM									
RC2-018-016	H		FALSE			16.8	CH2				1.9	SUM									
RC2-018-017	H		FALSE			15.2	CH2				7.3	SUM									
RC2-018-018	H		FALSE			12.8	CH2				1.9	SUM									
RC2-019-001	V		FALSE			395.3	SUM				4.2	SUM									
RC2-019-002	H, V		FALSE			305.3	SUM				5.8	SUM									
RC2-019-003	H		FALSE			72.2	SUM				14.5	SUM									
RC2-019-004	H		FALSE			72.2	SUM				14.5	SUM									
RC2-019-005	H		FALSE			54.3	SUM				15.7	SUM									
RC2-019-006	H		FALSE			212.6	SUM				18.9	SUM									
RC2-019-007	H		FALSE			82.2	SUM				14.2	SUM									
RC2-019-008	H		FALSE			26.7	SUM				13.5	SUM									
RC2-019-009	H		FALSE			25.2	SUM				2.9	SUM									
RC2-019-010	H		FALSE			24.6	SUM				9.3	SUM									
RC2-019-011	H		FALSE			96.7	SUM				5.9	SUM									
RC2-019-012	H		FALSE			90.2	SUM					SUM									
RC2-019-013	H		FALSE			46.2	SUM				3.8	SUM									
RC2-019-014	H		FALSE			58.9	SUM				2.9	SUM									
RC2-019-015	H		FALSE			61.2	SUM				5.2	SUM									
RC2-019-016	H		FALSE			112.3	SUM				1.9	SUM									
RC2-019-017	H		FALSE			80.4	SUM				1.1	SUM									
RC2-019-018	H		FALSE			89.2	SUM				2.1	SUM									
RC2-019-019	H		FALSE			75.4	SUM				1.4	SUM									
RC2-019-020	H		FALSE			45.3	SUM				1.6	SUM									
RC2-019-021	H		FALSE			52.3	SUM				4.2	SUM									
RC2-019-022	H		FALSE			55.6	SUM				2.1	SUM									
RC2-019-023	H		FALSE			58.7	SUM				10.1	SUM									
RC2-021-001	V		FALSE			200.7	CH2			2.29999999999	2.3	SUM									
RC2-021-002	V		FALSE			95.2	CH2			15.2000000000	15.2	SUM									
RC2-021-003	H		FALSE			19.6	CH2			3.39999999999	3.4	SUM									
RC2-021-004	H		FALSE			11.8	CH2			3.20000000000	3.2	SUM									
RC2-021-005	H		FALSE			37.9	CH2			10.1	10.1	SUM									
RC2-021-006	H		FALSE			20.3	CH2			3.20000000000	3.2	SUM									
RC2-021-007	H		FALSE			24.8	CH2			5.20000000000	5.2	SUM									
RC2-021-008	H		FALSE			15.3	CH2			4.20000000000	4.2	SUM									
RC2-021-009	H		FALSE			16.1	CH2			19.5	19.5	SUM									
RC2-021-010	H		FALSE			48.7	CH2			3.20000000000	3.2	SUM									
RC2-021-011	H		FALSE			17.1	CH2			11.2000000000	11.2	SUM									
RC2-021-012	H		FALSE			15.6	CH2			19.6000000000	19.6	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-021-013	H		FALSE			25.6	CH2			19.3999999999	19.4	SUM									
RC2-021-014	H		FALSE			8.7	CH2			6.40000000000	6.4	SUM									
RC2-021-015	H		FALSE			11.2	CH2			15.8000000000	15.8	SUM									
RC2-021-016	H		FALSE			14.8	CH2			13.2000000000	13.2	SUM									
RC2-021-017	H		FALSE			13.2	CH2			7.60000000000	7.6	SUM									
RC2-021-018	H		FALSE			6.1	CH2			9.09999999999	9.1	SUM									
RC2-024-001	V		FALSE			0.5	CH2			0.5/1.1	0.5	CH2	1.1	SUM							
RC2-024-002	H		FALSE			10.1	CH2			1.5/2.4	1.5	CH2	2.4	SUM							
RC2-024-003	H		FALSE			12.2	CH2			1.1/2.1	1.1	CH2	2.1	SUM							
RC2-024-004	H		FALSE			27.1	CH2			3.2/7.8	3.2	CH2	7.8	SUM							
RC2-024-005	H		FALSE			29.4	CH2			0.5/1.2	0.5	CH2	1.2	SUM							
RC2-024-006	H		FALSE			22.2	CH2			0.9/1.7	0.9	CH2	1.7	SUM							
RC2-024-007	H		FALSE			156.5	CH2			8.5/24.4	8.5	CH2	24.4	SUM							
RC2-024-008	H		FALSE			11.1	CH2			1.1/2.4	1.1	CH2	2.4	SUM							
RC2-024-009	H		FALSE			15.6	CH2			4.2/11.1	4.2	CH2	11.1	SUM							
RC2-024-010	H		FALSE			19.2	CH2			1.7/3.8	1.7	CH2	3.8	SUM							
RC2-024-011	H		FALSE			7.9	CH2			2.2/4.8	2.2	CH2	4.8	SUM							
RC2-024-012	V		FALSE			14.1	CH2			2.1/3.9	2.1	CH2	3.9	SUM							
RC2-024-013	V		FALSE			24.1	CH2			1.4/2.3	1.4	CH2	2.3	SUM							
RC2-025-001	V		FALSE			164.1	CH2			0.5/10.2	0.5	CH2	10.2	SUM							
RC2-025-002	H		FALSE			14.4	CH2			2.2/12.6	2.2	CH2	12.6	SUM							
RC2-025-003	H		FALSE			13.9	CH2			4.3/11.5	4.3	CH2	11.5	SUM							
RC2-025-004	H		FALSE			16.1	CH2			4.1/11.7	4.1	CH2	11.7	SUM							
RC2-025-005	H		FALSE			22.5	CH2			3.5/4.7	3.5	CH2	4.7	SUM							
RC2-025-006	H		FALSE			20.6	CH2			3.6/5.7	3.6	CH2	5.7	SUM							
RC2-025-007	H		FALSE			11.1	CH2			0.9/2.3	0.9	CH2	2.3	SUM							
RC2-025-008	H		FALSE			21.5	CH2			1.7/5.3	1.7	CH2	5.3	SUM							
RC2-025-009	H		FALSE			23.3	CH2			0.9/2.1	0.9	CH2	2.1	SUM							
RC2-025-010	H		FALSE			21.3	CH2			1.6/5.9	1.6	CH2	5.9	SUM							
RC2-025-011	H		FALSE			21.3	CH2			1.6/7.4	1.6	CH2	7.4	SUM							
RC2-025-012	H		FALSE			24.2	CH2			1.7/3.7	1.7	CH2	3.7	SUM							
RC2-025-013	H		FALSE			13.8	CH2			3.5/7.6	3.5	CH2	7.6	SUM							
RC2-025-014	H		FALSE			24.7	CH2			4.1/12.5	4.1	CH2	12.5	SUM							
RC2-025-015	H		FALSE			21.2	CH2			11.3/35.2	11.3	CH2	35.2	SUM							
RC2-025-016	V		FALSE			114.7	CH2			2.5/17.3	2.5	CH2	17.3	SUM							
RC2-027-001	V		FALSE			156.3	SUM				14.9	SUM									
RC2-027-002	H		FALSE			14.6	SUM				11.6	SUM									
RC2-027-004	H		FALSE			24.3	SUM				6.2	SUM									
RC2-027-005	V		FALSE			112.2	SUM				4.7	SUM									
RC2-027-007	H		FALSE			35.6	SUM				4.3	SUM									
RC2-027-008	H		FALSE			10.2	SUM				2.6	SUM									
RC2-027-009	H		FALSE			38.4	SUM				4.2	SUM									
RC2-027-012	H		FALSE			21.2	SUM				3	SUM									
RC2-027-014	H		FALSE			41.2	SUM				5.2	SUM									
RC2-027-015	H		FALSE			16.5	SUM				3	SUM									
RC2-027-017	H		FALSE			13.3	SUM				10.2	SUM									
RC2-027-018	H		FALSE			13.4	SUM				10.1	SUM									
RC2-027-019	H		FALSE			11.1	SUM				6.7	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-027-020	H		FALSE			9.1	SUM				7.4	SUM									
RC2-027-021	H		FALSE			24.7	SUM				2.2	SUM									
RC2-027-023	H		FALSE			8.9	SUM				5.6	SUM									
RC2-027-024	H		FALSE			72.2	SUM				5.8	SUM									
RC2-027-025	H		FALSE			11.1	SUM				10.2	SUM									
RC2-027-026	H		FALSE			24.2	SUM				2.3	SUM									
RC2-027-027	H		FALSE			21.2	SUM				2.8	SUM									
RC2-027-028	H		FALSE			11.2	SUM				2.6	SUM									
RC2-027-029	H		FALSE			8.6	SUM				1.4	SUM									
RC2-027-030	H		FALSE			21.2	SUM				10.9	SUM									
RC2-027-031	H		FALSE			31.2	SUM				7.2	SUM									
RC2-027-032	H		FALSE			10.5	SUM				3.1	SUM									
RC2-027-033	H		FALSE			41.6	SUM				1.4	SUM									
RC2-027-034	H		FALSE			10.1	SUM				3.2	SUM									
RC2-027-036	H		FALSE			10.2	SUM				2.9	SUM									
RC2-027-037	H		FALSE			14.5	SUM				5.8	SUM									
RC2-027-038	H		FALSE			51.2	SUM				18.9	SUM									
RC2-029-001	V		FALSE			623.5	SUM				14.2	SUM									
RC2-029-002			FALSE			20.2	SUM				16.1	SUM									
RC2-029-003			FALSE			17.9	SUM				17.9	SUM									
RC2-029-004			FALSE			28.6	SUM				18.2	SUM									
RC2-029-005			FALSE			36.1	SUM				16.2	SUM									
RC2-029-006			FALSE			33.3	SUM				15.5	SUM									
RC2-029-007			FALSE			23.9	SUM				14.2	SUM									
RC2-029-008			FALSE			28.6	SUM				19.2	SUM									
RC2-029-009			FALSE			24.9	SUM				15.6	SUM									
RC2-029-010			FALSE			14.7	SUM				12.2	SUM									
RC2-029-011			FALSE			23.3	SUM				10.2	SUM									
RC2-029-012	V		FALSE			356.2	SUM				12.7	SUM									
RC2-029-013			FALSE			4.2	SUM				4.2	SUM									
RC2-030-001	H		FALSE			166.6	CH2				12.9	SUM									
RC2-030-003	H		FALSE			54.2	CH2				1.2	SUM									
RC2-030-004	H		FALSE			15.1	CH2				10.1	SUM									
RC2-030-005	H		FALSE			11.1	CH2				7.6	SUM									
RC2-030-006	H		FALSE			10.7	CH2				6.1	SUM									
RC2-030-011	H		FALSE			10.9	CH2				5.9	SUM									
RC2-030-013	H		FALSE			12.2	CH2				8.2	SUM									
RC2-030-015	H		FALSE			22.6	CH2				6.4	SUM									
RC2-030-016	H		FALSE			24.2	CH2				8.1	SUM									
RC2-030-017	H		FALSE			11.2	CH2				3.1	SUM									
RC2-030-018	H		FALSE			31.5	CH2				5.2	SUM									
RC2-030-019	H		FALSE			15.6	CH2				2.2	SUM									
RC2-030-020	H		FALSE			8.4	CH2				3.4	SUM									
RC2-030-021	H		FALSE			13.8	CH2				8.1	SUM									
RC2-030-022	H		FALSE			13.1	CH2				11.7	SUM									
RC2-030-023	H		FALSE			31.1	CH2				8.9	SUM									
RC2-030-024	H		FALSE			28.1	CH2				6.4	SUM									
RC2-030-025	H		FALSE			14.1	CH2				5.3	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-030-026	H		FALSE			17.2	CH2				3.4	SUM									
RC2-030-027			FALSE			3.5	CH2				14.5	SUM									
RC2-030-028	H		FALSE			16.7	CH2				12.1	SUM									
RC2-030-029	H		FALSE			77.7	CH2				3.1	SUM									
RC2-030-030	H		FALSE			17.2	CH2				3.2	SUM									
RC2-030-031	H		FALSE			18.1	CH2				3.4	SUM									
RC2-030-032	H		FALSE			66.4	CH2				2.4	SUM									
RC2-030-033	H		FALSE			6.6	CH2				7.9	SUM									
RC2-030-034	H		FALSE			82.3	CH2				3.2	SUM									
RC2-030-037	H		FALSE			37.4	CH2				12.2	SUM									
RC2-030-038	H		FALSE			14	CH2				15.5	SUM									
RC2-030-039	H		FALSE			13.9	CH2				3.4	SUM									
RC2-031-001	V		FALSE			498.2	SUM				2.4	SUM									
RC2-031-003	H		FALSE			93.1	SUM				55.2	SUM									
RC2-031-004	H		FALSE			81.6	SUM				9.7	SUM									
RC2-031-006	H		FALSE			211.5	SUM				16.4	SUM									
RC2-031-007	H		FALSE			42.8	SUM				10.2	SUM									
RC2-031-009	H		FALSE			67.4	SUM				12.2	SUM									
RC2-031-010	H		FALSE			23.4	SUM				16.3	SUM									
RC2-031-011	H		FALSE			49.5	SUM				16.5	SUM									
RC2-031-012	H		FALSE			39.4	SUM				15.4	SUM									
RC2-031-013	H		FALSE			51.2	SUM				9.4	SUM									
RC2-031-014	H		FALSE			82.4	SUM				9.4	SUM									
RC2-031-015	V		FALSE			620.3	SUM				9.2	SUM									
RC2-031-016	H		FALSE			76.4	SUM				10.2	SUM									
RC2-031-017	H		FALSE			139.4	SUM				23.6	SUM									
RC2-031-018	H		FALSE			87.2	SUM				7.2	SUM									
RC2-031-019			FALSE			87.2	SUM				7.2	SUM									
RC2-031-020	H		FALSE			190.8	SUM				4.5	SUM									
RC2-031-021	H		FALSE			103.4	SUM				12.2	SUM									
RC2-031-022			FALSE			103.4	SUM				12.2	SUM									
RC2-031-023	H		FALSE			46.1	SUM				9.21	SUM									
RC2-031-024	H		FALSE			112.2	SUM				20.4	SUM									
RC2-031-025	H		FALSE			49.1	SUM				7.7	SUM									
RC2-031-026	H		FALSE			60.8	SUM				10.6	SUM									
RC2-031-027	H		FALSE			46.5	SUM				9.2	SUM									
RC2-031-028	H		FALSE			109	SUM				40.4	SUM									
RC2-031-029	H		FALSE			124.6	SUM				31.6	SUM									
RC2-031-030	H		FALSE			111.8	SUM				24.6	SUM									
RC2-031-031	H		FALSE			45.6	SUM				4.3	SUM									
RC2-031-033	H		FALSE			57.3	SUM				20.9	SUM									
RC2-031-034	H		FALSE			58.4	SUM				7.4	SUM									
RC2-031-035	H		FALSE			69.7	SUM				19.2	SUM									
RC2-031-036	H		FALSE			135.2	SUM				10.9	SUM									
RC2-031-037	H		FALSE			68.2	SUM				43.2	SUM									
RC2-031-038	H		FALSE			96.7	SUM				20.2	SUM									
RC2-031-039	H		FALSE			273.4	SUM				54.1	SUM									
RC2-031-040	H		FALSE			153.4	SUM				8.7	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-031-041	H		FALSE			29.5	SUM				51.2	SUM									
RC2-031-042	H		FALSE			58.7	SUM				4.6	SUM									
RC2-031-044	H		FALSE			5896.6	SUM				40.2	SUM									
RC2-031-046	H		FALSE			106.4	SUM				37.2	SUM									
RC2-031-047	H		FALSE			41.5	SUM				5.4	SUM									
RC2-032-001	V		FALSE			252.2	CH2				10.2	SUM									
RC2-032-002	H		FALSE			9.1	CH2				10.6	SUM									
RC2-032-003	H		FALSE			11.6	CH2				11.7	SUM									
RC2-032-004	H		FALSE			10.7	CH2				3.6	SUM									
RC2-032-005	H		FALSE			9.1	CH2				6.7	SUM									
RC2-032-006	H		FALSE			10.1	CH2				2.1	SUM									
RC2-032-007	H		FALSE			70.4	CH2				12.1	SUM									
RC2-032-008	H		FALSE			33.4	CH2				13.2	SUM									
RC2-032-009	V		FALSE			101.3	CH2				1.3	SUM									
RC2-032-010	H		FALSE			9.1	CH2				3.1	SUM									
RC2-032-011	H		FALSE			5.8	CH2				11.2	SUM									
RC2-032-012			FALSE			9.1	CH2				6.4	SUM									
RC2-032-013			FALSE			3.6	CH2				12.7	SUM									
RC2-032-014	H		FALSE			7.2	CH2				7.9	SUM									
RC2-032-015	H, V		FALSE			35.1	CH2				60.4	SUM									
RC2-032-016	H		FALSE			13.1	CH2				12.4	SUM									
RC2-032-017	H		FALSE			10.7	CH2				3.6	SUM									
RC2-032-018	H		FALSE			45.4	CH2				13.1	SUM									
RC2-032-019	H		FALSE			19.7	CH2				13.4	SUM									
RC2-032-020			FALSE			45.4	CH2				13.1	SUM									
RC2-032-021	H		FALSE			47.1	CH2				7.3	SUM									
RC2-032-022	H		FALSE			3.7	CH2				14.4	SUM									
RC2-032-023	H		FALSE			8.1	CH2				17.6	SUM									
RC2-032-024	H		FALSE			20.7	CH2				10.4	SUM									
RC2-033-001	V		FALSE			427.3	SUM				4.6	SUM									
RC2-033-002	H		FALSE			28.1	SUM				3.4	SUM									
RC2-033-003	H		FALSE			51.3	SUM				1.6	SUM									
RC2-033-004	H		FALSE			59.2	SUM				1.8	SUM									
RC2-033-005	H		FALSE			58.1	SUM				2.6	SUM									
RC2-033-006	H		FALSE			39.3	SUM				3.6	SUM									
RC2-033-007	H		FALSE			34.3	SUM				4.9	SUM									
RC2-033-008	H		FALSE			77.3	SUM				3.7	SUM									
RC2-033-009	H		FALSE			53.2	SUM				1.9	SUM									
RC2-033-010	V		FALSE			362.1	SUM				1.8	SUM									
RC2-033-011	H		FALSE			42.4	SUM				2.8	SUM									
RC2-033-012	H		FALSE			42.6	SUM				2.4	SUM									
RC2-033-013	H		FALSE			34.8	SUM				1.3	SUM									
RC2-033-014	H		FALSE			45.7	SUM				19.4	SUM									
RC2-033-015	H		FALSE			40.2	SUM				3.7	SUM									
RC2-033-016	H		FALSE			28.7	SUM				4.1	SUM									
RC2-033-017	H		FALSE			94.3	SUM				2.6	SUM									
RC2-033-018	H		FALSE			48.3	SUM				4.1	SUM									
RC2-033-019	H		FALSE			32.4	SUM				2.1	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-033-020	H		FALSE			22.9	SUM				5.4	SUM									
RC2-033-021	H		FALSE			36.8	SUM				5.3	SUM									
RC2-033-022	H		FALSE			32.3	SUM				1.6	SUM									
RC2-033-023	H		FALSE			30.9	SUM				12.2	SUM									
RC2-033-024	H		FALSE			60.3	SUM				2.7	SUM									
RC2-033-025	H		FALSE			35.6	SUM				1.3	SUM									
RC2-033-026	H		FALSE			22.3	SUM				4.7	SUM									
RC2-033-027	H		FALSE			61.2	SUM				2.9	SUM									
RC2-033-028	H		FALSE			48.7	SUM				3.7	SUM									
RC2-033-029	H		FALSE			34.7	SUM				3.9	SUM									
RC2-033-030	H		FALSE			115.6	SUM				2.7	SUM									
RC2-033-031	H		FALSE			53.8	SUM				3.6	SUM									
RC2-034-001	V		FALSE			463.2	1				7.1	SUM									
RC2-034-007	V		FALSE			310.8	1				7.4	SUM									
RC2-034-009	H		FALSE			21.3	1				4.7	SUM									
RC2-034-010	H		FALSE			18.7	1				5.3	SUM									
RC2-034-013	H		FALSE			28.4	1				2.1	SUM									
RC2-035-001	V		FALSE			145.1	CH2			1.2/1.7	1.2	CH2	1.7	SUM							
RC2-035-002	H		FALSE			18.1	CH2			3.2/6.4	3.2	CH2	6.4	SUM							
RC2-035-003	H		FALSE			22.1	CH2			4.8/9.6	4.8	CH2	9.6	SUM							
RC2-035-004	H		FALSE			32.1	CH2			1.9/5.6	1.9	CH2	5.6	SUM							
RC2-035-005	H		FALSE			26.2	CH2			4.2/7.4	4.2	CH2	7.4	SUM							
RC2-035-006	H		FALSE			29.1	CH2			2.7/4.3	2.7	CH2	4.3	SUM							
RC2-035-007	H		FALSE			71.6	CH2			1.6/6.5	1.6	CH2	6.5	SUM							
RC2-035-008	H		FALSE			64.2	CH2			4.6/15.1	4.6	CH2	15.1	SUM							
RC2-035-009	H		FALSE			14.4	CH2			3.6/7.8	3.6	CH2	7.8	SUM							
RC2-035-010	H		FALSE			76.2	CH2			1.3/4.7	1.3	CH2	4.7	SUM							
RC2-035-011	V		FALSE			111.6	CH2			0.5/1.4	0.5	CH2	1.4	SUM							
RC2-035-012	H		FALSE			12.7	CH2			1.6/4.2	1.6	CH2	4.2	SUM							
RC2-035-013	H		FALSE			15.2	CH2			1.5/4.3	1.5	CH2	4.3	SUM							
RC2-035-014	H		FALSE			23.9	CH2			4.7/15.9	4.7	CH2	15.9	SUM							
RC2-035-015	H		FALSE			17.6	CH2			3.4/11.6	3.4	CH2	11.6	SUM							
RC2-035-016	H		FALSE			10.6	CH2			2.4/7.2	2.4	CH2	7.2	SUM							
RC2-035-017	H		FALSE			31.9	CH2			1.2/3.8	1.2	CH2	3.8	SUM							
RC2-035-018	H		FALSE			16.7	CH2			1.2/2.1	1.2	CH2	2.1	SUM							
RC2-035-019	H		FALSE			20.1	CH2			1.4/2.7	1.4	CH2	2.7	SUM							
RC2-035-020	H		FALSE			16.1	CH2			3.7/10.6	3.7	CH2	10.6	SUM							
RC2-035-021	H		FALSE			31.7	CH2			2.3/8.2	2.3	CH2	8.2	SUM							
RC2-035-022	H		FALSE			13.7	CH2			1.2/3.4	1.2	CH2	3.4	SUM							
RC2-035-023	H		FALSE			22.4	CH2			1.9/5.7	1.9	CH2	5.7	SUM							
RC2-035-024	H		FALSE			41.5	CH2			1.2/2.6	1.2	CH2	2.6	SUM							
RC2-035-025	H		FALSE			32.3	CH2			1.6/4.7	1.6	CH2	4.7	SUM							
RC2-037-001	V		FALSE			323.2	SUM				11.6	SUM									
RC2-037-002			FALSE			18.2	SUM				18.2	SUM									
RC2-037-003	H		FALSE			22.3	SUM				4.3	SUM									
RC2-037-004	H		FALSE			31.2	SUM				4.3	SUM									
RC2-037-005	H		FALSE			28.3	SUM				3.6	SUM									
RC2-037-006	H		FALSE			105.5	SUM				4.4	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-037-007	H		FALSE			22.2	SUM				6.3	SUM									
RC2-037-008	V		FALSE			332.2	SUM				4.2	SUM									
RC2-037-009	H		FALSE			31.2	SUM				15.6	SUM									
RC2-037-010	H		FALSE			30.2	SUM				3.6	SUM									
RC2-037-011			FALSE			6.3	SUM				6.3	SUM									
RC2-037-012	H		FALSE			24.3	SUM				6.9	SUM									
RC2-037-013			FALSE			13.4	SUM				13.4	SUM									
RC2-037-014			FALSE			5.3	SUM				5.3	SUM									
RC2-037-015	H		FALSE			36.1	SUM				5.6	SUM									
RC2-037-016	H		FALSE			105.6	SUM				13.2	SUM									
RC2-039-001	H		FALSE			21.2	SUM				2.2	SUM									
RC2-039-002	V		FALSE			694.2	SUM				5.4	SUM									
RC2-039-003	H		FALSE			38.4	SUM				2.3	SUM									
RC2-039-004	H		FALSE			110.4	SUM				2.3	SUM									
RC2-039-005	H		FALSE			76.1	SUM				4.2	SUM									
RC2-039-006	H		FALSE			74.3	SUM				10.2	SUM									
RC2-039-007	H		FALSE			11.6	SUM				6.5	SUM									
RC2-039-008	H		FALSE			22.9	SUM				5.4	SUM									
RC2-039-009	H		FALSE			69.2	SUM				6.6	SUM									
RC2-039-010	H		FALSE			22.5	SUM				15.3	SUM									
RC2-039-011			FALSE			10.2	SUM				8.4	SUM									
RC2-039-012	H		FALSE			29.4	SUM				10.5	SUM									
RC2-039-013	H		FALSE			34.5	SUM				11.9	SUM									
RC2-039-014	H		FALSE			41.2	SUM				10.1	SUM									
RC2-039-015	H		FALSE			40.2	SUM				7.5	SUM									
RC2-039-016	H		FALSE			46.5	SUM				11.1	SUM									
RC2-039-017	H		FALSE			42.3	SUM				12.4	SUM									
RC2-039-018			FALSE			7.3	SUM				5.8	SUM									
RC2-039-019	H		FALSE			53.3	SUM				9.2	SUM									
RC2-039-020	V		FALSE			335.4	SUM				10.6	SUM									
RC2-039-021	H		FALSE			72.4	SUM				9.9	SUM									
RC2-040-001	V		FALSE			982.1	SUM				7.9	SUM									
RC2-040-002			FALSE			25.6	SUM				11.4	SUM									
RC2-040-003	H		FALSE			68.9	SUM				15.6	SUM									
RC2-040-004			FALSE			2.5	SUM				2.5	SUM									
RC2-040-005	V		FALSE			1.4	SUM				1.4	SUM									
RC2-040-006			FALSE			0.3	SUM				0.3	SUM									
RC2-040-007			FALSE			3.2	SUM				3.2	SUM									
RC2-040-008			FALSE			10.4	SUM				10.4	SUM									
RC2-040-009			FALSE			12.3	SUM				12.3	SUM									
RC2-040-010			FALSE			10.4	SUM				10.4	SUM									
RC2-040-011			FALSE			1.4	SUM				1.4	SUM									
RC2-040-012	H		FALSE			1.2	SUM				1.2	SUM									
RC2-041-001	V		FALSE			447.1	1				3.2	SUM									
RC2-041-002	H		FALSE			63.7	1				13.2	SUM									
RC2-041-003	H		FALSE			78.9	1				5.2	SUM									
RC2-041-004	H		FALSE			104.8	1				73.4	SUM									
RC2-041-005	H		FALSE			37.9	1				8.9	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-041-006	H		FALSE			52.8	1				7.2	SUM									
RC2-041-007	H		FALSE			12.1	1				3.3	SUM									
RC2-041-008	H		FALSE			23.9	1				8.1	SUM									
RC2-041-009	H		FALSE			19.3	1				1.3	SUM									
RC2-041-010	H		FALSE			50.1	1				2.2	SUM									
RC2-041-011	H		FALSE			24.2	1				1.2	SUM									
RC2-041-012	H		FALSE			17.4	1				5.6	SUM									
RC2-041-013	H		FALSE			25	1				4.9	SUM									
RC2-041-014	H		FALSE			16.7	1				2.5	SUM									
RC2-041-015	H		FALSE			19.8	1				2.3	SUM									
RC2-041-016	H		FALSE			53.6	1				28.7	SUM									
RC2-041-017	H		FALSE			60.8	1				4.2	SUM									
RC2-041-018	H		FALSE			47.1	1				35.4	SUM									
RC2-041-019			FALSE			9.2	1				9.2	SUM									
RC2-041-020	H		FALSE			81.7	1				1.3	SUM									
RC2-041-021	H		FALSE			16.4	1				12.3	SUM									
RC2-041-022	H		FALSE			47.3	1				7.3	SUM									
RC2-041-023			FALSE			34.1	1				11.2	SUM									
RC2-041-024	H		FALSE			30.7	1				5.2	SUM									
RC2-041-025			FALSE			2.4	1				2.4	SUM									
RC2-041-026	H		FALSE			19.1	1				5.3	SUM									
RC2-041-027	H		FALSE			25.2	1				4.6	SUM									
RC2-041-028	H		FALSE			22.7	1				6.9	SUM									
RC2-041-029	H		FALSE			38.1	1				12.3	SUM									
RC2-041-030	H		FALSE			44.9	1				27.2	SUM									
RC2-041-031	H		FALSE			65.3	1				37.4	SUM									
RC2-041-032	H		FALSE			33.4	1				16.7	SUM									
RC2-041-033	H		FALSE			74.5	1				15.3	SUM									
RC2-041-034	V		FALSE			111.3	1				3.4	SUM									
RC2-041-035	H		FALSE			34.7	1				12.5	SUM									
RC2-041-036	H		FALSE			19.8	1				6.2	SUM									
RC2-041-037	H		FALSE			68.3	1				23.4	SUM									
RC2-041-038	H		FALSE			14.4	1				6.2	SUM									
RC2-041-039	H		FALSE			22.3	1				4.2	SUM									
RC2-041-040	H		FALSE			30.7	1				2.2	SUM									
RC2-041-041	H		FALSE			41.6	1				8.2	SUM									
RC2-041-042	H		FALSE			90.8	1				18.9	SUM									
RC2-041-043	H		FALSE			30.4	1				13.4	SUM									
RC2-041-044	H		FALSE			36.2	1				1.2	SUM									
RC2-041-045	H		FALSE			44.9	1				23.7	SUM									
RC2-042-001	V		FALSE			649.3	SUM				5.2	SUM									
RC2-042-002	H		FALSE			215.5	SUM				2.7	SUM									
RC2-042-003	H		FALSE			48.6	SUM				5.2	SUM									
RC2-042-004	V		FALSE			345.2	SUM				3.6	SUM									
RC2-042-005			FALSE			3.2	SUM				3.2	SUM									
RC2-042-006			FALSE			4.1	SUM				4.1	SUM									
RC2-042-007	H		FALSE			165.3	SUM				2.7	SUM									
RC2-042-008	H		FALSE			343.4	SUM				3.2	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-042-009	H		FALSE			907.3	SUM				4.6	SUM									
RC2-042-010			FALSE			3.8	SUM				3.8	SUM									
RC2-042-011	H		FALSE			292.1	SUM				4.1	SUM									
RC2-042-012	H		FALSE			647.5	SUM				3.8	SUM									
RC2-042-013	H		FALSE			1013.2	SUM				6.1	SUM									
RC2-042-014	H		FALSE			63.5	SUM				2.7	SUM									
RC2-042-015	H		FALSE			162.4	SUM				4.6	SUM									
RC2-042-016	H		FALSE			51.8	SUM				3.2	SUM									
RC2-042-017	H		FALSE			170.3	SUM				4.7	SUM									
RC2-042-018			FALSE			19.5	SUM				19.5	SUM									
RC2-042-019	H		FALSE			170.3	SUM				4.7	SUM									
RC2-042-020	H		FALSE			120.5	SUM				2.5	SUM									
RC2-042-021			FALSE			2.6	SUM				2.6	SUM									
RC2-042-022	H		FALSE			53.2	SUM				1.8	SUM									
RC2-042-023	H		FALSE			57.8	SUM				3.7	SUM									
RC2-042-024	H		FALSE			164.7	SUM				6.1	SUM									
RC2-042-025			FALSE			280.1	SUM				18.3	SUM									
RC2-042-026	H		FALSE			148.2	SUM				3.1	SUM									
RC2-042-027			FALSE			4.7	SUM				4.7	SUM									
RC2-042-028			FALSE			3.1	SUM				3.1	SUM									
RC2-042-029	H		FALSE			61.6	SUM				2.6	SUM									
RC2-042-030	H		FALSE			115.8	SUM				3.8	SUM									
RC2-042-031	H		FALSE			162.3	SUM				5.2	SUM									
RC2-042-032	H		FALSE			38.8	SUM				2.3	SUM									
RC2-042-033	H		FALSE			82.4	SUM				2.3	SUM									
RC2-042-034	H		FALSE			160.8	SUM				1.7	SUM									
RC2-042-035	H		FALSE			241.2	SUM				6.1	SUM									
RC2-042-036	H		FALSE			131.6	SUM				3.8	SUM									
RC2-042-037	H		FALSE			22.3	SUM				1.3	SUM									
RC2-042-038			FALSE			5.7	SUM				5.7	SUM									
RC2-042-039	H		FALSE			572.4	SUM				3.6	SUM									
RC2-042-040	H		FALSE			258.5	SUM				5.2	SUM									
RC2-042-041	H		FALSE			197.2	SUM					SUM									
RC2-043-001	V		FALSE			148.9	CH2			1.7	1.7	SUM									
RC2-043-002	H		FALSE			20.3	CH2			2.10000000000	2.1	SUM									
RC2-043-003	H		FALSE			17.6	CH2			5.40000000000	5.4	SUM									
RC2-043-004	H		FALSE			12.8	CH2			9.09999999999	9.1	SUM									
RC2-043-005	H		FALSE			6.7	CH2			19.3999999999	19.4	SUM									
RC2-043-006	H		FALSE			16.1	CH2			18.6999999999	18.7	SUM									
RC2-043-007	H		FALSE			19.1	CH2			5.09999999999	5.1	SUM									
RC2-043-008	V		FALSE			6.3	CH2			2.70000000000	2.7	SUM									
RC2-043-009	H		FALSE			8.3	CH2			8.09999999999	8.1	SUM									
RC2-043-010	H		FALSE			13.6	CH2			10.1	10.1	SUM									
RC2-043-011	H		FALSE			11.2	CH2			14.2000000000	14.2	SUM									
RC2-043-012	V		FALSE			108.4	CH2			6.79999999999	6.8	SUM									
RC2-043-013	H		FALSE			9.1	CH2			2.39999999999	2.4	SUM									
RC2-043-014	H		FALSE			113.1	CH2			1.2	1.2	SUM									
RC2-044-001	V		FALSE			177	CH2			11.2000000000	11.2	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-044-002	H		FALSE			17.7	CH2			3.5	3.5	SUM									
RC2-044-003	H		FALSE			6.5	CH2			2.2000000000	2.2	SUM									
RC2-044-004	H		FALSE			24.3	CH2			9.9000000000	9.9	SUM									
RC2-044-005	H		FALSE			13.6	CH2			14.800000000	14.8	SUM									
RC2-044-006	H		FALSE			17.1	CH2			15.5	15.5	SUM									
RC2-044-007	H		FALSE			14.5	CH2			6.1000000000	6.1	SUM									
RC2-044-008	H		FALSE			13.9	CH2			2.2000000000	2.2	SUM									
RC2-044-009	H		FALSE			11.5	CH2			3.1000000000	3.1	SUM									
RC2-044-010			FALSE			1.5	CH2			4.2000000000	4.2	SUM									
RC2-044-011	H		FALSE			57.8	CH2			8.6999999999	8.7	SUM									
RC2-044-012	H		FALSE			17.2	CH2			1.8	1.8	SUM									
RC2-044-013	H		FALSE			16.9	CH2			14.4	14.4	SUM									
RC2-044-014	H		FALSE			11.1	CH2			2.3999999999	2.4	SUM									
RC2-044-015	H		FALSE			15.1	CH2			2.8000000000	2.8	SUM									
RC2-044-016	H		FALSE			16.6	CH2			7.2000000000	7.2	SUM									
RC2-044-017	H		FALSE			22.7	CH2			3.8000000000	3.8	SUM									
RC2-044-018			FALSE			3.2	CH2			7.5	7.5	SUM									
RC2-044-019	H		FALSE			10.6	CH2			3.5	3.5	SUM									
RC2-044-020	V		FALSE			112.7	CH2			9.4000000000	9.4	SUM									
RC2-044-021	H		FALSE			11.4	CH2			4.0999999999	4.1	SUM									
RC2-044-022	H		FALSE			18.2	CH2			11.5	11.5	SUM									
RC2-044-023	H		FALSE			14.5	CH2			12.5	12.5	SUM									
RC2-044-024	H		FALSE			32.6	CH2			14.1	14.1	SUM									
RC2-045-001	V		FALSE			374.6	SUM				2.1	SUM									
RC2-045-002	H		FALSE			34.3	SUM				3.8	SUM									
RC2-045-003	H		FALSE			38.7	SUM				4.1	SUM									
RC2-045-004	H		FALSE			23.6	SUM				5.3	SUM									
RC2-045-005	H		FALSE			28.9	SUM				8.2	SUM									
RC2-045-007	H		FALSE			247.3	SUM				9.4	SUM									
RC2-045-008	H		FALSE			48.9	SUM				4.7	SUM									
RC2-045-011	H		FALSE			247.3	SUM				9.4	SUM									
RC2-045-012	H		FALSE			41.9	SUM				4.3	SUM									
RC2-045-013	H		FALSE			32.4	SUM				4.7	SUM									
RC2-045-014	H		FALSE			42.3	SUM				3.2	SUM									
RC2-045-015	H		FALSE			204.5	SUM				7.2	SUM									
RC2-045-016	H		FALSE			41.3	SUM				3.2	SUM									
RC2-045-017	H		FALSE			20.4	SUM				1.7	SUM									
RC2-045-018	H		FALSE			59.8	SUM				8.7	SUM									
RC2-045-019	H		FALSE			34.7	SUM				6.3	SUM									
RC2-045-020	V		FALSE			317.8	SUM				3.2	SUM									
RC2-045-021	H		FALSE			31.9	SUM				6.7	SUM									
RC2-045-022	H		FALSE			39.7	SUM				5.3	SUM									
RC2-045-023	H		FALSE			33.2	SUM				3.6	SUM									
RC2-046-001	V		FALSE			599.1	1				8.3	SUM									
RC2-046-002	H		FALSE			68.1	1				18.2	SUM									
RC2-046-003	H		FALSE			38.3	1				18.9	SUM									
RC2-046-004	H		FALSE			23.2	1				1.9	SUM									
RC2-046-005	H		FALSE			41.3	1				11.3	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-046-006	H		FALSE			81.2	1				2.1	SUM									
RC2-046-007	H		FALSE			60.5	1				4.2	SUM									
RC2-046-008	H		FALSE			19.8	1				1.9	SUM									
RC2-046-009	H		FALSE			33.6	1				4.7	SUM									
RC2-046-010	H, V		FALSE			54.6	1				7.2	SUM									
RC2-046-011	H		FALSE			54.6	1				7.2	SUM									
RC2-046-012	H		FALSE			68.4	1				10.3	SUM									
RC2-046-013	H		FALSE			59.8	1				18.4	SUM									
RC2-046-014	H		FALSE			42.8	1				3.3	SUM									
RC2-046-015	H		FALSE			58.9	1				3.5	SUM									
RC2-046-016	V		FALSE			301.4	1				4.3	SUM									
RC2-046-017	H		FALSE			36.8	1				2.7	SUM									
RC2-047-001	V		FALSE			142.6	CH2			2.29999999999	2.3	SUM									
RC2-047-002	V		FALSE			148.6	CH2			5.60000000000	5.6	SUM									
RC2-047-003			FALSE			148.6	CH2			5.60000000000	5.6	SUM									
RC2-049-001	V		FALSE			522.4	1				9.8	SUM									
RC2-049-002	H		FALSE			60.2	1				5.2	SUM									
RC2-049-003	H		FALSE			52.8	1				2.4	SUM									
RC2-049-004	H		FALSE			17.7	1				1.2	SUM									
RC2-049-005	H		FALSE			52.8	1				2.4	SUM									
RC2-049-006			FALSE			8.1	1				8.1	SUM									
RC2-049-007	H		FALSE			24.2	1				4.8	SUM									
RC2-049-008	H		FALSE			34.8	1				1.8	SUM									
RC2-049-009	H		FALSE			6.4	1				2.8	SUM									
RC2-049-010	H		FALSE			38.9	1				1.4	SUM									
RC2-049-011	H		FALSE			32.8	1				3.6	SUM									
RC2-049-012			FALSE			9.2	1				9.2	SUM									
RC2-049-013	H		FALSE			26.2	1				1.3	SUM									
RC2-049-014	H		FALSE			38.9	1				1.2	SUM									
RC2-049-015	H		FALSE			29.8	1				1.8	SUM									
RC2-049-016	H		FALSE			22.3	1				2.4	SUM									
RC2-049-017	H		FALSE			13.9	1				1.1	SUM									
RC2-049-018			FALSE			10.2	1				10.2	SUM									
RC2-049-019	H		FALSE			17.1	1				5.3	SUM									
RC2-049-020	H		FALSE			23.2	1				4.2	SUM									
RC2-049-021	V		FALSE			320.8	1				3.3	SUM									
RC2-049-022	H		FALSE			34.8	1				4.7	SUM									
RC2-050-001	H		FALSE			464.3	SUM				1.4	SUM									
RC2-050-002	H		FALSE			43.2	SUM				5.8	SUM									
RC2-050-003	H		FALSE			24.6	SUM				5.9	SUM									
RC2-050-004	H		FALSE			79.3	SUM				3.3	SUM									
RC2-050-005	V		FALSE			241.3	SUM				7.5	SUM									
RC2-050-006	H		FALSE			33.6	SUM				4.3	SUM									
RC2-050-007	H		FALSE			75.6	SUM				8.6	SUM									
RC2-050-008	H		FALSE			40.6	SUM				2.6	SUM									
RC2-050-009	H		FALSE			80.6	SUM				4.7	SUM									
RC2-050-010	H		FALSE			20.4	SUM				2.4	SUM									
RC2-050-011	H		FALSE			22.2	SUM				6.4	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-050-012	H		FALSE			23.5	SUM				8.1	SUM									
RC2-050-013	H		FALSE			45.3	SUM				6.7	SUM									
RC2-050-014	H		FALSE			25.2	SUM				6.1	SUM									
RC2-050-015	V		FALSE			40.5	SUM				1.6	SUM									
RC2-050-016	H		FALSE			27.3	SUM				18.4	SUM									
RC2-050-017	H		FALSE			58.6	SUM				1.3	SUM									
RC2-050-018	H		FALSE			24.9	SUM				5.6	SUM									
RC2-050-019	H		FALSE			54.1	SUM				3.5	SUM									
RC2-050-020	H		FALSE			43.3	SUM				5.8	SUM									
RC2-050-021	H		FALSE			38.6	SUM				2.4	SUM									
RC2-050-022	H		FALSE			39.6	SUM				7.6	SUM									
RC2-050-023	H		FALSE			60.4	SUM				1.6	SUM									
RC2-050-024	H		FALSE			30.3	SUM				12.1	SUM									
RC2-050-025	H		FALSE			83.9	SUM				9.5	SUM									
RC2-050-026	H		FALSE			43.9	SUM				4.8	SUM									
RC2-050-027	H		FALSE			176.2	SUM				10.4	SUM									
RC2-050-028	H		FALSE			81.9	SUM				11.4	SUM									
RC2-050-029	H		FALSE			30.8	SUM				9.2	SUM									
RC2-050-030	H		FALSE			176.2	SUM				10.4	SUM									
RC2-052-001	V		FALSE			167.6	CH2				1.2	SUM									
RC2-052-002	H		FALSE			17.6	CH2				2.6	SUM									
RC2-052-003	H		FALSE			7.9	CH2				15.7	SUM									
RC2-052-004	H		FALSE			22.6	CH2				7.2	SUM									
RC2-052-005	H		FALSE			12.1	CH2				4.5	SUM									
RC2-052-006	V		FALSE			131.9	CH2				8.3	SUM									
RC2-052-007	H		FALSE			15.6	CH2				13.2	SUM									
RC2-052-008	H		FALSE			16.2	CH2				15.5	SUM									
RC2-052-009	H		FALSE			15.9	CH2				13.8	SUM									
RC2-052-010	H		FALSE			16.5	CH2				4.6	SUM									
RC2-052-011	H		FALSE			15.7	CH2				5.2	SUM									
RC2-052-012	H		FALSE			13.8	CH2				4.6	SUM									
RC2-052-013	H		FALSE			12.9	CH2				7.2	SUM									
RC2-052-014	H		FALSE			52.3	CH2				4.5	SUM									
RC2-054-001	V		FALSE			469.8	SUM				16.2	SUM									
RC2-054-002	H		FALSE			26.4	SUM				16.3	SUM									
RC2-054-003			FALSE			9.3	SUM				9.3	SUM									
RC2-054-004			FALSE			79.8	SUM				10.8	SUM									
RC2-054-005			FALSE			10.4	SUM				10.4	SUM									
RC2-054-006			FALSE			21.8	SUM				19.3	SUM									
RC2-054-007			FALSE			11.5	SUM				11.5	SUM									
RC2-054-008			FALSE			14.7	SUM				14.7	SUM									
RC2-054-009	V		FALSE			283.5	SUM				18.2	SUM									
RC2-054-010			FALSE			12.8	SUM				12.8	SUM									
RC2-054-011			FALSE			8.7	SUM				8.1	SUM									
RC2-054-012			FALSE			13.4	SUM				13.4	SUM									
RC2-054-013			FALSE			12.7	SUM				12.7	SUM									
RC2-054-014			FALSE			15.6	SUM				15.6	SUM									
RC2-054-015			FALSE			12.3	SUM				12.3	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-055-001	V		FALSE			630.7	SUM				5.6	SUM									
RC2-055-002	V		FALSE			458.7	SUM				5.2	SUM									
RC2-055-003	H		FALSE			26.6	SUM				3.9	SUM									
RC2-055-004			FALSE			16.2	SUM				16.2	SUM									
RC2-055-005			FALSE			7.3	SUM				7.3	SUM									
RC2-055-006			FALSE			4.8	SUM				4.8	SUM									
RC2-055-007	H		FALSE			26.4	SUM				4.2	SUM									
RC2-055-008	V		FALSE			369.9	SUM				2.3	SUM									
RC2-055-009	H		FALSE			49.9	SUM				5.6	SUM									
RC2-056-001	V		FALSE			449.3	SUM				3.2	SUM									
RC2-056-005	H		FALSE			24.6	SUM				2.1	SUM									
RC2-056-006	H		FALSE			32.6	SUM				1.9	SUM									
RC2-056-007	H		FALSE			32.8	SUM				1.4	SUM									
RC2-056-009	H		FALSE			16.2	SUM				1.7	SUM									
RC2-056-010	H		FALSE			15.1	SUM				1.1	SUM									
RC2-056-011	H		FALSE			15.1	SUM				1.5	SUM									
RC2-056-012	H		FALSE			24.3	SUM				2.2	SUM									
RC2-056-013	V		FALSE			211.3	SUM				2.6	SUM									
RC2-056-014	H		FALSE			19.8	SUM				1.3	SUM									
RC2-056-015	H		FALSE			20.1	SUM				4.3	SUM									
RC2-056-017	H		FALSE			15.6	SUM				10.4	SUM									
RC2-056-018	H		FALSE			30.4	SUM				4.7	SUM									
RC2-056-020	H		FALSE			14.8	SUM				2.1	SUM									
RC2-057-001	V		FALSE			201	CH2			0.9/1.2	0.9	CH2	1.2	SUM							
RC2-057-002	H		FALSE			26.5	CH2			0.5/0.9	0.5	CH2	0.9	SUM							
RC2-057-003	H		FALSE			61.2	CH2			0.7/1.2	0.7	CH2	1.2	SUM							
RC2-057-004	V		FALSE			90.6	CH2			0.8/1.3	0.8	CH2	1.3	SUM		incorrectly recorded as seed #54, no idea why, changed it to 86					
RC2-057-005	H		FALSE			12.5	CH2			5.9/18.1	5.9	CH2	18.1	SUM							
RC2-058-001	V		FALSE			225.8	CH2			11.2000000000	11.2	SUM									
RC2-058-002	H		FALSE			41.1	CH2			8.40000000000	8.4	SUM									
RC2-058-003			FALSE			8.4	CH2			16.1999999999	16.2	SUM									
RC2-058-004	H		FALSE			9.2	CH2			12.6	12.6	SUM									
RC2-058-005	H		FALSE			29.6	CH2			10.1	10.1	SUM									
RC2-058-006	V		FALSE			133.4	CH2			5.20000000000	5.2	SUM									
RC2-058-007			FALSE			3.8	CH2			6.20000000000	6.2	SUM									
RC2-058-008			FALSE			7.7	CH2			18.1999999999	18.2	SUM									
RC2-058-009	H		FALSE			49.1	CH2			3.39999999999	3.4	SUM									
RC2-058-010	H		FALSE			28.9	CH2			9.30000000000	9.3	SUM									
RC2-058-011			FALSE			12.1	CH2			16.1000000000	16.1	SUM									
RC2-058-012	H		FALSE			13.2	CH2			15.2000000000	15.2	SUM									
RC2-058-013			FALSE			11.6	CH2			3.60000000000	3.6	SUM									
RC2-058-014			FALSE			16.4	CH2			12.6	12.6	SUM									
RC2-058-015	V		FALSE			25.6	CH2			9.19999999999	9.2	SUM									
RC2-058-016			FALSE			11.9	CH2			8.69999999999	8.7	SUM									
RC2-058-017			FALSE			4.5	CH2			18.8999999999	18.9	SUM									
RC2-058-018	H		FALSE			45.6	CH2			14.6	14.6	SUM									
RC2-058-019			FALSE			8.3	CH2			8.09999999999	8.1	SUM									
RC2-059-001			FALSE			13.4	SUM				13.4	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-059-002	V		FALSE			587.2	SUM				2.5	SUM									
RC2-059-003	H		FALSE			311.5	SUM				2.2	SUM									
RC2-059-004	H		FALSE			324.7	SUM				2.2	SUM									
RC2-059-005	H		FALSE			22.6	SUM				2.1	SUM									
RC2-059-006			FALSE			1.9	SUM				1.9	SUM									
RC2-059-007			FALSE			4.3	SUM				4.3	SUM									
RC2-059-008			FALSE			8.1	SUM				8.1	SUM									
RC2-059-009			FALSE			6.8	SUM				6.8	SUM									
RC2-059-010	H		FALSE			46.5	SUM				2.2	SUM									
RC2-059-011			FALSE			8.6	SUM				8.6	SUM									
RC2-059-012	V		FALSE			226.5	SUM				14.5	SUM									
RC2-059-013	H		FALSE			234.6	SUM				6.9	SUM									
RC2-059-014			FALSE			7.3	SUM				7.3	SUM									
RC2-059-015	H		FALSE			84.2	SUM				1.4	SUM									
RC2-059-016	H		FALSE			84.2	SUM				1.4	SUM									
RC2-059-017	H		FALSE			49.4	SUM				5.2	SUM									
RC2-059-018	H		FALSE			38.6	SUM				3.1	SUM									
RC2-061-001	V		FALSE			423.4	SUM				1.4	SUM									
RC2-061-002	H		FALSE			4.2	SUM				1.4	SUM									
RC2-061-003	H		FALSE			49.7	SUM				3.2	SUM									
RC2-061-004	V		FALSE			321.6	SUM				2.1	SUM									
RC2-061-005	H		FALSE			49.4	SUM				2.1	SUM									
RC2-061-006	H		FALSE			19.3	SUM				1.2	SUM									
RC2-061-007	H		FALSE			19.5	SUM				1.4	SUM									
RC2-061-008	H		FALSE			20.1	SUM				1.6	SUM									
RC2-061-009			FALSE			16.4	SUM				16.4	SUM									
RC2-061-010	H		FALSE			34.3	SUM				2.2	SUM									
RC2-061-011	H		FALSE			19.7	SUM				3.1	SUM									
RC2-061-012			FALSE			17.2	SUM				17.2	SUM									
RC2-061-013	H		FALSE			24.7	SUM				6.5	SUM									
RC2-061-014	H		FALSE			47.3	SUM				4.7	SUM									
RC2-062-001			FALSE			153.4	CH2				12.3	SUM									
RC2-062-002	H		FALSE			55.8	CH2				5.9	SUM									
RC2-062-003	H		FALSE			41.2	CH2				8.4	SUM									
RC2-062-004	H		FALSE			19.9	CH2				14.4	SUM									
RC2-062-005	H		FALSE			14.5	CH2				5.5	SUM									
RC2-062-006	H		FALSE			15.5	CH2				7.2	SUM									
RC2-062-007	H		FALSE			175.3	CH2				19.9	SUM									
RC2-062-008	H		FALSE			31.4	CH2				9.2	SUM									
RC2-062-009	H		FALSE			32.5	CH2				59.6	SUM									
RC2-062-010	H		FALSE			19.5	CH2				9.2	SUM									
RC2-062-011	H		FALSE			11.2	CH2				4.5	SUM									
RC2-062-012	H		FALSE			31.5	CH2				5.4	SUM									
RC2-062-013	H		FALSE			9.1	CH2				3.5	SUM									
RC2-062-014	H		FALSE			69.8	CH2				33.4	SUM									
RC2-062-015	H		FALSE			27	CH2				2.8	SUM									
RC2-062-016	H		FALSE			20.9	CH2				11.7	SUM									
RC2-062-017	H		FALSE			52.9	CH2				10.5	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-062-018	H		FALSE			11.1	CH2				17.9	SUM									
RC2-062-019	H		FALSE			16.2	CH2				23.1	SUM									
RC2-062-020	H		FALSE			110.4	CH2				8.7	SUM									
RC2-062-021	H		FALSE			109.2	CH2				29	SUM									
RC2-062-022	H		FALSE			28.4	CH2				17.8	SUM									
RC2-062-023	H		FALSE			112.2	CH2				16.5	SUM									
RC2-062-024	H		FALSE			143.2	CH2				34.2	SUM									
RC2-062-025	H		FALSE			41.6	CH2				3.9	SUM									
RC2-062-026	H		FALSE			63.5	CH2				12.8	SUM									
RC2-062-027	H		FALSE			145.6	CH2				37.5	SUM									
RC2-062-028	H		FALSE			30.8	CH2				66.3	SUM									
RC2-062-029	H		FALSE			81.6	CH2				3.9	SUM									
RC2-062-030	H		FALSE			205.7	CH2				21.9	SUM									
RC2-062-031	H		FALSE			29.2	CH2				5.2	SUM									
RC2-062-032	H		FALSE			70.6	CH2				90.1	SUM									
RC2-063-001	V		FALSE			587	SUM				7.2	SUM									
RC2-063-002			FALSE			32.3	SUM				29.4	SUM									
RC2-063-003			FALSE			9.5	SUM				2.3	SUM									
RC2-063-004			FALSE			12.2	SUM				8.4	SUM									
RC2-063-005	H		FALSE			15.2	SUM				4.6	SUM									
RC2-063-006			FALSE			9.1	SUM				9.1	SUM									
RC2-063-007	H		FALSE			10.1	SUM				3.4	SUM									
RC2-063-008	H		FALSE			7.1	SUM				2.4	SUM									
RC2-063-009	H		FALSE			35.1	SUM				12.2	SUM									
RC2-063-010			FALSE			12.1	SUM				12.1	SUM									
RC2-063-011			FALSE			16.5	SUM				16.5	SUM									
RC2-063-012	H		FALSE			15.6	SUM				6.3	SUM									
RC2-063-013			FALSE			7.2	SUM				7.2	SUM									
RC2-063-014			FALSE			11.2	SUM				11.2	SUM									
RC2-063-015	V		FALSE			345.2	SUM				16.5	SUM									
RC2-063-016			FALSE			9.5	SUM				11.2	SUM									
RC2-063-017			FALSE			6.2	SUM				6.2	SUM									
RC2-063-018	H		FALSE			53.4	SUM				3.2	SUM									
RC2-063-019	H		FALSE			47.2	SUM				15.5	SUM									
RC2-063-020			FALSE			17.3	SUM				13.2	SUM									
RC2-063-021			FALSE			12.4	SUM				12.4	SUM									
RC2-063-022	H		FALSE			13.3	SUM				9.6	SUM									
RC2-063-023			FALSE			34.2	SUM				12.4	SUM									
RC2-063-024			FALSE			18.1	SUM				18.1	SUM									
RC2-063-025			FALSE			33.1	SUM				23.5	SUM									
RC2-063-026	H		FALSE			58.3	SUM				33.2	SUM									
RC2-063-027	H		FALSE			33.6	SUM				7.2	SUM									
RC2-063-028	H		FALSE			79.2	SUM				5.3	SUM									
RC2-063-029			FALSE			46.7	SUM				37.2	SUM									
RC2-064-001	V		FALSE			495.3	SUM				4.2	SUM									
RC2-064-002	H		FALSE			34.9	SUM				5.2	SUM									
RC2-064-003	H		FALSE			28.6	SUM				4.2	SUM									
RC2-064-004	V		FALSE			102.4	SUM				2.1	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-064-005			FALSE			34.9	SUM				5.2	SUM									
RC2-064-006	H		FALSE			106.9	SUM				3.2	SUM									
RC2-064-007	H		FALSE			29.4	SUM				4.6	SUM									
RC2-064-008	V		FALSE			335.6	SUM				3.2	SUM									
RC2-064-009	H		FALSE			45.1	SUM				2.4	SUM									
RC2-064-010	H		FALSE			22.6	SUM				5.2	SUM									
RC2-064-011	H		FALSE			24.2	SUM				1.4	SUM									
RC2-064-012	H		FALSE			124.4	SUM				3.8	SUM									
RC2-064-013	H		FALSE			102.8	SUM				6.1	SUM									
RC2-064-014	H		FALSE			49.7	SUM				3.8	SUM									
RC2-064-015	H		FALSE			65.2	SUM				6.8	SUM									
RC2-064-016	H		FALSE			31.2	SUM				2.1	SUM									
RC2-064-017	H		FALSE			27.8	SUM				7.2	SUM									
RC2-064-018	H		FALSE			105.2	SUM				7.8	SUM									
RC2-064-019	H		FALSE			32.8	SUM				5.1	SUM									
RC2-064-020	H		FALSE			37.2	SUM				15.4	SUM									
RC2-064-021	H		FALSE			23.2	SUM				16.8	SUM									
RC2-064-022	H		FALSE			60.8	SUM				2.4	SUM									
RC2-064-023	H		FALSE			32.8	SUM				4.2	SUM									
RC2-064-024	H		FALSE			36.9	SUM				9.6	SUM									
RC2-064-025	H		FALSE			24.6	SUM				6.1	SUM									
RC2-065-001	V		FALSE			1070.4	SUM				6.3	SUM									
RC2-065-002	V		FALSE			292.2	SUM				4.8	SUM									
RC2-065-003	H		FALSE			24.2	SUM				3.6	SUM									
RC2-065-004	H		FALSE			61.3	SUM				2.8	SUM									
RC2-065-005	H		FALSE			48.9	SUM				6.9	SUM									
RC2-065-006	H		FALSE			103.4	SUM				9.9	SUM									
RC2-065-007			FALSE			103.4	SUM				9.9	SUM									
RC2-065-008	H		FALSE			69.9	SUM				5.7	SUM									
RC2-065-009	H		FALSE			105.8	SUM				5.6	SUM									
RC2-065-010	H		FALSE			69.8	SUM				3.4	SUM									
RC2-065-011	H		FALSE			44.2	SUM				3.4	SUM									
RC2-065-012	H		FALSE			290.9	SUM				2.3	SUM									
RC2-065-013			FALSE			14.3	SUM				14.3	SUM									
RC2-065-014	H		FALSE			47.8	SUM				12.2	SUM									
RC2-065-015	H		FALSE			35.5	SUM				10.3	SUM									
RC2-065-016			FALSE			16.1	SUM				16.1	SUM									
RC2-065-017	H		FALSE			50.1	SUM				15.2	SUM									
RC2-065-018			FALSE			17.4	SUM				17.4	SUM									
RC2-066-001	V		FALSE			330.1	SUM				9.8	SUM									
RC2-066-002			FALSE			12.9	SUM				12.9	SUM									
RC2-066-003			FALSE			34.7	SUM				34.7	SUM									
RC2-066-004			FALSE			25.2	SUM				25.2	SUM									
RC2-066-005			FALSE			29.7	SUM				29.7	SUM									
RC2-066-006			FALSE			33.6	SUM				33.6	SUM									
RC2-066-007			FALSE			40.8	SUM				40.8	SUM									
RC2-066-008			FALSE			28.4	SUM				28.4	SUM									
RC2-066-009			FALSE			36.3	SUM				36.3	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-066-010			FALSE			16.2	SUM				16.2	SUM									
RC2-066-011	V		FALSE			237.1	SUM				10.7	SUM									
RC2-067-001	V		FALSE			159.3	CH2			9.19999999999	9.2	SUM									
RC2-067-002	H		FALSE			35.1	CH2			7.70000000000	7.7	SUM									
RC2-067-003	H		FALSE			8	CH2			9.80000000000	9.8	SUM									
RC2-067-004	H		FALSE			68.2	CH2			3.20000000000	3.2	SUM									
RC2-067-005	H		FALSE			18.1	CH2			7.10000000000	7.1	SUM									
RC2-067-006	H		FALSE			46.5	CH2			9.19999999999	9.2	SUM									
RC2-067-007	H		FALSE			17.2	CH2			10.1	10.1	SUM									
RC2-067-008	V		FALSE			107.9	CH2			4.79999999999	4.8	SUM									
RC2-067-009	H		FALSE			12.2	CH2			2.29999999999	2.3	SUM									
RC2-068-001	V		FALSE			183.4	CH2			3.20000000000	3.2	SUM									
RC2-068-002	V		FALSE			122.2	CH2			2.20000000000	2.2	SUM									
RC2-068-003	H		FALSE			7.2	CH2			7.40000000000	7.4	SUM									
RC2-070-001	V		FALSE			684.4	SUM				7.4	SUM									
RC2-070-002	H		FALSE			38.1	SUM				3.4	SUM									
RC2-070-003	H		FALSE			33.8	SUM				5.3	SUM									
RC2-070-004	V		FALSE			366.1	SUM				4.9	SUM									
RC2-070-005	H		FALSE			86.7	SUM				6.2	SUM									
RC2-070-006	H		FALSE			62.7	SUM				4.2	SUM									
RC2-070-007	H		FALSE			136.1	SUM				12.4	SUM									
RC2-070-008	H		FALSE			184.7	SUM				16.5	SUM									
RC2-070-009	H		FALSE			147.6	SUM				10.1	SUM									
RC2-070-010	H		FALSE			33.4	SUM				12.4	SUM									
RC2-071-001	H		FALSE			33.8	SUM				11.2	SUM									
RC2-071-002	V		FALSE			302.4	SUM				6.9	SUM									
RC2-071-003	H		FALSE			51.2	SUM				9.2	SUM									
RC2-071-004	H		FALSE			42.6	SUM				10.8	SUM									
RC2-071-005	H		FALSE			72.9	SUM				55.7	SUM									
RC2-071-006	H		FALSE			50.2	SUM				14.3	SUM									
RC2-071-007	H		FALSE			182.4	SUM				37.8	SUM									
RC2-071-008			FALSE			182.4	SUM					SUM									
RC2-071-009	H		FALSE			42.4	SUM				13.7	SUM									
RC2-072-001	V		FALSE			356.2	1				7.9	SUM									
RC2-072-002	H		FALSE			40.2	1				1.3	SUM									
RC2-072-003	H		FALSE			80.7	1				2.1	SUM									
RC2-072-004	H		FALSE			52.8	1				8.9	SUM									
RC2-072-005	H		FALSE			173.9	1				4.7	SUM									
RC2-072-006	H		FALSE			51.4	1				6.5	SUM									
RC2-072-007	H		FALSE			16.5	1				9.2	SUM									
RC2-072-008	H		FALSE			76.5	1				16.8	SUM									
RC2-072-009	H, H		FALSE			27.3	1				13.1	SUM									
RC2-072-010	H		FALSE			31.4	1				15.1	SUM									
RC2-072-011	H		FALSE			31.2	1				11.1	SUM									
RC2-072-012	H, V		FALSE			323.4	1				9.9	SUM									
RC2-072-013	H		FALSE			26.2	1				4.4	SUM									
RC2-072-014	H		FALSE			57.3	1				1.4	SUM									
RC2-072-015	H		FALSE			32.4	1				6.4	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-072-016	H		FALSE			40.1	1				6.4	SUM									
RC2-073-001	V		FALSE			184.5	CH2			2.10000000000	2.1	SUM									
RC2-073-002	V		FALSE			102.3	CH2			5.20000000000	5.2	SUM									
RC2-074-001	V		FALSE			408.6	SUM				7.8	SUM									
RC2-074-002	H		FALSE			8.2	SUM				2.6	SUM									
RC2-074-003	H		FALSE			22.3	SUM				1.3	SUM									
RC2-074-004	H		FALSE			49.2	SUM				2.2	SUM									
RC2-074-005	H		FALSE			25.7	SUM				1.8	SUM									
RC2-074-006	H		FALSE			27.8	SUM				1.6	SUM									
RC2-074-007	H		FALSE			24.9	SUM				2.6	SUM									
RC2-074-008	H		FALSE			120.2	SUM				2.4	SUM									
RC2-074-009	H		FALSE			17.3	SUM				4.2	SUM									
RC2-074-010	H		FALSE			22.6	SUM				4.2	SUM									
RC2-074-011	V		FALSE			296.4	SUM				1.1	SUM									
RC2-075-001	V		FALSE			166.1	CH2			7.70000000000	7.7	SUM									
RC2-075-002	H		FALSE			11	CH2			4.09999999999	4.1	SUM									
RC2-075-003	H		FALSE			4.5	CH2			11.2000000000	11.2	SUM									
RC2-075-004	V		FALSE			114.6	CH2			6.29999999999	6.3	SUM									
RC2-075-005	V		FALSE			36.2	CH2			9.5	9.5	SUM									
RC2-076-001	V		FALSE			436.7	SUM				10.2	SUM									
RC2-076-002			FALSE			13.4	SUM				13.4	SUM									
RC2-076-003	H		FALSE			23.6	SUM				10.7	SUM									
RC2-076-004			FALSE			8.6	SUM				8.6	SUM									
RC2-076-005	H		FALSE			33.8	SUM				8.2	SUM									
RC2-076-006	H		FALSE			44.3	SUM				18.6	SUM									
RC2-076-007			FALSE			16.1	SUM				16.1	SUM									
RC2-076-008	H		FALSE			29	SUM				16.6	SUM									
RC2-076-009	H		FALSE			51.9	SUM				5.7	SUM									
RC2-076-010	H		FALSE			37.5	SUM				16.2	SUM									
RC2-076-011	H		FALSE			317.4	SUM				7.2	SUM									
RC2-077-001	V		FALSE			672.4	SUM				1.2	SUM									
RC2-077-002	V		FALSE			263.4	SUM				1.4	SUM									
RC2-077-003	H		FALSE			25.4	SUM				5.1	SUM									
RC2-077-004	H		FALSE			18.2	SUM				1.7	SUM									
RC2-077-005	H		FALSE			14.2	SUM				2.1	SUM									
RC2-078-001	V		FALSE			172.2	CH2			1.10000000000	1.1	SUM									
RC2-078-002	H		FALSE			15.2	CH2			4.09999999999	4.1	SUM									
RC2-078-003	H		FALSE			8.6	CH2			8.19999999999	8.2	SUM									
RC2-078-004	H		FALSE			14.8	CH2			6.70000000000	6.7	SUM									
RC2-078-005	H		FALSE			5.2	CH2			8.90000000000	8.9	SUM									
RC2-078-006	H		FALSE			11.2	CH2			5.20000000000	5.2	SUM									
RC2-078-007	H		FALSE			31.3	CH2			8.19999999999	8.2	SUM									
RC2-078-008	H		FALSE			12.1	CH2			3.10000000000	3.1	SUM									
RC2-078-009	H		FALSE			4.8	CH2			1.10000000000	1.1	SUM									
RC2-078-010	H		FALSE			17.1	CH2			1.2	1.2	SUM									
RC2-078-011	H		FALSE			17.5	CH2			3.89999999999	3.9	SUM									
RC2-078-012	H		FALSE			6.8	CH2			3.70000000000	3.7	SUM									
RC2-078-013	H		FALSE			11.9	CH2			2.10000000000	2.1	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-078-014	V		FALSE			105.2	CH2			1.90000000000	1.9	SUM									
RC2-079-001	H		FALSE			521.3	SUM				7.8	SUM									
RC2-079-002	V		FALSE			671.3	SUM				7.3	SUM									
RC2-079-003	H		FALSE			49.6	SUM				9.6	SUM									
RC2-079-004	V		FALSE			422.2	SUM				5.2	SUM									
RC2-079-005	H		FALSE			22.2	SUM				8.8	SUM									
RC2-079-006			FALSE			7.3	SUM				7.3	SUM									
RC2-079-007	H		FALSE			41.6	SUM				6.9	SUM									
RC2-079-008	H		FALSE			22.3	SUM				7.3	SUM									
RC2-080-001	V		FALSE			141.2	CH2				2.3	SUM									
RC2-080-002	H		FALSE			12.9	Ch2				11.2	SUM									
RC2-080-003	H		FALSE			8	CH2				3.2	SUM									
RC2-080-004	H		FALSE			7.6	CH2				2.4	SUM									
RC2-080-005	H		FALSE			18.9	CH2				5.2	SUM									
RC2-080-006	H		FALSE			5.3	CH2				0.8	SUM									
RC2-080-007	H		FALSE			9.1	CH2				3.2	SUM									
RC2-080-008	H		FALSE			16.1	CH2				2.3	SUM									
RC2-080-009	H		FALSE			64.3	CH2				2.3	SUM									
RC2-080-010	V		FALSE			93.1	CH2				1.8	SUM									
RC2-080-011	H		FALSE			164.1	CH2				2.3	SUM									
RC2-080-012			FALSE			58.5	CH2					SUM									
RC2-081-001	V		FALSE			620.2	SUM				15.2	SUM									
RC2-081-002			FALSE			6.9	SUM				5.8	SUM									
RC2-081-003	H		FALSE			90.1	SUM				13.9	SUM									
RC2-081-004			FALSE			8.1	SUM				6.2	SUM									
RC2-081-005	V		FALSE			360.9	SUM				16.6	SUM									
RC2-081-006			FALSE			11.7	SUM				4.6	SUM									
RC2-082-001	V		FALSE			180.3	CH2			10.7000000000	10.7	SUM									
RC2-082-002			FALSE			29.7	CH2			10.1	10.1	SUM									
RC2-082-003	V		FALSE			72.1	CH2			10.4	10.4	SUM									
RC2-082-004	H		FALSE			51.2	CH2			14.2000000000	14.2	SUM									
RC2-082-005			FALSE			51.2	CH2			14.2000000000	14.2	SUM									
RC2-082-006			FALSE			5.7	CH2			11.5	11.5	SUM									
RC2-082-007			FALSE			7.2	CH2			16.1999999999	16.2	SUM									
RC2-082-008			FALSE			6.3	CH2			13.2000000000	13.2	SUM									
RC2-082-009			FALSE			6.2	CH2			5.60000000000	5.6	SUM									
RC2-082-010	H		FALSE			199.7	CH2			10.4	10.4	SUM									
RC2-084-001	V		FALSE			452.9	SUM				2.4	SUM									
RC2-084-003	V		FALSE			432.5	SUM				1.3	SUM									
RC2-085-001	V		FALSE			598	SUM				6.4	SUM									
RC2-085-002	H		FALSE			36.4	SUM				3.2	SUM									
RC2-085-003	H		FALSE			46.5	SUM				10.2	SUM									
RC2-085-004	H		FALSE			32.4	SUM				12.6	SUM									
RC2-085-005	V		FALSE			392.6	SUM				11.1	SUM									
RC2-086-001	V		FALSE			170.1	CH2			5.40000000000	5.4	SUM									
RC2-086-002	H		FALSE			16.5	CH2			4.5	4.5	SUM									
RC2-086-003	H		FALSE			17.1	CH2			2.2999999999	2.3	SUM									
RC2-086-004	V		FALSE			118.1	CH2			3.3999999999	3.4	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-086-005			FALSE			118.1	CH2			3.39999999999	3.4	SUM									
RC2-086-006	H		FALSE			32.4	CH2			6.60000000000	6.6	SUM									
RC2-086-007	H		FALSE			63.3	CH2			3.5	3.5	SUM									
RC2-086-008	H		FALSE			14.1	CH2			2.29999999999	2.3	SUM									
RC2-086-009	H		FALSE			6.2	CH2			10.1	10.1	SUM									
RC2-087-001	V		FALSE			492.3	SUM				4.5	SUM									
RC2-087-002	H		FALSE			20.2	SUM				1.1	SUM									
RC2-087-003	H		FALSE			16.4	SUM				1.4	SUM									
RC2-087-004	H		FALSE			74.9	SUM				2.9	SUM									
RC2-087-005			FALSE			74.9	SUM				2.9	SUM									
RC2-087-006	H		FALSE			23.9	SUM				2.7	SUM									
RC2-087-007	H		FALSE			36.2	SUM				2.6	SUM									
RC2-087-008	V		FALSE			236.4	SUM				3.4	SUM									
RC2-088-001	V		FALSE			190.9	CH2			0.3/0.5	0.3	CH2	0.5	SUM							
RC2-088-002	V		FALSE			108.9	CH2			0.5/0.8	0.5	CH2	0.8	SUM							
RC2-089-001	V		FALSE			192.8	CH2			10.1999999999	10.2	SUM									
RC2-089-002	H		FALSE			12.3	CH2			9.19999999999	9.2	SUM									
RC2-089-003	H		FALSE			14.5	CH2			10.5	10.5	SUM									
RC2-089-004	H		FALSE			8.4	CH2			4.79999999999	4.8	SUM									
RC2-089-005	H		FALSE			6.2	CH2			5.5	5.5	SUM									
RC2-089-006	H		FALSE			8.8	CH2			2.29999999999	2.3	SUM									
RC2-089-007	H		FALSE			6.6	CH2			4.20000000000	4.2	SUM									
RC2-089-008	V		FALSE			115.3	CH2			2.29999999999	2.3	SUM									
RC2-089-009			FALSE			115.3	CH2			2.29999999999	2.3	SUM									
RC2-089-010	H		FALSE			23.43	CH2			7.60000000000	7.6	SUM									
RC2-090-001	V		FALSE			639.1	SUM				4.2	SUM									
RC2-090-002	V		FALSE			278.3	SUM				3.4	SUM									
RC2-090-003	H		FALSE			7.2	SUM				2.4	SUM									
RC2-090-004	H		FALSE			25.6	SUM				2.3	SUM									
RC2-090-005	H		FALSE			34.3	SUM				3.6	SUM									
RC2-090-006	H		FALSE			37.5	SUM				3.2	SUM									
RC2-090-007	H		FALSE			54.3	SUM				2.4	SUM									
RC2-090-008	H		FALSE			13.5	SUM				4.3	SUM									
RC2-090-009	H		FALSE			74.3	SUM				2.4	SUM									
RC2-090-010	H		FALSE			14.2	SUM				4.2	SUM									
RC2-091-001	V		FALSE			601.4	SUM				11.2	SUM									
RC2-091-002	H		FALSE			28.6	SUM				12.2	SUM									
RC2-091-003	V		FALSE			291.4	SUM				14.1	SUM									
RC2-091-004	H		FALSE			48.7	SUM				11.2	SUM									
RC2-091-005	H		FALSE			36.2	SUM				9.8	SUM									
RC2-091-006	H		FALSE			49.7	SUM				14.9	SUM									
RC2-092-001	V		FALSE			152.1	CH2			2.20000000000	2.2	SUM									
RC2-092-002			FALSE			3.5	CH2			8.09999999999	8.1	SUM									
RC2-092-003	H		FALSE			44.2	CH2			4.59999999999	4.6	SUM									
RC2-092-004			FALSE			9	CH2			9.09999999999	9.1	SUM									
RC2-092-005	H		FALSE			5.2	CH2			10.3000000000	10.3	SUM									
RC2-092-006			FALSE			2.6	CH2			10.7000000000	10.7	SUM									
RC2-092-007	V		FALSE			115.6	CH2			6.40000000000	6.4	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-092-008	H		FALSE			2.5	CH2			8.30000000000	8.3	SUM									
RC2-092-009	H		FALSE			11.1	CH2			7.20000000000	7.2	SUM									
RC2-092-010			FALSE			3.4	CH2			7	7	SUM									
RC2-092-011			FALSE			4.9	CH2			8.59999999999	8.6	SUM									
RC2-093-001	V		FALSE			159.2	CH2			0.7/1.2	0.7	CH2	1.2	SUM							
RC2-093-002	V		FALSE			89.9	CH2			0.3/1.2	0.3	CH2	1.2	SUM							
RC2-094-001	V		FALSE			145.6	CH2			7.10000000000	7.1	SUM									
RC2-094-002	V		FALSE			100.2	CH2			6.10000000000	6.1	SUM									
RC2-094-003	H		FALSE			4.8	CH2			1.2	1.2	SUM									
RC2-095-001	V		FALSE			508.4	SUM				3.2	SUM									
RC2-095-002	H		FALSE			146.2	SUM				3.4	SUM									
RC2-095-003	H		FALSE			401.2	SUM				3.3	SUM									
RC2-095-004			FALSE			401.2	SUM				3.3	SUM									
RC2-095-005	H		FALSE			82.3	SUM				1.9	SUM									
RC2-095-006			FALSE			82.3	SUM				1.9	SUM									
RC2-095-007			FALSE			82.3	SUM				1.9	SUM									
RC2-095-008	V		FALSE			321.4	SUM				2.9	SUM									
RC2-095-009	H		FALSE			174.6	SUM				4.6	SUM									
RC2-097-001	V		FALSE			152.4	CH2			1.5/2.3	1.5	CH2	2.3	SUM							
RC2-097-002	V		FALSE			119.9	CH2			0.2/0.9	0.2	CH2	0.9	SUM							
RC2-097-003	H		FALSE			37.1	CH2			0.2/0.8	0.2	CH2	0.8	SUM							
RC2-098-001	V		FALSE			105.8	CH2				1.7	SUM									
RC2-098-002	V		FALSE			116.9	CH2				1.1	SUM									
RC2-098-003	H		FALSE			49.2	CH2				2.1	SUM									
RC2-099-001	V		FALSE			492.3	SUM				7.2	SUM									
RC2-099-002			FALSE			20.2	SUM				2.1	SUM									
RC2-099-003	H		FALSE			21.6	SUM				1.6	SUM									
RC2-099-004	V		FALSE			329.4	SUM				3.3	SUM									
RC2-099-005	H		FALSE			41.7	SUM				2.1	SUM									
RC2-099-006			FALSE			20.2	SUM				1.2	SUM									
RC2-099-007	H		FALSE			26.7	SUM				4.2	SUM									
RC2-099-008	H		FALSE			33.9	SUM				1.1	SUM									
RC2-102-001	V		FALSE			260.2	CH2			0.7/1.9	0.7	CH2	1.9	SUM							
RC2-102-002	V		FALSE			119.9	CH2			0.2/0.9	0.2	CH2	0.9	SUM							
RC2-102-003			FALSE			119.9	CH2			0.2/0.9	0.2	CH2	0.9	SUM							
RC2-103-001	V		FALSE			826.4	SUM				17.4	SUM									
RC2-103-002	H		FALSE			41.8	SUM				2.9	SUM									
RC2-103-003	H		FALSE			19.4	SUM				1.2	SUM									
RC2-103-004	H		FALSE			106.5	SUM				2.1	SUM									
RC2-103-005	H		FALSE			24.2	SUM				6.4	SUM									
RC2-103-006	H		FALSE			23.5	SUM				7.6	SUM									
RC2-103-007	H		FALSE			20.4	SUM				4.3	SUM									
RC2-103-008	H		FALSE			21.2	SUM				1.3	SUM									
RC2-103-009	V		FALSE			276.2	SUM				2.1	SUM									
RC2-103-010			FALSE			10.8	SUM				10.8	SUM									
RC2-104-001	V		FALSE			406.8	1				6.7	SUM									
RC2-104-002	H		FALSE			33.8	1				1.5	SUM									
RC2-104-003			FALSE			5.4	1				5.4	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-104-004	V		FALSE			318.4	1				4.5	SUM									
RC2-105-001	V		FALSE			597	SUM				4.1	SUM									
RC2-105-002	H		FALSE			18.1	SUM				2.4	SUM									
RC2-105-003	V		FALSE			212.4	SUM				1.7	SUM									
RC2-106-001	H		FALSE			167.4	SUM				9.5	SUM									
RC2-106-002	V		FALSE			415.3	SUM				4.7	SUM									
RC2-106-003	H		FALSE			26.8	SUM				2.9	SUM									
RC2-106-004	H		FALSE			57.4	SUM				3.8	SUM									
RC2-106-005	H		FALSE			63.8	SUM				4.2	SUM									
RC2-106-006	H		FALSE			95.2	SUM				7.3	SUM									
RC2-106-007	H		FALSE			37.8	SUM				7.9	SUM									
RC2-106-008	H		FALSE			50.1	SUM				5.2	SUM									
RC2-106-009	H		FALSE			62.7	SUM				8.1	SUM									
RC2-106-010	H		FALSE			35.3	SUM				5.8	SUM									
RC2-106-011	H		FALSE			38.6	SUM				4.3	SUM									
RC2-106-012	H		FALSE			78.2	SUM				7.3	SUM									
RC2-106-013	H		FALSE			67.4	SUM				5.8	SUM									
RC2-106-014	H		FALSE			183.8	SUM				6.7	SUM									
RC2-106-015	H		FALSE			92.6	SUM				5.4	SUM									
RC2-106-016	H		FALSE			88.1	SUM				3.7	SUM									
RC2-106-017	H		FALSE			41.5	SUM				6.1	SUM									
RC2-106-018	H		FALSE			62.3	SUM				5.6	SUM									
RC2-106-019	H		FALSE			135.2	SUM				4.8	SUM									
RC2-108-001	V		FALSE			846.1	SUM				6.5	SUM									
RC2-108-002	H		FALSE			57.4	SUM				7.3	SUM									
RC2-108-003	H		FALSE			39.6	SUM				9.8	SUM									
RC2-108-004			FALSE			17.9	SUM				17.9	SUM									
RC2-108-005	H		FALSE			84.3	SUM				3.9	SUM									
RC2-108-006	V		FALSE			375	SUM				5.6	SUM									
RC2-108-007	H		FALSE			132.7	SUM				7.2	SUM									
RC2-108-008	H		FALSE			107.9	SUM				6.7	SUM									
RC2-110-001	H		FALSE			601.7	SUM				55.6	SUM									
RC2-110-002	H		FALSE			204.4	SUM				17.3	SUM									
RC2-110-003	H		FALSE			107.2	SUM				16.5	SUM									
RC2-110-004	H		FALSE			90.3	SUM				102.6	SUM									
RC2-110-005	H		FALSE			30.1	SUM				12.5	SUM									
RC2-110-006			FALSE			18.2	SUM				18.2	SUM									
RC2-110-007			FALSE			18.3	SUM				18.3	SUM									
RC2-110-008	H		FALSE			36.2	SUM				13.5	SUM									
RC2-110-009	H		FALSE			47.7	SUM				17.8	SUM									
RC2-110-010	H		FALSE			126.3	SUM				89.2	SUM									
RC2-110-011	H		FALSE			157.8	SUM				17.1	SUM									
RC2-110-012	H		FALSE			85.3	SUM				15.8	SUM									
RC2-110-013	H		FALSE			142.3	SUM				40.1	SUM									
RC2-110-014	V		FALSE			286.3	SUM				5.6	SUM									
RC2-110-015	H		FALSE			73.4	SUM				28.7	SUM									
RC2-110-016	H		FALSE			22.3	SUM				11.2	SUM									
RC2-110-017	H		FALSE			93.4	SUM				12.9	SUM									

Target_ID	Orientation	Inclination	Photo_ Taken	Photo_ filename	Final_ Disposition	Reac_ Response1	Reac_ Response1_ CH	Reac_ Response2	Reac_ Response2_ CH	Post_ Excavation_ Response_ text	Post_ Excavation_ Response1	Post_ Excavation_ Response1_ CH	Post_ Excavation_ Response2	Post_ Excavation_ Response2_ CH	QCStatus	Comments	Acceptance_ Sampling_ Recheck	Acceptance_ Sampling_ PeakResp	Acceptance_ Sampling_ QCStatus	Acceptance_ Sampling_ comments	Depth_to_ Groundwater
RC2-110-018	H		FALSE			169.2	SUM				15.3	SUM									
RC2-110-019	H		FALSE			195.7	SUM				12.1	SUM									
RC2-110-020			FALSE			17.2	SUM				17.2	SUM									
RC2-111-001	V		FALSE			818.1	SUM				3.8	SUM									
RC2-111-002	V		FALSE			362.1	SUM				4.2	SUM									
RC2-111-003	H		FALSE			47.4	SUM				2.3	SUM									
RC2-111-004			FALSE			39.1	SUM					SUM									
RC2-111-005			FALSE			29.2	SUM					SUM									
RC2-112-001			FALSE			599.9	SUM				13.6	SUM									
RC2-112-002			FALSE			8.6	SUM				8.6	SUM									
RC2-112-003	H		FALSE			61.2	SUM				10.7	SUM									
RC2-112-004	V		FALSE			253.2	SUM				7.6	SUM									
RC2-112-005	H		FALSE			35.8	SUM				15.4	SUM									
RC2-112-006	H		FALSE			240.7	SUM				304	SUM									
RC2-112-007	H		FALSE			87.2	SUM				38.6	SUM									
RC2-112-008	H		FALSE			4120.1	SUM				672	SUM									
RC2-112-009	H		FALSE			277.8	SUM				4.2	SUM									
RC2-112-010			FALSE			16.2	SUM				16.2	SUM									
RC2-112-011			FALSE			9.6	SUM				9.6	SUM									
RC2-113-001	H		FALSE			52.3	SUM				5.7	SUM									
RC2-113-002			FALSE			522	SUM				9.2	SUM									
RC2-113-003	H		FALSE			522	SUM				9.2	SUM									
RC2-113-004	H		FALSE			23.1	SUM				3.2	SUM									
RC2-113-005	V		FALSE			413	SUM				3.2	SUM									
RC2-113-006			FALSE			413	SUM				3.2	SUM									
RC2-113-007	H		FALSE			29.2	SUM				6.7	SUM									

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-001-001				8		in							4/16/2013				5175			
ARNG-001-002				2		in							4/16/2013				5176			
ARNG-001-003				4		in							4/16/2013				5177			
ARNG-001-004				4		in							4/16/2013				5178			
ARNG-001-005				2		in							4/16/2013				5179			
ARNG-001-006				4		in							4/16/2013				5180			
ARNG-001-007				3		in						Seed-027	4/16/2013				5181			
ARNG-001-008				4		in							4/16/2013				5182			
ARNG-001-009				4		in							4/16/2013				5183			
ARNG-001-010				4		in							4/16/2013				5184			
ARNG-001-011				6		in							4/16/2013				5185			
ARNG-001-012				5		in							4/16/2013				5186			
ARNG-002-001				4		in							4/8/2013				4017			MD
ARNG-002-002				3		in							4/8/2013				4018			MD
ARNG-002-003				4		in							4/8/2013				4019			MD
ARNG-002-004				4		in							4/8/2013				4020			MD
ARNG-002-005				4		in							4/8/2013				4021			MD
ARNG-002-006				3		in							4/8/2013				4022			MD
ARNG-002-007				4		in							4/8/2013				4023			MD
ARNG-002-008				4		in						Seed-017	4/8/2013				4024			MD, SEED
ARNG-002-009				6		in							4/8/2013				4025			MD
ARNG-002-010				6		in							4/8/2013				4026			MD
ARNG-002-011				4		in							4/8/2013				4027			MD
ARNG-002-012				7		in							4/8/2013				4028			MD
ARNG-002-013				5		in							4/8/2013				4029			MD
ARNG-002-014				7		in							4/8/2013				4030			MD
ARNG-002-015				4		in							4/8/2013				4031			MD
ARNG-003-001				8		in							4/18/2013				6026			
ARNG-003-002				48		in							4/18/2013				6027			
ARNG-003-003				4		in							4/18/2013				6028			
ARNG-003-004				32		in							4/18/2013				6029			
ARNG-003-005				2		in							4/18/2013				6030			
ARNG-003-006				6		in							4/18/2013				6031			
ARNG-003-007				3		in							4/18/2013				6032			
ARNG-003-008				3		in							4/18/2013				6033			
ARNG-003-009				2		in							4/18/2013				6034			
ARNG-003-010				3		in						Seed-060	4/18/2013				6035			
ARNG-003-011						in							4/18/2013				6036			
ARNG-003-012				4		in							4/18/2013				6037			
ARNG-003-013				4		in							4/18/2013				6038			
ARNG-003-014				3		in							4/18/2013				6039			
ARNG-004-001				7		in							5/8/2013				8999			
ARNG-004-002				1		in							5/8/2013				9000			
ARNG-004-003				6		in							5/8/2013				9001			
ARNG-004-004				2		in							5/8/2013				9002			
ARNG-004-005				2		in							5/8/2013				9003			
ARNG-004-006				2		in							5/8/2013				9004			
ARNG-004-007				5		in							5/8/2013				9005			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-004-008				4		in							5/8/2013				9006			
ARNG-004-009				3		in						Seed-069	5/8/2013				9007			
ARNG-004-010				4		in							5/8/2013				9008			
ARNG-004-011				4		in							5/8/2013				9009			
ARNG-004-012				4		in							5/8/2013				9010			
ARNG-004-013				2		in							5/8/2013				9011			
ARNG-004-014				3		in							5/8/2013				9012			
ARNG-004-015				5		in							5/8/2013				9013			
ARNG-004-016				4		in							5/8/2013				9014			
ARNG-004-017				1		in							5/8/2013				9015			
ARNG-004-018				1		in							5/8/2013				9016			
ARNG-004-019				4		in							5/8/2013				9017			
ARNG-004-020						in							5/8/2013				9018			
ARNG-004-021				4		in							5/8/2013				9019			
ARNG-004-022				1		in							5/8/2013				9020			
ARNG-004-023				1		in							5/8/2013				9021			
ARNG-004-024				6		in							5/8/2013				9022			
ARNG-004-025				6		in							5/8/2013				9023			
ARNG-004-026				1		in							5/8/2013				9024			
ARNG-004-027				3		in							5/8/2013				9025			
ARNG-004-028				3		in							5/8/2013				9026			
ARNG-004-029				3		in							5/8/2013				9027			
ARNG-004-030				3.5		in							5/8/2013				9028			
ARNG-004-031				5		in							5/8/2013				9029			
ARNG-004-032				4		in							5/8/2013				9030			
ARNG-004-033				4		in							5/8/2013				9031			
ARNG-004-034				4		in							5/8/2013				9032			
ARNG-004-035				4		in							5/8/2013				9033			
ARNG-004-036				6		in							5/8/2013				9034			
ARNG-004-037				6		in							5/8/2013				9035			
ARNG-004-038				3		in							5/8/2013				9036			
ARNG-004-039				4		in							5/8/2013				9037			
ARNG-004-040				5		in							5/8/2013				9038			
ARNG-005-001				8		in							4/16/2013				5201			
ARNG-005-002				16		in							4/16/2013				5202			
ARNG-005-003				4		in							4/16/2013				5203			
ARNG-005-004				3		in						Seed-023	4/16/2013				5204			
ARNG-005-005				9		in							4/16/2013				5205			
ARNG-005-006				2		in							4/16/2013				5206			
ARNG-005-007				4		in							4/16/2013				5207			
ARNG-005-008				4		in							4/16/2013				5208			
ARNG-005-009				5		in							4/16/2013				5209			
ARNG-005-010				4		in							4/16/2013				5210			
ARNG-005-011				3		in							4/16/2013				5211			
ARNG-005-012				4		in							4/16/2013				5212			
ARNG-006-001				2		in							4/16/2013				5187			
ARNG-006-002				8		in							4/16/2013				5188			
ARNG-006-003				2		in							4/16/2013				5189			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-006-004				1		in							4/16/2013				5190			
ARNG-006-005				2		in							4/16/2013				5191			
ARNG-006-006				3		in							4/16/2013				5192			
ARNG-006-007				4		in							4/16/2013				5193			
ARNG-006-008				1		in							4/16/2013				5194			
ARNG-006-009				3		in							4/16/2013				5195			
ARNG-006-010				3		in						Seed-025	4/16/2013				5196			
ARNG-006-011				3		in							4/16/2013				5197			
ARNG-006-012				2		in							4/16/2013				5198			
ARNG-006-013				2		in							4/16/2013				5199			
ARNG-006-014				3		in							4/16/2013				5200			
ARNG-007-001				8		in							4/16/2013				5213			
ARNG-007-002				3		in							4/16/2013				5214			
ARNG-007-003				4		in							4/16/2013				5215			
ARNG-007-004				5		in							4/16/2013				5216			
ARNG-007-005				1.5		in							4/16/2013				5217			
ARNG-007-006				5		in							4/16/2013				5218			
ARNG-007-007				3		in						Seed-039	4/16/2013				5219			
ARNG-007-008				4		in							4/16/2013				5220			
ARNG-007-009				3		in							4/16/2013				5221			
ARNG-007-010				4		in							4/16/2013				5222			
ARNG-007-011				4		in							4/16/2013				5223			
ARNG-008-001				4		in							3/29/2013				2520			MD
ARNG-008-002				5		in							3/29/2013				2521			MD
ARNG-008-003				3		in						Seed-051	3/29/2013				2522			SEED, MD
ARNG-008-004				2		in							3/29/2013				2523			MD
ARNG-008-005						in							3/29/2013				2524			SEED, MD
ARNG-008-006				5		in							3/29/2013				2525			MD
ARNG-008-007				5		in							3/29/2013				2526			MD
ARNG-008-008				4		in							3/29/2013				2527			MD
ARNG-009-001				4		in							3/29/2013				2528			MD
ARNG-009-002				2		in							3/29/2013				2529			MD
ARNG-009-003				3		in							3/29/2013				2530			MD
ARNG-009-004				4		in						Seed-040	3/29/2013				2531			SEED, MD
ARNG-009-005				5		in							3/29/2013				2532			MD
ARNG-009-006				3		in							3/29/2013				2533			MD
ARNG-009-007				5		in							3/29/2013				2534			MD
ARNG-009-008				3		in							3/29/2013				2535			MD
ARNG-009-009				2		in							3/29/2013				2536			MD
ARNG-009-010				3		in							3/29/2013				2537			MD
ARNG-009-011				4		in							3/29/2013				2538			MD
ARNG-010-001				1.5		in							4/3/2013				3273			MD
ARNG-010-002				2		in							4/3/2013				3274			MD
ARNG-010-003				3		in						Seed-041	4/3/2013				3275			SEED
ARNG-010-004				2		in							4/3/2013				3276			MD
ARNG-010-005				3		in							4/3/2013				3277			MD
ARNG-010-006				3		in							4/3/2013				3278			MD
ARNG-010-007						in							4/3/2013				3279			MD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-010-008				3		in							4/3/2013				3280			MD
ARNG-010-009						in							4/3/2013				3281			MD
ARNG-010-010				3		in							4/3/2013				3282			MD
ARNG-010-011				3		in							4/3/2013				3283			MD
ARNG-010-012				14		in							4/3/2013				3284			MD
ARNG-010-013						in							4/3/2013				3285			MD
ARNG-011-001				15		in							3/29/2013				2388			CD
ARNG-011-002				18		in							3/29/2013				2389			CD
ARNG-011-003				1		in							3/29/2013				2390			CD, MD
ARNG-011-004				9		in							3/29/2013				2391			CD
ARNG-011-005				5		in							3/29/2013				2392			CD
ARNG-011-006				3		in							3/29/2013				2393			CD
ARNG-011-007				18		in							3/29/2013				2394			CD
ARNG-011-008				24		in							3/29/2013				2395			CD
ARNG-011-009				4		in							3/29/2013				2396			CD
ARNG-011-010				6		in							3/29/2013				2397			CD
ARNG-011-011				1		in							3/29/2013				2398			CD
ARNG-011-012				1		in							3/29/2013				2399			CD
ARNG-011-013				12		in							3/29/2013				2400			CD
ARNG-011-014				4		in							3/29/2013				2401			CD
ARNG-011-015				4		in							3/29/2013				2402			CD, MD
ARNG-011-016						in							3/29/2013				2403			CD
ARNG-011-017				24		in							3/29/2013				2404			CD
ARNG-011-018				18		in							3/29/2013				2405			CD
ARNG-011-019				3		in							3/29/2013				2406			CD, MD
ARNG-011-020				8		in							3/29/2013				2407			CD
ARNG-011-021				15		in							3/29/2013				2408			CD
ARNG-011-022				5		in							3/29/2013				2409			CD
ARNG-011-023				4		in							3/29/2013				2410			CD
ARNG-011-024				6		in							3/29/2013				2411			CD, MD
ARNG-011-025				25		in							3/29/2013				2412			CD
ARNG-011-026				12		in							3/29/2013				2413			CD, MD
ARNG-011-027				3		in							3/29/2013				2414			MD
ARNG-011-028				6		in							3/29/2013				2415			CD, MD
ARNG-011-029				3		in							3/29/2013				2416			CD
ARNG-011-030				12		in							3/29/2013	1			2417			OTHER
ARNG-011-031				3		in							3/29/2013				2418			CD
ARNG-011-032				1		in							3/29/2013				2419			MD
ARNG-011-033						in							3/29/2013				2420	1	41381.653472	CD, MD
ARNG-011-034				5		in							3/29/2013				2421			CD
ARNG-011-035				3		in							3/29/2013				2422			MD
ARNG-011-036				3		in							3/29/2013				2423			CD, MD
ARNG-011-037				24		in							3/29/2013				2424			CD
ARNG-011-038				5		in							3/29/2013				2425			CD, MD
ARNG-011-039				5		in							3/29/2013				2426			CD
ARNG-011-040				3		in							3/29/2013				2427			MD
ARNG-011-041				12		in							3/29/2013				2428			CD
ARNG-011-042				5		in						Seed-073	3/29/2013				2429			SEED

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-011-043				9		in							3/29/2013				2430	1	41375.801389	MEC
ARNG-011-044				5		in							3/29/2013				2431			MD
ARNG-011-045				24		in							3/29/2013				2432			CD
ARNG-011-046				13		in							3/29/2013				2433			CD
ARNG-012-001				8		in							4/16/2013				5933			
ARNG-012-002				4		in							4/16/2013				5934			
ARNG-012-003				3		in						Seed-028	4/16/2013				5935			
ARNG-012-004				2		in							4/16/2013				5936			
ARNG-012-005				2		in							4/16/2013				5937			
ARNG-012-006				8		in							4/16/2013				5938			
ARNG-012-007				4		in							4/16/2013				5939			
ARNG-012-008				3		in							4/16/2013				5940			
ARNG-012-009				2		in							4/16/2013				5941			
ARNG-012-010				4		in							4/16/2013				5942			
ARNG-012-011				4		in							4/16/2013				5943			
ARNG-012-012				3		in							4/16/2013				5944			
ARNG-012-013				2.5		in							4/16/2013				5945			
ARNG-012-014				5		in							4/16/2013				5946			
ARNG-012-015				3		in							4/16/2013				5947			
ARNG-012-016				5		in							4/16/2013				5948			
ARNG-013-001				6		in							5/8/2013				9039			
ARNG-013-002				7		in							5/8/2013				9040			
ARNG-013-003				3		in							5/8/2013				9041			
ARNG-013-004				4		in							5/8/2013				9042			
ARNG-013-005				25		in							5/8/2013				9043			
ARNG-013-006				6		in							5/8/2013				9044			
ARNG-013-007				1		in							5/8/2013				9045			
ARNG-013-008				6		in							5/8/2013				9046			
ARNG-013-009				2		in							5/8/2013				9047			
ARNG-013-010				1		in							5/8/2013				9048			
ARNG-013-011				3		in							5/8/2013				9049			
ARNG-013-012				5		in							5/8/2013				9050			
ARNG-013-013						in							5/8/2013				9051			
ARNG-013-014				4		in							5/8/2013				9052			
ARNG-013-015				2.5		in							5/8/2013				9053			
ARNG-013-016				3		in							5/8/2013				9054			
ARNG-013-017				2.5		in							5/8/2013				9055			
ARNG-013-018				3		in							5/8/2013				9056			
ARNG-013-019				3		in							5/8/2013				9057			
ARNG-013-020				4		in							5/8/2013				9058			
ARNG-013-021				2.5		in							5/8/2013				9059			
ARNG-013-022				6		in							5/8/2013				9060			
ARNG-013-023				4		in							5/8/2013				9061			
ARNG-013-024				0.5		in							5/8/2013				9062			
ARNG-013-025				3		in						Seed-024	5/8/2013				9063			
ARNG-013-026				1		in							5/8/2013				9064			
ARNG-014-001				3		in							4/8/2013				4032			CD
ARNG-014-002				5		in							4/8/2013				4033			MD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-014-003				13		in							4/8/2013				4034			MD
ARNG-014-004				2		in							4/8/2013				4035			MD
ARNG-014-005				5		in							4/8/2013				4036			MD
ARNG-014-006				5		in							4/8/2013				4037			MD
ARNG-014-007				4		in							4/8/2013				4038			MD
ARNG-014-008				4		in							4/8/2013				4039			MD
ARNG-014-009				4		in							4/8/2013				4040			MD
ARNG-014-010				3		in							4/8/2013				4041			MD
ARNG-014-011				4		in							4/8/2013				4042			MD
ARNG-014-012				1		in							4/8/2013				4043			MD
ARNG-014-013				4		in							4/8/2013				4044			MD
ARNG-014-014				5		in							4/8/2013				4045			MD
ARNG-014-015				3		in							4/8/2013				4046			MD
ARNG-014-016				4		in							4/8/2013				4047	1	41381.649306	MD
ARNG-014-017				6		in							4/8/2013				4048			MD, CD
ARNG-014-018				12		in							4/8/2013				4049			MEC
ARNG-014-019				4		in							4/8/2013				4050			MD
ARNG-014-020				3		in						Seed-033	4/8/2013				4051			SEED
ARNG-015-001				2		in							3/29/2013				2539			MD
ARNG-015-002				6		in							3/29/2013				2540			MD
ARNG-015-003				6		in							3/29/2013				2541			MD
ARNG-015-004				2		in							3/29/2013				2542			MD
ARNG-015-005				5		in							3/29/2013				2543			MD
ARNG-015-006				3		in							3/29/2013				2544			MD
ARNG-015-007				7		in							3/29/2013				2545			MD
ARNG-015-008						in							3/29/2013				2546			MD
ARNG-015-009				1.5		in							3/29/2013				2547			MD
ARNG-015-010				4		in							3/29/2013				2548			MD, CD
ARNG-015-011				1		in							3/29/2013				2549			MD
ARNG-015-012				3		in						Seed-083	3/29/2013				2550			SEED
ARNG-015-013				16		in							3/29/2013				2551			MD, CD
ARNG-015-014				2		in							3/29/2013				2552			MD
ARNG-016-001				4		in							4/8/2013				4232			MD
ARNG-016-002				5		in							4/8/2013				4233			MD
ARNG-016-003				5		in							4/8/2013				4234			MD
ARNG-016-004				4		in							4/8/2013				4235			MD
ARNG-016-005				3		in							4/8/2013				4236			MD
ARNG-016-006				3		in						Seed-020	4/8/2013				4237			SEED
ARNG-016-007				3		in							4/8/2013				4238			MD
ARNG-016-008				3		in							4/8/2013				4239			MD
ARNG-016-009				6		in							4/8/2013				4240			MD
ARNG-016-010				5		in							4/8/2013				4241			MD
ARNG-016-011				4		in							4/8/2013				4242			MD
ARNG-016-012				5		in							4/8/2013				4243			MD
ARNG-016-013				3		in							4/8/2013				4244			MD
ARNG-016-014				4		in							4/8/2013				4245			MD
ARNG-016-015				4		in							4/8/2013				4246			MD
ARNG-016-016				5		in							4/8/2013				4247			MD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-016-017				5		in							4/8/2013				4248			MD
ARNG-016-018				7		in							4/8/2013				4249			MD
ARNG-017-001				3		in							4/3/2013				3256			MD
ARNG-017-002				1		in							4/3/2013				3257			MD
ARNG-017-003				3.5		in							4/3/2013				3258			MD
ARNG-017-004						in						Seed-030	4/3/2013				3259			SEED
ARNG-017-005				3		in							4/3/2013				3260			SEED
ARNG-017-006				4		in							4/3/2013				3261			MD
ARNG-017-007				3		in							4/3/2013				3262			MD
ARNG-017-008				5		in							4/3/2013				3263			MD
ARNG-017-009				2		in							4/3/2013				3264			MD
ARNG-017-010				5		in							4/3/2013				3265			MD
ARNG-017-011				1.5		in							4/3/2013				3266			MD
ARNG-017-012				7		in							4/3/2013				3267			MD
ARNG-017-013						in							4/3/2013				3268			MD
ARNG-017-014				5		in							4/3/2013				3269			MD
ARNG-017-015				5		in							4/3/2013				3270			MD
ARNG-017-016				3.5		in							4/3/2013				3271			MD
ARNG-017-017				4		in							4/3/2013				3272			MD
ARNG-018-001				3		in							3/29/2013				2553			MD
ARNG-018-002				1.5		in							3/29/2013				2554			MD
ARNG-018-003				3		in						Seed-048	3/29/2013				2555			SEED
ARNG-018-004				13		in							3/29/2013				2556			CD, MD
ARNG-018-005				15		in							3/29/2013				2557			CD, MD
ARNG-018-006				7		in							3/29/2013				2558			CD
ARNG-018-007				7		in							3/29/2013				2559			MD
ARNG-018-008				3		in							3/29/2013				2560			MD
ARNG-018-009				2		in							3/29/2013				2561			MD
ARNG-018-010				1		in							3/29/2013				2562			MD
ARNG-018-011				3		in							3/29/2013				2563			CD, MD
ARNG-018-012				2		in							3/29/2013				2564			MD
ARNG-019-001				4		in							4/11/2013				4675			MD
ARNG-019-002				3		in							4/11/2013				4676			MD
ARNG-019-003				6		in							4/11/2013				4677			MD
ARNG-019-004				3		in							4/11/2013				4678			MD
ARNG-019-005				2		in							4/11/2013				4679			MD
ARNG-019-006				1		in							4/11/2013				4680			MD
ARNG-019-007				6		in							4/11/2013				4681			MD
ARNG-019-008				6		in							4/11/2013				4682			MD
ARNG-019-009				4		in							4/11/2013				4683			MD
ARNG-019-010				5		in							4/11/2013				4684			MD
ARNG-019-011				3		in						Seed-043	4/11/2013				4685			SEED
ARNG-019-012				3		in							4/11/2013				4686			MD
ARNG-019-013				6		in							4/11/2013				4687			MD
ARNG-019-014				6		in							4/11/2013				4688			MD
ARNG-019-015				4		in							4/11/2013				4689			MD
ARNG-019-016				5		in							4/11/2013				4690			MD
ARNG-019-017				5		in							4/11/2013				4691			MD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-019-018				10		in							4/11/2013				4692			MD
ARNG-019-019				2		in							4/11/2013				4693			MD
ARNG-019-020						in							4/11/2013	1			4694			OT
ARNG-020-001				8		in							4/16/2013				5906			
ARNG-020-002				2		in							4/16/2013				5907			
ARNG-020-003				2		in							4/16/2013				5908			
ARNG-020-004				3		in							4/16/2013				5909			
ARNG-020-005				5		in							4/16/2013				5910			
ARNG-020-006				4		in							4/16/2013				5911			
ARNG-020-007				3		in							4/16/2013				5912			
ARNG-020-008				3		in							4/16/2013				5913			
ARNG-020-009				2		in							4/16/2013				5914			
ARNG-020-010				5		in							4/16/2013				5915			
ARNG-020-011				3		in							4/16/2013				5916			
ARNG-020-012				2		in							4/16/2013				5917			
ARNG-020-013				2		in							4/16/2013				5918			
ARNG-020-014				4		in							4/16/2013				5919			
ARNG-020-015				3		in							4/16/2013				5920			
ARNG-020-016				3		in						Seed-006	4/16/2013				5921			
ARNG-020-017				2		in							4/16/2013				5922			
ARNG-020-018				2		in							4/16/2013				5923			
ARNG-020-019				2		in							4/16/2013				5924			
ARNG-020-020				5		in							4/16/2013				5925			
ARNG-020-021				3		in							4/16/2013				5926			
ARNG-020-022				3		in							4/16/2013				5927			
ARNG-020-023				3		in							4/16/2013				5928			
ARNG-020-024				3		in							4/16/2013				5929			
ARNG-020-025				5		in							4/16/2013				5930			
ARNG-020-026				3		in							4/16/2013				5931			
ARNG-020-027				4		in							4/16/2013				5932			
ARNG-021-001				8		in							4/18/2013				6006			
ARNG-021-002				8		in							4/18/2013				6007			
ARNG-021-003				7		in							4/18/2013				6008			
ARNG-021-004				3		in						Seed-022	4/18/2013				6009			
ARNG-021-005				4		in							4/18/2013				6010			
ARNG-021-006				4		in							4/18/2013				6011			
ARNG-021-007				2		in							4/18/2013				6012			
ARNG-021-008				3		in							4/18/2013				6013			
ARNG-021-009				3		in							4/18/2013				6014			
ARNG-021-010				4		in							4/18/2013				6015			
ARNG-021-011				5		in							4/18/2013				6016			
ARNG-021-012				2		in							4/18/2013				6017			
ARNG-021-013				3		in							4/18/2013				6018			
ARNG-021-014				3		in							4/18/2013				6019			
ARNG-021-015				4		in							4/18/2013				6020			
ARNG-021-016				3		in							4/18/2013				6021			
ARNG-021-017				4		in							4/18/2013				6022			
ARNG-021-018				4		in							4/18/2013				6023			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-021-019				8		in							4/18/2013				6024			
ARNG-021-020				3		in							4/18/2013				6025			
ARNG-022-001				2		in							3/29/2013				2434			MD
ARNG-022-002				3		in						Seed-050	3/29/2013				2435			SEED
ARNG-022-003						in							3/29/2013				2436			MD
ARNG-022-004				6		in							3/29/2013				2437			CD
ARNG-022-005				5		in							3/29/2013				2438			MD
ARNG-022-006				1		in							3/29/2013				2439			MD
ARNG-022-007				3		in							3/29/2013				2440			MD
ARNG-022-008						in							3/29/2013				2441			MD
ARNG-022-009				3		in							3/29/2013				2442			MD
ARNG-022-010				4		in							3/29/2013				2443			MD
ARNG-022-011				6		in							3/29/2013				2444			MD
ARNG-022-012				5		in							3/29/2013				2445			MD
ARNG-022-013						in							3/29/2013				2446			MD
ARNG-022-014				2		in							3/29/2013				2447			MD
ARNG-022-015				2		in							3/29/2013				2448			MD
ARNG-022-016				2		in							3/29/2013				2449			MD
ARNG-022-017				1		in							3/29/2013				2450			MD
ARNG-022-018				2		in							3/29/2013				2451			MD
ARNG-022-019						in							3/29/2013				2452			MD
ARNG-022-020				6		in							3/29/2013				2453			MD
ARNG-022-021				3		in							3/29/2013				2454			MD
ARNG-023-001				8		in							4/12/2013				5153	1	41381.654167	
ARNG-023-002				6		in							4/12/2013				5154			
ARNG-023-003				3		in							4/12/2013				5155			
ARNG-023-004				3		in						Seed-079	4/12/2013				5156			
ARNG-023-005				3		in							4/12/2013				5157			
ARNG-023-006				3		in							4/12/2013				5158			
ARNG-023-007				2		in							4/12/2013				5159			
ARNG-023-008				3		in							4/12/2013				5160			
ARNG-023-009				1.5		in							4/12/2013				5161			
ARNG-023-010				2		in							4/12/2013				5162			
ARNG-023-011				6		in							4/12/2013				5163			
ARNG-023-012				4		in							4/12/2013				5164			
ARNG-023-013				0		in							4/12/2013	1			5165			
ARNG-023-014				2		in							4/12/2013				5166			
ARNG-023-015				1		in							4/12/2013				5167			
ARNG-023-016				2		in							4/12/2013				5168			
ARNG-023-017				3		in							4/12/2013				5169			
ARNG-023-018				0		in							4/12/2013	1			5170			
ARNG-023-019				3		in							4/12/2013				5171			
ARNG-023-020				2.5		in							4/12/2013				5172			
ARNG-023-021				2		in							4/12/2013				5173			
ARNG-024-001				3		in							4/11/2013				4666			MD
ARNG-024-002				1.5		in							4/11/2013				4667			MD
ARNG-024-003				6		in							4/11/2013				4668			MD
ARNG-024-004				6		in							4/11/2013				4669			OT

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-024-005				2		in							4/11/2013				4670			MD
ARNG-024-006				1		in							4/11/2013				4671			MD
ARNG-024-007				3		in						Seed-038	4/11/2013				4672			SEED
ARNG-024-008				3		in							4/11/2013				4673			CD
ARNG-024-009				4		in							4/11/2013				4674			CD
ARNG-025-001				2		in							4/22/2013				6553			
ARNG-025-002				7		in							4/22/2013				6554			
ARNG-025-003				25		in							4/22/2013				6555			
ARNG-025-004				36		in							4/22/2013				6556			
ARNG-025-005				15		in							4/22/2013				6557			
ARNG-025-006				4		in							4/22/2013				6558			
ARNG-025-007				12		in							4/22/2013				6559			
ARNG-025-008				18		in							4/22/2013				6560			
ARNG-025-009				18		in							4/22/2013				6561			
ARNG-025-010				8		in							4/22/2013				6562			
ARNG-025-011				4		in							4/22/2013				6563			
ARNG-025-012				5		in							4/22/2013				6564			
ARNG-025-013				5		in							4/22/2013				6565			
ARNG-025-014				19		in							4/22/2013				6566			
ARNG-025-015				3		in							4/22/2013				6567			
ARNG-025-016				2		in							4/22/2013				6568			
ARNG-025-017				2		in							4/22/2013				6569			
ARNG-025-018				5		in							4/22/2013				6570			
ARNG-025-019				2		in							4/22/2013				6571			
ARNG-025-020				8		in							4/22/2013				6572			
ARNG-025-021				8		in							4/22/2013				6573			
ARNG-025-022				25		in							4/22/2013				6574			
ARNG-025-023				2		in							4/22/2013				6575			
ARNG-025-024				4		in							4/22/2013				6576			
ARNG-025-025				6		in							4/22/2013				6577			
ARNG-025-026				5		in							4/22/2013				6578			
ARNG-025-027				22		in							4/22/2013				6579			
ARNG-025-028				24		in							4/22/2013				6580			
ARNG-025-029				4		in							4/22/2013				6581			
ARNG-025-030				3		in						Seed-090	4/22/2013				6582			
ARNG-025-031				4		in							4/22/2013				6583			
ARNG-025-032				3		in							4/22/2013				6584			
ARNG-025-033				2		in							4/22/2013				6585			
ARNG-025-034				24		in							4/22/2013				6586			
ARNG-025-035				2		in							4/22/2013				6587			
ARNG-025-036				4		in							4/22/2013				6588			
ARNG-025-037				3		in							4/22/2013				6589			
ARNG-025-038				5		in							4/22/2013				6590			
ARNG-025-039				24		in							4/22/2013				6591			
ARNG-025-040				24		in							4/22/2013				6592			
ARNG-025-041				3		in							4/22/2013				6593			
ARNG-025-042				3		in							4/22/2013				6594			
ARNG-026-001				2		in							4/16/2013				5949			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-026-002				4		in							4/16/2013				5950			
ARNG-026-003				3		in							4/16/2013				5951			
ARNG-026-004				4		in							4/16/2013				5952			
ARNG-026-005				4		in							4/16/2013				5953			
ARNG-026-006				4		in							4/16/2013				5954			
ARNG-026-007				3		in							4/16/2013				5955			
ARNG-026-008				2		in							4/16/2013				5956			
ARNG-026-009				1.5		in							4/16/2013				5957			
ARNG-026-010				3		in							4/16/2013				5958			
ARNG-026-011				4		in							4/16/2013				5959			
ARNG-026-012				6		in							4/16/2013				5960			
ARNG-026-013				2		in							4/16/2013				5961			
ARNG-026-014				2		in							4/16/2013				5962			
ARNG-026-015				6		in							4/16/2013				5963			
ARNG-026-016				2		in							4/16/2013				5964			
ARNG-026-017				5		in							4/16/2013				5965			
ARNG-026-018				1		in							4/16/2013				5966			
ARNG-026-019				3		in						Seed-091	4/16/2013				5967			
ARNG-026-020				3		in							4/16/2013				5968			
ARNG-026-021				6		in							4/16/2013				5969			
ARNG-026-022				3		in							4/16/2013				5970			
ARNG-026-023				3		in							4/16/2013				5971			
ARNG-026-024				2		in							4/16/2013				5972			
ARNG-026-025				4		in							4/16/2013				5973			
ARNG-026-026				3		in							4/16/2013				5974			
ARNG-026-027				3		in							4/16/2013				5975			
ARNG-026-028				3		in							4/16/2013				5976			
ARNG-026-029				4		in							4/16/2013				5977			
ARNG-026-030				2.5		in							4/16/2013				5978			
ARNG-026-031				2.5		in							4/16/2013				5979			
ARNG-026-032				3		in							4/16/2013				5980			
ARNG-026-033				4		in							4/16/2013				5981			
ARNG-027-001				2		in							4/3/2013				3220			CD
ARNG-027-002				18		in							4/3/2013				3221			CD
ARNG-027-003				2		in							4/3/2013				3222			CD
ARNG-027-004				2		in							4/3/2013				3223			CD
ARNG-027-005				5		in							4/3/2013				3224			CD
ARNG-027-006				3		in						Seed-016	4/3/2013				3225			SEED
ARNG-027-007				3		in							4/3/2013				3226			CD
ARNG-027-008				24		in							4/3/2013				3227			CD
ARNG-027-009				48		in							4/3/2013				3228			CD
ARNG-027-010				4		in							4/3/2013				3229			CD
ARNG-027-011				4		in							4/3/2013				3230			CD
ARNG-027-012				36		in							4/3/2013				3231			CD
ARNG-027-013				2		in							4/3/2013				3232			CD
ARNG-027-014				6		in							4/3/2013				3233			CD
ARNG-027-015				2		in							4/3/2013				3234			CD
ARNG-027-016				5		in							4/3/2013				3235			CD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-027-017				5		in							4/3/2013				3236			CD
ARNG-027-018				2		in							4/3/2013				3237			CD
ARNG-027-019				2		in							4/3/2013				3238			CD
ARNG-027-020				8		in							4/3/2013				3239			CD
ARNG-027-021				7		in							4/3/2013				3240			CD
ARNG-027-022				5		in							4/3/2013				3241			CD
ARNG-027-023				2		in							4/3/2013				3242			CD
ARNG-027-024				2		in							4/3/2013				3243			CD
ARNG-027-025				2		in							4/3/2013				3244			CD
ARNG-027-026				18		in							4/3/2013				3245			CD
ARNG-027-027				6		in							4/3/2013				3246			CD
ARNG-027-028				4		in							4/3/2013				3247			CD
ARNG-027-029				4		in							4/3/2013				3248			CD
ARNG-027-030				3		in							4/3/2013				3249			CD
ARNG-027-031				18		in							4/3/2013				3250			CD
ARNG-027-032				4		in							4/3/2013				3251			CD
ARNG-027-033				8		in							4/3/2013				3252			CD
ARNG-027-034				2		in							4/3/2013				3253			CD
ARNG-027-035				3		in							4/3/2013				3254			CD
ARNG-027-036				6		in							4/3/2013				3255			CD
ARNG-028-001				5		in							4/11/2013				4650			MD
ARNG-028-002				6		in							4/11/2013				4651			MD
ARNG-028-003				5		in							4/11/2013				4652			MD
ARNG-028-004				2		in							4/11/2013				4653			MD
ARNG-028-005				3		in							4/11/2013				4654			MD
ARNG-028-006				6		in							4/11/2013				4655			MD
ARNG-028-007				2		in							4/11/2013				4656			MD
ARNG-028-008				1		in							4/11/2013				4657			MD
ARNG-028-009				3		in							4/11/2013				4658			MD
ARNG-028-010				12		in							4/11/2013				4659			MD
ARNG-028-011				3		in							4/11/2013				4660			MD
ARNG-028-012				6		in							4/11/2013				4661			MD
ARNG-028-013				6		in							4/11/2013				4662			MD
ARNG-028-014				3		in						Seed-061	4/11/2013				4663			SEED
ARNG-028-015				4		in							4/11/2013				4664			MD
ARNG-028-016				4		in							4/11/2013				4665			MD
ARNG-029-001				1		in							4/4/2013				3550			CD
ARNG-029-002				4		in							4/4/2013				3551			MD
ARNG-029-003				5		in							4/4/2013				3552			MD
ARNG-029-004				5		in							4/4/2013				3553			MD
ARNG-029-005				3		in							4/4/2013				3554			MD
ARNG-029-006				3		in							4/4/2013				3555			MD
ARNG-029-007				6		in							4/4/2013				3556			MD
ARNG-029-008				4		in							4/4/2013				3557			MD
ARNG-029-009				1		in							4/4/2013				3558			MD
ARNG-029-010				4		in							4/4/2013				3559			MD
ARNG-029-011				3		in							4/4/2013				3560			MD
ARNG-029-012				6		in							4/4/2013				3561			MD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-029-013				1		in							4/4/2013				3562			MD
ARNG-029-014				3.5		in							4/4/2013				3563			MD
ARNG-029-015				4		in							4/4/2013				3564			MD
ARNG-029-016				2		in							4/4/2013				3565			MD
ARNG-029-017				3		in							4/4/2013				3566			MD
ARNG-029-018				2		in							4/4/2013				3567			MD
ARNG-029-019				1		in							4/4/2013				3568			MD
ARNG-029-020				2		in						Seed-071	4/4/2013				3569			MD, SEED
ARNG-029-021				2		in							4/4/2013				3570			MD, SEED
ARNG-029-022						in							4/4/2013				3571			
ARNG-029-023				6		in							4/4/2013				3572	1	41381.654861	MD
ARNG-029-024				1		in							4/4/2013				3573			MD
ARNG-029-025				2		in							4/4/2013				3574			MD
ARNG-029-026				1		in							4/4/2013				3575			MD
ARNG-029-027				2		in							4/4/2013				3576			MD
ARNG-029-028				3		in							4/4/2013				3577			MD
ARNG-030-001				3		in						Seed-075	5/8/2013				9065			
ARNG-030-002				1		in							5/8/2013				9066			
ARNG-030-003				4		in							5/8/2013				9067			
ARNG-030-004				4		in							5/8/2013				9068			
ARNG-030-005				5		in							5/8/2013				9069			
ARNG-030-006				3		in							5/8/2013				9070			
ARNG-030-007				5		in							5/8/2013				9071			
ARNG-030-008				12		in							5/8/2013				9072			
ARNG-030-009				5		in							5/8/2013				9073			
ARNG-030-010				7		in							5/8/2013				9074			
ARNG-030-011				8		in							5/8/2013				9075			
ARNG-030-012				0.5		in							5/8/2013				9076			
ARNG-030-013				6		in							5/8/2013				9077			
ARNG-030-014				3		in							5/8/2013				9078			
ARNG-030-015				5		in							5/8/2013				9079			
ARNG-030-016				2		in							5/8/2013				9080			
ARNG-030-017				3		in							5/8/2013				9081			
ARNG-030-018				3		in							5/8/2013				9082			
ARNG-030-019				2		in							5/8/2013				9083			
ARNG-030-020				4		in							5/8/2013				9084			
ARNG-031-001				3		in							3/29/2013				2455			MD
ARNG-031-002				3		in							3/29/2013				2456			MD
ARNG-031-003				2		in							3/29/2013				2457			MD
ARNG-031-004				5		in							3/29/2013				2458			MD
ARNG-031-005				6		in							3/29/2013				2459			CD
ARNG-031-006				6		in							3/29/2013				2460			MD
ARNG-031-007				3		in						Seed-047	3/29/2013				2461			SEED
ARNG-031-008				2		in							3/29/2013				2462			MD
ARNG-031-009				1		in							3/29/2013				2463			MD
ARNG-031-010				1		in							3/29/2013				2464			MD
ARNG-031-011				2		in							3/29/2013				2465			MD
ARNG-031-012				4		in							3/29/2013				2466			MD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-031-013				8		in							3/29/2013				2467			MD
ARNG-032-001				8		in							4/12/2013				5147	1	41381.655556	
ARNG-032-002				3		in							4/12/2013				5148			
ARNG-032-003				2		in							4/12/2013				5149			
ARNG-032-004				3		in							4/12/2013				5150			
ARNG-032-005				3		in						Seed-004	4/12/2013				5151			
ARNG-032-006				4		in							4/12/2013				5152			
ARNG-033-001				8		in							4/16/2013				5887			
ARNG-033-002				3		in							4/16/2013				5888			
ARNG-033-003				2		in							4/16/2013				5889			
ARNG-033-004				2		in							4/16/2013				5890			
ARNG-033-005				4		in							4/16/2013				5891			
ARNG-033-006				2		in							4/16/2013				5892			
ARNG-033-007				3.5		in							4/16/2013				5893			
ARNG-033-008				7		in							4/16/2013				5894			
ARNG-033-009				2		in							4/16/2013				5895			
ARNG-033-010				5		in							4/16/2013				5896			
ARNG-033-011				5		in							4/16/2013				5897			
ARNG-033-012				5		in							4/16/2013				5898			
ARNG-033-013				3		in						Seed-076	4/16/2013				5899			
ARNG-033-014				8		in							4/16/2013				5900			
ARNG-033-015				5		in							4/16/2013				5901			
ARNG-033-016				4		in							4/16/2013				5902			
ARNG-033-017				2		in							4/16/2013				5903			
ARNG-033-018				4		in							4/16/2013				5904			
ARNG-033-019				2		in							4/16/2013				5905			
ARNG-034-001				6		in							3/29/2013				2573			CD, OTHER
ARNG-034-002				5		in							3/29/2013				2574			CD
ARNG-034-003				4		in							3/29/2013				2575			CD, OTHER
ARNG-034-004				3		in							3/29/2013				2576			CD
ARNG-034-005				2		in							3/29/2013				2577			CD
ARNG-034-006				4		in							3/29/2013				2578			CD
ARNG-034-007				2		in							3/29/2013				2579			CD
ARNG-034-008				6		in							3/29/2013				2580			CD
ARNG-034-009				3		in							3/29/2013				2581			CD
ARNG-034-010				4		in							3/29/2013				2582			CD
ARNG-034-011				6		in							3/29/2013				2583			CD
ARNG-034-012				5		in							3/29/2013				2584			CD
ARNG-034-013				8		in							3/29/2013				2585			CD
ARNG-034-014				5		in							3/29/2013				2586			CD
ARNG-034-015				8		in							3/29/2013				2587			CD
ARNG-034-016				8		in							3/29/2013				2588			CD
ARNG-034-017				3		in							3/29/2013				2589			CD
ARNG-034-018				3		in						Seed-018	3/29/2013				2590			SEED
ARNG-034-019				2		in							3/29/2013				2591			CD
ARNG-034-020				3		in							3/29/2013				2592			SEED
ARNG-034-021				2		in							3/29/2013				2593			MD
ARNG-035-001				0		in							4/8/2013	1			4223			OTHER

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-035-002				0		in							4/8/2013	1			4224			OTHER
ARNG-035-003				0		in							4/8/2013	1			4225			OTHER
ARNG-035-004				3		in						Seed-034	4/8/2013				4226			SEED
ARNG-035-005				3		in							4/8/2013				4227			CD
ARNG-035-006				3		in							4/8/2013				4228			CD
ARNG-035-007				18		in							4/8/2013				4229			CD
ARNG-035-008				30		in							4/8/2013				4230			CD
ARNG-035-009				3		in							4/8/2013				4231			CD
ARNG-036-001				5		in							3/29/2013				2468			CD
ARNG-036-002				12		in							3/29/2013				2469			CD
ARNG-036-003				12		in							3/29/2013				2470			CD
ARNG-036-004				13		in							3/29/2013				2471			CD
ARNG-036-005				20		in							3/29/2013				2472			CD
ARNG-036-006				48		in							3/29/2013				2473			CD
ARNG-036-007				48		in							3/29/2013				2474			CD
ARNG-036-008				24		in							3/29/2013				2475			CD
ARNG-036-009				4		in							3/29/2013				2476			CD
ARNG-036-010				36		in							3/29/2013				2477			CD
ARNG-036-011				36		in							3/29/2013				2478			CD
ARNG-036-012				60		in							3/29/2013				2479			CD
ARNG-036-013				60		in							3/29/2013				2480			CD
ARNG-036-014				18		in							3/29/2013				2481			CD
ARNG-036-015				36		in							3/29/2013				2482			CD
ARNG-036-016				4		in							3/29/2013				2483			CD
ARNG-036-017				6		in							3/29/2013				2484			CD
ARNG-036-018				3		in						Seed-058	3/29/2013				2485			SEED
ARNG-036-019				48		in							3/29/2013				2486			CD
ARNG-036-020				36		in							3/29/2013				2487			CD
ARNG-036-021				48		in							3/29/2013				2488			CD
ARNG-036-022				36		in							3/29/2013				2489			CD
ARNG-036-023				12		in							3/29/2013				2490			CD
ARNG-036-024				5		in							3/29/2013				2491			CD
ARNG-036-025				24		in							3/29/2013				2492			CD
ARNG-036-026				12		in							3/29/2013				2493			CD
ARNG-036-027				10		in							3/29/2013				2494			CD
ARNG-036-028				24		in							3/29/2013				2495			CD
ARNG-036-029				60		in							3/29/2013				2496			CD
ARNG-036-030				3		in							3/29/2013				2497			CD
ARNG-036-031				18		in							3/29/2013				2498			CD
ARNG-037-001				3		in							4/3/2013				3061			CD
ARNG-037-002				3		in							4/3/2013				3062			CD
ARNG-037-003				8		in							4/3/2013				3063			CD
ARNG-037-004				5		in							4/3/2013				3064			CD
ARNG-037-005				2		in							4/3/2013				3065			CD
ARNG-037-006				12		in							4/3/2013				3066			CD
ARNG-037-007				5		in							4/3/2013				3067			CD
ARNG-037-008				2		in							4/3/2013				3068			CD
ARNG-037-009				2		in							4/3/2013				3069			CD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-037-010						in							4/3/2013				3070	1	41381.656944	CD
ARNG-037-011				12		in							4/3/2013				3071			CD
ARNG-037-012				3		in							4/3/2013				3072			CD
ARNG-037-013				6		in							4/3/2013				3073			CD
ARNG-037-014				2		in							4/3/2013				3074			CD
ARNG-037-015				2		in							4/3/2013				3075			CD
ARNG-037-016				4		in							4/3/2013				3076			CD
ARNG-037-017				8		in							4/3/2013				3077			CD
ARNG-037-018				3		in							4/3/2013				3078			CD
ARNG-037-019				6		in							4/3/2013				3079			CD
ARNG-037-020				3		in							4/3/2013				3080			CD
ARNG-037-021				3		in							4/3/2013				3081			CD
ARNG-037-022				24		in							4/3/2013				3082			CD
ARNG-037-023				3		in							4/3/2013				3083			CD
ARNG-037-024				2		in							4/3/2013				3084			CD
ARNG-037-025				6		in							4/3/2013				3085			CD
ARNG-037-026				4		in							4/3/2013				3086			CD
ARNG-037-027				13		in							4/3/2013				3087			CD
ARNG-037-028				8		in							4/3/2013				3088			CD
ARNG-037-029				14		in							4/3/2013				3089			CD
ARNG-037-030				36		in							4/3/2013				3090			CD
ARNG-037-031				3		in						Seed-068	4/3/2013				3091			SEED, CD
ARNG-037-032				3		in							4/3/2013				3092			CD
ARNG-037-033				4		in							4/3/2013				3093			CD
ARNG-037-034						in							4/3/2013				3094	1	41381.658333	SEED, CD
ARNG-037-035				3		in							4/3/2013				3095			CD
ARNG-037-036				8		in							4/3/2013				3096			CD
ARNG-037-037				3		in							4/3/2013				3097			CD
ARNG-037-038				8		in							4/3/2013				3098			CD
ARNG-037-039				6		in							4/3/2013				3099			CD
ARNG-037-040				4		in							4/3/2013				3100			CD
ARNG-037-041						in							4/3/2013				3101			CD
ARNG-037-042				4		in							4/3/2013				3102			CD
ARNG-037-043				2		in							4/3/2013				3103			CD
ARNG-037-044				6		in							4/3/2013				3104			CD
ARNG-037-045				2		in							4/3/2013				3105			CD
ARNG-037-046				3		in							4/3/2013				3106			CD
ARNG-037-047						in							4/3/2013				3107			CD
ARNG-037-048						in							4/3/2013				3108			CD
ARNG-037-049				3		in							4/3/2013				3109			CD
ARNG-037-050				18		in							4/3/2013				3110			CD
ARNG-037-051				3		in							4/3/2013				3111			CD
ARNG-037-052				3		in							4/3/2013				3112			CD
ARNG-037-053				3		in							4/3/2013				3113			CD
ARNG-037-054				12		in							4/3/2013				3114			CD
ARNG-037-055				30		in							4/3/2013				3115			CD
ARNG-037-056				2		in							4/3/2013				3116			CD
ARNG-037-057				1		in							4/3/2013				3117			CD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-037-058				5		in							4/3/2013				3118			CD
ARNG-037-059				2		in							4/3/2013				3119			CD
ARNG-037-060						in							4/3/2013				3120			CD
ARNG-037-061				4		in							4/3/2013				3121			CD
ARNG-037-062				3		in							4/3/2013				3122			CD
ARNG-037-063				4		in							4/3/2013				3123			CD
ARNG-037-064				6		in							4/3/2013				3124			CD
ARNG-037-065				8		in							4/3/2013				3125			CD
ARNG-037-066				8		in							4/3/2013				3126			CD
ARNG-037-067				5		in							4/3/2013				3127			CD
ARNG-037-068				18		in							4/3/2013				3128			CD
ARNG-037-069				2.5		in							4/3/2013				3129			CD
ARNG-037-070				3		in							4/3/2013				3130			CD
ARNG-037-071				6		in							4/3/2013				3131			CD
ARNG-037-072				4		in							4/3/2013				3132			CD
ARNG-037-073				3		in							4/3/2013				3133			CD
ARNG-037-074						in							4/3/2013				3134			CD
ARNG-038-001				5		in							4/3/2013				3205			CD
ARNG-038-002				9		in							4/3/2013				3206			CD
ARNG-038-003				3		in						Seed-063	4/3/2013				3207			SEED
ARNG-038-004				2		in							4/3/2013				3208			CD
ARNG-038-005				6		in							4/3/2013				3209			CD
ARNG-038-006						in							4/3/2013				3210			CD
ARNG-038-007				8		in							4/3/2013				3211			CD
ARNG-038-008						in							4/3/2013				3212			CD
ARNG-038-009						in							4/3/2013				3213			CD
ARNG-038-010				3		in							4/3/2013				3214			CD
ARNG-038-011				12		in							4/3/2013				3215			CD
ARNG-038-012						in							4/3/2013				3216			CD
ARNG-038-013				5		in							4/3/2013				3217			CD
ARNG-038-014				1		in							4/3/2013				3218			CD
ARNG-038-015						in							4/3/2013				3219			CD
ARNG-039-001				5		in							4/8/2013				4197			MD
ARNG-039-002				2		in							4/8/2013				4198			MD
ARNG-039-003				3		in							4/8/2013				4199			MD
ARNG-039-004				3		in							4/8/2013				4200			MD
ARNG-039-005				3.5		in							4/8/2013				4201			MD
ARNG-039-006				2		in							4/8/2013				4202			MD
ARNG-039-007				5		in							4/8/2013				4203			MD
ARNG-039-008				3		in							4/8/2013				4204			MD
ARNG-039-009						in							4/8/2013				4205			
ARNG-039-010				4		in							4/8/2013				4206			MD
ARNG-039-011				3		in							4/8/2013				4207			MD
ARNG-039-012				4		in							4/8/2013				4208			CD
ARNG-039-013				4		in							4/8/2013				4209			MD
ARNG-039-014						in							4/8/2013				4210			
ARNG-039-015				3		in							4/8/2013				4211			MD
ARNG-039-016				3		in							4/8/2013				4212			MD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-039-017				5		in							4/8/2013				4213			MD
ARNG-039-018				3		in							4/8/2013				4214			MD
ARNG-039-019				4		in							4/8/2013				4215			MD
ARNG-039-020				3		in						Seed-005	4/8/2013				4216			SEED
ARNG-039-021				3		in							4/8/2013				4217			MD
ARNG-039-022						in							4/8/2013				4218			
ARNG-039-023				3		in							4/8/2013				4219			MD
ARNG-039-024						in							4/8/2013				4220			
ARNG-039-025				6		in							4/8/2013				4221			MD
ARNG-039-026				4		in							4/8/2013				4222			MD
ARNG-040-001				2		in							4/8/2013				4181			CD
ARNG-040-002				9		in							4/8/2013				4182			CD
ARNG-040-003				3		in							4/8/2013				4183			CD
ARNG-040-004				3		in							4/8/2013				4184			CD
ARNG-040-005				3		in							4/8/2013				4185			CD
ARNG-040-006				3		in							4/8/2013				4186			CD
ARNG-040-007				3		in							4/8/2013				4187			CD
ARNG-040-008						in							4/8/2013				4188			CD
ARNG-040-009				3		in							4/8/2013				4189			CD
ARNG-040-010				3		in							4/8/2013				4190			CD
ARNG-040-011				3		in							4/8/2013				4191			CD
ARNG-040-012				3		in							4/8/2013				4192			CD
ARNG-040-013				3		in							4/8/2013				4193			CD
ARNG-040-014				2		in							4/8/2013				4194			CD
ARNG-040-015				3		in						Seed-081	4/8/2013				4195			SEED
ARNG-040-016						in							4/8/2013	1			4196			OTHER
ARNG-041-001				12		in							4/3/2013				3182			CD
ARNG-041-002				2		in							4/3/2013				3183			CD
ARNG-041-003				13		in							4/3/2013				3184			CD
ARNG-041-004				7		in							4/3/2013				3185			CD
ARNG-041-005				4		in							4/3/2013				3186			CD
ARNG-041-006				14		in							4/3/2013				3187			CD
ARNG-041-007				8		in							4/3/2013				3188			CD
ARNG-041-008				8		in							4/3/2013				3189			CD
ARNG-041-009				12		in							4/3/2013				3190			CD
ARNG-041-010				1		in							4/3/2013				3191			CD
ARNG-041-011				6		in							4/3/2013				3192			MD, CD
ARNG-041-012				18		in							4/3/2013				3193			CD
ARNG-041-013				18		in							4/3/2013				3194			CD
ARNG-041-014				4		in							4/3/2013				3195			CD
ARNG-041-015				2		in							4/3/2013				3196			CD
ARNG-041-016				1		in							4/3/2013				3197			CD
ARNG-041-017				8		in							4/3/2013				3198			CD
ARNG-041-018				1		in							4/3/2013				3199			CD
ARNG-041-019				3		in						Seed-074	4/3/2013				3200			SEED
ARNG-041-020				8		in							4/3/2013				3201			CD
ARNG-041-021				8		in							4/3/2013				3202			CD
ARNG-041-022				3		in							4/3/2013				3203			CD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-041-023				2		in							4/3/2013				3204			CD
ARNG-042-001				4		in							3/29/2013				2499			CD
ARNG-042-002				1.5		in							3/29/2013				2500			MD
ARNG-042-003						in							3/29/2013				2501			MD
ARNG-042-004						in							3/29/2013				2502			MD
ARNG-042-005						in							3/29/2013				2503			MD
ARNG-042-006				24		in							3/29/2013				2504			MD
ARNG-042-007						in							3/29/2013				2505			MD
ARNG-042-008				3		in						Seed-049	3/29/2013				2506			SEED
ARNG-042-009						in							3/29/2013	1			2507	1	41381.651389	OTHER
ARNG-043-001				3		in						Seed-067	3/29/2013				2594			SEED
ARNG-043-002						in							3/29/2013	1			2595			OTHER
ARNG-043-003						in							3/29/2013	1			2596			OTHER
ARNG-043-004						in							3/29/2013	1			2597			OTHER
ARNG-043-005						in							3/29/2013	1			2598			OTHER
ARNG-043-006				1		in							3/29/2013				2599			CD
ARNG-043-007				1		in							3/29/2013				2600			MD
ARNG-043-008				1		in							3/29/2013				2601			CD
ARNG-043-009				8		in							3/29/2013				2602			CD
ARNG-044-001				3		in							4/8/2013				4169			MD
ARNG-044-002				0		in							4/8/2013	1			4170			OTHER
ARNG-044-003				3		in						Seed-044	4/8/2013				4171			SEED
ARNG-044-004				0		in							4/8/2013	1			4172			OTHER
ARNG-044-005				0		in							4/8/2013	1			4173			OTHER
ARNG-044-006				0		in							4/8/2013	1			4174			OTHER
ARNG-044-007				0		in							4/8/2013	1			4175			OTHER
ARNG-044-008				0		in							4/8/2013	1			4176			OTHER
ARNG-044-009				2		in							4/8/2013				4177			CD
ARNG-044-010				0		in							4/8/2013	1			4178			OTHER
ARNG-044-011				0		in							4/8/2013	1			4179			OTHER
ARNG-044-012				0		in							4/8/2013	1			4180			OTHER
ARNG-045-001				2		in							4/12/2013				5114			
ARNG-045-002				2		in							4/12/2013				5115			
ARNG-045-003				5		in							4/12/2013				5116			
ARNG-045-004				1		in							4/12/2013				5117			
ARNG-045-005				5		in							4/12/2013				5118			
ARNG-045-006				3		in							4/12/2013				5119			
ARNG-045-007				3		in							4/12/2013				5120			
ARNG-045-008				2		in							4/12/2013				5121			
ARNG-045-009				2		in							4/12/2013				5122			
ARNG-045-010				2		in							4/12/2013				5123			
ARNG-045-011				8		in							4/12/2013				5124			
ARNG-045-012				2		in							4/12/2013				5125			
ARNG-045-013				3		in						Seed-036	4/12/2013				5126			
ARNG-045-014				2		in							4/12/2013				5127			
ARNG-045-015				5		in							4/12/2013				5128			
ARNG-045-016						in							4/12/2013				5129			
ARNG-045-017				3		in							4/12/2013				5130			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-045-018				5		in							4/12/2013				5131			
ARNG-045-019				2		in							4/12/2013				5132			
ARNG-045-020				3		in							4/12/2013				5133			
ARNG-045-021				4.5		in							4/12/2013				5134			
ARNG-045-022				1		in							4/12/2013				5135			
ARNG-045-023				3		in							4/12/2013				5136			
ARNG-045-024				5		in							4/12/2013				5137			
ARNG-045-025				5		in							4/12/2013				5138			
ARNG-045-026				3		in							4/12/2013				5139			
ARNG-045-027				1		in							4/12/2013				5140			
ARNG-045-028				2.5		in							4/12/2013				5141			
ARNG-045-029				2.5		in							4/12/2013				5142			
ARNG-045-030				4		in							4/12/2013				5143			
ARNG-045-031				5		in							4/12/2013				5144			
ARNG-045-032				8		in							4/12/2013				5145			
ARNG-045-033				2		in							4/12/2013				5146			
ARNG-046-001						in							4/11/2013				4635	1	41381.659028	O
ARNG-046-002				4		in							4/11/2013				4636			MD
ARNG-046-003				2		in							4/11/2013				4637			MD
ARNG-046-004				3		in						Seed-072	4/11/2013				4638			SEED
ARNG-046-005				3		in							4/11/2013				4639			MD
ARNG-046-006				2		in							4/11/2013				4640			MD
ARNG-046-007				8		in							4/11/2013				4641			MD
ARNG-046-008				7		in							4/11/2013				4642			MD
ARNG-046-009				2		in							4/11/2013				4643			MD
ARNG-046-010				2		in							4/11/2013				4644			MD
ARNG-046-011				2		in							4/11/2013				4645			MD
ARNG-046-012				6		in							4/11/2013				4646			MD
ARNG-046-013				1		in							4/11/2013				4647			MD
ARNG-046-014				6		in							4/11/2013				4648			MD
ARNG-046-015				5		in							4/11/2013				4649			MD
ARNG-047-001				3		in							4/4/2013				3547			MD
ARNG-047-002				2		in							4/4/2013				3548			MD
ARNG-047-003				3		in						Seed-059	4/4/2013				3549			SEED
ARNG-048-001				5		in							4/8/2013				4146			CD
ARNG-048-002				2		in							4/8/2013				4147			CD
ARNG-048-003				4		in							4/8/2013				4148			CD
ARNG-048-004				3		in							4/8/2013				4149			CD
ARNG-048-005				4		in							4/8/2013				4150			CD
ARNG-048-006				2		in							4/8/2013				4151			CD
ARNG-048-007				9		in							4/8/2013				4152			CD
ARNG-048-008				7		in							4/8/2013				4153			CD
ARNG-048-009				1		in							4/8/2013				4154			CD
ARNG-048-010				6		in							4/8/2013				4155			CD
ARNG-048-011				7		in							4/8/2013				4156			CD
ARNG-048-012				3		in							4/8/2013				4157			CD
ARNG-048-013				3		in						Seed-026	4/8/2013				4158			SEED
ARNG-048-014				3		in							4/8/2013				4159			CD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-048-015						in							4/8/2013				4160			
ARNG-048-016						in							4/8/2013				4161			
ARNG-048-017						in							4/8/2013				4162			
ARNG-048-018				2		in							4/8/2013				4163			CD
ARNG-048-019				2		in							4/8/2013				4164			CD
ARNG-048-020				7		in							4/8/2013				4165			CD
ARNG-048-021				3		in							4/8/2013				4166			CD
ARNG-048-022						in							4/8/2013				4167			
ARNG-048-023				2		in							4/8/2013				4168			CD
ARNG-049-001				3		in						Seed-029	4/8/2013				4133			SEED
ARNG-049-002				8		in							4/8/2013				4134			CD
ARNG-049-003						in							4/8/2013				4135			
ARNG-049-004				7		in							4/8/2013				4136			CD
ARNG-049-005				4		in							4/8/2013				4137			CD
ARNG-049-006						in							4/8/2013				4138			
ARNG-049-007				15		in							4/8/2013				4139			MD, CD
ARNG-049-008						in							4/8/2013				4140			
ARNG-049-009				8		in							4/8/2013				4141			CD
ARNG-049-010				3		in							4/8/2013				4142			MD
ARNG-049-011				1.5		in							4/8/2013				4143			MD
ARNG-049-012				2		in							4/8/2013				4144			CD
ARNG-049-013				1.5		in							4/8/2013				4145			MD
ARNG-050-001				0		in							4/8/2013	1			4120			O
ARNG-050-002				3		in						Seed-082	4/8/2013				4121			SEED
ARNG-050-003				0		in							4/8/2013	1			4122			O
ARNG-050-004				0		in							4/8/2013	1			4123			O
ARNG-050-005				0		in							4/8/2013	1			4124			O
ARNG-050-006				0		in							4/8/2013	1			4125			O
ARNG-050-007				2.5		in							4/8/2013				4126			CD
ARNG-050-008				0		in							4/8/2013	1			4127			O
ARNG-050-009				3		in							4/8/2013				4128			CD
ARNG-050-010				0		in							4/8/2013	1			4129			O
ARNG-050-011				4		in							4/8/2013				4130			CD
ARNG-050-012				2		in							4/8/2013				4131			CD
ARNG-050-013				0		in							4/8/2013	1			4132			O
ARNG-051-001				3		in							4/8/2013				4107			CD
ARNG-051-002				5		in							4/8/2013				4108			MD
ARNG-051-003				3		in						Seed-053	4/8/2013				4109			SEED
ARNG-051-004				2.5		in							4/8/2013				4110			MD
ARNG-051-005				3		in							4/8/2013				4111			MD
ARNG-051-006				3		in							4/8/2013				4112			MD
ARNG-051-007				3		in							4/8/2013				4113			MD
ARNG-051-008				1.5		in							4/8/2013				4114			MD
ARNG-051-009				0		in							4/8/2013	1			4115			OT
ARNG-051-010				0		in							4/8/2013	1			4116			OT
ARNG-051-011				0		in							4/8/2013	1			4117			OT
ARNG-051-012				0		in							4/8/2013	1			4118			OT
ARNG-051-013				0		in							4/8/2013	1			4119			OT

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-052-001				8		in							4/11/2013				4625			MD
ARNG-052-002				2		in							4/11/2013				4626			MD
ARNG-052-003				3		in							4/11/2013				4627			MD
ARNG-052-004				8		in							4/11/2013				4628			MD
ARNG-052-005				0.5		in							4/11/2013				4629			MD
ARNG-052-006				5		in							4/11/2013				4630			MD
ARNG-052-007				4		in							4/11/2013				4631			MD
ARNG-052-008				2		in							4/11/2013				4632			MD
ARNG-052-009				2		in							4/11/2013				4633			MD
ARNG-052-010				3		in						Seed-037	4/11/2013				4634			MD, SEED
ARNG-053-001				2.5		in							4/8/2013				4094			CD, 0
ARNG-053-002				2		in							4/8/2013				4095			CD, 0
ARNG-053-003				2		in							4/8/2013				4096			CD, 0
ARNG-053-004				5		in							4/8/2013				4097			CD
ARNG-053-005						in							4/8/2013	1			4098			
ARNG-053-006						in							4/8/2013	1			4099			
ARNG-053-007				4		in							4/8/2013				4100			CD, 0
ARNG-053-008						in							4/8/2013	1			4101			
ARNG-053-009				4		in							4/8/2013				4102			CD
ARNG-053-010				4		in							4/8/2013				4103			CD, 0
ARNG-053-011				3		in						Seed-035	4/8/2013				4104			SEED
ARNG-053-012						in							4/8/2013				4105			
ARNG-053-013				2		in							4/8/2013				4106			CD
ARNG-054-001						in							3/29/2013	1			2508			No Find
ARNG-054-002				5		in							3/29/2013				2509			MD
ARNG-054-003						in							3/29/2013				2510			MD
ARNG-054-004						in							3/29/2013				2511			MD
ARNG-054-005				2		in							3/29/2013				2512			MD
ARNG-054-006				3		in							3/29/2013				2513			MD
ARNG-054-007				3		in						Seed-015	3/29/2013				2514			SEED
ARNG-054-008				8		in							3/29/2013				2515			MD
ARNG-054-009						in							3/29/2013				2516			MD
ARNG-054-010				3		in							3/29/2013				2517			MD
ARNG-054-011				4		in							3/29/2013				2518			MD
ARNG-054-012				3		in							3/29/2013				2519			MD
ARNG-055-001				3		in							4/12/2013				5087			
ARNG-055-002				0.5		in							4/12/2013				5088			
ARNG-055-003				1		in							4/12/2013				5089			
ARNG-055-004				1		in							4/12/2013				5090			
ARNG-055-005				0.5		in							4/12/2013				5091			
ARNG-055-006				2		in							4/12/2013				5092			
ARNG-055-007				12		in							4/12/2013				5093			
ARNG-055-008				0.5		in							4/12/2013				5094			
ARNG-055-009				2		in							4/12/2013				5095			
ARNG-055-010				0.5		in							4/12/2013				5096			
ARNG-055-011				0.5		in							4/12/2013				5097			
ARNG-055-012				0.5		in							4/12/2013				5098			
ARNG-055-013				0.75		in							4/12/2013				5099			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-055-014				1		in							4/12/2013				5100			
ARNG-055-015				2		in							4/12/2013				5101			
ARNG-055-016				0.5		in							4/12/2013				5102			
ARNG-055-017				2		in							4/12/2013				5103			
ARNG-055-018				0.5		in							4/12/2013				5104			
ARNG-055-019				3		in							4/12/2013				5105			
ARNG-055-020				2.5		in							4/12/2013				5106			
ARNG-055-021				6		in							4/12/2013				5107			
ARNG-055-022				3		in							4/12/2013				5108			
ARNG-055-023				0.5		in							4/12/2013				5109			
ARNG-055-024				1		in							4/12/2013				5110			
ARNG-055-025				2		in							4/12/2013				5111			
ARNG-055-026				3		in						Seed-002	4/12/2013				5112			
ARNG-055-027				2		in							4/12/2013				5113			
ARNG-056-001				2		in							4/8/2013				4083			MD
ARNG-056-002				1		in							4/8/2013				4084			OTHER
ARNG-056-003				2		in							4/8/2013				4085			CD
ARNG-056-004				2.5		in							4/8/2013				4086			MD
ARNG-056-005				3		in							4/8/2013				4087			MD
ARNG-056-006				3		in							4/8/2013				4088			MD
ARNG-056-007				5		in							4/8/2013				4089			MD
ARNG-056-008				3		in							4/8/2013				4090			MD
ARNG-056-009				0		in							4/8/2013	1			4091			OTHER
ARNG-056-010						in							4/8/2013				4092			
ARNG-056-011				3		in						Seed-013	4/8/2013				4093			SEED
ARNG-057-001				9		in							4/4/2013				3535			CD
ARNG-057-002						in							4/4/2013				3536			
ARNG-057-003				2		in							4/4/2013				3537			CD
ARNG-057-004				3		in						Seed-054	4/4/2013				3538			SEED
ARNG-057-005				9		in							4/4/2013				3539			CD
ARNG-057-006				7		in							4/4/2013				3540			CD
ARNG-057-007				2		in							4/4/2013				3541			CD
ARNG-057-008				3		in							4/4/2013				3542			CD
ARNG-057-009				11		in							4/4/2013				3543			CD
ARNG-057-010				4		in							4/4/2013				3544			CD
ARNG-057-011				6		in							4/4/2013				3545			CD
ARNG-057-012				9		in							4/4/2013				3546			CD
ARNG-058-001				2		in							4/3/2013				3136			CD
ARNG-058-002				8		in							4/3/2013				3137			CD
ARNG-058-003				2		in							4/3/2013				3138			MD, CD
ARNG-058-004						in							4/3/2013				3139			CD
ARNG-058-005				7		in							4/3/2013				3140			CD
ARNG-058-006				8		in							4/3/2013				3141			CD
ARNG-058-007				4		in							4/3/2013				3142			CD
ARNG-058-008				6		in							4/3/2013				3143			CD
ARNG-058-009				30		in							4/3/2013				3144			CD
ARNG-058-010				3		in							4/3/2013				3145			CD
ARNG-058-011				2		in							4/3/2013				3146			CD

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-058-012				3		in							4/3/2013				3147			CD
ARNG-058-013				8		in							4/3/2013				3148			CD
ARNG-058-014				5		in							4/3/2013				3149			CD
ARNG-058-015				18		in						Seed-057	4/3/2013				3150			SEED, CD
ARNG-058-016				3		in							4/3/2013				3151			CD
ARNG-058-017				4		in							4/3/2013				3152			CD
ARNG-058-018				7		in							4/3/2013				3153			CD
ARNG-058-019				18		in							4/3/2013				3154			CD
ARNG-058-020				3		in							4/3/2013				3155			CD
ARNG-058-021				3		in							4/3/2013				3156			CD
ARNG-058-022				4		in							4/3/2013				3157			CD
ARNG-058-023				5		in							4/3/2013				3158			CD
ARNG-058-024				7		in							4/3/2013				3159			CD
ARNG-058-025				3		in							4/3/2013				3160			CD
ARNG-058-026				3		in							4/3/2013				3161			CD
ARNG-058-027				8		in							4/3/2013				3162			CD
ARNG-058-028				13		in							4/3/2013				3163			CD
ARNG-058-029				4		in							4/3/2013				3164			CD
ARNG-058-030						in							4/3/2013				3165			CD
ARNG-058-031				2		in							4/3/2013				3166			CD
ARNG-058-032				3		in							4/3/2013				3167			CD
ARNG-058-033				3		in							4/3/2013				3168			CD
ARNG-058-034				3		in							4/3/2013				3169			CD
ARNG-058-035				3		in							4/3/2013				3170			CD
ARNG-058-036				4		in							4/3/2013				3171			CD
ARNG-058-037				3		in							4/3/2013				3172			CD
ARNG-059-001						in							4/11/2013	1			4721			O
ARNG-059-002				3		in						Seed-064	4/11/2013				4722			SEED
ARNG-059-003				6		in							4/11/2013				4723			MD
ARNG-059-004				0.5		in							4/11/2013				4724			CD
ARNG-059-005						in							4/11/2013	1			4725			O
ARNG-060-001				4		in							4/19/2013				6169			
ARNG-060-002				4		in							4/19/2013				6170			
ARNG-060-003				6		in							4/19/2013				6171			
ARNG-060-004				3		in							4/19/2013				6172			
ARNG-060-005				1		in							4/19/2013				6173			
ARNG-060-006				3		in						Seed-032	4/19/2013				6174			
ARNG-060-007				1		in							4/19/2013				6175			
ARNG-060-008				0		in							4/19/2013	1			6176			OT
ARNG-060-009				3		in							4/19/2013				6177			
ARNG-060-010						in							4/19/2013				6178			
ARNG-060-011				0		in							4/19/2013	1			6179			OT
ARNG-060-012				0		in							4/19/2013	1			6180			OT
ARNG-060-013				0		in							4/19/2013	1			6181			OT
ARNG-060-014				0		in							4/19/2013	1			6182			OT
ARNG-060-015				0		in							4/19/2013	1			6183			OT
ARNG-060-016				0		in							4/19/2013	1			6184			OT
ARNG-060-017				0		in							4/19/2013				6185			OT

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-060-018				0		in							4/19/2013	1			6186			OT
ARNG-060-019				0		in							4/19/2013	1			6187			OT
ARNG-060-020				0		in							4/19/2013				6188			OT
ARNG-060-021				0		in							4/19/2013	1			6189			OT
ARNG-060-022				0		in							4/19/2013	1			6190			OT
ARNG-060-023				0		in							4/19/2013	1			6191			OT
ARNG-060-024				0.5		in							4/19/2013				6192			
ARNG-060-025				1		in							4/19/2013				6193			
ARNG-060-026				1		in							4/19/2013				6194			
ARNG-060-027				0		in							4/19/2013	1			6195			OT
ARNG-060-028				0		in							4/19/2013	1			6196			OT
ARNG-060-029				0		in							4/19/2013	1			6197			OT
ARNG-060-030				0		in							4/19/2013	1			6198			OT
ARNG-061-001				3		in						Seed-019	4/11/2013				4718			SEED
ARNG-061-002				2		in							4/11/2013				4719			MD
ARNG-061-003				5		in							4/11/2013				4720			CD
ARNG-062-001				3		in						Seed-078	4/8/2013				4081			SEED
ARNG-062-002						in							4/8/2013				4082			CD
ARNG-063-001				3		in							4/11/2013				4713			CD
ARNG-063-002				3		in						Seed-011	4/11/2013				4714			SEED
ARNG-063-003				2.5		in							4/11/2013				4715			MD
ARNG-063-004				2		in							4/11/2013				4716			MD
ARNG-063-005				2		in							4/11/2013				4717			MD
ARNG-064-001				3		in						Seed-052	4/8/2013				4076			SEED
ARNG-064-002				6		in							4/8/2013				4077	1	41381.634722	H
ARNG-064-003				0		in							4/8/2013	1			4078	14	41377.772917	H
ARNG-064-004				2		in							4/8/2013	1			4079	14	41377.772917	H
ARNG-064-005						in							4/8/2013	1			4080	14	41377.773611	H
ARNG-065-001				4		in							4/11/2013				4706			MD
ARNG-065-002				2		in							4/11/2013				4707			CD
ARNG-065-003				3		in						Seed-070	4/11/2013				4708	1	41381.634028	SEED
ARNG-065-004						in							4/11/2013	1			4709			O
ARNG-065-005				4		in							4/11/2013				4710			CD
ARNG-065-006						in							4/11/2013	1			4711			O
ARNG-065-007						in							4/11/2013	1			4712			O
ARNG-066-001				2		in							4/3/2013				3057			CD
ARNG-066-002				3		in							4/3/2013				3058			CD
ARNG-066-003				3		in						Seed-084	4/3/2013				3059	14	41377.771528	SEED
ARNG-067-001				8		in							4/11/2013				4699			CD
ARNG-067-002						in							4/11/2013	1			4700			OT
ARNG-067-003				0		in							4/11/2013				4701	1	41381.636111	OT
ARNG-067-004				3		in						Seed-012	4/11/2013				4702			SEED
ARNG-067-005				7		in							4/11/2013				4703			CD
ARNG-067-006				3		in							4/11/2013				4704			MD
ARNG-067-007				4		in							4/11/2013				4705			MD
ARNG-068-001				8		in							4/18/2013				6001			
ARNG-068-002				0.5		in							4/18/2013				6002			
ARNG-068-003				0.5		in							4/18/2013				6003			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-068-004				3		in						Seed-089	4/18/2013				6004			
ARNG-068-005				0.5		in							4/18/2013				6005			
ARNG-069-001				2		in							4/8/2013				4070			CD
ARNG-069-002				3		in							4/8/2013				4071			CD
ARNG-069-003				3.5		in							4/8/2013				4072			CD
ARNG-069-004				4		in							4/8/2013				4073			CD
ARNG-069-005				3		in						Seed-066	4/8/2013				4074			SEED
ARNG-069-006				3		in							4/8/2013				4075			CD
ARNG-070-001				2		in							4/8/2013				4067			CD
ARNG-070-002				3		in						Seed-065	4/8/2013				4068			SEED
ARNG-070-003						in							4/8/2013				4069	1	41381.659722	
ARNG-071-001				6		in							4/8/2013				4058			CD
ARNG-071-002				2		in							4/8/2013				4059			CD
ARNG-071-003				6		in							4/8/2013				4060			CD
ARNG-071-004				6		in							4/8/2013				4061			CD
ARNG-071-005				6		in							4/8/2013				4062			CD
ARNG-071-006				6		in							4/8/2013				4063			CD
ARNG-071-007				3		in						Seed-077	4/8/2013				4064			SEED
ARNG-071-008				8		in							4/8/2013				4065			CD
ARNG-071-009				8		in							4/8/2013				4066			CD
ARNG-072-001				1		in							4/8/2013				4053			MD
ARNG-072-002				2		in							4/8/2013				4054			MD
ARNG-072-003				3		in						Seed-007	4/8/2013				4055			SEED
ARNG-072-004				2.5		in							4/8/2013				4056			MD
ARNG-072-005				12		in							4/8/2013				4057			MD
ARNG-073-001				3		in							4/11/2013				4695			MD
ARNG-073-002				2		in							4/11/2013				4696			MD
ARNG-073-003				3		in							4/11/2013				4697			OT
ARNG-073-004				3		in						Seed-046	4/11/2013				4698			SEED
ARNG-074-001				4		in							3/29/2013				2565			CD
ARNG-074-002				4		in							3/29/2013				2566			MD
ARNG-074-003				3		in							3/29/2013				2567			CD
ARNG-074-004						in							3/29/2013	1			2568			OTHER
ARNG-074-005						in							3/29/2013	1			2569			OTHER
ARNG-074-006				3		in						Seed-045	3/29/2013				2570			SEED
ARNG-074-007				8		in							3/29/2013				2571			CD
ARNG-074-008						in							3/29/2013				2572	14	41377.769444	SEED
ARNG-075-001				3		in						Seed-042	4/3/2013				3135			SEED
ARNG-076-001				8		in							4/18/2013				6101			OT
ARNG-076-002				3		in						Seed-021	4/18/2013				6102			
ARNG-077-001				3		in						Seed-008	4/8/2013				4052			SEED
ARNG-078-001				3		in						Seed-055	4/3/2013				3060			SEED
ARNG-079-001				8		in							4/18/2013				6097			
ARNG-079-002				96		in							4/18/2013				6098			
ARNG-079-003				3		in						Seed-131	4/18/2013				6099			
ARNG-079-004				36		in							4/18/2013				6100			
ARNG-080-001				8		in							4/16/2013				5875			
ARNG-080-002				3		in							4/16/2013				5876			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-080-003				13		in							4/16/2013				5877			
ARNG-080-004						in							4/16/2013				5878			OT
ARNG-080-005				3		in						Seed-093	4/16/2013				5879			
ARNG-080-006				1		in							4/16/2013				5880			
ARNG-080-007				3		in							4/16/2013				5881			
ARNG-080-008				36		in							4/16/2013				5882			
ARNG-080-009				1		in							4/16/2013				5883			
ARNG-080-010				8		in							4/16/2013				5884			
ARNG-080-011				2		in							4/16/2013				5885			
ARNG-080-012				2		in							4/16/2013				5886			
ARNG-081-001				8		in							4/16/2013				5871			
ARNG-081-002				3		in						Seed-088	4/16/2013				5872			
ARNG-081-003				7		in							4/16/2013				5873			
ARNG-081-004						in							4/16/2013				5874			OT
ARNG-082-001				8		in							5/8/2013				8928			
ARNG-082-002				2		in							5/8/2013				8929			
ARNG-082-003				6		in							5/8/2013				8930			
ARNG-082-004				4		in							5/8/2013				8931			
ARNG-082-005				3		in							5/8/2013				8932			
ARNG-082-006				6		in							5/8/2013				8933			
ARNG-082-007				2		in							5/8/2013				8934			
ARNG-082-008				10		in							5/8/2013				8935			
ARNG-082-009				8		in							5/8/2013				8936			
ARNG-082-010				1		in							5/8/2013				8937			
ARNG-082-011				1		in							5/8/2013				8938			
ARNG-082-012				2		in							5/8/2013				8939			
ARNG-082-013				1		in							5/8/2013				8940			
ARNG-082-014				1		in							5/8/2013				8941			
ARNG-082-015				1		in							5/8/2013				8942			
ARNG-082-016				4		in							5/8/2013				8943			
ARNG-082-017				1		in							5/8/2013				8944			
ARNG-082-018				6		in							5/8/2013				8945			
ARNG-082-019				1		in							5/8/2013				8946			
ARNG-082-020				6		in							5/8/2013				8947			
ARNG-082-021				1		in							5/8/2013				8948			
ARNG-082-022				1		in							5/8/2013				8949			
ARNG-082-023				6		in							5/8/2013				8950			
ARNG-082-024				1		in							5/8/2013				8951			
ARNG-082-025				2		in							5/8/2013				8952			
ARNG-082-026				2		in							5/8/2013				8953			
ARNG-082-027				1		in							5/8/2013				8954			
ARNG-082-028				2		in							5/8/2013				8955			
ARNG-082-029				2		in							5/8/2013				8956			
ARNG-082-030				3		in							5/8/2013				8957			
ARNG-082-031				3		in						Seed-127	5/8/2013				8958			
ARNG-082-032				1		in							5/8/2013				8959			
ARNG-082-033				1		in							5/8/2013				8960			
ARNG-082-034				6		in							5/8/2013				8961			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-082-035				8		in							5/8/2013				8962			
ARNG-082-036				4		in							5/8/2013				8963			
ARNG-082-037				3		in							5/8/2013				8964			
ARNG-082-038				6		in							5/8/2013				8965			
ARNG-083-001				8		in							4/16/2013				5863			
ARNG-083-002				6		in							4/16/2013				5864			
ARNG-083-003				1		in							4/16/2013				5865			
ARNG-083-004				2		in							4/16/2013				5866			
ARNG-083-005						in							4/16/2013				5867			OT
ARNG-083-006				13		in							4/16/2013				5868			
ARNG-083-007				3		in						Seed-001	4/16/2013				5869			
ARNG-083-008				5		in							4/16/2013				5870			
ARNG-084-001				8		in							4/12/2013				5078	1	41381.660417	
ARNG-084-002				3		in						Seed-003	4/12/2013				5079	14	41377.76875	
ARNG-084-003				3		in							4/12/2013				5080			
ARNG-084-004				3		in							4/12/2013				5081			
ARNG-084-005				3		in							4/12/2013				5082			
ARNG-084-006				4		in							4/12/2013				5083			
ARNG-084-007				3		in							4/12/2013				5084			
ARNG-084-008				3		in							4/12/2013				5085			
ARNG-084-009				7		in							4/12/2013				5086	14	41380.354861	
ARNG-085-001						in							4/16/2013	1			5858			OT
ARNG-085-002				8		in							4/16/2013				5859			
ARNG-085-003				3		in						Seed-085	4/16/2013				5860			
ARNG-085-004				6		in							4/16/2013				5861			
ARNG-085-005						in							4/16/2013				5862			OT
ARNG-086-001				6		in							4/16/2013				5830			
ARNG-086-002				8		in							4/16/2013				5831			
ARNG-086-003						in							4/16/2013				5832			OT
ARNG-086-004				8		in							4/16/2013				5833			
ARNG-086-005				3		in							4/16/2013				5834			
ARNG-086-006				10		in							4/16/2013				5835			
ARNG-086-007				5		in							4/16/2013				5836			
ARNG-086-008				3		in							4/16/2013				5837			
ARNG-086-009				2		in							4/16/2013				5838			
ARNG-086-010				3		in						Seed-014	4/16/2013				5839			
ARNG-086-011						in							4/16/2013	1			5840			OT
ARNG-086-012						in							4/16/2013				5841			OT
ARNG-086-013				6		in							4/16/2013				5842			
ARNG-086-014				10		in							4/16/2013				5843			
ARNG-086-015				1		in							4/16/2013				5844			
ARNG-086-016						in							4/16/2013	1			5845			OT
ARNG-086-017				6		in							4/16/2013				5846			
ARNG-086-018				3		in							4/16/2013				5847			
ARNG-086-019				0		in							4/16/2013	1			5848			OT
ARNG-086-020				4		in							4/16/2013				5849			
ARNG-086-021				4		in							4/16/2013				5850			
ARNG-086-022				4		in							4/16/2013				5851			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
ARNG-086-023				1		in							4/16/2013				5852			
ARNG-086-024				3		in							4/16/2013				5853			
ARNG-086-025				6		in							4/16/2013				5854			
ARNG-086-026				6		in							4/16/2013				5855			
ARNG-086-027				5		in							4/16/2013				5856			
ARNG-086-028				9		in							4/16/2013				5857			
ARNG-087-001				24		in							4/18/2013				5982			
ARNG-087-002				36		in							4/18/2013				5983			
ARNG-087-003				12		in							4/18/2013				5984			
ARNG-087-004				15		in							4/18/2013				5985			
ARNG-087-005				15		in							4/18/2013				5986			
ARNG-087-006				13		in							4/18/2013				5987			
ARNG-087-007				18		in							4/18/2013				5988			
ARNG-087-008				72		in							4/18/2013				5989			
ARNG-087-009						in							4/18/2013				5990			OT
ARNG-087-010				12		in							4/18/2013				5991			
ARNG-087-011				12		in							4/18/2013				5992			
ARNG-087-012				5		in							4/18/2013				5993			
ARNG-087-013				3		in							4/18/2013				5994			
ARNG-087-014				3		in						Seed-092	4/18/2013				5995			
ARNG-087-015				8		in							4/18/2013				5996			
ARNG-087-016				18		in							4/18/2013				5997			
ARNG-087-017						in							4/18/2013				5998			OT
ARNG-087-018				1		in							4/18/2013				5999			
ARNG-087-019				2		in							4/18/2013				6000			
ARNG-088-001				3		in							4/18/2013				6089			
ARNG-088-002				4		in							4/18/2013				6090			
ARNG-088-003				1		in							4/18/2013				6091			
ARNG-088-004				1		in							4/18/2013				6092			
ARNG-088-005				1		in							4/18/2013				6093			
ARNG-088-006				4		in							4/18/2013				6094			
ARNG-088-007				1		in							4/18/2013				6095			
ARNG-088-008				3		in						Seed-087	4/18/2013				6096			
ARNG-089-001				8		in							4/16/2013				5827			
ARNG-089-002				4.5		in							4/16/2013				5828			
ARNG-089-003				3		in						Seed-009	4/16/2013				5829			
ARNG-23-034				10		in							4/12/2013				5174			
ARNG-82-039				4		in							5/8/2013				8966			
RC1-002-001				8		in							5/21/2013				15703			
RC1-002-002				13		in							5/21/2013				15704			
RC1-002-003				8		in							5/21/2013				15705			
RC1-002-004				8		in							5/21/2013				15706			
RC1-002-005						in							5/21/2013	1			15707			
RC1-002-006				9		in							5/21/2013				15708			
RC1-002-007						in							5/21/2013				15709			
RC1-002-008				3		in						Seed-288	5/21/2013				15710			
RC1-002-009						in							5/21/2013	1			15711			
RC1-002-010				6		in							5/21/2013				15712			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-003-001				8		in							5/21/2013				15698			
RC1-003-002						in							5/21/2013	1			15699			
RC1-003-003						in							5/21/2013	1			15700			
RC1-003-004				3		in							5/21/2013				15701			
RC1-003-005				3		in						Seed-284	5/21/2013				15702			
RC1-004-001				8		in							5/21/2013				15686			
RC1-004-002				5		in							5/21/2013				15687			
RC1-004-003				3		in						Seed-289	5/21/2013				15688			
RC1-004-004						in							5/21/2013	1			15689			
RC1-004-005				8		in							5/21/2013				15690			
RC1-004-006				18		in							5/21/2013				15691			
RC1-004-007				13		in							5/21/2013				15692			
RC1-004-008				18		in							5/21/2013				15693			
RC1-004-009						in							5/21/2013	1			15694			
RC1-004-010				15		in							5/21/2013				15695			
RC1-004-011				9		in							5/21/2013				15696			
RC1-004-012						in							5/21/2013	1			15697			
RC1-005-001				2		in							5/10/2013				9338			
RC1-005-002				5		in							5/10/2013				9339			
RC1-005-003				3		in							5/10/2013				9340			
RC1-005-004				6		in							5/10/2013				9341			
RC1-005-005				4		in							5/10/2013				9342			
RC1-005-006				3		in							5/10/2013				9343			
RC1-005-007				6		in							5/10/2013				9344			
RC1-005-008				2		in							5/10/2013				9345			
RC1-005-009				3		in						Seed-227	5/10/2013				9346			
RC1-005-010				4		in							5/10/2013				9347			
RC1-005-011						in							5/10/2013	1			9348			
RC1-005-012				3		in							5/10/2013				9349			
RC1-005-013				3		in							5/10/2013				9350			
RC1-007-001				8		in							5/8/2013				9253			
RC1-007-002				4		in							5/8/2013				9254			
RC1-007-003				4		in							5/8/2013				9255			
RC1-007-004				3		in							5/8/2013				9256			
RC1-007-005				3		in							5/8/2013				9257			
RC1-007-006				4		in							5/8/2013				9258			
RC1-007-007				2		in							5/8/2013				9259			
RC1-007-008				3		in							5/8/2013				9260			
RC1-007-009				4		in							5/8/2013				9261			
RC1-007-010				4		in							5/8/2013				9262			
RC1-007-011				2		in							5/8/2013				9263			
RC1-007-012				2		in							5/8/2013				9264			
RC1-007-013				3		in						Seed-188	5/8/2013				9265			
RC1-007-014				4		in							5/8/2013				9266			
RC1-007-015				2		in							5/8/2013				9267			
RC1-007-016				2		in							5/8/2013				9268			
RC1-007-017				2		in							5/8/2013				9269			
RC1-012-001				8		in							5/21/2013				15566			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-012-002				2		in							5/21/2013				15567			
RC1-012-003				3		in							5/21/2013				15568			
RC1-012-004				3		in							5/21/2013				15569			
RC1-012-005				4		in							5/21/2013				15570			
RC1-012-006				10		in							5/21/2013				15571			
RC1-012-007				6		in							5/21/2013				15572			
RC1-012-008				6		in							5/21/2013				15573			
RC1-012-009				6		in							5/21/2013				15574			
RC1-012-010				8		in							5/21/2013				15575			
RC1-012-011				5		in							5/21/2013				15576			
RC1-012-012				4		in							5/21/2013				15577			
RC1-012-013						in							5/21/2013	1			15578			
RC1-012-014				3		in							5/21/2013				15579			
RC1-012-015				3		in							5/21/2013				15580			
RC1-012-016				3		in						Seed-283	5/21/2013				15581			
RC1-012-017				3		in							5/21/2013				15582			
RC1-012-018				3		in							5/21/2013				15583			
RC1-012-019				4		in							5/21/2013				15584			
RC1-012-020				4		in							5/21/2013				15585			
RC1-012-021				4		in							5/21/2013				15586			
RC1-012-022				6		in							5/21/2013				15587			
RC1-012-023				6		in							5/21/2013				15588			
RC1-012-024				6		in							5/21/2013				15589			
RC1-012-025				5		in							5/21/2013				15590			
RC1-012-026				6		in							5/21/2013				15591			
RC1-012-027				2		in							5/21/2013				15592			
RC1-012-028				1.5		in							5/21/2013				15593			
RC1-012-029				3		in							5/21/2013				15594			
RC1-013-001				8		in							5/10/2013				9321			
RC1-013-002				4		in							5/10/2013				9322			
RC1-013-003				6		in						Seed-213	5/10/2013				9323			
RC1-013-004				6		in							5/10/2013				9324			
RC1-013-005				4		in							5/10/2013				9325			
RC1-013-006				4		in							5/10/2013				9326			
RC1-013-007				36		in							5/10/2013				9327			
RC1-013-008				2		in							5/10/2013				9328			
RC1-013-009				3		in							5/10/2013				9329			
RC1-013-010				3		in							5/10/2013				9330			
RC1-013-011				2		in							5/10/2013				9331			
RC1-013-012				3		in							5/10/2013				9332			
RC1-013-013				2		in							5/10/2013				9333			
RC1-013-014				3		in							5/10/2013				9334			
RC1-013-015				2		in							5/10/2013				9335			
RC1-013-016				5		in							5/10/2013				9336			
RC1-013-017				12		in							5/10/2013				9337			
RC1-014-001				8		in							5/8/2013				9225			
RC1-014-002				3		in							5/8/2013				9226			
RC1-014-003				2		in							5/8/2013				9227			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-014-004				5		in							5/8/2013				9228			
RC1-014-005				6		in							5/8/2013				9229			
RC1-014-006				3		in							5/8/2013				9230			
RC1-014-007				2		in							5/8/2013				9231			
RC1-014-008				5		in							5/8/2013				9232			
RC1-014-009				3		in							5/8/2013				9233			
RC1-014-010				5		in							5/8/2013				9234			
RC1-014-011				6		in							5/8/2013				9235			
RC1-014-012				3		in							5/8/2013				9236			
RC1-014-013				4		in							5/8/2013				9237			
RC1-014-014				4		in							5/8/2013				9238			
RC1-014-015				3		in							5/8/2013				9239			
RC1-014-016				2		in							5/8/2013				9240			
RC1-014-017				2		in							5/8/2013				9241			
RC1-014-018				6		in							5/8/2013				9242			
RC1-014-019				6		in							5/8/2013				9243			
RC1-014-020				6		in							5/8/2013				9244			
RC1-014-021				4		in							5/8/2013				9245			
RC1-014-022				3		in							5/8/2013				9246			
RC1-014-023				2		in							5/8/2013				9247			
RC1-014-024				6		in							5/8/2013				9248			
RC1-014-025				2		in							5/8/2013				9249			
RC1-014-026				4		in							5/8/2013				9250			
RC1-014-027				3		in							5/8/2013				9251			
RC1-014-028				3		in						Seed-223	5/8/2013				9252			
RC1-016-001				8		in							5/6/2013				8720			
RC1-016-002				3		in						Seed-198	5/6/2013				8721			
RC1-016-003						in							5/6/2013	1			8722			
RC1-016-004				10		in							5/6/2013				8723			
RC1-016-006				4		in							5/6/2013				8724			
RC1-016-007				6		in							5/6/2013				8725			
RC1-016-008				3		in							5/6/2013				8726			
RC1-016-009				3		in							5/6/2013				8727			
RC1-016-010				6		in							5/6/2013				8728			
RC1-016-011				3		in							5/6/2013				8729			
RC1-016-012				12		in							5/6/2013				8730			
RC1-016-013						in							5/6/2013				8731			
RC1-016-014				3		in							5/6/2013				8732			
RC1-016-015				3		in							5/6/2013				8733			
RC1-016-016				3		in							5/6/2013				8734			
RC1-016-017				4		in							5/6/2013				8735			
RC1-016-018				3		in							5/6/2013				8736			
RC1-016-019				3		in							5/6/2013				8737			
RC1-016-020				2		in							5/6/2013				8738			
RC1-016-021				8		in							5/6/2013				8739			
RC1-016-022				4		in							5/6/2013				8740			
RC1-018-001				8		in							5/10/2013				9444			
RC1-018-002				12		in							5/10/2013				9445			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-018-003				24		in							5/10/2013				9446			
RC1-018-004				12		in							5/10/2013				9447			
RC1-018-005				6		in							5/10/2013				9448			
RC1-018-006				5		in							5/10/2013				9449			
RC1-018-007				4		in							5/10/2013				9450			
RC1-018-008				30		in							5/10/2013				9451			
RC1-018-009				12		in							5/10/2013				9452			
RC1-018-010				6		in							5/10/2013				9453			
RC1-018-011				4		in							5/10/2013				9454			
RC1-018-012				12		in							5/10/2013				9455			
RC1-018-013				24		in							5/10/2013				9456			
RC1-018-014				5		in							5/10/2013				9457			
RC1-018-015				12		in							5/10/2013				9458			
RC1-018-016				2		in							5/10/2013				9459			
RC1-018-017				3.5		in							5/10/2013				9460			
RC1-018-018				2		in							5/10/2013				9461			
RC1-018-019				24		in							5/10/2013				9462			
RC1-018-020				18		in							5/10/2013				9463			
RC1-018-021				14		in							5/10/2013				9464			
RC1-018-022				4		in							5/10/2013				9465			
RC1-018-023				3		in							5/10/2013				9466			
RC1-018-024				72		in							5/10/2013				9467			
RC1-018-025				6		in							5/10/2013				9468			
RC1-018-026				16		in							5/10/2013				9469			
RC1-018-027				4		in							5/10/2013				9470			
RC1-018-028				3		in							5/10/2013				9471			
RC1-018-029				2		in							5/10/2013				9472			
RC1-018-030				3		in							5/10/2013				9473			
RC1-018-031				3		in							5/10/2013				9474			
RC1-018-032				3		in							5/10/2013				9475			
RC1-018-033				4		in							5/10/2013				9476			
RC1-018-034				18		in							5/10/2013				9477			
RC1-018-035				3		in							5/10/2013				9478			
RC1-018-036				8		in							5/10/2013				9479			
RC1-018-037				2		in							5/10/2013				9480			
RC1-018-038				6		in							5/10/2013				9481			
RC1-018-039				6		in							5/10/2013				9482			
RC1-018-040				5		in							5/10/2013				9483			
RC1-018-041				3		in							5/10/2013				9484			
RC1-018-042				12		in							5/10/2013				9485			
RC1-018-043				3		in							5/10/2013				9486			
RC1-018-044						in							5/10/2013	1			9487			
RC1-018-045				3		in							5/10/2013				9488			
RC1-018-046				4		in							5/10/2013				9489			
RC1-018-047				2		in							5/10/2013				9490			
RC1-018-048				6		in							5/10/2013				9491			
RC1-018-049				6		in							5/10/2013				9492			
RC1-018-050				6		in							5/10/2013				9493			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-018-051				4		in							5/10/2013				9494			
RC1-018-052				4		in							5/10/2013				9495			
RC1-018-053				6		in							5/10/2013				9496			
RC1-018-054				3		in						Seed-216	5/10/2013				9497			
RC1-018-055				13		in							5/10/2013				9498			
RC1-018-056				24		in							5/10/2013				9499			
RC1-022-001				8		in							5/22/2013				15840			
RC1-022-002				3		in							5/22/2013				15841			
RC1-022-003				3		in						Seed-244	5/22/2013				15842			
RC1-022-004				3		in							5/22/2013				15843			
RC1-022-005						in							5/22/2013	1			15844			
RC1-022-006				3		in							5/22/2013				15845			
RC1-022-007				4		in							5/22/2013				15846			
RC1-022-008				4		in							5/22/2013				15847			
RC1-022-009				4		in							5/22/2013				15848			
RC1-022-010				4		in							5/22/2013				15849			
RC1-022-011						in							5/22/2013	1			15850			
RC1-022-012						in							5/22/2013	1			15851			
RC1-022-013						in							5/22/2013	1			15852			
RC1-022-014				3		in							5/22/2013				15853			
RC1-022-015				3		in							5/22/2013				15854			
RC1-022-016						in							5/22/2013	1			15855			
RC1-022-017				5		in							5/22/2013				15856			
RC1-022-018						in							5/22/2013	1			15857			
RC1-022-019				2		in							5/22/2013				15858			
RC1-022-020						in							5/22/2013	1			15859			
RC1-022-021						in							5/22/2013	1			15860			
RC1-022-022						in							5/22/2013	1			15861			
RC1-022-023						in							5/22/2013	1			15862			
RC1-022-024				4		in							5/22/2013				15863			
RC1-022-025				5		in							5/22/2013				15864			
RC1-022-026						in							5/22/2013	1			15865			
RC1-022-027				3		in							5/22/2013				15866			
RC1-022-028						in							5/22/2013	1			15867			
RC1-022-029				5		in							5/22/2013				15868			
RC1-028-001				8		in							5/6/2013				8682			
RC1-028-002						in							5/6/2013	1			8683			
RC1-028-003						in							5/6/2013	1			8684			
RC1-028-004						in							5/6/2013	1			8685			
RC1-028-005				2		in							5/6/2013				8686			
RC1-028-006						in							5/6/2013	1			8687			
RC1-028-009						in							5/6/2013	1			8688			
RC1-028-010						in							5/6/2013	1			8689			
RC1-028-011						in							5/6/2013	1			8690			
RC1-028-012				1		in							5/6/2013				8691			
RC1-028-013						in							5/6/2013	1			8692			
RC1-028-014				3		in							5/6/2013				8693			
RC1-028-015				4		in							5/6/2013				8694			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-028-016						in							5/6/2013	1			8695			
RC1-028-017						in							5/6/2013	1			8696			
RC1-028-018						in							5/6/2013	1			8697			
RC1-028-019						in							5/6/2013	1			8698			
RC1-028-020						in							5/6/2013	1			8699			
RC1-028-021						in							5/6/2013	1			8700			
RC1-028-022						in							5/6/2013	1			8701			
RC1-028-023						in							5/6/2013	1			8702			
RC1-028-024				8		in							5/6/2013				8703			
RC1-028-025				3		in						Seed-193	5/6/2013				8704			
RC1-028-026						in							5/6/2013	1			8705			
RC1-028-027						in							5/6/2013	1			8706			
RC1-028-028						in							5/6/2013	1			8707			
RC1-028-029						in							5/6/2013	1			8708			
RC1-028-030						in							5/6/2013	1			8709			
RC1-028-031						in							5/6/2013	1			8710			
RC1-028-032						in							5/6/2013	1			8711			
RC1-028-033						in							5/6/2013	1			8712			
RC1-028-034						in							5/6/2013	1			8713			
RC1-028-035						in							5/6/2013	1			8714			
RC1-028-036						in							5/6/2013	1			8715			
RC1-028-037						in							5/6/2013	1			8716			
RC1-028-038						in							5/6/2013	1			8717			
RC1-028-039						in							5/6/2013	1			8718			
RC1-028-041						in							5/6/2013	1			8719			
RC1-029-001				1		in							5/14/2013				11294			
RC1-029-002				3		in							5/14/2013				11295			
RC1-029-003				1		in							5/14/2013				11296			
RC1-029-004				1		in							5/14/2013				11297			
RC1-029-005				3		in							5/14/2013				11298			
RC1-029-006				1		in							5/14/2013				11299			
RC1-029-007				2		in							5/14/2013				11300			
RC1-029-008				2		in							5/14/2013				11301			
RC1-029-009				2		in							5/14/2013				11302			
RC1-029-010				2		in							5/14/2013				11303			
RC1-029-011				6		in							5/14/2013				11304			
RC1-029-012				3		in							5/14/2013				11305			
RC1-029-013				3		in							5/14/2013				11306			
RC1-029-014				3		in							5/14/2013				11307			
RC1-029-015				6		in							5/14/2013				11308			
RC1-029-016				3		in							5/14/2013				11309			
RC1-029-017				3		in							5/14/2013				11310			
RC1-029-018				4		in							5/14/2013				11311			
RC1-029-019				1		in							5/14/2013				11312			
RC1-029-020				6		in							5/14/2013				11313			
RC1-029-021				3		in						Seed-186	5/14/2013				11314			
RC1-029-022				5		in							5/14/2013				11315			
RC1-029-023				5		in							5/14/2013				11316			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-029-024				5		in							5/14/2013				11317			
RC1-029-025				5		in							5/14/2013				11318			
RC1-029-026				2		in							5/14/2013				11319			
RC1-029-027				5		in							5/14/2013				11320			
RC1-029-028				6		in							5/14/2013				11321			
RC1-032-001				8		in							5/14/2013				11286			
RC1-032-002				3		in						Seed-214	5/14/2013				11287			
RC1-032-003				5		in							5/14/2013				11288			
RC1-032-004				3		in							5/14/2013				11289			
RC1-032-005				3		in							5/14/2013				11290			
RC1-032-006						in							5/14/2013	1			11291			
RC1-032-007				3		in							5/14/2013				11292			
RC1-032-008				5		in							5/14/2013				11293			
RC1-033-001				8		in							5/14/2013				11261			
RC1-033-002				3		in							5/14/2013				11262			
RC1-033-003				4		in							5/14/2013				11263			
RC1-033-004				1		in							5/14/2013				11264			
RC1-033-005				2		in							5/14/2013				11265			
RC1-033-006				3		in							5/14/2013				11266			
RC1-033-007				0.5		in							5/14/2013				11267			
RC1-033-008				3		in							5/14/2013				11268			
RC1-033-009				2		in							5/14/2013				11269			
RC1-033-010				3		in							5/14/2013				11270			
RC1-033-011				6		in							5/14/2013				11271			
RC1-033-012				5		in							5/14/2013				11272			
RC1-033-013				4		in							5/14/2013				11273			
RC1-033-014				5		in							5/14/2013				11274			
RC1-033-015				3		in						Seed-219	5/14/2013				11275			
RC1-033-016				4		in							5/14/2013				11276			
RC1-033-017				4		in							5/14/2013				11277			
RC1-033-018				5		in							5/14/2013				11278			
RC1-033-019				5		in							5/14/2013				11279			
RC1-033-020				4		in							5/14/2013				11280			
RC1-033-021				4		in							5/14/2013				11281			
RC1-033-022				2		in							5/14/2013				11282			
RC1-033-023						in							5/14/2013	1			11283			
RC1-033-024				2		in							5/14/2013				11284			
RC1-033-025				4		in							5/14/2013				11285			
RC1-034-001				8		in							5/6/2013				8667			
RC1-034-002				3		in							5/6/2013				8668			
RC1-034-003				3		in							5/6/2013				8669			
RC1-034-004				3		in							5/6/2013				8670			
RC1-034-005				3		in							5/6/2013				8671			
RC1-034-006				3		in							5/6/2013				8672			
RC1-034-007						in							5/6/2013	1			8673			
RC1-034-008				2		in							5/6/2013				8674			
RC1-034-009				3		in						Seed-195	5/6/2013				8675			
RC1-034-010						in							5/6/2013	1			8676			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-034-011				2		in							5/6/2013				8677			
RC1-034-012				6		in							5/6/2013				8678			
RC1-034-013				1		in							5/6/2013				8679			
RC1-034-014				2		in							5/6/2013				8680			
RC1-034-015				3		in							5/6/2013				8681			
RC1-035-001				8		in							5/14/2013				11251			
RC1-035-002				3		in						Seed-232	5/14/2013				11252			
RC1-035-003						in							5/14/2013	1			11253			
RC1-035-004				5		in							5/14/2013				11254			
RC1-035-005				6		in							5/14/2013				11255			
RC1-035-006				8		in							5/14/2013				11256			
RC1-035-007				4		in							5/14/2013				11257			
RC1-035-008				6		in							5/14/2013				11258			
RC1-035-009				6		in							5/14/2013				11259			
RC1-035-010				6		in							5/14/2013				11260			
RC1-037-001				8		in							5/21/2013				15555			
RC1-037-002				3		in							5/21/2013				15556			
RC1-037-003				2		in							5/21/2013				15557			
RC1-037-004				3		in						Seed-285	5/21/2013				15558			
RC1-037-005				3		in							5/21/2013				15559			
RC1-037-006				3		in							5/21/2013				15560			
RC1-037-007				2		in							5/21/2013				15561			
RC1-037-008				4		in							5/21/2013				15562			
RC1-037-009				3		in							5/21/2013				15563			
RC1-037-010				5		in							5/21/2013				15564			
RC1-037-011				3		in							5/21/2013				15565			
RC1-040-001				8		in							5/6/2013				8648			
RC1-040-002				1		in							5/6/2013				8649			
RC1-040-003				1		in							5/6/2013				8650			
RC1-040-004				5		in							5/6/2013				8651			
RC1-040-005				1		in							5/6/2013				8652			
RC1-040-006				1		in							5/6/2013				8653			
RC1-040-007				2		in							5/6/2013				8654			
RC1-040-008				1		in							5/6/2013				8655			
RC1-040-009				1		in							5/6/2013				8656			
RC1-040-011				5		in							5/6/2013				8657			
RC1-040-012				7		in							5/6/2013				8658			
RC1-040-014						in							5/6/2013				8659			
RC1-040-015				2		in							5/6/2013				8660			
RC1-040-016				6		in							5/6/2013				8661			
RC1-040-018				5		in							5/6/2013				8662			
RC1-040-019				4		in							5/6/2013				8663			
RC1-040-020				4		in							5/6/2013				8664			
RC1-040-021				3		in							5/6/2013				8665			
RC1-040-022				3		in						Seed-201	5/6/2013				8666			
RC1-041-001				8		in							5/21/2013				15548			
RC1-041-002				8		in							5/21/2013				15549			
RC1-041-003				8		in							5/21/2013				15550			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-041-004				5		in							5/21/2013				15551			
RC1-041-005				4.71		in							5/21/2013				15552			
RC1-041-006				3		in						Seed-231	5/21/2013				15553			
RC1-041-007				2.5		in							5/21/2013				15554			
RC1-042-001				8		in							5/21/2013				15544			
RC1-042-002						in							5/21/2013	1			15545			
RC1-042-003						in							5/21/2013	1			15546			
RC1-042-004				3		in						Seed-236	5/21/2013				15547			
RC1-043-001				8		in							5/21/2013				15538			
RC1-043-002						in							5/21/2013	1			15539			
RC1-043-003						in							5/21/2013	1			15540			
RC1-043-004				3		in						Seed-203	5/21/2013				15541			
RC1-043-005				3		in							5/21/2013				15542			
RC1-043-006				4		in							5/21/2013				15543			
RC1-045-001				8		in							5/14/2013				11243			
RC1-045-002						in							5/14/2013	1			11244			
RC1-045-003						in							5/14/2013	1			11245			
RC1-045-004						in							5/14/2013	1			11246			
RC1-045-005						in							5/14/2013	1			11247			
RC1-045-006				3		in						Seed-210	5/14/2013				11248			
RC1-045-007				4		in							5/14/2013				11249			
RC1-045-008				3		in							5/14/2013				11250			
RC1-046-001				1		in							5/21/2013				15511			
RC1-046-002						in							5/21/2013				15512			
RC1-046-003						in							5/21/2013				15513			
RC1-046-004						in							5/21/2013				15514			
RC1-046-005						in							5/21/2013				15515			
RC1-046-006						in							5/21/2013				15516			
RC1-046-007						in							5/21/2013				15517			
RC1-046-008						in							5/21/2013				15518			
RC1-046-009				4		in							5/21/2013				15519			
RC1-046-010				5		in							5/21/2013				15520			
RC1-046-011						in							5/21/2013				15521			
RC1-046-012						in							5/21/2013				15522			
RC1-046-013				6		in							5/21/2013				15523			
RC1-046-014						in							5/21/2013				15524			
RC1-046-015						in							5/21/2013				15525			
RC1-046-016						in							5/21/2013				15526			
RC1-046-017						in							5/21/2013	1			15527			
RC1-046-018				3		in						Seed-202	5/21/2013				15528			
RC1-046-019				15		in							5/21/2013				15529			
RC1-046-020				3		in							5/21/2013				15530			
RC1-046-021				3		in							5/21/2013				15531			
RC1-046-022				2		in							5/21/2013				15532			
RC1-046-023						in							5/21/2013	1			15533			
RC1-046-024						in							5/21/2013	1			15534			
RC1-046-025						in							5/21/2013	1			15535			
RC1-046-026						in							5/21/2013	1			15536			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-046-027				2		in							5/21/2013				15537			
RC1-047-001				8		in							5/14/2013				11223			
RC1-047-002				5		in							5/14/2013				11224			
RC1-047-003						in							5/14/2013	1			11225			
RC1-047-004						in							5/14/2013	1			11226			
RC1-047-005				10		in							5/14/2013				11227			
RC1-047-006						in							5/14/2013	1			11228			
RC1-047-007				4		in							5/14/2013				11229			
RC1-047-008						in							5/14/2013	1			11230			
RC1-047-009						in							5/14/2013	1			11231			
RC1-047-010				3		in						Seed-230	5/14/2013				11232			
RC1-047-011						in							5/14/2013	1			11233			
RC1-047-012						in							5/14/2013	1			11234			
RC1-047-013						in							5/14/2013	1			11235			
RC1-047-014						in							5/14/2013	1			11236			
RC1-047-015				38		in							5/14/2013				11237			
RC1-047-016						in							5/14/2013	1			11238			
RC1-047-017						in							5/14/2013	1			11239			
RC1-047-018						in							5/14/2013	1			11240			
RC1-047-019						in							5/14/2013	1			11241			
RC1-047-020						in							5/14/2013	1			11242			
RC1-048-001				8		in							5/14/2013				11182			
RC1-048-002				5		in							5/14/2013				11183			
RC1-048-003				4		in							5/14/2013				11184			
RC1-048-004				4		in							5/14/2013				11185			
RC1-048-005				8		in							5/14/2013				11186			
RC1-048-006				5		in							5/14/2013				11187			
RC1-048-007				8		in							5/14/2013				11188			
RC1-048-008				5		in							5/14/2013				11189			
RC1-048-009				6		in							5/14/2013				11190			
RC1-048-010				14		in							5/14/2013				11191			
RC1-048-011				3		in						Seed-215	5/14/2013				11192			
RC1-048-012				3		in							5/14/2013				11193			
RC1-048-013				8		in							5/14/2013				11194			
RC1-048-014				24		in							5/14/2013				11195			
RC1-048-015				6		in							5/14/2013				11196			
RC1-048-016				7		in							5/14/2013				11197			
RC1-048-017				12		in							5/14/2013				11198			
RC1-048-018				3		in							5/14/2013				11199			
RC1-048-019				4		in							5/14/2013				11200			
RC1-048-020				4		in							5/14/2013				11201			
RC1-048-021				3		in							5/14/2013				11202			
RC1-048-022				8		in							5/14/2013				11203			
RC1-048-023				8		in							5/14/2013				11204			
RC1-048-024				3		in							5/14/2013				11205			
RC1-048-025				3		in							5/14/2013				11206			
RC1-048-026				3		in							5/14/2013				11207			
RC1-048-027				3		in							5/14/2013				11208			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-048-028				5		in							5/14/2013				11209			
RC1-048-029				3		in							5/14/2013				11210			
RC1-048-030				5		in							5/14/2013				11211			
RC1-048-031				3		in							5/14/2013				11212			
RC1-048-032				8		in							5/14/2013				11213			
RC1-048-033				5		in							5/14/2013				11214			
RC1-048-034				3		in							5/14/2013				11215			
RC1-048-035				8		in							5/14/2013				11216			
RC1-048-036				4		in							5/14/2013				11217			
RC1-048-037				3		in							5/14/2013				11218			
RC1-048-038				3		in							5/14/2013				11219			
RC1-048-039				8		in							5/14/2013				11220			
RC1-048-040				3		in							5/14/2013				11221			
RC1-048-041				2		in							5/14/2013				11222			
RC1-049-001				8		in							5/21/2013				15494			
RC1-049-002				6		in							5/21/2013				15495			
RC1-049-003				4		in							5/21/2013				15496			
RC1-049-004				2		in							5/21/2013				15497			
RC1-049-005						in							5/21/2013	1			15498			
RC1-049-006				4		in							5/21/2013				15499			
RC1-049-007				6		in							5/21/2013				15500			
RC1-049-008				10		in							5/21/2013				15501			
RC1-049-009				25		in							5/21/2013				15502			
RC1-049-010				3		in							5/21/2013				15503			
RC1-049-011				1.5		in							5/21/2013				15504			
RC1-049-012						in							5/21/2013	1			15505			
RC1-049-013				2		in							5/21/2013				15506			
RC1-049-014				3		in							5/21/2013				15507			
RC1-049-015				12		in							5/21/2013				15508			
RC1-049-016				3		in						Seed-249	5/21/2013				15509			
RC1-049-017				6		in							5/21/2013				15510			
RC1-050-001				8		in							5/21/2013				15482			
RC1-050-002				3		in						Seed-247	5/21/2013				15483			
RC1-050-003						in							5/21/2013	1			15484			
RC1-050-004						in							5/21/2013	1			15485			
RC1-050-005						in							5/21/2013	1			15486			
RC1-050-006						in							5/21/2013	1			15487			
RC1-050-007						in							5/21/2013	1			15488			
RC1-050-008						in							5/21/2013	1			15489			
RC1-050-009						in							5/21/2013	1			15490			
RC1-050-010						in							5/21/2013	1			15491			
RC1-050-011						in							5/21/2013	1			15492			
RC1-050-012						in							5/21/2013	1			15493			
RC1-054-001				8		in							5/10/2013				9315			
RC1-054-002				3		in						Seed-185	5/10/2013				9316			
RC1-054-004				4		in							5/10/2013				9317			
RC1-054-005				5		in							5/10/2013				9318			
RC1-054-006				2		in							5/10/2013				9319			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-054-007				4		in							5/10/2013				9320			
RC1-055-001				8		in							5/10/2013				9305			
RC1-055-002				2		in							5/10/2013				9306			
RC1-055-003						in							5/10/2013	1			9307			
RC1-055-004				2.5		in							5/10/2013				9308			
RC1-055-005				5		in							5/10/2013				9309			
RC1-055-006						in							5/10/2013	1			9310			
RC1-055-007				3		in							5/10/2013				9311			
RC1-055-008				6		in							5/10/2013				9312			
RC1-055-009				3		in						Seed-199	5/10/2013				9313			
RC1-055-010				3		in							5/10/2013				9314			
RC1-056-001				8		in							5/21/2013				15470			
RC1-056-002				3		in						Seed-282	5/21/2013				15471			
RC1-056-003				4		in							5/21/2013				15472			
RC1-056-004				5		in							5/21/2013				15473			
RC1-056-005						in							5/21/2013	1			15474			
RC1-056-006						in							5/21/2013	1			15475			
RC1-056-007				4		in							5/21/2013				15476			
RC1-056-008				8		in							5/21/2013				15477			
RC1-056-009				6		in							5/21/2013				15478			
RC1-056-010				4		in							5/21/2013				15479			
RC1-056-011						in							5/21/2013	1			15480			
RC1-056-012						in							5/21/2013	1			15481			
RC1-058-001				8		in							5/14/2013				11166			
RC1-058-002				3		in						Seed-243	5/14/2013				11167			
RC1-058-003				6		in							5/14/2013				11168			
RC1-058-004				3		in							5/14/2013				11169			
RC1-058-005				4		in							5/14/2013				11170			
RC1-058-006						in							5/14/2013	1			11171			
RC1-058-007				3		in							5/14/2013				11172			
RC1-058-008				8		in							5/14/2013				11173			
RC1-058-009				36		in							5/14/2013				11174			
RC1-058-010						in							5/14/2013				11175			
RC1-058-011						in							5/14/2013				11176			
RC1-058-012				24		in							5/14/2013				11177			
RC1-058-013				13		in							5/14/2013				11178			
RC1-058-014				1		in							5/14/2013				11179			
RC1-058-015				1		in							5/14/2013				11180			
RC1-058-016						in							5/14/2013	1			11181			
RC1-059-001				8		in							5/14/2013				11322			
RC1-059-002						in							5/14/2013	1			11323			
RC1-059-003						in							5/14/2013	1			11324			
RC1-059-004				0.5		in							5/14/2013				11325			
RC1-059-005						in							5/14/2013	1			11326			
RC1-059-006				3		in						Seed-222	5/14/2013				11327			
RC1-059-007						in							5/14/2013	1			11328			
RC1-059-008				4		in							5/14/2013				11329			
RC1-059-009				2		in							5/14/2013				11330			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-059-010				9		in							5/14/2013				11331			
RC1-059-011						in							5/14/2013				11332			
RC1-059-012						in							5/14/2013	1			11333			
RC1-059-013				4		in							5/14/2013				11334			
RC1-059-014				8		in							5/14/2013				11335			
RC1-059-015						in							5/14/2013	1			11336			
RC1-059-016						in							5/14/2013	1			11337			
RC1-060-001				8		in							5/21/2013				15595			
RC1-060-002				3		in						Seed-237	5/21/2013				15596			
RC1-060-003						in							5/21/2013	1			15597			
RC1-061-001				8		in							5/10/2013				9295			
RC1-061-002				1		in							5/10/2013				9296			
RC1-061-003				3		in						Seed-208	5/10/2013				9297			
RC1-061-004				4		in							5/10/2013				9298			
RC1-061-005				2		in							5/10/2013				9299			
RC1-061-006				6		in							5/10/2013				9300			
RC1-061-007				5		in							5/10/2013				9301			
RC1-061-008				3		in							5/10/2013				9302			
RC1-061-009				5		in							5/10/2013				9303			
RC1-061-010						in							5/10/2013	1			9304			
RC1-062-001				8		in							5/21/2013				15622			
RC1-062-002						in							5/21/2013	1			15623			
RC1-062-003				3		in						Seed-220	5/21/2013				15624			
RC1-062-004						in							5/21/2013	1			15625			
RC1-063-001				8		in							5/14/2013				11144			
RC1-063-002						in							5/14/2013	1			11145			
RC1-063-003				3		in						Seed-226	5/14/2013				11146			
RC1-063-004				2		in							5/14/2013				11147			
RC1-064-001				8		in							5/6/2013				8642			
RC1-064-002				4		in							5/6/2013				8643			
RC1-064-003				3		in							5/6/2013				8644			
RC1-064-004				2		in							5/6/2013				8645			
RC1-064-005				3		in						Seed-205	5/6/2013				8646			
RC1-064-006				5		in							5/6/2013				8647			
RC1-066-001				8		in							5/21/2013				15614			
RC1-066-002				4		in							5/21/2013				15615			
RC1-066-003						in							5/21/2013	1			15616			
RC1-066-004						in							5/21/2013	1			15617			
RC1-066-005				3		in						Seed-238	5/21/2013				15618			
RC1-066-006						in							5/21/2013	1			15619			
RC1-066-007						in							5/21/2013	1			15620			
RC1-066-008						in							5/21/2013	1			15621			
RC1-067-001				8		in							5/14/2013				11140			
RC1-067-002						in							5/14/2013	1			11141			
RC1-067-003				1.5		in							5/14/2013				11142			
RC1-067-004				3		in						Seed-246	5/14/2013				11143			
RC1-068-001				3		in							5/14/2013				11128			
RC1-068-002				8		in							5/14/2013				11129			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-068-003				5		in							5/14/2013				11130			
RC1-068-004				4		in							5/14/2013				11131			
RC1-068-005				5		in							5/14/2013				11132			
RC1-068-006				3		in							5/14/2013				11133			
RC1-068-007				5		in							5/14/2013				11134			
RC1-068-008				3		in						Seed-212	5/14/2013				11135			
RC1-068-009				5		in							5/14/2013				11136			
RC1-068-010				4		in							5/14/2013				11137			
RC1-068-011				5		in							5/14/2013				11138			
RC1-068-012				3		in							5/14/2013				11139			
RC1-069-001				5		in							5/21/2013				15608			
RC1-069-002				8		in							5/21/2013				15609			
RC1-069-003				4		in							5/21/2013				15610			
RC1-069-004				5		in							5/21/2013				15611			
RC1-069-005				3		in						Seed-162	5/21/2013				15612			
RC1-069-006				8		in							5/21/2013				15613			
RC1-071-001				8		in							5/21/2013				15601			
RC1-071-002				6		in							5/21/2013				15602			
RC1-071-003				3		in						Seed-233	5/21/2013				15603			
RC1-071-004				6		in							5/21/2013				15604			
RC1-071-005				6		in							5/21/2013				15605			
RC1-071-006				6		in							5/21/2013				15606			
RC1-071-007				6		in							5/21/2013				15607			
RC1-073-001				8		in							5/14/2013				11126			
RC1-073-002				3		in						Seed-181	5/14/2013				11127			
RC1-075-001				8		in							5/6/2013				8635			
RC1-075-002				2		in							5/6/2013				8636			
RC1-075-003						in							5/6/2013	1			8637			
RC1-075-004						in							5/6/2013				8638			
RC1-075-005				3		in						Seed-207	5/6/2013				8639			
RC1-075-006				3		in							5/6/2013				8640			
RC1-075-007				2		in							5/6/2013				8641			
RC1-076-001				1		in							5/14/2013				11118			
RC1-076-002				2		in							5/14/2013				11119			
RC1-076-003				8		in							5/14/2013				11120			
RC1-076-004				2		in							5/14/2013				11121			
RC1-076-005				3		in						Seed-224	5/14/2013				11122			
RC1-076-006				4		in							5/14/2013				11123			
RC1-076-007				2		in							5/14/2013				11124			
RC1-076-008				2		in							5/14/2013				11125			
RC1-077-001				8		in							5/6/2013				8628			
RC1-077-002				3		in						Seed-204	5/6/2013				8629			
RC1-077-003						in							5/6/2013	1			8630			
RC1-077-004						in							5/6/2013	1			8631			
RC1-077-005				8		in							5/6/2013				8632			
RC1-077-006				8		in							5/6/2013				8633			
RC1-077-007				8		in							5/6/2013				8634			
RC1-078-001				8		in							5/14/2013				11116			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-078-002				3		in						Seed-229	5/14/2013				11117			
RC1-079-001				8		in							5/21/2013				15598			
RC1-079-002				2		in							5/21/2013				15599			
RC1-079-003				3		in						Seed-235	5/21/2013				15600			
RC1-080-001				8		in							5/21/2013				15667			
RC1-080-002						in							5/21/2013	1			15668			
RC1-080-003				3		in						Seed-175	5/21/2013				15669			
RC1-080-004						in							5/21/2013	1			15670			
RC1-081-001				8		in							5/22/2013				15917			
RC1-081-002				4		in							5/22/2013				15918			
RC1-081-003						in							5/22/2013	1			15919			
RC1-081-004				2		in							5/22/2013				15920			
RC1-081-005				3		in						Seed-234	5/22/2013				15921			
RC1-081-006				5		in							5/22/2013				15922			
RC1-082-001				8		in							5/22/2013				15912			
RC1-082-002				5		in							5/22/2013				15913			
RC1-082-003						in							5/22/2013	1			15914			
RC1-082-004				3		in						Seed-290	5/22/2013				15915			
RC1-082-005						in							5/22/2013	1			15916			
RC1-085-001				8		in							5/21/2013				15663			
RC1-085-002				0		in							5/21/2013	1			15664			
RC1-085-003				3		in						Seed-242	5/21/2013				15665			
RC1-085-004				6		in							5/21/2013				15666			
RC1-086-001				8		in							5/21/2013				15654			
RC1-086-002						in							5/21/2013	1			15655			
RC1-086-003						in							5/21/2013				15656			
RC1-086-004				5		in							5/21/2013				15657			
RC1-086-005				8		in							5/21/2013				15658			
RC1-086-006				18		in							5/21/2013				15659			
RC1-086-007				3		in						Seed-190	5/21/2013				15660			
RC1-086-008				8		in							5/21/2013				15661			
RC1-086-009				50		in							5/21/2013				15662			
RC1-088-001				8		in							5/14/2013				11113			
RC1-088-002				6		in							5/14/2013				11114			
RC1-088-004				3		in						Seed-239	5/14/2013				11115			
RC1-089-001				8		in							5/21/2013				15647			
RC1-089-002				10		in							5/21/2013				15648			
RC1-089-003				8		in							5/21/2013				15649			
RC1-089-004				3		in						Seed-281	5/21/2013				15650			
RC1-089-005				10		in							5/21/2013				15651			
RC1-089-006				2		in							5/21/2013				15652			
RC1-089-007						in							5/21/2013	1			15653			
RC1-090-001				8		in							5/21/2013				15642			
RC1-090-002						in							5/21/2013	1			15643			
RC1-090-003				3		in						Seed-250	5/21/2013				15644			
RC1-090-004				2		in							5/21/2013				15645			
RC1-090-005				5		in							5/21/2013				15646			
RC1-091-001				8		in							5/21/2013				15640			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC1-091-002				3		in						Seed-192	5/21/2013				15641			
RC1-093-001				8		in							5/10/2013				9384			
RC1-093-002				8		in							5/10/2013				9385			
RC1-093-003				3		in						Seed-206	5/10/2013				9386			
RC1-093-004				2		in							5/10/2013				9387			
RC1-095-001				8		in							5/21/2013				15635			
RC1-095-002				68		in							5/21/2013				15636			
RC1-095-003						in							5/21/2013	1			15637			
RC1-095-004				3		in						Seed-240	5/21/2013				15638			
RC1-095-005						in							5/21/2013	1			15639			
RC1-098-001				8		in							5/21/2013				15632			
RC1-098-002				4		in							5/21/2013				15633			
RC1-098-003				3		in						Seed-286	5/21/2013				15634			
RC1-099-001				8		in							5/21/2013				15626			
RC1-099-002						in							5/21/2013	1			15627			
RC1-099-003						in							5/21/2013	1			15628			
RC1-099-004						in							5/21/2013	1			15629			
RC1-099-005				3		in						Seed-287	5/21/2013				15630			
RC1-099-006						in							5/21/2013	1			15631			
RC2-000-001				8		in							5/6/2013				8745			
RC2-000-002						in							5/6/2013	1			8746			
RC2-000-003						in							5/6/2013	1			8747			
RC2-000-004				6		in							5/6/2013				8748			
RC2-000-005				52		in							5/6/2013				8749			
RC2-000-006						in							5/6/2013	1			8750			
RC2-000-007				48		in							5/6/2013				8751			
RC2-000-008						in							5/6/2013	1			8752			
RC2-000-009				39		in							5/6/2013				8753			
RC2-000-010				3		in						Seed-146	5/6/2013				8754			
RC2-000-011						in							5/6/2013	1			8755			
RC2-000-012				10		in							5/6/2013				8756			
RC2-002-001				8		in							5/10/2013				9361			
RC2-002-002				10		in							5/10/2013				9362			
RC2-002-003				5		in							5/10/2013				9363			
RC2-002-004				2		in							5/10/2013				9364			
RC2-002-005				3		in						Seed-149	5/10/2013				9365			
RC2-002-006						in							5/10/2013				9366			
RC2-002-007				5		in							5/10/2013				9367			
RC2-002-008				4		in							5/10/2013				9368			
RC2-002-009				4		in							5/10/2013				9369			
RC2-002-010				2		in							5/10/2013				9370			
RC2-002-011				2		in							5/10/2013				9371			
RC2-002-012				6		in							5/10/2013				9372			
RC2-002-013				8		in							5/10/2013				9373			
RC2-002-014				6		in							5/10/2013				9374			
RC2-002-015				4		in							5/10/2013				9375			
RC2-002-016				3		in							5/10/2013				9376			
RC2-002-017				2		in							5/10/2013				9377			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-002-018				4		in							5/10/2013				9378			
RC2-002-019				4		in							5/10/2013				9379			
RC2-002-020				5		in							5/10/2013				9380			
RC2-002-021				6		in							5/10/2013				9381			
RC2-002-022				5		in							5/10/2013				9382			
RC2-002-023				8		in							5/10/2013				9383			
RC2-004-001				8		in							5/6/2013				8622			
RC2-004-002						in							5/6/2013	1			8623			
RC2-004-003						in							5/6/2013	1			8624			
RC2-004-004						in							5/6/2013	1			8625			
RC2-004-005						in						Seed-200	5/6/2013				8626			
RC2-004-006				5		in							5/6/2013				8627			
RC2-005-001				8		in							5/2/2013				7538			
RC2-005-002				4		in							5/2/2013				7539			
RC2-005-003				3		in							5/2/2013				7540			
RC2-005-004				1		in							5/2/2013				7541			
RC2-005-005				3		in							5/2/2013				7542			
RC2-005-006				4		in							5/2/2013				7543			
RC2-005-007				2		in							5/2/2013				7544			
RC2-005-008				2		in							5/2/2013				7545			
RC2-005-009				3		in							5/2/2013				7546			
RC2-005-010				3		in						Seed-144	5/2/2013				7547			
RC2-006-001				3		in							4/18/2013				6040			
RC2-006-002				72		in							4/18/2013				6041			
RC2-006-003				3		in							4/18/2013				6042			
RC2-006-004				1		in						Seed-010	4/18/2013				6043			
RC2-006-005				3		in							4/18/2013				6044			
RC2-006-006				8		in							4/18/2013				6045			
RC2-006-007				3		in							4/18/2013				6046			
RC2-006-008				6		in							4/18/2013				6047			
RC2-006-009				8		in							4/18/2013				6048			
RC2-006-010				18		in							4/18/2013				6049			
RC2-006-011				1		in							4/18/2013				6050			
RC2-006-012				6		in							4/18/2013				6051			
RC2-006-013				18		in							4/18/2013				6052			
RC2-006-014				4		in							4/18/2013				6053			
RC2-006-015				4		in							4/18/2013				6054			
RC2-006-016				3		in							4/18/2013				6055			
RC2-006-017				7		in							4/18/2013				6056			
RC2-006-018				2		in							4/18/2013				6057			
RC2-006-019				6		in							4/18/2013				6058			
RC2-006-020				6		in							5/21/2013				15783			
RC2-006-021				2		in							5/21/2013				15784			
RC2-006-022				4		in							5/21/2013				15785			
RC2-006-023				3		in							5/21/2013				15786			
RC2-006-024				3		in						Seed-241	5/21/2013				15787			
RC2-006-025				2		in							5/21/2013				15788			
RC2-007-001				8		in							4/16/2013				5806			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-007-002				3		in							4/16/2013				5807			
RC2-007-003				6		in							4/16/2013				5808			
RC2-007-004				4		in							4/16/2013				5809			
RC2-007-005				4		in							4/16/2013				5810			
RC2-007-006				3		in							4/16/2013				5811			
RC2-007-007				6		in							4/16/2013				5812			
RC2-007-008				6		in							4/16/2013				5813			
RC2-007-009				3		in							4/16/2013				5814			
RC2-007-010				3		in							4/16/2013				5815			
RC2-007-011				4		in							4/16/2013				5816			
RC2-007-012				2		in							4/16/2013				5817			
RC2-007-013				4		in						Seed-117	4/16/2013				5818			
RC2-007-014				3		in							4/16/2013				5819			
RC2-007-015				5		in							4/16/2013				5820			
RC2-007-016						in							4/16/2013				5821			
RC2-007-017				4		in							4/16/2013				5822			
RC2-007-018				2		in							4/16/2013				5823			
RC2-007-019				2		in							4/16/2013				5824			
RC2-007-020				3		in							4/16/2013				5825			
RC2-007-021				1.5		in							4/16/2013				5826			
RC2-008-001				8		in							4/16/2013				5793			
RC2-008-002				3		in							4/16/2013				5794			
RC2-008-003				3		in						Seed-096	4/16/2013				5795			
RC2-008-004				6		in							4/16/2013				5796			
RC2-008-005				2		in							4/16/2013				5797			
RC2-008-006				3		in							4/16/2013				5798			
RC2-008-007				1		in							4/16/2013				5799			
RC2-008-008				4		in							4/16/2013				5800			
RC2-008-009				3		in							4/16/2013				5801			
RC2-008-010				4		in							4/16/2013				5802			
RC2-008-011				3		in							4/16/2013				5803			
RC2-008-012				5		in							4/16/2013				5804			
RC2-008-013				3		in							4/16/2013				5805			
RC2-009-001				4		in							4/16/2013				5780			
RC2-009-002				5		in							4/16/2013				5781			
RC2-009-003				3		in							4/16/2013				5782			
RC2-009-004				3		in							4/16/2013				5783			
RC2-009-005				3		in							4/16/2013				5784			
RC2-009-006				3		in							4/16/2013				5785			
RC2-009-007				4		in							4/16/2013				5786			
RC2-009-008				7		in							4/16/2013				5787			
RC2-009-009				4		in							4/16/2013				5788			
RC2-009-010				3		in						Seed-115	4/16/2013				5789			
RC2-009-011				3		in							4/16/2013				5790			
RC2-009-012				6		in							4/16/2013				5791			
RC2-009-013				3		in							4/16/2013				5792			
RC2-010-001				3		in							4/19/2013				6144			
RC2-010-002				6		in							4/19/2013				6145			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-010-003				10		in							4/19/2013				6146			
RC2-010-004				3		in							4/19/2013				6147			
RC2-010-005				4		in							4/19/2013				6148			
RC2-010-006				10		in							4/19/2013				6149			
RC2-010-007				7		in							4/19/2013				6150			
RC2-010-008				3		in							4/19/2013				6151			
RC2-010-009				9		in							4/19/2013				6152			
RC2-010-010				3		in							4/19/2013				6153			
RC2-010-011				7		in							4/19/2013				6154			
RC2-010-012				5		in							4/19/2013				6155			
RC2-010-013				3		in							4/19/2013				6156			
RC2-010-014				12		in							4/19/2013				6157			
RC2-010-015				3		in							4/19/2013				6158			
RC2-010-016				3		in							4/19/2013				6159			
RC2-010-017				16		in							4/19/2013				6160			
RC2-010-018				3		in							4/19/2013				6161			
RC2-010-019				7		in							4/19/2013				6162			
RC2-010-020				3		in							4/19/2013				6163			
RC2-010-021				14		in							4/19/2013				6164			
RC2-010-022				6		in							4/19/2013				6165			
RC2-010-026				7		in							4/19/2013				6166			
RC2-010-027				3		in						Seed-107	4/19/2013				6167			
RC2-010-028				1		in							4/19/2013				6168			
RC2-011-001				8		in							4/23/2013				6622			
RC2-011-002				1		in							4/23/2013				6623			
RC2-011-003				2		in							4/23/2013				6624			
RC2-011-006				5		in							4/23/2013				6625			
RC2-011-007				5		in							4/23/2013				6626			
RC2-011-008				2		in							4/23/2013				6627			
RC2-011-009						in							4/23/2013	1			6628			OT
RC2-011-010				3		in						Seed-111	4/23/2013				6629			
RC2-011-011				5		in							4/23/2013				6630			
RC2-011-012				4		in							4/23/2013				6631			
RC2-011-013				2.5		in							4/23/2013				6632			
RC2-011-015				3		in							4/23/2013				6633			
RC2-011-016				24		in							4/23/2013				6634			
RC2-011-017				3		in							4/23/2013				6635			
RC2-011-019				6		in							4/23/2013				6636			
RC2-011-020						in							4/23/2013				6637			OT
RC2-012-001				8		in							4/23/2013				6657			
RC2-012-002				2		in							4/23/2013				6658			
RC2-012-003				1.25		in							4/23/2013				6659			
RC2-012-004				6		in							4/23/2013				6660			
RC2-012-005				5		in							4/23/2013				6661			
RC2-012-006				2		in							4/23/2013				6662			
RC2-012-007				4		in							4/23/2013				6663			
RC2-012-008				4		in							4/23/2013				6664			
RC2-012-011				3		in						Seed-112	4/23/2013				6665			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-012-012				6		in							4/23/2013				6666			
RC2-012-014				3		in							4/23/2013				6667			
RC2-012-016				3		in							4/23/2013				6668			
RC2-012-017				2		in							4/23/2013				6669			
RC2-012-018				5		in							4/23/2013				6670			
RC2-012-019				4		in							4/23/2013				6671			
RC2-012-020				8		in							4/23/2013				6672			
RC2-012-021				2		in							4/23/2013				6673			
RC2-013-001				0.5		in							4/19/2013				6121			
RC2-013-002				3		in							4/19/2013				6122			
RC2-013-003				3		in							4/19/2013				6123			
RC2-013-004				2		in						Seed-116	4/19/2013				6124			
RC2-013-005				4		in							4/19/2013				6125			
RC2-013-006				2		in							4/19/2013				6126			
RC2-013-007				2		in							4/19/2013				6127			
RC2-013-008				2		in							4/19/2013				6128			
RC2-013-009				2		in							4/19/2013				6129			
RC2-013-010				2		in							4/19/2013				6130			
RC2-013-011				4		in							4/19/2013				6131			
RC2-013-012				4		in							4/19/2013				6132			
RC2-013-013				5		in							4/19/2013				6133			
RC2-013-014				2		in							4/19/2013				6134			
RC2-013-015				8		in							4/19/2013				6135			
RC2-013-016				8		in							4/19/2013				6136			
RC2-013-017				3		in							4/19/2013				6137			
RC2-013-018				2		in							4/19/2013				6138			
RC2-013-019				7		in							4/19/2013				6139			
RC2-013-020				8		in							4/19/2013				6140			
RC2-013-021				6		in							4/19/2013				6141			
RC2-013-022				2		in							4/19/2013				6142			
RC2-013-023				6		in							4/19/2013				6143			
RC2-016-001				3		in							4/18/2013				6059			
RC2-016-002				2		in							4/18/2013				6060			
RC2-016-003				1		in							4/18/2013				6061			
RC2-016-004				5		in							4/18/2013				6062			
RC2-016-005				3		in						Seed-125	4/18/2013				6063			
RC2-016-006				3		in							4/18/2013				6064			
RC2-016-007				3		in							4/18/2013				6065			
RC2-016-008				4		in							4/18/2013				6066			
RC2-016-009				1		in							4/18/2013				6067			
RC2-016-010				3		in							4/18/2013				6068			
RC2-016-011				2		in							4/18/2013				6069			
RC2-016-012				2		in							4/18/2013				6070			
RC2-018-001				5		in							4/18/2013				6071			
RC2-018-002				5		in							4/18/2013				6072			
RC2-018-003				3		in						Seed-114	4/18/2013				6073			
RC2-018-004				3		in							4/18/2013				6074			
RC2-018-005				4		in							4/18/2013				6075			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-018-006				4		in							4/18/2013				6076			
RC2-018-007				1		in							4/18/2013				6077			
RC2-018-008				3		in							4/18/2013				6078			
RC2-018-009				4		in							4/18/2013				6079			
RC2-018-010				8		in							4/18/2013				6080			
RC2-018-011				3		in							4/18/2013				6081			
RC2-018-012				2		in							4/18/2013				6082			
RC2-018-013				3		in							4/18/2013				6083			
RC2-018-014				4		in							4/18/2013				6084			
RC2-018-015				3		in							4/18/2013				6085			
RC2-018-016				4		in							4/18/2013				6086			
RC2-018-017				3		in							4/18/2013				6087			
RC2-018-018				4		in							4/18/2013				6088			
RC2-019-001						in							5/3/2013				7680			
RC2-019-002						in						Seed-123	5/3/2013				7681			
RC2-019-003						in							5/3/2013				7682			
RC2-019-004						in							5/3/2013				7683			
RC2-019-005						in							5/3/2013				7684			
RC2-019-006						in							5/3/2013				7685			
RC2-019-007						in							5/3/2013				7686			
RC2-019-008						in							5/3/2013				7687			
RC2-019-009						in							5/3/2013				7688			
RC2-019-010						in							5/3/2013				7689			
RC2-019-011						in							5/3/2013				7690			
RC2-019-012						in							5/3/2013				7691			
RC2-019-013						in							5/3/2013				7692			
RC2-019-014						in							5/3/2013				7693			
RC2-019-015						in							5/3/2013				7694			
RC2-019-016						in							5/3/2013				7695			
RC2-019-017						in							5/3/2013				7696			
RC2-019-018						in							5/3/2013				7697			
RC2-019-019						in							5/3/2013				7698			
RC2-019-020						in							5/3/2013				7699			
RC2-019-021						in							5/3/2013				7700			
RC2-019-022						in							5/3/2013				7701			
RC2-019-023						in							5/3/2013				7702			
RC2-021-001				8		in							4/19/2013				6103			
RC2-021-002				3		in						Seed-153	4/19/2013				6104			
RC2-021-003				2		in							4/19/2013				6105			
RC2-021-004				1.5		in							4/19/2013				6106			
RC2-021-005				4		in							4/19/2013				6107			
RC2-021-006				5		in							4/19/2013				6108			
RC2-021-007				6		in							4/19/2013				6109			
RC2-021-008				3		in							4/19/2013				6110			
RC2-021-009				4		in							4/19/2013				6111			
RC2-021-010				4		in							4/19/2013				6112			
RC2-021-011				5		in							4/19/2013				6113			
RC2-021-012				4		in							4/19/2013				6114			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-021-013				4		in							4/19/2013				6115			
RC2-021-014				2		in							4/19/2013				6116			
RC2-021-015				5		in							4/19/2013				6117			
RC2-021-016				6		in							4/19/2013				6118			
RC2-021-017				4		in							4/19/2013				6119			
RC2-021-018				3		in							4/19/2013				6120			
RC2-024-001				8		in							4/16/2013				5767			
RC2-024-002				4		in							4/16/2013				5768			
RC2-024-003				2		in							4/16/2013				5769			
RC2-024-004				4		in							4/16/2013				5770			
RC2-024-005				6		in							4/16/2013				5771			
RC2-024-006				4		in							4/16/2013				5772			
RC2-024-007				8		in							4/16/2013				5773			
RC2-024-008				5		in							4/16/2013				5774			
RC2-024-009				3		in							4/16/2013				5775			
RC2-024-010				3		in							4/16/2013				5776			
RC2-024-011				3		in							4/16/2013				5777			
RC2-024-012				4		in							4/16/2013				5778			
RC2-024-013				3		in						Seed-099	4/16/2013				5779			
RC2-025-001				8		in							4/16/2013				5726			
RC2-025-002				2		in							4/16/2013				5727			
RC2-025-003				2		in							4/16/2013				5728			
RC2-025-004				3		in							4/16/2013				5729			
RC2-025-005				1		in							4/16/2013				5730			
RC2-025-006				4		in							4/16/2013				5731			
RC2-025-007				4		in							4/16/2013				5732			
RC2-025-008				2		in							4/16/2013				5733			
RC2-025-009				2		in							4/16/2013				5734			
RC2-025-010				4		in							4/16/2013				5735			
RC2-025-011				4		in							4/16/2013				5736			
RC2-025-012				2		in							4/16/2013				5737			
RC2-025-013				2		in							4/16/2013				5738			
RC2-025-014				2		in							4/16/2013				5739			
RC2-025-015				5		in							4/16/2013				5740			
RC2-025-016				3		in						Seed-120	4/16/2013				5741			
RC2-027-001				8		in							5/14/2013				11521			
RC2-027-002				5.5		in							5/14/2013				11522			
RC2-027-004				3		in							5/14/2013				11523			
RC2-027-005				3		in						Seed-167	5/14/2013				11524			
RC2-027-007				7		in							5/14/2013				11525			
RC2-027-008				2		in							5/14/2013				11526			
RC2-027-009				4		in							5/14/2013				11527			
RC2-027-012				2		in							5/14/2013				11528			
RC2-027-014				6		in							5/14/2013				11529			
RC2-027-015				2		in							5/14/2013				11530			
RC2-027-017				2		in							5/14/2013				11531			
RC2-027-018				3		in							5/14/2013				11532			
RC2-027-019				2		in							5/14/2013				11533			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-027-020				1		in							5/14/2013				11534			
RC2-027-021				1		in							5/14/2013				11535			
RC2-027-023				2		in							5/14/2013				11536			
RC2-027-024				5		in							5/14/2013				11537			
RC2-027-025				4		in							5/14/2013				11538			
RC2-027-026				2		in							5/14/2013				11539			
RC2-027-027				4		in							5/14/2013				11540			
RC2-027-028				3		in							5/14/2013				11541			
RC2-027-029				1		in							5/14/2013				11542			
RC2-027-030				4		in							5/14/2013				11543			
RC2-027-031				2		in							5/14/2013				11544			
RC2-027-032				2		in							5/14/2013				11545			
RC2-027-033				3		in							5/14/2013				11546			
RC2-027-034				2		in							5/14/2013				11547			
RC2-027-036				0.5		in							5/14/2013				11548			
RC2-027-037				2		in							5/14/2013				11549			
RC2-027-038				1		in							5/14/2013				11550			
RC2-029-001						in							5/3/2013				7667			
RC2-029-002						in							5/3/2013	1			7668			
RC2-029-003						in							5/3/2013	1			7669			
RC2-029-004						in							5/3/2013	1			7670			
RC2-029-005						in							5/3/2013	1			7671			
RC2-029-006						in							5/3/2013	1			7672			
RC2-029-007						in							5/3/2013	1			7673			
RC2-029-008						in							5/3/2013	1			7674			
RC2-029-009						in							5/3/2013	1			7675			
RC2-029-010						in							5/3/2013	1			7676			
RC2-029-011						in							5/3/2013	1			7677			
RC2-029-012						in						Seed-171	5/3/2013				7678			
RC2-029-013						in							5/3/2013	1			7679			
RC2-030-001				2		in							5/14/2013				11388			
RC2-030-003				10		in							5/14/2013				11389			
RC2-030-004				3		in							5/14/2013				11390			
RC2-030-005				4		in							5/14/2013				11391			
RC2-030-006				3		in							5/14/2013				11392			
RC2-030-011				4		in							5/14/2013				11393			
RC2-030-013				3		in							5/14/2013				11394			
RC2-030-015				3		in							5/14/2013				11395			
RC2-030-016				7		in							5/14/2013				11396			
RC2-030-017				1		in							5/14/2013				11397			
RC2-030-018				4		in							5/14/2013				11398			
RC2-030-019				5		in							5/14/2013				11399			
RC2-030-020				3		in							5/14/2013				11400			
RC2-030-021				3		in							5/14/2013				11401			
RC2-030-022				5		in							5/14/2013				11402			
RC2-030-023				6		in							5/14/2013				11403			
RC2-030-024				6		in							5/14/2013				11404			
RC2-030-025				2		in							5/14/2013				11405			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-030-026				4		in							5/14/2013				11406			
RC2-030-027						in							5/14/2013	1			11407			
RC2-030-028				4		in							5/14/2013				11408			
RC2-030-029				3		in						Seed-170	5/14/2013				11409			
RC2-030-030				3		in							5/14/2013				11410			
RC2-030-031				2		in							5/14/2013				11411			
RC2-030-032				5		in							5/14/2013				11412			
RC2-030-033				2		in							5/14/2013				11413			
RC2-030-034				6		in							5/14/2013				11414			
RC2-030-037				6		in							5/14/2013				11415			
RC2-030-038				4		in							5/14/2013				11416			
RC2-030-039				6		in							5/14/2013				11417			
RC2-031-001				8		in							5/14/2013				11480			
RC2-031-003				4		in							5/14/2013				11481			
RC2-031-004				6		in							5/14/2013				11482			
RC2-031-006				3		in							5/14/2013				11483			
RC2-031-007				2		in							5/14/2013				11484			
RC2-031-009				5		in							5/14/2013				11485			
RC2-031-010				2		in							5/14/2013				11486			
RC2-031-011				6		in							5/14/2013				11487			
RC2-031-012				3		in							5/14/2013				11488			
RC2-031-013				3		in							5/14/2013				11489			
RC2-031-014				4		in							5/14/2013				11490			
RC2-031-015				3		in						Seed-163	5/14/2013				11491			
RC2-031-016				8		in							5/14/2013				11492			
RC2-031-017				7		in							5/14/2013				11493			
RC2-031-018				8		in							5/14/2013				11494			
RC2-031-019						in							5/14/2013				11495			
RC2-031-020				3		in							5/14/2013				11496			
RC2-031-021				8		in							5/14/2013				11497			
RC2-031-022						in							5/14/2013				11498			
RC2-031-023				3		in							5/14/2013				11499			
RC2-031-024				1		in							5/14/2013				11500			
RC2-031-025				4		in							5/14/2013				11501			
RC2-031-026				3		in							5/14/2013				11502			
RC2-031-027				3		in							5/14/2013				11503			
RC2-031-028				5		in							5/14/2013				11504			
RC2-031-029				2		in							5/14/2013				11505			
RC2-031-030				6		in							5/14/2013				11506			
RC2-031-031				3		in							5/14/2013				11507			
RC2-031-033				4		in							5/14/2013				11508			
RC2-031-034				4		in							5/14/2013				11509			
RC2-031-035				6		in							5/14/2013				11510			
RC2-031-036				6		in							5/14/2013				11511			
RC2-031-037				5		in							5/14/2013				11512			
RC2-031-038				6		in							5/14/2013				11513			
RC2-031-039				6		in							5/14/2013				11514			
RC2-031-040				5		in							5/14/2013				11515			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-031-041				2		in							5/14/2013				11516			
RC2-031-042				7		in							5/14/2013				11517			
RC2-031-044				18		in							5/14/2013				11518			
RC2-031-046				3		in							5/14/2013				11519			
RC2-031-047				5		in							5/14/2013				11520			
RC2-032-001				8		in							5/14/2013				11364			
RC2-032-002				3		in							5/14/2013				11365			
RC2-032-003				4		in							5/14/2013				11366			
RC2-032-004				4		in							5/14/2013				11367			
RC2-032-005				3		in							5/14/2013				11368			
RC2-032-006				1		in							5/14/2013				11369			
RC2-032-007				7		in							5/14/2013				11370			
RC2-032-008				6		in							5/14/2013				11371			
RC2-032-009				3		in						Seed-101	5/14/2013				11372			
RC2-032-010				3		in							5/14/2013				11373			
RC2-032-011				3		in							5/14/2013				11374			
RC2-032-012				3.5		in							5/14/2013				11375			
RC2-032-013						in							5/14/2013	1			11376			
RC2-032-014				1		in							5/14/2013				11377			
RC2-032-015				7		in							5/14/2013				11378			
RC2-032-016				4		in							5/14/2013				11379			
RC2-032-017				3		in							5/14/2013				11380			
RC2-032-018				6		in							5/14/2013				11381			
RC2-032-019				3		in							5/14/2013				11382			
RC2-032-020						in							5/14/2013				11383			
RC2-032-021				8		in							5/14/2013				11384			
RC2-032-022				1		in							5/14/2013				11385			
RC2-032-023				2		in							5/14/2013				11386			
RC2-032-024				3		in							5/14/2013				11387			
RC2-033-001				8		in							5/8/2013				8897			
RC2-033-002				2		in							5/8/2013				8898			
RC2-033-003				3		in							5/8/2013				8899			
RC2-033-004				3		in							5/8/2013				8900			
RC2-033-005				3		in							5/8/2013				8901			
RC2-033-006				2		in							5/8/2013				8902			
RC2-033-007				3		in							5/8/2013				8903			
RC2-033-008				3		in							5/8/2013				8904			
RC2-033-009				2		in							5/8/2013				8905			
RC2-033-010				3		in						Seed-183	5/8/2013				8906			
RC2-033-011				5		in							5/8/2013				8907			
RC2-033-012				3		in							5/8/2013				8908			
RC2-033-013				2		in							5/8/2013				8909			
RC2-033-014				3		in							5/8/2013				8910			
RC2-033-015				2		in							5/8/2013				8911			
RC2-033-016				3		in							5/8/2013				8912			
RC2-033-017				5		in							5/8/2013				8913			
RC2-033-018				3		in							5/8/2013				8914			
RC2-033-019				4		in							5/8/2013				8915			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-033-020				2		in							5/8/2013				8916			
RC2-033-021				2		in							5/8/2013				8917			
RC2-033-022				3		in							5/8/2013				8918			
RC2-033-023				2		in							5/8/2013				8919			
RC2-033-024				2		in							5/8/2013				8920			
RC2-033-025				4		in							5/8/2013				8921			
RC2-033-026				3		in							5/8/2013				8922			
RC2-033-027				5		in							5/8/2013				8923			
RC2-033-028				4		in							5/8/2013				8924			
RC2-033-029				2		in							5/8/2013				8925			
RC2-033-030				6		in							5/8/2013				8926			
RC2-033-031				3		in							5/8/2013				8927			
RC2-034-001				8		in							5/6/2013				8617			
RC2-034-007				3		in						Seed-154	5/6/2013				8618			
RC2-034-009				2		in							5/6/2013				8619			
RC2-034-010				3		in							5/6/2013				8620			
RC2-034-013				3		in							5/6/2013				8621			
RC2-035-001				8		in							4/16/2013				5742			
RC2-035-002				2		in							4/16/2013				5743			
RC2-035-003				4		in							4/16/2013				5744			
RC2-035-004				8		in							4/16/2013				5745			
RC2-035-005				6		in							4/16/2013				5746			
RC2-035-006				2		in							4/16/2013				5747			
RC2-035-007				2		in							4/16/2013				5748			
RC2-035-008				7		in							4/16/2013				5749			
RC2-035-009				2		in							4/16/2013				5750			
RC2-035-010				6		in							4/16/2013				5751			
RC2-035-011				3		in						Seed-106	4/16/2013				5752			
RC2-035-012				2		in							4/16/2013				5753			
RC2-035-013				5		in							4/16/2013				5754			
RC2-035-014				3		in							4/16/2013				5755			
RC2-035-015				2		in							4/16/2013				5756			
RC2-035-016				2		in							4/16/2013				5757			
RC2-035-017				3		in							4/16/2013				5758			
RC2-035-018				6		in							4/16/2013				5759			
RC2-035-019				2		in							4/16/2013				5760			
RC2-035-020				3		in							4/16/2013				5761			
RC2-035-021				5		in							4/16/2013				5762			
RC2-035-022				2		in							4/16/2013				5763			
RC2-035-023				5		in							4/16/2013				5764			
RC2-035-024				4		in							4/16/2013				5765			
RC2-035-025				3		in							4/16/2013				5766			
RC2-037-001				8		in							5/22/2013				15896			
RC2-037-002						in							5/22/2013	1			15897			
RC2-037-003				3		in							5/22/2013				15898			
RC2-037-004				2		in							5/22/2013				15899			
RC2-037-005				4		in							5/22/2013				15900			
RC2-037-006				5		in							5/22/2013				15901			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-037-007				2		in							5/22/2013				15902			
RC2-037-008				3		in						Seed-301	5/22/2013				15903			
RC2-037-009				2		in							5/22/2013				15904			
RC2-037-010				2		in							5/22/2013				15905			
RC2-037-011						in							5/22/2013	1			15906			
RC2-037-012				2		in							5/22/2013				15907			
RC2-037-013						in							5/22/2013	1			15908			
RC2-037-014						in							5/22/2013	1			15909			
RC2-037-015				1		in							5/22/2013				15910			
RC2-037-016				3		in							5/22/2013				15911			
RC2-039-001				2		in							5/8/2013				8876			
RC2-039-002				8		in							5/8/2013				8877			
RC2-039-003				0.5		in							5/8/2013				8878			
RC2-039-004				4		in							5/8/2013				8879			
RC2-039-005				3		in							5/8/2013				8880			
RC2-039-006				3		in							5/8/2013				8881			
RC2-039-007				2		in							5/8/2013				8882			
RC2-039-008				3		in							5/8/2013				8883			
RC2-039-009				3		in							5/8/2013				8884			
RC2-039-010				5		in							5/8/2013				8885			
RC2-039-011						in							5/8/2013	1			8886			
RC2-039-012				2		in							5/8/2013				8887			
RC2-039-013				3		in							5/8/2013				8888			
RC2-039-014				3		in							5/8/2013				8889			
RC2-039-015				2		in							5/8/2013				8890			
RC2-039-016				3		in							5/8/2013				8891			
RC2-039-017				2		in							5/8/2013				8892			
RC2-039-018						in							5/8/2013	1			8893			
RC2-039-019				3		in							5/8/2013				8894			
RC2-039-020				3		in						Seed-169	5/8/2013				8895			
RC2-039-021				3		in							5/8/2013				8896			
RC2-040-001				8		in							5/2/2013				7526			
RC2-040-002						in							5/2/2013	1			7527			
RC2-040-003				5		in							5/2/2013				7528			
RC2-040-004						in							5/2/2013	1			7529			
RC2-040-005				3		in						Seed-165	5/2/2013				7530			
RC2-040-006						in							5/2/2013	1			7531			
RC2-040-007						in							5/2/2013	1			7532			
RC2-040-008						in							5/2/2013	1			7533			
RC2-040-009						in							5/2/2013	1			7534			
RC2-040-010						in							5/2/2013	1			7535			
RC2-040-011						in							5/2/2013	1			7536			
RC2-040-012				6		in							5/2/2013				7537			
RC2-041-001				8		in							5/6/2013				8572			
RC2-041-002				5		in							5/6/2013				8573			
RC2-041-003				7		in							5/6/2013				8574			
RC2-041-004				5		in							5/6/2013				8575			
RC2-041-005				3		in							5/6/2013				8576			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-041-006				4		in							5/6/2013				8577			
RC2-041-007				2		in							5/6/2013				8578			
RC2-041-008				1		in							5/6/2013				8579			
RC2-041-009				2		in							5/6/2013				8580			
RC2-041-010				3		in							5/6/2013				8581			
RC2-041-011				4		in							5/6/2013				8582			
RC2-041-012				1		in							5/6/2013				8583			
RC2-041-013				1		in							5/6/2013				8584			
RC2-041-014				2		in							5/6/2013				8585			
RC2-041-015				2		in							5/6/2013				8586			
RC2-041-016				4		in							5/6/2013				8587			
RC2-041-017				1		in							5/6/2013				8588			
RC2-041-018				3		in							5/6/2013				8589			
RC2-041-019						in							5/6/2013	1			8590			
RC2-041-020				4		in							5/6/2013				8591			
RC2-041-021				1		in							5/6/2013				8592			
RC2-041-022				8		in							5/6/2013				8593			
RC2-041-023				6		in							5/6/2013				8594			
RC2-041-024				6		in							5/6/2013				8595			
RC2-041-025						in							5/6/2013	1			8596			
RC2-041-026				2		in							5/6/2013				8597			
RC2-041-027				4		in							5/6/2013				8598			
RC2-041-028				6		in							5/6/2013				8599			
RC2-041-029				4		in							5/6/2013				8600			
RC2-041-030				3		in							5/6/2013				8601			
RC2-041-031				4		in							5/6/2013				8602			
RC2-041-032				2		in							5/6/2013				8603			
RC2-041-033				3		in							5/6/2013				8604			
RC2-041-034				3		in						Seed-161	5/6/2013				8605			
RC2-041-035				4		in							5/6/2013				8606			
RC2-041-036				3		in							5/6/2013				8607			
RC2-041-037				3		in							5/6/2013				8608			
RC2-041-038				2		in							5/6/2013				8609			
RC2-041-039				6		in							5/6/2013				8610			
RC2-041-040				4		in							5/6/2013				8611			
RC2-041-041				2		in							5/6/2013				8612			
RC2-041-042				1		in							5/6/2013				8613			
RC2-041-043				3		in							5/6/2013				8614			
RC2-041-044				3		in							5/6/2013				8615			
RC2-041-045				2		in							5/6/2013				8616			
RC2-042-001				8		in							5/14/2013				11072			
RC2-042-002				6		in							5/14/2013				11073			
RC2-042-003				3		in							5/14/2013				11074			
RC2-042-004				3		in						Seed-103	5/14/2013				11075			
RC2-042-005						in							5/14/2013	1			11076			
RC2-042-006						in							5/14/2013	1			11077			
RC2-042-007				10		in							5/14/2013				11078			
RC2-042-008				36		in							5/14/2013				11079			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-042-009				11		in							5/14/2013				11080			
RC2-042-010						in							5/14/2013	1			11081			
RC2-042-011				10		in							5/14/2013				11082			
RC2-042-012				10		in							5/14/2013				11083			
RC2-042-013				10		in							5/14/2013				11084			
RC2-042-014				5		in							5/14/2013				11085			
RC2-042-015				12		in							5/14/2013				11086			
RC2-042-016				4		in							5/14/2013				11087			
RC2-042-017				10		in							5/14/2013				11088			
RC2-042-018						in							5/14/2013	1			11089			
RC2-042-019				10		in							5/14/2013				11090			
RC2-042-020				10		in							5/14/2013				11091			
RC2-042-021						in							5/14/2013	1			11092			
RC2-042-022				4		in							5/14/2013				11093			
RC2-042-023				6		in							5/14/2013				11094			
RC2-042-024				10		in							5/14/2013				11095			
RC2-042-025						in							5/14/2013	1			11096			
RC2-042-026				6		in							5/14/2013				11097			
RC2-042-027						in							5/14/2013	1			11098			
RC2-042-028						in							5/14/2013	1			11099			
RC2-042-029				10		in							5/14/2013				11100			
RC2-042-030				7		in							5/14/2013				11101			
RC2-042-031				10		in							5/14/2013				11102			
RC2-042-032				18		in							5/14/2013				11103			
RC2-042-033				18		in							5/14/2013				11104			
RC2-042-034				10		in							5/14/2013				11105			
RC2-042-035				3		in							5/14/2013				11106			
RC2-042-036				10		in							5/14/2013				11107			
RC2-042-037				1		in							5/14/2013				11108			
RC2-042-038						in							5/14/2013	1			11109			
RC2-042-039				10		in							5/14/2013				11110			
RC2-042-040				10		in							5/14/2013				11111			
RC2-042-041				10		in							5/14/2013				11112			
RC2-043-001				8		in							4/19/2013				6236			
RC2-043-002				4		in							4/19/2013				6237			
RC2-043-003				4		in							4/19/2013				6238			
RC2-043-004				5		in							4/19/2013				6239			
RC2-043-005				2.5		in							4/19/2013				6240			
RC2-043-006				3		in							4/19/2013				6241			
RC2-043-007				3		in							4/19/2013				6242			
RC2-043-008				2		in							4/19/2013				6243			
RC2-043-009				5		in							4/19/2013				6244			
RC2-043-010				5		in							4/19/2013				6245			
RC2-043-011				5		in							4/19/2013				6246			
RC2-043-012				3		in						Seed-137	4/19/2013				6247			
RC2-043-013				5		in							4/19/2013				6248			
RC2-043-014				6		in							4/19/2013				6249			
RC2-044-001				8		in							4/22/2013				6529			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-044-002				3		in							4/22/2013				6530			
RC2-044-003				3		in							4/22/2013				6531			
RC2-044-004				1		in							4/22/2013				6532			
RC2-044-005				3		in							4/22/2013				6533			
RC2-044-006				3		in							4/22/2013				6534			
RC2-044-007				7		in							4/22/2013				6535			
RC2-044-008				3		in							4/22/2013				6536			
RC2-044-009				2		in							4/22/2013				6537			
RC2-044-010						in							4/22/2013	1			6538			
RC2-044-011				7		in							4/22/2013				6539			
RC2-044-012				2		in							4/22/2013				6540			
RC2-044-013				3.5		in							4/22/2013				6541			
RC2-044-014				2		in							4/22/2013				6542			
RC2-044-015				5		in							4/22/2013				6543			
RC2-044-016				4		in							4/22/2013				6544			
RC2-044-017				5		in							4/22/2013				6545			
RC2-044-018						in							4/22/2013	1			6546			
RC2-044-019				4		in							4/22/2013				6547			
RC2-044-020				3		in						Seed-130	4/22/2013				6548			
RC2-044-021				4		in							4/22/2013				6549			
RC2-044-022				4		in							4/22/2013				6550			
RC2-044-023				3		in							4/22/2013				6551			
RC2-044-024				3		in							4/22/2013				6552			
RC2-045-001				8		in							5/8/2013				8856			
RC2-045-002				3		in							5/8/2013				8857			
RC2-045-003				3		in							5/8/2013				8858			
RC2-045-004				2		in							5/8/2013				8859			
RC2-045-005				4		in							5/8/2013				8860			
RC2-045-007				6		in							5/8/2013				8861			
RC2-045-008				3		in							5/8/2013				8862			
RC2-045-011				6		in							5/8/2013				8863			
RC2-045-012				2		in							5/8/2013				8864			
RC2-045-013				6		in							5/8/2013				8865			
RC2-045-014				4		in							5/8/2013				8866			
RC2-045-015				4		in							5/8/2013				8867			
RC2-045-016				1		in							5/8/2013				8868			
RC2-045-017				4		in							5/8/2013				8869			
RC2-045-018				4		in							5/8/2013				8870			
RC2-045-019				4		in							5/8/2013				8871			
RC2-045-020				3		in						Seed-209	5/8/2013				8872			
RC2-045-021				5		in							5/8/2013				8873			
RC2-045-022				6		in							5/8/2013				8874			
RC2-045-023				6		in							5/8/2013				8875			
RC2-046-001				8		in							5/6/2013				8795			
RC2-046-002				2		in							5/6/2013				8796			
RC2-046-003				3		in							5/6/2013				8797			
RC2-046-004				3		in							5/6/2013				8798			
RC2-046-005				2		in							5/6/2013				8799			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-046-006				5		in							5/6/2013				8800			
RC2-046-007				3		in							5/6/2013				8801			
RC2-046-008				6		in							5/6/2013				8802			
RC2-046-009				4		in							5/6/2013				8803			
RC2-046-010				8		in							5/6/2013				8804			
RC2-046-011				8		in							5/6/2013				8805			
RC2-046-012				5		in							5/6/2013				8806			
RC2-046-013				3		in							5/6/2013				8807			
RC2-046-014				4		in							5/6/2013				8808			
RC2-046-015				4		in							5/6/2013				8809			
RC2-046-016				3		in						Seed-129	5/6/2013				8810			
RC2-046-017				3		in							5/6/2013				8811			
RC2-047-001				8		in							4/19/2013				6233			
RC2-047-002				3		in						Seed-109	4/19/2013				6234			
RC2-047-003						in							4/19/2013				6235			
RC2-049-001				8		in							5/6/2013				8773			
RC2-049-002				9		in							5/6/2013				8774			
RC2-049-003				4		in							5/6/2013				8775			
RC2-049-004				3		in							5/6/2013				8776			
RC2-049-005				4		in							5/6/2013				8777			
RC2-049-006						in							5/6/2013	1			8778			
RC2-049-007				4		in							5/6/2013				8779			
RC2-049-008				4		in							5/6/2013				8780			
RC2-049-009				3		in							5/6/2013				8781			
RC2-049-010				4		in							5/6/2013				8782			
RC2-049-011				4		in							5/6/2013				8783			
RC2-049-012						in							5/6/2013	1			8784			
RC2-049-013				3		in							5/6/2013				8785			
RC2-049-014				4		in							5/6/2013				8786			
RC2-049-015				4		in							5/6/2013				8787			
RC2-049-016				3		in							5/6/2013				8788			
RC2-049-017				3		in							5/6/2013				8789			
RC2-049-018						in							5/6/2013	1			8790			
RC2-049-019				2		in							5/6/2013				8791			
RC2-049-020				3		in							5/6/2013				8792			
RC2-049-021				3		in						Seed-172	5/6/2013				8793			
RC2-049-022				4		in							5/6/2013				8794			
RC2-050-001				4		in							5/8/2013				8826			
RC2-050-002				3		in							5/8/2013				8827			
RC2-050-003				2		in							5/8/2013				8828			
RC2-050-004				5		in							5/8/2013				8829			
RC2-050-005				3		in						Seed-189	5/8/2013				8830			
RC2-050-006				3		in							5/8/2013				8831			
RC2-050-007				4		in							5/8/2013				8832			
RC2-050-008				2		in							5/8/2013				8833			
RC2-050-009				2		in							5/8/2013				8834			
RC2-050-010				3		in							5/8/2013				8835			
RC2-050-011				3		in							5/8/2013				8836			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-050-012				3		in							5/8/2013				8837			
RC2-050-013				3		in							5/8/2013				8838			
RC2-050-014				1		in							5/8/2013				8839			
RC2-050-015				2		in							5/8/2013				8840			
RC2-050-016				2		in							5/8/2013				8841			
RC2-050-017				4		in							5/8/2013				8842			
RC2-050-018				4		in							5/8/2013				8843			
RC2-050-019				5		in							5/8/2013				8844			
RC2-050-020				6		in							5/8/2013				8845			
RC2-050-021				2		in							5/8/2013				8846			
RC2-050-022				4		in							5/8/2013				8847			
RC2-050-023				6		in							5/8/2013				8848			
RC2-050-024				7		in							5/8/2013				8849			
RC2-050-025				3		in							5/8/2013				8850			
RC2-050-026				4		in							5/8/2013				8851			
RC2-050-027				6		in							5/8/2013				8852			
RC2-050-028				3		in							5/8/2013				8853			
RC2-050-029				4		in							5/8/2013				8854			
RC2-050-030				6		in							5/8/2013				8855			
RC2-052-001				8		in							5/14/2013				11350			
RC2-052-002				4		in							5/14/2013				11351			
RC2-052-003				0.5		in							5/14/2013				11352			
RC2-052-004				4		in							5/14/2013				11353			
RC2-052-005				3		in							5/14/2013				11354			
RC2-052-006				3		in						Seed-105	5/14/2013				11355			
RC2-052-007				6		in							5/14/2013				11356			
RC2-052-008				4		in							5/14/2013				11357			
RC2-052-009				6		in							5/14/2013				11358			
RC2-052-010				5		in							5/14/2013				11359			
RC2-052-011				5		in							5/14/2013				11360			
RC2-052-012				2		in							5/14/2013				11361			
RC2-052-013				7		in							5/14/2013				11362			
RC2-052-014				5		in							5/14/2013				11363			
RC2-054-001				8		in							5/21/2013				15671			
RC2-054-002				3		in							5/21/2013				15672			
RC2-054-003						in							5/21/2013	1			15673			
RC2-054-004						in							5/21/2013	1			15674			
RC2-054-005						in							5/21/2013	1			15675			
RC2-054-006						in							5/21/2013	1			15676			
RC2-054-007						in							5/21/2013	1			15677			
RC2-054-008						in							5/21/2013	1			15678			
RC2-054-009				3		in						Seed-141	5/21/2013				15679			
RC2-054-010						in							5/21/2013	1			15680			
RC2-054-011						in							5/21/2013	1			15681			
RC2-054-012						in							5/21/2013	1			15682			
RC2-054-013						in							5/21/2013	1			15683			
RC2-054-014						in							5/21/2013	1			15684			
RC2-054-015						in							5/21/2013	1			15685			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-055-001				8		in							5/22/2013				15887			
RC2-055-002				8		in							5/22/2013				15888			
RC2-055-003				3		in							5/22/2013				15889			
RC2-055-004						in							5/22/2013	1			15890			
RC2-055-005						in							5/22/2013	1			15891			
RC2-055-006						in							5/22/2013	1			15892			
RC2-055-007				3		in							5/22/2013				15893			
RC2-055-008				3		in						Seed-303	5/22/2013				15894			
RC2-055-009				5		in							5/22/2013				15895			
RC2-056-001				8		in							5/8/2013				8812			
RC2-056-005				4.5		in							5/8/2013				8813			
RC2-056-006				1		in							5/8/2013				8814			
RC2-056-007				2.5		in							5/8/2013				8815			
RC2-056-009				2		in							5/8/2013				8816			
RC2-056-010				4		in							5/8/2013				8817			
RC2-056-011				3		in							5/8/2013				8818			
RC2-056-012				3		in							5/8/2013				8819			
RC2-056-013				3		in						Seed-187	5/8/2013				8820			
RC2-056-014				2.5		in							5/8/2013				8821			
RC2-056-015				3		in							5/8/2013				8822			
RC2-056-017				2		in							5/8/2013				8823			
RC2-056-018				2		in							5/8/2013				8824			
RC2-056-020				1		in							5/8/2013				8825			
RC2-057-001				8		in							4/16/2013				5721			
RC2-057-002				4		in							4/16/2013				5722			
RC2-057-003				6		in							4/16/2013				5723			
RC2-057-004				3		in						Seed-086	4/16/2013				5724			
RC2-057-005				15		in							4/16/2013				5725			
RC2-058-001				8		in							4/23/2013				6638			
RC2-058-002				3		in							4/23/2013				6639			
RC2-058-003						in							4/23/2013	1			6640			
RC2-058-004				2		in							4/23/2013				6641			
RC2-058-005				3		in							4/23/2013				6642			
RC2-058-006				3		in						Seed-140	4/23/2013				6643			
RC2-058-007						in							4/23/2013	1			6644			
RC2-058-008						in							4/23/2013	1			6645			
RC2-058-009				2		in							4/23/2013				6646			
RC2-058-010				3		in							4/23/2013				6647			
RC2-058-011						in							4/23/2013	1			6648			
RC2-058-012				4		in							4/23/2013				6649			
RC2-058-013						in							4/23/2013	1			6650			
RC2-058-014				2.5		in							4/23/2013				6651			
RC2-058-015				3		in							4/23/2013				6652			
RC2-058-016						in							4/23/2013	1			6653			
RC2-058-017						in							4/23/2013	1			6654			
RC2-058-018				3.5		in							4/23/2013				6655			
RC2-058-019						in							4/23/2013	1			6656			
RC2-059-001						in							5/14/2013	1			11148			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-059-002				8		in							5/14/2013				11149			
RC2-059-003				6		in							5/14/2013				11150			
RC2-059-004				6		in							5/14/2013				11151			
RC2-059-005				2		in							5/14/2013				11152			
RC2-059-006						in							5/14/2013	1			11153			
RC2-059-007						in							5/14/2013	1			11154			
RC2-059-008						in							5/14/2013	1			11155			
RC2-059-009						in							5/14/2013	1			11156			
RC2-059-010				3		in							5/14/2013				11157			
RC2-059-011						in							5/14/2013	1			11158			
RC2-059-012				3		in						Seed-098	5/14/2013				11159			
RC2-059-013				6		in							5/14/2013				11160			
RC2-059-014						in							5/14/2013	1			11161			
RC2-059-015				5		in							5/14/2013				11162			
RC2-059-016				5		in							5/14/2013				11163			
RC2-059-017				6		in							5/14/2013				11164			
RC2-059-018				4		in							5/14/2013				11165			
RC2-061-001						in							5/3/2013				7653			
RC2-061-002						in							5/3/2013				7654			
RC2-061-003						in							5/3/2013				7655			
RC2-061-004						in						Seed-100	5/3/2013				7656			
RC2-061-005						in							5/3/2013				7657			
RC2-061-006						in							5/3/2013				7658			
RC2-061-007						in							5/3/2013				7659			
RC2-061-008						in							5/3/2013				7660			
RC2-061-009						in							5/3/2013	1			7661			
RC2-061-010						in							5/3/2013				7662			
RC2-061-011						in							5/3/2013				7663			
RC2-061-012						in							5/3/2013	1			7664			
RC2-061-013						in							5/3/2013				7665			
RC2-061-014						in							5/3/2013				7666			
RC2-062-001						in							5/8/2013				8967			
RC2-062-002				10		in							5/8/2013				8968			
RC2-062-003				1		in							5/8/2013				8969			
RC2-062-004				3		in							5/8/2013				8970			
RC2-062-005				4		in							5/8/2013				8971			
RC2-062-006				6		in							5/8/2013				8972			
RC2-062-007				18		in							5/8/2013				8973			
RC2-062-008				3		in							5/8/2013				8974			
RC2-062-009				8		in							5/8/2013				8975			
RC2-062-010				8		in							5/8/2013				8976			
RC2-062-011				8		in							5/8/2013				8977			
RC2-062-012				4		in							5/8/2013				8978			
RC2-062-013				4		in							5/8/2013				8979			
RC2-062-014				6		in							5/8/2013				8980			
RC2-062-015				6		in							5/8/2013				8981			
RC2-062-016				4		in							5/8/2013				8982			
RC2-062-017				5		in							5/8/2013				8983			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-062-018				4		in							5/8/2013				8984			
RC2-062-019				2		in							5/8/2013				8985			
RC2-062-020				5		in						Seed-119	5/8/2013				8986			
RC2-062-021				14		in							5/8/2013				8987			
RC2-062-022				3		in							5/8/2013				8988			
RC2-062-023				3		in							5/8/2013				8989			
RC2-062-024				5		in							5/8/2013				8990			
RC2-062-025				6		in							5/8/2013				8991			
RC2-062-026				7		in							5/8/2013				8992			
RC2-062-027				5		in							5/8/2013				8993			
RC2-062-028				6		in							5/8/2013				8994			
RC2-062-029				7		in							5/8/2013				8995			
RC2-062-030				15		in							5/8/2013				8996			
RC2-062-031				6		in							5/8/2013				8997			
RC2-062-032				6		in							5/8/2013				8998			
RC2-063-001				8		in							5/14/2013				11451			
RC2-063-002						in							5/14/2013	1			11452			
RC2-063-003						in							5/14/2013	1			11453			
RC2-063-004						in							5/14/2013	1			11454			
RC2-063-005				1		in							5/14/2013				11455			
RC2-063-006						in							5/14/2013	1			11456			
RC2-063-007				2		in							5/14/2013				11457			
RC2-063-008				0.25		in							5/14/2013				11458			
RC2-063-009				3		in							5/14/2013				11459			
RC2-063-010						in							5/14/2013	1			11460			
RC2-063-011						in							5/14/2013	1			11461			
RC2-063-012				1.5		in							5/14/2013				11462			
RC2-063-013						in							5/14/2013	1			11463			
RC2-063-014						in							5/14/2013	1			11464			
RC2-063-015				3		in						Seed-164	5/14/2013				11465			
RC2-063-016						in							5/14/2013	1			11466			
RC2-063-017						in							5/14/2013	1			11467			
RC2-063-018				7		in							5/14/2013				11468			
RC2-063-019				2		in							5/14/2013				11469			
RC2-063-020						in							5/14/2013	1			11470			
RC2-063-021						in							5/14/2013	1			11471			
RC2-063-022				0.25		in							5/14/2013				11472			
RC2-063-023						in							5/14/2013	1			11473			
RC2-063-024						in							5/14/2013	1			11474			
RC2-063-025						in							5/14/2013	1			11475			
RC2-063-026				3		in							5/14/2013				11476			
RC2-063-027				3		in							5/14/2013				11477			
RC2-063-028				3		in							5/14/2013				11478			
RC2-063-029						in							5/14/2013	1			11479			
RC2-064-001				8		in							5/2/2013				7501			
RC2-064-002				3		in							5/2/2013				7502			
RC2-064-003				2		in							5/2/2013				7503			
RC2-064-004				4		in							5/2/2013				7504			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-064-005						in							5/2/2013				7505			
RC2-064-006				4		in							5/2/2013				7506			
RC2-064-007				2		in							5/2/2013				7507			
RC2-064-008				3		in						Seed-180	5/2/2013				7508			
RC2-064-009				4		in							5/2/2013				7509			
RC2-064-010				4		in							5/2/2013				7510			
RC2-064-011				4		in							5/2/2013				7511			
RC2-064-012				5		in							5/2/2013				7512			
RC2-064-013				6		in							5/2/2013				7513			
RC2-064-014				2		in							5/2/2013				7514			
RC2-064-015				4		in							5/2/2013				7515			
RC2-064-016				3		in							5/2/2013				7516			
RC2-064-017				4		in							5/2/2013				7517			
RC2-064-018				4		in							5/2/2013				7518			
RC2-064-019				1		in							5/2/2013				7519			
RC2-064-020				4		in							5/2/2013				7520			
RC2-064-021				2		in							5/2/2013				7521			
RC2-064-022				4		in							5/2/2013				7522			
RC2-064-023				4		in							5/2/2013				7523			
RC2-064-024				4		in							5/2/2013				7524			
RC2-064-025				2		in							5/2/2013				7525			
RC2-065-001				8		in							5/22/2013				15869			
RC2-065-002				3		in						Seed-302	5/22/2013				15870			
RC2-065-003				1		in							5/22/2013				15871			
RC2-065-004				2		in							5/22/2013				15872			
RC2-065-005				1		in							5/22/2013				15873			
RC2-065-006				4		in							5/22/2013				15874			
RC2-065-007						in							5/22/2013				15875			
RC2-065-008				2		in							5/22/2013				15876			
RC2-065-009				5		in							5/22/2013				15877			
RC2-065-010				3		in							5/22/2013				15878			
RC2-065-011				5		in							5/22/2013				15879			
RC2-065-012				8		in							5/22/2013				15880			
RC2-065-013						in							5/22/2013	1			15881			
RC2-065-014				1		in							5/22/2013				15882			
RC2-065-015				2		in							5/22/2013				15883			
RC2-065-016						in							5/22/2013	1			15884			
RC2-065-017				5		in							5/22/2013				15885			
RC2-065-018						in							5/22/2013	1			15886			
RC2-066-001						in							5/3/2013				7642			
RC2-066-002						in							5/3/2013	1			7643			
RC2-066-003						in							5/3/2013	1			7644			
RC2-066-004						in							5/3/2013	1			7645			
RC2-066-005						in							5/3/2013	1			7646			
RC2-066-006						in							5/3/2013	1			7647			
RC2-066-007						in							5/3/2013	1			7648			
RC2-066-008						in							5/3/2013	1			7649			
RC2-066-009						in							5/3/2013	1			7650			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-066-010						in							5/3/2013	1			7651			
RC2-066-011						in						Seed-176	5/3/2013				7652			
RC2-067-001				8		in							4/19/2013				6224			
RC2-067-002				4		in							4/19/2013				6225			
RC2-067-003				2		in							4/19/2013				6226			
RC2-067-004				1		in							4/19/2013				6227			
RC2-067-005				1		in							4/19/2013				6228			
RC2-067-006				6		in							4/19/2013				6229			
RC2-067-007				3		in							4/19/2013				6230			
RC2-067-008				3		in						Seed-145	4/19/2013				6231			
RC2-067-009				2		in							4/19/2013				6232			
RC2-068-001				8		in							4/22/2013				6526			
RC2-068-002				3		in						Seed-126	4/22/2013				6527			
RC2-068-003				3		in							4/22/2013				6528			
RC2-070-001				8		in							5/21/2013				15800			
RC2-070-002				2		in							5/21/2013				15801			
RC2-070-003				2		in							5/21/2013				15802			
RC2-070-004				3		in						Seed-178	5/21/2013				15803			
RC2-070-005				2		in							5/21/2013				15804			
RC2-070-006				3		in							5/21/2013				15805			
RC2-070-007				0.5		in							5/21/2013				15806			
RC2-070-008				6		in							5/21/2013				15807			
RC2-070-009				1		in							5/21/2013				15808			
RC2-070-010				3		in							5/21/2013				15809			
RC2-071-001				7		in							5/8/2013				9276			
RC2-071-002				3		in						Seed-248	5/8/2013				9277			
RC2-071-003				5		in							5/8/2013				9278			
RC2-071-004				3		in							5/8/2013				9279			
RC2-071-005				4		in							5/8/2013				9280			
RC2-071-006				7		in							5/8/2013				9281			
RC2-071-007				4		in							5/8/2013				9282			
RC2-071-008						in							5/8/2013				9283			
RC2-071-009				5		in							5/8/2013				9284			
RC2-072-001				8		in							5/6/2013				8757			
RC2-072-002				3		in							5/6/2013				8758			
RC2-072-003				5		in							5/6/2013				8759			
RC2-072-004				5		in							5/6/2013				8760			
RC2-072-005				3		in							5/6/2013				8761			
RC2-072-006				3		in							5/6/2013				8762			
RC2-072-007				3		in							5/6/2013				8763			
RC2-072-008				4		in							5/6/2013				8764			
RC2-072-009				3		in							5/6/2013				8765			
RC2-072-010				2		in							5/6/2013				8766			
RC2-072-011				2		in							5/6/2013				8767			
RC2-072-012				3		in						Seed-184	5/6/2013				8768			
RC2-072-013				2		in							5/6/2013				8769			
RC2-072-014				2		in							5/6/2013				8770			
RC2-072-015				2		in							5/6/2013				8771			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-072-016				2		in							5/6/2013				8772			
RC2-073-001				8		in							4/22/2013				6524			
RC2-073-002				3		in						Seed-138	4/22/2013				6525			
RC2-074-001				8		in							5/14/2013				11061			
RC2-074-002				1		in							5/14/2013				11062			
RC2-074-003				4		in							5/14/2013				11063			
RC2-074-004				5		in							5/14/2013				11064			
RC2-074-005				2		in							5/14/2013				11065			
RC2-074-006				1		in							5/14/2013				11066			
RC2-074-007				6		in							5/14/2013				11067			
RC2-074-008				8		in							5/14/2013				11068			
RC2-074-009				1		in							5/14/2013				11069			
RC2-074-010				3		in							5/14/2013				11070			
RC2-074-011				3		in						Seed-122	5/14/2013				11071			
RC2-075-001				8		in							4/19/2013				6219			
RC2-075-002				2		in							4/19/2013				6220			
RC2-075-003				0.5		in							4/19/2013				6221			
RC2-075-004				3		in						Seed-113	4/19/2013				6222			
RC2-075-005				8		in							4/19/2013				6223			
RC2-076-001				8		in							5/21/2013				15789			
RC2-076-002						in							5/21/2013	1			15790			
RC2-076-003				3		in							5/21/2013				15791			
RC2-076-004						in							5/21/2013	1			15792			
RC2-076-005				2		in							5/21/2013				15793			
RC2-076-006				2		in							5/21/2013				15794			
RC2-076-007						in							5/21/2013	1			15795			
RC2-076-008				1		in							5/21/2013				15796			
RC2-076-009				3		in							5/21/2013				15797			
RC2-076-010				1		in							5/21/2013				15798			
RC2-076-011				3		in						Seed-157	5/21/2013				15799			
RC2-077-001						in							5/3/2013				7721			
RC2-077-002						in						Seed-148	5/3/2013				7722			
RC2-077-003						in							5/3/2013				7723			
RC2-077-004						in							5/3/2013				7724			
RC2-077-005						in							5/3/2013				7725			
RC2-078-001				8		in							4/22/2013				6608			
RC2-078-002				3		in							4/22/2013				6609			
RC2-078-003				3		in							4/22/2013				6610			
RC2-078-004				2		in							4/22/2013				6611			
RC2-078-005				2		in							4/22/2013				6612			
RC2-078-006				4		in							4/22/2013				6613			
RC2-078-007				4		in							4/22/2013				6614			
RC2-078-008				4		in							4/22/2013				6615			
RC2-078-009				5		in							4/22/2013				6616			
RC2-078-010				3		in							4/22/2013				6617			
RC2-078-011				6		in							4/22/2013				6618			
RC2-078-012				4		in							4/22/2013				6619			
RC2-078-013				4		in							4/22/2013				6620			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-078-014				3		in						Seed-133	4/22/2013				6621			
RC2-079-001						in							5/3/2013				7713			
RC2-079-002						in							5/3/2013				7714			
RC2-079-003						in							5/3/2013				7715			
RC2-079-004						in						Seed-128	5/3/2013				7716			
RC2-079-005						in							5/3/2013				7717			
RC2-079-006						in							5/3/2013	1			7718			
RC2-079-007						in							5/3/2013				7719			
RC2-079-008						in							5/3/2013				7720			
RC2-080-001				8		in							5/14/2013				11338			
RC2-080-002				5		in							5/14/2013				11339			
RC2-080-003				4		in							5/14/2013				11340			
RC2-080-004				1		in							5/14/2013				11341			
RC2-080-005				5		in							5/14/2013				11342			
RC2-080-006				2		in							5/14/2013				11343			
RC2-080-007				2		in							5/14/2013				11344			
RC2-080-008				6		in							5/14/2013				11345			
RC2-080-009				6		in							5/14/2013				11346			
RC2-080-010				3		in						Seed-135	5/14/2013				11347			
RC2-080-011				12		in							5/14/2013				11348			
RC2-080-012						in							5/14/2013				11349			
RC2-081-001				8		in							5/14/2013				11445			
RC2-081-002						in							5/14/2013	1			11446			
RC2-081-003				3		in							5/14/2013				11447			
RC2-081-004						in							5/14/2013	1			11448			
RC2-081-005				3		in						Seed-080	5/14/2013				11449			
RC2-081-006						in							5/14/2013	1			11450			
RC2-082-001				8		in							4/23/2013				6674			
RC2-082-002						in							4/23/2013	1			6675			OT
RC2-082-003				3		in						Seed-132	4/23/2013				6676			
RC2-082-004				6		in							4/23/2013				6677			
RC2-082-005						in							4/23/2013				6678			
RC2-082-006						in							4/23/2013	1			6679			
RC2-082-007						in							4/23/2013	1			6680			
RC2-082-008						in							4/23/2013	1			6681			
RC2-082-009						in							4/23/2013	1			6682			
RC2-082-010				13		in							4/23/2013				6683			
RC2-084-001						in							5/3/2013				7711			
RC2-084-003						in						Seed-191	5/3/2013				7712			
RC2-085-001				8		in							5/14/2013				11440			
RC2-085-002				2		in							5/14/2013				11441			
RC2-085-003				2		in							5/14/2013				11442			
RC2-085-004				4		in							5/14/2013				11443			
RC2-085-005				3		in						Seed-142	5/14/2013				11444			
RC2-086-001				8		in							4/19/2013				6210			
RC2-086-002				3		in							4/19/2013				6211			
RC2-086-003				3		in							4/19/2013				6212			
RC2-086-004				3		in						Seed-156	4/19/2013				6213			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-086-005						in							4/19/2013				6214			OT
RC2-086-006				3		in							4/19/2013				6215			
RC2-086-007				2		in							4/19/2013				6216			
RC2-086-008				0.5		in							4/19/2013				6217			
RC2-086-009				0.5		in							4/19/2013				6218			
RC2-087-001				8		in							5/2/2013				7548			
RC2-087-002				2.5		in							5/2/2013				7549			
RC2-087-003				3		in							5/2/2013				7550			
RC2-087-004				6		in							5/2/2013				7551			
RC2-087-005						in							5/2/2013				7552			
RC2-087-006				5		in							5/2/2013				7553			
RC2-087-007				5		in							5/2/2013				7554			
RC2-087-008				3		in						Seed-179	5/2/2013				7555			
RC2-088-001				8		in							4/16/2013				5719			
RC2-088-002				3		in						Seed-110	4/16/2013				5720			
RC2-089-001				8		in							4/22/2013				6598			
RC2-089-002				2		in							4/22/2013				6599			
RC2-089-003				4		in							4/22/2013				6600			
RC2-089-004				1		in							4/22/2013				6601			
RC2-089-005				1		in							4/22/2013				6602			
RC2-089-006				2		in							4/22/2013				6603			
RC2-089-007				3		in							4/22/2013				6604			
RC2-089-008				3		in						Seed-104	4/22/2013				6605	1	41389.165278	
RC2-089-009						in							4/22/2013				6606			OT
RC2-089-010				4		in							4/22/2013				6607			
RC2-090-001				8		in							5/14/2013				11430			
RC2-090-002				3		in						Seed-147	5/14/2013				11431			
RC2-090-003				1		in							5/14/2013				11432			
RC2-090-004				2		in							5/14/2013				11433			
RC2-090-005				3		in							5/14/2013				11434			
RC2-090-006				2		in							5/14/2013				11435			
RC2-090-007				3		in							5/14/2013				11436			
RC2-090-008				4		in							5/14/2013				11437			
RC2-090-009				4		in							5/14/2013				11438			
RC2-090-010				2		in							5/14/2013				11439			
RC2-091-001				8		in							5/8/2013				9270			
RC2-091-002				1.25		in							5/8/2013				9271			
RC2-091-003				1		in						Seed-245	5/8/2013				9272			
RC2-091-004				1		in							5/8/2013				9273			
RC2-091-005				1		in							5/8/2013				9274			
RC2-091-006				0.5		in							5/8/2013				9275			
RC2-092-001				8		in							4/19/2013				6199			
RC2-092-002						in							4/19/2013	1			6200			
RC2-092-003				5		in							4/19/2013				6201			
RC2-092-004						in							4/19/2013	1			6202			
RC2-092-005				0.5		in							4/19/2013				6203			
RC2-092-006						in							4/19/2013	1			6204			
RC2-092-007				3		in						Seed-121	4/19/2013				6205			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-092-008				0.5		in							4/19/2013				6206			
RC2-092-009			0.20000000000000001			in							4/19/2013				6207			
RC2-092-010						in							4/19/2013	1			6208			
RC2-092-011						in							4/19/2013	1			6209			
RC2-093-001				8		in							4/16/2013				5717			
RC2-093-002				3		in						Seed-094	4/16/2013				5718			
RC2-094-001				8		in							4/22/2013				6595			
RC2-094-002				3		in						Seed-124	4/22/2013				6596			
RC2-094-003				1		in							4/22/2013				6597			
RC2-095-001				8		in							5/14/2013				11421			
RC2-095-002				6		in							5/14/2013				11422			
RC2-095-003				6		in							5/14/2013				11423			
RC2-095-004						in							5/14/2013				11424			
RC2-095-005				6		in							5/14/2013				11425			
RC2-095-006						in							5/14/2013				11426			
RC2-095-007						in							5/14/2013				11427			
RC2-095-008				3		in						Seed-159	5/14/2013				11428			
RC2-095-009				9		in							5/14/2013				11429			
RC2-097-001				8		in							4/16/2013				5714			
RC2-097-002				3		in						Seed-118	4/16/2013				5715			
RC2-097-003				4		in							4/16/2013				5716			
RC2-098-001				8		in							5/14/2013				11418			
RC2-098-002				3		in						Seed-136	5/14/2013				11419			
RC2-098-003				8		in							5/14/2013				11420			
RC2-099-001						in							5/3/2013				7703			
RC2-099-002						in							5/3/2013	1			7704			
RC2-099-003						in							5/3/2013				7705			
RC2-099-004						in						Seed-102	5/3/2013				7706			
RC2-099-005						in							5/3/2013				7707			
RC2-099-006						in							5/3/2013	1			7708			
RC2-099-007						in							5/3/2013				7709			
RC2-099-008						in							5/3/2013				7710			
RC2-102-001				8		in							4/16/2013				5711			
RC2-102-002				3		in						Seed-108	4/16/2013				5712			
RC2-102-003						in							4/16/2013				5713			
RC2-103-001				8		in							5/10/2013				9351			
RC2-103-002				6		in							5/10/2013				9352			
RC2-103-003				1		in							5/10/2013				9353			
RC2-103-004				8		in							5/10/2013				9354			
RC2-103-005				1		in							5/10/2013				9355			
RC2-103-006				1		in							5/10/2013				9356			
RC2-103-007				1		in							5/10/2013				9357			
RC2-103-008				3		in							5/10/2013				9358			
RC2-103-009				3		in						Seed-173	5/10/2013				9359			
RC2-103-010						in							5/10/2013	1			9360			
RC2-104-001				8		in							5/6/2013				8741			
RC2-104-002				2		in							5/6/2013				8742			
RC2-104-003						in							5/6/2013	1			8743			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-104-004				3		in						Seed-194	5/6/2013				8744			
RC2-105-001				8		in							5/14/2013				11551			
RC2-105-002				2		in							5/14/2013				11552			
RC2-105-003				3		in						Seed-134	5/14/2013				11553			
RC2-106-001				4		in							5/21/2013				15764			
RC2-106-002				8		in							5/21/2013				15765			
RC2-106-003				3		in							5/21/2013				15766			
RC2-106-004				6		in							5/21/2013				15767			
RC2-106-005				6		in							5/21/2013				15768			
RC2-106-006				5		in							5/21/2013				15769			
RC2-106-007				3		in							5/21/2013				15770			
RC2-106-008				5		in							5/21/2013				15771			
RC2-106-009				5		in							5/21/2013				15772			
RC2-106-010				2		in							5/21/2013				15773			
RC2-106-011				2		in							5/21/2013				15774			
RC2-106-012				9		in							5/21/2013				15775			
RC2-106-013				4		in							5/21/2013				15776			
RC2-106-014				8		in							5/21/2013				15777			
RC2-106-015				24		in							5/21/2013				15778			
RC2-106-016				20		in							5/21/2013				15779			
RC2-106-017				12		in							5/21/2013				15780			
RC2-106-018				7		in							5/21/2013				15781			
RC2-106-019				5		in							5/21/2013				15782			
RC2-108-001				8		in							5/21/2013				15756			
RC2-108-002				4		in							5/21/2013				15757			
RC2-108-003				5		in							5/21/2013				15758			
RC2-108-004						in							5/21/2013	1			15759			
RC2-108-005				6		in							5/21/2013				15760			
RC2-108-006				3		in						Seed-292	5/21/2013				15761			
RC2-108-007				6		in							5/21/2013				15762			
RC2-108-008				6		in							5/21/2013				15763			
RC2-110-001				7		in							5/21/2013				15736			
RC2-110-002				12		in							5/21/2013				15737			
RC2-110-003				0		in							5/21/2013				15738			
RC2-110-004				12		in							5/21/2013				15739			
RC2-110-005				6		in							5/21/2013				15740			
RC2-110-006						in							5/21/2013	1			15741			
RC2-110-007						in							5/21/2013	1			15742			
RC2-110-008				5		in							5/21/2013				15743			
RC2-110-009				3		in							5/21/2013				15744			
RC2-110-010				2		in							5/21/2013				15745			
RC2-110-011				30		in							5/21/2013				15746			
RC2-110-012				3		in							5/21/2013				15747			
RC2-110-013				13		in							5/21/2013				15748			
RC2-110-014				3		in						Seed-294	5/21/2013				15749			
RC2-110-015				2		in							5/21/2013				15750			
RC2-110-016				3		in							5/21/2013				15751			
RC2-110-017				2		in							5/21/2013				15752			

Target_ID	Excavation_length	Excavation_width	Excavation_depth	Item_length	Item_width	Length_ Unit	Condition_of_rotating_band	Item_source	BIP_SoilSampleID	Final_X	Final_Y	Test_Item_ID	LoadDate	GPCheck	GPPass	GPDate Accept	RowID	Last Edited By	Last Edit Date	Original_AT
RC2-110-018				6		in							5/21/2013				15753			
RC2-110-019				3		in							5/21/2013				15754			
RC2-110-020						in							5/21/2013	1			15755			
RC2-111-001				8		in							5/21/2013				15731			
RC2-111-002				3		in						Seed-296	5/21/2013				15732			
RC2-111-003				7		in							5/21/2013				15733			
RC2-111-004						in							5/21/2013				15734			
RC2-111-005						in							5/21/2013				15735			
RC2-112-001						in							5/21/2013				15720			
RC2-112-002						in							5/21/2013	1			15721			
RC2-112-003				3		in							5/21/2013				15722			
RC2-112-004				3		in						Seed-298	5/21/2013				15723			
RC2-112-005				2		in							5/21/2013				15724			
RC2-112-006				1		in							5/21/2013				15725			
RC2-112-007				2		in							5/21/2013				15726			
RC2-112-008				2		in							5/21/2013				15727			
RC2-112-009				13		in							5/21/2013				15728			
RC2-112-010						in							5/21/2013	1			15729			
RC2-112-011						in							5/21/2013	1			15730			
RC2-113-001				4		in							5/21/2013				15713			
RC2-113-002						in							5/21/2013				15714			
RC2-113-003				6		in							5/21/2013				15715			
RC2-113-004				2		in							5/21/2013				15716			
RC2-113-005				3		in						Seed-291	5/21/2013				15717			
RC2-113-006						in							5/21/2013				15718			
RC2-113-007				1		in							5/21/2013				15719			

APPENDIX F-10

JANUARY 2015 MEMORANDUM FOR RE-INVESTIGATION OF GRIDS

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Memorandum

TO: Chris Cochrane, USAESCH-Project Manager
Amy Walker, USAESCH- Project Geophysicist
Raymond R. Livermore, USACE Wilmington District
Julie A. Hiscox, USACE Savannah District

FROM: Kimberly Vaughn, HGL Project Manager
Tim Deignan, HGL MMRP Program Geophysicist

DATE: 1/15/2015

SUBJECT: Remedial Investigation Verification of Intrusive Data, Contract No. W91238-06-D-0021, Task Order No. 0009, FUDS Project No. I04NC000902

INTRODUCTION:

HydroGeoLogic, Inc. (HGL) has conducted a Remedial Investigation (RI) at the former Camp Butner (Butner) project site. The RI is being conducted to confirm whether munitions and explosives of concern (MEC) are present and, if they are, to characterize their nature and extent. An additional objective is to determine if munitions constituents (MC) contamination is present and collect analytical data to determine its nature and extent. The RI field activities were completed by HGL and its subcontractors from October 2012 through May 2013.

The field investigation was conducted under the Work Plan reviewed and approved by the technical project planning (TPP) Team, which includes the U. S. Army Engineering and Support Center – Huntsville (USAESCH), the U.S. Army Corps of Engineers (USACE), Wilmington District, North Carolina Department of Environment and Natural Resources (NCDENR), and North Carolina Army National Guard (ARNG). Field data was collected and the project site has been characterized in accordance with the approved data quality objectives (DQOs). Following the completion of field activities, an RI Report has been submitted for project development team (PDT) and stakeholder review and concurrence. Based on concerns about quality assurance/quality control (QA/QC) procedures, HGL and USAESCH agreed to a limited field verification of the intrusive investigation data. HGL recommended to perform a re-investigation for verification of the data summarized in the draft RI report and to allow all parties a greater level of confidence.

HGL conducted this additional investigation at the ARNG property. The ARNG property is considered representative of the Butner investigation as a whole as it is similar in vegetation, terrain, and munitions type to the other two MRSs. HGL re-investigated 10 grids in total as a representative sample for this additional QC. On September 12, 2014, HGL in coordination with the Government team identified 20 grids as candidates for conducting the verification. The list of grids selected for re-investigation is shown in Table 1. HGL proposed that at least two stakes would be needed to positively geo-reference the original grid. Therefore, if the teams could not identify at least two stakes for a grid, an alternate grid would be selected for investigation from the 20 candidate grids until at least 10 grids were re-investigated.

Table 1 - Proposed Grids for Re-Investigation

Grid ID	Team	Target Count	Grid Area	Adjusted Target Count*	MD/MEC Count	Selection Comments
ARNG-004	1	40	2500	40	38	hi anomaly count, "frag", lacking descriptions
ARNG-019	2	20	1500	33	18	high anomaly count, most MD; most under 19.7 mV
ARNG-023	2	22	2500	22	9	med anomaly density, all post DR below 19.7mV
ARNG-026	2	33	2500	33	32	hi anomaly count, all frag" except seed"
ARNG-037	1	74	2500	74	0	hi target count, no MD adjacent grids have MD
ARNG-040	2	16	2500	16	0	no MD; all surrounding grids have MD
ARNG-044	2	12	2500	12	1	med anomaly density, many hot rock, 1 MD
ARNG-045	1	33	2500	33	31	hi anomaly count, most "frag", lacking descriptions
ARNG-053	2	13	2500	13	0	hot rock, CD, no MD; near grids with MD
ARNG-068	1	5	2500	5	0	no MD; all surrounding grids have MD
Alternate grids:						
ARNG-025	1	42	2500	42	3	hi anomaly count, most CD, some frag, lacking descriptions
ARNG-001	2	12	625	48	11	hi anomaly count, all MD except seed/SW nail
ARNG-005	1	12	625	48	11	hi anomaly count, most MD, lacking descriptions
ARNG-011	1	46	2500	46	14	hi anomaly count, mix of CD/MD/MEC, good descriptions
ARNG-021	2	20	2500	20	18	med anomaly count, mostly frag, lacking descriptions
ARNG-027	2	36	2500	36	0	hi anomaly count, no MD, variety of CD
ARNG-034	1	21	2500	21	1	hi CD count, 1MD
ARNG-036	2	31	2500	31	0	hi anomaly count, a lot of barbed wire
ARNG-058	1	37	2500	37	1	hi anomaly count, most CD, detailed descriptions
ARNG-060	2	30	2500	30	9	hi anomaly count

*Anomaly and MD counts are adjusted to reflect the projected counts in a 2500 square foot grid equivalent. Actual grid sizes were either 625, 1500, or 2500 square feet.

ADDITIONAL FIELD INVESTIGATION CONDUCTED:

HGL re-mobilized to Camp Butner from October 27 to November 4, 2014. The reinvestigation included intrusive investigation of the grids listed in Table 2, all located in the ARNG MRS. Grids ARNG-005 and ARNG-011 were identified as alternate grids in the Final Memorandum dated October 8, 2014. These grids were selected for investigation by the HGL SUXOS while on-site due to Camp Butner National Guard training activities that were conducted on October 28 and 31, 2014.

Two hundred-eighty (280) anomaly locations were investigated in the ten DGM grids during the current investigation by six HGL team members and one OESS representative from USAESCH. At each grid the anomaly locations from the original DGM data were staked out, reacquired with an EM61-MK2A, intrusively investigated, and a post-dig hole check was performed with the EM61-MK2A. If the EM61-MK2A signal intensity during reacquisition was below ~ 19 mV (Sum of Channels 1-4) no intrusive activities were performed. The UXO Technicians utilized the Schonstedt hand held detector during intrusive operations for all grids, and the White's all metals detector was used after the first day of operation (the EM61-MK2A was used in place of the White's at ARNG-044). Excavation activities were performed at each anomaly location until the results were identified as being representative of those documented during the original investigation. All field activities were performed in accordance with the approved Work Plan and the Work Plan addendum approved by the project team in October 2014.

The intrusive results for the 2014 reinvestigation and the original investigation conducted in 2012 are summarized in Table 2. The results from the 2014 reinvestigation are representative of those documented during the original investigation in 2012. The four MD items identified in ARNG-037 during the reinvestigation are 0.556 brass casings. Although no MD was identified in this grid during the original investigation, the site is an active training area and the brass casings are likely the result of training activities that occurred after the original investigation in this grid.

Table 2, Intrusive Results, 2014 (Intrusive Results Original, 2012)

Grid	Anomalies	CD	CD, OTHER	MD	MD, CD	MD, CD, OTHER	MD, OTHER	MEC	NI	OTHER
ARNG-005	12	1 (1)		9 (11)					2	
ARNG-011	46	22 (28)	1 (0)	0 (5)	8 (8)	2 (0)	1 (0)	0 (1)	11	1 (3)
ARNG-019	20	1 (0)		3 (16)		0 (2)			15	1 (1)
ARNG-023	21	9 (7)	2 (0)	0 (8)					4	6 (5)
ARNG-026	33	1		8 (32)	1				20	3 (0)
ARNG-037	74	52 (66)	3 (0)	2 (0)	1 (0)		1 (0)		9	6 (7)
ARNG-040	16	9 (14)	1 (0)						6	0 (1)
ARNG-044	12	0 (1)		0 (1)					6	6 (9)
ARNG-045	33	0 (1)		3 (31)			11		18	1 (1)
ARNG-053	13	0 (2)	0 (4)	1 (0)			0 (1)		11	1 (5)

NI = not investigated (reacquisition signal was below threshold of ~ 19 mV, Sum14)

Seven (7) anomalies in five different grids that were below the signal intensity threshold for the project were selected as "QC picks" for further verification of the results. MD (small frag) was identified at four locations, CD (small piece of sheet metal) was identified at one location, and the remaining two locations were classified as "Other" (e.g., hot rocks identified with the Schonstedt, null or minimal response from White's metal detector). The intrusive results for the 2014 reinvestigation were uploaded for government geophysicist review in November 2014, and are documented in the MS Access database table Intrusive_Results_Table_Revisits_2014 that accompanies the RI report.

CONCLUSION:

Based on the Memorandum for Record issued by Mr. Hank Counts in November 2014, and HGL's evaluation of the verification data collected, there are no discrepancies in the intrusive results data presented in the RI Report for this project. This memorandum will be included in the geophysical data appendix of the RI Report (Appendix F) for documentation of this additional QC verification conducted.

APPENDIX G

FIELD WORK VARIANCES

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TABLE OF CONTENTS

Field Work Variance No. 0001

Field Work Variance No. 0002

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FIELD WORK VARIANCE

PROJECT NO.: H1009A DATE: 4/5/13 VARIANCE NO.: 0001

PROJECT NAME: Former Camp Butner Remedial Investigation / Feasibility Study, Granville County, North Carolina

CONTRACT NO.: W912DY-10-D-0023 DELIVERY ORDER NO.: 0009

PRESENT REQUIREMENTS: REQUESTED BY: HydroGeoLogic, Inc.
As described in the approved work plan in Section 3.7.4.6 (eighth bulleted paragraph):

"Investigative results will be recorded electronically. Electronic dig sheets will be annotated, as appropriate, and all columns completed."

PROPOSED CHANGE:
"Investigative results will be recorded electronically or on paper dig sheets, which will be incorporated nightly into the electronic database. Electronic dig sheets will be annotated, as appropriate, and all columns completed."

TECHNICAL JUSTIFICATION:
Intrusive investigation results may be tracked either electronically or on paper (hard copy) dig sheets. This change will give the HGL teams flexibility in data collection methods and does not impact data quality, as the same information will be gathered by both methods.

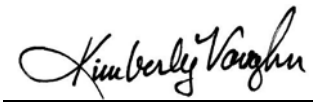
COST/SCHEDULE IMPACT:
No impact on cost, schedule, or data quality.

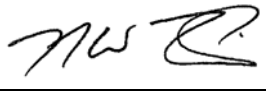
REASON FOR CHANGE: Clarification __X_____ ADDITION _____ DELETION

CHANGE ORDER REQUIRED: __X___ NO _____ YES CHANGE ORDER NO. _____

APPLICABLE DOCUMENT:
Final Work Plan approved October 15, 2012.

cc: Distribution

APPROVED BY  DATE 4/5/13
HydroGeoLogic Project Manager

APPROVED BY  DATE 4/5/13
HydroGeoLogic Quality Control Systems Manager

APPROVED BY _____ DATE _____
USACE Project Manager

FORMER CAMP BUTNER, REMEDIAL INVESTIGATION/FEASIBILITY STUDY
FIELD WORK VARIANCE (FWV) TRACKING LOG

FWV NO.	AFFECTED DOCUMENT	SUBJECT	DATE WRITTEN	DATE SUBMITTED	DATE APPROVED BY USACE	REMARKS
0001	Work Plan	Intrusive Investigation Data Collection Methods	3/18/13	4/5/13	4/17/13	

FIELD WORK VARIANCE

PROJECT NO.: H1009A DATE: 4/5/13 VARIANCE NO.: 0002

PROJECT NAME: Former Camp Butner Remedial Investigation / Feasibility Study, Granville County, North Carolina PAGE _1__ OF _2__

CONTRACT NO.: W912DY-10-D-0023 DELIVERY ORDER NO.: 0009

PRESENT REQUIREMENTS: REQUESTED BY: HydroGeoLogic, Inc.

As described in the approved work plan in Paragraph 3.6.5.2:

3.6.5.2 A UXO field crew will be used to perform a subsurface analog metal detection and investigation survey in real time. The field crew will detect, mark, and map anomaly locations prior to intrusive investigation.

PROPOSED CHANGE:

The highlighted text is proposed for insertion:

3.6.5 AGM Grid Procedures

3.6.5.1 As described earlier, the technical approach favors the use of DGM transects and grids, but in areas inaccessible to DGM, such as steep slopes and rough terrain, AGM grids may be established. The procedures to establish AGM grids are as follows:

3.6.5.2 A UXO field crew will be used to perform a subsurface analog metal detection and investigation survey in real time. The field crew will detect, mark, and map anomaly locations prior to intrusive investigation, or will identify and intrusively investigate anomalies as described in paragraph 3.6.5.4.

3.6.5.3 Each AGM grid will be seeded with four (4) coverage seeds, consisting of 6-inch steel nails driven into the ground flush with ground surface. Two detection seed items comprised of a small and a medium ISO, each buried at the maximum reliable depth of detection as determined at a test plot using an EM61-MK2. Reliable detection is defined as a coherent, recognizable anomaly in each of first three time-gates of the EM61-MK2.

3.6.5.4 Upon arriving at a previously marked grid, the field team will lay out measuring tape on parallel ends of the grids, and mark off lanes along the tape using alternating colors of flagging or pin flags. Instrument operators will collect data in alternating 4-foot-wide passes so that an alternating set of passes will be performed within each lane such that the survey completely covers the 5-foot-wide swath. Operators will be responsible for identifying and intrusively investigating anomalous responses. A single waypoint will be recorded at each grid that summarizes the quantity and depth of CD and non-identifiable MD (i.e., undifferentiated HE fragmentation). For MEC and identifiable MD, depth, category (MEC, MD, etc.), and waypoint, as well as a narrative description, of each recovered item (e.g., 60mm mortar, 2.36-inch rocket fins, etc.) will be recorded at the intrusive location. If MEC is identified, all activities within the particular grid will be halted, and the SUXOS will be notified immediately.

TECHNICAL JUSTIFICATION:

This change clarifies methods described in both paragraphs 3.6.5.2 and 3.6.5.4 and gives the HGL teams flexibility to follow either method. This change does not impact data quality.

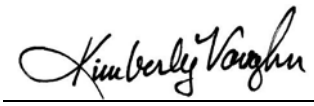
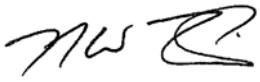
COST/SCHEDULE IMPACT:

No impact on cost, schedule, or data quality.

REASON FOR CHANGE: Clarification	__X_____ ADDITION		_____ DELETION
CHANGE ORDER REQUIRED:	__X___ NO	_____ YES	CHANGE ORDER NO. _____

APPLICABLE DOCUMENT:
Final Work Plan approved October 15, 2012.

cc: Distribution

APPROVED BY		DATE	4/5/13
	HydroGeoLogic Project Manager		
APPROVED BY		DATE	4/5/13
	HydroGeoLogic Quality Control Systems Manager		
APPROVED BY	_____	DATE	_____
	USACE Project Manager		

FORMER CAMP BUTNER, REMEDIAL INVESTIGATION/FEASIBILITY STUDY
FIELD WORK VARIANCE (FWV) TRACKING LOG

FWV NO.	AFFECTED DOCUMENT	SUBJECT	DATE WRITTEN	DATE SUBMITTED	DATE APPROVED BY USACE	REMARKS
0001	Work Plan	Intrusive Investigation Data Collection Methods	3/18/13	4/5/13	4/17/13	
0002	Work Plan	AGM Grids Data Collection Methods	4/3/13	4/5/13	4/17/13	

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APPENDIX H

SUXOS, UXOSO, UXOQCS REPORTS, LOGS, AND MEMORANDA

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H1 Daily Production Reports

H2 Daily Quality Control Reports

H3 Weekly Site Manager Reports

H4 Geophysical Field Notes

H5 Team 1 Field Notes

H6 Team 2 Field Notes

H7 Daily Production Reports from Re-investigation of selected grids, October and November 2014

All Appendix H documents are included in the electronic version only.

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APPENDIX H1

DAILY PRODUCTION REPORTS

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Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/29/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	0		
UXO Technician III	0		
UXO Technician II	0		
UXO Technician I	0		
Subcontractors	0		

4. Work Summary

Work Activity	Daily Total	Weekly Total	Project Total
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Summary of today's work activities:

Mobilize to Camp Butner, NC. Pickup truck from Enterprise Rental. Informal meeting with Vicky Johnson and range control staff. Range Control scheduling personnel provide dates for access to various ranges. Areas suitable for site trailer discussed. Tour of range facilities.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/29/2012

Task Order No: 0009

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	0
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	8	8	10/29/12	
Truck, pickup, ¾ ton	0	0	6		
Skidsteer (brush clearance)	0				
Owned Equipment					
Schonstedt	4	0	40	10/29/12	
Camera, digital	0	0	0		
Lightning detector	0	0	0		
PDA/GPS	0	0	0		
First aid kit	0	0	0		
Team gear	0	0	0		

Contract No: W912DY-10-D-0023 **Date:** **10/29/2012**

Task Order No: 0009

Demo kit	0	0	0		
Site Safety Officer Kit	0	0	0		
Computer, laptop	1	0	10	10/29/12	
Printer/copier/scanner/fax	0	0	0		

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

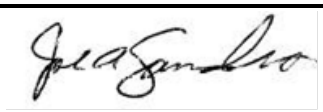
13. Continuation/other.

N/A

Site Daily Production Report

Contract No:	W912DY-10-D-0023	**Date:**	**10/29/2012**
Task Order No:	0009		

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/30/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	0		
UXO Technician III	0		
UXO Technician II	0		
UXO Technician I	0		
Subcontractors	0		

4. Work Summary

Work Activity	Daily Total	Weekly Total	Project Total
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Summary of today's work activities:

Receive explosive magazines from Dyno Nobel. Continue site mobilization. Procure equipment for site.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/30/2012

Task Order No: 0009

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	0
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	0	0			
Skidsteer (brush clearance)	0	0			
Owned Equipment					
Schonstedt	4	0	80	10/29/12	
Camera, digital	0	0	0		
Lightning detector	0	0	0		
PDA/GPS	0	0	0		
First aid kit	0	0	0		
Team gear	0	0	0		

Contract No: W912DY-10-D-0023 **Date:** **10/30/2012**

Task Order No: 0009

Demo kit	0	0	0		
Site Safety Officer Kit	0	0	0		
Computer, laptop	1	0	20	10/29/12	
Printer/copier/scanner/fax	0	0	0		

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/31/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	0		
UXO Technician III	0		
UXO Technician II	0		
UXO Technician I	0		
Subcontractors	0		

4. Work Summary

Work Activity	Daily Total	Weekly Total	Project Total
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Summary of today's work activities:

Continue site mobilization. Procure team equipment, safety gear, and office printer. Ahern Rentals prove unreliable in providing brush cutting machine. Locate alternate equipment vendor – Triangle Equipment.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/31/2012

Task Order No: 0009

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	0
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	0	0			
Skidsteer (brush clearance)	0	0			
Owned Equipment					
Schonstedt	4	0	120	10/29/12	
Camera, digital	0	0	0		
Lightning detector	0	0	0		
PDA/GPS	0	0	0		
First aid kit	0	0	0		
Team gear	0	0	0		

Contract No: W912DY-10-D-0023 **Date:** **10/31/2012**

Task Order No: 0009

Demo kit	0	0	0		
Site Safety Officer Kit	0	0	0		
Computer, laptop	1	0	30	10/29/12	
Printer/copier/scanner/fax	0	0	0		

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/01/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician II	Brush TL #1	Amiotte, Jeremy

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	0		
UXO Technician III	0		
UXO Technician II	1	8	8
UXO Technician I	0		
Subcontractors	0		

4. Work Summary

Work Activity	Daily Total	Weekly Total	Project Total
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/01/2012

Task Order No: 0009

Summary of today's work activities:

Site trailer office/storage combo delivered today. Jeremy Amiotte mobilized to assist with site setup and begin marking transects that require vegetation removal. DGM transects 023, 024, 025 identified with flagging ribbon. Retrieve two 2500 Silverado trucks from Enterprise Rental.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	0
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	2	3	6	11/01/12	
Skidsteer (brush clearance)	0				
Owned Equipment					
Schonstedt	4	10	160	10/29/12	

Contract No: W912DY-10-D-0023 **Date:** **11/01/2012**

Task Order No: 0009

Camera, digital	0	0	0		
Lightning detector	0	0	0		
PDA/GPS	3	10	30	11/01/12	
First aid kit	1	10	10	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit	0	0	0		
Site Safety Officer Kit	0	0	0		
Computer, laptop	1	10	40	10/29/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

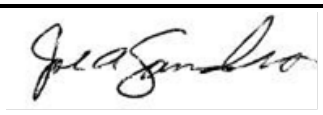
N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/02/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician II	Brush TL # 1	Amiotte, Jeremy

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO/QC	0		
UXO Technician III	0		
UXO Technician II	1	10	18
UXO Technician I	0		
Subcontractors	0		

4. Work Summary

Work Activity	Daily Total	Weekly Total	Project Total
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/02/2012

Task Order No: 0009

Summary of today's work activities:

Camp Butner facilities personnel connect power to site trailer. Jeremy Amiotte marks DGM transects south of Robert's Chapel Road. DGM transects # 061, 062, 063 identified with flagging ribbon. SUXOS prepares site specific training.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	0
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	50	10/29/12	
Truck, pickup, ¾ ton	2	10	16	11/01/12	
Skidsteer (brush clearance)	0				
Owned Equipment					
Schonstedt	4	10	200	10/29/12	

Contract No: W912DY-10-D-0023 **Date:** **11/02/2012**

Task Order No: 0009

Camera, digital	0	0	0		
Lightning detector	0	0	0		
PDA/GPS	3	10	60	11/01/12	
First aid kit	1	10	20	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit	0	0	0		
Site Safety Officer Kit	0	0	0		
Computer, laptop	1	10	50	10/29/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/05/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / I3	Brush Team	David Davis

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	0	0	0
UXO Technician III	1	10	10
UXO Technician II	2	10	20
UXO Technician I	1	10	10
Subcontractors	1	10	10

4. Work Summary

Army National Guard MRS			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.2	1.2	1.2
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **11/05/2012**

Task Order No: 0009

Summary of today's work activities:

First day of brush cutting. Mobilized Oscar Honne, Dawn Weber, Rebecca Powers, and David Davis (I3 equipment operator). After reviewing the WP, SSHP, and site specific hazards, employees were briefed on project objectives and management's expectations.

Brush team cut DGM transect 025 and a portion of DGM transect 024.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	0
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	2	10	20	11/01/12	
Skidsteer (brush clearance)	1	7	7	11/05/12	
Owned Equipment					
Schonstedt	4	10	40	10/29/12	

Contract No: W912DY-10-D-0023 **Date:** **11/05/2012**

Task Order No: 0009

Camera, digital	0	0	0		
Lightning detector	0	0	0		
PDA/GPS	3	10	30	11/01/12	
First aid kit	1	10	10	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit	0	0	0		
Site Safety Officer Kit	0	0	0		
Computer, laptop	1	10	10	10/29/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

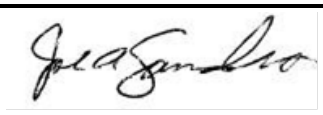
Pics of site trailer, brush cutter operating, and transect ready for DGM

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/06/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Recon Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Recon Team	Powers, Rebecca N.
Equipment Operator / I3	Brush Team	David Davis

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	11	21
UXOSO/QC	0	0	0
UXO Technician III	1	10	20
UXO Technician II	2	10	40
UXO Technician I	1	10	20
Subcontractors	1	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.6	1.8	1.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	2	2	2
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/06/2012

Task Order No: 0009

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Summary of today's work activities:

- Continue brush cutting. Brush team finished DGM transect 024 and cut a portion of DGM transect 023. Production was less today due to denser forest. Also, while attempting to cross certain terrain features such as creeks and steep gullies, the brush cutting machine must track away from the transect some distance and return to cutting on the other side.
- Recon team was formed today and collected approximately 2 miles of data on Recon transects 021 and 022.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **11/06/2012**

Task Order No: 0009

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	0
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	2	10	40	11/01/12	
Skidsteer (brush clearance)	1	10	17	11/05/12	
Owned Equipment					
Schonstedt	4	10	80	10/29/12	
Camera, digital	0	0	0		
Lightning detector	0	0	0		
PDA/GPS	3	10	60	11/01/12	
First aid kit	1	10	20	11/01/12	
Team gear	2	10	40	11/01/12	

Contract No: W912DY-10-D-0023 **Date:** **11/06/2012**

Task Order No: 0009

Demo kit	0	0	0		
Site Safety Officer Kit	0	0	0		
Computer, laptop	1	10	20	10/29/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/07/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Recon Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Recon Team	Powers, Rebecca N.
Equipment Operator / I3	Brush Team	David Davis

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	11	32
UXOSO/QC	0	0	0
UXO Technician III	1	10	30
UXO Technician II	2	10	60
UXO Technician I	1	10	30
Subcontractors	1	10	30

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**Project Total**
Transect Brush Clearing (Miles)	2.5	4.3	4.3
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	.5	2.5	2.5
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **11/07/2012**

Task Order No: 0009

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/07/2012

Task Order No: 0009

Summary of today's work activities:

● Continue brush cutting. A second brush cutting machine was delivered mid-morning. The steep terrain towards the eastern edge of the guard property makes brush cutting difficult in some areas. Brush teams finished DGM transect 022 and cut a portion of DGM transects 021, 020 and 019.

● Recon team was formed temporarily due to equipment problems and collected approximately .5 miles of data on Recon transects 021 and 022.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	0
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	2	10	60	11/01/12	
Skidsteer (brush clearance)	1	10	27	11/05/12	
Skidsteer #2	1	7	7	11/07/12	
Owned Equipment					

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Schonstedt	4	10	120	10/29/12	
Camera, digital	0	0	0		
Lightning detector	0	0	0		
PDA/GPS	3	10	90	11/01/12	
First aid kit	3	10	50	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	1	10	30	10/29/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

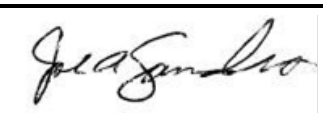
N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/08/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	David Davis

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	11	43
UXOSO/QC	0	0	0
UXO Technician III	1	10	40
UXO Technician II	2	10	80
UXO Technician I	2	10	50
Subcontractors	1	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**Project Total**
Transect Brush Clearing (Miles)	3.0	7.3	7.3
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	2.5	2.5
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/08/2012

Task Order No: 0009

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Summary of today's work activities:

● Brush Teams 1 and 2 cut the western sides of DGM transects 023, 022, 021 and 020 into the range fan while the range was cold today. Portions of transects 019 and 018 were also cut but not completed. Some data was not collected due to battery issues with the Juno GPS.

● While marking a path to cut on the eastern side of DGM transect 023, Oscar Honne discovered an 81mm illumination mortar tail boom (MD). A GPS position was recorded; the item was photographed, and removed.

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5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	1	1	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	2	10	80	11/01/12	
Skidsteer (brush clearance)	1	10	37	11/05/12	
Skidsteer #2	1	7	17	11/07/12	
Owned Equipment					
Schonstedt	4	10	160	10/29/12	
Camera, digital	0	0	0		
Lightning detector	0	0	10	11/08/12	
PDA/GPS	3	10	120	11/01/12	
First aid kit	3	10	80	11/01/12	
Team gear	2	10	80	11/01/12	

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Demo kit	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	1	10	40	10/29/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **11/09/2012**

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	11	54
UXOSO/QC	0	0	0
UXO Technician III	1	10	50
UXO Technician II	2	10	100
UXO Technician I	2	10	70
Subcontractors	1	10	50

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**Project Total**
Transect Brush Clearing (Miles)	2	9.3	9.3
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1.5	4	4
MEC Disposal	0	0	0

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Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **11/09/2012**

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 cut the eastern sides of DGM transects 023 and 018 while the ANRG range was active. DGM transect 026 was hand cleared and made ready for collection.

● Two surface recon teams were formed in the afternoon to collect Recon transects 013 and 015.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	1	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	50	10/29/12	
Truck, pickup, ¾ ton	2	10	100	11/01/12	
Skidsteer (brush clearance)	1	10	47	11/05/12	
Skidsteer #2	1	7	27	11/07/12	
Owned Equipment					

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Schonstedt	4	10	200	10/29/12	
Camera, digital	0	0	0		
Lightning detector	0	0	20	11/08/12	
PDA/GPS	3	10	150	11/01/12	
First aid kit	3	10	110	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	1	10	50	10/29/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/12/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Geophysicist	Site Management	Donatelli, Daryl
Geophysicist/Amec	DGM	Holzbauer, Micah
Geophysicist/Amec	DGM	Buckman, Chris
UXO Technician II/Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	11	11
UXOSO/QC	0	0	0
UXO Technician III	1	10	10
UXO Technician II	2	10	20
UXO Technician I	2	10	20
Geophysicist	1	10	10
Subcontractors	4	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	9.3
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.8	1.8	1.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

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Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 relocated to the property south of the guard property also owned by the State of North Carolina. Transects RC1_DGM500_054 through 063 were cut and marked.

● Daryl Donatelli and three Amec employees arrived on site to set up the IVS and prepare for DGM.

Site Visitors:
● Elise Goggin (USAESCH Geophysicist) arrived on site after lunch and observed IVS installation.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	2	10	20	11/01/12	
SUV (Donatelli)	1	10	10	11/12/12	
SUV (Amec)	1	10	10	11/12/12	
Skidsteer (brush clearance)	1	10	10	11/05/12	

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Skidsteer #2	1	10	10	11/07/12	
Owned Equipment					
Schonstedt	4	10	40	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	4	10	40	11/01/12	
First aid kit	3	10	30	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	1	10	10	10/29/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/13/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Geophysicist	Site Management	Donatelli, Daryl
Geophysicist/ Amec	DGM	Holzbauer, Micah
Geophysicist/ Amec	DGM	Buckman, Chris
UXO Technician II/ Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	11	22
UXOSO/QC	0	0	0
UXO Technician III	1	10	20
UXO Technician II	2	10	40
UXO Technician I	2	10	40
Geophysicist	1	10	20
Subcontractors	4	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3	3	12.3
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **11/13/2012**

Task Order No: 0009

Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	1.8	1.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/13/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 relocated back to Guard property to cut transects inside the range fan to include: DGM 016, 018, and a large portion of 017.

● AMEC continued IVS set-up and prepared for DGM. USACOE on site to observe IVS.

Site Visitors: Elise Goggin (USAESCH Geophysicist) onsite to observe IVS.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	2	10	40	11/01/12	
SUV (Donatelli)	1	10	20	11/12/12	
SUV (Amec)	1	10	20	11/12/12	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	

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Task Order No: 0009

Owned Equipment					
Schonstedt	4	10	80	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	4	10	80	11/01/12	
First aid kit	3	10	60	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	1	10	20	10/29/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/14/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Geophysicist	Site Management	Donatelli, Daryl
Geophysicist/ Amec	DGM	Holzbauer, Micah
Geophysicist/ Amec	DGM	Buckman, Chris
UXO Technician II/ Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	11	33
UXOSO/QC	0	0	0
UXO Technician III	1	10	30
UXO Technician II	2	10	60
UXO Technician I	2	10	60
Geophysicist	1	10	30
Subcontractors	4	10	120

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.2	6.2	15.5
Transect DGM (Miles)			
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **11/14/2012**

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.8	1.8	1.8
Transect DGM (Miles)	2.8	2.8	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/14/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 continued cutting on the guard property east of the range fan. Transects ARNG DGM500-023, 020, 019, 018, 017 and 016 were cut and/or completed from the range fan to the lake. Portions of transects ARNG DGM500- 015, 014 and 013 were also cut but hindered by steep terrain. Production was cut short due to a broken hydraulic line on one brush cutting machines.

● AMEC collected transects RC1 DGM500-055 through 063.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	2	10	60	11/01/12	
SUV (Donatelli)	1	10	30	11/12/12	
SUV (Amec)	1	10	30	11/12/12	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	

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Owned Equipment					
Schonstedt	4	10	120	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	4	10	120	11/01/12	
First aid kit	3	10	90	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	1	10	30	10/29/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/15/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Geophysicist	Site Management	Donatelli, Daryl
Geophysicist/ Amec	DGM	Holzbauer, Micah
Geophysicist/ Amec	DGM	Buckman, Chris
UXO Technician II/ Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	11	44
UXOSO/QC	0	0	0
UXO Technician III	1	10	40
UXO Technician II	2	10	80
UXO Technician I	2	10	80
Geophysicist	1	10	40
Subcontractors	4	10	160

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.5	7.7	17
Transect DGM (Miles)	5.0	5.0	5.0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **11/15/2012**

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	1.8	1.8
Transect DGM (Miles)	0	2.8	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/15/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 continued cutting on the guard property east of the range fan. Transects ARNG DGM500-015, 014, 013, 012, 011 were cut. Wet weather slowed production.

● AMEC collected transects ARNG DGM500-025 through 020.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	2	10	80	11/01/12	
SUV (Donatelli)	1	10	40	11/12/12	
SUV (Amec)	1	10	40	11/12/12	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
PDA/GPS	4	10	40	11/15/12	

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Contract No: W912DY-10-D-0023 **Date:** **11/15/2012**

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Owned Equipment					
Schonstedt	4	10	160	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	4	10	160	11/01/12	
First aid kit	3	10	120	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	1	10	40	10/29/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/16/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Geophysicist	Site Management	Donatelli, Daryl
Geophysicist/ Amec	DGM	Holzbauer, Micah
Geophysicist/ Amec	DGM	Buckman, Chris
UXO Technician II/ Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	11	55
UXOSO/QC	0	0	0
UXO Technician III	1	10	50
UXO Technician II	2	10	100
UXO Technician I	2	10	100
Geophysicist	1	10	50
Subcontractors	4	10	200

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3	10.7	20
Transect DGM (Miles)	3.7	8.7	8.7
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **11/16/2012**

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	1.8	1.8
Transect DGM (Miles)	0	2.8	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	0
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/16/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 continued cutting on the guard property east of the range fan. Transects ARNG DGM500- 005, 006 and ARNG300-009, 010, 011, 012, 013, 014, 015 were cut as the teams moved around the lake.

● AMEC collected transects ARNG DGM500-014 through 020.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	50	10/29/12	
Truck, pickup, ¾ ton	2	10	100	11/01/12	
SUV (Donatelli)	1	10	50	11/12/12	
SUV (Amec)	1	10	50	11/12/12	
Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	
PDA/GPS	4	10	80	11/15/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **11/16/2012**

Task Order No: 0009

Owned Equipment					
Schonstedt	4	10	200	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	50	11/08/12	
PDA/GPS	4	10	200	11/01/12	
First aid kit	3	10	150	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	1	10	50	10/29/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/19/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	0	0	0
UXO Technician III	1	10	10
UXO Technician II	2	10	20
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	1	10	10

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	20
Transect DGM (Miles)	0	0	8.5
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **11/19/2012**

Task Order No: 0009

Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2.2	2.2	2.2
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1.5	1.5	1.5
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/19/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 relocated to RC2 MRS and performed brush cutting and survey reconnaissance at Roberts' and Fogleman's properties. Transects RC2_DGM500_003 through 010 were cut and or marked. In addition transects RC2_DGM300_001 through 005 were cut and/or marked for DGM.

● Recon survey transects RC2_RECON_015 -022 were collected.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	2	10	20	11/01/12	
SUV (Donatelli)	0	10	0	11/12/12	
SUV (Amec)	0	10	0	11/12/12	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
PDA/GPS	4	10	40	11/15/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **11/19/2012**

Task Order No: 0009

Owned Equipment					
Schonstedt	4	10	40	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	4	10	40	11/01/12	
First aid kit	3	10	30	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	1	10	10	10/29/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/20/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	0	0	0
UXO Technician III	1	10	20
UXO Technician II	2	10	40
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	1	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	20
Transect DGM (Miles)	0	0	8.5
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **11/20/2012**

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2	4.2	4.2
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1.5	1.5
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/20/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 continued brush cutting at RC2 MRS. Both machines relocated to the Garrett property. It was discovered that roughly half of the trees on this parcel are "planted pine trees" and cannot be cut. Hand cleared paths were created through these pine groves. Transects RC2_DGM300_008 through 012 were cut and or marked. In addition, transects RC2_DGM300_022 through 025 were also cut and or marked for DGM.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	2	10	40	11/01/12	
SUV (Donatelli)	0	10	0		
SUV (Amec)	0	10	0		
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
PDA/GPS	4	10	80	11/15/12	

Site Daily Production Report

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Task Order No: 0009

Owned Equipment					
Schonstedt	4	10	80	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	4	10	80	11/01/12	
First aid kit	3	10	60	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	1	10	20	10/29/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/21/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	0	0	0
UXO Technician III	1	10	30
UXO Technician II	2	10	60
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	0	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	20
Transect DGM (Miles)	0	0	8.5
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.6	5.8	5.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	.25	1.75	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/21/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 continued brush cutting at RC2 MRS. Only one brush machine was utilized today while the other was being serviced. The second brush team used a weed whacker to cut small saplings and briar patches between the planted pine tree groves on Mr. Garret's property. Transects RC2_DGM300_013, 014, 015, 016, 017 and 021 were cut and/or marked.

● A reconnaissance survey team was formed to finish collecting RC2_RECON_022, 023 and 024 at Mr. Roberts' property. Terrain and vegetation made certain portions of these transects impassible.

● Both brush cutting machines to be relocated back to guard property for operations starting after Thanksgiving break.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	2	10	60	11/01/12	
SUV (Donatelli)	0	10	0		
SUV (Amec)	0	10	0		
Skidsteer (brush clearance)	1	10	30	11/05/12	

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Skidsteer #2	1	10	30	11/07/12	
PDA/GPS	4	10	120	11/15/12	
Owned Equipment					
Schonstedt	4	10	120	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	4	10	120	11/01/12	
First aid kit	3	10	90	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	1	10	30	10/29/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/26/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	0	0	0
UXO Technician III	1	10	10
UXO Technician II	2	10	20
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	2	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2.8	2.8	22.8
Transect DGM (Miles)	0	0	8.5
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **11/26/2012**

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	5.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/26/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 returned to ARNG property and continued to cut the northeastern portion of property surrounding the lake. Communication with Camp Butner range control has indicated that we may be allowed limited access to certain buffer areas while the range is hot.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	2	10	20	11/01/12	
SUV (Donatelli)	0	10	0		
SUV (Amec)	0	10	0		
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
PDA/GPS	4	10	40	11/15/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **11/26/2012**

Task Order No: 0009

Owned Equipment					
Schonstedt	4	10	40	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	4	10	40	11/01/12	
First aid kit	3	10	30	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	1	10	10	10/29/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/27/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	0	0	0
UXO Technician III	1	10	20
UXO Technician II	2	10	40
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	2	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.5	6.3	26.3
Transect DGM (Miles)	0	0	8.5
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4

Contract No: W912DY-10-D-0023 **Date:** **11/27/2012**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	5.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/27/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Team 1 finished transects ARNG_DGM500_012, 013, 014, 015, 016, 017 and ARNG_DGM300_20 on the eastern side of Lake Butner.

● Brush Team 2 worked on the west side of the Range 4 fan at transects ARNG_DGM500_003, 004, 005, 006 and 007.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	2	10	40	11/01/12	
SUV (Donatelli)	0	10	0		
SUV (Amec)	0	10	0		
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
PDA/GPS	4	10	80	11/15/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **11/27/2012**

Task Order No: 0009

Owned Equipment					
Schonstedt	4	10	80	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	4	10	80	11/01/12	
First aid kit	3	10	60	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	1	10	20	10/29/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/28/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	0	0	0
UXO Technician III	1	10	30
UXO Technician II	2	10	60
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	2	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.8	10.1	30.1
Transect DGM (Miles)	0	0	8.5
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4

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MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	5.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/28/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Team 1 completed transects ARNG_DGM500_003,004 and ARNG_DGM300_003, 004, and 005 while Range 4 was "cold" (no live-firing activities).

● Brush Team 2 continued to work on the west side of the Range 4 fan at transects ARNG_DGM500_003, 004, 008, 009 and 010.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	2	10	60	11/01/12	
SUV (Donatelli)	0	10	0		
SUV (Amec)	0	10	0		
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
PDA/GPS	4	10	120	11/15/12	

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Owned Equipment					
Schonstedt	4	10	120	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	4	10	120	11/01/12	
First aid kit	3	10	90	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	1	10	30	10/29/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/29/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	0	0	0
UXO Technician III	1	10	40
UXO Technician II	2	10	80
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	2	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3	13.1	33.1
Transect DGM (Miles)	0	0	8.5
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4

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MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	5.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/29/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Team 1 completed transect ARNG_DGM500_005 while Range 4 was "cold" and cut portions of ARNG_DGM300-007,008.

● Brush Team 2 continued to work on the west side of the Range 4 fan at transects ARNG_DGM500_010, 011, 012 and 013. Equipment breakdowns slowed production today.

● Received explosives from Dyno Nobel.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	2	10	80	11/01/12	
SUV (Donatelli)	0	10	0		
SUV (Amec)	0	10	0		
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	

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PDA/GPS	4	10	160	11/15/12	
Owned Equipment					
Schonstedt	4	10	160	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	4	10	160	11/01/12	
First aid kit	3	10	120	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	1	10	40	10/29/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/30/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO/QC	0	0	0
UXO Technician III	1	10	50
UXO Technician II	2	10	100
UXO Technician I	2	10	100
Geophysicist	0	10	0
Subcontractors	2	10	100

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2.25	15.35	35.35
Transect DGM (Miles)	0	0	8.5
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4

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MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	5.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

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Contract No: W912DY-10-D-0023 **Date:** 11/30/2012

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Summary of today's work activities:

- Brush Team 1 completed transect ARNG_DGM500_006 while Range 4 was "cold" and cut portions of ARNG_DGM_001 and 002

- Brush Team 2 continued to work on the west side of the Range 4 fan at transects ARNG_DGM500_008 and 009

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	50	10/29/12	
Truck, pickup, ¾ ton	2	10	100	11/01/12	
SUV (Donatelli)	0	10	0		
SUV (Amec)	0	10	0		
Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	
PDA/GPS	4	10	200	11/15/12	

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Owned Equipment					
Schonstedt	4	10	200	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	50	11/08/12	
PDA/GPS	4	10	200	11/01/12	
First aid kit	3	10	150	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	1	10	50	10/29/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/03/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
Equipment Operator / UXO I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	0	0	0
UXO Technician III	1	10	10
UXO Technician II	2	10	20
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	2	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.65	3.65	39
Transect DGM (Miles)	0	0	8.5
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	4
MEC Disposal	0	0	0

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Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	5.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/03/2012

Task Order No: 0009

Summary of today's work activities:

- Brush Teams 1 and 2 continued to cut vegetation on either side of the Range 4 fan.
- USACE OESS on site to observe brush cutting, DGM and reconnaissance survey.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	2	10	20	11/01/12	
SUV (Donatelli)	0	10	0		
SUV (Amec)	0	10	0		
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
PDA/GPS	4	10	40	11/15/12	
Owned Equipment					
Schonstedt	4	10	40	10/29/12	

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Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	4	10	40	11/01/12	
First aid kit	3	10	30	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	1	10	10	10/29/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

Brush, DGM and Recon teams should carry First Aid kits while walking transects.

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/04/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assignment	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Buckman, Chris
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	0	0	0
UXO Technician III	1	10	20
UXO Technician II	2	10	40
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	4	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.10	4.75	40.10
Transect DGM (Miles)	4.5	4.5	13
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	7.7	7.7	11.7
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/04/2012

Task Order No: 0009

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	5.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/04/2012

Task Order No: 0009

Summary of today's work activities:

● Survey Teams collected recon transects on the western portion of the Guard property. After Range 4 went cold for the day, a brush team cut DGM_500_011 across the range fan.
● Amec collected transect data at the northeastern portion of the guard property.
Site Visitors:
USACE PM Kenyatta Sprull (Savannah District) on site. He was provided site overview and tour by OESS, Hank Counts.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	2	10	40	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	0	10	10	12/04/12	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
PDA/GPS	4	10	80	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	

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Task Order No: 0009

Office Trailer	1	24	48	11/1/12	
Port-a-potties	2	10	40	11/1/12	
Owned Equipment					
Schonstedt	4	10	80	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	4	10	80	11/01/12	
First aid kit	3	10	60	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	1	10	20	10/29/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

OESS noted several items for HGL to address prior to beginning intrusive operations.

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/05/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Buckman, Chris
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	0	0	0
UXO Technician III	1	10	30
UXO Technician II	2	10	60
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	4	10	100

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.7	8.45	43.80
Transect DGM (Miles)	6.5	11	19.5
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

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Task Order No: 0009

Surface Recon (Miles)	0	7.7	11.7
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	5.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/05/2012

Task Order No: 0009

Summary of today's work activities:

- Brush Teams 1 and 2 cut and marked transects within the range fan and Amec collected data within the range fan.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	2	10	60	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	0	10	20	12/04/12	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
PDA/GPS	4	10	120	11/15/12	
Explosives Storage Magazine	1	24	72	10/29/12	
Office Trailer	1	24	72	11/1/12	

Site Daily Production Report

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Task Order No: 0009

Port-a-potties	2	10	60	11/1/12	
Owned Equipment					
Schonstedt	4	10	120	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	4	10	120	11/01/12	
First aid kit	3	10	90	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	1	10	30	10/29/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/06/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Buckman, Chris
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	0	0	0
UXO Technician III	1	10	40
UXO Technician II	2	10	80
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	4	10	140

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.2	11.65	47
Transect DGM (Miles)	5.3	16.3	24.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

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Surface Recon (Miles)	0	7.7	11.7
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	5.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/06/2012

Task Order No: 0009

Summary of today's work activities:

- Brush Teams 1 and 2 cut and marked transects within the range fan.
- AMEC collected data within the range fan.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	2	10	80	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	0	10	30	12/04/12	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
PDA/GPS	4	10	160	11/15/12	
Explosives Storage Magazine	1	24	96	10/29/12	
Office Trailer	1	24	96	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **12/06/2012**

Task Order No: 0009

Port-a-potties	2	10	80	11/1/12	
Owned Equipment					
Schonstedt	4	10	160	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	4	10	160	11/01/12	
First aid kit	3	10	120	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	1	10	40	10/29/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/07/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Buckman, Chris
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO/QC	0	0	0
UXO Technician III	1	10	50
UXO Technician II	2	10	100
UXO Technician I	2	10	100
Geophysicist	0	10	0
Subcontractors	4	10	180

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2.5	14.15	49.5
Transect DGM (Miles)	2.5	18.8	27.3
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **12/07/2012**

Task Order No: 0009

Surface Recon (Miles)	0	7.7	11.7
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	1.8
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	5.8
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/07/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 finished cutting and marking DGM transects within the range fan. All brush cutting on the National Guard property was completed today.

● Amec continued to collect data within the range fan, while no live firing activities were occurring.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	50	10/29/12	
Truck, pickup, ¾ ton	2	10	100	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	1	10	40	12/04/12	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	50	11/07/12	
PDA/GPS	4	10	200	11/15/12	
Explosives Storage Magazine	1	24	120	10/29/12	

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Office Trailer	1	24	120	11/1/12	
Port-a-potties	2	10	100	11/1/12	
Owned Equipment					
Schonstedt	4	10	200	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	50	11/08/12	
PDA/GPS	4	10	200	11/01/12	
First aid kit	3	10	150	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	1	10	50	10/29/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No:	W912DY-10-D-0023	**Date:**	**12/07/2012**
Task Order No:	0009		

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/10/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Buckman, Chris
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	0	0	0
UXO Technician III	1	10	10
UXO Technician II	2	10	20
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	2	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	27.3
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	7.97	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **12/10/2012**

Task Order No: 0009

Surface Recon (Miles)	0	7.7	11.7
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.6	1.6	3.4
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	1.9	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (AMEC)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	.5	.5	.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.6	1.6	7.4
Transect DGM (Miles)	0	0	0
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/10/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 relocated north of guard property and began cutting and marking transects RC2_DGM500_032-034 and RC1_DGM500_005, 006, 007, 008, 009, 010, 011, and 012. SUXOS met with Mr. Mangum and his daughter to discuss the operation, property boundaries, and specific concerns. Based on discussion with landowner, the majority of the Mangum's land north of Bethany Church Road would need to be cut by hand (weed whackers) to avoid damaging "planted pines".
● AMEC did not collect data today due to flight delayed by weather conditions.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	2	10	20	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	1	10	10	12/04/12	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
PDA/GPS	4	10	40	11/15/12	
Explosives Storage Magazine	1	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	

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Port-a-potties	2	10	20	11/1/12	
Owned Equipment					
Schonstedt	4	10	40	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	4	10	40	11/01/12	
First aid kit	3	10	30	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	1	10	10	10/29/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/11/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	0	0	0
UXO Technician III	1	10	20
UXO Technician II	2	10	40
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	4	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	27.3
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	7.97
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

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Surface Recon (Miles)	0	7.7	11.7
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1	2.6	4.4
Transect DGM (Miles)	0	0	2.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	1.9	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.2	2.8	8.6
Transect DGM (Miles)	2.1	2.1	2.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/11/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 resumed cutting and marking transects starting at Malcom Mangum's property then continued onto Mr. Eyster and Mr. Gilbert's properties. SUXOS met with Mr. Daniel and Jim Hunter to discuss property access. Machine breakdowns hindered cutting efforts today.

● AMEC collected transects in northern portion of RC2.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	2	10	40	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	1	10	20	12/04/12	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
PDA/GPS	4	10	80	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	

Site Daily Production Report

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Task Order No: 0009

Port-a-potties	2	10	40	11/1/12	
Owned Equipment					
Schonstedt	4	10	80	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	4	10	80	11/01/12	
First aid kit	3	10	60	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	1	10	20	10/29/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/12/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	0	0	0
UXO Technician III	1	10	30
UXO Technician II	2	10	60
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	4	10	100

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	27.3
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	7.97
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

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Surface Recon (Miles)	0	7.7	11.7
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.45	4.05	5.85
Transect DGM (Miles)	1.2	1.2	4
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	1.9	1.9
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.2	6	11.8
Transect DGM (Miles)	2	4.1	4.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/12/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Team 1 cut and marked DGM transects at Elvin Mangum's properties. Brush Team 2 cut and marked DGM transects at the Veazy, Huff, and Daniel properties. SUXOS was confronted by angry, unidentified landowner claiming that an HGL brush crew crossed onto his property which is adjacent to the Gilbert property. Landowner left without any exchange of information. SUXOS observed some Bobcat tracks on unidentified landowner's access road and a few small hardwood trees knocked over next to road.

● Amec collected transects at John and Malcom Mangum properties.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	2	10	60	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	1	10	30	12/04/12	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
PDA/GPS	4	10	120	11/15/12	

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Explosives Storage Magazine	1	24	72	10/29/12	
Office Trailer	1	24	72	11/1/12	
Port-a-potties	2	10	60	11/1/12	
Owned Equipment					
Schonstedt	4	10	120	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	3	10	110	11/01/12	12-11-12 Shipped 1 GPS
First aid kit	3	10	90	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	1	10	30	10/29/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **12/12/2012**

Task Order No: 0009

Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/13/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	0	0	0
UXO Technician III	1	10	40
UXO Technician II	2	10	80
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	4	10	140

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	27.3
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	7.97	7.97
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

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Task Order No: 0009

Surface Recon (Miles)	0	7.7	11.7
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2.1	6.15	7.95
Transect DGM (Miles)	1.8	3	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	1.9	1.9
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	.5	.5	.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.75	6.75	13.55
Transect DGM (Miles)	0	4.1	4.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	1.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/13/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Team 1 cut and marked DGM transects at Elvin Mangum's properties. Brush Team 2 cut and marked DGM transects at the Daniel, Arrington, and Wicker properties.

● Amec collected transects at the Barker, Eyster, Huff, and Veazey properties

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	2	10	80	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	1	10	40	12/04/12	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
PDA/GPS	4	10	160	11/15/12	
Explosives Storage Magazine	1	24	96	10/29/12	
Office Trailer	1	24	96	11/1/12	

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Task Order No: 0009

Port-a-potties	2	10	80	11/1/12	
Owned Equipment					
Schonstedt	4	10	160	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	3	10	140	11/01/12	12-11-12 Shipped 1 GPS
First aid kit	3	10	120	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	1	10	40	10/29/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/14/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO/QC	0	0	0
UXO Technician III	1	10	50
UXO Technician II	2	10	100
UXO Technician I	2	10	100
Geophysicist	0	10	0
Subcontractors	4	10	180

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	27.3
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	7.97	7.97
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **12/14/2012**

Task Order No: 0009

Surface Recon (Miles)	0	7.7	11.7
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	6.15	7.95
Transect DGM (Miles)	0	3	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	1.9	1.9
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2	8.75	15.55
Transect DGM (Miles)	4.8	8.9	8.9
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/14/2012

Task Order No: 0009

Summary of today's work activities:

- Brush Team 1 continued to cut and mark DGM transects at Elvin Mangum's properties. Brush Team 2 finished the Daniel property and relocated to assist Team 1. Both brush machines suffered mechanical issues today limiting production.
- Amec collected transects at the Mangum and Garrett properties.
- Received two-way radios and repeater.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	2	10	100	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	1	10	50	12/04/12	
Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	
Two-way Radios/Repeater	6	10	60	12/14/12	
PDA/GPS	4	10	200	11/15/12	
Explosives Storage Magazine	1	24	120	10/29/12	

Contract No: W912DY-10-D-0023 **Date:** **12/14/2012**

Task Order No: 0009

Office Trailer	1	24	120	11/1/12	
Port-a-potties	2	10	100	11/1/12	
Owned Equipment					
Schonstedt	4	10	200	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	50	11/08/12	
PDA/GPS	3	10	170	11/01/12	12-11-12 Shipped 1 GPS
First aid kit	3	10	150	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	1	10	50	10/29/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No:	W912DY-10-D-0023	**Date:**	**12/14/2012**
Task Order No:	0009		

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/17/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	0	0	0
UXO Technician III	1	10	10
UXO Technician II	2	10	20
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	4	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	6.1	6.1	33.4
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	7.97
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **12/17/2012**

Task Order No: 0009

Surface Recon (Miles)	9	9	20.7
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	7.95
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	1.9
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	15.55
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/17/2012

Task Order No: 0009

Summary of today's work activities:

- Recon survey teams collected transects ARNG_RECON_011, 012, 014, 015, 016, 017, 018, 019, 020, 023 and 023.
- Amec collected transects at the guard property while the range was cold.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	2	10	20	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	1	10	10	12/04/12	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
Two-way Radios/Repeater	6	10	60	12/14/12	
PDA/GPS	4	10	40	11/15/12	
Explosives Storage Magazine	1	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **12/17/2012**

Task Order No: 0009

Port-a-potties	2	10	20	11/1/12	
Owned Equipment					
Schonstedt	4	10	40	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	3	10	30	11/01/12	
First aid kit	3	10	30	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	1	10	10	10/29/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/18/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	0	0	0
UXO Technician III	1	10	20
UXO Technician II	2	10	40
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	4	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	3.3	9.4	36.7
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	7.97
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

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Surface Recon (Miles)	0	9	20.7
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2.2	2.2	10.15
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	1.9
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.45	.45	16
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/18/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 cut and marked transects at Mangum's property RC1_DGM500_006 through 008 and RC2_DGM500_033 through 036.

● Amec collected transects at the guard property, outside the range fan, while the range was active.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	2	10	40	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	1	10	20	12/04/12	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Two-way Radios/Repeater	6	10	120	12/14/12	
PDA/GPS	4	10	80	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	

Contract No: W912DY-10-D-0023 **Date:** **12/18/2012**

Task Order No: 0009

Office Trailer	1	24	48	11/1/12	
Port-a-potties	3	10	60	11/1/12	
Owned Equipment					
Schonstedt	4	10	80	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	3	10	60	11/01/12	
First aid kit	3	10	60	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	30	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

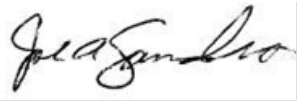
N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No:	W912DY-10-D-0023	**Date:**	**12/18/2012**
Task Order No:	0009		

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/19/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	0	0	0
UXO Technician III	1	10	30
UXO Technician II	2	10	60
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	4	10	120

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	7.8	17.2	44.5
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	7.97
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **12/19/2012**

Task Order No: 0009

Surface Recon (Miles)	4	13	24.7
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.5	2.7	10.65
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	1.9
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	.45	16
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/19/2012

Task Order No: 0009

Summary of today's work activities:

● Brush Teams 1 and 2 cut and marked transects at Mangum's property RC1_DGM500_008 and 009 then converted to recon survey teams to collect ARNG_Recon_027-035, 010 and 012.

● Amec collected transects at the guard property inside the range fan while the range was cold.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	2	10	60	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	1	10	30	12/04/12	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
Two-way Radios/Repeater	6	10	180	12/14/12	
PDA/GPS	4	10	120	11/15/12	
Explosives Storage Magazine	1	24	72	10/29/12	
Office Trailer	1	24	72	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **12/19/2012**

Task Order No: 0009

Port-a-potties	3	10	90	11/1/12	
Owned Equipment					
Schonstedt	4	10	120	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	3	10	90	11/01/12	
First aid kit	3	10	90	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/20/2012

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXO Technician III, UXOSO/QCS	Brush Team	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	0	0	0
UXO Technician III	1	10	40
UXO Technician II	2	10	80
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	4	10	160

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	4.6	21.8	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	23.34	23.34	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	3.5	16.5	28.20

Contract No: W912DY-10-D-0023 **Date:** **12/20/2012**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	2.7	10.65
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	1.9
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	3	3	3.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	.45	16
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 12/20/2012

Task Order No: 0009

Summary of today's work activities:

● Recon Team 1 finished collecting recon transects on the guard property while Recon Team 2 collected transects on state property south of the guard property.
● Amec collected all DGM transects at the guard property except for small portions of the following transects at the east side of the lake: ARNG_DGM500_018,019,020,021,022, and 024.
● All personnel demob 12/21 for holiday break.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	2	10	80	11/01/12	
SUV (Donatelli)	0	10	0		
Truck (Amec)	1	10	40	12/04/12	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
Two-way Radios/Repeater	6	10	240	12/14/12	
PDA/GPS	4	10	160	11/15/12	
Explosives Storage Magazine	1	24	96	10/29/12	
Office Trailer	1	24	96	11/1/12	

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Port-a-potties	3	10	120	11/1/12	
Owned Equipment					
Schonstedt	4	10	160	10/29/12	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	3	10	120	11/01/12	
First aid kit	3	10	120	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/03/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXO Technician III	0	10	0
UXO Technician II	3	10	30
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	2	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **01/03/2013**

Task Order No: 0009

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	10.65
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	3.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3	3	19
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Summary of today's work activities:

- HGL mobilized to begin cutting and marking DGM transects at the Heirs of W.B. Jones' property. Added UXO Tech II, Westleon Rogers, and another Bobcat Forestry Mulching machine to create a 3rd brush team.
- Met with landowner, Philip Robbins, to discuss access on his family's land.
- Production slowed due to substantial rain over holiday break.

Site Daily Production Report

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Task Order No: 0009

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	2	10	20	11/01/12	
Truck, pickup, ½ ton	0	10	0		
Truck (Amec)	1	10	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
Skidsteer #3(Southland)	1	5	5	1/03/13	
Two-way Radios/Repeater	6	10	60	12/14/12	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	1	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	
Port-a-potties	3	10	30	11/1/12	
Owned Equipment					
Schonstedt	4	10	40	1/03/13	
Camera, digital	0	0	0		

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Task Order No: 0009

Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	5	10	50	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/04/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	1	10	20
UXO Technician III	0	10	0
UXO Technician II	3	10	60
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	2	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

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Task Order No: 0009

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	10.65
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	3.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	5.5	8.5	24.5
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/04/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued brush cutting at Range Complex 2, properties: Jones, Broyhill, Robbins, and Baker
- SUXOS met with landowner Sandy Gantt, to discuss access on her family's land.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	2	10	40	11/01/12	
Truck, pickup, ½ ton	0	10	0		
Truck (Amec)	1	10	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Skidsteer #3(Southland)	1	10	15	1/03/13	
Two-way Radios/Repeater	6	10	120	12/14/12	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	
Port-a-potties	3	10	60	11/1/12	

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Owned Equipment					
Schonstedt	4	10	80	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	5	10	100	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/07/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXO Technician III	0	10	0
UXO Technician II	3	10	30
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	2	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/07/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	10.65
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	3.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	5.5	5.5	30
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/07/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued brush cutting at Range Complex 2, properties: Jones, Broyhill, Robbins, and Baker
- OESS, Timothy Bohannon, arrived onsite.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	2	10	20	11/01/12	
Truck, pickup, ½ ton	0	10	0		
Truck (Amec)	1	10	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
Skidsteer #3(Southland)	1	10	10	1/03/13	
Two-way Radios/Repeater	6	10	60	12/14/12	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	1	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	

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Port-a-potties	3	10	10	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	4	10	40	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	5	10	50	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/08/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	1	10	20
UXO Technician III	0	10	0
UXO Technician II	3	10	60
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	2	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/08/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	10.65
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	3.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	5	10.5	35
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/08/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued brush cutting at Range Complex 2, properties: Broyhill, Robbins, Baker, and WNA LLC
- OESS, Timothy Bohannon, continued onsite.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	3	10	50	01/08/13	
Truck (Amec)	0	0	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Skidsteer #3(Southland)	1	10	20	1/03/13	
Two-way Radios/Repeater	6	10	120	12/14/12	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	
Port-a-potties	3	10	60	11/1/12	

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Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	4	10	80	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	5	10	100	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/09/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	1	10	30
UXO Technician III	0	10	0
UXO Technician II	3	10	90
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	2	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles Identified: ___)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **01/09/2013**

Task Order No: 0009

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	10.65
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	3.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	4	14.5	39
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/09/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued brush cutting and marking DGM transects at Range Complex 2 properties: Jones and WNA LLC

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	3	10	80	01/08/13	
Truck (Amec)	0	0	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
Skidsteer #3(Southland)	1	10	30	1/03/13	
Two-way Radios/Repeater	6	10	180	12/14/12	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	1	24	72	10/29/12	
Office Trailer	1	24	72	11/1/12	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **01/09/2013**

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Owned Equipment					
Schonstedt	4	10	120	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	5	10	150	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/10/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	1	10	40
UXO Technician III	0	10	0
UXO Technician II	3	10	120
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	2	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/10/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	10.65
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	3.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	6	20.5	45
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/10/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued brush cutting and marking DGM transects at Range Complex 2 properties: WNA LLC, Jones, Broyhill, Erwin
- Two-way communications established with range encompassing entire area of operations
- Weekly explosive inventory accomplished

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	3	10	110	01/08/13	
Truck (Amec)	0	0	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
Skidsteer #3(Southland)	1	10	40	1/03/13	
Two-way Radios/Repeater	9	10	270	1/11/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	1	24	96	10/29/12	
Office Trailer	1	24	96	11/1/12	
Port-a-potties	3	10	120	11/1/12	

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Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	4	10	160	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	5	10	200	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/11/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO/QC	1	10	50
UXO Technician III	0	10	0
UXO Technician II	3	10	150
UXO Technician I	2	10	100
Geophysicist	0	10	0
Subcontractors	2	10	100

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/11/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	10.65
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	3.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	4.2	24.7	49.2
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/11/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued brush cutting and marking DGM transects at Range Complex 2 properties: including WNA LLC.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	50	10/29/12	
Truck, pickup, ¾ ton	3	10	140	01/08/13	
Truck (Amec)	0	0	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	
Skidsteer #3(Southland)	1	10	50	1/03/13	
Two-way Radios/Repeater	9	10	360	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	1	24	120	10/29/12	
Office Trailer	1	24	120	11/1/12	
Port-a-potties	3	10	150	11/1/12	

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Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	4	10	200	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	5	10	250	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/14/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXO Technician III	0	10	0
UXO Technician II	3	10	30
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	2	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/14/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	10.65
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	3.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	5	5	54.2
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/14/2013

Task Order No: 0009

Summary of today's work activities:

● HGL continued brush cutting and marking DGM transects at Range Complex 2 properties: WNA LLC, Mangum, Lloyd, and Phelps

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	3	10	30	01/08/13	
Truck (Amec)	0	0	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
Skidsteer #3(Southland)	1	10	10	1/03/13	
Two-way Radios/Repeater	9	10	90	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	1	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	
Port-a-potties	3	10	30	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **01/14/2013**

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Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	4	10	40	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	5	10	50	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/15/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	1	10	20
UXO Technician III	0	10	0
UXO Technician II	3	10	60
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	2	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/15/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	10.65
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	6	6	9.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.5	6.5	55.7
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/15/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued brush cutting and marking DGM transects at Range Complex 2 properties: Jones, Mangum, and Kreidler.
- Two recon survey teams collected at the southern portion of RC1.
- Landowner Mrs. Broyhill has requested a meeting with SUXOS on Jan 16th, OESS will attend, also.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	3	10	60	01/08/13	
Truck (Amec)	0	0	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Skidsteer #3(Southland)	1	10	20	1/03/13	
Two-way Radios/Repeater	9	10	180	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	
Port-a-potties	3	10	60	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **01/15/2013**

Task Order No: 0009

Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	4	10	80	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	5	10	100	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/16/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	1	10	30
UXO Technician III	0	10	0
UXO Technician II	3	10	90
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	2	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/16/2013

Task Order No: 0009

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.5	1.5	12.15
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1.5	7.5	11
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	6.5	55.7
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/16/2013

Task Order No: 0009

Summary of today's work activities:

- HGL relocated brush clearing efforts to Range Complex 1 properties: Morrison (includes C&P of Dunham) and Gantt.
- Wet weather limited machine cutting. Brush teams transitioned into recon survey teams as necessary.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	3	10	90	01/08/13	
Truck (Amec)	0	0	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
Skidsteer #3(Southland)	1	10	30	1/03/13	
Two-way Radios/Repeater	9	10	270	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	1	24	72	10/29/12	
Office Trailer	1	24	72	11/1/12	
Port-a-potties	3	10	90	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **01/16/2013**

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Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	4	10	120	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	5	10	150	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/17/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	1	10	40
UXO Technician III	0	10	0
UXO Technician II	3	10	120
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	2	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/17/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	4.85	6.35	17
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	7.5	11
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	6.5	55.7
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/17/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continues brush clearing efforts to Range Complex 1 properties: Morrison (includes C&P of Dunham) and Gantt.
- Wet weather continues to impact brush clearing.
- Weekly explosive inventory accomplished.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	3	10	120	01/08/13	
Truck (Amec)	0	0	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
Skidsteer #3(Southland)	1	10	40	1/03/13	
Two-way Radios/Repeater	9	10	360	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	1	24	84	10/29/12	
Office Trailer	1	24	84	11/1/12	
Port-a-potties	3	10	120	11/1/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **01/17/2013**

Task Order No: 0009

Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	4	10	160	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	5	10	200	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/18/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	8	48
UXOSO/QC	1	8	48
UXO Technician III	0	8	0
UXO Technician II	3	8	144
UXO Technician I	2	8	96
Geophysicist	0	8	0
Subcontractors	2	8	96

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	49.29
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **01/18/2013**

Task Order No: 0009

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0.5	6.85	17.5
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles Identified: 0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	6.5	10	17.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	6.5	55.7
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles Identified: 0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/18/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued brush clearing efforts to Range Complex 1 properties: Morrison (including C&P of Dunham)
- Wet weather continued to impact brush clearing. Recon Survey being conducted instead.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	50	10/29/12	
Truck, pickup, ¾ ton	3	10	150	01/08/13	
Truck (Amec)	0	0	0	12/04/12	12/21/12
Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	
Skidsteer #3(Southland)	1	10	50	1/03/13	
Two-way Radios/Repeater	9	10	450	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	1	24	108	10/29/12	
Office Trailer	1	24	108	11/1/12	
Port-a-potties	3	10	150	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **01/18/2013**

Task Order No: 0009

Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	4	10	200	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	5	10	250	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/21/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	1	10	20
UXO Technician III	0	10	0
UXO Technician II	3	10	60
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	4	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/21/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	17.5
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	6	6	23.5
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	55.7
Transect DGM (Miles)	0	0	8.9
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	0
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/21/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed Recon Survey at Range Complex 1 property: State of North Carolina
- Property owners are concerned about vehicles and machinery damaging soft terrain. HGL will allow soil to dry before resuming machine brush cutting.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	3	10	30	01/08/13	
Truck (Amec)	1	10	10	1/21/13	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Skidsteer #3(Southland)	1	10	20	1/03/13	
Two-way Radios/Repeater	9	10	180	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	
Port-a-potties	3	10	60	11/1/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **01/21/2013**

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Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	4	10	80	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	5	10	100	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/22/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	1	10	20
UXO Technician III	0	10	0
UXO Technician II	3	10	60
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	4	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/22/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.5	1.5	19
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	3.25	9.25	26.75
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.75	.75	56.45
Transect DGM (Miles)	3.6	3.6	12.5
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/22/2013

Task Order No: 0009

Summary of today's work activities:

● HGL performed Recon Survey at Range Complex 1 properties: State of North Carolina, Gantt, and Hursting. Teams converted into brush teams and began marking transects to be cut as terrain dries out.

● AMEC collected transects at Range Complex 2: Jones property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	3	10	60	01/08/13	
Truck (Amec)	1	10	20	1/21/13	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Skidsteer #3(Southland)	1	10	20	1/03/13	
Two-way Radios/Repeater	9	10	180	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **01/22/2013**

Task Order No: 0009

Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	4	10	80	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	5	10	100	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

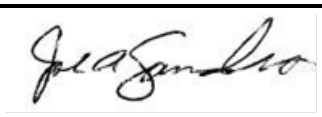
N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/23/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	1	10	30
UXO Technician III	0	10	0
UXO Technician II	3	10	90
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	4	10	100

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/23/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	5	6.5	24
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	9.25	26.75
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	.75	56.45
Transect DGM (Miles)	3.1	6.7	15.6
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/23/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at Range Complex 1, properties: Gantt and Hunter
- AMEC collected transects at Range Complex 2: Jones, Kendrick, and Baker properties

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	3	10	90	01/08/13	
Truck (Amec)	1	10	30	1/21/13	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
Skidsteer #3(Southland)	1	10	30	1/03/13	
Two-way Radios/Repeater	9	10	270	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	1	24	72	10/29/12	
Office Trailer	1	24	72	11/1/12	
Port-a-potties	3	10	90	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **01/23/2013**

Task Order No: 0009

Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	4	10	120	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	5	10	150	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/24/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	1	10	40
UXO Technician III	0	10	0
UXO Technician II	3	10	120
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	4	10	140

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/24/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	5	11.5	29
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	9.25	26.75
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	.75	56.45
Transect DGM (Miles)	4.7	11.4	20.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/24/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at Range Complex 1, Gantt property
- AMEC collected transects at Range Complex 2, properties: Broyhill and Robbins

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	3	10	120	01/08/13	
Truck (Amec)	1	10	40	1/21/13	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
Skidsteer #3(Southland)	1	10	40	1/03/13	
Two-way Radios/Repeater	9	10	360	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	1	24	96	10/29/12	
Office Trailer	1	24	96	11/1/12	
Port-a-potties	3	10	120	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **01/24/2013**

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Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	4	10	160	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	5	10	200	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/25/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	6	46
UXOSO/QC	1	6	46
UXO Technician III	0	6	0
UXO Technician II	3	6	138
UXO Technician I	2	6	92
Geophysicist	0	6	0
Subcontractors	4	6	164

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/25/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.25	12.75	30.25
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	9.25	26.75
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	.75	56.45
Transect DGM (Miles)	0.8	12.2	21.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/25/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at Range Complex 1, properties: Gantt and Hursting
- AMEC collected transects at Range Complex 2, properties: Broyhill and Robins
- Freezing rain and sleet forced operations to terminate early.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	1.5	1.5	2.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	6	46	10/29/12	
Truck, pickup, ¾ ton	3	6	138	01/08/13	
Truck (Amec)	1	6	46	1/21/13	
Skidsteer (brush clearance)	1	6	46	11/05/12	
Skidsteer #2	1	6	46	11/07/12	
Skidsteer #3(Southland)	1	6	46	1/03/13	
Two-way Radios/Repeater	9	6	414	1/10/13	
PDA/GPS	3	6	138	11/15/12	
Explosives Storage Magazine	1	24	120	10/29/12	
Office Trailer	1	24	120	11/1/12	
Port-a-potties	3	6	138	11/1/12	

Site Daily Production Report

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Task Order No: 0009

Truck mounted fuel tank	1	6	46	1/07/13	
Owned Equipment					
Schonstedt	4	6	184	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	6	46	11/08/12	
PDA/GPS	2	6	92	11/01/12	
First aid kit	5	6	230	11/01/12	
Team gear	2	6	92	11/01/12	
Demo kit/RFD	1	6	46	11/07/12	
Site Safety Officer Kit	1	6	46	11/07/12	
Computer, laptop	2	6	92	12/18/12	
Printer/copier/scanner/fax	1	6	46	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/28/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXO Technician III	0	10	0
UXO Technician II	3	10	30
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	4	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/28/2013

Task Order No: 0009

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.1	3.1	33.35
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1.8	1.8	28.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	4.8	4.8	25.9
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/28/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at Range Complex 1, properties: Gantt and Hursting
- AMEC collected transects at Range Complex 2: WNA LLC property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	2.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	3	10	30	01/08/13	
Truck (Amec)	1	10	10	1/21/13	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
Skidsteer #3(Southland)	1	10	10	1/03/13	
Two-way Radios/Repeater	9	10	90	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	1	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	
Port-a-potties	3	10	30	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **01/28/2013**

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Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	4	10	40	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	5	10	50	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/29/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	1	10	20
UXO Technician III	0	10	0
UXO Technician II	3	10	60
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	4	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **01/29/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	4.75	7.85	38.1
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1.8	28.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	3.8	8.6	29.7
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/29/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at Range Complex 1, properties: Gantt and Hursting
- AMEC collected transects at Range Complex 2: WNA LLC property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	2.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	3	10	60	01/08/13	
Truck (Amec)	1	10	20	1/21/13	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Skidsteer #3(Southland)	1	10	20	1/03/13	
Two-way Radios/Repeater	9	10	180	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	
Port-a-potties	3	10	60	11/1/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **01/29/2013**

Task Order No: 0009

Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	4	10	80	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	5	10	100	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/30/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	1	10	30
UXO Technician III	0	10	0
UXO Technician II	3	10	90
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	4	10	120

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

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MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2.90	10.75	41
Transect DGM (Miles)	0	0	5.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1.8	28.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	3.6	12.2	33.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	0
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/30/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at Range Complex 1, properties: Bullock and Grace Ministries
- AMEC collected transects at Range Complex 2: WNA LLC property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	2.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	3	10	90	01/08/13	
Truck (Amec)	1	10	30	1/21/13	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
Skidsteer #3(Southland)	1	10	30	1/03/13	
Two-way Radios/Repeater	9	10	270	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	1	24	72	10/29/12	
Office Trailer	1	24	72	11/1/12	
Port-a-potties	3	10	90	11/1/12	

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Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	4	10	120	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	5	10	150	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/31/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	1	10	40
UXO Technician III	0	10	0
UXO Technician II	3	10	120
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	4	10	160

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

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Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.25	14	44.25
Transect DGM (Miles)	1.6	1.6	7.4
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1	2.8	29.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	.8	13	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	8.77
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	2.6	2.6	2.6
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 01/31/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 1: DW Uzzle property
- HGL performed recon survey at RC 1 and 2, properties, Gantt and Jones
- AMEC collected transects at RC 1 and 2, properties: WNA LLC, Hunter, and Gantt

In the afternoon, one of HGL's trucks was involved in an accident with another vehicle. There are no injuries reported initially and no medical assistance was requested at the accident scene. Four HGL employees, were in the process of making a left turn off of Range Road. They were struck by a car attempting to pass them from behind around the drivers side (on the left). The HGL employee had his left turn signal activated. A third party witness saw the accident and provided a statement to police officers. The SUXOS (Joel Sanders), USACE OESS (Tim Bohannon), and local police completed an accident report. HGL will provide the police department accident report and photographs as well as the ENG Form 3394 as soon as possible.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	2.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	3	10	120	01/08/13	
Truck (Amec)	1	10	40	1/21/13	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
Skidsteer #3(Southland)	1	10	40	1/03/13	

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Two-way Radios/Repeater	9	10	360	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	1	24	96	10/29/12	
Office Trailer	1	24	96	11/1/12	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	4	10	160	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	5	10	200	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **01/31/2013**

Task Order No: 0009

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/01/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO/QC	1	10	50
UXO Technician III	0	10	0
UXO Technician II	3	10	150
UXO Technician I	2	10	100
Geophysicist	0	10	0
Subcontractors	4	10	200

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **02/01/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	4.4	18.4	48.65
Transect DGM (Miles)	3	4.6	10.4
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1.25	4.05	30.8
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	0	13	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	13.3	13.3	22.07
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1.9	4.5	6.25
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/01/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 1: DW Uzzle property
- HGL performed recon survey at RC 1 and RC 2, properties: Gantt and Jones
- AMEC collected transects at RC 1: Gantt property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	2.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	50	10/29/12	
Truck, pickup, ¾ ton	3	10	150	01/08/13	
Truck (Amec)	1	10	50	1/21/13	
Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	
Skidsteer #3(Southland)	1	10	50	1/03/13	
Two-way Radios/Repeater	9	10	450	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	1	24	120	10/29/12	
Office Trailer	1	24	120	11/1/12	
Port-a-potties	3	10	150	11/1/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/01/2013**

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Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	4	10	200	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	5	10	250	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/04/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXO Technician III	0	10	0
UXO Technician II	3	10	30
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	4	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **02/04/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.10	3.10	51.75
Transect DGM (Miles)	3	3	13.4
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1	1	31.8
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	0	0	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	22.07
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	2.2	2.2	8.45
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/04/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 1, properties: DW Uzzle and Newsom
- HGL performed recon survey at RC 1 and RC 2, properties: Jones and Veazey
- AMEC collected transects at RC, properties: Gantt and Grace Ministries
- SUXOS and OESS met with Fred Newsom to discuss brush cutting and access to his property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	2.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	3	10	30	01/08/13	
Truck (Amec)	1	10	10	1/21/13	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
Skidsteer #3(Southland)	1	10	10	1/03/13	
Two-way Radios/Repeater	9	10	90	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	1	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	
Port-a-potties	3	10	30	11/1/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/04/2013**

Task Order No: 0009

Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	4	10	40	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	5	10	50	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/05/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	1	10	20
UXO Technician III	0	10	0
UXO Technician II	3	10	60
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	4	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **02/05/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.8	6.90	55.55
Transect DGM (Miles)	4.1	7.1	17.5
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1	31.8
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	0	0	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	22.07
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	2.2	8.45
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/05/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 1, properties: Knap of Reeds LLC, Newsom and Carrington
- AMEC collected transects at RC 1: Uzzle property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	2.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	3	10	60	01/08/13	
Truck (Amec)	1	10	20	1/21/13	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Skidsteer #3(Southland)	1	10	20	1/03/13	
Two-way Radios/Repeater	9	10	180	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	
Port-a-potties	3	10	60	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **02/05/2013**

Task Order No: 0009

Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	4	10	80	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	5	10	100	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/06/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	1	10	30
UXO Technician III	0	10	0
UXO Technician II	3	10	90
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	4	10	120

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

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Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	3.5	10.4	59.05
Transect DGM (Miles)	4.3	11.4	21.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1	31.8
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	0	0	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	22.07
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	2.2	8.45
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/06/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 1, properties: Knap of Reeds LLC, Newsom and Carrington
- AMEC collected transects at RC 1, properties: Morrison and Uzzle

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	2.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	3	10	90	01/08/13	
Truck (Amec)	1	10	30	1/21/13	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
Skidsteer #3(Southland)	1	10	30	1/03/13	
Two-way Radios/Repeater	9	10	270	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	1	24	72	10/29/12	
Office Trailer	1	24	72	11/1/12	
Port-a-potties	3	10	90	11/1/12	

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Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	4	10	120	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	5	10	150	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/07/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	1	10	40
UXO Technician III	0	10	0
UXO Technician II	3	10	120
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	4	10	160

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **02/07/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2.70	13.1	61.75
Transect DGM (Miles)	2.2	13.6	24
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	4.58
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1	31.8
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	0	0	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	22.07
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	2.2	8.45
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/07/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 1, properties: Knap of Reeds LLC, Carrington, and Poyet
- AMEC collected transects at RC 1: Gantt property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	2.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	3	10	120	01/08/13	
Truck (Amec)	1	10	40	1/21/13	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
Skidsteer #3(Southland)	1	10	40	1/03/13	
Two-way Radios/Repeater	9	10	360	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	1	24	96	10/29/12	
Office Trailer	1	24	96	11/1/12	
Port-a-potties	3	10	120	11/1/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/07/2013**

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Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	4	10	160	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	5	10	200	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/08/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO/QC	1	10	50
UXO Technician III	0	10	0
UXO Technician II	3	10	150
UXO Technician I	2	10	100
Geophysicist	0	10	0
Subcontractors	4	10	200

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20

Contract No: W912DY-10-D-0023 **Date:** **02/08/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1	14.1	62.75
Transect DGM (Miles)	4.5	18.1	28.5
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	5.66	5.66	10.24
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1	31.8
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	0	0	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	12.75	12.75	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1.7	3.9	10.15
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/08/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 1, properties: Newsom, Carrington, and Poyet. While conducting MEC avoidance, HGL personnel located and identified a practice 2.36" rocket laying on the surface of RC1_DGM300_021
- HGL performed recon survey at RC 2: Jones property
- AMEC collected transects at RC 1: Gantt and Uzzle properties
- Heavy rain limited cutting by brush machines

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	2	2	4.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	50	10/29/12	
Truck, pickup, ¾ ton	3	10	150	01/08/13	
Truck (Amec)	1	10	50	1/21/13	
Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	
Skidsteer #3(Southland)	1	10	50	1/03/13	
Two-way Radios/Repeater	9	10	450	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	1	24	120	10/29/12	
Office Trailer	1	24	120	11/1/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/08/2013**

Task Order No: 0009

Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	4	10	200	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	5	10	250	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

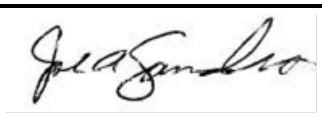
N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/11/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXO Technician III	0	10	0
UXO Technician II	5	10	50
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	4	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **02/11/2013**

Task Order No: 0009

Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.5	.5	63.25
Transect DGM (Miles)	5.7	5.7	34.2
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	10.24
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1	31.8
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	0	0	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	7.5	7.5	17.65
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/11/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 1, properties: Scott and Trudell
- HGL performed recon survey at RC 2, properties: Mangum and Jones
- AMEC collected transects at RC 1, properties: Carrington, Newsom, Poyet

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	4.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	3	10	30	01/08/13	
Truck (Amec)	1	10	10	1/21/13	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
Skidsteer #3(Southland)	1	10	10	1/03/13	
Two-way Radios/Repeater	9	10	90	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	1	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	
Port-a-potties	3	10	30	11/1/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/11/2013**

Task Order No: 0009

Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	4	10	40	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	5	10	50	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/12/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	1	10	20
UXO Technician III	0	10	0
UXO Technician II	5	10	100
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	4	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **02/12/2013**

Task Order No: 0009

Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	4.3	4.8	67.55
Transect DGM (Miles)	3.8	9.5	38
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	10.24
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	31.8
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	56.45
Transect DGM (Miles)	0	0	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	7.5	17.65
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/12/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 1, properties: Brumbaugh, Blackwell, Crystal Springs, Barreto, Goldthwaite, Knap of Reeds, Henderson, Jones, and Watkins
- AMEC collected transects at RC 1, properties: Carrington, Newsom, Poyet
- SUXOS met with William Henderson and Norma Blackwell to discuss proposed transect locations and property access.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	4.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	20	10/29/12	
Truck, pickup, ¾ ton	3	10	60	01/08/13	
Truck (Amec)	1	10	20	1/21/13	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Skidsteer #3(Southland)	1	10	20	1/03/13	
Two-way Radios/Repeater	11	10	200	1/10/13	+2 02/12/13
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/12/2013

Task Order No: 0009

Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	4	10	80	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	5	10	100	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

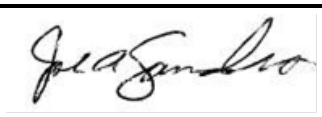
N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/13/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	1	10	30
UXO Technician III	0	10	0
UXO Technician II	5	10	150
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	4	10	120

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	4	4	4
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **02/13/2013**

Task Order No: 0009

Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.2	5	67.75
Transect DGM (Miles)	2.5	12	40.5
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	10.24
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	31.8
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.5	.5	56.95
Transect DGM (Miles)	0	0	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	7.5	17.65
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/13/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 1and RC 2, properties: Brumbaugh and Phelps
- AMEC collected transects at RC 1, properties: Carrington and Newsom
- HGL began brush clearance at proposed DGM grid locations on the guard property.
- AMEC crew located a 57mm HE Projectile laying on the surface at the Carrington property immediately north of Army National Guard. This item was not fuzed. SUXOS consolidated this item to the guard property as a secure location. Demolition of the item will be performed February 14th.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile		X			Consolidated at ARNG

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	4.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	30	10/29/12	
Truck, pickup, ¾ ton	3	10	90	01/08/13	
Truck (Amec)	1	10	30	1/21/13	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
Skidsteer #3(Southland)	1	10	30	1/03/13	
Two-way Radios/Repeater	11	10	310	1/10/13	+2 02/12/13
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	1	24	72	10/29/12	
Office Trailer	1	24	72	11/1/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/13/2013**

Task Order No: 0009

Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	6	10	140	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	5	10	150	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

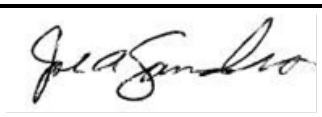
N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/14/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	1	10	40
UXO Technician III	0	10	0
UXO Technician II	5	10	200
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	4	10	160

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	3	7	7
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **02/14/2013**

Task Order No: 0009

Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	5	67.75
Transect DGM (Miles)	1.6	13.6	42.1
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	10.24
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	2.5	2.5	34.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2.3	2.8	59.25
Transect DGM (Miles)	0	0	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	7.5	17.65
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/14/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 2, properties: Blalock and Wilkins
- AMEC collected transects at RC 1, properties: Brumbaugh, Barreto, Blackwell, Crystal Springs, Ashmore, and Goldthwaite
- HGL continued brush clearance at proposed DGM grid locations on the guard property.
- HGL conducted demo operations at RC 1 to destroy a 57mm HE projectile located by collection team yesterday. While scouting a suitable demo site, SUXOS and UXOSO discovered an additional 57mm HE projectile and a 57mm AP-T projectile near the surface at the Poyet property. The two high explosive projectiles were successfully destroyed. The AP-T projectile was vented to ensure it was free of any energetic material. Butner Public Safety was notified prior to commencing demo operations. The demo shot holes were swept by Schonstedt to ensure all fragmentation was recovered. See photographs included.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	1 ea	
Detonating Cord, 80gr	39 ft	
Jet Perforators, 32 G	3 ea	

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	5	5	9.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	40	10/29/12	
Truck, pickup, ¾ ton	3	10	120	01/08/13	
Truck (Amec)	1	10	40	1/21/13	

Contract No: W912DY-10-D-0023 **Date:** **02/14/2013**

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Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
Skidsteer #3(Southland)	1	10	40	1/03/13	
Two-way Radios/Repeater	11	10	420	1/10/13	+2 02/12/13
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	1	24	96	10/29/12	
Office Trailer	1	24	96	11/1/12	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	6	10	200	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	5	10	200	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/14/2013**

Task Order No: 0009

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel Sanders	
Site Manager or SUXOS	Signature







Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/15/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO/QC	1	10	50
UXO Technician III	0	10	0
UXO Technician II	5	10	250
UXO Technician I	2	10	100
Geophysicist	0	10	0
Subcontractors	4	10	200

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	6	13	13
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **02/15/2013**

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	5	67.75
Transect DGM (Miles)	2.6	16.2	44.7
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	10.24
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	2.5	34.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.5	3.3	59.75
Transect DGM (Miles)	0	0	34.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	7.5	17.65
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/15/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 2, properties: Blalock, Sears, and Wilkins
- AMEC collected transects at RC 1, properties: Daniel, Wicker and Arrington
- HGL continued brush clearance at proposed DGM grid locations on the guard property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	5	9.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	50	10/29/12	
Truck, pickup, ¾ ton	3	10	150	01/08/13	
Truck (Amec)	1	10	50	1/21/13	
Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	
Skidsteer #3(Southland)	1	10	50	1/03/13	
Two-way Radios/Repeater	11	10	530	1/10/13	+2 02/12/13

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PDA/GPS	3	10	180	11/15/12	
Explosives Storage Magazine	1	24	120	10/29/12	
Office Trailer	1	24	120	11/1/12	
Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	6	10	260	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	5	10	250	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/15/2013**

Task Order No: 0009

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/18/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
UXO Technician III, SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician II	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXO Technician III	0	10	0
UXO Technician II	5	10	50
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	4	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	4	4	17
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **02/18/2013**

Task Order No: 0009

Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	0	0	44.7
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	10.24
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	34.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2	2	61.75
Transect DGM (Miles)	4.3	4.3	38.4
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	17.65
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/18/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed brush clearance at RC 2, properties: Sears
- AMEC collected transects at RC 1, properties: Mangum, Blalock, and Wilkins
- HGL continued brush clearance at proposed DGM grid locations on the guard property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	9.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ½ ton	1	10	10	10/29/12	
Truck, pickup, ¾ ton	3	10	30	01/08/13	
Truck (Amec)	1	10	10	1/21/13	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
Skidsteer #3(Southland)	1	10	10	1/03/13	
Two-way Radios/Repeater	11	10	110	1/10/13	+2 02/12/13

Contract No: W912DY-10-D-0023 **Date:** **02/18/2013**

Task Order No: 0009

PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	1	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	6	10	60	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	5	10	50	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/18/2013**

Task Order No: 0009

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/19/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician III	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO/QC	1	10	20
UXO Technician III	2	10	20
UXO Technician II	3	10	80
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	4	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	6	10	23
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	2.1	2.1	46.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	10.24
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	34.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.5	2.5	62.25
Transect DGM (Miles)	0	4.3	38.4
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	17.65
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/19/2013

Task Order No: 0009

Summary of today's work activities:

- HGL marked transects at RC 2, properties: Irek, McDonald, Mangum
- AMEC collected transects at RC 1, Clayton Mangum property
- HGL continued brush clearance at proposed DGM grid locations on the guard property. Team located an expended105mm Illumination Projectile near transect ARNG_DGM500-015 at the western edge of the range fan. The item was consolidated to a locked MD container.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	20	20	29.5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	4	10	80	01/08/13	
Truck (Amec)	1	10	20	1/21/13	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Skidsteer #3(Southland)	1	10	20	1/03/13	
Two-way Radios/Repeater	11	10	220	1/10/13	+2 02/12/13

Contract No: W912DY-10-D-0023 **Date:** **02/19/2013**

Task Order No: 0009

PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	6	10	120	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	5	10	100	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/19/2013**

Task Order No: 0009

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/20/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician III	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	1	10	30
UXO Technician III	2	10	40
UXO Technician II	3	10	110
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	4	10	120

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	4	14	27
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **02/20/2013**

Task Order No: 0009

Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	.7	2.8	47.5
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	10.24
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	34.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.2	2.7	62.45
Transect DGM (Miles)	1.1	5.4	39.5
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	17.65
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/20/2013

Task Order No: 0009

Summary of today's work activities:

- HGL cut and marked transects at RC 2, Hawley property
- AMEC collected transects at RC 1and RC 2, properties: Broyhill, Mangum, Kreidler, Clayton, and Zangerle
- HGL continued brush clearance at proposed DGM grid locations on the guard property. Team located an expended M159 Signal Flare near transect ARNG_DGM500-002 at the western edge of the range fan. The item was consolidated to a locked MD container.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	.2	20.2	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	4	10	120	01/08/13	
Truck (Amec)	1	10	30	1/21/13	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
Skidsteer #3(Southland)	1	10	30	1/03/13	
Two-way Radios/Repeater	11	10	330	1/10/13	+2 02/12/13

Contract No: W912DY-10-D-0023 **Date:** **02/20/2013**

Task Order No: 0009

PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	1	24	72	10/29/12	
Office Trailer	1	24	72	11/1/12	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	6	10	180	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	5	10	150	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/20/2013**

Task Order No: 0009

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/21/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician III	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth
Geo / Amec	Visitor	Kellogg, Anthony

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	1	10	40
UXO Technician III	2	10	60
UXO Technician II	3	10	140
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	4	10	160

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	4	18	31
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0

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Task Order No: 0009

Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	0	2.8	47.5
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	10.24
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1	1	35.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.6	3.3	63.05
Transect DGM (Miles)	2.3	7.7	41.8
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1.6	1.6	19.25
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/21/2013

Task Order No: 0009

Summary of today's work activities:

- HGL cut and marked transects at RC 1 and RC 2, properties: Mangum and Hursting
- AMEC collected transects at RC 2, properties: Broyhill and WNA LLC
- HGL continued brush clearance at proposed DGM grid locations on the guard property.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	20.2	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	4	10	160	01/08/13	
Truck (Amec)	1	10	40	1/21/13	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
Skidsteer #3(Southland)	1	10	40	1/03/13	
Two-way Radios/Repeater	11	10	440	1/10/13	+2 02/12/13
PDA/GPS	3	10	120	11/15/12	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/21/2013

Task Order No: 0009

Explosives Storage Magazine	1	24	96	10/29/12	
Office Trailer	1	24	96	11/1/12	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	6	10	240	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	5	10	200	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

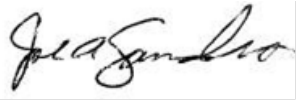
N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/22/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician III	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth
Geo / Amec	Visitor	Kellogg, Anthony

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	8	48
UXOSO/QC	1	8	48
UXO Technician III	1	8	78
UXO Technician II	3	8	154
UXO Technician I	2	8	96
Geophysicist	0	8	0
Subcontractors	4	8	192

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	4	22	35
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **02/22/2013**

Task Order No: 0009

Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	0	2.8	47.5
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	17.83	28.07
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1	35.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.1	4.4	64.15
Transect DGM (Miles)	2.5	10.2	44.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1.6	19.25
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/22/2013

Task Order No: 0009

Summary of today's work activities:

- HGL cut and marked transects at RC 2, properties: Rouse, Hobson, Rank, Hawley, and Christian
- AMEC collected transects at RC 2, properties: WNA LLC and Christian Phelps
- HGL continued brush clearance at proposed DGM grid locations on the guard property
- Joel Sanders on vacation from 2/22 – 3/1, Westleon Rogers will perform as SUXOS in his absence

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	20.2	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	4	8	192	01/08/13	
Truck (Amec)	1	8	48	1/21/13	
Skidsteer (brush clearance)	1	8	48	11/05/12	
Skidsteer #2	1	8	48	11/07/12	
Skidsteer #3(Southland)	1	8	48	1/03/13	
Two-way Radios/Repeater	11	8	528	1/10/13	+2 02/12/13
PDA/GPS	3	8	148	11/15/12	
Explosives Storage Magazine	1	24	120	10/29/12	
Office Trailer	1	24	120	11/1/12	

Contract No: W912DY-10-D-0023 **Date:** **02/22/2013**

Task Order No: 0009

Port-a-potties	3	8	148	11/1/12	
Truck mounted fuel tank	1	8	48	1/07/13	
Owned Equipment					
Schonstedt	6	8	288	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	8	48	11/08/12	
PDA/GPS	2	8	96	11/01/12	
First aid kit	5	8	240	11/01/12	
Team gear	2	8	96	11/01/12	
Demo kit/RFD	1	8	48	11/07/12	
Site Safety Officer Kit	1	8	48	11/07/12	
Computer, laptop	2	8	96	12/18/12	
Printer/copier/scanner/fax	1	8	48	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/25/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician III	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Kellogg, Anthony
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXO Technician III	1	10	10
UXO Technician II	3	10	30
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	4	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	4	4	39
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **02/25/2013**

Task Order No: 0009

Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	0	0	47.5
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	28.07
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1	1	36.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	2.80	2.80	47.1
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	7.9	7.9	27.15
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/25/2013

Task Order No: 0009

Summary of today's work activities:

- HGL performed Recon Survey at RC 1 and RC 2
- AMEC collected transects at RC 1, Uzzle property
- HGL continued brush clearance at proposed DGM grid locations on the guard property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	4	10	40	01/08/13	
Truck (Amec)	1	10	10	1/21/13	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
Skidsteer #3(Southland)	1	10	10	1/03/13	
Two-way Radios/Repeater	11	10	110	1/10/13	+2 02/12/13
PDA/GPS	3	10	30	11/15/12	

Contract No: W912DY-10-D-0023 **Date:** **02/25/2013**

Task Order No: 0009

Explosives Storage Magazine	1	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	6	10	60	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	5	10	50	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Westleon Paul Rogers	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/25/2013**

Task Order No: 0009

Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/26/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician III	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Kellogg, Anthony
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	6.5	16.5
UXOSO/QC	1	6.5	16.5
UXO Technician III	1	6.5	16.5
UXO Technician II	3	6.5	49.5
UXO Technician I	2	6.5	33
Geophysicist	0	0	0
Subcontractors	4	6.5	66

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	4	8	43
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **02/26/2013**

Task Order No: 0009

Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	0	0	47.5
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	28.07
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1	36.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	1.29	4.09	48.30
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	5	12.9	32.15
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/26/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued Recon Survey at RC 2
- AMEC collected transects at RC 2
- HGL continued brush clearance at proposed DGM grid locations on the guard property
- Operations were terminated early due to extreme weather

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	4	6.5	66	01/08/13	
Truck (Amec)	1	6.5	16.5	1/21/13	
Skidsteer (brush clearance)	1	6.5	16.5	11/05/12	
Skidsteer #2	1	6.5	16.5	11/07/12	
Skidsteer #3(Southland)	1	6.5	16.5	1/03/13	
Two-way Radios/Repeater	11	6.5	181.5	1/10/13	+2 02/12/13
PDA/GPS	3	6.5	49.5	11/15/12	

Contract No: W912DY-10-D-0023 **Date:** **02/26/2013**

Task Order No: 0009

Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	
Port-a-potties	3	6.5	49.5	11/1/12	
Truck mounted fuel tank	1	6.5	16.5	1/07/13	
Owned Equipment					
Schonstedt	6	6.5	99	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	6.5	16.5	11/08/12	
PDA/GPS	2	6.5	33	11/01/12	
First aid kit	5	6.5	82.5	11/01/12	
Team gear	2	6.5	33	11/01/12	
Demo kit/RFD	1	6.5	16.5	11/07/12	
Site Safety Officer Kit	1	6.5	16.5	11/07/12	
Computer, laptop	2	6.5	33	12/18/12	
Printer/copier/scanner/fax	1	6.5	16.5	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Westleon Paul Rogers	Westleon Paul Rogers

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/26/2013**

Task Order No: 0009

Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/27/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician III	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	26.5
UXOSO/QC	1	10	26.5
UXO Technician III	1	10	26.5
UXO Technician II	3	10	79.5
UXO Technician I	2	10	53
Geophysicist	0	0	0
Subcontractors	4	10	106

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	3	11	46
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/27/2013

Task Order No: 0009

Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	.5	.5	48
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	28.07
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1	36.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	2.3	6.39	50.60
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	4.60	17.5	36.75
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/27/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued Recon Survey at RC 2, properties: Champion, Fredrick, and Gardner
- AMEC collected transects at RC 2 adjacent to Uzzle Rd.
- HGL continued brush clearance at proposed grid locations and started grid set up on the guard property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	4	10	106	01/08/13	
Truck (Amec)	1	10	26.5	1/21/13	
Skidsteer (brush clearance)	1	10	26.5	11/05/12	
Skidsteer #2	1	10	26.5	11/07/12	
Skidsteer #3(Southland)	1	10	26.5	1/03/13	
Two-way Radios/Repeater	11	10	291.5	1/10/13	+2 02/12/13
PDA/GPS	3	10	79.5	11/15/12	

Contract No: W912DY-10-D-0023 **Date:** **02/27/2013**

Task Order No: 0009

Explosives Storage Magazine	1	24	72	10/29/12	
Office Trailer	1	24	72	11/1/12	
Port-a-potties	3	10	79.5	11/1/12	
Truck mounted fuel tank	1	10	26.5	1/07/13	
Owned Equipment					
Schonstedt	6	10	159	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	10	26.5	11/08/12	
PDA/GPS	2	10	53	11/01/12	
First aid kit	5	10	132.5	11/01/12	
Team gear	2	10	53	11/01/12	
Demo kit/RFD	1	10	26.5	11/07/12	
Site Safety Officer Kit	1	10	26.5	11/07/12	
Computer, laptop	2	10	53	12/18/12	
Printer/copier/scanner/fax	1	10	26.5	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Westleon Paul Rogers	Westleon Paul Rogers

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **02/27/2013**

Task Order No: 0009

Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/28/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS *(offsite)*	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician III	Brush Team	Cagle, Gary
SUXOS, UXO Technician III	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM / Visitor	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	36.5
UXOSO/QC	1	10	36.5
UXO Technician III	1	10	36.5
UXO Technician II	3	10	109.5
UXO Technician I	2	10	73
Geophysicist	0	0	0
Subcontractors	4	10	146

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	3	14	49
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **02/28/2013**

Task Order No: 0009

Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	1	1.5	49
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	28.07
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1	36.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	1.6	7.99	52.20
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	34.82
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	3.75	21.25	40.5
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 02/28/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued Recon Survey at RC 2, properties: Thorp, Morris, Raymer, Dorsey, Clark, Dean, and Autry
- AMEC collected transects at RC 2 between Moriah Rd and Uzzle Rd.
- HGL continued brush clearance and grid set up at proposed grid locations on the guard property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	4	10	146	01/08/13	
Truck (Amec)	1	10	36.5	1/21/13	
Skidsteer (brush clearance)	1	10	36.5	11/05/12	
Skidsteer #2	1	10	36.5	11/07/12	
Skidsteer #3(Southland)	1	10	36.5	1/03/13	
Two-way Radios/Repeater	11	10	401.5	1/10/13	+2 02/12/13
PDA/GPS	3	10	109.5	11/15/12	
Explosives Storage Magazine	1	24	96	10/29/12	

Contract No: W912DY-10-D-0023 **Date:** **02/28/2013**

Task Order No: 0009

Office Trailer	1	24	96	11/1/12	
Port-a-potties	3	10	109.5	11/1/12	
Truck mounted fuel tank	1	10	36.5	1/07/13	
Owned Equipment					
Schonstedt	6	10	219	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	10	36.5	11/08/12	
PDA/GPS	2	10	73	11/01/12	
First aid kit	5	10	182.5	11/01/12	
Team gear	2	10	73	11/01/12	
Demo kit/RFD	1	10	36.5	11/07/12	
Site Safety Officer Kit	1	10	36.5	11/07/12	
Computer, laptop	2	10	73	12/18/12	
Printer/copier/scanner/fax	1	10	36.5	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Westleon Paul Rogers	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/01/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS *(offsite)*	Site Management	Sanders, Joel A.
UXOSO/QCS	Site Management	Honne, Oscar M.
UXO Technician III	Brush Team	Cagle, Gary
SUXOS, UXO Technician III	Brush Team	Rogers, Westleon
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM / Visitor	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	46.5
UXOSO/QC	1	10	46.5
UXO Technician III	1	10	46.5
UXO Technician II	3	10	139.5
UXO Technician I	2	10	93
Geophysicist	0	0	0
Subcontractors	4	10	186

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	4	18	53
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0

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Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	0	1.5	49
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	2.58	2.58	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1	36.3
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	3.2	11.19	55.40
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	9.93	9.93	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	4	25.25	44.5
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/01/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued Recon Survey at RC2, properties: Meadows, Averette, Dean, Autrey, and Black
- AMEC collected transects at RC2 between Moriah Rd and Uzzle Rd.
- HGL continued brush clearance and grid set up at proposed grid locations on the guard property. In total, 6 grids are ready for DGM.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	4	10	186	01/08/13	
Truck (Amec)	1	10	46.5	1/21/13	
Skidsteer (brush clearance)	1	10	46.5	11/05/12	
Skidsteer #2	1	10	46.5	11/07/12	
Skidsteer #3(Southland)	1	10	46.5	1/03/13	
Two-way Radios/Repeater	11	10	511.5	1/10/13	+2 02/12/13
PDA/GPS	3	10	139.5	11/15/12	

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Explosives Storage Magazine	1	24	120	10/29/12	
Office Trailer	1	24	120	11/1/12	
Port-a-potties	3	10	139.5	11/1/12	
Truck mounted fuel tank	1	10	46.5	1/07/13	
Owned Equipment					
Schonstedt	6	10	279	1/03/13	+2 02/13/13
Camera, digital	0	0	0		
Lightning detector	1	10	46.5	11/08/12	
PDA/GPS	2	10	93	11/01/12	
First aid kit	5	10	232.5	11/01/12	
Team gear	2	10	93	11/01/12	
Demo kit/RFD	1	10	46.5	11/07/12	
Site Safety Officer Kit	1	10	46.5	11/07/12	
Computer, laptop	2	10	93	12/18/12	
Printer/copier/scanner/fax	1	10	46.5	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Westleon Paul Rogers	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/04/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar M.
UXOQC	Site Management	Rogers, Westleon
Geophysicist	Site Management	Donatelli, Daryl
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO	1	10	10
UXOQC	1	10	10
UXO Technician III	1	10	20
UXO Technician II	3	10	30
UXO Technician I	2	10	20
Geophysicist	1	10	10
Subcontractors	6	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	3	3	56

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Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	0	0	49
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	.25	.25	36.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	2.5	2.5	57.90
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	2.50	2.50	47
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/04/2013

Task Order No: 0009

Summary of today's work activities:

- HGL continued Recon Survey at RC2, properties: Jones, Adcock, and Frey
- AMEC began DGM collection of grids at the guard property under the supervision of Daryl Donatelli. A second Amec team continued DGM transect collection at RC2 between Moriah Road and Uzzle Road
- HGL continued brush clearance and grid set up at proposed grid locations on the guard property
- Due to the increased number of personnel on site, Westleon Rogers assumed the responsibilities of QC. Oscar Honne will continue as the safety officer .

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	50	01/08/13	+1 3/04/13
Truck (Amec)	2	10	20	1/21/13	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	

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Skidsteer #3(Southland)	0	10	0	1/03/13	3/01/13
Two-way Radios/Repeater	11	10	110	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	1	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	6	10	60	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	70	11/01/12	+2 03/04/13
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

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14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/05/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar M.
UXOQC	Site Management	Rogers, Westleon
Geophysicist	Site Management	Donatelli, Daryl
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Equipment Operator / I3	Brush Team	Davis, David
Equipment Operator / I3	Brush Team	Hughes, Adam
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	1	10	20
UXO Technician II	3	10	60
UXO Technician I	2	10	40
Geophysicist	1	10	20
Subcontractors	6	10	120

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	10	13	66

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Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	1.5	1.5	50.5
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	.25	36.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	0	2.5	57.90
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	2.50	47
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/05/2013

Task Order No: 0009

Summary of today's work activities:

- AMEC continued the DGM collection of grids at the guard property. Amec's second team continued DGM transect collection at RC1: Gantt property
- HGL continued brush clearance and grid set up at proposed grid locations on the guard property
- UXOQC continued emplacing QC seeds in grids at guard property
- Last day on site for I3 equipment operators

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	100	01/08/13	+1 3/04/13
Truck (Amec)	2	10	40	1/21/13	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Skidsteer #3(Southland)	0	10	0	1/03/13	3/01/13
Two-way Radios/Repeater	11	10	220	1/10/13	

Contract No: W912DY-10-D-0023 **Date:** **03/05/2013**

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PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	1	24	48	10/29/12	
Office Trailer	1	24	48	11/1/12	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	6	10	120	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	+2 03/04/13
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Contract No: W912DY-10-D-0023 **Date:** **03/05/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/06/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar M.
UXOQC	Site Management	Rogers, Westleon
Geophysicist	Site Management	Donatelli, Daryl
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO	1	10	30
UXOQC	1	10	30
UXO Technician III	1	10	30
UXO Technician II	3	10	90
UXO Technician I	2	10	60
Geophysicist	1	10	30
Subcontractors	4	10	160

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	3	16	69
Grids DGM MEC & Non-MEC (Grids)	15	15	15

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Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	1.5	3	52
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	.25	36.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	0	2.5	57.90
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	2.50	47
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/06/2013

Task Order No: 0009

Summary of today's work activities:

- AMEC continued the DGM collection of grids at the guard property. Amec's second team continued DGM transect collection at RC1: Gantt property
- HGL continued brush clearance and grid set up at proposed grid locations on the guard property
- UXOQC continued placing QC seeds in grids at guard property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	150	01/08/13	+1 3/04/13
Truck (Amec)	2	10	60	1/21/13	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	
Skidsteer #3(Southland)	0	10	0	1/03/13	3/01/13
Two-way Radios/Repeater	13	10	350	1/10/13	+2 3/06/13

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PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	6	10	180	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	+2 03/04/13
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/06/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/07/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar M.
UXOQC	Site Management	Rogers, Westleon
Geophysicist	Site Management	Donatelli, Daryl
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO	1	10	40
UXOQC	1	10	40
UXO Technician III	1	10	40
UXO Technician II	3	10	120
UXO Technician I	2	10	80
Geophysicist	1	10	40
Subcontractors	4	10	200

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	2	18	71
Grids DGM MEC & Non-MEC (Grids)	5	20	20

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Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	1.8	4.8	53.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	.25	36.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	0	2.5	57.90
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	2.50	47
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/07/2013

Task Order No: 0009

Summary of today's work activities:

- AMEC continued the DGM collection of grids at the guard property. Amec's second team continued DGM transect collection at RC1: Gantt property. Larry Hudgins on site to observe Amec field teams
- HGL continued brush clearance and grid set up at proposed grid locations on the guard property
- UXOQC continued emplacing QC seeds in grids at guard property
- Performed explosive magazine inventory

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	200	01/08/13	+1 3/04/13
Truck (Amec)	2	10	80	1/21/13	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
Skidsteer #3(Southland)	0	10	0	1/03/13	3/01/13
Two-way Radios/Repeater	13	10	480	1/10/13	+2 3/06/13
PDA/GPS	3	10	120	11/15/12	

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Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	96	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	6	10	240	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	7	10	280	11/01/12	+2 03/04/13
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/08/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar M.
UXOQC	Site Management	Rogers, Westleon
Geophysicist	Site Management	Donatelli, Daryl
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO	1	10	50
UXOQC	1	10	50
UXO Technician III	1	10	50
UXO Technician II	3	10	150
UXO Technician I	2	10	100
Geophysicist	1	10	50
Subcontractors	4	10	240

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	1	19	72
Grids DGM MEC & Non-MEC (Grids)	5	25	25

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Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	67.75
Transect DGM (Miles)	0	4.8	53.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	.25	36.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	2.4	4.9	60.30
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	2.50	47
MEC Disposal	0	0	0

Site Daily Production Report

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Task Order No: 0009

Summary of today's work activities:

- AMEC continued the DGM collection of grids at the guard property. Amec's second team continued DGM transect collection at RC1: Sears property
- HGL continued brush clearance and grid set up at proposed grid locations on the guard property
- UXOQC continued emplacing QC seeds in grids at guard property
- Daryl Donatelli and Wes Rogers evaluated six proposed grid locations to confirm proper placement. It was determined that due to the adjacent grave yard, Grid ARNG035 would be relocated 400' to the east of its current location
- OESS Demobilization

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	29.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	250	01/08/13	+1 3/04/13
Truck (Amec)	2	10	100	1/21/13	
Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	
Skidsteer #3(Southland)	0	10	0	1/03/13	3/01/13

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Two-way Radios/Repeater	13	10	610	1/10/13	+2 3/06/13
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	2	24	240	10/29/12	
Office Trailer	1	24	120	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	6	10	300	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	7	10	350	11/01/12	+2 03/04/13
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/08/2013**

Task Order No: 0009

Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/11/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar M.
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff (Medical Appt)
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Alu, Seth (Not on site)

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO	1	10	10
UXOQC	1	10	10
UXO Technician III	1	10	10
UXO Technician II	3	10	30
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	2	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	2	2	74
Grids DGM MEC & Non-MEC (Grids)	6	6	31
Grids Data Processing (Amec)	0	0	0

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Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0.5	.5	68.25
Transect DGM (Miles)	0	0	53.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	36.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	0	0	60.30
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/11/2013

Task Order No: 0009

Summary of today's work activities:

- AMEC continued the DGM collection of grids at the guard property. AMEC Team 2 did not collect today
- HGL continued brush clearance and grid set up at proposed grid locations on the guard property. Grid ARNG_35 was relocated approximately 400' to the east of its original position. The set up team located an expended projectile fuze near grid ARNG_20. Item was stored in locked MD drum.
- HGL cut DGM transects at RC1: Uzzle D W property
- UXOQC continued emplacing QC seeds in grids at guard property

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	1	1	30.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	50	01/08/13	
Truck (Amec)	2	10	20	1/21/13	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	

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Two-way Radios/Repeater	13	10	130	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	2	24	48	10/29/12	
Office Trailer	1	24	24	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	6	10	60	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	70	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Contract No: W912DY-10-D-0023 **Date:** **03/11/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/12/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar M.
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Brush Team	Cagle, Gary (Left early)
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	1	6	16
UXO Technician II	3	10	60
UXO Technician I	2	10	40
Geophysicist	0	10	0
Subcontractors	4	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	3	5	77
Grids DGM MEC & Non-MEC (Grids)	5	11	36
Grids Data Processing (Amec)	0	0	0

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Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	.5	68.25
Transect DGM (Miles)	.6	.6	54.4
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	36.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	0	0	60.30
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/12/2013

Task Order No: 0009

Summary of today's work activities:

- AMEC continued the DGM collection of grids at the guard property. AMEC Team 2 collected transects in RC1, properties: Watkins and Jones
- HGL continued brush clearance and grid set up at proposed grid locations on the guard property
- UXOQC continued emplacing QC seeds in grids at the guard property
- Kimberly Vaughn and Neil Feist arrived on site to observe operations

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	1	30.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	100	01/08/13	
Truck (Amec)	2	10	40	1/21/13	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
Two-way Radios/Repeater	13	10	260	1/10/13	
PDA/GPS	3	10	60	11/15/12	

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Explosives Storage Magazine	2	24	96	10/29/12	
Office Trailer	1	24	48	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	6	10	120	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

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Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/13/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO/QC	Site Management	Rogers, Westleon
UXO Technician III	Brush Team	Cagle, Gary (Out Sick)
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO/QC	1	10	30
UXOQC	0	10	20
UXO Technician III	1	0	16
UXO Technician II	3	10	90
UXO Technician I	2	10	60
Geophysicist	0	10	0
Subcontractors	4	10	100

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	4	9	81
Grids DGM MEC & Non-MEC (Grids)	6	17	42
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.4	.9	68.65
Transect DGM (Miles)	1.8	2.4	56.2
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	36.55
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	0	0	60.30
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/13/2013

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Summary of today's work activities:

- AMEC continued the DGM collection of grids at the guard property. AMEC Team 2 collected transects in RC1: Hursting property
- HGL continued brush clearance and grid set up at proposed grid locations on the guard property
- Westleon Rogers will assume the responsibilities of UXO Safety and QC until 3/15
- Ray Livermore (USACE Wilmington District), Marti Morgan (North Carolina Department of Environment and Natural Resources), Kimberly Vaughn, and Neil Feist toured the site and observed team operations including DGM data collection on grids and brush clearance of grids. A site tour of the area followed team observations.
- Replacement OESS, Ron Cates, arrived onsite

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	1	30.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	150	01/08/13	
Truck (Amec)	2	10	60	1/21/13	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	

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Two-way Radios/Repeater	13	10	390	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	6	10	180	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/13/2013**

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Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/14/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO/QC	Site Management	Rogers, Westleon
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO/QC	1	10	40
UXOQC	0	10	20
UXO Technician III	1	10	26
UXO Technician II	3	10	120
UXO Technician I	2	10	80
Geophysicist	0	10	0
Subcontractors	4	10	140

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	2	11	83
Grids DGM MEC & Non-MEC (Grids)	4	21	46
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.5	1.4	69.15
Transect DGM (Miles)	2.5	4.9	58.7
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	.85	.85	37.4
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	0	0	60.30
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/14/2013

Task Order No: 0009

Summary of today's work activities:

● AMEC continued the DGM collection of grids at the guard property. AMEC Team 2 collected transects in RC1, properties: Hursting and Morrison

● HGL continued brush clearance at proposed grid locations on the guard property and at transects in RC1, properties: Hursting and Morrison. HGL also performed recon survey at the Mangum/Clayton property in RC1

● Kimberly Vaughn and Neil Feist depart site

● While training on ARNG property, national guard personnel discovered mortar tail boom protruding from surface between transects ARNG_DGM500_022 and 023 just west of Lake Butner. HGL team to investigate tomorrow 3/15

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	1	30.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	200	01/08/13	
Truck (Amec)	2	10	80	1/21/13	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	
Two-way Radios/Repeater	13	10	520	1/10/13	

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PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	96	11/1/12	
Storage Connex	1	24	96	3/06/13	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	6	10	240	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	7	10	280	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/14/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/15/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO/QC	Site Management	Rogers, Westleon
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C. (Out sick)
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Alu, Seth

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO/QC	1	10	50
UXOQC	0	10	20
UXO Technician III	1	10	36
UXO Technician II	2	10	140
UXO Technician I	2	10	100
Geophysicist	0	10	0
Subcontractors	4	10	180

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	2	13	85
Grids DGM MEC & Non-MEC (Grids)	5	26	51
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0

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Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.35	1.75	69.50
Transect DGM (Miles)	.6	5.5	59.3
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	.85	37.4
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	64.15
Transect DGM (Miles)	.2	.2	60.50
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/15/2013

Task Order No: 0009

Summary of today's work activities:

● AMEC continued the DGM collection of grids at the guard property. AMEC Team 2 collected transects in RC1, properties: Hursting, Morrison, and Clayton

● HGL continued brush clearance at proposed grid locations on the guard property and at transects in RC1, properties: Hursting and Morrison.

● HGL intrusively investigated the UXO reported yesterday by National Guard personnel. The item was determined to be an 81mm mortar (model unknown) which had functioned leaving behind only the tail boom. The tail boom was considered free of energetic material and consolidated to a locked storage container. (see photos attached).

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	2	3	32.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	250	01/08/13	
Truck (Amec)	2	10	100	1/21/13	
Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	

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Two-way Radios/Repeater	13	10	650	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	2	24	240	10/29/12	
Office Trailer	1	24	120	11/1/12	
Storage Connex	1	24	120	3/06/13	
Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	6	10	300	1/03/13	
Camera, digital	0	0	0		
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	7	10	350	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

Photos 1 and 2

13. Continuation/other.

N/A

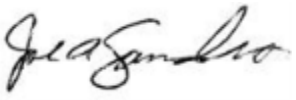
14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/15/2013**

Task Order No: 0009

Joel A. Sanders	
Site Manager or SUXOS	Signature





Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/18/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	Brush Team	Amiotte, Jeremy
UXO Technician II	Brush Team	Weber, Dawn C.
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca N.
UXO Technician I	Brush Team	Richardson, Charles
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Patton, Edward *(Replaced Seth Alu)*

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXOQC	1	10	10
UXO Technician III	1	10	10
UXO Technician II	3	10	30
UXO Technician I	2	10	20
Geophysicist	0	10	0
Subcontractors	4	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	2	2	87
Grids DGM MEC & Non-MEC (Grids)	4	4	55
Grids Data Processing (Amec)	0	0	0

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Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	69.50
Transect DGM (Miles)	1.6	1.6	60.9
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	.5	.5	37.9
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.75	.75	64.90
Transect DGM (Miles)	0	0	60.50
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/18/2013

Task Order No: 0009

Summary of today's work activities:

- AMEC continued the DGM collection of grids at the guard property. AMEC Team 2 collected transects in RC1: Gantt property
- HGL continued brush clearance at proposed grid locations on the guard property and at transects in RC2, properties: Orander and WNA LLC
- HGL UXOQC continued seeding DGM grids
- Grid ARNG_88 was relocated and setup at the northern end of ARNG Recon_018
- Oscar Honne returned to the site as UXOSO and Westleon Rogers will continue as UXOQCS. AMEC replaced Seth Alu (UXO Tech II) with Edward Patton. AMEC also plans to have several "observers" onsite learning DGM collection efforts from the current teams. Their presence will not change planned DGM collection efforts.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	32.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	50	01/08/13	
Truck (Amec)	2	10	20	1/21/13	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	

Contract No: W912DY-10-D-0023 **Date:** **03/18/2013**

Task Order No: 0009

EM-61	2	10	20	3/14/13	
Two-way Radios/Repeater	13	10	130	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	2	24	48	10/29/12	
Office Trailer	1	24	24	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	6	10	60	1/03/13	
Camera, digital	2	10	20	3/18/13	
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	70	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/18/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/19/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1	Smith, Al
UXO Technician III	Team 2	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Team 2	Richardson, Charles
UXO Technician I	Team 1	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Brush Team	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Patton, Edward

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	2	10	30
UXO Technician II	5	10	80
UXO Technician I	5	10	70
Geophysicist	0	10	0
Subcontractors	4	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0

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Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	2	87
Grids DGM MEC & Non-MEC (Grids)	0	4	55
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	69.50
Transect DGM (Miles)	1.8	3.4	62.7
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	.5	37.9
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	.75	64.90
Transect DGM (Miles)	0	0	60.50
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	5	5	5
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **03/19/2013**

Task Order No: 0009

Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC Team 2 collected transects in RC1, properties: Knap of Reeds LLC, Uzzle D W, and Beard. AMEC Team 1 experienced equipment issues and did not collect data.
- HGL started brush clearance and grid setup at proposed grid locations within RC2.
- 6 additional UXO Techs mobilized to assist with intrusive operations. New team members participated in indoctrination and site specific training.
- SUXOS met with Mr. Turner (Uzzle LLC) to discuss access and brush clearance on three parcels of land. Mr. Turner indicated no objections to brush cutting.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	32.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	100	01/08/13	

Contract No: W912DY-10-D-0023 **Date:** **03/19/2013**

Task Order No: 0009

Truck (Amec)	2	10	40	1/21/13	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	
EM-61	2	10	40	3/14/13	
Two-way Radios/Repeater	13	10	260	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	2	24	96	10/29/12	
Office Trailer	1	24	48	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	6	10	120	1/03/13	
Camera, digital	2	10	40	3/18/13	
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/19/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/20/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1	Smith, Al
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Brush Team	Richardson, Charles
UXO Technician I	Team 1	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Brush Team	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Patton, Edward

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO	1	10	30
UXOQC	1	10	30
UXO Technician III	2	10	50
UXO Technician II	5	10	130
UXO Technician I	5	10	120
Geophysicist	0	10	0
Subcontractors	4	10	120

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0

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Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	2	87
Grids DGM MEC & Non-MEC (Grids)	3	7	58
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	3	3	3
Grids Intrusive (Grids)	2	2	2
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	69.50
Transect DGM (Miles)	1.2	4.6	63.9
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	.5	37.9
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2.25	3	67.15
Transect DGM (Miles)	0	0	60.50
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	5	10	10
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **03/20/2013**

Task Order No: 0009

Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC Team 2 collected transects in RC1, properties: Knap of Reeds LLC and Baretto. AMEC Team 1 repaired their EM-61 and resumed DGM collection of grids on the guard property.
- HGL continued brush clearance and grid setup at proposed grid locations within RC2. In addition, HGL cut and marked transects in RC2 on the Uzzle LLC property.
- HGL Team 1 began the intrusive investigation of grids on the National Guard property.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	10	10	42.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	150	01/08/13	
Truck (Amec)	2	10	60	1/21/13	
Skidsteer (brush clearance)	1	10	30	11/05/12	

Contract No: W912DY-10-D-0023 **Date:** **03/20/2013**

Task Order No: 0009

Skidsteer #2	1	10	30	11/07/12	
EM-61	2	10	60	3/14/13	
Two-way Radios/Repeater	13	10	390	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	6	10	180	1/03/13	
Camera, digital	2	10	60	3/18/13	
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/20/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/21/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1	Smith, Al
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	QC Assistant	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Brush Team	Richardson, Charles
UXO Technician I	Team 1	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Brush Team	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Patton, Edward

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO	1	10	40
UXOQC	1	10	40
UXO Technician III	2	10	70
UXO Technician II	5	10	180
UXO Technician I	5	10	170
Geophysicist	0	10	0
Subcontractors	4	10	160

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0

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Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	2	87
Grids DGM MEC & Non-MEC (Grids)	5	12	63
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	1	4	4
Grids Intrusive (Grids)	2	4	4
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	0

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	69.50
Transect DGM (Miles)	0	4.6	63.9
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	30.65
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	.5	37.9
MEC Disposal	0	0	0

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	1.15	4.15	68.30
Transect DGM (Miles)	2.3	2.3	62.80
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	44.75
Grids Brush Clearing (Grids)	5	15	15
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

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Task Order No: 0009

Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC Team 2 collected transects in RC2, properties: Uzzle LLC. AMEC Team 1 continued DGM collection of grids on the ARNG MRS property.
- HGL cut and marked transects in RC2 on the Uzzle LLC property.
- HGL Team 1 continued the intrusive investigation of grids on the ARNG MRS property.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T RC1-003			X		Demo 02/14/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	10	42.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	5	10	200	01/08/13	
Truck (Amec)	2	10	80	1/21/13	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	

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EM-61	2	10	80	3/14/13	
Two-way Radios/Repeater	13	10	520	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	96	11/1/12	
Storage Connex	1	24	96	3/06/13	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	6	10	240	1/03/13	
Camera, digital	2	10	80	3/18/13	
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	7	10	280	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

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Contract No: W912DY-10-D-0023 **Date:** **03/21/2013**

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14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/22/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1	Smith, Al
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	QC Assistant	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Brush Team	Richardson, Charles
UXO Technician I	Team 1	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Brush Team	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Patton, Edward

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO	1	10	50
UXOQC	1	10	50
UXO Technician III	2	10	90
UXO Technician II	5	10	230
UXO Technician I	5	10	220
Geophysicist	0	10	0
Subcontractors	4	10	200

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0

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Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	2	87
Grids DGM MEC & Non-MEC (Grids)	6	18	69
Grids Data Processing (Amec)	46	46	46
Grids DGM Reaq (Grids)	2	6	6
Grids Intrusive (Grids)	2	6	6
Surface Recon (Miles)	0	0	28.20
MEC Disposal	1	1	1

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	69.50
Transect DGM (Miles)	0	4.6	63.9
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	16.9	16.9	47.6
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	.5	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	4.15	68.30
Transect DGM (Miles)	2	4.3	64.80
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	6.85	6.85	51.6
Grids Brush Clearing (Grids)	6	21	21
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

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Task Order No: 0009

Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Summary of today's work activities:

● AMEC Team 2 collected transects in RC2: Uzzle Road LLC property. AMEC Team 1 continued DGM collection of grids on the guard property.

● HGL brush team cut and setup grids in RC2

● HGL Team 1 and 2 continued the intrusive investigation of grids on the National Guard property. While investigating grid ARNG_011, Team 1 discovered a 60mm HE Mortar. After notifying National Guard personnel, HGL performed demo operations and successfully destroyed the item.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd		0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	1	Consumed 3/22/13
Detonating Cord, 80gr	6'	Consumed 3/22/13
Jet Perforators, 32 G	1	Consumed 3/22/13

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	21	31	63.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	260	01/08/13	+1 03/22/13
Truck (Amec)	2	10	100	1/21/13	

Contract No: W912DY-10-D-0023 **Date:** **03/22/2013**

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Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	
EM-61	2	10	100	3/14/13	
Two-way Radios/Repeater	13	10	650	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	2	24	240	10/29/12	
Office Trailer	1	24	120	11/1/12	
Storage Connex	1	24	120	3/06/13	
Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	6	10	300	1/03/13	
White Detectors	4	10	80	3/20/13	
Camera, digital	2	10	100	3/18/13	
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	7	10	350	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/22/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/25/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1	Smith, Al
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	QC Assistant	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Brush Team	Richardson, Charles
UXO Technician I	Team 1	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Brush Team	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Patton, Edward

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO	1	10	10
UXOQC	1	10	10
UXO Technician III	2	10	20
UXO Technician II	5	10	50
UXO Technician I	5	10	50
Geophysicist	0	10	0
Subcontractors	4	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0

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Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	87
Grids DGM MEC & Non-MEC (Grids)	5	5	74
Grids Data Processing (Amec)	0	0	46
Grids DGM Reaq (Grids)	3	3	9
Grids Intrusive (Grids)	3	3	9
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	1

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	69.50
Transect DGM (Miles)	2.5	2.5	66.4
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	47.6
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	68.30
Transect DGM (Miles)	0	0	64.80
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	51.6
Grids Brush Clearing (Grids)	0	0	21
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

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Task Order No: 0009

Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC Team 2 collected transects in RC2, properties: Lee, Scott, Jennings, and Uzzle D W. AMEC Team 1 continued DGM collection of grids on the ARNG MRS.
- HGL brush teams cut and marked transects in RC1 and RC2, properties: Davis, Obriant, Blair, and Gray.
- HGL Team 1 intrusively investigated grids inside the range fan on the ARNG MRS.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd		0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	2	2	65.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	60	01/08/13	
Truck (Amec)	2	10	20	1/21/13	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	

Contract No: W912DY-10-D-0023 **Date:** **03/25/2013**

Task Order No: 0009

EM-61	2	10	20	3/14/13	
Two-way Radios/Repeater	13	10	130	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	2	24	24	10/29/12	
Office Trailer	1	24	24	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	6	10	60	1/03/13	
White Detectors	4	10	40	3/20/13	
Camera, digital	2	10	20	3/18/13	
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	70	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/25/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/26/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1	Smith, Al
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	QC Assistant	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody (Off site)
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Brush Team	Richardson, Charles
UXO Technician I	Team 1	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Brush Team	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Patton, Edward

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	2	10	40
UXO Technician II	4	10	90
UXO Technician I	5	10	100
Geophysicist	0	10	0
Subcontractors	4	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **03/26/2013**

Task Order No: 0009

Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	87
Grids DGM MEC & Non-MEC (Grids)	4	9	78
Grids Data Processing (Amec)	0	0	46
Grids DGM Reaq (Grids)	4	7	13
Grids Intrusive (Grids)	4	7	13
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	1

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	69.50
Transect DGM (Miles)	.1	2.6	66.5
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	47.6
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.5	.5	68.80
Transect DGM (Miles)	1.5	1.5	62.30
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	51.6
Grids Brush Clearing (Grids)	0	0	21
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

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Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC Team 2 collected transects in RC2, properties: WNA LLC, Blair, and Boone. AMEC Team 1 continued DGM collection of grids on the guard property.
- HGL brush teams cut and marked transects in RC2: Davis property
- HGL Team 1 intrusively investigated grids outside the range fan on the guard property.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	5	0	5	0	5	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	25	27	90.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	120	01/08/13	
Truck (Amec)	2	10	40	1/21/13	
Skidsteer (brush clearance)	1	10	20	11/05/12	
Skidsteer #2	1	10	20	11/07/12	

Contract No: W912DY-10-D-0023 **Date:** **03/26/2013**

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EM-61	2	10	40	3/14/13	
Two-way Radios/Repeater	13	10	260	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	2	24	96	10/29/12	
Office Trailer	1	24	48	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	6	10	120	1/03/13	
White Detectors	4	10	80	3/20/13	
Camera, digital	2	10	40	3/18/13	
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/26/2013**

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14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/27/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1	Smith, Al
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	QC Assistant	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Brush Team	Richardson, Charles
UXO Technician I	Team 1	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Brush Team	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Patton, Edward

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO	1	10	30
UXOQC	1	10	30
UXO Technician III	2	10	60
UXO Technician II	5	10	140
UXO Technician I	5	10	150
Geophysicist	0	10	0
Subcontractors	4	10	120

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0

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Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	87
Grids DGM MEC & Non-MEC (Grids)	4	13	82
Grids Data Processing (Amec)	0	0	46
Grids DGM Reaq (Grids)	3	10	16
Grids Intrusive (Grids)	3	10	16
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	1

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	69.50
Transect DGM (Miles)	0	2.6	66.5
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	47.6
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	2	2.5	70.8
Transect DGM (Miles)	3	4.5	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	51.6
Grids Brush Clearing (Grids)	10	10	31
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **03/27/2013**

Task Order No: 0009

Surface Recon (Miles)	0	0	47
MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC Team 2 collected transects in RC2: Davis property. AMEC Team 1 continued DGM collection of grids on the guard property.
- HGL brush teams cut transects and setup grids in RC2
- HGL Team 1 intrusively investigated grids outside the range fan on the guard property.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	5	0	5	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	1	28	91.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	180	01/08/13	
Truck (Amec)	2	10	60	1/21/13	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	

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EM-61	2	10	60	3/14/13	
Two-way Radios/Repeater	13	10	390	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	6	10	180	1/03/13	
White Detectors	4	10	120	3/20/13	
Camera, digital	2	10	60	3/18/13	
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	1	10	30	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/27/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/28/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1	Smith, Al
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	QC Assistant	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 1	Bullock, Jack
UXO Technician II	Brush Team/Recon	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team/Recon	Powers, Rebecca
UXO Technician I	Brush Team	Richardson, Charles
UXO Technician I	Team 1	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Brush Team	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Patton, Edward

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO	1	10	40
UXOQC	1	10	40
UXO Technician III	2	10	80
UXO Technician II	5	10	190
UXO Technician I	5	10	200
Geophysicist	0	10	0
Subcontractors	4	10	160

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0

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Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	87
Grids DGM MEC & Non-MEC (Grids)	4	17	86
Grids Data Processing (Amec)	0	0	46
Grids DGM Reaq (Grids)	3	13	19
Grids Intrusive (Grids)	3	13	19
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	1

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	.7	.7	70.20
Transect DGM (Miles)	1.3	3.9	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	47.6
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	2.5	70.8
Transect DGM (Miles)	0	4.5	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	51.6
Grids Brush Clearing (Grids)	2	12	33
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **03/28/2013**

Task Order No: 0009

Surface Recon (Miles)	.5	.5	47.5
MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC Team 2 collected transects in RC1: Stout property. AMEC Team 1 continued DGM collection of grids on the guard property.
- HGL brush teams cut transects in RC1 and setup grids in RC2.
- HGL recon survey team collected data in RC2.
- HGL Team 1 intrusively investigated grids inside the range fan on the guard property.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	10	0	10	0
Grids QA'd	0	0	10	0	10	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	28	91.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	240	01/08/13	
Truck (Amec)	2	10	80	1/21/13	
Skidsteer (brush clearance)	1	10	40	11/05/12	

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Skidsteer #2	1	10	40	11/07/12	
EM-61	2	10	80	3/14/13	
Two-way Radios/Repeater	13	10	520	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	96	11/1/12	
Storage Connex	1	24	96	3/06/13	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	6	10	240	1/03/13	
White Detectors	4	10	160	3/20/13	
Camera, digital	2	10	80	3/18/13	
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	7	10	280	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	1	10	40	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/28/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 03/29/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1	Smith, Al
UXO Technician III	Brush Team	Cagle, Gary
UXO Technician II	QC Assistant	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 1	Bullock, Jack
UXO Technician II	Brush Team/Recon	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team/Recon	Powers, Rebecca
UXO Technician I	Brush Team	Richardson, Charles
UXO Technician I	Team 1	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Brush Team	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald
UXO Technician II / Amec	DGM	Patton, Edward

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	9	49
UXOSO	1	10	50
UXOQC	1	10	50
UXO Technician III	2	10	100
UXO Technician II	5	10	240
UXO Technician I	5	10	250
Geophysicist	0	10	0
Subcontractors	4	10	200

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **03/29/2013**

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Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	87
Grids DGM MEC & Non-MEC (Grids)	0	17	86
Grids Data Processing (Amec)	23	23	69
Grids DGM Reaq (Grids)	7	20	26
Grids Intrusive (Grids)	7	20	26
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	1

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0.7	70.20
Transect DGM (Miles)	0	3.9	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	14.6	14.6	62.2
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	2.5	70.8
Transect DGM (Miles)	0	4.5	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	11.6	11.6	63.2
Grids Brush Clearing (Grids)	5	17	38
Grids DGM MEC & Non-MEC (Grids)	5	5	5
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **03/29/2013**

Task Order No: 0009

Surface Recon (Miles)	0	.5	47.5
MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC Teams collected grids in RC2. AMEC trained personnel in preparation to cut staff and collect with a single team for the remainder of the project.
- HGL brush team cut and setup grids in RC2.
- HGL Team 1 and 2 intrusively investigated grids outside the range fan on the guard property while the range was active.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	10	0	10	0
Grids QA'd	0	0	10	0	10	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	20	48	111.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	300	01/08/13	
Truck (Amec)	2	10	100	1/21/13	
Skidsteer (brush clearance)	1	10	50	11/05/12	
Skidsteer #2	1	10	50	11/07/12	

Contract No: W912DY-10-D-0023 **Date:** **03/29/2013**

Task Order No: 0009

EM-61	2	10	100	3/14/13	
Two-way Radios/Repeater	13	10	650	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	2	24	240	10/29/12	
Office Trailer	1	24	120	11/1/12	
Storage Connex	1	24	120	3/06/13	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	6	10	300	1/03/13	
White Detectors	4	10	200	3/20/13	
Camera, digital	2	10	100	3/18/13	
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	7	10	350	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	1	10	50	11/01/12	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **03/29/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/01/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1	Smith, Al
UXO Technician III	Team 2	Cagle, Gary
UXO Technician II	Team 1/ EM61	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2/ EM61	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO	1	10	10
UXOQC	1	10	10
UXO Technician III	2	10	20
UXO Technician II	5	10	50
UXO Technician I	5	10	50
Geophysicist	0	10	0
Subcontractors	3	10	30

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **04/01/2013**

Task Order No: 0009

(Amec)			
Grids Brush Clearing (Grids)	1	1	88
Grids DGM MEC & Non-MEC (Grids)	0	0	86
Grids Data Processing (Amec)	0	0	69
Grids DGM Reaq (Grids)	12	12	38
Grids Intrusive (Grids)	12	12	38
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	1

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	62.2
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	63.2
Grids Brush Clearing (Grids)	2	2	40
Grids DGM MEC & Non-MEC (Grids)	7	7	12
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47.5

Contract No: W912DY-10-D-0023 **Date:** **04/01/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC Team 1 collected grids in RC2.
- HGL brush team cut and setup grids at ARNG and RC2.
- HGL Teams 1 and 2 intrusively investigated grids on the guard property while the range was inactive.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	3	0	3	0	13	0
Grids QA'd	3	0	3	0	13	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	17	17	128.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	60	01/08/13	
Truck (Amec)	2	10	20	1/21/13	
Skidsteer (brush clearance)	1	10	10	11/05/12	
Skidsteer #2	1	10	10	11/07/12	
EM-61	2	10	20	3/14/13	

Contract No: W912DY-10-D-0023 **Date:** **04/01/2013**

Task Order No: 0009

Two-way Radios/Repeater	13	10	130	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	2	24	48	10/29/12	
Office Trailer	1	24	24	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	9	10	90	1/03/13	+3 03/29/13
White Detectors	4	10	40	3/20/13	
Camera, digital	2	10	20	3/18/13	
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	70	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	1	10	10	11/01/12	
Monitor, Acer, V273H	1	10	10	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/01/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/02/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1/ TL	Smith, Al
UXO Technician III	Team 2/ TL	Cagle, Gary
UXO Technician II	Team 1/ EM61	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2/ EM61	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	2	10	40
UXO Technician II	5	10	100
UXO Technician I	5	10	100
Geophysicist	0	10	0
Subcontractors	3	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **04/02/2013**

Task Order No: 0009

(Amec)			
Grids Brush Clearing (Grids)	1	2	89
Grids DGM MEC & Non-MEC (Grids)	0	0	86
Grids Data Processing (Amec)	0	0	69
Grids DGM Reaq (Grids)	8	20	46
Grids Intrusive (Grids)	8	20	46
Surface Recon (Miles)	0	0	28.20
MEC Disposal	1	1	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	62.2
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	63.2
Grids Brush Clearing (Grids)	4	6	44
Grids DGM MEC & Non-MEC (Grids)	5	12	17
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47.5

Contract No: W912DY-10-D-0023 **Date:** **04/02/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC collected grids in RC2.
- HGL brush team cut and setup grids at ARNG and RC2.
- HGL Teams 1 and 2 intrusively investigated grids on the guard property while the range was inactive.
- HGL Team 1 discovered a 60mm HE Mortar (M49) while intrusively investigating grid ARNG_14. The mortar was fuzed and blown in place.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	15	0	18	0	28	0
Grids QA'd	0	0	3	0	13	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	1	Consumed 4/02/13
Detonating Cord, 80gr	5 FT	Consumed 4/02/13
Jet Perforators, 32 G	1	Consumed 4/02/13

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	40	57	168.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	120	01/08/13	
Truck (Amec)	2	10	40	1/21/13	
Skidsteer (brush clearance)	1	10	20	11/05/12	

Contract No: W912DY-10-D-0023 **Date:** **04/02/2013**

Task Order No: 0009

Skidsteer #2	1	10	20	11/07/12	
EM-61	2	10	40	3/14/13	
Two-way Radios/Repeater	13	10	260	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	2	24	96	10/29/12	
Office Trailer	1	24	48	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	9	10	180	1/03/13	+3 03/29/13
White Detectors	4	10	80	3/20/13	
Camera, digital	2	10	40	3/18/13	
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	1	10	20	11/01/12	
Monitor, Acer, V273H	1	10	20	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

Photo: MEC # ARNG-002

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/02/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Contract No: W912DY-10-D-0023 **Date:** **04/02/2013**

Task Order No: 0009

Attachment: Photo: MEC # ARNG-002



Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/03/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1/ TL	Smith, Al
UXO Technician III	Team 2/ TL	Cagle, Gary
UXO Technician II	Team 1/ EM61	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2/ EM61	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO	1	10	30
UXOQC	1	10	30
UXO Technician III	2	10	60
UXO Technician II	5	10	150
UXO Technician I	5	10	150
Geophysicist	0	10	0
Subcontractors	3	10	90

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **04/03/2013**

Task Order No: 0009

(Amec)			
Grids Brush Clearing (Grids)	0	2	89
Grids DGM MEC & Non-MEC (Grids)	0	0	86
Grids Data Processing (Amec)	0	0	69
Grids DGM Reaq (Grids)	4	24	50
Grids Intrusive (Grids)	4	24	50
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	1	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	62.2
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	63.2
Grids Brush Clearing (Grids)	3	9	47
Grids DGM MEC & Non-MEC (Grids)	5	17	22
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47.5

Contract No: W912DY-10-D-0023 **Date:** **04/03/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC collected grids in RC2.
- HGL brush team cut and setup grids at RC2.
- HGL Teams 1 and 2 intrusively investigated grids on the guard property while the range was active. Team 2 experienced an equipment failure and relocated to grid RC2_069 and began analog intrusive (mag/flag/dig) operations.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	18	0	28	0
Grids QA'd	15	0	18	0	28	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	30	87	198.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	180	01/08/13	
Truck (Amec)	2	10	60	1/21/13	
Skidsteer (brush clearance)	1	10	30	11/05/12	
Skidsteer #2	1	10	30	11/07/12	

Contract No: W912DY-10-D-0023 **Date:** **04/03/2013**

Task Order No: 0009

EM-61	2	10	60	3/14/13	
Two-way Radios/Repeater	13	10	390	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	9	10	270	1/03/13	+3 03/29/13
White Detectors	4	10	120	3/20/13	
Camera, digital	2	10	60	3/18/13	
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	2	10	40	11/01/12	+1 04/03/13
Monitor, Acer, V273H	1	10	30	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/03/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/04/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1/ TL	Smith, Al
UXO Technician III	Team 2/ TL	Cagle, Gary
UXO Technician II	Team 1/ EM61	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2/ EM61	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason (went home sick)
Geo / Amec	DGM	Holzbauer, Micah
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO	1	10	40
UXOQC	1	10	40
UXO Technician III	2	10	80
UXO Technician II	5	10	200
UXO Technician I	4	10	192
Geophysicist	0	10	0
Subcontractors	3	10	120

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing	0	0	49.29

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(Amec)			
Grids Brush Clearing (Grids)	0	2	89
Grids DGM MEC & Non-MEC (Grids)	0	0	86
Grids Data Processing (Amec)	0	0	69
Grids DGM Reaq (Grids)	9	33	59
Grids Intrusive (Grids)	9	33	59
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	1	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	62.2
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	63.2
Grids Brush Clearing (Grids)	7	16	54
Grids DGM MEC & Non-MEC (Grids)	1	18	23
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47.5

Contract No: W912DY-10-D-0023 **Date:** **04/04/2013**

Task Order No: 0009

MEC Disposal	0	0	0

Summary of today's work activities:

- AMEC collected in RC2. Equipment issues limited collection.
- HGL brush team cut and setup grids at RC2.
- HGL Teams 1 and 2 intrusively investigated grids on the guard property while the range was inactive.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	18	0	28	0
Grids QA'd	0	0	18	0	28	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	35	122	233.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	240	01/08/13	
Truck (Amec)	1	10	70	1/21/13	
Skidsteer (brush clearance)	1	10	40	11/05/12	
Skidsteer #2	1	10	40	11/07/12	

Contract No: W912DY-10-D-0023 **Date:** **04/04/2013**

Task Order No: 0009

EM-61	2	10	80	3/14/13	
Two-way Radios/Repeater	13	10	520	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	96	11/1/12	
Storage Connex	1	24	96	3/06/13	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	9	10	360	1/03/13	+3 03/29/13
White Detectors	4	10	160	3/20/13	
Camera, digital	2	10	80	3/18/13	
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	7	10	280	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	2	10	60	11/01/12	+1 04/03/13
Monitor, Acer, V273H	1	10	40	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/04/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/05/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1/ TL	Smith, Al
UXO Technician III	Team 2/ TL	Cagle, Gary
UXO Technician II	Team 1/ EM61	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2/ EM61	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO	1	10	50
UXOQC	1	10	50
UXO Technician III	2	10	100
UXO Technician II	5	10	250
UXO Technician I	5	10	242
Geophysicist	0	10	0
Subcontractors	2	10	140

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

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Grids Brush Clearing (Grids)	0	2	89
Grids DGM MEC & Non-MEC (Grids)	0	0	86
Grids Data Processing (Amec)	17	17	86
Grids DGM Reaq (Grids)	7	40	66
Grids Intrusive (Grids)	7	40	66
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	1	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	1.45	1.45	63.7
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	1.83	1.83	65.1
Grids Brush Clearing (Grids)	5	21	59
Grids DGM MEC & Non-MEC (Grids)	0	18	23
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47.5
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/05/2013

Task Order No: 0009

Summary of today's work activities:

- After resolving equipment issues, Amec re-collected several DGM transects.
- HGL brush team cut and setup grids at RC2. SUXOS called off 1 of the 2 brush cutting machines on site.
- HGL Teams 1 and 2 intrusively investigated grids on the guard property while the range was active.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	18	0	28	0
Grids QA'd	0	0	18	0	28	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	25	147	258.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	300	01/08/13	
Truck (Amec)	1	10	80	1/21/13	-1 4/04/13
Skidsteer	1	10	50	11/05/12	
Skidsteer#2(called off 4/5/13)	1	10	50	11/07/12	
EM-61	2	10	100	3/14/13	

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Two-way Radios/Repeater	13	10	650	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	2	24	240	10/29/12	
Office Trailer	1	24	120	11/1/12	
Storage Connex	1	24	120	3/06/13	
Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	9	10	450	1/03/13	+3 03/29/13
White Detectors	4	10	200	3/20/13	
Camera, digital	2	10	100	3/18/13	
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	7	10	350	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	2	10	80	11/01/12	+1 04/03/13
Monitor, Acer, V273H	1	10	50	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/05/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/08/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1/ TL	Smith, Al
UXO Technician III	Team 2/ TL	Cagle, Gary
UXO Technician II	Team 1/ EM61	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2/ EM61	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO	1	10	10
UXOQC	1	10	10
UXO Technician III	2	10	20
UXO Technician II	5	10	50
UXO Technician I	5	10	50
Geophysicist	0	10	0
Subcontractors	2	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

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Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	86
Grids Data Processing (Amec)	0	0	86
Grids DGM Reaq (Grids)	11	11	77
Grids Intrusive (Grids)	11	11	77
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	0	0	0
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	5	5	64
Grids DGM MEC & Non-MEC (Grids)	7	7	30
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	47.5
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/08/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC2
- HGL brush team cut and setup grids at RC2.
- HGL Teams 1 and 2 intrusively investigated grids on the guard property while the range was inactive.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	16	0	16	0	44	0
Grids QA'd	16	0	16	0	44	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	22	22	280.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	60	01/08/13	
Truck (Amec)	1	10	10	1/21/13	
Skidsteer	1	10	10	11/05/12	
EM-61	2	10	20	3/14/13	
Two-way Radios/Repeater	13	10	130	1/10/13	

Contract No: W912DY-10-D-0023 **Date:** **04/08/2013**

Task Order No: 0009

PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	2	24	48	10/29/12	
Office Trailer	1	24	24	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	9	10	90	1/03/13	
White Detectors	4	10	40	3/20/13	
Camera, digital	2	10	20	3/18/13	
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	70	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	2	10	20	11/01/12	
Monitor, Acer, V273H	1	10	10	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/08/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/09/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1/ TL	Smith, Al
UXO Technician III	Team 2/ TL	Cagle, Gary
UXO Technician II	Team 1/ EM61	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2/ EM61	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush Team	Zow, Woody
UXO Technician I	Brush Team	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	2	10	40
UXO Technician II	5	10	100
UXO Technician I	5	10	100
Geophysicist	0	10	0
Subcontractors	2	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **04/09/2013**

Task Order No: 0009

Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	3	3	89
Grids Data Processing (Amec)	0	0	86
Grids DGM Reaq (Grids)	7	18	84
Grids Intrusive (Grids)	7	18	84
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	2	2	2
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	37.9
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	63.2
Grids Brush Clearing (Grids)	2	7	66
Grids DGM MEC & Non-MEC (Grids)	3	10	33
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	1	1	1
Grids Intrusive (Grids)	1	1	1
Surface Recon (Miles)	0	0	47.5
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/09/2013**

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC2 and finished off the guard property.
- HGL brush team cut and setup grids at RC1 and RC2.
- HGL Teams 1 and 2 intrusively investigated grids at ARNG and RC2.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd		0	16	0	44	0
Grids QA'd		0	16	0	44	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	40	62	320.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	120	01/08/13	
Truck (Amec)	1	10	20	1/21/13	
Skidsteer	1	10	20	11/05/12	
EM-61	2	10	40	3/14/13	
Two-way Radios/Repeater	13	10	260	1/10/13	

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PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	2	24	96	10/29/12	
Office Trailer	1	24	48	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	9	10	180	1/03/13	
White Detectors	4	10	80	3/20/13	
Camera, digital	2	10	40	3/18/13	
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	2	10	40	11/01/12	
Monitor, Acer, V273H	1	10	20	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/09/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/10/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Brush	Smith, Al
UXO Technician III	Brush	Cagle, Gary
UXO Technician II	Brush	Amiotte, Jeremy
UXO Technician II	Recon	Hood, Casie
UXO Technician II		Bullock, Jack (sick)
UXO Technician II	Recon	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Brush	Richardson, Charles
UXO Technician I		Kaliszewski, Coty (sick)
UXO Technician I	Recon	Okino, Cheryl
UXO Technician I	Recon	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO	1	10	30
UXOQC	1	10	30
UXO Technician III	2	10	60
UXO Technician II	4	10	140
UXO Technician I	4	10	140
Geophysicist	0	10	0
Subcontractors	2	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

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Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	3	89
Grids Data Processing (Amec)	0	0	86
Grids DGM Reaq (Grids)	0	18	84
Grids Intrusive (Grids)	0	18	84
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	0	2	2
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1.13	1.13	39.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	9	16	75
Grids DGM MEC & Non-MEC (Grids)	5	15	38
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	1	1
Grids Intrusive (Grids)	0	1	1
Surface Recon (Miles)	.35	.35	47.85
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/10/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC2.
- HGL brush teams cut and setup grids at RC2.
- HGL recon teams collected data in the power line corridor at transects where DGM data was rejected due to high "noise" levels.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd		0	16	0	44	0
Grids QA'd		0	16	0	44	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	62	320.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	180	01/08/13	
Truck (Amec)	1	10	30	1/21/13	
Skidsteer	1	10	30	11/05/12	
EM-61	2	10	60	3/14/13	
Two-way Radios/Repeater	13	10	390	1/10/13	

Contract No: W912DY-10-D-0023 **Date:** **04/10/2013**

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PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	9	10	270	1/03/13	
White Detectors	4	10	120	3/20/13	
Camera, digital	2	10	60	3/18/13	
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	2	10	60	11/01/12	
Monitor, Acer, V273H	1	10	30	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/10/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/11/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Brush	Cagle, Gary
UXO Technician II	Team 1 / EM61	Amiotte, Jeremy
UXO Technician II	Team 1 / Recon	Hood, Casie
UXO Technician II	Team 1 / Brush	Bullock, Jack
UXO Technician II	Team 1 / Brush	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Brush	Richardson, Charles
UXO Technician I	Team 1	Kaliszewski, Coty
UXO Technician I	Brush / Recon	Okino, Cheryl
UXO Technician I	Team 1	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO	1	10	40
UXOQC	1	10	40
UXO Technician III	2	10	80
UXO Technician II	5	10	190
UXO Technician I	5	10	190
Geophysicist	0	10	0
Subcontractors	2	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

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Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	3	89
Grids Data Processing (Amec)	0	0	86
Grids DGM Reaq (Grids)	0	18	84
Grids Intrusive (Grids)	0	18	84
Surface Recon (Miles)	0	0	28.2
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	0	2	2
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1.13	39.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	0
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	8	24	83
Grids DGM MEC & Non-MEC (Grids)	8	23	46
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	5	6	6
Grids Intrusive (Grids)	5	6	6
Surface Recon (Miles)	.88	1.23	48.73
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/11/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC2.
- HGL brush teams cut and setup grids at RC2.
- HGL recon team collected data in the power line corridor at transects where DGM data was rejected due to high "noise" levels.
- HGL Team 1 intrusively investigated grids on RC2.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd		0	16	0	44	0
Grids QA'd		0	16	0	44	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	62	320.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	240	01/08/13	
Truck (Amec)	1	10	40	1/21/13	
Skidsteer	1	10	40	11/05/12	
EM-61	2	10	80	3/14/13	
Two-way Radios/Repeater	13	10	520	1/10/13	

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Task Order No: 0009

PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	96	11/1/12	
Storage Connex	1	24	96	3/06/13	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	9	10	360	1/03/13	
White Detectors	4	10	160	3/20/13	
Camera, digital	2	10	80	3/18/13	
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	7	10	280	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	2	10	80	11/01/12	
Monitor, Acer, V273H	1	10	40	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/11/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/12/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 2	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 1	Bullock, Jack
UXO Technician II	Brush	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Brush	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 1	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO	1	10	50
UXOQC	1	8	48
UXO Technician III	2	8	96
UXO Technician II	5	8	230
UXO Technician I	5	8	230
Geophysicist	0	8	0
Subcontractors	2	8	96

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **04/12/2013**

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Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	3	89
Grids Data Processing (Amec)	0	0	86
Grids DGM Reaq (Grids)	0	18	84
Grids Intrusive (Grids)	0	18	84
Surface Recon (Miles)	0	0	28.2
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	0	2	2
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1.13	39.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	.07	.07	.07
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	3	27	86
Grids DGM MEC & Non-MEC (Grids)	5	28	51
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	6	12	12
Grids Intrusive (Grids)	6	12	12
Surface Recon (Miles)	0	1.23	48.73
MEC Disposal	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/12/2013**

Task Order No: 0009

Summary of today's work activities:

- Delayed start in operations due to severe weather.
- Amec collected DGM grids in RC2.
- HGL brush teams cut and setup grids at RC1 and RC2.
- HGL Team 1 intrusively investigated grids on RC2.
- HGL Team 2 intrusively investigated grids in RC2 and transect RC2_DGM300_051 (Ziegler property).

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	5	0	21	0	49	0
Grids QA'd	5	0	21	0	49	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	62	124	382.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	300	01/08/13	
Truck (Amec)	1	10	50	1/21/13	
Skidsteer	1	10	50	11/05/12	
EM-61	2	10	100	3/14/13	

Contract No: W912DY-10-D-0023 **Date:** **04/12/2013**

Task Order No: 0009

Two-way Radios/Repeater	13	10	650	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	2	24	240	10/29/12	
Office Trailer	1	24	120	11/1/12	
Storage Connex	1	24	120	3/06/13	
Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	9	10	450	1/03/13	
White Detectors	4	10	200	3/20/13	
Camera, digital	2	10	100	3/18/13	
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	7	10	350	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	2	10	100	11/01/12	
Monitor, Acer, V273H	1	10	50	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/12/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/15/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 2	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 1	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 1	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO	1	10	10
UXOQC	1	10	10
UXO Technician III	2	10	20
UXO Technician II	5	10	50
UXO Technician I	5	10	50
Geophysicist	0	10	0
Subcontractors	2	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **04/15/2013**

Task Order No: 0009

Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	86
Grids DGM Reaq (Grids)	2	2	86
Grids Intrusive (Grids)	2	2	86
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	0	0	2
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	39.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	.07
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	1	1	87
Grids DGM MEC & Non-MEC (Grids)	6	6	57
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	3	3	15
Grids Intrusive (Grids)	3	3	15
Surface Recon (Miles)	0	0	48.73
MEC Disposal	1	1	1

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/15/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC2.
- HGL brush team cut and setup grids at RC2.
- HGL Team 2 intrusively investigated grids at ARNG.
- HGL Team 1 intrusively investigated grids at RC2.
- Property owner, Mr. Robbins, reported the discovery of a possible UXO item. HGL responded and identified the item as an M107 155mm HE projectile. The projectile was located 100 yards south of grid RC2_072 adjacent to transect RC2_DGM300_045. After notifying Butner Public Safety, the Butner Fire Marshal and a deputy sheriff arrived onsite to assess potential fire danger and risk to public safety. It was determined that the forestry department should cut a fire break around the demo site, and forestry department personnel completed the fire break. The item was successfully blown in place, with support from Butner Public Safety for public notifications.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	49	0
Grids QA'd	0	0	0	0	49	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	1	Expended on 4/15/13
Detonating Cord, 80gr	50	Expended on 4/15/13
Jet Perforators, 32 G	2	Expended on 4/15/13

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13
155mm HE Projectile RC2_001		X			Demo 04/15/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	382.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite

Contract No: W912DY-10-D-0023 **Date:** **04/15/2013**

Task Order No: 0009

Rental Equipment					
Truck, pickup, ¾ ton	6	10	60	01/08/13	
Truck (Amec)	1	10	10	1/21/13	
Skidsteer	1	10	10	11/05/12	
EM-61	2	10	20	3/14/13	
Two-way Radios/Repeater	13	10	130	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	2	24	48	10/29/12	
Office Trailer	1	24	24	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	9	10	90	1/03/13	
White Detectors	4	10	40	3/20/13	
Camera, digital	2	10	20	3/18/13	
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	70	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	2	10	20	11/01/12	
Monitor, Acer, V273H	1	10	10	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

Photos: RC2_001 item found and destroyed.

Contract No: W912DY-10-D-0023 **Date:** **04/15/2013**

Task Order No: 0009

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature



Contract No: W912DY-10-D-0023 **Date:** **04/15/2013**

Task Order No: 0009



Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/16/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 2	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 1	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 1	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	2	10	40
UXO Technician II	5	10	100
UXO Technician I	5	10	100
Geophysicist	0	10	0
Subcontractors	2	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **04/16/2013**

Task Order No: 0009

Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	86
Grids DGM Reaq (Grids)	2	4	88
Grids Intrusive (Grids)	2	4	88
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	2	2	4
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	39.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	.07
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	4	5	91
Grids DGM MEC & Non-MEC (Grids)	5	11	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	6	9	21
Grids Intrusive (Grids)	6	9	21
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	1	1

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/16/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC2.
- HGL brush team cut and setup grids at RC2 and RC1.
- HGL Team 2 intrusively investigated grids at ARNG and RC2.
- HGL Team 1 intrusively investigated grids at RC2.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	5	0	5	0	54	0
Grids QA'd	5	0	5	0	54	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	0	
Detonating Cord, 80gr	0	
Jet Perforators, 32 G	0	

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13
155mm HE Projectile RC2_001		X			Demo 04/15/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	382.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	120	01/08/13	
Truck (Amec)	1	10	20	1/21/13	
Skidsteer	1	10	20	11/05/12	

Contract No: W912DY-10-D-0023 **Date:** **04/16/2013**

Task Order No: 0009

EM-61	2	10	40	3/14/13	
Two-way Radios/Repeater	13	10	260	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	2	24	96	10/29/12	
Office Trailer	1	24	48	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	9	10	180	1/03/13	
White Detectors	4	10	80	3/20/13	
Camera, digital	2	10	40	3/18/13	
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	2	10	40	11/01/12	
Monitor, Acer, V273H	1	10	20	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/16/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/17/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 2	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 1	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 1	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO	1	10	30
UXOQC	1	10	30
UXO Technician III	2	10	60
UXO Technician II	5	10	150
UXO Technician I	5	10	150
Geophysicist	0	10	0
Subcontractors	2	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **04/17/2013**

Task Order No: 0009

Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	86
Grids DGM Reaq (Grids)	0	4	88
Grids Intrusive (Grids)	0	4	88
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	3	5	7
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	39.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	.07
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	1	6	92
Grids DGM MEC & Non-MEC (Grids)	6	11	68
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	5	14	26
Grids Intrusive (Grids)	5	14	26
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	1	1

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/17/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC2.
- HGL brush team cut and setup grids at RC2 and RC1.
- HGL Team 1 intrusively investigated grids at RC2.
- HGL Team 2 intrusively investigated grids at ARNG.

During QC of the grid, the UXOQCS, accompanied by the OESS, identified an anomaly and requested the intrusive team revisit ARNG-013. During additional investigation of ARNG-013, team discovered a 3.25" rocket near anomaly 005. The rocket has been identified as the M2 Anti-Aircraft Target Rocket and is a piece of munitions debris. HGL will penetrate the nose of the rocket with a jet perforator before storing the item as MD for eventual disposal. Additional description of the item and a photograph are attached.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	5	0	54	0
Grids QA'd	0	0	5	0	54	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	0	
Detonating Cord, 80gr	0	
Jet Perforators, 32 G	0	

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13
155mm HE Projectile RC2_001		X			Demo 04/15/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	382.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **04/17/2013**

Task Order No: 0009

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	180	01/08/13	
Truck (Amec)	1	10	30	1/21/13	
Skidsteer	1	10	30	11/05/12	
EM-61	2	10	60	3/14/13	
Two-way Radios/Repeater	13	10	390	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	9	10	270	1/03/13	
White Detectors	4	10	120	3/20/13	
Camera, digital	2	10	60	3/18/13	
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	2	10	60	11/01/12	
Monitor, Acer, V273H	1	10	30	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

Contract No: W912DY-10-D-0023 **Date:** **04/17/2013**

Task Order No: 0009

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature



M2 Anti-Aircraft Target Rocket
ARNG-DGM-G013, #005
Munitions Debris

14. 3.25-in. Antiaircraft Target Rocket (M2).

approximately the speed of hostile aircraft but under surprise conditions of variable directions and angles, the 3.25-in. M2 target rocket was developed. It is launched from the M1 mobile projector, carried on a lightweight carriage fitted with two rubber tires and capable of firing at elevations from 0 to 60°. The total launcher weight is 750 lb. The range is approximately 1700 yd. at 530 ft./sec.

The target rocket shown in Fig. 194 is a thin-walled metal cylinder 34.3 in. long and 3.25 in. in diameter with an ogival head and three large equally spaced plywood fins at the tail to increase the rocket's size and resultant visibility, and its stability. These fins are assembled in the

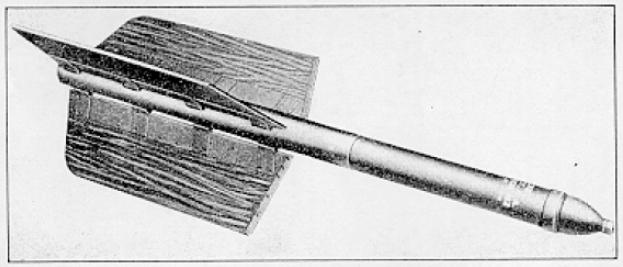

FIG. 194. 3.25-in. target rocket.

field. The rocket is 59.1 in. long and weighs 35.1 lb. The propelling charge is 3.2 lb. of $\frac{7}{8}$-in.-diameter stick powder, composed of $5\frac{1}{8}$-in. lengths to which shorter 2-in. or $\frac{3}{8}$-in. lengths are added to obtain proper weight. Without the additional shorter sticks, the main charge consists of three $5\frac{1}{8}$-in. lengths on each of six trap wires, or eighteen sticks total. The safe operating temperature limits are 30 to 120° F., and the burning time is 0.25 sec. at 30° F. The central nose cavity of the rocket contains igniting mixture, ignited by an electric squib in the front of the motor tube, and an auxiliary igniter bag is tied to the propellent powder sticks at the center of the motor tube. This target rocket has no explosive charge.

The disadvantages of such a rocket target are its small size and the fact that hits cannot be registered or recorded, but it makes a good target for such automatic weapons as the 20-mm., 37-mm., and 40-mm. antiaircraft guns and the caliber .50 machine gun.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/18/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Brush	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Brush	Amiotte, Jeremy
UXO Technician II	Recon	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Brush	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Recon	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO	1	10	40
UXOQC	1	10	40
UXO Technician III	2	10	80
UXO Technician II	5	10	200
UXO Technician I	5	10	200
Geophysicist	0	10	0
Subcontractors	2	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

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Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	86
Grids DGM Reaq (Grids)	0	4	88
Grids Intrusive (Grids)	0	4	88
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	7	12	14
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	1	1	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	.07
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	0	6	92
Grids DGM MEC & Non-MEC (Grids)	5	16	73
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	2	16	28
Grids Intrusive (Grids)	2	16	28
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	1	1

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/18/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC2.
- HGL brush teams cut and setup grids at RC1.
- HGL team 2 intrusively investigated grids at ARNG and RC2.
- Explosive venting operations were performed on two items to ensure they were free of energetic material. After a successful procedure, the M2 3.25" Target Rocket and M70 57mm AP-T Projectile were stored in a locked MD container. Photographs of the venting operation are attached.
- Conducted explosive magazine inventory/inspection.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	6	0	11	0	60	0
Grids QA'd	6	0	11	0	60	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	1	Consumed on 4/18/13
Detonating Cord, 80gr	5	Consumed on 4/18/13
Jet Perforators, 32 G	2	Consumed on 4/18/13
NONEL Leadline, 2500ft	1	Consumed on 4/18/13

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	21		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	13		X		Demo 04/18/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	50	50	432.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite

Contract No: W912DY-10-D-0023 **Date:** **04/18/2013**

Task Order No: 0009

Rental Equipment					
Truck, pickup, ¾ ton	6	10	240	01/08/13	
Truck (Amec)	1	10	40	1/21/13	
Skidsteer	1	10	40	11/05/12	
EM-61	2	10	80	3/14/13	
Two-way Radios/Repeater	13	10	520	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	96	11/1/12	
Storage Connex	1	24	96	3/06/13	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	9	10	360	1/03/13	
White Detectors	4	10	160	3/20/13	
Camera, digital	2	10	80	3/18/13	
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	7	10	280	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	2	10	80	11/01/12	
Monitor, Acer, V273H	1	10	40	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

ARNG_003, ARNG_004

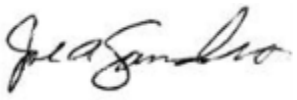
13. Continuation/other.

Contract No: W912DY-10-D-0023 **Date:** **04/18/2013**

Task Order No: 0009

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature





Contract No: W912DY-10-D-0023 **Date:** **04/18/2013**

Task Order No: 0009





Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/19/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1 / EM-61	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2 / EM-61	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO	1	10	50
UXOQC	1	10	50
UXO Technician III	2	10	100
UXO Technician II	5	10	250
UXO Technician I	5	10	250
Geophysicist	0	10	0
Subcontractors	2	10	100

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

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Task Order No: 0009

Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	3	3	89
Grids DGM Reaq (Grids)	0	4	88
Grids Intrusive (Grids)	0	4	88
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	4	16	18
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	1	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	.07
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	0	6	92
Grids DGM MEC & Non-MEC (Grids)	5	21	78
Grids Data Processing (Amec)	23	23	45
Grids DGM Reaq (Grids)	7	23	35
Grids Intrusive (Grids)	7	23	35
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	1	1

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/19/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC2.
- HGL Brush Teams cut and setup grids at RC1.
- HGL Team 1 and 2 intrusively investigated grids in RC2.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	11	0	60	0
Grids QA'd	0	0	11	0	60	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		
NONEL Leadline, 2500ft		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	21		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	13		X		Demo 04/18/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	20	70	452.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	300	01/08/13	
Truck (Amec)	1	10	50	1/21/13	

Contract No: W912DY-10-D-0023 **Date:** **04/19/2013**

Task Order No: 0009

Skidsteer	1	10	50	11/05/12	
EM-61	2	10	100	3/14/13	
Two-way Radios/Repeater	13	10	650	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	2	24	240	10/29/12	
Office Trailer	1	24	120	11/1/12	
Storage Connex	1	24	120	3/06/13	
Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	9	10	450	1/03/13	
White Detectors	4	10	200	3/20/13	
Camera, digital	2	10	100	3/18/13	
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	7	10	350	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	2	10	100	11/01/12	
Monitor, Acer, V273H	1	10	50	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/19/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/22/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1 / EM-61	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO	1	10	10
UXOQC	1	10	10
UXO Technician III	2	10	20
UXO Technician II	5	10	50
UXO Technician I	5	10	50
Geophysicist	0	10	0
Subcontractors	2	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **04/22/2013**

Task Order No: 0009

Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	3	3	89
Grids DGM Reaq (Grids)	0	0	88
Grids Intrusive (Grids)	0	0	88
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	6	6	24
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig (Miles Identified:0.10)	0	0	.07
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	2	2	94
Grids DGM MEC & Non-MEC (Grids)	7	7	85
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	4	4	39
Grids Intrusive (Grids)	7	7	42
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	1

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/22/2013

Task Order No: 0009

Summary of today's work activities:
● Amec collected DGM grids in RC2. ● HGL brush teams cut and setup grids at RC1. ● HGL Team 1 and 2 intrusively investigated grids in RC2. Grids RC2_069 and 023were collected analog (mag/dig) due to heavy vegetation which could not be cut.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	60	0
Grids QA'd	0	0	0	0	60	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		
NONEL Leadline, 2500ft		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	21		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	13		X		Demo 04/18/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	53	53	505.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	60	01/08/13	
Truck (Amec)	1	10	10	1/21/13	

Contract No: W912DY-10-D-0023 **Date:** **04/22/2013**

Task Order No: 0009

Skidsteer	1	10	10	11/05/12	
EM-61	2	10	20	3/14/13	
Two-way Radios/Repeater	13	10	130	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	2	24	48	10/29/12	
Office Trailer	1	24	24	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	9	10	90	1/03/13	
White Detectors	4	10	40	3/20/13	
Camera, digital	2	10	20	3/18/13	
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	70	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	2	10	20	11/01/12	
Monitor, Acer, V273H	1	10	10	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/22/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/23/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1 / EM-61	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	2	10	40
UXO Technician II	5	10	100
UXO Technician I	5	10	100
Geophysicist	0	10	0
Subcontractors	2	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

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Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	88
Grids Intrusive (Grids)	0	0	88
Surface Recon (Miles)	0	0	28.20
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	4	10	28
Grids DGM MEC & Non-MEC (Grids)	0	0	0
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig	.3	.3	.37
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	2	4	96
Grids DGM MEC & Non-MEC (Grids)	5	12	90
Grids Data Processing (Amec)	0	23	45
Grids DGM Reaq (Grids)	3	7	42
Grids Intrusive (Grids)	5	12	47
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	1

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/23/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC2.
- HGL brush teams cut and setup grids at RC1.
- HGL Team 1 and 2 intrusively investigated grids in RC2. Grids RC2_028, 096, and 101 were collected analog (mag/dig) due to heavy vegetation which could not be cut. In addition, Team 2 performed analog investigation at transects RC2_DGM500_027 and 028.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	60	0
Grids QA'd	0	0	0	0	60	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		
NONEL Leadline, 2500ft		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	21		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	13		X		Demo 04/18/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	53	505.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	120	01/08/13	
Truck (Amec)	1	10	20	1/21/13	

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Skidsteer	1	10	20	11/05/12	
EM-61	2	10	40	3/14/13	
Two-way Radios/Repeater	13	10	260	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	2	24	96	10/29/12	
Office Trailer	1	24	48	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	9	10	180	1/03/13	
White Detectors	4	10	80	3/20/13	
Camera, digital	2	10	40	3/18/13	
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	2	10	40	11/01/12	
Monitor, Acer, V273H	1	10	20	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

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14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/24/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1 / EM-61	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO	1	10	30
UXOQC	1	10	30
UXO Technician III	2	10	60
UXO Technician II	5	10	150
UXO Technician I	5	10	150
Geophysicist	0	10	0
Subcontractors	2	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

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Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	88
Grids Intrusive (Grids)	0	0	88
Surface Recon (Miles)	0	0	29.2
MEC Disposal	0	0	2

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	1	11	29
Grids DGM MEC & Non-MEC (Grids)	5	5	5
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig	0	.3	.37
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	5	9	101
Grids DGM MEC & Non-MEC (Grids)	0	12	90
Grids Data Processing (Amec)	0	23	45
Grids DGM Reaq (Grids)	6	13	48
Grids Intrusive (Grids)	10	22	57
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	1

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/24/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC1.
- HGL brush teams cut and setup grids at RC1 and RC2.
- HGL Team 1 and 2 intrusively investigated grids in RC2. Grids RC2_036, 038, 083, and 014 were collected analog (mag/dig) due to heavy vegetation which could not be cut.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	11	0	11	0	77	0
Grids QA'd	11	0	11	0	77	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		
NONEL Leadline, 2500ft		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	11	X			Demo 03/22/13
60mm HE Mortar ARNG-002	14	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	21		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	13		X		Demo 04/18/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	28	81	533.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	180	01/08/13	
Truck (Amec)	1	10	30	1/21/13	
Skidsteer	1	10	30	11/05/12	

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EM-61	2	10	60	3/14/13	
Two-way Radios/Repeater	13	10	390	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	9	10	270	1/03/13	
White Detectors	4	10	120	3/20/13	
Camera, digital	2	10	60	3/18/13	
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	2	10	60	11/01/12	
Monitor, Acer, V273H	1	10	30	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/24/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/25/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Brush	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	DGM	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Brush	Richardson, Charles
UXO Technician I	DGM	Kaliszewski, Coty
UXO Technician I	Team 2	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO	1	10	40
UXOQC	1	10	40
UXO Technician III	2	10	80
UXO Technician II	5	10	200
UXO Technician I	5	10	200
Geophysicist	0	10	0
Subcontractors	2	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

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Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	1	1	89
Grids Intrusive (Grids)	1	1	89
Surface Recon (Miles)	0	0	29.2
MEC Disposal	1	1	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.6
Grids Brush Clearing (Grids)	6	17	35
Grids DGM MEC & Non-MEC (Grids)	4	9	9
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	0
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.3
Transect Mag & Dig	0	.3	.37
Transect Data Processing (Amec)	0	0	65.03
Grids Brush Clearing (Grids)	0	9	101
Grids DGM MEC & Non-MEC (Grids)	0	12	90
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	0	13	48
Grids Intrusive (Grids)	1	23	58
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	1

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/25/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC1.
- HGL brush teams cut and setup grids at RC1.
- HGL Team 2 intrusively investigated grids at ARNG and RC2. Grids RC2_052 was collected analog (mag/dig) due to heavy vegetation which could not be cut. All grids within the ARNG MRS were completed today.
- HGL performed demo operations to destroy four Mk II Hand Grenades discovered while investigating grid ARNG_082. See photographs attached.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	11	0	77	0
Grids QA'd	0	0	11	0	77	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	1	Consumed 4/25/13
Detonating Cord, 80gr	75ft	Consumed 4/25/13
Jet Perforators, 32 G	4	Consumed 4/25/13

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_021		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	38	119	571.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **04/25/2013**

Task Order No: 0009

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	240	01/08/13	
Truck (Amec)	1	10	40	1/21/13	
Skidsteer	1	10	40	11/05/12	
EM-61	2	10	80	3/14/13	
Two-way Radios/Repeater	13	10	520	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	96	11/1/12	
Storage Connex	1	24	96	3/06/13	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	9	10	360	1/03/13	
White Detectors	4	10	160	3/20/13	
Camera, digital	2	10	80	3/18/13	
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	7	10	280	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	2	10	80	11/01/12	
Monitor, Acer, V273H	1	10	40	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

Photos: ARNG_005, 006, 007, 008

Contract No: W912DY-10-D-0023 **Date:** **04/25/2013**

Task Order No: 0009

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature



Contract No: W912DY-10-D-0023 **Date:** **04/25/2013**

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Site Daily Production Report

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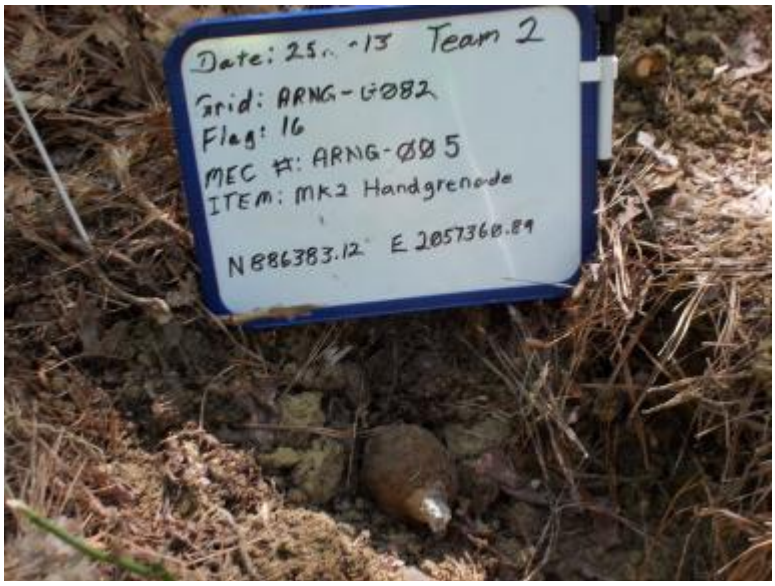
Task Order No: 0009



Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/26/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	DGM	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	DGM	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO	1	10	50
UXOQC	1	10	50
UXO Technician III	2	10	100
UXO Technician II	5	10	250
UXO Technician I	5	10	250
Geophysicist	0	10	0
Subcontractors	2	10	100

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.23*
Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-	0	0	89

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MEC (Grids)			
Grids Data Processing (Amec)	0	3	89
Grids DGM Reaq (Grids)	0	1	89
Grids Intrusive (Grids)	0	1	89
Surface Recon (Miles)	0	0	29.2
MEC Disposal	0	1	3

**Updated based on Geophysicist review of subcontractor datasets (amount changed by 0.06 miles).*

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9*
Grids Brush Clearing (Grids)	3	20	38
Grids DGM MEC & Non-MEC (Grids)	5	14	14
Grids Data Processing (Amec)	9	9	9
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	2	2	2
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

**Updated based on Geophysicist review of subcontractor datasets (amount changed by 0.3 miles).*

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0.3	.37
Transect Data Processing (Amec)	0	0	66.09*
Grids Brush Clearing (Grids)	0	9	101
Grids DGM MEC & Non-MEC (Grids)	0	12	90
Grids Data Processing (Amec)	49	49	94
Grids DGM Reaq (Grids)	4	17	52
Grids Intrusive (Grids)	4	27	62
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	1

**Updated based on HGL Geophysicist review of subcontractor datasets (amount increased by ~1.0 miles).*

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/26/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC1.
- HGL brush teams cut and setup grids at RC1.
- HGL Team 2 intrusively investigated grids at RC2.
- HGL Team 1 intrusively investigated grids at RC1. Grids RC2_036 and 017 were collected analog (mag/dig) due to heavy vegetation which could not be cut.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	11	0	77	0
Grids QA'd	0	0	11	0	77	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_021		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	65	184	636.7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/26/2013

Task Order No: 0009

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	300	01/08/13	
Truck (Amec)	1	10	50	1/21/13	
Skidsteer	1	10	50	11/05/12	
EM-61	2	10	100	3/14/13	
Two-way Radios/Repeater	13	10	650	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	2	24	240	10/29/12	
Office Trailer	1	24	120	11/1/12	
Storage Connex	1	24	120	3/06/13	
Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	9	10	450	1/03/13	
White Detectors	4	10	200	3/20/13	
Camera, digital	2	10	100	3/18/13	
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	7	10	350	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	2	10	100	11/01/12	
Monitor, Acer, V273H	1	10	50	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/26/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/29/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Brush	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	DGM	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Brush	Richardson, Charles
UXO Technician I	DGM	Kaliszewski, Coty
UXO Technician I	Team 2	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason (Sick)
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO	1	10	10
UXOQC	1	10	10
UXO Technician III	2	10	20
UXO Technician II	5	10	50
UXO Technician I	4	10	40
Geophysicist	0	10	0
Subcontractors	2	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

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Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.2
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	3	3	41
Grids DGM MEC & Non-MEC (Grids)	9	9	23
Grids Data Processing (Amec)	0	0	9
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	0	0	2
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	0.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	101
Grids DGM MEC & Non-MEC (Grids)	0	0	90
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	5	5	57
Grids Intrusive (Grids)	5	5	67
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	1

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/29/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC1.
- After completing the IVS, HGL Geo Team 1 formed to assist with DGM collection of grids in RC1.
- HGL brush team cut and setup grids at RC1.
- HGL Team 2 intrusively investigated grids at RC2.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	3	0	3	0	77	0
Grids QA'd	3	0	3	0	77	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_021		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	57.3	57.3	694
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite

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Task Order No: 0009

Rental Equipment					
Truck, pickup, ¾ ton	6	10	60	01/08/13	
Truck (Amec)	1	10	10	1/21/13	
Skidsteer	1	10	10	11/05/12	
EM-61	2	10	20	3/14/13	
Two-way Radios/Repeater	13	10	130	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	2	24	48	10/29/12	
Office Trailer	1	24	24	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	9	10	90	1/03/13	
White Detectors	4	10	40	3/20/13	
Camera, digital	2	10	20	3/18/13	
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	70	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	2	10	20	11/01/12	
Monitor, Acer, V273H	1	10	10	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

Site Daily Production Report

Contract No:	W912DY-10-D-0023	**Date:**	**04/29/2013**
Task Order No:	0009		

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/29/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/30/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Brush	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	DGM	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Brush	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Brush	Richardson, Charles
UXO Technician I	DGM	Kaliszewski, Coty
UXO Technician I	Team 2	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason (Sick)
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	2	10	40
UXO Technician II	5	10	100
UXO Technician I	5	10	90
Geophysicist	0	10	0
Subcontractors	2	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **04/30/2013**

Task Order No: 0009

Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	7	10	48
Grids DGM MEC & Non-MEC (Grids)	5	14	28
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	3	3	5
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	101
Grids DGM MEC & Non-MEC (Grids)	1	1	91
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	0	5	57
Grids Intrusive (Grids)	0	5	67
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	1

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 04/30/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC1.
- HGL Geo Team collected grids in RC2.
- HGL Brush Team cut and setup grids at RC1.
- HGL Team 2 intrusively investigated analog grids at RC1.
- HGL QC continued seeding grids.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	3	0	77	0
Grids QA'd	0	0	3	0	77	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_021		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	57.3	694
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite

Contract No: W912DY-10-D-0023 **Date:** **04/30/2013**

Task Order No: 0009

Rental Equipment					
Truck, pickup, ¾ ton	6	10	120	01/08/13	
Truck (Amec)	1	10	20	1/21/13	
Skidsteer	1	10	20	11/05/12	
EM-61	2	10	40	3/14/13	
Two-way Radios/Repeater	13	10	260	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	2	24	96	10/29/12	
Office Trailer	1	24	48	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	9	10	180	1/03/13	
White Detectors	4	10	80	3/20/13	
Camera, digital	2	10	40	3/18/13	
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	2	10	40	11/01/12	
Monitor, Acer, V273H	1	10	20	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

Site Daily Production Report

Contract No:	W912DY-10-D-0023	**Date:**	**04/30/2013**
Task Order No:	0009		

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **04/30/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/01/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 1	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 2	Okino, Cheryl
UXO Technician I	Team 1	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO	1	10	30
UXOQC	1	10	30
UXO Technician III	2	10	60
UXO Technician II	5	10	150
UXO Technician I	5	10	140
Geophysicist	0	10	0
Subcontractors	2	10	60

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **05/01/2013**

Task Order No: 0009

Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	5	15	53
Grids DGM MEC & Non-MEC (Grids)	5	19	33
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	0
Grids Intrusive (Grids)	1	4	6
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	101
Grids DGM MEC & Non-MEC (Grids)	0	1	91
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	11	16	68
Grids Intrusive (Grids)	11	16	78
Surface Recon (Miles)	0	0	48.73
MEC Disposal	1	1	2

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/01/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC1.
- HGL Brush Team cut and setup grids at RC1.
- HGL Teams 1 and 2 intrusively investigated grids at RC2. Team 2 located a M63 37mm TP projectile in grid RC2_019 at Philip Robbins property. Demo operations were performed and the projectile was successfully destroyed. See attached photographs.
- HGL QC continued seeding grids.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	3	0	77	0
Grids QA'd	0	0	3	0	77	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	1	Consumed 5/1/13
Detonating Cord, 80gr	5	Consumed 5/1/13
Jet Perforators, 32 G	1	Consumed 5/1/13

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_021		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	37	94.3	731
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/01/2013

Task Order No: 0009

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	180	01/08/13	
Truck (Amec)	1	10	30	1/21/13	
Skidsteer	1	10	30	11/05/12	
EM-61	2	10	60	3/14/13	
Two-way Radios/Repeater	13	10	390	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	9	10	270	1/03/13	
White Detectors	4	10	120	3/20/13	
Camera, digital	2	10	60	3/18/13	
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	2	10	60	11/01/12	
Monitor, Acer, V273H	1	10	30	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

Photo: RC2_002

13. Continuation/other.

Contract No: W912DY-10-D-0023 **Date:** **05/01/2013**

Task Order No: 0009

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature



Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/02/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 1	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 2	Okino, Cheryl
UXO Technician I	Team 1	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO	1	10	40
UXOQC	1	10	40
UXO Technician III	2	10	80
UXO Technician II	5	10	200
UXO Technician I	5	10	190
Geophysicist	0	10	0
Subcontractors	2	10	80

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **05/02/2013**

Task Order No: 0009

Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	5	20	58
Grids DGM MEC & Non-MEC (Grids)	6	25	39
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	2	2	2
Grids Intrusive (Grids)	2	6	8
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	0.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	101
Grids DGM MEC & Non-MEC (Grids)	0	1	91
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	6	22	74
Grids Intrusive (Grids)	6	22	84
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	1	2

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/02/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC1.
- HGL Brush Team cut and setup grids at RC1.
- HGL Teams 1 and 2 intrusively investigated grids at RC1 and RC2.
- HGL QC continued seeding grids.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	1	0	4	0	78	0
Grids QA'd	1	0	4	0	78	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_021		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	38	132.3	769
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/02/2013

Task Order No: 0009

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	240	01/08/13	
Truck (Amec)	1	10	40	1/21/13	
Skidsteer	1	10	40	11/05/12	
EM-61	2	10	80	3/14/13	
Two-way Radios/Repeater	13	10	520	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	96	11/1/12	
Storage Connex	1	24	96	3/06/13	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	1	10	40	1/07/13	
Owned Equipment					
Schonstedt	9	10	360	1/03/13	
White Detectors	4	10	160	3/20/13	
Camera, digital	2	10	80	3/18/13	
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	7	10	280	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	2	10	80	11/01/12	
Monitor, Acer, V273H	1	10	40	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/02/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/03/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie (Sick)
UXO Technician II	Team 2	Bullock, Jack
UXO Technician II	Team 1	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 2	Okino, Cheryl
UXO Technician I	Team 1	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO	1	10	50
UXOQC	1	10	50
UXO Technician III	2	10	100
UXO Technician II	4	10	240
UXO Technician I	5	10	240
Geophysicist	0	10	0
Subcontractors	2	10	100

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29

Contract No: W912DY-10-D-0023 **Date:** **05/03/2013**

Task Order No: 0009

Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	2	22	60
Grids DGM MEC & Non-MEC (Grids)	2	27	41
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	6	8	8
Grids Intrusive (Grids)	6	12	14
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	101
Grids DGM MEC & Non-MEC (Grids)	0	1	91
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	1	23	75
Grids Intrusive (Grids)	1	23	85
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	1	2

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/03/2013

Task Order No: 0009

Summary of today's work activities:

- Amec re-collected DGM transects at RC2 in areas where data was previously identified as being of poor quality.
- HGL Geo collected DGM grids at RC1, Morris property
- HGL Brush Team cut and setup grids at RC1.
- HGL Teams 1 and 2 intrusively investigated grids at RC1.
- HGL QC accompanied the OESS to QA check investigated grids in RC1 and RC2.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	6	0	10	0	84	0
Grids QA'd	6	0	10	0	84	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_021		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	38	170.3	807
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/03/2013

Task Order No: 0009

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	300	01/08/13	
Truck (Amec)	1	10	50	1/21/13	
Skidsteer	1	10	50	11/05/12	
EM-61	2	10	100	3/14/13	
Two-way Radios/Repeater	13	10	650	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	2	24	240	10/29/12	
Office Trailer	1	24	120	11/1/12	
Storage Connex	1	24	120	3/06/13	
Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	1	10	50	1/07/13	
Owned Equipment					
Schonstedt	9	10	450	1/03/13	
White Detectors	4	10	200	3/20/13	
Camera, digital	2	10	100	3/18/13	
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	7	10	350	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	2	10	100	11/01/12	
Monitor, Acer, V273H	1	10	50	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/03/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/06/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Geo	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Team 2	Zow, Woody
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Geo	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO	1	10	10
UXOQC	1	10	10
UXO Technician III	2	8.5	17
UXO Technician II	4	8.5	34
UXO Technician I	5	8.5	42.5
Geophysicist	0	10	0
Subcontractors	2	8.5	17

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/06/2013**

Task Order No: 0009

Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	0	0	60
Grids DGM MEC & Non-MEC (Grids)	6	6	47
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	2	2	10
Grids Intrusive (Grids)	2	2	16
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	101
Grids DGM MEC & Non-MEC (Grids)	0	0	91
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	3	3	78
Grids Intrusive (Grids)	3	3	88
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	2

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/06/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC1.
- HGL Geo collected DGM grids at RC1.
- HGL Teams 1 and 2 intrusively investigated grids at RC1 and RC2.
- HGL QC continued seeding DGM grids.
- Intrusive operations were halted due to severe weather.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	84	0
Grids QA'd	0	0	0	0	84	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_021		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	807
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/06/2013

Task Order No: 0009

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	60	01/08/13	
Truck (Amec)	1	10	10	1/21/13	
Skidsteer	1	10	10	11/05/12	
EM-61	2	10	20	3/14/13	
Two-way Radios/Repeater	13	10	130	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	2	24	48	10/29/12	
Office Trailer	1	24	24	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	1	10	10	1/07/13	
Owned Equipment					
Schonstedt	9	10	90	1/03/13	
White Detectors	4	10	40	3/20/13	
Camera, digital	2	10	20	3/18/13	
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	70	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	2	10	20	11/01/12	
Monitor, Acer, V273H	1	10	10	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/06/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/07/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Geo	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Team 2	Zow, Woody
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Geo	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	2	10	37
UXO Technician II	4	10	74
UXO Technician I	5	10	92.5
Geophysicist	0	10	0
Subcontractors	2	10	37

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/07/2013**

Task Order No: 0009

Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	6	6	66
Grids DGM MEC & Non-MEC (Grids)	11	17	58
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	5	7	15
Grids Intrusive (Grids)	5	7	21
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	101
Grids DGM MEC & Non-MEC (Grids)	0	0	91
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	0	3	78
Grids Intrusive (Grids)	0	3	88
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	2

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/07/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected DGM grids in RC1.
- HGL Geo collected DGM grids at RC1.
- HGL Team 2 intrusively investigated grids at RC1 and RC2.
- HGL QC continued seeding grids and accompanied the OESS to QA grids.
- HGL investigated the site of the suspect 37mm projectile. Grid RC2_114 (50'x50') was established and centered on the coordinates provided by the ESTCP Pilot Study. 45 anomalies were investigated. One of the anomalies proved to be an expended M63 Mod 1, 37mm TP projectile. The coordinates in the photo are recorded from a Trimble Juno which does not possess sub-meter accuracy.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	3	0	3	0	87	0
Grids QA'd	3	0	3	0	87	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_021		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	30	30	837
Other Debris (OD)	-	-	-

Contract No: W912DY-10-D-0023 **Date:** **05/07/2013**

Task Order No: 0009

Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	120	01/08/13	
Truck (Amec)	1	10	20	1/21/13	
Skidsteer	1	10	20	11/05/12	
EM-61	2	10	40	3/14/13	
Two-way Radios/Repeater	13	10	260	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	2	24	96	10/29/12	
Office Trailer	1	24	48	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	1	10	20	1/07/13	
Owned Equipment					
Schonstedt	9	10	180	1/03/13	
White Detectors	4	10	80	3/20/13	
Camera, digital	2	10	40	3/18/13	
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	2	10	40	11/01/12	
Monitor, Acer, V273H	1	10	20	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

See photograph of M63 Mod 1, 37mm TP projectile.

13. Continuation/other.

N/A

Contract No: W912DY-10-D-0023 **Date:** **05/07/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature



Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/08/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Brush	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Geo	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Brush	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Brush	Richardson, Charles
UXO Technician I	Geo	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO	1	10	30
UXOQC	1	10	30
UXO Technician III	2	10	57
UXO Technician II	4	10	114
UXO Technician I	5	10	142.5
Geophysicist	0	10	0
Subcontractors	2	10	57

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/08/2013**

Task Order No: 0009

Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	2	8	68
Grids DGM MEC & Non-MEC (Grids)	3	20	61
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	1	8	16
Grids Intrusive (Grids)	1	8	22
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	6	6	107
Grids DGM MEC & Non-MEC (Grids)	0	0	91
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	0	3	78
Grids Intrusive (Grids)	0	3	88
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	2

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/08/2013

Task Order No: 0009

Summary of today's work activities:

- Amec re-collected DGM transects.
- HGL Geo collected DGM grids at RC1.
- HGL Brush Teams cut and setup grids in RC1.
- HGL Team 2 intrusively investigated grid RC1_018.
- HGL QC continued seeding grids.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	3	0	87	0
Grids QA'd	0	0	3	0	87	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	10	40	847
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/08/2013

Task Order No: 0009

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	180	01/08/13	
Truck (Amec)	1	10	30	1/21/13	
Skidsteer	1	10	30	11/05/12	
EM-61	2	10	60	3/14/13	
Two-way Radios/Repeater	13	10	390	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	1	10	30	1/07/13	
Owned Equipment					
Schonstedt	9	10	270	1/03/13	
White Detectors	4	10	120	3/20/13	
Camera, digital	2	10	60	3/18/13	
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	2	10	60	11/01/12	
Monitor, Acer, V273H	1	10	30	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

Site Daily Production Report

Contract No:	W912DY-10-D-0023	**Date:**	**05/08/2013**
Task Order No:	0009		

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/09/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie (Not on site)
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Team 1	Zow, Woody
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO	1	10	40
UXOQC	1	10	40
UXO Technician III	2	10	77
UXO Technician II	3	10	144
UXO Technician I	5	10	192.5
Geophysicist	0	10	0
Subcontractors	2	10	77

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/09/2013**

Task Order No: 0009

Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	0	8	68
Grids DGM MEC & Non-MEC (Grids)	1	21	62
Grids Data Processing (Amec)		0	0
Grids DGM Reaq (Grids)	10	18	26
Grids Intrusive (Grids)	10	18	32
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	1	7	108
Grids DGM MEC & Non-MEC (Grids)	3	3	94
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	0	3	78
Grids Intrusive (Grids)	1	4	89
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	2

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/09/2013**

Task Order No: 0009

Summary of today's work activities:

- Amec re-collected DGM transects and grids in RC1 and RC2.
- HGL Teams 1 and 2 intrusively investigated DGM grids in RC1 and RC2.
- HGL QC continued seeding grids.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	3	0	87	0
Grids QA'd	0	0	3	0	87	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	55	95	902
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite

Contract No: W912DY-10-D-0023 **Date:** **05/09/2013**

Task Order No: 0009

Rental Equipment					
Truck, pickup, ¾ ton	6	10	240	01/08/13	
Truck (Amec)	1	10	40	1/21/13	
Skidsteer	1	10	40	11/05/12	
EM-61	2	10	80	3/14/13	
Two-way Radios/Repeater	13	10	520	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	96	11/1/12	
Storage Connex	1	24	96	3/06/13	
Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	0	10	30	1/07/13	5/08/13
Owned Equipment					
Schonstedt	9	10	360	1/03/13	
White Detectors	4	10	160	3/20/13	
Camera, digital	2	10	80	3/18/13	
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	7	10	280	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	2	10	80	11/01/12	
Monitor, Acer, V273H	1	10	40	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

Site Daily Production Report

Contract No:	W912DY-10-D-0023	**Date:**	**05/09/2013**
Task Order No:	0009		

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/10/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Geo	Amiotte, Jeremy
UXO Technician II	Team 1	Hood, Casie (Not on site)
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Team 1	Zow, Woody
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Geo	Kaliszewski, Coty
UXO Technician I	Team 2	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Geo / Amec	DGM	Beddingfield, Jeff
UXO Technician II / Amec	DGM	Koetje, Donald

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO	1	10	50
UXOQC	1	10	50
UXO Technician III	2	10	97
UXO Technician II	3	10	174
UXO Technician I	5	10	242.5
Geophysicist	0	10	0
Subcontractors	2	10	97

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	.47	.47	.47
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/10/2013**

Task Order No: 0009

Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	0	8	68
Grids DGM MEC & Non-MEC (Grids)	0	21	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	6	24	32
Grids Intrusive (Grids)	6	24	38
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	1	8	109
Grids DGM MEC & Non-MEC (Grids)	3	6	97
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	2	5	80
Grids Intrusive (Grids)	2	6	91
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	2

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/10/2013

Task Order No: 0009

Summary of today's work activities:

- Amec collected grids in RC2, packed up equipment, and demobilized.
- HGL Geo 1 collected grids in RC2.
- HGL Team 1 intrusively investigate analog transects ARNG_ANALOG_001 – 008 to define the extent of grenade training range at grid ARNG_082 (see attached diagram)
- HGL Team 2 intrusively investigated DGM grids in RC1 and RC2.
- HGL QC'd analog transects.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	3	0	87	0
Grids QA'd	0	0	3	0	87	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	40	135	942
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/10/2013**

Task Order No: 0009

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	300	01/08/13	
Truck (Amec)	1	10	50	1/21/13	
Skidsteer	1	10	50	11/05/12	
EM-61	2	10	100	3/14/13	
Two-way Radios/Repeater	13	10	650	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	120	11/1/12	
Storage Connex	1	24	120	3/06/13	
Port-a-potties	3	10	180	11/1/12	
Truck mounted fuel tank	0	10	30	1/07/13	5/08/13
Owned Equipment					
Schonstedt	9	10	450	1/03/13	
White Detectors	4	10	200	3/20/13	
Camera, digital	2	10	100	3/18/13	
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	7	10	350	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	2	10	100	11/01/12	
Monitor, Acer, V273H	1	10	50	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

Grenade Range diagram

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/10/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/13/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Team 1	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO	1	10	10
UXOQC	1	10	10
UXO Technician III	2	10	20
UXO Technician II	4	10	40
UXO Technician I	5	10	50
Geophysicist	0	10	0
Subcontractors	0	10	0

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	.47
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/13/2013**

Task Order No: 0009

Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	10	10	78
Grids DGM MEC & Non-MEC (Grids)	0	0	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	32
Grids Intrusive (Grids)	10	10	48
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	109
Grids DGM MEC & Non-MEC (Grids)	0	0	97
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	0	0	80
Grids Intrusive (Grids)	0	0	91
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	2

Summary of today's work activities:

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/13/2013

Task Order No: 0009

- HGL Teams 1 and 2 intrusively investigated analog grids in RC1 at the Gantt property.
- HGL QC continued seeding grids.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	87	0
Grids QA'd	0	0	0	0	87	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	28	28	970
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					

Contract No: W912DY-10-D-0023 **Date:** **05/13/2013**

Task Order No: 0009

Truck, pickup, ¾ ton	6	10	60	01/08/13	
Truck (Amec)	0	10	0	1/21/13	5/10/13
Skidsteer	1	10	10	11/05/12	
EM-61	2	10	20	3/14/13	
Two-way Radios/Repeater	13	10	130	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	2	24	48	10/29/12	
Office Trailer	1	24	24	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	0	10	0	1/07/13	5/08/13
Owned Equipment					
Schonstedt	9	10	90	1/03/13	
White Detectors	4	10	40	3/20/13	
Camera, digital	2	10	20	3/18/13	
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	70	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	2	10	20	11/01/12	
Monitor, Acer, V273H	1	10	10	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/13/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/14/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Team 1	Zow, Woody
UXO Technician I	Brush	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Soil Sampling Technician	Subcontractor	Michael Cox

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	2	10	40
UXO Technician II	4	10	80
UXO Technician I	5	10	100
Geophysicist	0	10	0
Subcontractors	1	10	10

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	.47
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/14/2013**

Task Order No: 0009

MEC (Grids)			
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	9	19	87
Grids DGM MEC & Non-MEC (Grids)	0	0	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	0	32
Grids Intrusive (Grids)	9	19	57
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	1	1	110
Grids DGM MEC & Non-MEC (Grids)	0	0	97
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	0	0	80
Grids Intrusive (Grids)	1	1	92
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	2

Summary of today's work activities:

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/14/2013

Task Order No: 0009

- HGL Teams 1 and 2 intrusively investigated analog grids in RC1 at the Gantt property.
- HGL QC continued seeding grids.
- HGL QC accompanied OESS to QA check analog and DGM grids in RC1 and RC2.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	6	0	6	0	93	0
Grids QA'd	6	0	6	0	93	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	15	43	985
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					

Contract No: W912DY-10-D-0023 **Date:** **05/14/2013**

Task Order No: 0009

Truck, pickup, ¾ ton	6	10	120	01/08/13	
Truck (Amec)	0	10	0	1/21/13	5/10/13
Skidsteer	1	10	20	11/05/12	
EM-61	2	10	40	3/14/13	
Two-way Radios/Repeater	13	10	260	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	2	24	96	10/29/12	
Office Trailer	1	24	48	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	0	10	0	1/07/13	5/08/13
Owned Equipment					
Schonstedt	9	10	180	1/03/13	
White Detectors	4	10	80	3/20/13	
Camera, digital	2	10	40	3/18/13	
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	2	10	40	11/01/12	
Monitor, Acer, V273H	1	10	20	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/14/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/15/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Geo	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Escort	Zow, Woody
UXO Technician I	Team 2	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Geo	Kaliszewski, Coty
UXO Technician I	Team 2	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Cox Environmental	Soil Sampling	Cox, Michael

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO	1	10	30
UXOQC	1	10	30
UXO Technician III	2	10	60
UXO Technician II	4	10	120
UXO Technician I	5	10	150
Geophysicist	0	10	0
Subcontractors	1	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	.47
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/15/2013**

Task Order No: 0009

MEC (Grids)			
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles Identified:0.5)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	2	21	89
Grids DGM MEC & Non-MEC (Grids)	0	0	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	5	5	37
Grids Intrusive (Grids)	5	24	62
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	2

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	3	4	113
Grids DGM MEC & Non-MEC (Grids)	3	3	100
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	1	1	81
Grids Intrusive (Grids)	1	2	93
Surface Recon (Miles)	0	0	48.73
MEC Disposal	1	1	3

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/15/2013

Task Order No: 0009

Summary of today's work activities:

- HGL Team 2 intrusively investigated DGM grids at RC1 and RC2. Team 2 located a M63 Mod 1 37mm TP projectile in grid RC2_106 adjacent to Uzzle Rd on the Rouse property. Demo operations were performed and the item was destroyed.
- HGL Brush Team completed the cut and setup the last grids in RC1 and RC2.
- HGL Geo Team collected the last grids in RC1 and RC2.
- HGL QC seeded the last grids in RC1 and RC2.
- HGL QC accompanied OESS to QA check DGM grids in RC2.
- Cox Environmental collected soil samples at ARNG.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	2	0	8	0	95	0
Grids QA'd	2	0	8	0	95	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	1	Consumed on 5/15/2013
Detonating Cord, 80gr	5'	Consumed on 5/15/2013
Jet Perforators, 32 G	1	Consumed on 5/15/2013

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13
37mm TP Projectile RC2-003	RC2_106	X			Demo 05/15/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	29	72	1014

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Task Order No: 0009

Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	180	01/08/13	
Truck (Amec)	0	10	0	1/21/13	5/10/13
Skidsteer	1	10	30	11/05/12	
EM-61	2	10	60	3/14/13	
Two-way Radios/Repeater	13	10	390	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	0	10	0	1/07/13	5/08/13
Owned Equipment					
Schonstedt	9	10	270	1/03/13	
White Detectors	4	10	120	3/20/13	
Camera, digital	2	10	60	3/18/13	
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	2	10	60	11/01/12	
Monitor, Acer, V273H	1	10	30	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

Photo: RC2_003

13. Continuation/other.

Site Daily Production Report

Contract No:	W912DY-10-D-0023	**Date:**	**05/15/2013**
Task Order No:	0009		

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature



Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/16/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Escort	Zow, Woody
UXO Technician I	Team 1	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Cox Environmental	Soil Sampling	Cox, Michael

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	40
UXOSO	1	10	40
UXOQC	1	10	40
UXO Technician III	2	10	80
UXO Technician II	4	10	160
UXO Technician I	5	10	200
Geophysicist	0	10	0
Subcontractors	1	10	30

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	.47
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-	0	0	89

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Task Order No: 0009

MEC (Grids)			
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	0	21	89
Grids DGM MEC & Non-MEC (Grids)	0	0	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	10	15	47
Grids Intrusive (Grids)	10	34	72
Surface Recon (Miles)	0	0	40.03
MEC Disposal	1	1	3

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	4	113
Grids DGM MEC & Non-MEC (Grids)	0	3	100
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	4	5	85
Grids Intrusive (Grids)	4	6	97
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	1	3

Summary of today's work activities:

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/16/2013

Task Order No: 0009

- HGL Teams 1 and 2 intrusively investigated DGM grids at RC1 and RC2. Team 1 located a M6 2.36" Rocket warhead in grid RC1_086 adjacent to Isham Chambers Rd on the Poyet property. Demo operations were performed and the item was destroyed.
- HGL QC accompanied the OESS to QA check DGM grids in RC1 and RC2.
- Cox Environmental collected soil samples at ARNG and RC2.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	10	0	18	0	105	0
Grids QA'd	10	0	18	0	105	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	1	Consumed on 5/16/2013
Detonating Cord, 80gr	5'	Consumed on 5/16/2013
Jet Perforators, 32 G	1	Consumed on 5/16/2013

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13
37mm TP Projectile RC2-003	RC2_106	X			Demo 05/15/13
2.36" Rocket Warhead	RC1_086	X			Demo 05/16/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	25	97	1039
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/16/2013

Task Order No: 0009

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	240	01/08/13	
Truck (Amec)	0	10	0	1/21/13	5/10/13
Skidsteer	1	10	40	11/05/12	
EM-61	2	10	80	3/14/13	
Two-way Radios/Repeater	13	10	520	1/10/13	
PDA/GPS	3	10	120	11/15/12	
Explosives Storage Magazine	2	24	192	10/29/12	
Office Trailer	1	24	96	11/1/12	
Storage Connex	1	24	96	3/06/13	
Port-a-potties	3	10	120	11/1/12	
Truck mounted fuel tank	0	10	0	1/07/13	5/08/13
Owned Equipment					
Schonstedt	9	10	360	1/03/13	
White Detectors	4	10	160	3/20/13	
Camera, digital	2	10	80	3/18/13	
Lightning detector	1	10	40	11/08/12	
PDA/GPS	2	10	80	11/01/12	
First aid kit	7	10	280	11/01/12	
Team gear	2	10	80	11/01/12	
Demo kit/RFD	1	10	40	11/07/12	
Site Safety Officer Kit	1	10	40	11/07/12	
Computer, laptop	2	10	80	12/18/12	
Printer/copier/scanner/fax	2	10	80	11/01/12	
Monitor, Acer, V273H	1	10	40	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

Photo: RC1_004

13. Continuation/other.

N/A

Contract No: W912DY-10-D-0023 **Date:** **05/16/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature



Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/17/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Escort	Zow, Woody
UXO Technician I	Team 1	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Cox Environmental	Soil Sampling	Cox, Michael

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	50
UXOSO	1	10	50
UXOQC	1	10	50
UXO Technician III	2	10	100
UXO Technician II	4	10	200
UXO Technician I	5	10	250
Geophysicist	0	10	0
Subcontractors	1	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	.47
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89

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Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	0	21	89
Grids DGM MEC & Non-MEC (Grids)	0	0	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	12	27	59
Grids Intrusive (Grids)	12	46	84
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	1	3

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	4	113
Grids DGM MEC & Non-MEC (Grids)	0	3	100
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	2	7	87
Grids Intrusive (Grids)	2	8	99
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	1	3

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/17/2013

Task Order No: 0009

Summary of today's work activities:

- HGL Teams 1 and 2 intrusively investigated DGM grids at RC1 and RC2.
- HGL QC accompanied the OESS to QA check DGM grids at RC1 and RC2.
- Cox Environmental collected soil samples at RC2.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	4	0	22	0	109	0
Grids QA'd	4	0	22	0	109	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13
37mm TP Projectile RC2-003	RC2_106	X			Demo 05/15/13
2.36" Rocket Warhead	RC1_086	X			Demo 05/16/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	97	1039
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/17/2013

Task Order No: 0009

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	300	01/08/13	
Truck (Amec)	0	10	0	1/21/13	5/10/13
Skidsteer	1	10	50	11/05/12	
EM-61	2	10	100	3/14/13	
Two-way Radios/Repeater	13	10	650	1/10/13	
PDA/GPS	3	10	150	11/15/12	
Explosives Storage Magazine	2	24	240	10/29/12	
Office Trailer	1	24	120	11/1/12	
Storage Connex	1	24	120	3/06/13	
Port-a-potties	3	10	150	11/1/12	
Truck mounted fuel tank	0	10	0	1/07/13	5/08/13
Owned Equipment					
Schonstedt	9	10	450	1/03/13	
White Detectors	4	10	200	3/20/13	
Camera, digital	2	10	100	3/18/13	
Lightning detector	1	10	50	11/08/12	
PDA/GPS	2	10	100	11/01/12	
First aid kit	7	10	350	11/01/12	
Team gear	2	10	100	11/01/12	
Demo kit/RFD	1	10	50	11/07/12	
Site Safety Officer Kit	1	10	50	11/07/12	
Computer, laptop	2	10	100	12/18/12	
Printer/copier/scanner/fax	2	10	100	11/01/12	
Monitor, Acer, V273H	1	10	50	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/17/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/20/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Escort	Zow, Woody
UXO Technician I	Team 1	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Cox Environmental	Soil Sampling	Cox, Michael

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO	1	10	10
UXOQC	1	10	10
UXO Technician III	2	10	20
UXO Technician II	4	10	40
UXO Technician I	5	10	50
Geophysicist	0	10	0
Subcontractors	1	10	10

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	.47
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/20/2013**

Task Order No: 0009

MEC (Grids)			
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	1	1	90
Grids DGM MEC & Non-MEC (Grids)	0	0	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	3	3	62
Grids Intrusive (Grids)	5	5	89
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	3

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	0	.37
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	113
Grids DGM MEC & Non-MEC (Grids)	0	0	100
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	3	3	90
Grids Intrusive (Grids)	4	4	103
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	3

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/20/2013

Task Order No: 0009

Summary of today's work activities:

- HGL Teams 1 and 2 intrusively investigated DGM grids at RC1 and RC2.
- Cox Environmental collected soil samples at RC1.
- Ray Livermore, USACE Wilmington District, visited site to observe soil sampling.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	109	0
Grids QA'd	0	0	0	0	109	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13
37mm TP Projectile RC2-003	RC2_106	X			Demo 05/15/13
2.36" Rocket Warhead	RC1_086	X			Demo 05/16/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	10	10	1,049
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/20/2013

Task Order No: 0009

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	60	01/08/13	
Truck (Amec)	0	10	0	1/21/13	5/10/13
Skidsteer	0	10	0	11/05/12	5/20/13
EM-61	2	10	20	3/14/13	
Two-way Radios/Repeater	13	10	130	1/10/13	
PDA/GPS	3	10	30	11/15/12	
Explosives Storage Magazine	2	24	48	10/29/12	
Office Trailer	1	24	24	11/1/12	
Storage Connex	1	24	24	3/06/13	
Port-a-potties	3	10	30	11/1/12	
Truck mounted fuel tank	0	10	0	1/07/13	5/08/13
Owned Equipment					
Schonstedt	9	10	90	1/03/13	
White Detectors	4	10	40	3/20/13	
Camera, digital	2	10	20	3/18/13	
Lightning detector	1	10	10	11/08/12	
PDA/GPS	2	10	20	11/01/12	
First aid kit	7	10	350	11/01/12	
Team gear	2	10	20	11/01/12	
Demo kit/RFD	1	10	10	11/07/12	
Site Safety Officer Kit	1	10	10	11/07/12	
Computer, laptop	2	10	20	12/18/12	
Printer/copier/scanner/fax	2	10	20	11/01/12	
Monitor, Acer, V273H	1	10	10	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/20/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/21/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Escort	Zow, Woody
UXO Technician I	Team 1	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Cox Environmental	Soil Sampling	Cox, Michael

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	20
UXOSO	1	10	20
UXOQC	1	10	20
UXO Technician III	2	10	40
UXO Technician II	4	10	80
UXO Technician I	5	10	100
Geophysicist	0	10	0
Subcontractors	1	10	20

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	.47
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/21/2013**

Task Order No: 0009

MEC (Grids)			
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	0	1	90
Grids DGM MEC & Non-MEC (Grids)	0	0	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	3	62
Grids Intrusive (Grids)	1	6	90
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	3

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	.30	.30	.67
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	113
Grids DGM MEC & Non-MEC (Grids)	0	0	100
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	0	3	90
Grids Intrusive (Grids)	0	4	103
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	3

Summary of today's work activities:

Contract No: W912DY-10-D-0023 **Date:** **05/21/2013**

Task Order No: 0009

- HGL Teams 1 and 2 intrusively investigated DGM grids at RC1 and RC2.
- HGL Teams 1 and 2 intrusively investigated analog transects at RC2.
- Cox Environmental collected soil samples at RC1.
- HGL UXOQC accompanied the OESS to QC/QA grids at RC1 and RC2.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	9	0	9	0	118	0
Grids QA'd	9	0	9	0	118	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13
37mm TP Projectile RC2-003	RC2_106	X			Demo 05/15/13
2.36" Rocket Warhead	RC1_086	X			Demo 05/16/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	10	1,049
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/21/2013

Task Order No: 0009

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	120	01/08/13	
Truck (Amec)	0	10	0	1/21/13	5/10/13
Skidsteer	0	10	0	11/05/12	5/20/13
EM-61	2	10	40	3/14/13	
Two-way Radios/Repeater	13	10	260	1/10/13	
PDA/GPS	3	10	60	11/15/12	
Explosives Storage Magazine	2	24	96	10/29/12	
Office Trailer	1	24	48	11/1/12	
Storage Connex	1	24	48	3/06/13	
Port-a-potties	3	10	60	11/1/12	
Truck mounted fuel tank	0	10	0	1/07/13	5/08/13
Owned Equipment					
Schonstedt	9	10	180	1/03/13	
White Detectors	4	10	80	3/20/13	
Camera, digital	2	10	40	3/18/13	
Lightning detector	1	10	20	11/08/12	
PDA/GPS	2	10	40	11/01/12	
First aid kit	7	10	140	11/01/12	
Team gear	2	10	40	11/01/12	
Demo kit/RFD	1	10	20	11/07/12	
Site Safety Officer Kit	1	10	20	11/07/12	
Computer, laptop	2	10	40	12/18/12	
Printer/copier/scanner/fax	2	10	40	11/01/12	
Monitor, Acer, V273H	1	10	20	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/21/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/22/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Escort	Zow, Woody
UXO Technician I	Team 1	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Cox Environmental	Soil Sampling	Cox, Michael

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	30
UXOSO	1	10	30
UXOQC	1	10	30
UXO Technician III	2	10	60
UXO Technician II	4	10	120
UXO Technician I	5	10	150
Geophysicist	0	10	0
Subcontractors	1	10	30

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	.47
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/22/2013**

Task Order No: 0009

MEC (Grids)			
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	0	1	90
Grids DGM MEC & Non-MEC (Grids)	0	0	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	3	62
Grids Intrusive (Grids)	0	6	90
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	3

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	.03	.33	.7
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	113
Grids DGM MEC & Non-MEC (Grids)	0	0	100
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	0	3	90
Grids Intrusive (Grids)	0	4	103
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	3

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/22/2013

Task Order No: 0009

Summary of today's work activities:

- HGL Team 1 intrusively investigated analog transects at RC2
- HGL Team 2 assisted with final demo shot. Several MD items were vented and all demolition materials were destroyed.
- ATF inspected explosive storage magazines.
- Cox Environmental collected soil samples at background locations.
- Started demobilization effort.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	9	0	118	0
Grids QA'd	0	0	9	0	118	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft	51	Final demo shot 5/22/2013
Detonating Cord, 80gr	305'	Final demo shot 5/22/2013
Jet Perforators, 32 G	34	Final demo shot 5/22/2013
Cast Boosters, 350	45	Final demo shot 5/22/2013
NONEL Leadline	7,500'	Final demo shot 5/22/2013

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13
37mm TP Projectile RC2-003	RC2_106	X			Demo 05/15/13
2.36" Rocket Warhead	RC1_086	X			Demo 05/16/13

Contract No: W912DY-10-D-0023 **Date:** **05/22/2013**

Task Order No: 0009

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	55	65	1,104
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	6	10	180	01/08/13	
Truck (Amec)	0	10	0	1/21/13	5/10/13
Skidsteer	0	10	0	11/05/12	5/20/13
EM-61	2	10	60	3/14/13	
Two-way Radios/Repeater	13	10	390	1/10/13	
PDA/GPS	3	10	90	11/15/12	
Explosives Storage Magazine	2	24	144	10/29/12	
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	3	10	90	11/1/12	
Truck mounted fuel tank	0	10	0	1/07/13	5/08/13
Owned Equipment					
Schonstedt	9	10	270	1/03/13	
White Detectors	4	10	120	3/20/13	
Camera, digital	2	10	60	3/18/13	
Lightning detector	1	10	30	11/08/12	
PDA/GPS	2	10	60	11/01/12	
First aid kit	7	10	210	11/01/12	
Team gear	2	10	60	11/01/12	
Demo kit/RFD	1	10	30	11/07/12	
Site Safety Officer Kit	1	10	30	11/07/12	
Computer, laptop	2	10	60	12/18/12	
Printer/copier/scanner/fax	2	10	60	11/01/12	
Monitor, Acer, V273H	1	10	30	03/13/13	

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/22/2013**

Task Order No: 0009

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/23/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOSO	Site Management	Honne, Oscar
UXOQC	Site Management	Rogers, Westleon
UXO Technician III	Team 1 / TL	Smith, Al
UXO Technician III	Team 2 / TL	Cagle, Gary
UXO Technician II	Team 1	Amiotte, Jeremy
UXO Technician II	Team 2	Hood, Casie
UXO Technician II	Team 2	Weber, Dawn
UXO Technician II	Escort	Zow, Woody
UXO Technician I	Team 1	Powers, Rebecca
UXO Technician I	Team 1	Richardson, Charles
UXO Technician I	Team 2	Kaliszewski, Coty
UXO Technician I	Team 1	Okino, Cheryl
UXO Technician I	Team 2	Brawner, Jason
Cox Environmental	Soil Sampling	Cox, Michael

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	8	38
UXOSO	1	8	38
UXOQC	1	10	40
UXO Technician III	2	8	76
UXO Technician II	4	8	152
UXO Technician I	5	8	190
Geophysicist	0	0	0
Subcontractors	1	10	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	.47
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-	0	0	89

Contract No: W912DY-10-D-0023 **Date:** **05/23/2013**

Task Order No: 0009

MEC (Grids)			
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles)	0	0	0
Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	0	1	90
Grids DGM MEC & Non-MEC (Grids)	0	0	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	3	62
Grids Intrusive (Grids)	0	6	90
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	3

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	.33	.7
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	113
Grids DGM MEC & Non-MEC (Grids)	0	0	100
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	0	3	90
Grids Intrusive (Grids)	0	4	103
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	3

Summary of today's work activities:

Contract No: W912DY-10-D-0023 **Date:** **05/23/2013**

Task Order No: 0009

- All personnel except for Westleon Rogers (HGL QC) demobilized.
- Cox Environmental finished collecting soil samples at background locations.
- Explosive storage magazines picked up by vendor.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	9	0	118	0
Grids QA'd	0	0	9	0	118	0

6. Explosive Usage:

Item	Quantity	Comments
NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		
Cast Boosters, 350		
NONEL Leadline		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25" AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13
37mm TP Projectile RC2-003	RC2_106	X			Demo 05/15/13
2.36" Rocket Warhead	RC1_086	X			Demo 05/16/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	65	1,104
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **05/23/2013**

Task Order No: 0009

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	0	10	180	01/08/13	5/23/12
Truck (Amec)	0	10	0	1/21/13	5/10/13
Skidsteer	0	10	0	11/05/12	5/20/13
EM-61	0	10	60	3/14/13	5/22/13
Two-way Radios/Repeater	0	10	390	1/10/13	5/22/13
PDA/GPS	0	10	90	11/15/12	5/22/13
Explosives Storage Magazine	0	24	144	10/29/12	5/23/13
Office Trailer	1	24	72	11/1/12	
Storage Connex	1	24	72	3/06/13	
Port-a-potties	0	10	90	11/1/12	5/23/13
Truck mounted fuel tank	0	10	0	1/07/13	5/08/13
Owned Equipment					
Schonstedt	0	10	270	1/03/13	5/22/13
White Detectors	0	10	120	3/20/13	5/22/13
Camera, digital	0	10	60	3/18/13	5/22/13
Lightning detector	0	10	30	11/08/12	5/22/13
PDA/GPS	0	10	60	11/01/12	5/23/13
First aid kit	0	10	210	11/01/12	5/22/13
Team gear	0	10	60	11/01/12	5/22/13
Demo kit/RFD	0	10	30	11/07/12	5/22/13
Site Safety Officer Kit	0	10	30	11/07/12	5/22/13
Computer, laptop	0	10	60	12/18/12	5/22/13
Printer/copier/scanner/fax	0	10	60	11/01/12	5/22/13
Monitor, Acer, V273H	0	10	30	03/13/13	5/22/13

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **05/23/2013**

Task Order No: 0009

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.	
Joel A. Sanders	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 05/24/2013

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Sanders, Joel A.
UXOQC	Site Management	Rogers, Westleon

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	2	40
UXOSO	1	0	38
UXOQC	1	10	50
UXO Technician III	2	0	76
UXO Technician II	4	0	152
UXO Technician I	5	0	190
Geophysicist	0	0	0
Subcontractors	1	0	40

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	49.5
Transect DGM (Miles)	0	0	49.1
Transect Mag & Dig (Miles)	0	0	.47
Transect Data Processing (Amec)	0	0	49.29
Grids Brush Clearing (Grids)	0	0	89
Grids DGM MEC & Non-MEC (Grids)	0	0	89
Grids Data Processing (Amec)	0	0	89
Grids DGM Reaq (Grids)	0	0	89
Grids Intrusive (Grids)	0	0	89
Surface Recon (Miles)	0	0	29.20
MEC Disposal	0	0	3

Range Complex 1 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.2
Transect DGM (Miles)	0	0	67.8
Transect Mag & Dig (Miles)	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **05/24/2013**

Task Order No: 0009

Transect Data Processing (Amec)	0	0	63.9
Grids Brush Clearing (Grids)	0	1	90
Grids DGM MEC & Non-MEC (Grids)	0	0	62
Grids Data Processing (Amec)	0	0	0
Grids DGM Reaq (Grids)	0	3	62
Grids Intrusive (Grids)	0	6	90
Surface Recon (Miles)	0	0	40.03
MEC Disposal	0	0	3

Range Complex 2 MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Transect Brush Clearing (Miles)	0	0	70.8
Transect DGM (Miles)	0	0	69.4
Transect Mag & Dig	0	.33	.7
Transect Data Processing (Amec)	0	0	66.09
Grids Brush Clearing (Grids)	0	0	113
Grids DGM MEC & Non-MEC (Grids)	0	0	100
Grids Data Processing (Amec)	0	0	45
Grids DGM Reaq (Grids)	0	3	90
Grids Intrusive (Grids)	0	4	103
Surface Recon (Miles)	0	0	48.73
MEC Disposal	0	0	3

Summary of today's work activities:

- MDAS picked up by shipper. Chain of custody was signed by the shipper. Westleon Rogers demobilized from the site.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	9	0	118	0
Grids QA'd	0	0	9	0	118	0

6. Explosive Usage:

Item	Quantity	Comments

Contract No: W912DY-10-D-0023 **Date:** **05/24/2013**

Task Order No: 0009

NONEL Blasting Caps, 40 ft		
Detonating Cord, 80gr		
Jet Perforators, 32 G		
Cast Boosters, 350		
NONEL Leadline		

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	
57mm HE Projectile RC1-001		X			Demo 02/14/13
57mm HE Projectile RC1-002		X			Demo 02/14/13
57mm AP-T Projo RC1-003			X		Demo 02/14/13
60mm HE Mortar ARNG-001	ARNG-011	X			Demo 03/22/13
60mm HE Mortar ARNG-002	ARNG_014	X			Demo 04/02/13
155mm HE Projectile RC2-001		X			Demo 04/15/13
57mm AP-T Projo ARNG-003	ARNG_023		X		Demo 04/18/13
3.25” AA Target Rocket ARNG-004	ARNG_013		X		Demo 04/18/13
Mk II Hand Grenade ARNG-005	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-006	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-007	ARNG_082	X			Demo 04/25/13
Mk II Hand Grenade ARNG-008	ARNG_082	X			Demo 04/25/13
37mm TP Projectile RC2-002	RC2_019	X			Demo 05/01/13
37mm TP Projectile RC2-003	RC2_106	X			Demo 05/15/13
2.36” Rocket Warhead	RC1_086	X			Demo 05/16/13

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	65	1,104
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, ¾ ton	0	10	180	01/08/13	5/23/12
Truck (Amec)	0	10	0	1/21/13	5/10/13
Skidsteer	0	10	0	11/05/12	5/20/13
EM-61	0	10	60	3/14/13	5/22/13
Two-way Radios/Repeater	0	10	390	1/10/13	5/22/13
PDA/GPS	0	10	90	11/15/12	5/22/13
Explosives Storage Magazine	0	24	144	10/29/12	5/23/13
Office Trailer	1	24	120	11/1/12	5/24/13
Storage Connex	1	24	120	3/06/13	5/24/13
Port-a-potties	0	10	90	11/1/12	5/23/13

Contract No: W912DY-10-D-0023 **Date:** **05/24/2013**

Task Order No: 0009

Truck mounted fuel tank	0	10	0	1/07/13	5/08/13
Owned Equipment					
Schonstedt	0	10	270	1/03/13	5/22/13
White Detectors	0	10	120	3/20/13	5/22/13
Camera, digital	0	10	60	3/18/13	5/22/13
Lightning detector	0	10	30	11/08/12	5/22/13
PDA/GPS	0	10	60	11/01/12	5/23/13
First aid kit	0	10	210	11/01/12	5/22/13
Team gear	0	10	60	11/01/12	5/22/13
Demo kit/RFD	0	10	30	11/07/12	5/22/13
Site Safety Officer Kit	0	10	30	11/07/12	5/22/13
Computer, laptop	0	10	60	12/18/12	5/22/13
Printer/copier/scanner/fax	0	10	60	11/01/12	5/22/13
Monitor, Acer, V273H	0	10	30	03/13/13	5/22/13

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

1348-1A (MDAS)

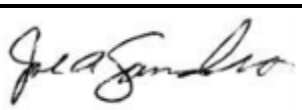
HGL MR Form 15.07 Chain of Custody

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Joel A. Sanders	
Site Manager or SUXOS	Signature

Contract No: W912DY-10-D-0023 **Date:** **05/24/2013**

Task Order No: 0009

Inert, Demilitarization and Chain of Custody Certification for Non-Hazardous AEDA and Range Scrap

1a. Load number: **05222013-001**

SECTION 1—GENERATOR RELEASE

1b. Releasing generator name and mailing address:	Telephone number:	Site Manager/Senior UXO Supervisor:
HydroGeoLogic, Inc. Munitions Response Team 5030 Bradford Drive, Bldg. 1, Ste 230, Huntsville, AL 35805	(259) 970-2105	Joel A. Sanders
1c. Project site name and location:	Telephone number:	Senior Unexploded Ordnance Supervisor:
Former Camp Butner RI/FS, Stem, NC	(919) 236-3304	Joel A. Sanders

1d. Container Numbers:	1e. Seal Numbers:	1f. Gross weight:	1g. Tare weight:	1h. Net weight:
USACE/FCB/HGL001 USACE/FCB/HGL002	4495805 4495804	1214	110	1104

1i. Material description:	1j. Material type:	1k. Units (weight/volume):
Munitions Debris (MD)	Mixed Metal (steel, brass, copper, aluminum)	lbs

1l. Inert certification:

"This certifies and verifies that the material listed has been 100 percent inspected and to the best of our knowledge and belief, are inert and/or free of explosives or related materials."

1m. **Project Inspector/Certifier**—Unexploded Ordnance Quality Control Specialist (UXOQCS):

Print or type name:	Signature:	Month/Day/Year:
Westleon Paul Rogers	Westleon Paul Rogers	05/22/13

1n. **Inspector/Certifier**—Project Site Senior Unexploded Ordnance Supervisor (SUXOS):

Print or type name:	Signature:	Month/Day/Year:
Joel A. Sanders	Joel A. Sanders	05/22/13

1o. **Generator Release**—I am the Project Site Manager and acknowledge release of this material:

Print or type name:	Signature:	Month/Day/Year:
Joel A. Sanders	Joel A. Sanders	05/22/13

SECTION 2—TRANSPORTER

2a. Transporter company name and mailing address:	Telephone Number:	Dispatcher Name:
Old Dominion Freight Line, Inc. 500 Old Dominion Way, Thomasville, NC 277360	(800) 432-6335	

2b. **Transporter Receipt**—I acknowledge receipt of this material and have verified that each container is sealed and intact:

Print or type name:	Signature:	Month/Day/Year:
Anthony Jones	Anthony Jones (2) Drums	5-24-13

2c. **Transporter Release**—I acknowledge release of this material:

Print or type name:	Signature:	Month/Day/Year:

SECTION 3—RECYCLER RECEIPT

3a. Demilitarization Recycler / Processor name and mailing address:	Telephone Number:	Recycler manager:
Bonetti Explosives, Inc. 1618 Smith Rau Road, Columbus, TX 78934	(979) 739-5597	Matt Barnett

3b. **Certified Recycler/Storage Manager**—I acknowledge receipt of this material and have verified that each container is seal and intact:

Print or type name:	Signature:	Month/Day/Year:

3c. **Certified Demilitarization / Destruction Processor**—I acknowledge receipt of this material (when applicable):

Print or type name:	Signature:	Month/Day/Year:

3d. Demilitarization / Destruction Certification:

"I certify that each item or items listed hereon were demilitarized and/or destroyed, so as to no longer resemble MPPEH (AEDA) or ordnance beyond the requirement listed in DoD 4160.21-M-1."

3e. **Certified Recycler Manager**—I acknowledge this material has undergone demilitarization/destruction in accordance with DoD 4160.21-M-1.

Print or type name:	Signature	Month/Day/Year:

3f. List special instruction or discrepancies here:

1. Three copies of this form will be completed and signed with original signature by the generator.
2. The transporter will receive one original copy and complete Section 2, blocks 2a.-2c., affix signature on 3-copies of this document and deliver 1-original copy with the material shipment to the recycler.
3. The recycler upon receipt and completion of Section 3. 3a.-3e. will return the original copy with affixed signatures to the generator address shown in Section 1, block 1b.
4. Attach DD FORM 1348-Issue Release/Transfer Document must remain attached with this document at all times.

HGL MR Form 15.07 (Oct 2010)

HGL HydroGeoLogic, Inc MUNITIONS RESPONSE TEAM

Site Daily Production Report

Page 6 of 6

Contract No: W912DY-10-D-0023 **Date:** **05/24/2013**

Task Order No: 0009

DD FORM 1348-1A, JUL 91 (EG) ISSUE RELEASE/RECEIPT DOCUMENT

27. ADDITIONAL DATA

USACE/FCB/HydroGeoLogic, Inc./Container Number: 001 /Serial Number: 4495805
USACE/FCB/HydroGeoLogic, Inc./Container Number: 002 /Serial Number: 4495804

26. RIC (4-6) UI (23-24) QTY (25-29) CON CODE (71) DIST (55-56) UP (74-80)

Westleon Paul Rogers
UXO Quality Control Specialist (UXOQCS)
HydroGeoLogic, Inc.
5030 Bradford Drive
Bldg 1, Suite 230

25. NATIONAL STOCK NO. & ADD (8-22)

Joel A. Sanders
Senior UXO Supervisor (SUXOS)
HydroGeoLogic, Inc.
5030 Bradford Drive
Bldg 1, Suite 230
Huntsville, AL 35805

24. DOCUMENT NUMBER & SUFFIX (30-44)

"This certifies that the material listed has been 100 percent properly inspected and, to the best of our knowledge and belief are free of explosive hazards, engine fluids, and illuminating dials and other visible liquid hazardous, toxic, and radioactive waste materials."

1. TOTAL PRICE — DOLLARS — CTS

UNIT PRICE — DOLLARS — CTS

2. SHIP FROM: Former Camp Butner, Stem, North Carolina

3. SHIP TO: Bonetti Explosives Columbus, TX 78934

4. MARK FOR

5. DOC DATE: 5-22-13

6. NMFC

7. FRT RATE

8. TYPE CARGO

9. PS

10. QTY. REC'D

11. UP

12. UNIT WEIGHT

13. UNIT CUBE

14. UFC

15. SL

16. FREIGHT CLASSIFICATION NOMENCLATURE

17. ITEM NOMENCLATURE: Mixed Metals (Steel, brass, copper, aluminum)

18. TY CONT

19. NO CONT

20. TOTAL WEIGHT: 1,214

21. TOTAL CUBE

22. RECEIVED BY

23. DATE RECEIVED

PerFORM (DLA) PREVIOUS EDITION MAY BE USED

APPENDIX H2

DAILY QUALITY CONTROL REPORTS

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Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0001	W912DY-10-D-0023	0009	4 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5-15 mph

Temperature: Minimum: 28 °F Maximum: 49 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO II	Team Leader	Jeremy Amiotte	Grid Preparation
Equipment Operator	Team Member	David Davis	Equipment Operations

Team TWO

UXO II	Team Leader	Dawn Weber	Grid Set-up
UXO II	Team Member	Rebecca Powers	Grid Set-up

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader	Gary Cagle	Grid Preparation
Equipment Operator	Team Member	Adam Hughes	Equipment Operations

Team FIVE

UXO II	Team Leader	Woody Zow	Grid Set-up
UXO I	Team Member	Chuck Richardson	Grid Set-up

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO III	UXO Escort	Seth Alu	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Grid Preparation/Set-up and Transect & Grid DGM Collection

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	Not staffed					
F	Team 4	See block 3.3					
F	Team 5	See block 3.3					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
F	Team 4						
F	Team 5	22	29	32	47	50	64
F	Geo 1						
F	Geo 2						

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	78
Totals to Date:				0	0	0	0
Pass		**Fail**					

0	0	

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment calibration check	UXO 1	UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Vehicle condition	UXO 1	UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment condition									X
Emergency equipment									X
Proper grid layout				UXO 5			X		
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0002	W912DY-10-D-0023	0009	5 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ __ mph

Temperature: Minimum: 36 °F Maximum: 55 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO II	Team Leader	Jeremy Amiotte	Grid Preparation
Equipment Operator	Team Member	David Davis	Equipment Operations

Team TWO

UXO II	Team Leader	Dawn Weber	Assisting QC
UXO II	Team Member	Rebecca Powers	Assisting QC

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader	Gary Cagle	Grid Preparation
Equipment Operator	Team Member	Adam Hughes	Equipment Operations

Team FIVE

UXO II	Team Leader	Woody Zow	Grid Set-up
UXO I	Team Member	Chuck Richardson	Grid Set-up

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO III	UXO Escort	Seth Alu	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Grid Preparation & Set-up and Grid & Transect DGM Collection

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW	Comments
F	Team 1	See block 3.3	
F	Team 2	See block 3.3	
F	Team 3	Not staffed	
F	Team 4	See block 3.3	
F	Team 5	See block 3.3	
F	Geo 1	See block 3.3	
F	Geo 2	See block 3.3	

		Grid #		Grid #		Grid #		Grid #		Grid #		Grid #	
F	Team 1												
F	Team 2	4	9	15	19	24	30	33	46	51	57		
F	Team 3												
F	Team 4												
F	Team 5												
F	Geo 1												
F	Geo 2												

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	78
Totals to Date:				0	0	0	0
Pass		Fail					

0	0	

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment calibration check	UXO 1	UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Vehicle condition	UXO 1			UXO 5	Geo 1	Geo 2	X		
Equipment condition									X
Emergency equipment									X
Proper grid layout				UXO 5			X		
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0003	W912DY-10-D-0023	0009	6 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☒ Snow ☐ Windy ☒ 15-25 Gusts 35-45 mph

Temperature: Minimum: 34 °F Maximum: 44 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO II	Team Leader	Jeremy Amiotte	Grid Preparation
UXO I	Team Member	Dawn Weber	Grid Preparation

Team TWO

UXO II	Team Leader		
UXO II	Team Member		

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader	Gary Cagle	Grid Preparation
UXO I	Team Member	Chuck Richardson	Grid Preparation

Team FIVE

UXO II	Team Leader	Woody Zow	Grid Set-up
UXO I	Team Member	Rebecca Powers	Grid Set-up

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO III	UXO Escort	Seth Alu	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Grid Preparation & Set-up and Grid & Transect DGM Collection

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	Not Staffed					
F	Team 3	Not Staffed					
F	Team 4	See block 3.3					
F	Team 5	See block 3.3					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
F	Team 4						
F	Team 5	62	65	66	70	74	75
F	Geo 1						
F	Geo 2						

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	78
Totals to Date:				0	0	0	0
Pass		**Fail**					

0	0	

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1		UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment calibration check	UXO 1		UXO 4	UXO 5	Geo 1	Geo 2	X		
Vehicle condition	UXO 1		UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment condition									X
Emergency equipment									X
Proper grid layout				UXO 5			X		
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0004	W912DY-10-D-0023	0009	7 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 10-20 mph

Temperature: Minimum: 34 °F Maximum: 50 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO II	Team Leader		
UXO I	Team Member		

Team TWO

UXO II	Team Leader	Dawn Weber	Grid Set-up
UXO II	Team Member	Rebecca Powers	Grid Set-up

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader	Gary Cagle	Grid Preparation
UXO I	Team Member	Jeremy Amiotte	Grid Preparation

Team FIVE

UXO II	Team Leader	Woody Zow	Grid Preparation
UXO I	Team Member	Chuck Richardson	Grid Preparation

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO III	UXO Escort	Seth Alu	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Grid Preparation & Set-up and Grid & Transect DGM Collection

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	Not Staffed					
F	Team 2	See block 3.3					
F	Team 3	Not Staffed					
F	Team 4	See block 3.3					
F	Team 5	See block 3.3					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2	43	44	58	68	73	78
F	Team 3						
F	Team 4						
F	Team 5						
F	Geo 1						
F	Geo 2						

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	78
Totals to Date:				0	0	0	0
Pass		**Fail**					

0	0	

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)		UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment calibration check		UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Vehicle condition			UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment condition									X
Emergency equipment									X
Proper grid layout		UXO 2					X		
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations		UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0005	W912DY-10-D-0023	0009	8 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☐ 10-15 mph

Temperature: Minimum: 34 °F Maximum: 55 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO II	Team Leader		
UXO I	Team Member		

Team TWO

UXO II	Team Leader		
UXO II	Team Member		

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader	Gary Cagle	Grid Preparation/Setup
UXO II	Team Member	Jeremy Amiotte	Grid Preparation/Setup
UXO I	Team Member	Dawn Weber	Grid Preparation/Setup

Team FIVE

UXO II	Team Leader	Woody Zow	Grid Preparation/Setup
UXO I	Team Member	Chuck Richardson	Grid Preparation/Setup
UXO I	Team Member	Rebecca Powers	Grid Preparation/Setup

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO III	UXO Escort	Seth Alu	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Grid Preparation & Set-up and Grid & Transect DGM Collection

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	Not Staffed					
F	Team 2	Not Staffed					
F	Team 3	Not Staffed					
F	Team 4	See block 3.3					
F	Team 5	See block 3.3					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
F	Team 4	55	61				
F	Team 5	1	7	12	27	52	59
F	Geo 1	27	38	43	58	78	
F	Geo 2						

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	78
Totals to Date:				0	0	0	0
Pass		**Fail**					

0	0	

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)			UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment calibration check			UXO 4	UXO 5	Geo 1	Geo 2	X		
Vehicle condition			UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment condition									X
Emergency equipment									X
Proper grid layout			UXO 4	UXO 5	Geo 1		X		
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations			UXO 4	UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0006	W912DY-10-D-0023	0009	11 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 10-15 mph

Temperature: Minimum: 42 °F Maximum: 64 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO II	Team Leader		
UXO I	Team Member		

Team TWO

UXO II	Team Leader	Dawn Weber	Assisting QC
UXO II	Team Member	Rebecca Powers	Assisting QC

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader	Gary Cagle	Grid Preparation/Setup
UXO II	Team Member	Chuck Richardson	Grid Preparation/Setup
UXO I	Team Member		

Team FIVE

UXO II	Team Leader	Woody Zow	Grid Preparation/Setup
UXO I	Team Member	Jeremy Amiotte	Grid Preparation/Setup
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO III	UXO Escort	Seth Alu	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Grid Preparation and Set-up, Grid and Transect DGM Collection

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW	Comments
F	Team 1	Not Staffed	
F	Team 2	See block 3.3	
F	Team 3	Not Staffed	
F	Team 4	See block 3.3	
F	Team 5	See block 3.3	
F	Geo 1	See block 3.3	
F	Geo 2	See block 3.3	

		Grid #	Grid #	Grid #	Grid #	Grid #	Grid #
F	Team 1						
F	Team 2						
F	Team 3						
F	Team 4						
F	Team 5						
F	Geo 1						
F	Geo 2						

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	78
Totals to Date:				0	0	0	0
Pass		Fail					

0	0	

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)		UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment calibration check		UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Vehicle condition			UXO 4	UXO 5	Geo 1	Geo 2	X		X
Equipment condition									X
Emergency equipment									X
Proper grid layout									X
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations			UXO 4	UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0007	W912DY-10-D-0023	0009	12 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Cloudy ☐ Rain ☒ Snow ☐ Windy ☐ 10-15 mph

Temperature: Minimum: 59 °F Maximum: 64 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO II	Team Leader	Jeremy Amiotte	Grid cutting
UXO I	Team Member		

Team TWO

UXO II	Team Leader	Dawn Weber	Assisting QC
UXO II	Team Member		

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader	Gary Cagle Went home sick	Grid Preparation/Setup
UXO II	Team Member	Chuck Richardson Team 5	Grid Preparation/Setup
UXO I	Team Member		

Team FIVE

UXO II	Team Leader	Woody Zow	Grid Preparation/Setup
UXO I	Team Member	Rebecca Powers	Grid Preparation/Setup
UXO I	Team Member	Chuck Richardson	Grid Preparation/Setup

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO III	UXO Escort	Seth Alu	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Transect cutting, grid cutting and set-up, Transect and Grid DGM Collection

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	Not Staffed					
F	Team 4	See block 3.3					
F	Team 5	See block 3.3					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
F	Team 4						
F	Team 5						
F	Geo 1						
F	Geo 2						

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	78
Totals to Date:				0	0	0	0
Pass		**Fail**					

0	0	

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment calibration check	UXO 1	UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Vehicle condition			UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment condition									X
Emergency equipment									X
Proper grid layout									X
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0008	W912DY-10-D-0023	0009	13 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5 mph

Temperature: Minimum: 40 °F Maximum: 52 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Westleon Rogers	Site Management

Team ONE

UXO II	Team Leader	Jeremy Amiotte	Grid Preparation/Setup
UXO I	Team Member	Chuck Richardson	Grid Preparation/Setup

Team TWO

UXO I	Team Leader	Rebecca Powers	Assisting QC
UXO II	Team Member		

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		

Team FIVE

UXO II	Team Leader	Woody Zow	Grid Preparation/Setup
UXO II	Team Member	Dawn Weber	Grid Preparation/Setup
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO III	UXO Escort	Seth Alu	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Grid Preparation and Set-up, Grid and Transect DGM Collection

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	Not Staffed					
F	Team 3	Not Staffed					
F	Team 4	Not Staffed					
F	Team 5	See block 3.3					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
F	Team 4						
F	Team 5						
F	Geo 1						
F	Geo 2	ANGP DGM 500-19					

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	89
Totals to Date:				0	0	0	0
Pass		**Fail**					

0	0	

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2		UXO 5	Geo 1	Geo 2	X		
Equipment calibration check	UXO 1	UXO 2		UXO 5	Geo 1	Geo 2	X		
Vehicle condition	UXO 1			UXO 5	Geo 1	Geo 2	X		X
Equipment condition									X
Emergency equipment									X
Proper grid layout									X
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2		UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0009	W912DY-10-D-0023	0009	14 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 10 mph

Temperature: Minimum: 35 °F Maximum: 54 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Westleon Rogers	Site Management

Team ONE

UXO II	Team Leader		
UXO I	Team Member		

Team TWO

UXO II	Team Leader	Dawn Weber	Brush Clearance
UXO I	Team Member	Rebecca Powers	Brush Clearance

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader	Gary Cagle	Grid Preparation/Setup
UXO II	Team Member	Chuck Richardson	Grid Preparation/Setup
UXO I	Team Member		

Team FIVE

UXO II	Team Leader	Woody Zow	Grid Preparation/Setup
UXO II	Team Member	Jeremey Amiotte	Grid Preparation/Setup
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO III	UXO Escort	Seth Alu	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Grid Preparation and Set-up, Grid and Transect DGM Collection
Weekly Explosives Inventory

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	Not Staffed					
F	Team 2	See block 3.3					
F	Team 3	Not Staffed					
F	Team 4	See block 3.3					
F	Team 5	See block 3.3					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
F	Team 4						
F	Team 5						
F	Geo 1						
F	Geo 2						

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	89
Totals to Date:				0	0	0	0
Pass		**Fail**					

0	0	

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)		UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment calibration check		UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		
Vehicle condition		UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		X
Equipment condition									X
Emergency equipment									X
Proper grid layout									X
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations		UXO 2	UXO 4	UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0010	W912DY-10-D-0023	0009	15 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 10 mph

Temperature: Minimum: 35 °F Maximum: 54 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Westleon Rogers	Site Management

Team ONE

UXO II	Team Leader		
UXO I	Team Member		

Team TWO

UXO II	Team Leader		
UXO I	Team Member		

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader	Gary Cagle	Grid Preparation/Setup
UXO II	Team Member	Chuck Richardson	Grid Preparation/Setup
UXO I	Team Member		

Team FIVE

UXO II	Team Leader	Woody Zow	Brush Clearance
UXO II	Team Member	Jeremy Amiotte	Brush Clearance
UXO I	Team Member	Rebecca Powers	Brush Clearance

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO III	UXO Escort	Seth Alu	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Grid Preparation and Set-up, Grid and Transect DGM Collection

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW	Comments
F	Team 1	Not Staffed	
F	Team 2	Not Staffed	
F	Team 3	Not Staffed	
F	Team 4	See block 3.3	
F	Team 5	See block 3.3	
F	Geo 1	See block 3.3	
F	Geo 2	See block 3.3	

		Grid #	Grid #	Grid #	Grid #	Grid #	Grid #
F	Team 1						
F	Team 2						
F	Team 3						
F	Team 4						
F	Team 5						
F	Geo 1						
F	Geo 2						

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				0	0	0	0
Pass		Fail					

0	0	

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)			UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment calibration check			UXO 4	UXO 5	Geo 1	Geo 2	X		
Vehicle condition			UXO 4	UXO 5	Geo 1	Geo 2	X		X
Equipment condition									X
Emergency equipment			UXO 4				X		
Proper grid layout			UXO 4				X		
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone			UXO 4				X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations			UXO 4	UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0011	W912DY-10-D-0023	0009	18 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☒ Cloudy ☒ Rain ☒ Snow ☐ Windy ☒ 5-10 mph

Temperature: Minimum: 36 °F Maximum: 50 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO II	Team Leader	Jeremy Amiotte	Brush Cutting
UXO II	Team Member	Dawn Weber	Brush Cutting

Team TWO

UXO II	Team Leader		
UXO I	Team Member		

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader	Gary Cagle	Grid Preparation/Setup
UXO II	Team Member	Chuck Richardson	Grid Preparation/Setup
UXO I	Team Member		

Team FIVE

UXO II	Team Leader	Woody Zow	RECON
UXO I	Team Member	Rebecca Powers	RECON
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator
GeoPhysical	Team Member	Norm Barnes	GEO Operator - TNG
GeoPhysical	Team Member	Angela Adams	GEO Operator - TNG

AMEC Team TWO

UXO III	UXO Escort	Ed Patton	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator
GeoPhysical	Team Member	Travis Stanley	GEO Operator - TNG

1. Work performed today:

Grid Preparation and Set-up, Grid and Transect DGM Collection

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	Not Staffed					
F	Team 3	Not Staffed					
F	Team 4	See block 3.3					
F	Team 5	See block 3.3					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
F	Team 4						
F	Team 5						
F	Geo 1						
F	Geo 2						

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	89
Totals to Date:				0	0	0	0

Pass	Fail	
0	0	

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1		UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment calibration check	UXO 1		UXO 4	UXO 5	Geo 1	Geo 2	X		
Vehicle condition	UXO 1		UXO 4	UXO 5	Geo 1	Geo 2	X		X
Equipment condition									X
Emergency equipment			UXO 4				X		
Proper grid layout			UXO 4				X		
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone			UXO 4				X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations			UXO 4	UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0012	W912DY-10-D-0023	0009	19 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5-15 Gusting 25-30 mph

Temperature: Minimum: 36 °F Maximum: 66 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Inprocessing

UXO III	Team Leader	Al Smith	Inprocessing/Orientation
UXO II	Team Member	Jack Bullock	Inprocessing/Orientation
UXO II	Team Member	Casie Hood	Inprocessing/Orientation
UXO I	Team Member	Cheryl Okino	Inprocessing/Orientation
UXO I	Team Member	Coty Kaliszewski	Inprocessing/Orientation
UXO I	Team Member	Jason Brawner	Inprocessing/Orientation

Team ONE

UXO II	Team Leader	Jeremy Amiotte	Grid Preparation/Cutting
UXO II	Team Member	Woody Zow	Grid Preparation/Cutting

Team TWO

UXO III	Team Leader		
UXO II	Team Member		

Team THREE

UXO III	Team Leader		
UXO II	Team Member		

Team FOUR

UXO III	Team Leader	Gary Cagle	Brush Cutting
UXO II	Team Member	Chuck Richardson	Brush Cutting
UXO I	Team Member		

Team FIVE

UXO II	Team Leader	Dawn Weber	Grid Set-up
UXO I	Team Member	Rebecca Powers	Grid Set-up
UXO I	Team Member		

AMEC Team ONE Equipment Failure – Team left at 0930

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator
GeoPhysical	Team Member	Travis Stanley	GEO Operator - TNG

AMEC Team TWO

UXO III	UXO Escort	Ed Patton	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator
GeoPhysical	Team Member	Norm Barnes	GEO Operator - TNG
GeoPhysical	Team Member	Angela Adams	GEO Operator - TNG

1. Work performed today:

Grid Preparation and Set-up, Grid and Transect DGM Collection
Inprocessing of new personnel

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	Not Staffed					
F	Team 3	Not Staffed					
F	Team 4	See block 3.3					
F	Team 5	See block 3.3					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
F	Team 4						

F	Team 5						
F	Geo 1						
F	Geo 2						

3.2 Grid Inspection Performed:

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1		UXO 4	UXO 5	Geo 1	Geo 2	X		
Equipment calibration check	UXO 1		UXO 4	UXO 5	Geo 1	Geo 2	X		
Vehicle condition	UXO 1		UXO 4	UXO 5	Geo 1	Geo 2	X		X
Equipment condition									X
Emergency equipment									X
Proper grid layout									X
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1		UXO 4	UXO 5	Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:

Daily Quality Control Report

PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0013	W912DY-10-D-0023	0009	20 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 0-10 mph

Temperature: Minimum: 35 °F Maximum: 54 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Jeremy Amiotte	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation

Team TWO

UXO III	Team Leader	Gary Cagle	Brush Cutting
UXO II	Team Member	Jack Bullock	Brush Cutting
UXO II	Team Member	Dawn Weber	Brush Cutting
UXO II	Team Leader	Woody Zow	Brush Cutting
UXO I	Team Member	Jason Brawner	Brush Cutting
UXO I	Team Member	Chuck Richardson	Brush Cutting
UXO I	Team Member	Rebecca Powers	Brush Cutting

Team THREE

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator
GeoPhysical	Team Member	Travis Stanley	GEO Operator - TNG

AMEC Team TWO

UXO III	UXO Escort	Ed Patton	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator
GeoPhysical	Team Member	Norm Barnes	GEO Operator - TNG
GeoPhysical	Team Member	Angela Adams	GEO Operator - TNG

1. Work performed today:

Grid Preparation and Set-up, Grid and Transect DGM Collection [AMEC], Intrusive investigation of selected anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	42	54				
F	Team 2						
	Team 3						
	Team 4						
	Team 5						
F	Geo 1						
F	Geo 2						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89

Daily Quality Control Report

Totals to Date:			0	0	0	0
Pass	Fail					
0	0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	139
Totals to Date:				0	0	0	0
Pass	Fail						
0	0						

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass	Fail						
0	0						

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment calibration check	UXO 1	UXO 2			Geo 1	Geo 2	X		
Vehicle condition	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment condition	UXO 1						X		
Emergency equipment	UXO 1						X		
Proper grid layout	UXO 1						X		
Proper search techniques	UXO 1						X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1						X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

Daily Quality Control Report

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0014	W912DY-10-D-0023	0009	21 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 0-10 mph

Temperature: Minimum: 35 °F Maximum: 54 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Jeremy Amiotte	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation

Team TWO

UXO III	Team Leader	Gary Cagle	Brush Cutting
UXO II	Team Member	Jack Bullock	Brush Cutting
UXO II	Team Member	Dawn Weber	Brush Cutting
UXO II	Team Leader	Woody Zow	Brush Cutting
UXO I	Team Member	Jason Brawner	Brush Cutting
UXO I	Team Member	Chuck Richardson	Brush Cutting
UXO I	Team Member	Rebecca Powers	Brush Cutting

Team THREE

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator
GeoPhysical	Team Member	Travis Stanley	GEO Operator - TNG

AMEC Team TWO

UXO III	UXO Escort	Ed Patton	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Grid Preparation and Set-up, Grid and Transect DGM Collection [AMEC], Intrusive investigation of selected anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	22	31				
F	Team 2						
	Team 3						
	Team 4						
	Team 5						
F	Geo 1						
F	Geo 2						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	89
Totals to Date:				0	0	0	0
Pass		**Fail**					
0		0					

Daily Quality Control Report

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	139
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment calibration check	UXO 1	UXO 2			Geo 1	Geo 2	X		
Vehicle condition	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment condition	UXO 1	UXO 2					X		
Emergency equipment	UXO 1						X		
Proper grid layout	UXO 1						X		
Proper search techniques	UXO 1						X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1						X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

Daily Quality Control Report

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0015	W912DY-10-D-0023	0009	22 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5-10 mph

Temperature: Minimum: 21 °F Maximum: 51 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Jack Bullock	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Chuck Richardson	Intrusive Investigation
UXO I	Team Member		
UXO I	Team Member		

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Jason Brawner	Grid Preparation/Set
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

AMEC Team

Daily Quality Control Report

ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator
GeoPhysical	Team Member	Travis Stanley	GEO Operator - TNG

AMEC Team
TWO

UXO III	UXO Escort	Ed Patton	UXO Escort
GeoPhysical	Team Member	Jeff Beddington	GEO Operator

1. Work performed today:

Grid Preparation and Set-up, Grid and Transect DGM Collection [AMEC], Intrusive investigation of selected anomalies, Disposal operations for MEC Grid # 11

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	See block 3.3					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	11					
F	Team 2	36					
F	Team 3						
	Team 4						
	Team 5						
F	Geo 1						
F	Geo 2						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	89
Totals to Date:				0	0	0	0
Pass		**Fail**					
0		0					

Daily Quality Control Report

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	139
Totals to Date:				0	0	0	0

Pass	Fail
0	0

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0

Pass	Fail
0	0

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		Geo 1	Geo 2	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		Geo 1	Geo 2	X		
Vehicle condition	UXO 1	UXO 2	UXO 3		Geo 1	Geo 2	X		
Equipment condition	UXO 1	UXO 2	UXO 3		Geo 1	Geo 2	X		
Emergency equipment	UXO 1	UXO 2	UXO 3				X		
Proper grid layout	UXO 1	UXO 2					X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations				Demo			X		
Safety violations	UXO 1	UXO 2		Demo	Geo 2		X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

Daily Quality Control Report

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0016	W912DY-10-D-0023	0009	25 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 10 Gusting to 20 mph

Temperature: Minimum: 34 °F Maximum: 50 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO II	Team Member	Jack Bullock	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Grid Preparation/Set-up
UXO II	Team Member	Dawn Weber	Grid Preparation/Set
UXO I	Team Member	Jason Brawner	Grid Preparation/Set
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set
UXO I	Team Member		

Team THREE

UXO II	Team Leader		
UXO II	Team Member		
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

AMEC Team

Daily Quality Control Report

ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator
GeoPhysical	Team Member	Norm Barnes	GEO Operator - TNG

AMEC Team
TWO

UXO III	UXO Escort	Ed Patton	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

1. Work performed today:

Grid Preparation and Set-up, Grid and Transect DGM Collection [AMEC], Intrusive investigation of selected anomalies,

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	34	43	74			
F	Team 2						
	Team 3						
	Team 4						
F	Geo 1						
F	Geo 2						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
6	0	6				At Start	89
Totals to Date:				6	0	6	83
Pass		**Fail**					
6		0					

3.2.2 Grid Inspection Performed: RC1

Daily Quality Control Report

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	139
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment calibration check	UXO 1	UXO 2			Geo 1	Geo 2	X		
Vehicle condition	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment condition	UXO 1	UXO 2			Geo 1	Geo 2	X		
Emergency equipment	UXO 1	UXO 2					X		
Proper grid layout	UXO 1						X		
Proper search techniques	UXO 1						X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1						X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:

Daily Quality Control Report

PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0017	W912DY-10-D-0023	0009	26 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5 - 20 mph

Temperature: Minimum: 32 °F Maximum: 50 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO II	Team Member	Jack Bullock	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Grid Preparation/Set-up
UXO II	Team Member	Dawn Weber	Grid Preparation/Set
UXO I	Team Member	Jason Brawner	Grid Preparation/Set
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set
UXO I	Team Member		

Team THREE

UXO II	Team Leader		
UXO II	Team Member		
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

AMEC Team

ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team
TWO

UXO III	UXO Escort	Ed Patton	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

1. Work performed today:

Transect brush cutting, Grid and Transect DGM Collection [AMEC], Intrusive investigation of selected anomalies,

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	8	9	15	18		
F	Team 2						
F	Team 3						
	Team 4						
F	Geo 1						
F	Geo 2						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
6	0	6				At Start	89
Totals to Date:				6	0	6	83
Pass		**Fail**					
6		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:		QA inspections completed to date:

Daily Quality Control Report

Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	139
Totals to Date:				0	0	0	0

Pass	Fail
0	0

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0

Pass	Fail
0	0

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment calibration check	UXO 1	UXO 2			Geo 1	Geo 2	X		
Vehicle condition	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment condition	UXO 1	UXO 2			Geo 1	Geo 2	X		
Emergency equipment	UXO 1	UXO 2					X		
Proper grid layout	UXO 1						X		
Proper search techniques	UXO 1						X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1						X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D

Daily Quality Control Report

Safety violations observed:	☒	No	☐	Yes	Safety violations observed	☒ No	☐ Yes

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0018	W912DY-10-D-0023	0009	27 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5 - 20 gusts to 30 mph

Temperature: Minimum: 32 °F Maximum: 52 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO II	Team Member	Jack Bullock	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Grid Preparation/Set-up
UXO II	Team Member	Dawn Weber	Grid Preparation/Set-up
UXO II	Team Member	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Jason Brawner	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team THREE

UXO II	Team Leader		
UXO II	Team Member		
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Ed Patton	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid and Transect DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	58	78	41			
F	Team 2						
F	Team 3						
	Team 4						
F	Geo 1						
F	Geo 2						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
4	0	4				At Start	89
Totals to Date:				4	0	4	79
Pass		**Fail**					
10		0					

3.2.2 Grid Inspection Performed: RC1

Daily Quality Control Report

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment calibration check	UXO 1	UXO 2			Geo 1	Geo 2	X		
Vehicle condition	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment condition	UXO 1	UXO 2			Geo 1	Geo 2	X		
Emergency equipment	UXO 1	UXO 2					X		
Proper grid layout	UXO 1						X		
Proper search techniques	UXO 1						X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1						X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:

Daily Quality Control Report

PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0019	W912DY-10-D-0023	0009	28 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5 - 15 mph

Temperature: Minimum: 32 °F Maximum: 52 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO II	Team Member	Jack Bullock	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Grid Preparation/Set-up
UXO II	Team Member	Dawn Weber	Grid Preparation/Set-up
UXO II	Team Member	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Jason Brawner	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team THREE

UXO II	Team Leader		
UXO II	Team Member		
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Ed Patton	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator

AMEC Team TWO

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid and Transect DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
F	Geo 2	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	37					
F	Team 2						
	Team 3						
	Team 4						
F	Geo 1						
F	Geo 2						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	89
Totals to Date:				0	0	4	79
Pass		**Fail**					
10		0					

3.2.2 Grid Inspection Performed: RC1

Daily Quality Control Report

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment calibration check	UXO 1	UXO 2			Geo 1	Geo 2	X		
Vehicle condition	UXO 1	UXO 2			Geo 1	Geo 2	X		
Equipment condition	UXO 1	UXO 2			Geo 1	Geo 2	X		
Emergency equipment	UXO 1	UXO 2					X		
Proper grid layout	UXO 1						X		
Proper search techniques	UXO 1						X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1						X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			Geo 1	Geo 2	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:

Daily Quality Control Report

PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0020	W912DY-10-D-0023	0009	29 March 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5 - 10 mph

Temperature: Minimum: 30 °F Maximum: 60 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Ed Patton	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator
UXO II	UXO Escort	Donnie Koetje	UXO Escort – Grid TNG
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator – Grid TNG

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	10					
F	Team 2	27	38				
	Team 3						
	Team 4						
F	Geo 1						
	Geo 2						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	89
Totals to Date:				0	0	0	79
Pass		**Fail**					
10		0					

Daily Quality Control Report

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			Geo 1		X		
Equipment calibration check	UXO 1	UXO 2			Geo 1		X		
Vehicle condition	UXO 1	UXO 2			Geo 1		X		
Equipment condition	UXO 1	UXO 2			Geo 1		X		
Emergency equipment	UXO 1	UXO 2					X		
Proper grid layout	UXO 1	UXO 2					X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			Geo 1		X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

Daily Quality Control Report

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0021	W912DY-10-D-0023	0009	1 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5 - 15 mph

Temperature: Minimum: 52 °F Maximum: 70 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP Grids
AMEC 2 – DGM Collection of RC2 Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2	53					
F	Team 3	82					
	Team 4						
F	Geo 1						
	Geo 2						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
3	0	3				At Start	89
Totals to Date:				0	0	0	76
Pass		Fail					
13		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:		QA inspections completed to date:

Daily Quality Control Report

Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0

Pass	Fail
0	0

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0

Pass	Fail
0	0

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		Geo 1		X		
Vehicle condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Emergency equipment	UXO 1	UXO 2	UXO 3				X		
Proper grid layout	UXO 1	UXO 2	UXO 3				X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		Geo 1		X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D

Daily Quality Control Report

Safety violations observed:	☒	No	☐	Yes	Safety violations observed	☒ No	☐ Yes

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0022	W912DY-10-D-0023	0009	2 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5 - 10 mph

Temperature: Minimum: 36 °F Maximum: 54 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies, DEMO 60mm mortar Grid # 14

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP & RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	14					
F	Team 2						
F	Team 3						
	Team 4						
F	Geo 1						
	Geo 2						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
15	0	15				At Start	89
Totals to Date:				28	0	0	61
Pass		**Fail**					
28		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:		QA inspections completed to date:

Daily Quality Control Report

Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0

Pass	Fail
0	0

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0

Pass	Fail
0	0

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		Geo 1		X		
Vehicle condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Emergency equipment	UXO 1	UXO 2	UXO 3				X		
Proper grid layout	UXO 1	UXO 2	UXO 3				X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		Geo 1		X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D

Daily Quality Control Report

Safety violations observed:	☒	No	☐	Yes	Safety violations observed	☒ No	☐ Yes

5. Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0023	W912DY-10-D-0023	0009	3 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 0-5 mph

Temperature: Minimum: 35 °F Maximum: 55 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Micah Holzbauer	GEO Operator
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP & RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	004					
F	Team 2						
F	Team 3						
	Team 4						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				28	0	0	61
Pass		Fail					
28		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		Geo 1		X		
Vehicle condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Emergency equipment	UXO 1	UXO 2	UXO 3				X		
Proper grid layout	UXO 1	UXO 2	UXO 3				X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		Geo 1		X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

Daily Quality Control Report

c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – Team # 1 – ARNG # 004 & 030; Team # 2 – ARNG # 051 & 060

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0024	W912DY-10-D-0023	0009	4 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☐ Fog ☐ Cloudy ☐ Rain ☒ Snow ☐ Windy ☒ 5-10 mph

Temperature: Minimum: 36 °F Maximum: 49 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Went home - Sick
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP & RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
	Team 4						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				28	0	0	61
Pass		Fail					
28		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		Geo 1		X		
Vehicle condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Emergency equipment	UXO 1	UXO 2	UXO 3				X		
Proper grid layout	UXO 1	UXO 2	UXO 3				X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		Geo 1		X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – Team # 1 – ARNG #46, # 55, # 59, # 61 & # 65; Team # 2 – ARNG # 19, # 23, # 24 & # 32
Received and inspected 35 lbs of MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0025	W912DY-10-D-0023	0009	5 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Cloudy ☒ Rain ☐ Snow ☐ Windy ☒ 5-10 mph

Temperature: Minimum: 36 °F Maximum: 60 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP & RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
	Team 4						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				28	0	0	61
Pass		Fail					
28		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		Geo 1		X		
Vehicle condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Emergency equipment	UXO 1	UXO 2	UXO 3				X		
Proper grid layout	UXO 1	UXO 2	UXO 3				X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		Geo 1		X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

Daily Quality Control Report

c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – Team # 1 – ARNG # 28, # 4 & # 52; Team # 2 – ARNG # 63, # 67, # 73 & # 84
Received and inspected 35 lbs of MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0026	W912DY-10-D-0023	0009	8 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Cloudy ☒ Rain ☐ Snow ☐ Windy ☒ 5-10 mph

Temperature: Minimum: 36 °F Maximum: 60 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP & RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
	Team 4						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
15	0	15				At Start	89
Totals to Date:				28	0	0	61
Pass		Fail					
43		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		Geo 1		X		
Vehicle condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Emergency equipment	UXO 1	UXO 2	UXO 3				X		
Proper grid layout	UXO 1	UXO 2	UXO 3				X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		Geo 1		X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

Daily Quality Control Report

c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – Team # 1 – ARNG # 5, # 20, # 25, #68 & # 87; Team # 2 – ARNG # 26, # 76, # 80, # 81, # 86 & # 89
Received and inspected 22 lbs of MD – [Tm # 1 – 14 / Tm # 2 – 8]

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0027	W912DY-10-D-0023	0009	9 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5-10 mph

Temperature: Minimum: 45 °F Maximum: 82 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO III	Team Leader		
UXO II	Team Member		
UXO I	Team Member		
UXO I	Team Member		

Daily Quality Control Report

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP & RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
	Team 4						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
15	0	15				At Start	89
Totals to Date:				43	0	0	46
Pass		Fail					
43		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		Geo 1		X		
Vehicle condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Equipment condition	UXO 1	UXO 2	UXO 3		Geo 1		X		
Emergency equipment	UXO 1	UXO 2	UXO 3				X		
Proper grid layout	UXO 1	UXO 2	UXO 3				X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		Geo 1		X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

Daily Quality Control Report

c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – Team # 1 – ARNG # 33, # 83, # 85 & RC2 # 57; Team # 2 – ARNG # 1, # 6, # 7 & # 12
Received and inspected 40 lbs of MD – [Tm # 1 – 10 / Tm # 2 – 30]

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0028	W912DY-10-D-0023	0009	10 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5-10 mph

Temperature: Minimum: 56 °F Maximum: 84 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Grid Preparation/Set-up
UXO II	Team Member	Jeremy Amiotte	Grid Preparation/Set-up
UXO I	Team Member		
UXO I	Team Member		
UXO II	QC Geo Assistant		Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Grid Preparation/Set-up
UXO I	Team Member	Charlie Richardson	Grid Preparation/Set-up
UXO I	Team Member		
UXO I	Team Member		
UXO II	QC Geo Assistant		Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO II	Team Leader	Dawn Weber	Recon Transects
UXO I	Team Member	Jason Brawner	Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader	Casie Hood	Recon Transects
UXO I	Team Member	Cheryl Okino	Recon Transects

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of ANGP & RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
F	Team 4	See block 3.3					
F	Team 5	See block 3.3					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
F	Recon 1						
F	Recon 2						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
15	0	15				At Start	89
Totals to Date:				43	0	0	46
Pass		Fail					
43		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3	UXO 4	UXO 5	Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3	UXO 4	UXO 5	Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3	UXO 4	UXO 5	Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3	UXO 4	UXO 5	Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3	UXO 4	UXO 5	Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3	UXO 4	UXO 5	Geo 1	X		
Proper search techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3	UXO 4	UXO 5	Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:
None
c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks:

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0029	W912DY-10-D-0023	0009	11 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5-15 mph

Temperature: Minimum: 61 °F Maximum: 81 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Grid Preparation/Set-up
UXO II	Team Member	Dawn Weber	Grid Preparation/Set-up
UXO II	Team Member	Jack Bullock	Grid Preparation/Set-up
UXO I	Team Member	Charlie Richardson	Grid Preparation/Set-up
UXO I	Team Member		
UXO I	Team Member		

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO II	Team Leader	Casie Hood	Recon Transects
UXO I	Team Member	Cheryl Okino	Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
F	Team 4	See block 3.3					
	Team 5	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
F	Recon 1						
	Recon 2						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
5	0	5				At Start	89
Totals to Date:				43	0	0	46
Pass		Fail					
48		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Proper search techniques	UXO 1						X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1						X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – Team # - RC2 # 7, # 8, # 9, # 10 & # 24; Team # 2 – Received and inspected 40 lbs of MD – [Tm # 1 – 40 / Tm # 2 – 0]

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0030	W912DY-10-D-0023	0009	12 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Cloudy ☒ Rain ☒ Snow ☐ Windy ☒ 5-15 mph

Temperature: Minimum: 69 °F Maximum: 81 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Jack Bullock	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO I	Team Member		
UXO I	Team Member		

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO II	Team Leader	Dawn Weber	Grid Preparation
UXO I	Team Member	Charlie Richardson	Grid Preparation

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
F	Team 4	See block 3.3					
	Team 5	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2	RC2-AGM-300-51					
F	Team 3						
F	Recon 1						
	Recon 2						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
1	0	1				At Start	89
Totals to Date:				43	0	0	46
Pass		Fail	RC2-AGM-300-51 / 357' done ANALOG				
48		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – Team # 1 - RC2 # 25 & # 35; Team # 2 – RC2-AGM-300-51, # 88, # 93, # 97 & # 102
Received and inspected 22 lbs of MD – [Tm # 1 – 20 / Tm # 2 – 2]

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0031	W912DY-10-D-0023	0009	15 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☐ Fog ☐ Cloudy ☒ Rain ☒ Snow ☐ Windy ☒ 5-10 mph

Temperature: Minimum: 60 °F Maximum: 67 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO II	Team Leader		Grid Preparation
UXO I	Team Member		Grid Preparation

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
	Recon 1						
	Recon 2						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				43	0	0	46
Pass		Fail					
48		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – Team # 1 - RC2 # 6, # 13 & # 18; Team # 2 – ARNG # 3 & # 21
Received and inspected 0 lbs of MD – [Tm # 1 –/ Tm # 2 –]

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0032	W912DY-10-D-0023	0009	16 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Cloudy ☒ Rain ☐ Snow ☐ Windy ☒ 0-5 mph

Temperature: Minimum: 58 °F Maximum: 75 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO II	Team Leader		Grid Preparation
UXO I	Team Member		Grid Preparation

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC1 & RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
	Team 4						
	Team 5						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
5	0	0				At Start	89
Totals to Date:				48	0	0	41
Pass		Fail					
53		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3			Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3			Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

Requested SUXOS have a team revisit ARNG Grids # 013, particularly Target # 5, suspect item found during QC and # 002, numerous significant hits producing frag

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – Team # 1 - RC2 # 16, # 18, # 44, # 67 & # 86; Team # 2 – ARNG # 79 & # 88, RC2 # 21 & # 43
Received and inspected 53 lbs of MD – [Tm # 1 – 28 lbs / Tm # 2 – 25]

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0033	W912DY-10-D-0023	0009	17 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 0-5 mph

Temperature: Minimum: 61 °F Maximum: 82 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO II	Team Leader		Grid Preparation
UXO I	Team Member		Grid Preparation

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC1 & RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
	Team 4						
	Team 5						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				53	0	0	36
Pass		Fail					
53		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3			Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3			Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – Team # 1 - RC2 # 47, # 75, # 89, # 92 & # 94; Team # 2 – Revisits ARNG # 2, # 13, # 14, # 29 & # 53
Received and inspected 53 lbs of MD – [Tm # 1 – 3 lbs / Tm # 2 – 50]
During re-visit of ARNG grid # 013, an item tentatively ID'd as a Target Rocket was removed from Target # 5 – no additional items of significance were found

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0034	W912DY-10-D-0023	0009	18 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Cloudy ☐ Rain ☐ Snow ☐ Windy ☒ 5-15 mph

Temperature: Minimum: 61 °F Maximum: 81 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Grid cutting
UXO I	Team Member	Charlie Richardson	Grid cutting
UXO I	Team Member		Intrusive Investigation
UXO I	Team Member		Intrusive Investigation
UXO II	QC Geo Assistant		Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Jeremy Amiotte	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up

Team FOUR

UXO II	Team Leader	Casie Hood	Recon Transects
UXO I	Team Member	Cheryl Okino	Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC1 & RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
F	Team 4	See block 3.3					
	Team 5	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2	RC2-079					
F	Team 3						
F	Team 4						
	Team 5						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
1	0	0				At Start	89
Totals to Date:				54	0	0	35
Pass		Fail					
54		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
5	0	5				At Start	105
Totals to Date:				5	0	0	100
Pass		Fail					
5		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper search techniques		UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone		UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

Team # 2 requested assistance on RC2 # 079 as none of the target X/Y coordinates were on anomalies
A check of the seed determined locations were about 9 feet to SW off, except one which could not be located
DGM notified

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed –Team # 2 – Revisits ARNG # 08, # 27, # 37 & # 58, RC2 # 068 & # 073
Received and inspected 28 lbs of MD – [Tm # 1 – 0 lbs / Tm # 2 – 28]
Conducted explosive venting on M2 Target Rocket [MPPEH] recovered during revisit of ARNG grid # 013, target # 5

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0035	W912DY-10-D-0023	0009	19 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☐ Fog ☐ Cloudy ☒ Rain ☒ Snow ☐ Windy ☒ 5-20 mph

Temperature: Minimum: 68 °F Maximum: 80 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC1 & RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
	Team 4						
	Team 5						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				54	0	0	35
Pass		Fail					
54		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	5				At Start	105
Totals to Date:				5	0	0	100
Pass		Fail					
5		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3			Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3			Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC2 - # 11, # 12, # 30, # 32, # 58 & # 82
Received and inspected lbs of MD – [Tm # 1 – lbs / Tm # 2 –]

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0036	W912DY-10-D-0023	0009	22 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Partly Cloudy ☒ Rain ☐ Snow ☐ Wind ☐ 4 mph

Temperature: Minimum: 38 °F Maximum: 60 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC1 & RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
	Team 4						
	Team 5						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				54	0	0	35
Pass		Fail					
54		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	5				At Start	105
Totals to Date:				5	0	0	100
Pass		Fail					
5		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3			Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3			Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC2 - # 52, # 80 & # 98 plus two RC2 ANALOG Grids #69 & # 23
Received and inspected 73 lbs of MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0037	W912DY-10-D-0023	0009	23 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Partly Cloudy ☒ Rain ☐ Snow ☐ Wind ☐ 0-10 mph

Temperature: Minimum: 48 °F Maximum: 66 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC1 & RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	RC2-062					
F	Team 2	RC2-AGM-101	RC2-AGM-096	T-500-AGM-028	T-500-AGM-027		
F	Team 3						
	Team 4						
	Team 5						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				54	0	0	35
Pass	Fail		QC/QA'd AGM Transects RC2-500-27 & 28				
54	0						

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass	Fail						
0	0						

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	5				At Start	105
Totals to Date:				5	0	0	100
Pass	Fail						
5	0						

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3			Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3			Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC2 - # 27, # 28 [AGM], # 31, # 62, # 81, # 96 [AGM] & # 101 [AGM] Also 574' of ANALOG Transect RC2-500-028 and 1067' of ANALOG Transect RC2-500-027 completed

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0038	W912DY-10-D-0023	0009	24 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 5-20 mph

Temperature: Minimum: 48 °F Maximum: 77 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC1 & RC2 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC2 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW	Comments
F	Team 1	See block 3.3	
F	Team 2	See block 3.3	
F	Team 3	See block 3.3	
	Team 4	Not Staffed	
	Team 5	Not Staffed	
F	Geo 1	See block 3.3	
	Geo 2	Not Staffed	

		Grid #	Grid #	Grid #	Grid #	Grid #	Grid #
F	Team 1						
F	Team 2						
F	Team 3						
	Team 4						
	Team 5						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
11	0	11				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
5	0	5				At Start	105
Totals to Date:				10	0	0	95
Pass		Fail					
10		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3			Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3			Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Daily Quality Control Report

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC2 – DGM # 39, # 63, # 85, # 90, # 95 & # 105; AGM # 14, # 36, # 38 & # 83
Received and inspected 28 lbs of MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0039	W912DY-10-D-0023	0009	25 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 5-10 mph

Temperature: Minimum: 51 °F Maximum: 66 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Grid Preparation
UXO II	Team Member	Charlie Richardson	Grid Preparation
UXO I	Team Member		
UXO I	Team Member		
UXO II	QC Geo Assistant		

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member		Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Team FOUR

UXO II	Team Leader	Casie Hood	Recon Transects
UXO I	Team Member	Cheryl Okino	Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator
	Team Member	Jeremy Amiotte	GEO Collections Training
	Team Member	Coty Kaliszewski	GEO Collections Training

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC1 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
F	Team 4	See block 3.3					
	Team 5	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2	ARNG-082					
F	Team 3						
F	Team 4						
	Team 5						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				10	0	0	95
Pass		Fail					
10		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		
Proper grid layout		UXO 2	UXO 3			Geo 1	X		
Proper search techniques		UXO 2		UXO 4			X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone		UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3	UXO 4		Geo 1	X		

a Soil samples taken:

Daily Quality Control Report

Pre-Detonation:	☐ No	☐ Yes	☒ None required
Post-Detonation:	☐ No	☐ Yes	☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – ARNG # 082, RC2-AGM-051
Received and inspected 38 lbs of MD
Disposal operations for 4 each MkII Hand grenades [ARNG-082]

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0040	W912DY-10-D-0023	0009	26 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 5-10 mph

Temperature: Minimum: 36 °F Maximum: 72 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant		

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member		Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator
	Team Member	Jeremy Amiotte	GEO Collections Training
	Team Member	Coty Kaliszewski	GEO Collections Training

AMEC Team TWO

1. Work performed today:

Cutting and Preparation of RC1 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	Geo 1	See block 3.3					
	Geo 2	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	RC1-AGM-021					
F	Team 2	RC2-019					
F	Team 3						
	Team 4						
	Team 5						
F	Geo 1						
	Geo 2						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				10	0	0	95
Pass		Fail					
10		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3			Geo 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3			Geo 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3			Geo 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3			Geo 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1-AGM-021 & 036; RC2 - # 33, # 45, # 50 & # 56
Received and inspected 65 lbs of MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0041	W912DY-10-D-0023	0009	29 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☐ Fog ☐ Partly Cloudy ☐ Rain ☒ Snow ☐ Wind ☐ 5-10 mph

Temperature: Minimum: 51 °F Maximum: 70 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Grid Preparation
UXO I	Team Member	Charlie Richardson	Grid Preparation
UXO I	Team Member		
UXO I	Team Member		
UXO II	QC Geo Assistant		

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team
ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

GEO Team ONE

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

Cutting and Preparation of RC1 Grids, Grid DGM Collection [AMEC & GEO 1], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	AMEC 1	See block 3.3					
F	GEO 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2	RC2-064	RC2-040				
F	Team 3						
	Team 4						
	Team 5						
F	AMEC 1						
F	GEO 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
3	0	3				At Start	105
Totals to Date:				13	0	0	92
Pass		Fail					
13		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Proper search techniques		UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone		UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC2 - # 5, # 40, # 64, # 84 & # 87
Received and inspected 20 lbs of MD
Drum # 1 sealed with 694 lbs MD under seal # 4495805

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0042	W912DY-10-D-0023	0009	30 April 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Partly Cloudy ☐ Rain ☒ Snow ☐ Wind ☐ 5-10 mph

Temperature: Minimum: 55 °F Maximum: 72 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Grid Preparation
UXO II	Team Member	Dawn Weber	Grid Preparation
UXO I	Team Member	Charlie Richardson	Grid Preparation
UXO I	Team Member		
UXO II	QC Geo Assistant		

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

GEO Team ONE

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

Cutting and Preparation of RC1 Grids, Grid DGM Collection [AMEC & GEO 1], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	AMEC 1	See block 3.3					
F	GEO 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2	RC1-AGM-074	RC1-AGM-083				
F	Team 3						
	Team 4						
	Team 5						
F	AMEC 1						
F	GEO 1	RC2-DGM-091					

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
3	0	3				At Start	105
Totals to Date:				13	0	0	92
Pass		Fail					
13		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Proper search techniques		UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone		UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1-AGM - # 074, # 083 & # 092
Received and inspected NO MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0043	W912DY-10-D-0023	0009	1 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☐ Fog ☐ Partly Cloudy ☐ Rain ☒ Snow ☐ Wind ☐ 5-15 mph

Temperature: Minimum: 55 °F Maximum: 72 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

GEO Team ONE Morning – Afternoon w/ Team # 1

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

Cutting and Preparation of RC1 Grids, Grid DGM Collection [AMEC & GEO 1], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	AMEC 1	See block 3.3					
F	GEO 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2	RC2-DGM-099					
F	Team 3						
	Team 4						
	Team 5						
F	AMEC 1						
F	GEO 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
3	0	3				At Start	105
Totals to Date:				13	0	0	92
Pass		Fail					
13		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		

a Soil samples taken:

Pre-Detonation: ☒ No ☐ Yes ☐ None required

Post-Detonation:	☒ No ☐ Yes ☐ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1-AGM # 017, RC2-DGM- # 04, # 19, # 29, # 41, # 61, # 66, # 72, # 77, # 79, # 99 & # 104
Received and inspected 0 lbs MD
Conducted Disposal operations for fuzed 37mm TP projectile located in RC2-019

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0044	W912DY-10-D-0023	0009	2 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☐ Fog ☐ Partly Cloudy ☐ Rain ☒ Snow ☐ Wind ☐ 5-15 mph

Temperature: Minimum: 55 °F Maximum: 68 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

GEO Team ONE Morning – Afternoon w/ Team # 1

UXO II	UXO Escort		UXO Escort
GeoPhysical	Team Member		GEO Operator

1. Work performed today:

Cutting and Preparation of RC1 Grids, Grid DGM Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	AMEC 1	See block 3.3					
	GEO 1	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3						
	Team 4						
	Team 5						
F	AMEC 1						
	GEO 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				0	0	0	0
Pass		Fail					
0		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
1	0	1				At Start	105
Totals to Date:				14	0	0	91
Pass		Fail					
14		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		AMEC 1		X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		AMEC 1		X		
Vehicle condition	UXO 1	UXO 2	UXO 3		AMEC 1		X		
Equipment condition	UXO 1	UXO 2	UXO 3		AMEC 1		X		
Emergency equipment	UXO 1	UXO 2	UXO 3		AMEC 1		X		
Proper grid layout	UXO 1	UXO 2	UXO 3		AMEC 1		X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		AMEC 1		X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1- # 16, # 28, # 40, # 64 & # 75 - RC2- # 2, # 34, # 46, # 49, # 74, # 100 & # 103
Received and inspected 38 lbs MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0045	W912DY-10-D-0023	0009	3 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Partly Cloudy ☒ Rain ☐ Snow ☐ Wind ☐ 5-15 mph

Temperature: Minimum: 50 °F Maximum: 68 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Grid Preparation/Set-up
UXO II	Team Member	Dawn Weber	Grid Preparation/Set-up
UXO I	Team Member	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Charlie Richardson	Grid Preparation/Set-up
UXO II	QC Geo Assistant		Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jack Bullock	Geo QC

Team THREE

UXO II	Team Leader		
UXO I	Team Member	Rebecca Powers	Field Paperwork
UXO I	Team Member		

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

GEO Team ONE Morning – Afternoon w/ Team # 1

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

Cutting and Preparation of RC1 Grids, Transect DGM Collection [AMEC], DGM Grid Collection [GEO], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	AMEC 1	See block 3.3					
F	GEO 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
	Team 3						
	Team 4						
	Team 5						
F	AMEC 1						
F	GEO 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
2	0	2				At Start	97
Totals to Date:				2	0	0	95
Pass		Fail					
2		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
4	0	4				At Start	105
Totals to Date:				18	0	0	87
Pass		Fail					
18		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Equipment calibration check	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Vehicle condition	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Equipment condition	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Emergency equipment	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Proper grid layout	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Proper search techniques		UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone		UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			AMEC 1	GEO 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1- # 34, # 77 & # 93 - RC2- # N/A
Received and inspected 38 lbs MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

8

Report No.:	Contract No:	Delivery/Task Order:	Date:
0046	W912DY-10-D-0023	0009	6 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Cloudy ☒ Rain ☒ Snow ☐ Wind ☐ 5-15 mph

Temperature: Minimum: 58 °F Maximum: 68 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO II	QC Geo Assistant	Casie Hood	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Woody Zow	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Rebecca Powers	Intrusive Investigation
UXO II	QC Geo Assistant	Dawn Weber	Geo QC

Team THREE

UXO II	Team Leader		Grid Preparation/Set
UXO I	Team Member		Grid Preparation/Set
UXO I	Team Member		

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

GEO Team ONE Morning – Afternoon w/ Team # 1

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

DGM Grid Collection [AMEC & GEO 1], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	AMEC 1	See block 3.3					
F	GEO 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
	Team 3						
	Team 4						
	Team 5						
F	AMEC 1						
F	GEO 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				2	0	0	95
Pass		Fail					
2		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				18	0	0	87
Pass		Fail					
18		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Equipment calibration check	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Vehicle condition	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Equipment condition	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Emergency equipment	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Proper grid layout	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			AMEC 1	GEO 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1- # 007 & # 014 - RC2- # 070, # 071 & # 091
No MD processed due to lightning and early release

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0047	W912DY-10-D-0023	0009	7 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 5-10 mph

Temperature: Minimum: 55 °F Maximum: 68 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Grid Preparation/Set-up
UXO II	Team Member		Grid Preparation/Set-up
UXO I	Team Member	Charlie Richardson	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO II	QC Geo Assistant		Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Casie Hood	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

GEO Team ONE Morning – Afternoon w/ Team # 1

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

Cutting and Preparation of RC1 and Add-on Grids, DGM Grid Collection [AMEC & GEO 1], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 Grids

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
F	Team 3	See block 3.3					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	AMEC 1	See block 3.3					
F	GEO 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
F	Team 3	RC1-103					
	Team 4						
	Team 5						
F	AMEC 1						
F	GEO 1	RC1-104					

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				2	0	0	95
Pass		Fail					
2		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
3	0	3				At Start	105
Totals to Date:				21	0	0	84
Pass		Fail					
21		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Proper search techniques		UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone		UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Daily Quality Control Report

Post-Detonation:	☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1- # 5, # 13, # 54, # 55 & # 61
Received and inspected lbs MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0048	W912DY-10-D-0023	0009	8 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 5-10 mph

Temperature: Minimum: 50 °F Maximum: 70 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Grid Preparation/Set-up
UXO II	Team Member		Grid Preparation/Set-up
UXO I	Team Member	Charlie Richardson	Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO II	QC Geo Assistant		Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Casie Hood	Geo QC

Team THREE

UXO II	Team Leader	Woody Zow	Grid Preparation/Set-up
UXO I	Team Member	Rebecca Powers	Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

GEO Team ONE Morning – Afternoon w/ Team # 1

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

Cutting and Preparation of RC1 and Add-on Grids, DGM Grid & Transect Collection [AMEC & GEO 1], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 & RC2 Transects

3. INSPECTIONS:

3.1 Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection

Phase	Team name:	DFOW	Comments
F	Team 1	See block 3.3	
F	Team 2	See block 3.3	
F	Team 3	See block 3.3	
	Team 4	Not Staffed	
	Team 5	Not Staffed	
F	AMEC 1	See block 3.3	
F	GEO 1	See block 3.3	

		Grid #	Grid #	Grid #	Grid #	Grid #	Grid #
F	Team 1						
F	Team 2						
F	Team 3						
	Team 4						
	Team 5						
F	AMEC 1						
F	GEO 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				2	0	0	95
Pass		Fail					
2		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				21	0	0	84
Pass		Fail					
21		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Equipment calibration check	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Vehicle condition	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Equipment condition	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Emergency equipment	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Proper grid layout	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		
Proper search techniques		UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone		UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2	UXO 3		AMEC 1	GEO 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:
None

c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :							
HGL:				**Subcontractor:**			
PPE Level worn:	D			PPE level worn:	D		
Safety violations observed:	☒	No	☐ Yes	Safety violations observed	☒	No	☐ Yes

Remarks: Grids reported completed – RC1- # 18 - RC2- #
Received and inspected 10 lbs MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0049	W912DY-10-D-0023	0009	9 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 0-5 mph

Temperature: Minimum: 52 °F Maximum: 82 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Woody Zow	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Rebecca Powers	Intrusive Investigation
UXO I	QC Geo Assistant	Coty Kaliszewski	Geo QC

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Daily Quality Control Report

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

GEO Team ONE

UXO II	UXO Escort		UXO Escort
GeoPhysical	Team Member		GEO Operator

1. Work performed today:

Cutting and Preparation of RC1 and Add-on Grids, DGM Grid & Transect Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 & RC2 Grids and Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW	Comments
F	Team 1	See block 3.3	
F	Team 2	See block 3.3	
	Team 3	See block 3.3	
	Team 4	Not Staffed	
	Team 5	Not Staffed	
F	AMEC 1	See block 3.3	
	GEO 1	See block 3.3	

		Grid #	Grid #	Grid #	Grid #	Grid #	Grid #
F	Team 1						
F	Team 2						
	Team 3						
	Team 4						
	Team 5						
F	AMEC 1						
	GEO 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				65	0	0	24
Pass		Fail					
65		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				2	0	0	95
Pass		Fail					
2		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				21	0	0	84
Pass		Fail					
21		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			AMEC 1		X		
Equipment calibration check	UXO 1	UXO 2			AMEC 1		X		
Vehicle condition	UXO 1	UXO 2			AMEC 1		X		
Equipment condition	UXO 1	UXO 2			AMEC 1		X		
Emergency equipment	UXO 1	UXO 2			AMEC 1		X		
Proper grid layout	UXO 1	UXO 2			AMEC 1		X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			AMEC 1		X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:
None
c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1- # 29, # 32, # 33, # 47, # 48, # 58, # 59, # 63, # 68 & # 76 - RC2- # Received and inspected 55 lbs MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0050	W912DY-10-D-0023	0009	10 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 5-15 mph

Temperature: Minimum: 55 °F Maximum: 85 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Woody Zow	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member		Intrusive Investigation
UXO II	QC Geo Assistant		Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Rebecca Powers	Intrusive Investigation
UXO II	QC Geo Assistant	Dawn Weber	Geo QC

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO I	Team Member		

Team FOUR

UXO II	Team Leader		Recon Transects
UXO I	Team Member		Recon Transects

Team FIVE

UXO II	Team Leader		
UXO I	Team Member		

AMEC Team ONE

UXO II	UXO Escort	Donnie Koetje	UXO Escort
GeoPhysical	Team Member	Jeff Beddingfield	GEO Operator

GEO Team ONE

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

Cutting and Preparation of RC1 and Add-on Grids, DGM Grid [AMEC & GEO 1], Transect Collection [AMEC], Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

AMEC 1 – DGM Collection of RC1 & RC2 Grids and Transects

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	Team 4	Not Staffed					
	Team 5	Not Staffed					
F	AMEC 1	See block 3.3					
F	GEO 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	ARNG-AGM-Transects 001 through 008					
F	Team 2						
	Team 3						
	Team 4						
	Team 5						
F	AMEC 1						
F	GEO 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
1	0	1				At Start	89
Totals to Date:				66	0	0	23
Pass		Fail	Also ARNG-AGM-Transects-001 through 008				
66		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	97
Totals to Date:				2	0	0	95
Pass		Fail					
2		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				21	0	0	84
Pass		Fail					
21		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Equipment calibration check	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Vehicle condition	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Equipment condition	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Emergency equipment	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Proper grid layout	UXO 1	UXO 2			AMEC 1	GEO 1	X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			AMEC 1	GEO 1	X		

a Soil samples taken:

Daily Quality Control Report

Pre-Detonation:	☐ No	☐ Yes	☒ None required
Post-Detonation:	☐ No	☐ Yes	☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:			**Subcontractor:**		
PPE Level worn: D			PPE level worn: D		
Safety violations observed:	☒ No	☐ Yes	Safety violations observed	☒ No	☐ Yes

Remarks: Grids reported completed – RC1- # 35 & # 45 - RC2- # 42 & # 59
Received and inspected lbs MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0051	W912DY-10-D-0023	0009	13 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 5-10 mph

Temperature: Minimum: 46 °F Maximum: 64 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Woody Zow	Intrusive Investigation
UXO II	Team Member	Jeremy Amiotte	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Rebecca Powers	Intrusive Investigation
UXO II	QC Geo Assistant		Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant		Geo QC

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO I	Team Member		

GEO Team ONE

UXO II	UXO Escort		UXO Escort

Daily Quality Control Report

GeoPhysical	Team Member		GEO Operator

1. Work performed today:

AGM Grid - Intrusive investigation of targeted anomalies

2. Worked performed today by subcontractors:

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	GEO 1	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
	Team 3						
	GEO 1						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	89
Totals to Date:				66	0	0	23
Pass		**Fail**					
66		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	104
Totals to Date:				2	0	0	102
Pass		**Fail**					
2		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**

Daily Quality Control Report

0	0	0				At Start	114
Totals to Date:				21	0	0	93

Pass	Fail
21	0

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2					X		
Equipment calibration check	UXO 1	UXO 2					X		
Vehicle condition	UXO 1	UXO 2					X		
Equipment condition	UXO 1	UXO 2					X		
Emergency equipment	UXO 1	UXO 2					X		
Proper grid layout	UXO 1	UXO 2					X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2					X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

Remarks: Grids reported completed – RC1-AGM # 10, # 11, # 31, # 39, # 51, # 52, # 57, # 70, # 97 & # 101
RC2- #
Received and inspected 28 lbs MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0052	W912DY-10-D-0023	0009	14 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 1-10 mph

Temperature: Minimum: 36 °F Maximum: 70 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Woody Zow	Intrusive Investigation
UXO II	Team Member	Jeremy Amiotte	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Rebecca Powers	Intrusive Investigation
UXO II	QC Geo Assistant		Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO II	QC Geo Assistant		Geo QC

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO I	Team Member		

Daily Quality Control Report

Water Sampling 1ST Day – Escorted by Safety

Environmentalist	Water Sampler	Mike Cox	Water Sampling

GEO Team ONE

UXO II	UXO Escort		UXO Escort
GeoPhysical	Team Member		GEO Operator

1. Work performed today:

AGM Grid - Intrusive investigation of targeted anomalies; Soil/Water Sampling

2. Worked performed today by subcontractors:

Samples IS-ARNG-11 & 49 collected

3. INSPECTIONS:

3.1 Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	GEO 1	Not Staffed					
F	Water 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
	Team 3						
	GEO 1						
F	Water 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				60	0	0	29
Pass		Fail					
60		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
5	0	5				At Start	104
Totals to Date:				7	0	0	98
Pass		Fail					
7		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
1	0	1				At Start	114
Totals to Date:				22	0	0	92
Pass		Fail					
22		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2				Water 1	X		
Equipment calibration check	UXO 1	UXO 2				Water 1	X		
Vehicle condition	UXO 1	UXO 2				Water 1	X		
Equipment condition	UXO 1	UXO 2				Water 1	X		
Emergency equipment	UXO 1	UXO 2				Water 1	X		
Proper grid layout	UXO 1	UXO 2					X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2				Water 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

Daily Quality Control Report

b. Verbal instructions received by the Government representative or client and actions taken:
None
c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1-AGM # 01, # 06, # 08, # 23, # 38, # 53, # 72, # 84, # 94 / RC2- DGM # 103
Received and inspected 15 lbs MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0053	W912DY-10-D-0023	0009	15 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 5-15 mph

Temperature: Minimum: 56 °F Maximum: 86 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Grid Preparation/Set-up
UXO II	Team Member		
UXO II	Team Member		
UXO I	Team Member	Charlie Richardson	Grid Preparation/Set-up
UXO I	Team Member		
UXO I	Team Member		
UXO II	QC Geo Assistant		

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Rebecca Powers	Intrusive Investigation
UXO II	QC Geo Assistant	Casie Hood	Geo QC

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO I	Team Member		

Daily Quality Control Report

Water Sampling

UXO II	UXO Escort	Woody Zow	UXO Escort
Environmentalist	Water Sampler	Mike Cox	Water Sampling

GEO Team ONE

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

DGM & AGM Grid - Intrusive investigation of targeted anomalies; Soil/Water Sampling

2. Worked performed today by subcontractors:

Samples IS-ARNG-01, 19, 23, 26, 51, 82, 82D & 82T collected

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
F	GEO 1	See block 3.3					
F	Water 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
	Team 3						
F	GEO 1	RC2-DGM-065					
F	Water 1						

HydroGeoLogic, Inc
MUNITIONS RESPONSE TEAM

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				60	0	0	29
Pass		Fail					
60		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
1	0	1				At Start	105
Totals to Date:				8	0	0	97
Pass		Fail					
8		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
1	0	1				At Start	114
Totals to Date:				23	0	0	91
Pass		Fail					
23		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2			GEO 1	Water 1	X		
Equipment calibration check	UXO 1	UXO 2			GEO 1	Water 1	X		
Vehicle condition	UXO 1	UXO 2			GEO 1	Water 1	X		
Equipment condition	UXO 1	UXO 2			GEO 1	Water 1	X		
Emergency equipment	UXO 1	UXO 2			GEO 1	Water 1	X		
Proper grid layout	UXO 1	UXO 2					X		
Proper search techniques		UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone		UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2			GEO 1	Water 1	X		

a Soil samples taken:

Pre-Detonation: ☒ No ☐ Yes ☐ None required

Post-Detonation: ☒ No ☐ Yes ☐ None required

Daily Quality Control Report

b. Verbal instructions received by the Government representative or client and actions taken:
None
c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1-DGM # 41, # 43, # 90, # 91 & # 95 / RC2- DGM # 54 & # 106
Received and inspected 29 lbs MD
Disposal of 37mm located in RC2-106

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0054	W912DY-10-D-0023	0009	16 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 5-15 mph

Temperature: Minimum: 65 °F Maximum: 86 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Woody Zow	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO I	Team Member	Becka Powers – SEE NOTE	Intrusive Investigation
UXO II	QC Geo Assistant	Casie Hood	Geo QC

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO I	Team Member		

Water Sampling

UXO II	UXO Escort	Oscar Honne - Safety	UXO Escort

Environmentalist	Water Sampler	Mike Cox	Water Sampling

GEO Team ONE

UXO II	UXO Escort		UXO Escort
GeoPhysical	Team Member		GEO Operator

1. Work performed today:

DGM Grid - Intrusive investigation of targeted anomalies; Water Sampling

2. Worked performed today by subcontractors:

Samples IS-ARNG-22 & IS-RC2-01, 04, 04D, 04T, 05, 19 & 64 collected

3. INSPECTIONS:

3.1 Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	GEO 1	Not Staffed					
F	Water 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1	RC1-DGM-086					
F	Team 2						
	Team 3						
	GEO 1						
F	Water 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				60	0	0	29
Pass		Fail					
60		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
10	0	10				At Start	105
Totals to Date:				18	0	0	87
Pass		Fail					
18		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	114
Totals to Date:				23	0	0	91
Pass		Fail					
23		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2				Water 1	X		
Equipment calibration check	UXO 1	UXO 2				Water 1	X		
Vehicle condition	UXO 1	UXO 2				Water 1	X		
Equipment condition	UXO 1	UXO 2				Water 1	X		
Emergency equipment	UXO 1	UXO 2				Water 1	X		
Proper grid layout	UXO 1	UXO 2					X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2				Water 1	X		

a Soil samples taken:

Pre-Detonation: ☒ No ☐ Yes ☐ None required

Post-Detonation: ☒ No ☐ Yes ☐ None required

Daily Quality Control Report

b. Verbal instructions received by the Government representative or client and actions taken:
None
c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1-DGM # 12, # 37, # 46, # 56, # 66, # 71, # 80, # 86, # 89 & # 98 / RC2- DGM # 108, # 110, # 112 & # 113
Received and inspected lbs MD
Disposal of 2.36" Rocket RC1-DGM-086
Rebecca Powers – OSHA Physical

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0055	W912DY-10-D-0023	0009	17 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☒ Fog ☐ Partly Cloudy ☐ Rain ☐ Snow ☐ Wind ☐ 5-10 mph

Temperature: Minimum: 63 °F Maximum: 89 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member	Casie Hood	Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Jeremy Amiotte	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member	Dawn Weber	Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member	Coty Kaliszewski	Intrusive Investigation
UXO I	Team Member	Becka Powers	Intrusive Investigation
UXO II	QC Geo Assistant		Geo QC

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO I	Team Member		

Daily Quality Control Report

Water Sampling

UXO II	UXO Escort	Woody Zow	UXO Escort
Environmentalist	Water Sampler	Mike Cox	Water Sampling

GEO Team ONE

UXO II	UXO Escort		UXO Escort
GeoPhysical	Team Member		GEO Operator

1. Work performed today:

DGM Grid - Intrusive investigation of targeted anomalies; Water Sampling

2. Worked performed today by subcontractors:

Samples IS-RC2-02, 02D, 02T, 21, 30, 34, & 52 collected

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	GEO 1	Not Staffed					
F	Water 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
	Team 3						
	GEO 1						
F	Water 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				60	0	0	29
Pass		Fail					
60		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
1	0	1				At Start	105
Totals to Date:				19	0	0	86
Pass		Fail					
19		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
2	0	2				At Start	114
Totals to Date:				25	0	0	88
Pass		Fail					
25		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2				Water 1	X		
Equipment calibration check	UXO 1	UXO 2				Water 1	X		
Vehicle condition	UXO 1	UXO 2				Water 1	X		
Equipment condition	UXO 1	UXO 2				Water 1	X		
Emergency equipment	UXO 1	UXO 2				Water 1	X		
Proper grid layout	UXO 1	UXO 2					X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2				Water 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:
None
c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1-DGM # 42, # 49, # 50, # 60, # 62, # 67, # 69, # 79, # 85, # 99, # 102, # 103 & # 104 / RC2- DGM # 76 & # 111
Received and inspected lbs MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0056	W912DY-10-D-0023	0009	20 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Partly Cloudy ☒ Rain ☒ Snow ☐ Wind ☐ 5-10 mph

Temperature: Minimum: 69 °F Maximum: 84 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Casie Hood	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member		Intrusive Investigation
UXO I	Team Member	Becka Powers	Intrusive Investigation
UXO II	QC Geo Assistant	Dawn Weber	Geo QC

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO I	Team Member		

Daily Quality Control Report

Water Sampling

UXO II	UXO Escort	Woody Zow	UXO Escort
Environmentalist	Water Sampler	Mike Cox	Water Sampling

GEO Team ONE

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

DGM Grid - Intrusive investigation of targeted anomalies; Water Sampling

2. Worked performed today by subcontractors:

Samples IS-RC1-05, 08, 13, 14,34 & 43 collected

3. INSPECTIONS:

3.1 Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection

Phase	Team name:	DFOW	Comments
F	Team 1	See block 3.3	
F	Team 2	See block 3.3	
	Team 3	Not Staffed	
F	GEO 1	See block 3.3	
F	Water 1	See block 3.3	

		Grid #	Grid #	Grid #	Grid #	Grid #	Grid #
F	Team 1						
F	Team 2						
	Team 3						
F	GEO 1						
F	Water 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				60	0	0	29
Pass	Fail						
60	0						

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				17	0	0	88
Pass	Fail						
17	0						

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	114
Totals to Date:				25	0	0	89
Pass	Fail						
25	0						

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2		GEO 1		Water 1	X		
Equipment calibration check	UXO 1	UXO 2		GEO 1		Water 1	X		
Vehicle condition	UXO 1	UXO 2		GEO 1		Water 1	X		
Equipment condition	UXO 1	UXO 2		GEO 1		Water 1	X		
Emergency equipment	UXO 1	UXO 2		GEO 1		Water 1	X		
Proper grid layout	UXO 1	UXO 2					X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2		GEO 1		Water 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:
None
c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1-DGM # 22, # 81 & # 82 – RC1-ANALOG- # 96 & # 105 / RC2-DGM # 37, # 55 & # 65
Received and inspected 10 lbs MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0057	W912DY-10-D-0023	0009	21 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Partly Cloudy ☒ Rain ☒ Snow ☐ Wind ☐ 5-10 mph

Temperature: Minimum: 69 °F Maximum: 84 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Casie Hood	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member		Intrusive Investigation
UXO I	Team Member	Becka Powers	Intrusive Investigation
UXO II	QC Geo Assistant	Dawn Weber	Geo QC

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO I	Team Member		

Daily Quality Control Report

Water Sampling

UXO II	UXO Escort	Woody Zow	UXO Escort
Environmentalist	Water Sampler	Mike Cox	Water Sampling

GEO Team ONE

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

AGM Grid - Intrusive investigation of targeted anomalies; AGM Transect collection; Rechecks of specific anomalies on selected DGM grids; Soil/Water Sampling

2. Worked performed today by subcontractors:

Samples IS-ARNG-14 & 45; IS-RC1-01, 06, 06D, 06T, 10 & 11 collected

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW	Comments
F	Team 1	See block 3.3	
F	Team 2	See block 3.3	
	Team 3	Not Staffed	
F	GEO 1	See block 3.3	
F	Water 1	See block 3.3	

		Grid #	Grid #	Grid #	Grid #	Grid #	Grid #
F	Team 1						
F	Team 2						
	Team 3						
F	GEO 1						
F	Water 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				60	0	0	29
Pass	Fail						
60	0						

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
9	0	9				At Start	105
Totals to Date:				26	0	0	79
Pass	Fail						
26	0						

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	114
Totals to Date:				26	0	0	88
Pass	Fail						
26	0						

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2		GEO 1		Water 1	X		
Equipment calibration check	UXO 1	UXO 2		GEO 1		Water 1	X		
Vehicle condition	UXO 1	UXO 2		GEO 1		Water 1	X		
Equipment condition	UXO 1	UXO 2		GEO 1		Water 1	X		
Emergency equipment	UXO 1	UXO 2		GEO 1		Water 1	X		
Proper grid layout	UXO 1	UXO 2					X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2		GEO 1		Water 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:
None
c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1-AGM # 100 – RC1-ANALOG- Transects AGM-500 # 009 1247' & 011 [2 sections] 477'
Received and inspected lbs MD

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0058	W912DY-10-D-0023	0009	22 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Partly Cloudy ☒ Rain ☒ Snow ☐ Wind ☐ 5-10 mph

Temperature: Minimum: 69 °F Maximum: 82 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader	Al Smith	Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member	Charlie Richardson	Intrusive Investigation
UXO I	Team Member	Cheryl Okino	Intrusive Investigation
UXO II	QC Geo Assistant	Casie Hood	Geo QC

Team TWO

UXO III	Team Leader	Gary Cagle	Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member	Jason Brawner	Intrusive Investigation
UXO I	Team Member		Intrusive Investigation
UXO I	Team Member	Becka Powers	Intrusive Investigation
UXO II	QC Geo Assistant	Dawn Weber	Geo QC

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up
UXO I	Team Member		

Daily Quality Control Report

Water Sampling

UXO II	UXO Escort	Woody Zow	UXO Escort
Environmentalist	Water / Soil Sampler	Mike Cox	Water / Soil Sampling

GEO Team ONE

UXO II	UXO Escort	Jeremy Amiotte	UXO Escort
GeoPhysical	Team Member	Coty Kaliszewski	GEO Operator

1. Work performed today:

AGM Transect collection; Water / Soil Sampling; Demil of Ordnance and Clean-up shot

2. Worked performed today by subcontractors:

Samples IS-BG-01, 01D, 01T, 02, 03, 04, 05, 06 & 07 collected

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
F	Team 1	See block 3.3					
F	Team 2	See block 3.3					
	Team 3	Not Staffed					
	GEO 1	Not Staffed					
F	Water 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
F	Team 1						
F	Team 2						
	Team 3						
	GEO 1						
F	Water 1						

Daily Quality Control Report

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	89
Totals to Date:				60	0	0	29
Pass		Fail					
60		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	105
Totals to Date:				26	0	0	79
Pass		Fail					
26		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	Fail	Total		Pass	Fail	Total	Remaining
0	0	0				At Start	114
Totals to Date:				26	0	0	88
Pass		Fail					
26		0					

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)	UXO 1	UXO 2				Water 1	X		
Equipment calibration check	UXO 1	UXO 2				Water 1	X		
Vehicle condition	UXO 1	UXO 2				Water 1	X		
Equipment condition	UXO 1	UXO 2				Water 1	X		
Emergency equipment	UXO 1	UXO 2				Water 1	X		
Proper grid layout	UXO 1	UXO 2					X		
Proper search techniques	UXO 1	UXO 2					X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone	UXO 1	UXO 2					X		
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations	UXO 1	UXO 2				Water 1	X		

a Soil samples taken:

Pre-Detonation: ☒ No ☐ Yes ☐ None required

Post-Detonation: ☒ No ☐ Yes ☐ None required

b. Verbal instructions received by the Government representative or client and actions taken:
None
c. Non-conformances/deficiencies reported:
None

4. Site safety monitoring activities performed today :	
HGL:	**Subcontractor:**
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Remarks: Grids reported completed – RC1-ANALOG- Transects AGM-500 # 011 [1 section] 233'
Received and inspected 55 lbs MD
MD Drum # 2 sealed – Seal # 4495804 containing 410 lbs of MD / [Drum # 1, 694 lbs, Seal # 4495805, sealed 26 April 2013]
Total MD weight 1104 lbs

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0059	W912DY-10-D-0023	0009	23 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:

Clear ☐ Fog ☐ Partly Cloudy ☒ Rain ☒ Snow ☐ Wind ☐ 10-15 mph

Temperature: Minimum: 64 °F Maximum: 82 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor	Joel Sanders	Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer	Oscar Honne	Site Management

Team ONE

UXO III	Team Leader		Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member		Intrusive Investigation

Team TWO

UXO III	Team Leader		Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member		Intrusive Investigation

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Water / Soil Sampling

UXO II	UXO Escort	Westleon Rogers	UXO Escort
Environmentalist	Water / Soil Sampler	Mike Cox	Water / Soil Sampling

GEO Team ONE

UXO II	UXO Escort		UXO Escort
GeoPhysical	Team Member		GEO Operator

1. Work performed today:

Water / Soil Sampling; Completion of shipping out equipment

2. Worked performed today by subcontractors:

Samples IS-BG-08, 09 & 10 collected

3. INSPECTIONS:

3.1 **Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection**

Phase	Team name:	DFOW			Comments		
	Team 1	Not Staffed					
	Team 2	Not Staffed					
	Team 3	Not Staffed					
	GEO 1	Not Staffed					
F	Water 1	See block 3.3					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
	Team 1						
	Team 2						
	Team 3						
	GEO 1						
F	Water 1	BG-08	BG-09	BG-10			

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	89
Totals to Date:				60	0	0	29
Pass		**Fail**					
60		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	105
Totals to Date:				26	0	0	79
Pass		**Fail**					
26		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	114
Totals to Date:				26	0	0	88
Pass		**Fail**					
26		0					

Daily Quality Control Report

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)						Water 1	X		
Equipment calibration check						Water 1	X		
Vehicle condition						Water 1	X		
Equipment condition						Water 1	X		
Emergency equipment						Water 1	X		
Proper grid layout						Water 1	X		
Proper sampling techniques						Water 1	X		
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations						Water 1	X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

Remarks: Soil and water sampling of Background grids - # 08, # 09 & # 10
Pick-up of Explosives Magazines
Return of gate keys to Property Owners

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*	
Westleon Paul Rogers	Westleon Paul Rogers
UXO Quality Control Specialist	Signature

Daily Quality Control Report

Report No.:	Contract No:	Delivery/Task Order:	Date:
0060	W912DY-10-D-0023	0009	24 May 2013

Site/Installation Name:	City:	State:	
Former Camp Butner RC1, RC2, ANGP, HGR & FTR	Butner	NC	

Weather:
Clear ☐ Fog ☐ Partly Cloudy ☒ Rain ☐ Snow ☐ Wind ☐ 5-15 mph

Temperature: Minimum: 45 °F Maximum: 73 °F

Management

Employer:	Position:	Name:	Activity:
HGL	Project Manager	Kimberly Vaughn	Site Management
	Site Manager		
HGL	Senior UXO Supervisor		Site Management
	Senior Geophysicist		
	Site Safety and Health Officer		
HGL	UXO Quality Control Specialist	Westleon Rogers	Site Management
HGL	UXO Safety Officer		Site Management

Team ONE

UXO III	Team Leader		Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member		Intrusive Investigation

Team TWO

UXO III	Team Leader		Intrusive Investigation
UXO II	Team Member		Intrusive Investigation
UXO I	Team Member		Intrusive Investigation

Team THREE

UXO II	Team Leader		Grid Preparation/Set-up
UXO I	Team Member		Grid Preparation/Set-up

Water / Soil Sampling

UXO II	UXO Escort	UXO Escort
Environmentalist	Water / Soil Sampler	Water / Soil Sampling

GEO Team ONE

UXO II	UXO Escort		UXO Escort
GeoPhysical	Team Member		GEO Operator

1. Work performed today:

Completed shipping out equipment and closure of site

2. Worked performed today by subcontractors:

3. INSPECTIONS:

3.1 Inspections performed (include name of team present, specifications, plans and submittals required for definable feature of work [DFOW]). Indicate 3-Phase inspection level with by inserting: Preparatory = P; Initial = I; Follow-up = F. (*See Remarks (Block 8)) F = Fail, RI = Re-Inspection

Phase	Team name:	DFOW			Comments		
	Team 1	Not Staffed					
	Team 2	Not Staffed					
	Team 3	Not Staffed					
	GEO 1	Not Staffed					
	Water 1	Not Staffed					
		Grid #	**Grid #**	**Grid #**	**Grid #**	**Grid #**	**Grid #**
	Team 1						
	Team 2						
	Team 3						
	GEO 1						
	Water 1						

3.2.1 Grid Inspection Performed: Army NG Property

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	89
Totals to Date:				60	0	0	29
Pass		**Fail**					
60		0					

3.2.2 Grid Inspection Performed: RC1

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	105
Totals to Date:				26	0	0	79
Pass		**Fail**					
26		0					

3.2.3 Grid Inspection Performed: RC2

Completed Today:				QA inspections completed to date:			
Pass	**Fail**	**Total**		**Pass**	**Fail**	**Total**	**Remaining**
0	0	0				At Start	114
Totals to Date:				26	0	0	88
Pass		**Fail**					
26		0					

Daily Quality Control Report

3.3 DFOW:	Team (indicate by: UXO = U; or Geo = G; and No):						Pass	Fail	NA
Proper work attire (PPE)									X
Equipment calibration check									X
Vehicle condition									X
Equipment condition									X
Emergency equipment									X
Proper grid layout									X
Proper sampling techniques									X
Team leader daily log									X
SUXOS daily log									X
GIS and map data									X
Exclusion zone									X
Field office interior									X
Field office exterior									X
Proper demolition operations									X
Safety violations							X		

a Soil samples taken:

Pre-Detonation: ☐ No ☐ Yes ☒ None required

Post-Detonation: ☐ No ☐ Yes ☒ None required

b. Verbal instructions received by the Government representative or client and actions taken:

None

c. Non-conformances/deficiencies reported:

None

4. Site safety monitoring activities performed today :

HGL:	Subcontractor:
PPE Level worn: D	PPE level worn: D
Safety violations observed: ☒ No ☐ Yes	Safety violations observed ☒ No ☐ Yes

Daily Quality Control Report

Remarks: Shipping of MD Drums – 1348 and HGL Form 15.07 completed and signed

CERTIFICATION: *I certify the above information is complete and correct and that I, or my representative, have inspected all work identified on this report performed by HGL and our subcontractor(s) and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.*

Westleon Paul Rogers	
UXO Quality Control Specialist	Signature

APPENDIX H3

WEEKLY SITE MANAGER REPORTS

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SITE MANAGER WEEKLY REPORT

Week ending: 05 November, 2012
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

---

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan.

Brush clearance and DGM transect data collection will proceed on the Army National Guard munitions response site (MRS), followed by transition of teams to the two Range Complex MRSs after hunting season concludes January 1st.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQCS*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Not on site

3. Project Field Information:
Remedial Investigation: Site Setup Activities conducted this week.

Summaries of daily production information.

Monday 29Oct:	Obtain rental truck. Informal meeting with Butner Range Control staff. Discuss schedule for access to various active ranges. Tour of range facilities and potential office trailer sites.
Tuesday: 30Oct	Receive delivery of explosive magazines from Dyno Nobel, begin setup. Continue procuring miscellaneous equipment for site.
Wednesday: 31Oct	Procure team equipment, safety gear, and office printer. Research equipment vendors available for brush clearance equipment.

Thursday: 01Nov	Site trailer office/storage combo delivered and setup today. Begin marking brush clearance transects that require vegetation removal. DGM transects 023, 024, 025 identified with flagging ribbon. Obtain two additional rental trucks.
Friday: 02Nov	Coordinate with Camp Butner facilities staff for connecting electrical power to site trailer. Mark DGM transects south of Roberts Chapel Road. DGM transects # 061, 062, 063 identified with flagging ribbon. SUXOS prepares site specific training for arrival of team personnel Monday 11/5.

Visitors this week:	NA
Weather delays this week/to date:	0 /0
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed: N/A, until explosives are delivered.	No discrepancies
Description of operations planned for the upcoming week ending 09Nov: Brush Clearance activities will commence in ARNG MRS.	
Personnel on Site Week Ending: 02 Nov 2012	HGL: SUXOS Joel Sanders, UXO Tech II Jeremy Amiotte

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	68.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	38.00
(3) Dec	0.00
(4) Jan	0.00
(5) Feb	0.00
Project Man-hours Total	68.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Kimberly Vaughn
Deputy Project Manager

Photographs



Office Trailer Setup



Office Trailer Setup

SITE MANAGER WEEKLY REPORT

Week ending: 09 November, 2012
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

---

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan.

Brush clearance and DGM transect data collection will proceed on the Army National Guard munitions response site (MRS), followed by transition of teams to the two Range Complex MRSs after hunting season concludes January 1st.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQCS*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Not on site

3. Project Field Information:
Remedial Investigation: Brush Clearance conducted this week.

Summaries of daily production information.

Monday 05 Nov:	Additional personnel arrived onsite, site safety briefing/orientation. Brush clearance transects ARNG_DGM500_025 and ARNG_DGM500_024
Tuesday 06 Nov:	Brush clearance (ARNG_DGM500_024 and ARNG_DGM500_023) and Reconnaissance ARNG_Recon_021 and ARNG_Recon_022.
Wednesday 07 Nov:	Second brush machine arrived, second brush clearance team created. Brush clearance on ARNG_DGM500_022, ARNG_DGM500_021, ARNG_DGM500_020 and ARNG_DGM500_019. Reconnaissance of ARNG_Recon_021 and

	ARNG_Recon_022.
Thursday 08 Nov:	Brush teams 1 and 2 cleared into range fan (range closed today) for ARNG_DGM500_023, 022, 021, and 020. Portions of 019 and 018 cut but not completed. Munitions debris located: 81mm illumination mortar tail boom (see photograph).
Friday 09 Nov:	Brush teams 1 and 2 cleared eastern sides of ARNG_DGM500_023 and ARNG_DGM500_018, DGM transect 026 hand cleared. Reconnaissance transects ARNG_Recon_013 and 015.

Visitors this week:	NA
Weather delays this week/to date:	0 /0
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed: N/A, until explosives are delivered.	No discrepancies
Description of operations planned for the upcoming week ending 09Nov: Brush Clearance activities will continue in ARNG MRS. DGM transect data collection will begin in ARNG MRS.	
Personnel on Site Week Ending: 09 Nov 2012	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte & Dawn Weber; UXO Tech I Rebecca Powers & Charles Richardson and i3: Equipment Operator David Davis

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	324.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	362.00
(3) Dec	0.00
(4) Jan	0.00
(5) Feb	0.00
Project Man-hours Total	392.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Kimberly Vaughn
Deputy Project Manager

Photographs



Brush Clearance, ARNG_DGM500_024



Transect path, ARNG_DGM500_025



Brush Clearance, ARNG_DGM500_024



MD found 81mm illumination mortar tail boom
ARNG_DGM500_023

SITE MANAGER WEEKLY REPORT

Week ending: 23 November, 2012
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

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1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance and DGM transect data collection will proceed on the Army National Guard munitions response site (MRS), followed by transition of teams to the two Range Complex MRSs after hunting season concludes January 1st.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQCS*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	None currently on site

3. Project Field Information: **Remedial Investigation:** Brush clearance on various privately owned parcels were conducted this week. No work could be conducted on the guard property due to hunting.	

Summaries of daily production information.	
Monday 19 Nov:	Brush clearance on transects RC2_DGM500_003 through 010 were cut and or marked. In addition transects RC2_DGM300_001 through 005 were cut and/or marked for DGM. Recon survey transects RC2_RECON_015 -022 were collected.
Tuesday 20 Nov:	Relocated teams to the Garrett property. Landowner explained roughly half of the trees on this parcel are "planted pine trees" that cannot be cut. Teams hand cleared paths through pine groves. Transects RC2_DGM300_008 through 012 were cut and

	or marked. In addition, transects RC2_DGM300_022 through 025 were also cut and or marked for DGM.
Wednesday 21 Nov:	Transects RC2_DGM300_013, 014, 015, 016, 017 and 021 were cut and/or marked. RC2_RECON_022, 023 and 024 at Mr. Roberts' property collected, though terrain and vegetation made certain portions of these transects impassible. Both brush cutting machines to be relocated back to guard property for operations starting after Thanksgiving break.
Thursday 22 Nov:	Holiday
Friday 23 Nov:	Holiday

Visitors this week:	N/A
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed: N/A, until explosives are delivered.	No discrepancies

Description of operations planned for the upcoming week ending 23 Nov:
Brush Clearance activities will continue inside the ARNG MRS, depending upon range usage. Amec personnel will demobilize until 3 December, so that additional brush clearance transects can be cleared.

Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte & Dawn Weber; UXO Tech I Rebecca Powers & Charles Richardson and i3: Equipment Operator David Davis

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	180.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1117.00
(3) Dec	0.00
(4) Jan	0.00
(5) Feb	0.00
Project Man-hours Total	1147.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Kimberly Vaughn
Deputy Project Manager

SITE MANAGER WEEKLY REPORT

Week ending: 07 December, 2012
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Hank Counts, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

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1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance and DGM transect data collection will proceed on the Army National Guard munitions response site (MRS), followed by transition of teams to the two Range Complex MRSs after hunting season concludes January 1st.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQCS*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Hank Counts

3. Project Field Information:

Remedial Investigation: Brush clearance equipment remained on the Army National Guard (ARNG) MRS. Teams focused on brush clearance in this MRS with no live-firing occurring on the 5, 6, and 7th. AMEC team arrived onsite to perform DGM transects. Teams transitioned in and out of the ranges depending on whether live fire training was occurring. Additional site visitors onsite are discussed below.

Summaries of daily production information.	
Monday 03 Dec:	Brush Teams 1 and 2 continued to cut vegetation on either side of the Range 4 fan. USACE OESS arrived onsite to observe brush cutting, DGM and reconnaissance survey activities.
Tuesday 04 Dec:	Teams collected reconnaisance transects on the western portion of the Guard property. After Range 4 went cold for the day, a brush team cut DGM_500_011 across the range fan. AMEC collected transect data at the northeastern portion of the guard property. Site Visitors today included USACE PM Kenyatta Spruill (USACE Savannah District). He was provided a site overview and tour by OESS, Hank Counts.
Wednesday 05 Dec:	Brush Teams 1 and 2 cut and marked transects within the range fan and AMEC collected data within the range fan including ARNG_DGM300_003 through 005 and ARNG_DGM500_003 through 005.
Thursday 06 Dec:	Brush Teams 1 and 2 cut and marked transects within the range fan. AMEC collected data within the range fan.
Friday 07 Dec:	Brush Teams 1 and 2 finished cutting and marking DGM transects within the range fan. All brush cutting is now complete on the ARNG MRS. AMEC continued to collect data within the range fan, while no live firing activities were occurring.

Visitors this week:	Mr. Kenyatta Spruill, USACE Savannah District, and Mr. Hank Counts, OESS assigned to the site provided escort for Mr. Spruill.
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed: N/A, until explosives are delivered.	No discrepancies

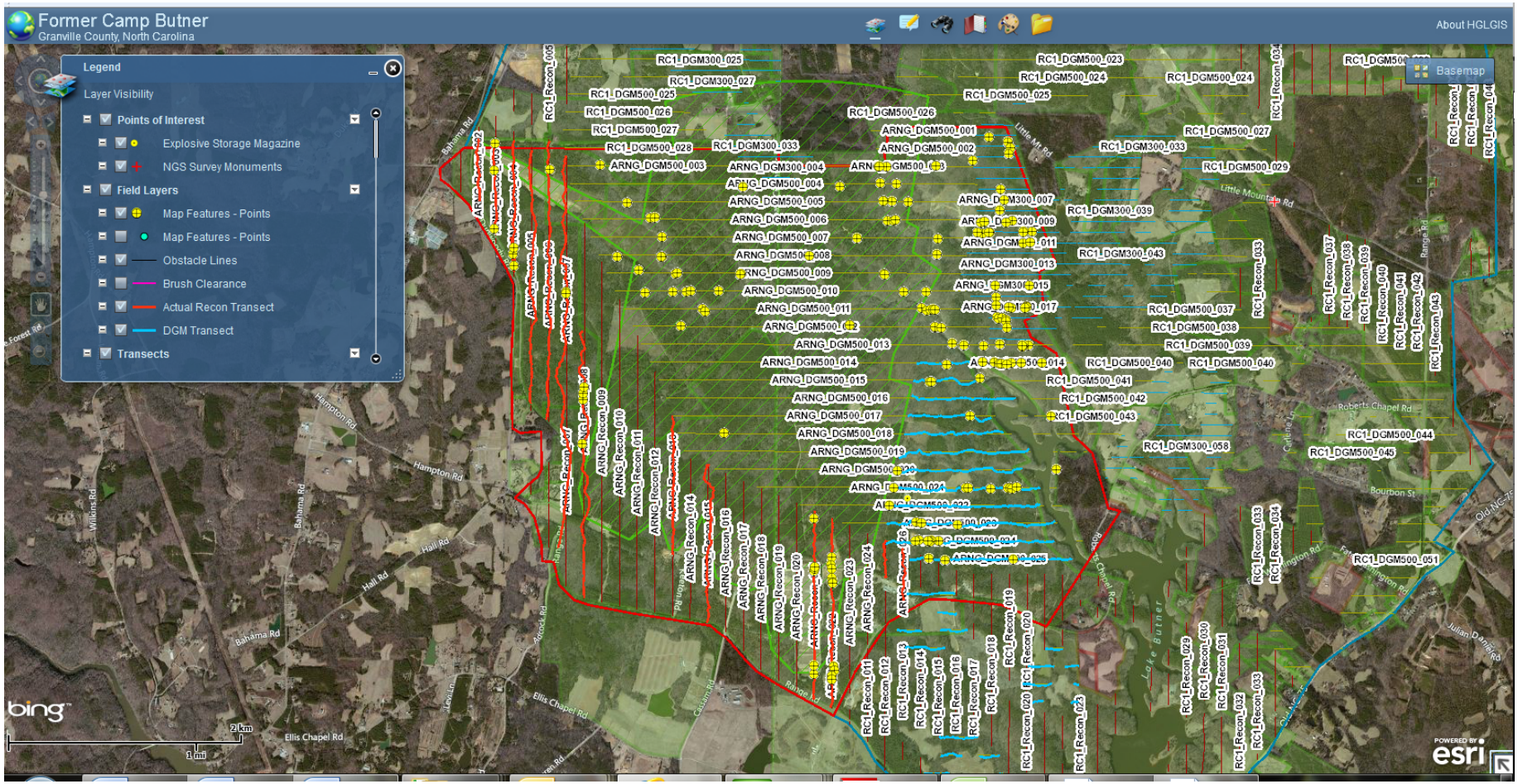
Description of operations planned for the upcoming week ending 14 Dec:
Brush Clearance activities will continue outside the ARNG MRS. AMEC personnel will continue collecting DGM transect data on other privately owned parcels.

Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte & Dawn Weber; UXO Tech I Rebecca Powers & Charles Richardson and i3: Equipment Operators David Davis and Adam Hughes

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	180.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	480.00
(4) Jan	0.00
(5) Feb	0.00
Project Man-hours Total	2027.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A



Kimberly Vaughn
Deputy Project Manager



Screenshot of Butner gis webmap showing field activity layers Reconnaissance Transects and DGM Transects both proposed and actual completed. Brush Clearance transects are not shown.

Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/

Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011

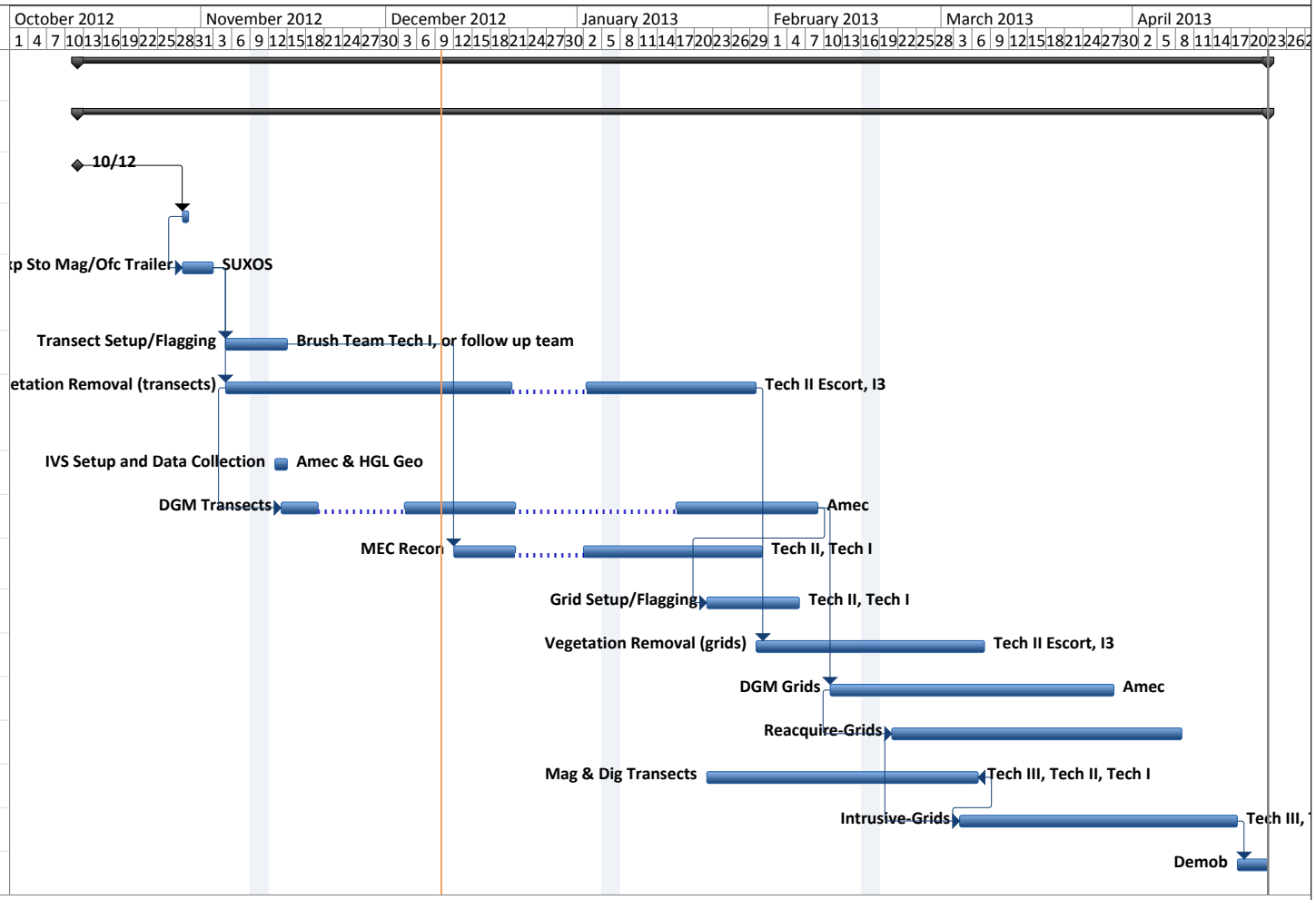
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

Butner Schedule - week ending 12/07/12.

The schedule and total amounts of brush clearance are still being evaluated. Based on landowner contacts made in December, the total of brush clearance in January/February may change. Updates to the schedule will be made each week in December based on telephone contacts with landowners and schedule for field efforts in January and February.

Anticipated ROE - Butner

ID	Task Name	Start
1	**Camp Butner**	**Fri 10/12/12**
2	**Task 4 RI/FS Field Activities**	**Fri 10/12/12**
3	NTP	Fri 10/12/12
4	Mobilization	Mon 10/29/12
5	Site Setup/Exp Sto Mag/Ofc Trailer	Mon 10/29/12
6	Transect Setup/Flagging	Mon 11/5/12
7	Vegetation Removal (transects)	Mon 11/5/12
8	IVS Setup and Data Collection	Tue 11/13/12
9	DGM Transects	Wed 11/14/12
10	MEC Recon	Wed 12/12/12
11	Grid Setup/Flagging	Tue 1/22/13
12	Vegetation Removal (grids)	Wed 1/30/13
13	DGM Grids	Mon 2/11/13
14	Reacquire-Grids	Thu 2/21/13
15	Mag & Dig Transects	Tue 1/22/13
16	Intrusive-Grids	Mon 3/4/13
17	Demob	Thu 4/18/13



Project: Butner RI/FS
Date: Mon 12/10/12

Task | Milestone | Inactive Task | Progress
Split | Summary | Deadline

SITE MANAGER WEEKLY REPORT

Week ending: 16 December, 2012
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Hank Counts, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

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1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance and DGM transect data collection will proceed on the Army National Guard munitions response site (MRS), followed by transition of teams to the two Range Complex MRSs after hunting season concludes January 1st.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQCS*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Hank Counts, USACE

3. Project Field Information: **Remedial Investigation:**	
Summaries of daily production information.	
Monday 10 Dec:	Brush Teams 1 and 2 cut and marked transects RC2_DGM500_032-034 and RC1_DGM500_005, 006, 007, 008, 009, 010, 011, and 012. SUXOS met with Mr. Mangum

	and his daughter to discuss the operation, property boundaries, and specific concerns. The majority of Mangum's land north of Bethany Church Road will need to be hand cleared to avoid damaging planted pines. AMEC did not collect data today due to flight delayed by weather conditions.
Tuesday 11 Dec:	Brush Teams cut and marked transects starting at Malcom Mangum's property then continued onto Mr. Eyster and Mr. Gilbert's properties. SUXOS met with Mr. Daniel and Jim Hunter to discuss property access. Machine breakdowns hindered cutting efforts today. AMEC collected transects in northern portion of RC2.
Wednesday 12 Dec:	Brush Team 1 cut and marked DGM transects at Elvin Mangum's properties. Brush Team 2 cut and marked DGM transects at the Veazey, Huff, and Daniel properties. AMEC collected transects at John and Malcolm Mangum properties.
Thursday 13 Dec:	Brush Team 1 cut and marked DGM transects at Elvin Mangum's properties. Brush Team 2 cut and marked DGM transects at the Daniel, Arrington, and Wicker properties. AMEC collected transects at the Barker, Eyster, Huff, and Veazey properties.
Friday 14 Dec:	Brush Team 1 continued to cut and mark DGM transects at Elvin Mangum's properties. Brush Team 2 finished the Daniel property and relocated to assist Team 1. Both brush machines suffered mechanical issues today limiting production. Amec collected transects at the Mangum and Garrett properties. Received two-way radios and repeater.

Visitors this week:	N/A
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies

Description of operations planned for the upcoming week ending 21 Dec:
Brush Clearance activities will continue outside the ARNG MRS. AMEC personnel will continue collecting DGM transect data on the ARNG MRS while the ranges are not conducting live fire training activities. Brush cutting, DGM transect data collection, and reconnaissance should be concluded by 21 December and personnel will demobilize for the holiday week.

Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte & Dawn Weber; UXO Tech I Rebecca Powers & Charles Richardson and i3: Equipment Operators David Davis and Adam Hughes

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	480.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	960.00
(4) Jan	0.00
(5) Feb	0.00
Project Man-hours Total	2507.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A



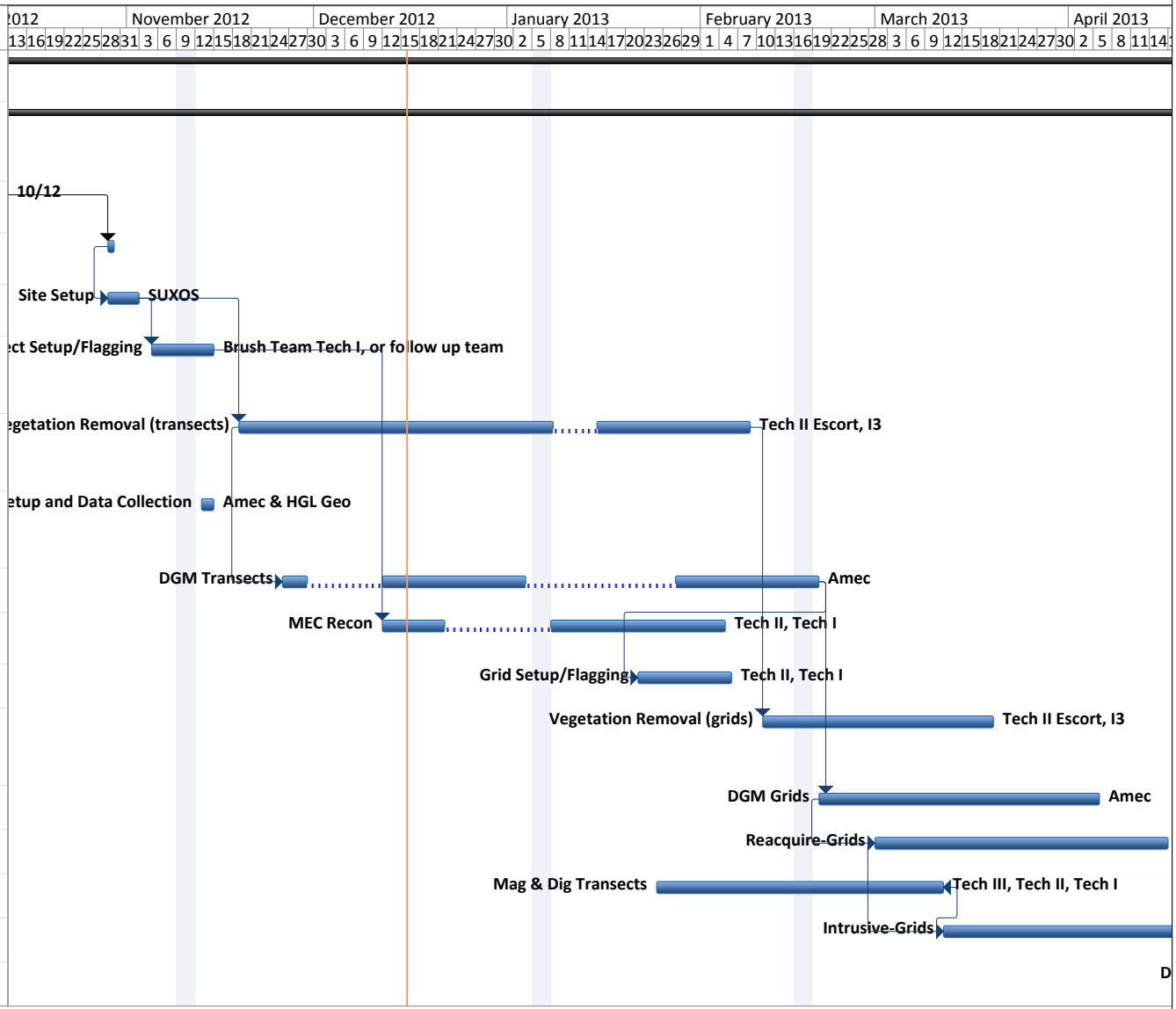
Kimberly Vaughn
Deputy Project Manager

Butner Schedule - week ending 12/14/12.

The schedule and total amounts of brush clearance are still being evaluated. Based on landowner contacts made in December, the total of brush clearance in January/February may change. Updates to the schedule will be made each week in December based on telephone contacts with landowners and schedule for field efforts in January and February.

Anticipated ROE - Butner

ID	Task Name	Start	Finish
1	**Camp Butner**	**Fri 10/12/12**	**Tue 4/30/13**
2	**Task 4 RI/FS Field Activities**	**Fri 10/12/12**	**Tue 4/30/13**
3	NTP	Fri 10/12/12	Fri 10/12/12
4	Mobilization	Mon 10/29/12	Mon 10/29/12
5	Site Setup	Mon 10/29/12	Fri 11/2/12
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12
7	Vegetation Removal (transects)	Mon 11/19/12	Fri 2/8/13
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12
9	DGM Transects	Mon 11/26/12	Tue 2/19/13
10	MEC Recon	Wed 12/12/12	Mon 2/4/13
11	Grid Setup/Flagging	Tue 1/22/13	Tue 2/5/13
12	Vegetation Removal (grids)	Mon 2/11/13	Tue 3/19/13
13	DGM Grids	Wed 2/20/13	Fri 4/5/13
14	Reacquire-Grids	Fri 3/1/13	Tue 4/16/13
15	Mag & Dig Transects	Fri 1/25/13	Tue 3/12/13
16	Intrusive-Grids	Tue 3/12/13	Thu 4/25/13
17	Demob	Fri 4/26/13	Tue 4/30/13



Project: Butner RI/FS
Date: Sun 12/16/12

Task — Milestone — Inactive Task — Progress
Split — Summary — Deadline

SITE MANAGER WEEKLY REPORT

Week ending: 21 December, 2012
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Hank Counts, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

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1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance and DGM transect data collection will proceed on the Army National Guard munitions response site (MRS), followed by transition of teams to the two Range Complex MRSs after hunting season concludes January 1st.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQCS*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Hank Counts, USACE

3. Project Field Information: **Remedial Investigation:**	
Summaries of daily production information.	
Monday 17 Dec:	Recon survey teams collected transects ARNG_RECON_011, 012, 014, 015, 016, 017, 018, 019, 020, 023 and 023. AMEC collected transects at the guard property

	while the range was not operating.
Tuesday 18 Dec:	Brush Teams 1 and 2 cut and marked transects at Mangum's property RC1_DGM500_006 through 008 and RC2_DGM500_033 through 036. AMEC collected transects at the guard property, outside the range fan, while the range was active.
Wednesday 19 Dec:	Brush Teams 1 and 2 cut and marked transects at Mangum's property RC1_DGM500_008 and 009 then converted to recon survey teams to collect ARNG_Recon_027-035, 010 and 012. Amec collected transects at the guard property inside the range fan while the range was cold.
Thursday 20 Dec:	Recon Team 1 finished collecting recon transects on the guard property while Recon Team 2 collected transects on state property south of the guard property. Amec collected all DGM transects at the guard property except for small portions of the following transects at the east side of the lake: ARNG_DGM500_018,019,020,021,022, and 024.
Friday 21 Dec:	No field teams were onsite – personnel demobilized today for the holiday week.

Visitors this week:	N/A
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 28 Dec: Personnel are demobilized for the week of 24 through 28 December, no teams are in the field.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte & Dawn Weber; UXO Tech I Rebecca Powers & Charles Richardson; i3 personnel: Equipment Operators David Davis and Adam Hughes; AMEC: Micah Holzbauer, UXO Tech: Alu, Seth

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	400.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	0.00
(5) Feb	0.00
Project Man-hours Total	2907.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

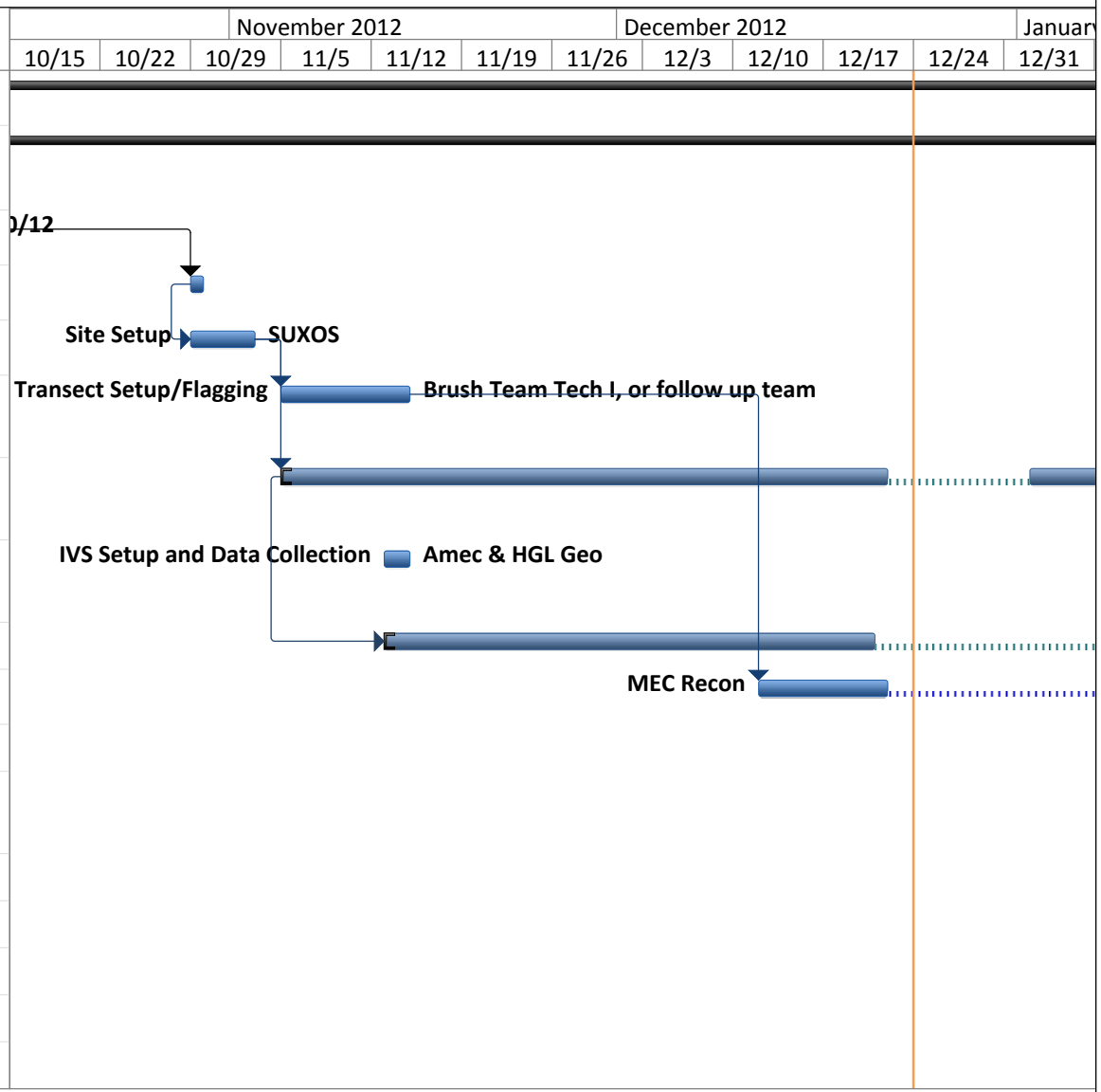
Kimberly Vaughn
Deputy Project Manager

Butner Schedule - week ending 12/21/12.

The schedule has been revised based on landowner contacts, total amount of right-of-entry obtained and total amounts of brush clearance anticipated. This revision incorporates planned brush clearance and landowner rights-of-entry granted to date.

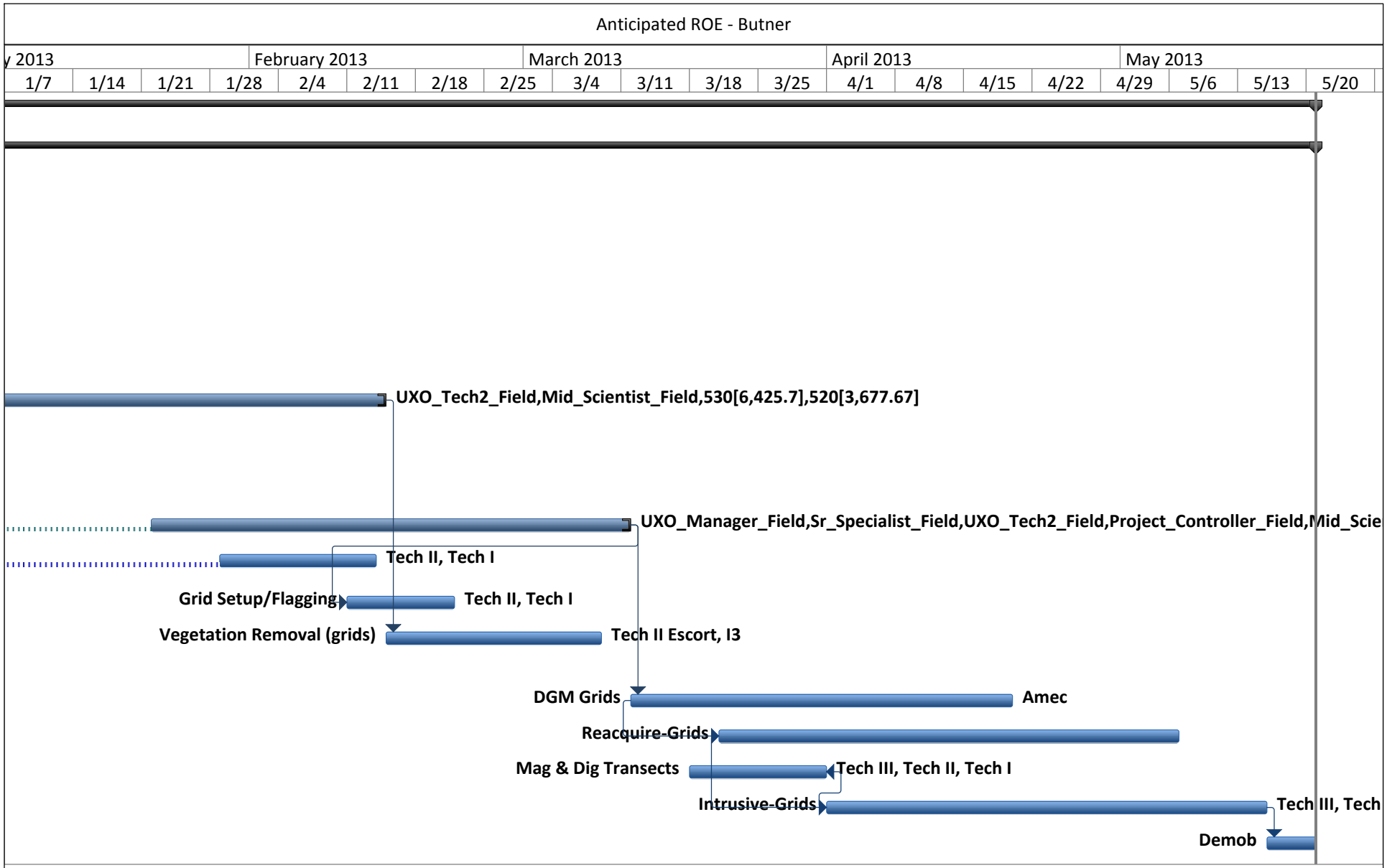
Anticipated ROE - Butner

ID	Task Name	Start	Finish
1	**Camp Butner**	**Fri 10/12/12**	**Mon 5/20/13**
2	**Task 4 RI/FS Field Activities**	**Fri 10/12/12**	**Mon 5/20/13**
3	NTP	Fri 10/12/12	Fri 10/12/12
4	Mobilization	Mon 10/29/12	Mon 10/29/12
5	Site Setup	Mon 10/29/12	Fri 11/2/12
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12
7	Vegetation Removal (transects)	Mon 11/5/12	Thu 2/14/13
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12
9	DGM Transects	Tue 11/13/12	Tue 3/12/13
10	MEC Recon	Wed 12/12/12	Wed 2/13/13
11	Grid Setup/Flagging	Mon 2/11/13	Thu 2/21/13
12	Vegetation Removal (grids)	Fri 2/15/13	Fri 3/8/13
13	DGM Grids	Tue 3/12/13	Fri 4/19/13
14	Reacquire-Grids	Thu 3/21/13	Mon 5/6/13
15	Mag & Dig Transects	Mon 3/18/13	Mon 4/1/13
16	Intrusive-Grids	Mon 4/1/13	Wed 5/15/13
17	Demob	Thu 5/16/13	Mon 5/20/13



Project: Butner RI/FS
Date: Mon 12/24/12

Task | Milestone | Inactive Task | Progress
Split | Summary | Deadline


Anticipated ROE - Butner
y 2013
February 2013
March 2013
April 2013
May 2013
1/7
1/14
1/21
1/28
2/4
2/11
2/18
2/25
3/4
3/11
3/18
3/25
4/1
4/8
4/15
4/22
4/29
5/6
5/13
5/20
UXO_Tech2_Field,Mid_Scientist_Field,530[6,425.7],520[3,677.67]
UXO_Manager_Field,Sr_Specialist_Field,UXO_Tech2_Field,Project_Controller_Field,Mid_Scie
Tech II, Tech I
Grid Setup/Flagging
Tech II, Tech I
Vegetation Removal (grids)
Tech II Escort, I3
DGM Grids
Amec
Reacquire-Grids
Mag & Dig Transects
Tech III, Tech II, Tech I
Intrusive-Grids
Tech III, Tech
Demob
Project: Butner RI/FS
Date: Mon 12/24/12
Task
Milestone
Inactive Task
Progress
Split
Summary
Deadline

SITE MANAGER WEEKLY REPORT

Week ending: 04 January 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Hank Counts, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance and DGM transect data collection was conducted on the Army National Guard (ARNG) munitions response site (MRS), followed by transition of teams to the two Range Complex MRSs after hunting season concludes January 1st.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQCS*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Hank Counts, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 31 Dec:	Teams were offsite.

Tuesday 01 Jan:	Holiday
Wednesday 02 Jan:	Personnel mobilized to the site after holiday break.
Thursday 03 Jan:	Teams began cutting and marking DGM transects at the Heirs of W.B. Jones' property (Large portion of RC2, along the southern MRS boundary, north of Enon Road). Added UXO Technician II, Westleon Rogers (USAESCH approval submitted 12/17/12), and another Bobcat Forestry Mulching machine to create a 3rd brush clearance team. SUXOS met with landowner, Philip Robbins, to discuss access on his family's land (Broyhill and Robbins parcels). Production slow due to substantial rain over holiday break and muddy conditions.
Friday 04 Jan:	Brush cutting continued on RC2 properties: Jones, Broyhill, Robbins, and Baker. SUXOS met with landowner Sandy Gantt, to discuss access on her family's land in RC1.

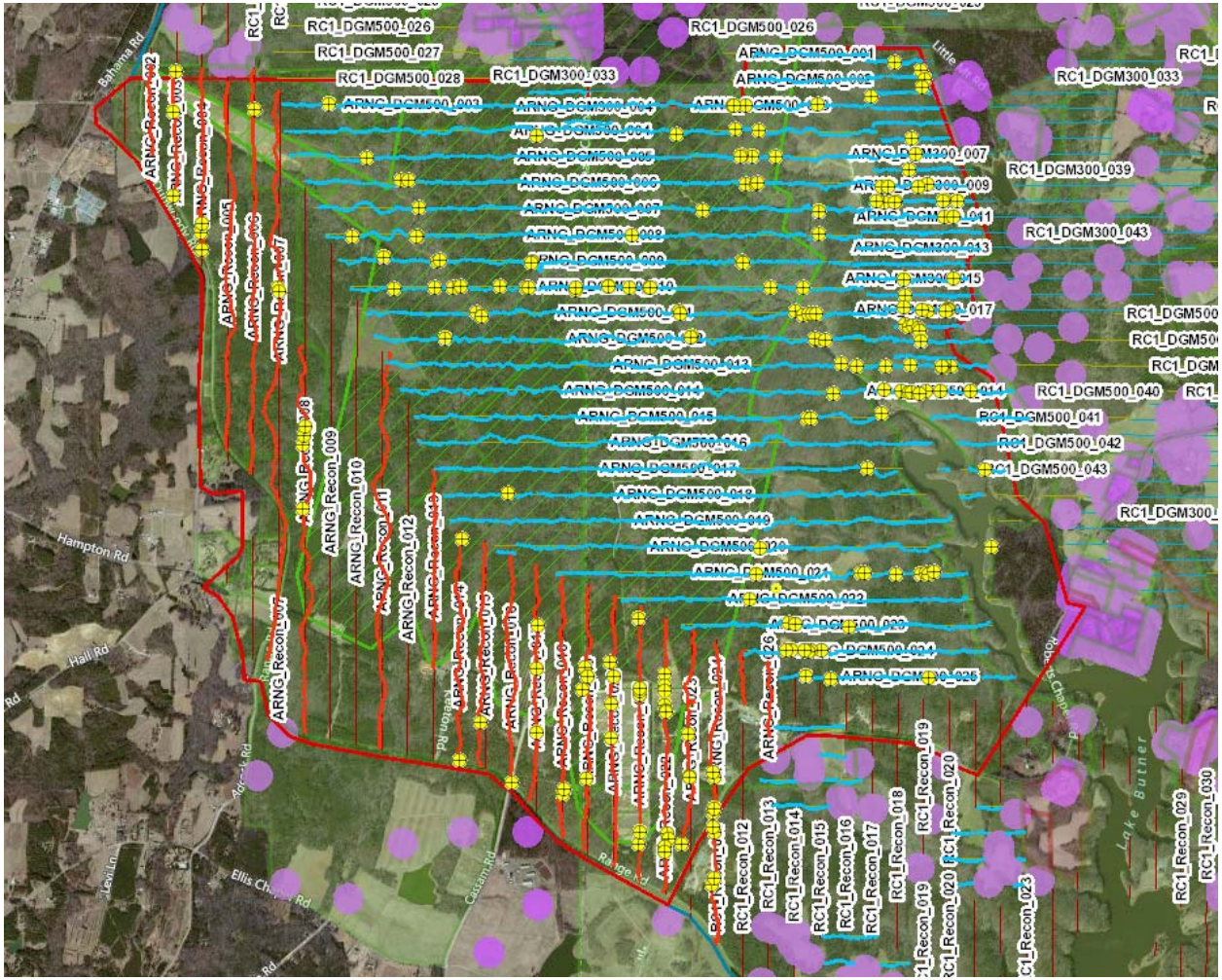
Visitors this week:	N/A
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 11 January: Brush clearance will continue, and coordination of schedule with various landowners.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte, Dawn Weber, and Westleon Rogers; UXO Tech I Rebecca Powers & Charles Richardson; i3 personnel: Equipment Operators David Davis and Adam Hughes.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	180.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	180.00
(5) Feb	0.00
Project Man-hours Total	3087.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A



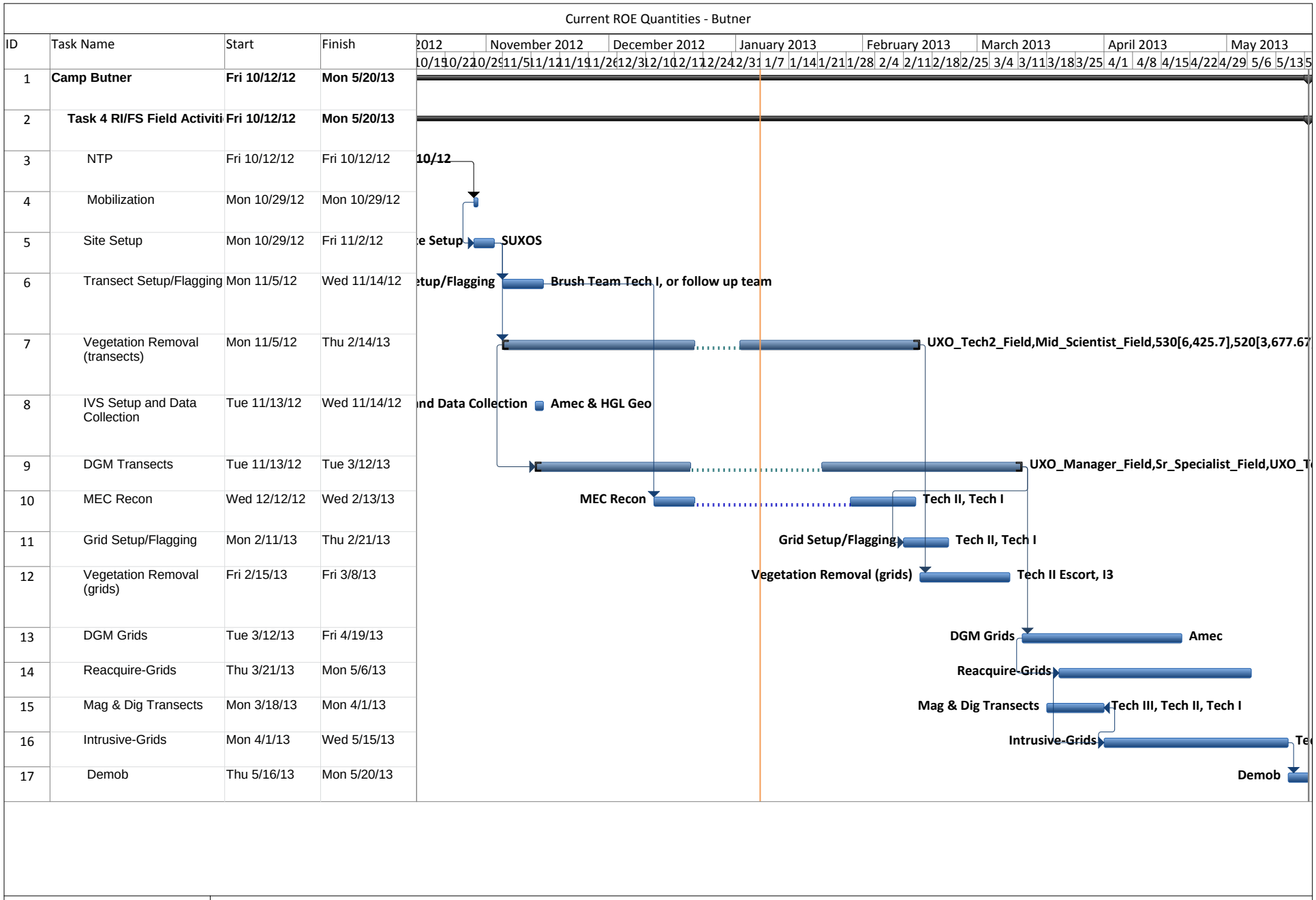
Kimberly Vaughn
Deputy Project Manager



Screenshot of Butner gis webmap showing field activity layers Reconnaissance Transects and DGM Transects. Brush Clearance transects are not shown (same as DGM Transects). ARNG MRS only.
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/

Butner RI/FS Schedule

The schedule has been revised based on landowner contacts, total amount of right-of-entry obtained and total amounts of brush clearance anticipated. This revision incorporates planned brush clearance and landowner rights-of-entry granted to date.


Current ROE Quantities - Butner
ID
Task Name
Start
Finish
2012
November 2012
December 2012
January 2013
February 2013
March 2013
April 2013
May 2013
1 Camp Butner Fri 10/12/12 Mon 5/20/13
2 Task 4 RI/FS Field Activiti Fri 10/12/12 Mon 5/20/13
3 NTP Fri 10/12/12 Fri 10/12/12
4 Mobilization Mon 10/29/12 Mon 10/29/12
5 Site Setup Mon 10/29/12 Fri 11/2/12
6 Transect Setup/Flagging Mon 11/5/12 Wed 11/14/12
7 Vegetation Removal (transects) Mon 11/5/12 Thu 2/14/13
8 IVS Setup and Data Collection Tue 11/13/12 Wed 11/14/12
9 DGM Transects Tue 11/13/12 Tue 3/12/13
10 MEC Recon Wed 12/12/12 Wed 2/13/13
11 Grid Setup/Flagging Mon 2/11/13 Thu 2/21/13
12 Vegetation Removal (grids) Fri 2/15/13 Fri 3/8/13
13 DGM Grids Tue 3/12/13 Fri 4/19/13
14 Reacquire-Grids Thu 3/21/13 Mon 5/6/13
15 Mag & Dig Transects Mon 3/18/13 Mon 4/1/13
16 Intrusive-Grids Mon 4/1/13 Wed 5/15/13
17 Demob Thu 5/16/13 Mon 5/20/13
10/12
SUXOS
Brush Team Tech I, or follow up team
UXO_Tech2_Field,Mid_Scientist_Field,530[6,425.7],520[3,677.67
Amec & HGL Geo
UXO_Manager_Field,Sr_Specialist_Field,UXO_T
MEC Recon
Tech II, Tech I
Grid Setup/Flagging
Tech II, Tech I
Vegetation Removal (grids)
Tech II Escort, I3
DGM Grids
Amec
Reacquire-Grids
Mag & Dig Transects
Tech III, Tech II, Tech I
Intrusive-Grids
Demob
Project: Butner RI/FS
Date: Mon 1/7/13
Task
Milestone
Inactive Task
Progress
Split
Summary
Deadline

SITE MANAGER WEEKLY REPORT

Week ending: 11 January 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Tim Bohannon, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

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1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance is being conducted on Range Complex 1 and Range Complex 2 MRSs. DGM Data collection will continue January 21st.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQCS*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Tim Bohannon, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 07 Jan:	HGL continued brush cutting at Range Complex 2, on properties: Jones, Broyhill, Robbins, and Baker. OESS, Timothy Bohannon, arrived onsite.

Tuesday 08 Jan:	Brush cutting at Range Complex 2, properties: Broyhill, Robbins, Baker, and WNA LLC.
Wednesday 09 Jan:	Brush cutting and marking of DGM transects at Range Complex 2 properties: Jones and WNA LLC.
Thursday 10 Jan:	Brush cutting and marking DGM transects at Range Complex 2 properties: WNA LLC, Jones, Broyhill, Erwin. Two-way communications established with range encompassing entire area of operations. Weekly explosive inventory accomplished.
Friday 11 Jan:	Brush cutting and marking DGM transects at Range Complex 2 properties: including WNA LLC.

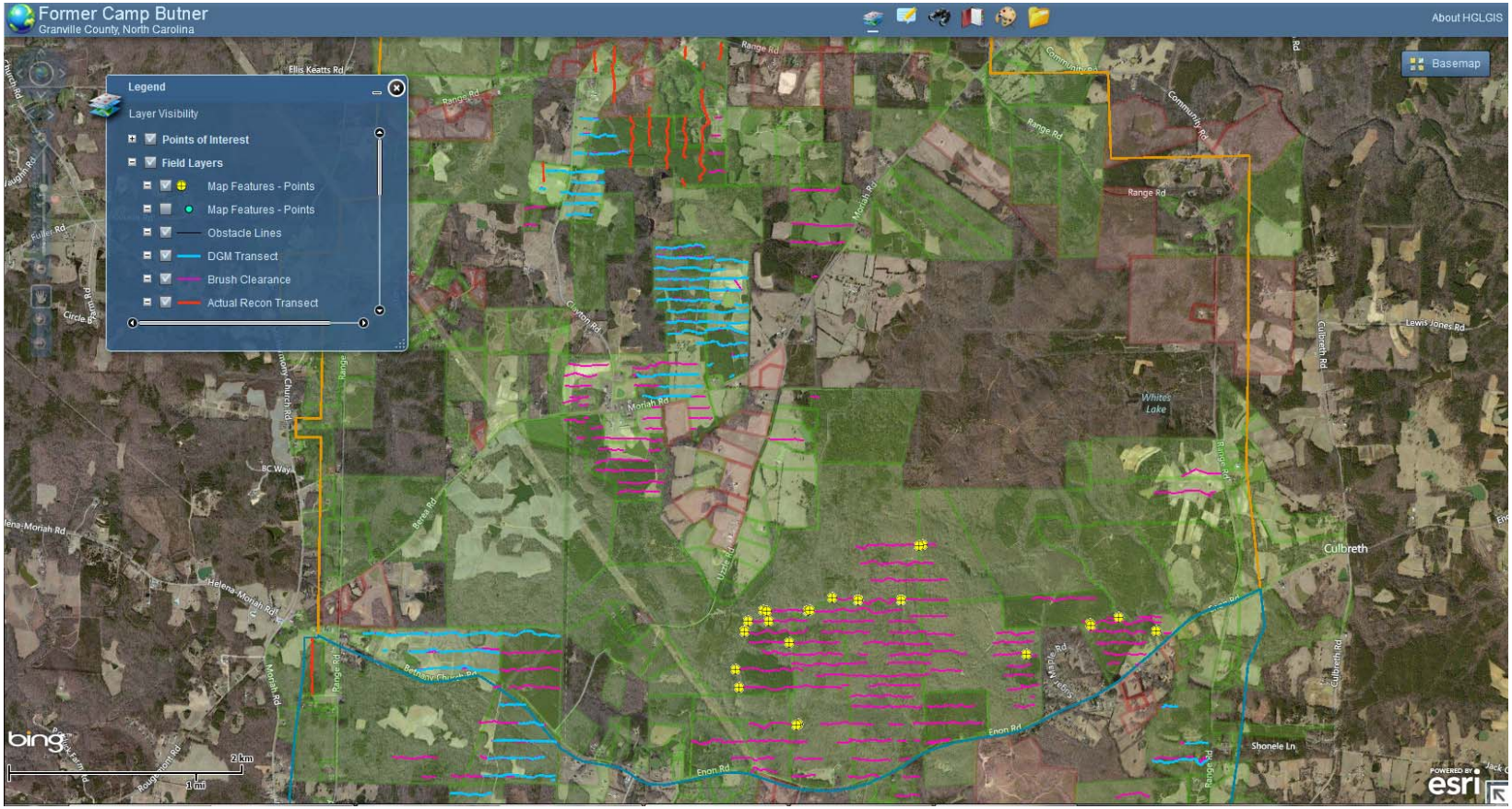
Visitors this week:	N/A
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 18 January: Brush clearance will continue, and coordination of schedule with various landowners.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte, Dawn Weber, and Westleon Rogers; UXO Tech I Rebecca Powers & Charles Richardson; i3 personnel: Equipment Operators David Davis and Adam Hughes. OESS Tim Bohannon.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	450.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	630.00
(5) Feb	0.00
Project Man-hours Total	3537.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A



Kimberly Vaughn
Deputy Project Manager

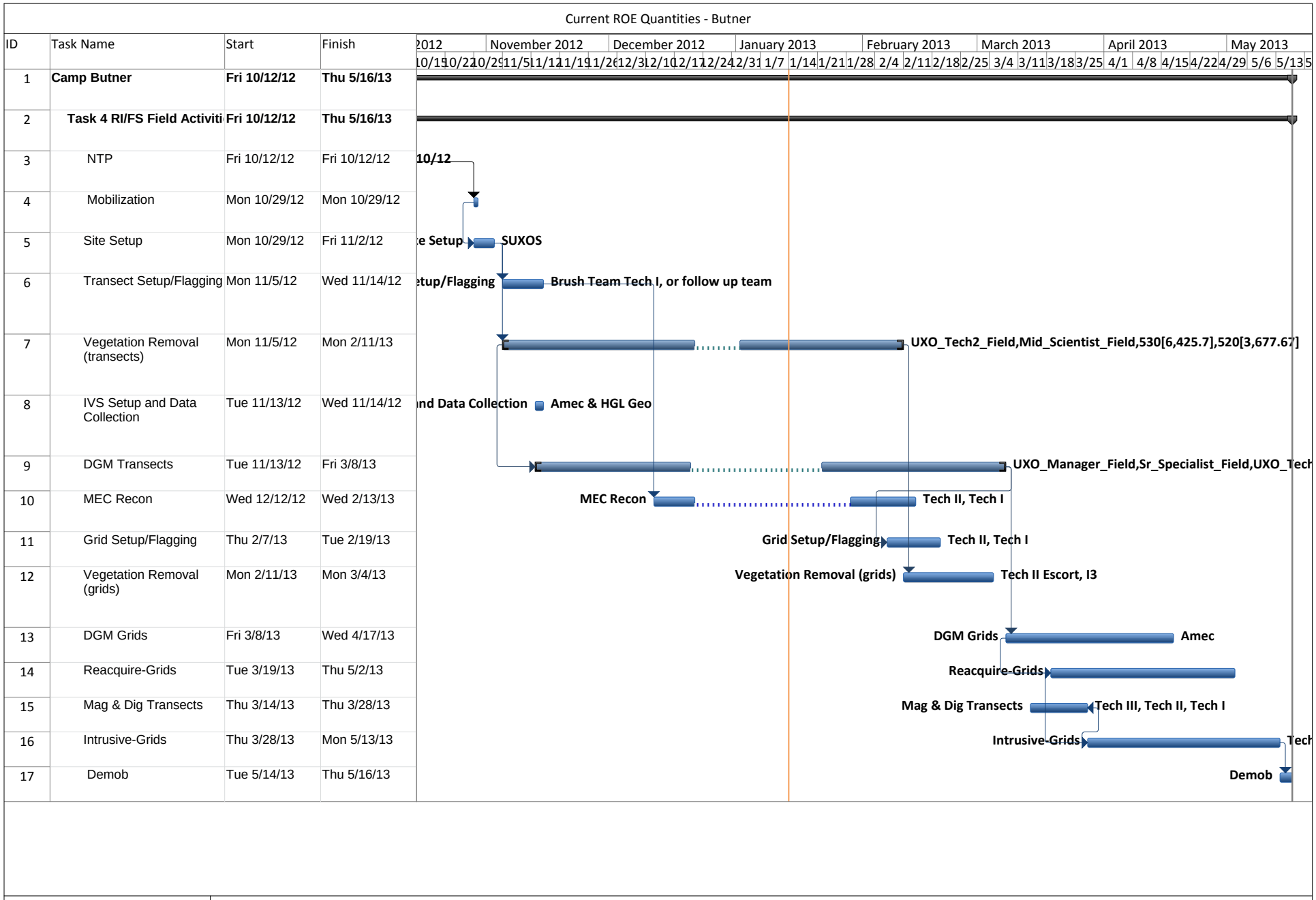


Screenshot of Butner gis webmap showing field activity layers Brush Clearance, DGM, and Recon transects, Range Complex 2 MRS

Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/

Butner RI/FS Schedule

The schedule attached is revised based on landowner contacts, brush clearance efforts scheduled, total amount of right-of-entry obtained (updated by information received from Stephen Bruce 1/8/13).


Current ROE Quantities - Butner
ID
Task Name
Start
Finish
2012
November 2012
December 2012
January 2013
February 2013
March 2013
April 2013
May 2013
1 Camp Butner Fri 10/12/12 Thu 5/16/13
2 Task 4 RI/FS Field Activiti Fri 10/12/12 Thu 5/16/13
3 NTP Fri 10/12/12 Fri 10/12/12
4 Mobilization Mon 10/29/12 Mon 10/29/12
5 Site Setup Mon 10/29/12 Fri 11/2/12
6 Transect Setup/Flagging Mon 11/5/12 Wed 11/14/12
7 Vegetation Removal (transects) Mon 11/5/12 Mon 2/11/13
8 IVS Setup and Data Collection Tue 11/13/12 Wed 11/14/12
9 DGM Transects Tue 11/13/12 Fri 3/8/13
10 MEC Recon Wed 12/12/12 Wed 2/13/13
11 Grid Setup/Flagging Thu 2/7/13 Tue 2/19/13
12 Vegetation Removal (grids) Mon 2/11/13 Mon 3/4/13
13 DGM Grids Fri 3/8/13 Wed 4/17/13
14 Reacquire-Grids Tue 3/19/13 Thu 5/2/13
15 Mag & Dig Transects Thu 3/14/13 Thu 3/28/13
16 Intrusive-Grids Thu 3/28/13 Mon 5/13/13
17 Demob Tue 5/14/13 Thu 5/16/13
10/12
SUXOS
Brush Team Tech I, or follow up team
UXO_Tech2_Field,Mid_Scientist_Field,530[6,425.7],520[3,677.67]
Amec & HGL Geo
UXO_Manager_Field,Sr_Specialist_Field,UXO_Tech
MEC Recon
Tech II, Tech I
Grid Setup/Flagging
Tech II, Tech I
Vegetation Removal (grids)
Tech II Escort, I3
DGM Grids
Amec
Reacquire-Grids
Mag & Dig Transects
Tech III, Tech II, Tech I
Intrusive-Grids
Demob
Project: Butner RI/FS
Date: Mon 1/14/13
Task
Milestone
Inactive Task
Progress
Split
Summary
Deadline

SITE MANAGER WEEKLY REPORT

Week ending: 19 January 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Tim Bohannon, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

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1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance is being conducted on Range Complex 1 and Range Complex 2 MRSs. DGM Data collection will continue January 21st.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQCS*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Tim Bohannon, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 14 Jan:	HGL continued brush cutting and marking DGM transects at Range Complex 2 properties: WNA LLC, Mangum, Lloyd, and Phelps

Tuesday 15 Jan:	HGL continued brush cutting and marking DGM transects at Range Complex 2 properties: Jones, Mangum, and Kreidler. Two recon survey teams collected at the southern portion of RC1. Landowner Mrs. Broyhill has requested a meeting with SUXOS on Jan 16th, OESS will attend, also.
Wednesday 16 Jan:	HGL relocated brush clearing efforts to Range Complex 1 properties: Morrison (includes C&P of Dunham) and Gantt. Wet weather limited machine cutting. Brush teams transitioned into recon survey teams as necessary.
Thursday 17 Jan:	HGL continues brush clearing efforts on Range Complex 1 properties: Morrison (includes C&P of Dunham) and Gantt. Wet weather continues to impact brush clearing. Weekly explosive inventory accomplished.
Friday 18 Jan:	HGL continued brush clearing efforts on Range Complex 1 properties: Morrison (includes C&P of Dunham). Wet weather continued to impact brush clearing. Recon survey accomplished instead, due to wet terrain.

Visitors this week:	N/A
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 25 January: Brush clearance will continue, and coordination of schedule with various landowners. Amec geophysical team will mobilize to the site and collect transect data beginning 21 January.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte, Dawn Weber, and Westleon Rogers; UXO Tech I Rebecca Powers & Charles Richardson; i3 personnel: Equipment Operators David Davis and Adam Hughes. OESS Tim Bohannon.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	450.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	1080.00
(5) Feb	0.00
Project Man-hours Total	3987.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A



Kimberly Vaughn
Deputy Project Manager

Screenshot of Butner gis webmap showing field activity layers Brush Clearance, DGM, and Recon transects,
Range Complex 2 MRS, Southern boundary (Jones and WNA, LLC parcels, and others)
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/

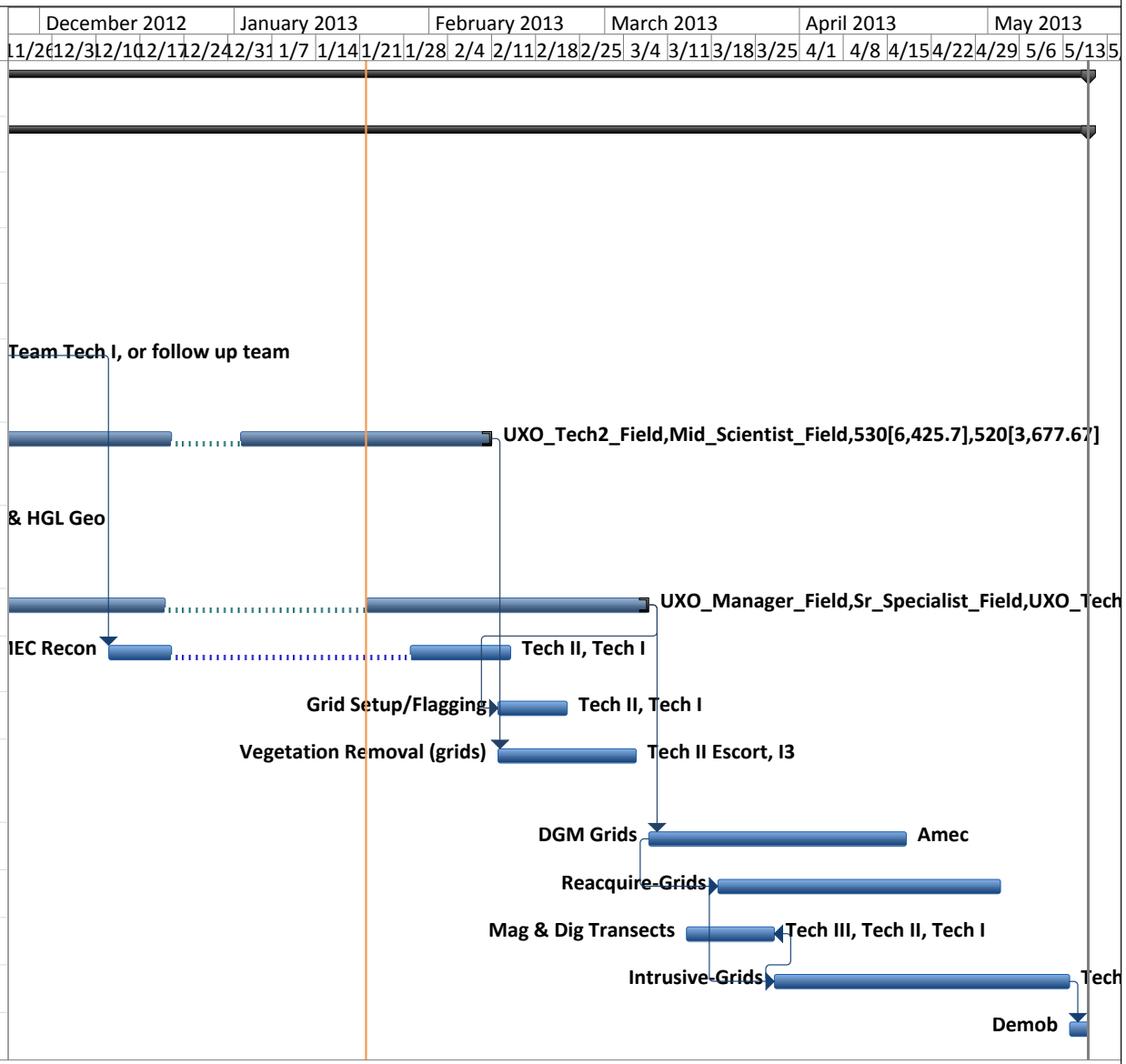


Butner RI/FS Schedule

The schedule attached is revised based on landowner contacts, brush clearance efforts scheduled, total amount of right-of-entry obtained (updated for ROE information received from Stephen Bruce 1/8/13).

Current ROE Quantities - Butner

ID	Task Name	Start	Finish
1	**Camp Butner**	**Fri 10/12/12**	**Thu 5/16/13**
2	**Task 4 RI/FS Field Activiti**	**Fri 10/12/12**	**Thu 5/16/13**
3	NTP	Fri 10/12/12	Fri 10/12/12
4	Mobilization	Mon 10/29/12	Mon 10/29/12
5	Site Setup	Mon 10/29/12	Fri 11/2/12
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12
7	Vegetation Removal (transects)	Mon 11/5/12	Mon 2/11/13
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12
9	DGM Transects	Tue 11/13/12	Fri 3/8/13
10	MEC Recon	Wed 12/12/12	Wed 2/13/13
11	Grid Setup/Flagging	Tue 2/12/13	Fri 2/22/13
12	Vegetation Removal (grids)	Tue 2/12/13	Tue 3/5/13
13	DGM Grids	Fri 3/8/13	Wed 4/17/13
14	Reacquire-Grids	Tue 3/19/13	Thu 5/2/13
15	Mag & Dig Transects	Thu 3/14/13	Thu 3/28/13
16	Intrusive-Grids	Thu 3/28/13	Mon 5/13/13
17	Demob	Tue 5/14/13	Thu 5/16/13



Project: Butner RI/FS
Date: Tue 1/22/13

Task | Milestone | Inactive Task | Progress
Split | Summary | Deadline

SITE MANAGER WEEKLY REPORT

Week ending: 25 January 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Tim Bohannon, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

---

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance is being conducted on Range Complex 1 and Range Complex 2 MRSs. DGM transect data collection began January 21st, focused mainly in Range Complex 2.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQCS*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Tim Bohannon, USACE

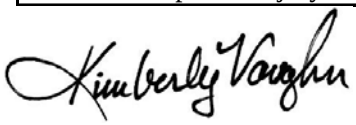
3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 21 Jan:	Performed Recon Survey at Range Complex 1 property: State of North Carolina. Wet conditions are slowing machine cutting efforts. Property owners have also expressed concern about vehicles and machinery damaging soft terrain. Delayed additional machine cutting to allow soil to dry.

Tuesday 22 Jan:	Performed Recon Survey at Range Complex 1 properties: State of North Carolina, Gantt, and Hursting. Teams converted into brush teams and began marking transects to be cut as terrain dries out. DGM transect data collected at Range Complex 2: Jones property.
Wednesday 23 Jan:	Performed brush clearance at Range Complex 1 Gantt and Hunter properties. DGM transect data collected at Range Complex 2: Jones, Kendrick, and Baker properties.
Thursday 24 Jan:	Performed brush clearance at Range Complex 1, Gantt property. DGM transect data collected at transects at Range Complex 2: Broyhill and Robbins properties
Friday 25 Jan:	Performed brush clearance at Range Complex 1, properties: Gantt and Hursting. DGM transect data collected at Range Complex 2: Broyhill and Robbins properties. Due to freezing rain and sleet, operations halted early.

Visitors this week:	N/A
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 01 February: Brush clearance will continue, and coordination of schedule with various landowners. Amec geophysical team will continue collecting transect data.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte, Dawn Weber, and Westleon Rogers; UXO Tech I Rebecca Powers & Charles Richardson; i3 personnel: Equipment Operators David Davis and Adam Hughes; Amec personnel Micah Holzbauer and Seth Alu. OESS Tim Bohannon.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	**Hours**
a. Total number of man-hours expended during this week:	486.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	1566.00
(5) Feb	0.00
Project Man-hours Total	4473.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A



Kimberly Vaughn
Deputy Project Manager

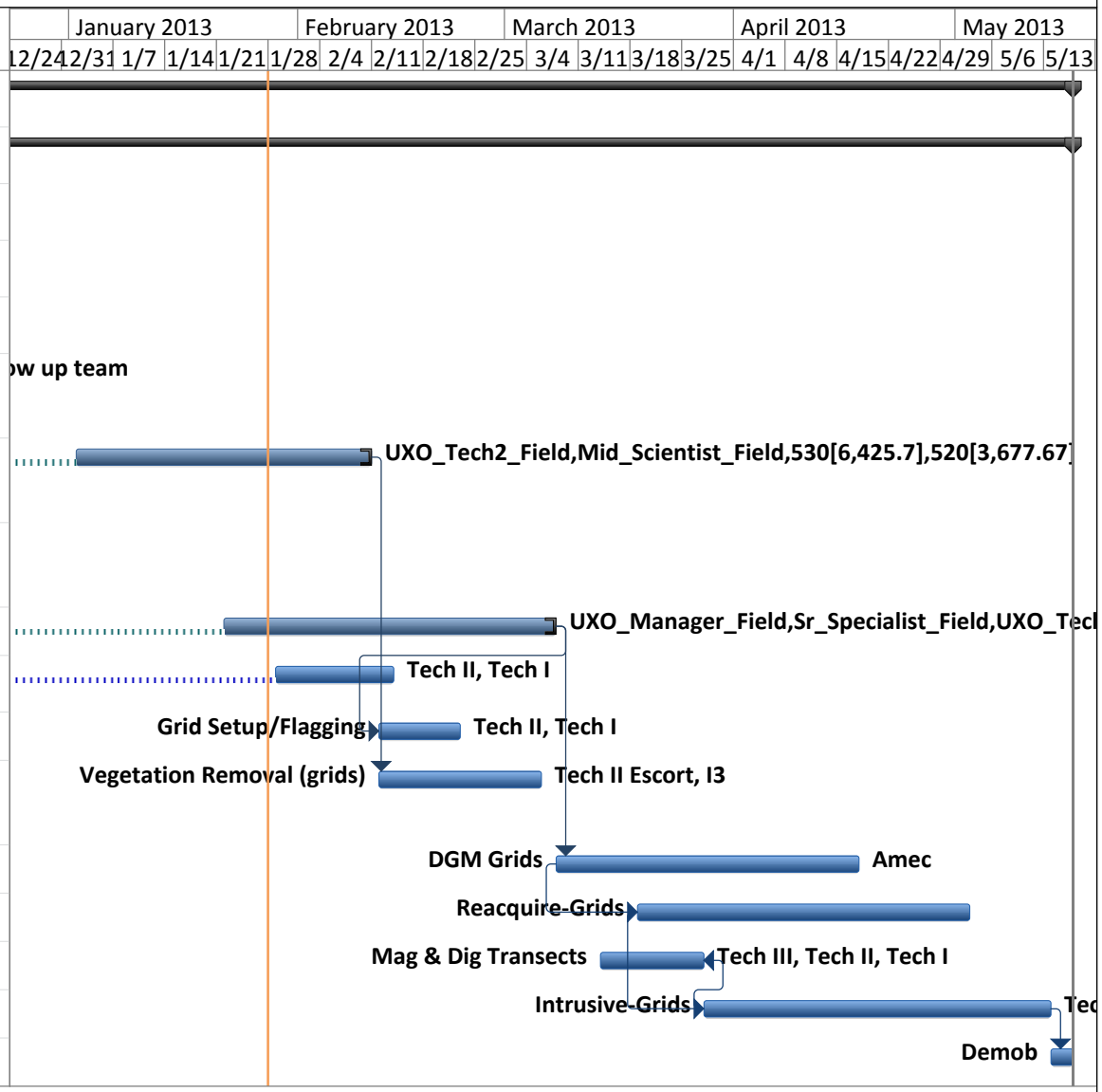
Screenshot of Butner gis webmap showing field activity layers: Brush Clearance, DGM, and Recon transects,
Range Complex 1 and Range Complex 2 MRSs; western boundary of site,
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/



Butner RI/FS Schedule

Current ROE Quantities - Butner

ID	Task Name	Start	Finish
1	**Camp Butner**	**Fri 10/12/12**	**Thu 5/16/13**
2	**Task 4 RI/FS Field Activiti**	**Fri 10/12/12**	**Thu 5/16/13**
3	NTP	Fri 10/12/12	Fri 10/12/12
4	Mobilization	Mon 10/29/12	Mon 10/29/12
5	Site Setup	Mon 10/29/12	Fri 11/2/12
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12
7	Vegetation Removal (transects)	Mon 11/5/12	Mon 2/11/13
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12
9	DGM Transects	Tue 11/13/12	Fri 3/8/13
10	MEC Recon	Wed 12/12/12	Wed 2/13/13
11	Grid Setup/Flagging	Tue 2/12/13	Fri 2/22/13
12	Vegetation Removal (grids)	Tue 2/12/13	Tue 3/5/13
13	DGM Grids	Fri 3/8/13	Wed 4/17/13
14	Reacquire-Grids	Tue 3/19/13	Thu 5/2/13
15	Mag & Dig Transects	Thu 3/14/13	Thu 3/28/13
16	Intrusive-Grids	Thu 3/28/13	Mon 5/13/13
17	Demob	Tue 5/14/13	Thu 5/16/13



Project: Butner RI/FS
Date: Mon 1/28/13

Task | Milestone | Inactive Task | Progress
Split | Summary | Deadline

SITE MANAGER WEEKLY REPORT

Week ending: 08 February 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Tim Bohannon, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

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1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance, DGM transect data collection and surface reconnaissance is being conducted on Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQCS*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Tim Bohannon, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 04 Feb:	Brush clearance at RC 1, properties: DW Uzzle and Newsom. Recon survey at RC1 and RC 2, properties: Jones and Veazey. DGM transects collected at RC2, properties: Gantt and Grace Ministries. SUXOS and OESS met with Fred Newsom to discuss brush cutting and access to his property.

Tuesday 05 Feb:	Brush clearance at RC 1, properties: Knap of Reeds LLC, Newsom and Carrington, DGM transects collected at RC 1: Uzzle property
Wednesday 06 Feb:	Brush clearance at RC 1, properties: Knap of Reeds LLC, Newsom and Carrington, DGM transects collected at RC 1, properties: Morrison and Uzzle
Thursday 07 Feb:	Continued brush clearance at RC 1, properties: Knap of Reeds LLC, Carrington, and Poyet, DGM transects collected at RC 1: Gantt property
Friday 08 Feb:	Continued brush clearance at RC 1, properties: Newsom, Carrington, and Poyet. While conducting MEC avoidance, HGL personnel located and identified a practice 2.36" rocket laying on the surface of RC1_DGM300_021. Performed recon survey at RC 2: Jones property. DGM transects collected at RC 1: Gantt and Uzzle properties. Heavy rain limited cutting by brush machines.

Visitors this week:	N/A
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 08 February: Brush clearance will continue, and coordination of schedule with various landowners. Amec geophysical team will continue collecting transect data. If approved grid locations, brush clearance may begin on grids.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte, Dawn Weber, and Westleon Rogers; UXO Tech I Rebecca Powers & Charles Richardson; i3 personnel: Equipment Operators David Davis and Adam Hughes; Amec personnel Micah Holzbauer and Seth Alu. OESS Tim Bohannon.

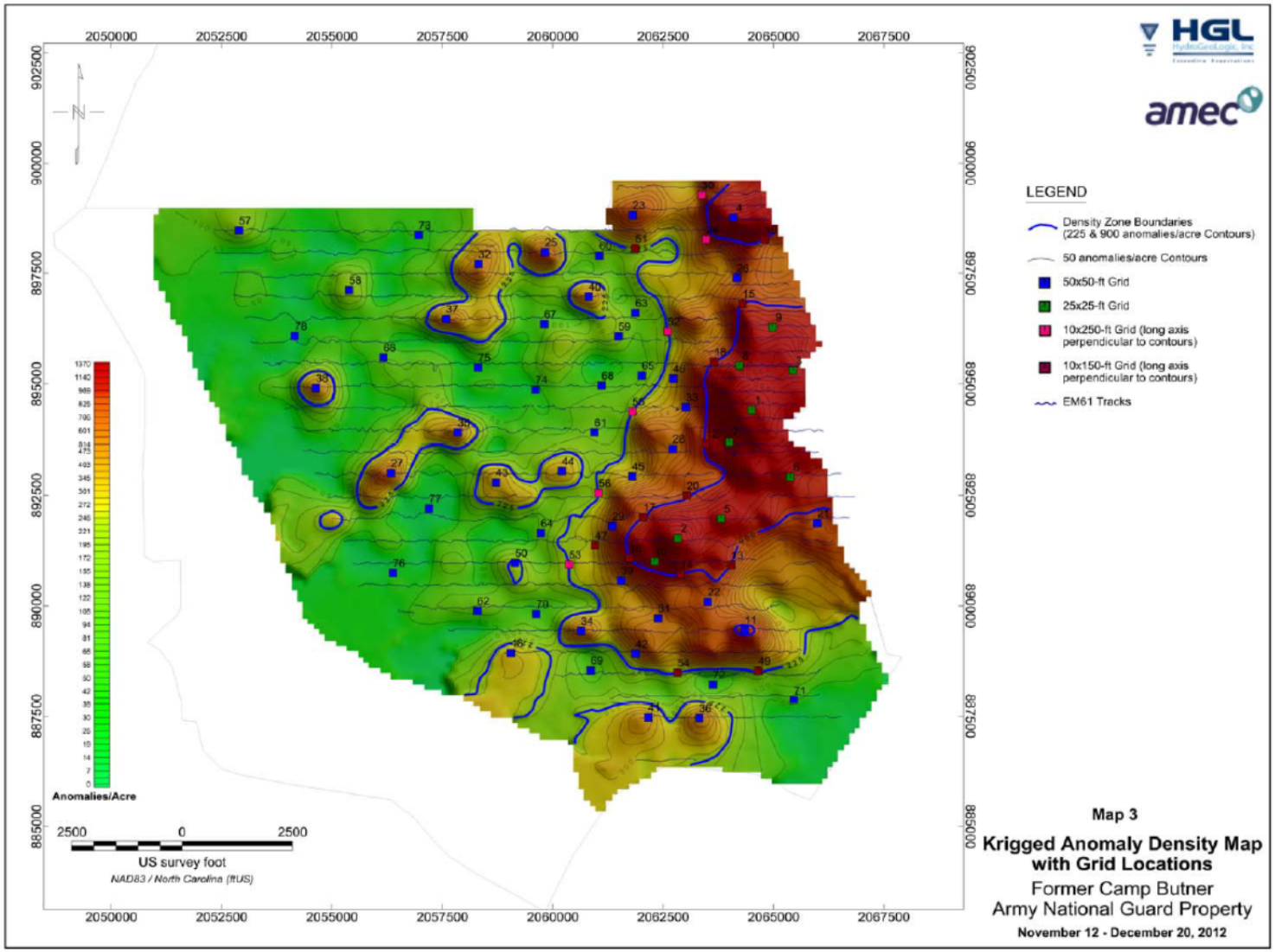
GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	550.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	660.00
Project Man-hours Total	5573.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A



Kimberly Vaughn
Deputy Project Manager

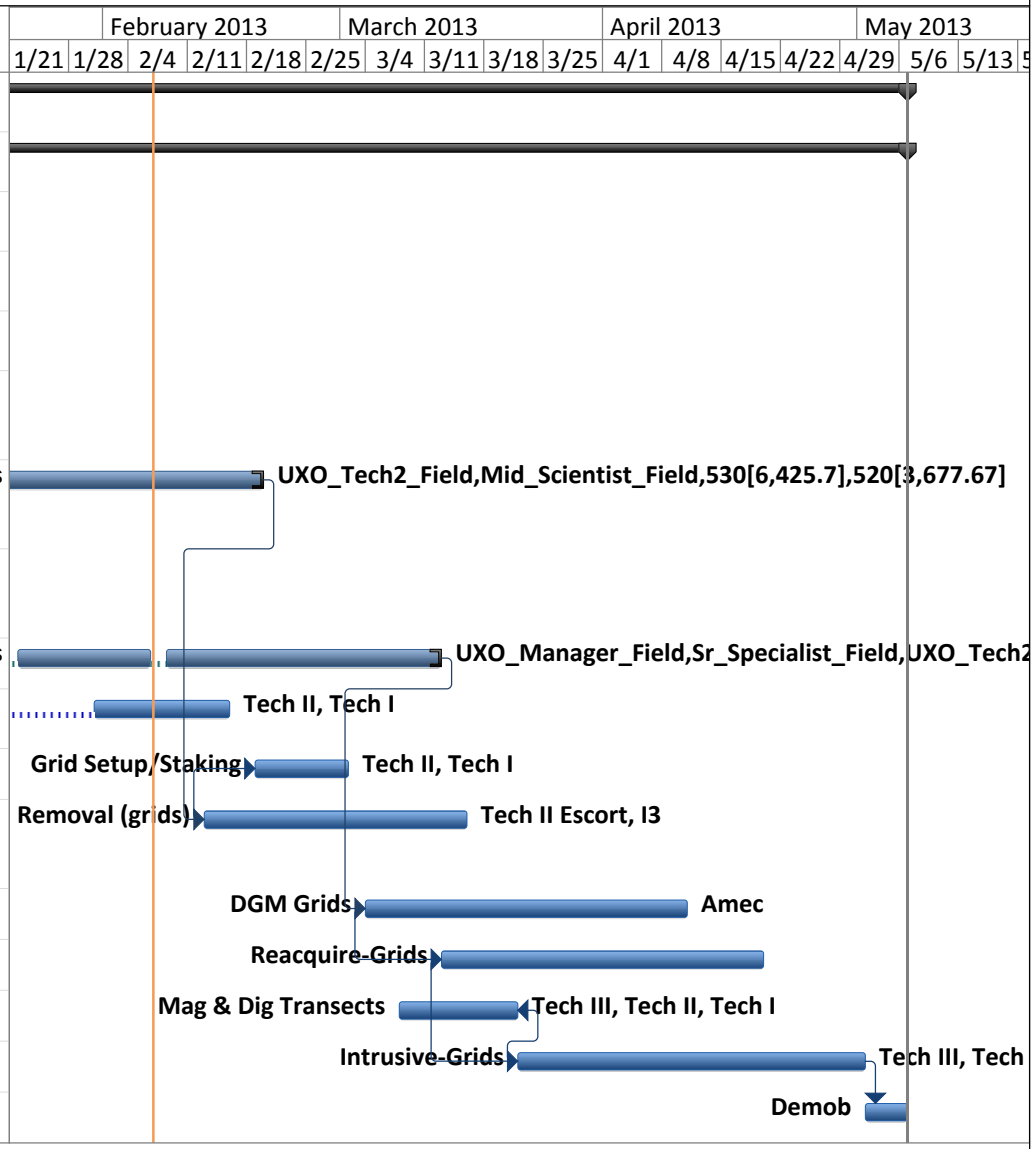
Revised, Proposed Grid Locations; ARNG MRS
Data currently under review by USAESCH Geophysicist



Butner RI/FS Schedule

Current ROE Quantities - Butner

ID	Task Name	Start	Finish	Duration
1	**Camp Butner**	**Fri 10/12/12**	**Mon 5/6/13**	**137 days**
2	**Task 4 RI/FS Field Activiti**	**Fri 10/12/12**	**Mon 5/6/13**	**137 days**
3	NTP	Fri 10/12/12	Fri 10/12/12	0 days
4	Mobilization	Mon 10/29/12	Mon 10/29/12	1 day
5	Site Setup	Mon 10/29/12	Fri 11/2/12	5 days
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12	6 days
7	Vegetation Removal (transects)	Mon 11/5/12	Wed 2/20/13	69.47 days
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12	2 days
9	DGM Transects	Tue 11/13/12	Wed 3/13/13	63.06 days
10	MEC Recon	Fri 12/14/12	Fri 2/15/13	20 days
11	Grid Setup/Staking	Tue 2/19/13	Fri 3/1/13	9 days
12	Vegetation Removal (grids)	Wed 2/13/13	Fri 3/15/13	22 days
13	DGM Grids	Mon 3/4/13	Wed 4/10/13	28 days
14	Reacquire-Grids	Wed 3/13/13	Fri 4/19/13	28 days
15	Mag & Dig Transects	Fri 3/8/13	Fri 3/22/13	10 days
16	Intrusive-Grids	Fri 3/22/13	Wed 5/1/13	29 days
17	Demob	Thu 5/2/13	Mon 5/6/13	3 days



Project: Butner RI/FS
Date: Thu 2/7/13

Task — Milestone — Inactive Task — Progress
Split — Summary — Deadline

Week ending: 15 February 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Tim Bohannon, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

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1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance, DGM transect data collection, surface reconnaissance and grid brush clearance was conducted on the Army National Guard, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQC*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Tim Bohannon, USACE *(offsite this week)*

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 11 Feb:	Performed brush clearance at RC1, properties: Scott and Trudell, reconnaissance survey at RC2, properties: Mangum and Jones. DGM transect data collection at RC1, properties: Carrington, Newsom, Poyet.

Tuesday 12 Feb:	Performed brush clearance at RC1, properties: Brumbaugh, Blackwell, Crystal Springs, Barreto, Goldthwaite, Knap of Reeds, Henderson, Jones, and Watkins. DGM transect data collection at RC1, properties: Carrington, Newsom, Poyet. SUXOS met with William Henderson and Norma Blackwell to discuss proposed transect locations and property access.
Wednesday 13 Feb:	Performed brush clearance at RC1and RC2, properties: Brumbaugh and Phelps. DGM transect data collection at RC1, properties: Carrington and Newsom. Brush clearance at proposed DGM grid locations on the guard property initiated. A 57mm HE Projectile on the surface north of the boundary of the Carrington and Army National Guard property. Demolition of the item performed February 14th.
Thursday 14 Feb:	Performed brush clearance at RC2, properties: Blalock and Wilkins. DGM transect data collection at RC1, properties: Brumbaugh, Barreto, Blackwell, Crystal Springs, Ashmore, and Goldthwaite. Continued brush clearance at proposed DGM grid locations on the ARNG MRS. Conducted demolition operations at RC1 to destroy a 57mm HE projectile located 02/13/13. While scouting the demolition site, SUXOS and UXOSO discovered an additional 57mm HE projectile and a 57mm AP-T projectile on the surface. The two high explosive projectiles were successfully destroyed. The AP-T projectile was vented to ensure it was free of any energetic material. Butner Public Safety was notified prior to commencing demo operations. The demo shot holes were swept by Schonstedt to ensure all fragmentation was recovered. See photographs included in Attachment 1.
Friday 15 Feb:	Performed brush clearance at RC2, properties: Blalock, Sears, and Wilkins. DGM transect data collection at RC1, properties: Daniel, Wicker and Arrington. Continued brush clearance at proposed DGM grid locations on the ARNG MRS.

Visitors this week:	N/A
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 22 February: Brush clearance will continue, and ongoing coordination and scheduling with various landowners. The Amec geophysical team will continue collecting transect data. Brush clearance on grids will continue and grid setup and seeding will begin.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte, Dawn Weber, and Westleon Rogers; UXO Tech I Rebecca Powers & Charles Richardson; i3 personnel: Equipment Operators David Davis and Adam Hughes; Amec personnel Micah Holzbauer and Seth Alu. OESS Tim Bohannon.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	650.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	1310.00
Project Man-hours Total	6223.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Kimberly Vaughn
Deputy Project Manager

Attachment 1











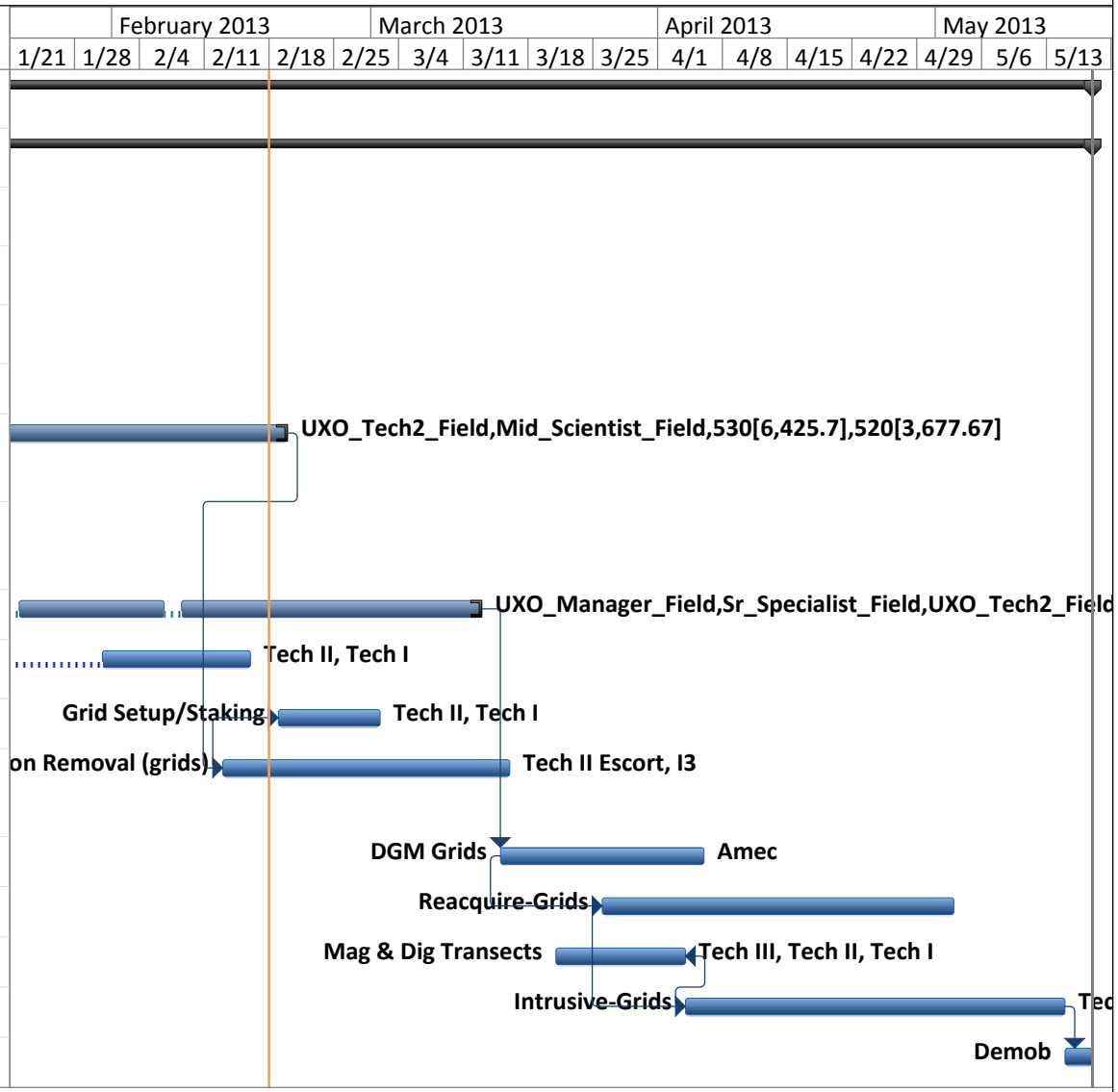




Attachment 2, Butner RI/FS Schedule

Current ROE Quantities - Butner

ID	Task Name	Start	Finish
1	**Camp Butner**	**Fri 10/12/12**	**Fri 5/17/13**
2	**Task 4 RI/FS Field Activiti**	**Fri 10/12/12**	**Fri 5/17/13**
3	NTP	Fri 10/12/12	Fri 10/12/12
4	Mobilization	Mon 10/29/12	Mon 10/29/12
5	Site Setup	Mon 10/29/12	Fri 11/2/12
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12
7	Vegetation Removal (transects)	Mon 11/5/12	Wed 2/20/13
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12
9	DGM Transects	Tue 11/13/12	Wed 3/13/13
10	MEC Recon	Fri 12/14/12	Fri 2/15/13
11	Grid Setup/Staking	Tue 2/19/13	Fri 3/1/13
12	Vegetation Removal (grids)	Wed 2/13/13	Fri 3/15/13
13	DGM Grids	Fri 3/15/13	Fri 4/5/13
14	Reacquire-Grids	Tue 3/26/13	Thu 5/2/13
15	Mag & Dig Transects	Thu 3/21/13	Thu 4/4/13
16	Intrusive-Grids	Thu 4/4/13	Tue 5/14/13
17	Demob	Wed 5/15/13	Fri 5/17/13



Project: Butner RI/FS
Date: Mon 2/18/13

Task | Milestone | Inactive Task | Progress
Split | Summary | Deadline

Week ending: 22 February 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Tim Bohannon, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

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1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance, DGM transect data collection, surface reconnaissance and grid brush clearance was conducted on the Army National Guard, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Quality Control (*UXOQC*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Tim Bohannon, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 18 Feb:	Performed brush clearance at RC 2, properties: Sears. DGM transect data collected at RC 1, properties: Mangum, Blalock, and Wilkins. Continued brush clearance at proposed DGM grid locations on the guard property.

Tuesday 19 Feb:	DGM transects marked/flagged at RC 2, properties: Irek, McDonald, Mangum. DGM transect data collected at RC 1, Clayton Mangum property. Continued brush clearance at proposed DGM grid locations on the guard property. Team located an expended105mm Illumination Projectile near transect ARNG_DGM500-015 at the western edge of the range fan. The item was consolidated to a locked MD container.
Wednesday 20 Feb:	Brush Clearance and marked transects at RC 2, Hawley property. DGM transect data collected at RC 1and RC 2, properties: Broyhill, Mangum, Kreidler, Clayton, and Zangerle. Continued brush clearance at proposed DGM grid locations on the guard property. Team located an expended M159 Signal Flare near transect ARNG_DGM500-002 at the western edge of the range fan. The item was consolidated to a locked MD container.
Thursday 21 Feb:	Brush Clearance and marked transects at RC 1 and RC 2, properties: Mangum and Hursting. DGM transect data collected at RC 2, properties: Broyhill and WNA LLC. Continued brush clearance at proposed DGM grid locations on the guard property.
Friday 22 Feb:	Brush Clearance and marked transects at RC 2, properties: Rouse, Hobson, Rank, Hawley, and Christian. DGM transect data collected at RC 2, properties: WNA LLC and Christian Phelps. Continued brush clearance at proposed DGM grid locations on the guard property. Mr. Sanders offsite from 2/22 – 3/1, Westleon Rogers will perform as SUXOS in his absence

Visitors this week:	Amec replacement geophysicist Anthony Kellogg onsite for training with Amec team.
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies

Description of operations planned for the upcoming week ending 01 March:
Brush clearance will continue, and ongoing coordination and scheduling with various landowners. Surface reconnaissance will be conducted. The Amec geophysical team will continue collecting transect data. Brush clearance on grids will continue and grid setup and seeding will begin.

Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte, Dawn Weber, and Westleon Rogers; UXO Tech I Rebecca Powers & Charles Richardson; i3 personnel: Equipment Operators David Davis and Adam Hughes; Amec personnel Micah Holzbauer and Seth Alu (Visitor Anthony Kellogg training with Amec team, will replace Micah Holzbauer next week). OESS Tim Bohannon.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

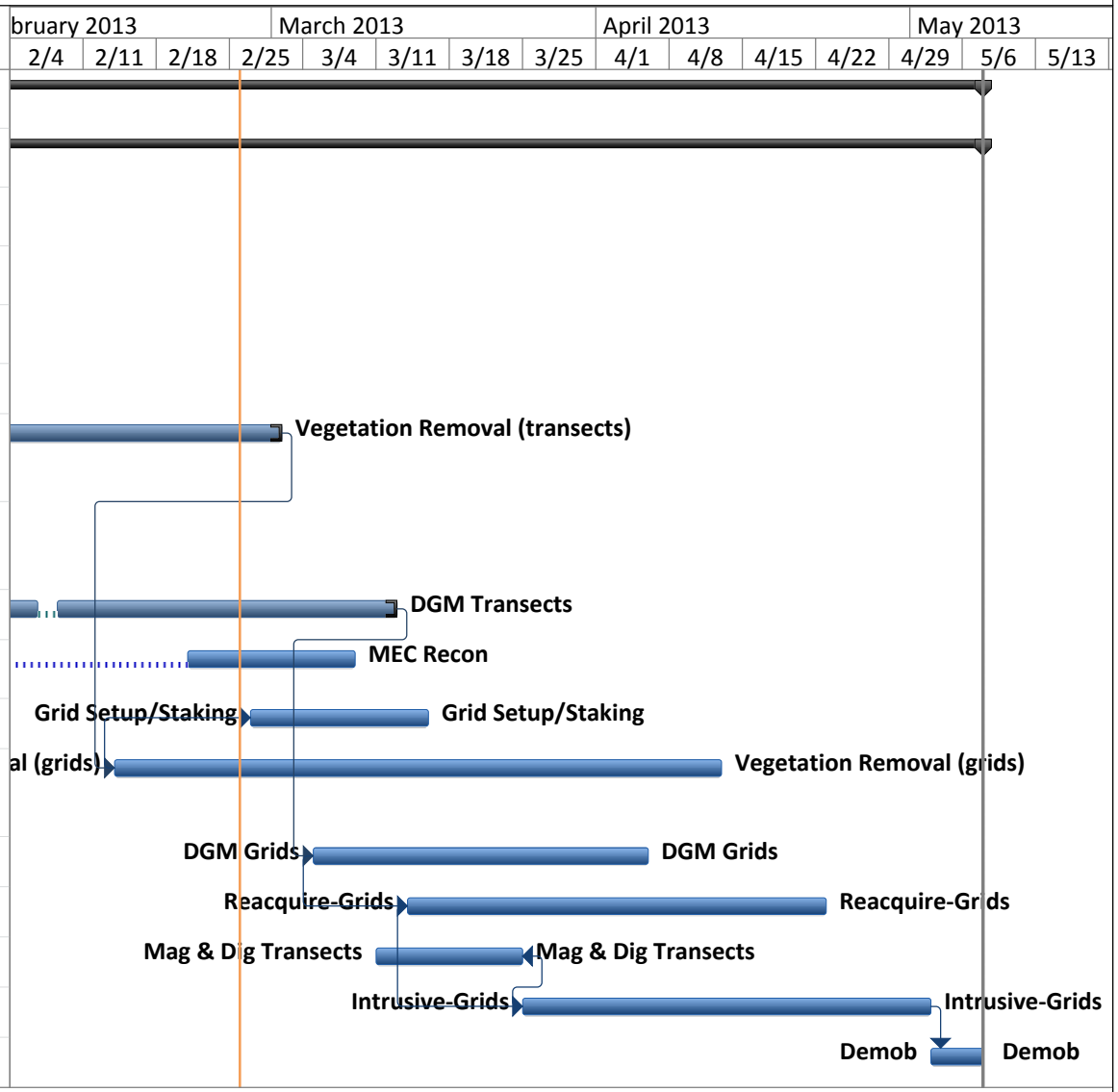
4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	616.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	1926.00
Project Man-hours Total	6839.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Kimberly Vaughn
Deputy Project Manager

Attachment 1, Butner RI/FS Schedule

Former Camp Butner RI/FS Field Activities Only

ID	Task Name	Start	Finish
1	**Camp Butner**	**Fri 10/12/12**	**Tue 5/7/13**
2	**Task 4 RI/FS Field Activiti**	**Fri 10/12/12**	**Tue 5/7/13**
3	NTP	Fri 10/12/12	Fri 10/12/12
4	Mobilization	Mon 10/29/12	Mon 10/29/12
5	Site Setup	Mon 10/29/12	Fri 11/2/12
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12
7	Vegetation Removal (transects)	Mon 11/5/12	Fri 3/1/13
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12
9	DGM Transects	Tue 11/13/12	Wed 3/13/13
10	MEC Recon	Wed 1/9/13	Fri 3/8/13
11	Grid Setup/Staking	Wed 2/27/13	Fri 3/15/13
12	Vegetation Removal (grids)	Thu 2/14/13	Fri 4/12/13
13	DGM Grids	Tue 3/5/13	Fri 4/5/13
14	Reacquire-Grids	Thu 3/14/13	Mon 4/22/13
15	Mag & Dig Transects	Mon 3/11/13	Mon 3/25/13
16	Intrusive-Grids	Mon 3/25/13	Thu 5/2/13
17	Demob	Fri 5/3/13	Tue 5/7/13



Project: Butner RI/FS
Date: Tue 2/26/13

Task — Milestone — Inactive Task — Progress
Split — Summary — Deadline

SITE MANAGER WEEKLY REPORT

Week ending: 01 March 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Tim Bohannon, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

---

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance, DGM transect data collection, and surface reconnaissance was conducted on the Range Complex 1 and Range Complex 2 MRSs, and grids brush clearance was conducted on the ARNG MRS.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc. *Offsite 2/22 through 3/01* Wes Rogers, acting SUXOS for this week.
*UXO Quality Control (*UXOQC*) and UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Tim Bohannon, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 25 Feb:	Performed Recon Survey at RC 1 and RC 2. Collected DGM transects at RC 1, Uzzle property. Continued brush clearance at proposed DGM grid locations on the

	guard property.
Tuesday 26 Feb:	Continued Recon Survey at RC 2, collected DGM transects at RC 2, Continued brush clearance at proposed DGM grid locations. Field operations terminated early due to extreme weather.
Wednesday 27 Feb:	Continued Recon Survey at RC 2, properties: Champion, Fredrick, and Gardner, Collected transects at RC 2 adjacent to Uzzle Road. Continued brush clearance at proposed grid locations and started grid set up at the ARNG MRS.
Thursday 28 Feb:	Continued Recon Survey at RC 2, properties: Thorp, Morris, Raymer, Dorsey, Clark, Dean, and Autry. Collected DGM transects at RC 2 between Moriah Rd and Uzzle Rd, Continued brush clearance and grid set up at proposed grid locations on the ARNG MRS.
Friday 01 Mar:	Continued Recon Survey at RC2, properties: Meadows, Averette, Dean, Autrey, and Black, Collected transects at RC2 between Moriah Rd and Uzzle Rd, Continued brush clearance and grid set up at proposed grid locations on the guard property.

Visitors this week:	
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 01 March: Brush clearance will continue, and ongoing coordination and scheduling with various landowners. One Amec geophysical team will continue collecting transect data, a second Amec team will begin collecting grids data on the RC1 and RC2 MRSs. Grid setup and seeding will continue.	
Personnel on Site this week:	HGL: SUXOS Wes Rogers; UXOSO/QCS Oscar Honne; UXO Tech II Jeremy Amiotte, Dawn Weber; UXO Tech I Rebecca Powers & Charles Richardson; i3 personnel: Equipment Operators David Davis and Adam Hughes; Amec personnel Anthony Kellogg and Seth Alu. OESS Tim Bohannon.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

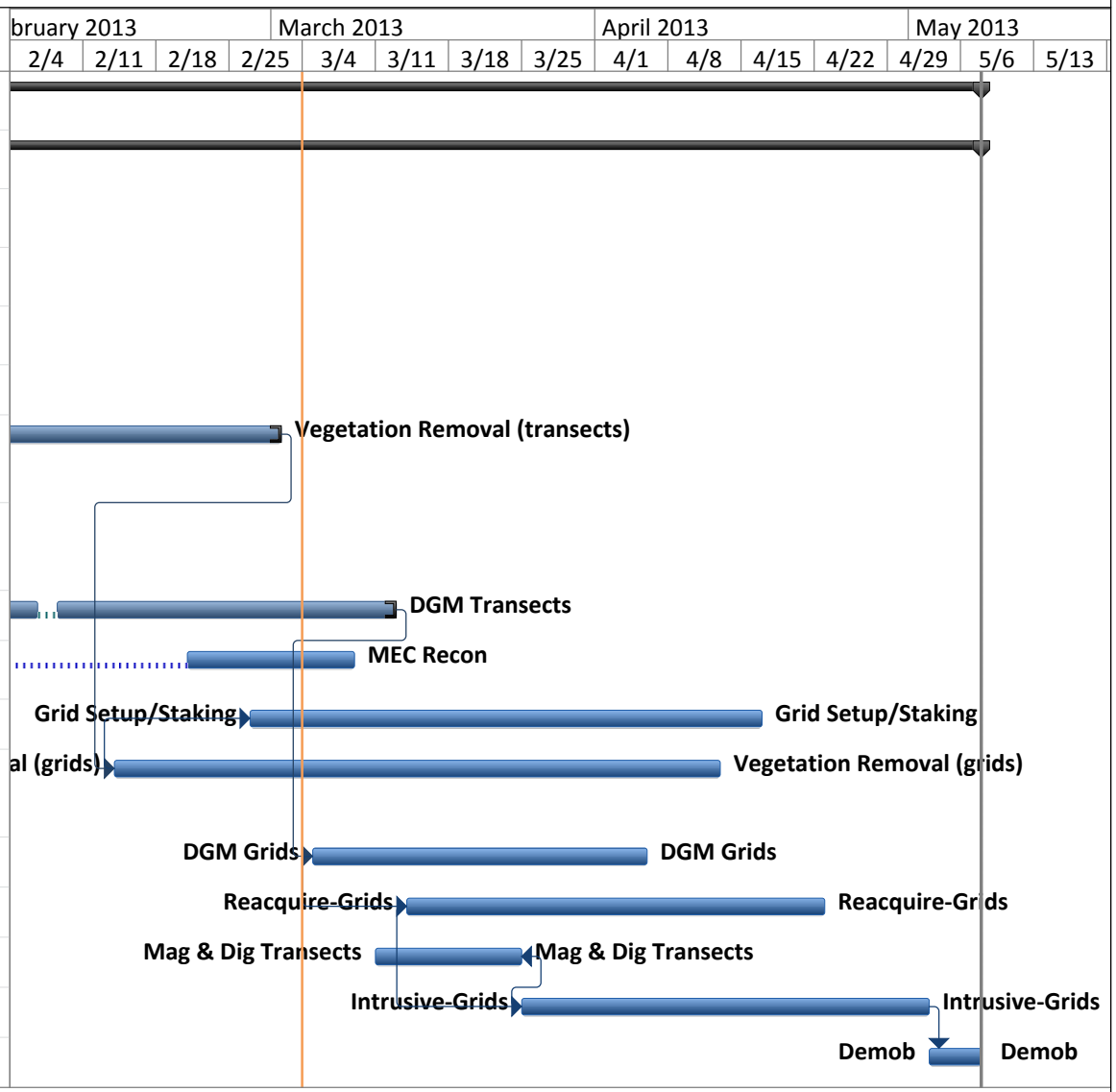
4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	558.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	2364.00
(6) Mar	120.00
Project Man-hours Total	7397.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Kimberly Vaughn
Deputy Project Manager

Attachment 1, Butner RI/FS Schedule

Former Camp Butner RI/FS Field Activities Only

ID	Task Name	Start	Finish
1	**Camp Butner**	**Fri 10/12/12**	**Tue 5/7/13**
2	**Task 4 RI/FS Field Activiti**	**Fri 10/12/12**	**Tue 5/7/13**
3	NTP	Fri 10/12/12	Fri 10/12/12
4	Mobilization	Mon 10/29/12	Mon 10/29/12
5	Site Setup	Mon 10/29/12	Fri 11/2/12
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12
7	Vegetation Removal (transects)	Mon 11/5/12	Fri 3/1/13
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12
9	DGM Transects	Tue 11/13/12	Wed 3/13/13
10	MEC Recon	Wed 1/9/13	Fri 3/8/13
11	Grid Setup/Staking	Wed 2/27/13	Tue 4/16/13
12	Vegetation Removal (grids)	Thu 2/14/13	Fri 4/12/13
13	DGM Grids	Tue 3/5/13	Fri 4/5/13
14	Reacquire-Grids	Thu 3/14/13	Mon 4/22/13
15	Mag & Dig Transects	Mon 3/11/13	Mon 3/25/13
16	Intrusive-Grids	Mon 3/25/13	Thu 5/2/13
17	Demob	Fri 5/3/13	Tue 5/7/13



Project: Butner RI/FS
Date: Mon 3/4/13

Task — Milestone — Inactive Task — Progress
Split — Summary — Deadline

Week ending: 08 March 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Tim Bohannon, USACE
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

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1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance (of both transects and grids), DGM transect data collection, DGM grid data collection and surface reconnaissance was conducted on the ARNG, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc.
UXO Quality Control (UXOQC)	Wes Rogers, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Tim Bohannon, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 04 Mar:	HGL continued Recon Survey at RC2, properties: Jones, Adcock, and Frey. DGM collection of grids data at the ARNG MRS (with Daryl Donatelli onsite). Continued DGM transect collection at RC2 between Moriah Road and Uzzle Road. Continued

	brush clearance and grid set up at proposed grid locations on the guard property. Due to the increased number of personnel on site, Westleon Rogers assumed UXOQCS role. Oscar Honne will continue as the UXOSO.
Tuesday 05 Mar:	Continued DGM collection of grids at ARNG MRS and DGM transect collection at RC1: Gantt property. Continued brush clearance and grid set up at proposed grid locations on ARNG MRS. UXOQC placed QC seeds in grids. This was the last day on site for I3 subcontracted brush clearance equipment operators.
Wednesday 06 Mar:	Continued the grids DGM collection ARNG MRS. Continued DGM transect collection at RC1: Gantt property. Continued brush clearance and grid set up. UXOQC placing QC seeds in grids.
Thursday 07 Mar:	Continued the grids DGM collection (ARNG MRS), DGM transect collection at RC1: Gantt property. Mr. Larry Hudgins (Amec Project Manager) onsite to observe Amec field teams. Continued brush clearance and grid set up at proposed grid locations. UXOQC continued emplacing QC seeds in grids.
Friday 08 Mar:	Continued the grids DGM collection, DGM transect collection at RC1: Sears property. Continued brush clearance and grid set up at proposed grid locations. UXOQC conducted QC seeding in grids at ARNG MRS. Daryl Donatelli and Wes Rogers evaluated six proposed grid locations to confirm proper placement. It was determined that due to the adjacent grave yard, Grid ARNG035 will be relocated 400' to the east of its current location. OESS Demobilized from the site today.

Visitors this week:	Mr. Larry Hudgins, Amec
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 01 March: Brush clearance will continue, and ongoing coordination and scheduling with various landowners. One Amec geophysical team will continue collecting transect data, a second Amec team will continue collecting grids data on the RC1 and RC2 MRSs. Grid setup and seeding will continue. Intrusive investigation of analog transects will begin.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO Oscar Honne; UXOQCS Wes Rogers; UXO Tech III Gary Cagle; UXO Tech II Jeremy Amiotte, Dawn Weber, Woody Zow; UXO Tech I Rebecca Powers & Charles Richardson; Amec personnel geophysicists: Jeff Beddingfield and Micah Holzbauer and UXO Tech IIs: Seth Alu and Donald Koetje. OESS Tim Bohannon.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	740.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	2364.00
(6) Mar	860.00
Project Man-hours Total	8137.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Percent Complete by MRS and by Task

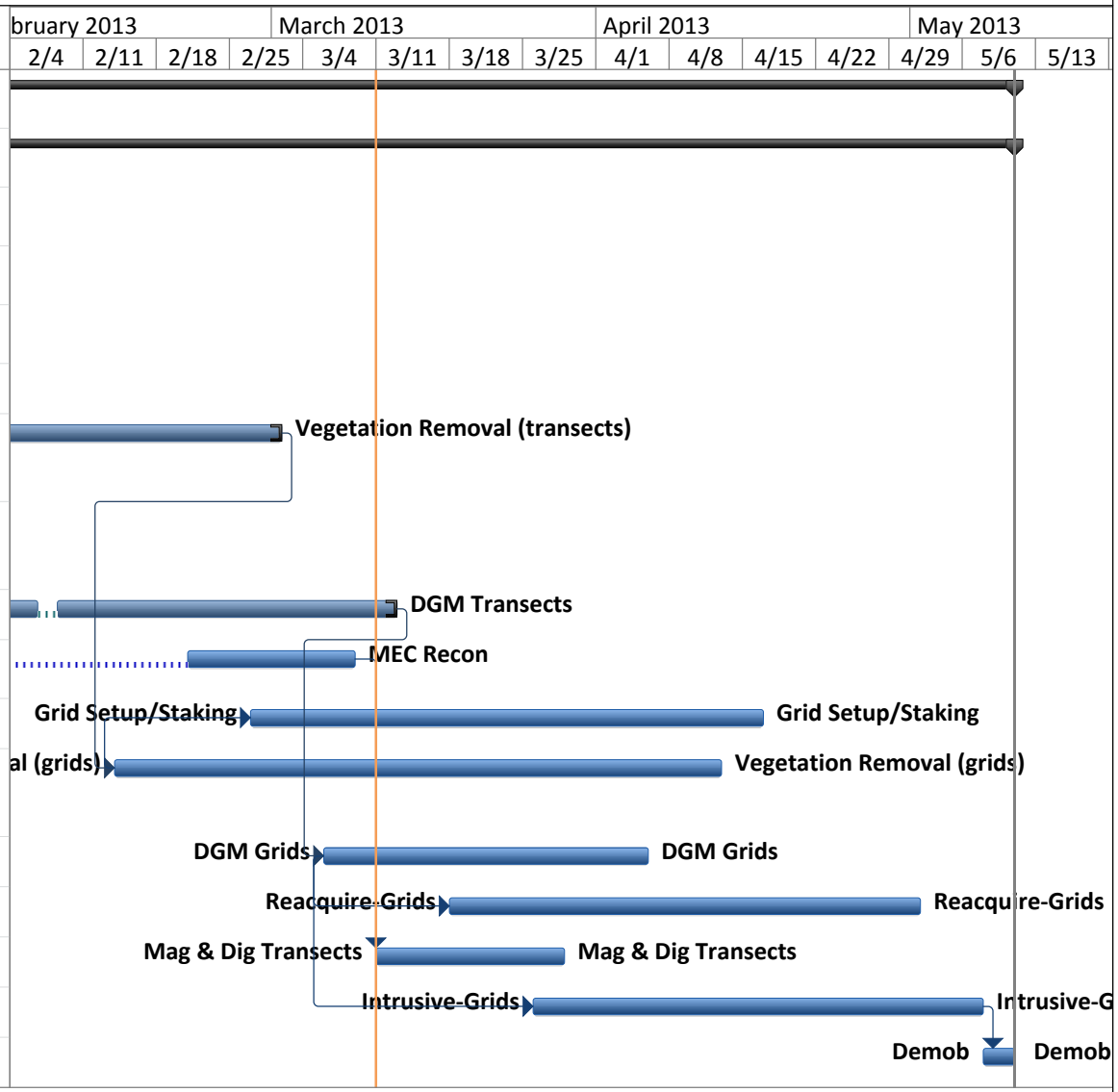
Field Activities	Weight	ARNG	RC1	RC2	Site Weighted % Complete
Mob/Demob	4%	100%	46%	25%	52%
Transect Brush Clearing (Miles)	8%	100%	98%	95%	98%
Transect DGM (Miles)	18%	99%	71%	82%	81%
Transect Data Processing (Miles)	7%	99.56%	44%	66%	64%
MEC Recon (Miles)	3%	100%	88%	100%	94%
Grid Setup - will be 100% when grid locations are staked (Grids)	2%	28%	0%	0%	7%
Grids Brush Clearing (Grids)	8%	72%	0%	0%	17%
Grids DGM MEC & Non-MEC (Grids)	18%	0%	0%	0%	0%
Grids Data Processing (Grids)	5%	0%	0%	0%	0%
Grids DGM Reaq for Intrusive (Grids)	3%	0%	0%	0%	0%
Transect Mag & Dig (Miles)	12%	0%	0%	0%	0%
Grids Intrusive (Grids)	12%	0%	0%	0%	0%
MEC Disposal	2%	33%	0%	0%	8%
	100%	46%	28%	31%	32.90%
Weighing		23%	45%	32%	100%

Kimberly Vaughn
Deputy Project Manager

Attachment 1, Butner RI/FS Schedule

Former Camp Butner RI/FS Field Activities Only

ID	Task Name	Start	Finish
1	**Camp Butner**	**Fri 10/12/12**	**Fri 5/10/13**
2	**Task 4 RI/FS Field Activiti**	**Fri 10/12/12**	**Fri 5/10/13**
3	NTP	Fri 10/12/12	Fri 10/12/12
4	Mobilization	Mon 10/29/12	Mon 10/29/12
5	Site Setup	Mon 10/29/12	Fri 11/2/12
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12
7	Vegetation Removal (transects)	Mon 11/5/12	Fri 3/1/13
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12
9	DGM Transects	Tue 11/13/12	Wed 3/13/13
10	MEC Recon	Wed 1/9/13	Fri 3/8/13
11	Grid Setup/Staking	Wed 2/27/13	Tue 4/16/13
12	Vegetation Removal (grids)	Thu 2/14/13	Fri 4/12/13
13	DGM Grids	Wed 3/6/13	Fri 4/5/13
14	Reacquire-Grids	Mon 3/18/13	Wed 5/1/13
15	Mag & Dig Transects	Mon 3/11/13	Thu 3/28/13
16	Intrusive-Grids	Tue 3/26/13	Tue 5/7/13
17	Demob	Wed 5/8/13	Fri 5/10/13



Project: Butner RI/FS
Date: Mon 3/11/13

Task | Milestone | Inactive Task | Progress
Split | Summary | Deadline

SITE MANAGER WEEKLY REPORT

Week ending: 15 March 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Tim Bohannon, USACE *(offsite)*
Ronald H. Cates, USACE OESS *(arrived 14 March 2013)*
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

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1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance (of both transects and grids), DGM transect data collection, DGM grid data collection and surface reconnaissance was conducted on the ARNG, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
*UXO Safety Officer (*UXOSO*):*	Oscar Honne, HydroGeoLogic, Inc. *(offsite after 3/12/13)*
UXO Quality Control (UXOQC)	Wes Rogers, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Tim Bohannon, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 11 Mar:	Continued brush clearance and grid set up at proposed grid locations on the guard property. Grid ARNG_35 was relocated approximately 400' to the east of its original position. The grid set up team located an expended projectile fuze near grid ARNG_20. Item was stored in

	locked MD drum. Only one Amec team operated today and collected DGM grid data on the ARNG MRS. Conducted brush clearance on DGM transects at RC1: D.W. Uzzle property. UXOQC continued emplacing QC seeds in grids at guard property
Tuesday 12 Mar:	Collected DGM of grids at the ARNG MRS and DGM transect data in RC1 MRS Watkins and Jones properties. Conducted brush clearance and grid set up at proposed grid locations on the ARNG MRS. UXOQC continued emplacing QC seeds in grids at the guard property. Kimberly Vaughn and Neil Feist (HGL) arrived on site to observe operations.
Wednesday 13 Mar:	Collected DGM on grids at the ARNG MRS and DGM transect data in RC1 MRS Hursting property. Conducted brush clearance and grid set up at proposed grid locations on the guard property. Mr. Rogers to assume the responsibilities of UXO Safety and QC until 3/15 (Mr. Honne is offsite). Mr. Ray Livermore (USACE Wilmington District), Marti Morgan (North Carolina Department of Environment and Natural Resources), Kimberly Vaughn and Neil Feist toured the site with SUXOS. Observed team operations including DGM data collection of grids and brush clearance of grids at the ARNG MRS. A site tour/windshield tour of the area (including portions of RC1 MRS and RC2 MRS) followed the morning of team activity observations. Mr. Livermore and Ms. Morgan left the site. The replacement OESS, Mr. Ron Cates, arrived onsite this afternoon.
Thursday 14 Mar:	Collected DGM of grids at the ARNG MRS and DGM transect data at the Hursting and Morrison properties. Conducted brush clearance at proposed grid locations on the guard property and at transects in RC1, properties: Hursting and Morrison. Performed reconnaissance survey at the Mangum/Clayton property in RC1. Kimberly Vaughn and Neil Feist departed the site. While training on ARNG MRS, National Guard personnel discovered mortar tail boom protruding from surface between transects ARNG_DGM500_022 and 023, west of Lake Butner. HGL team to investigate on 3/15.
Friday 15 Mar:	Collected DGM of grids at the ARNG MRS and DGM transect data at the Hursting, Morrison and Clayton properties. Conducted brush clearance at proposed grid locations on the ARNG MRS and at transects in RC1: Hursting and Morrison properties. HGL intrusively investigated the potential UXO item reported yesterday by National Guard personnel. The item was determined to be an 81mm mortar (model unknown) which had functioned leaving behind only the tail boom. The tail boom was considered free of energetic material and consolidated to a locked storage container. (see photos attached).

Visitors this week:	Mr. Ray Livermore, USACE Wilmington District, Ms. Marti Morgan, NCDENR, Ms. Kimberly Vaughn, Mr. Neil Feist.
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies

Description of operations planned for the upcoming week ending 22 March:
Brush clearance for both grids and final transects will continue, and ongoing coordination and scheduling with various landowners. Continue collection of both transect and grid DGM data. Grid setup and seeding will continue. Intrusive investigation of analog transects and grids, as target lists are approved, will begin. Preliminary contacts to RC1 and RC2 landowners for approval of grid locations will be conducted.

Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO Oscar Honne (partial week); UXOSO/UXOQCS Wes Rogers; UXO Tech III Gary Cagle; UXO Tech II Jeremy Amiotte, Dawn Weber, Woody Zow; UXO Tech I

	Rebecca Powers & Charles Richardson; Amec personnel geophysicists: Jeff Beddingfield and Micah Holzbauer and UXO Tech IIs: Seth Alu and Donald Koetje. OESS Ronald Cates.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	**Hours**
a. Total number of man-hours expended during this week:	576.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	2364.00
(6) Mar	1436.00
Project Man-hours Total	8713.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Percent Complete by MRS and by Task

Field Activities	Weight	ARNG	RC1	RC2	Site Weighted % Complete
Mob/Demob	4%	100%	46%	25%	52%
Transect Brush Clearing (Miles)	8%	100%	101%	95%	99%
Transect DGM (Miles)	18%	99%	86%	89%	90%
Transect Data Processing (Miles)	7%	99.56%	44%	66%	64%
MEC Recon (Miles)	3%	100%	91%	105%	97%
Grid Setup - will be 100% when grid locations are staked (Grids)	2%	115%	0%	0%	27%
Grids Brush Clearing (Grids)	8%	115%	0%	0%	27%
Grids DGM MEC & Non-MEC (Grids)	18%	69%	0%	0%	16%
Grids Data Processing (Grids)	5%	0%	0%	0%	0%
Grids DGM Reaq for Intrusive (Grids)	3%	0%	0%	0%	0%
Transect Mag & Dig (Miles)	12%	0%	0%	0%	0%
Grids Intrusive (Grids)	12%	0%	0%	0%	0%
MEC Disposal	2%	33%	0%	0%	8%
	100%	63%	31%	32%	38.6%
Weighting		23%	45%	32%	100%

Kimberly Vaughn
Deputy Project Manager

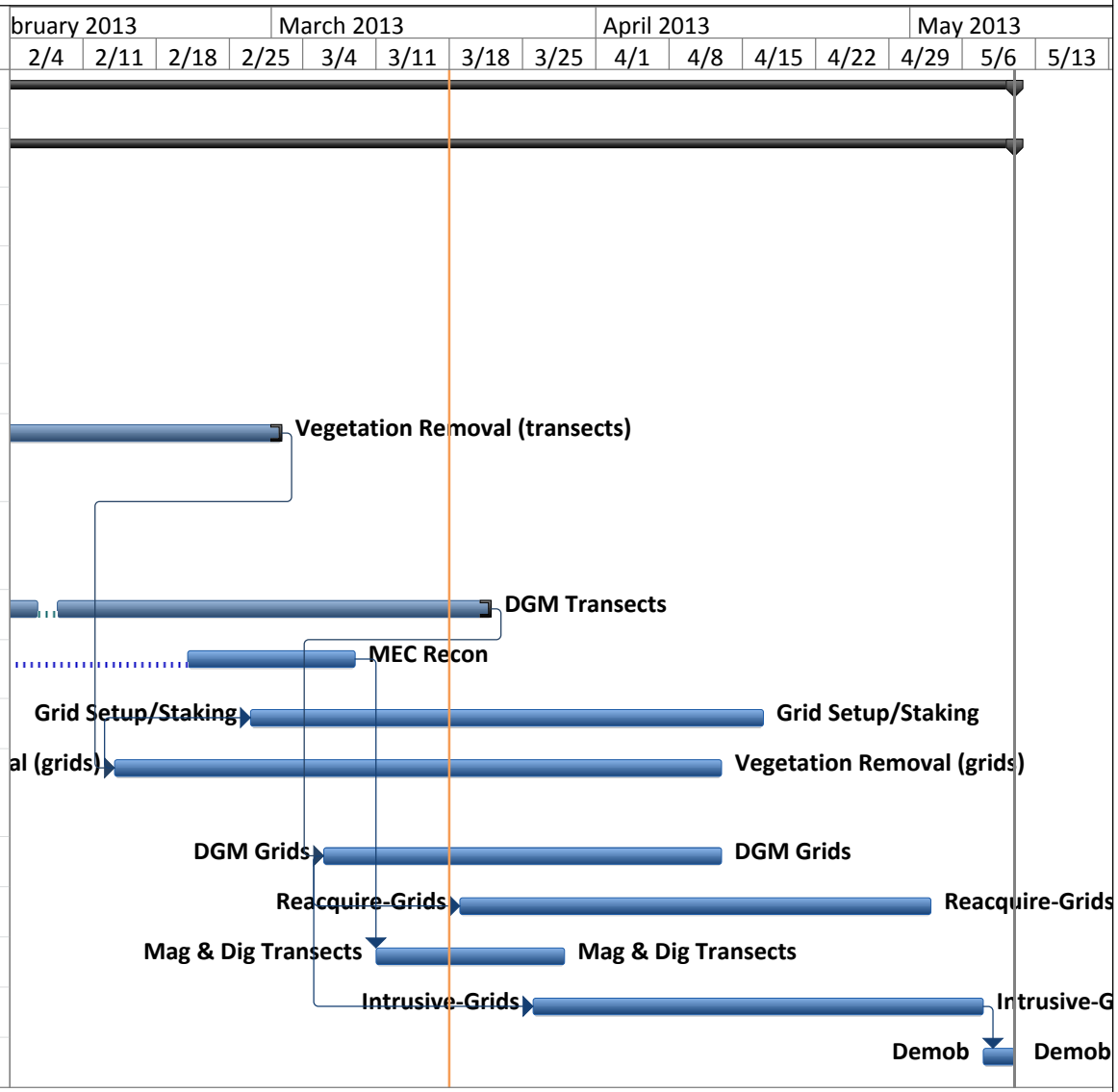




Attachment 1, Butner RI/FS Schedule

Former Camp Butner RI/FS Field Activities Only

ID	Task Name	Start	Finish
1	**Camp Butner**	**Fri 10/12/12**	**Fri 5/10/13**
2	**Task 4 RI/FS Field Activiti**	**Fri 10/12/12**	**Fri 5/10/13**
3	NTP	Fri 10/12/12	Fri 10/12/12
4	Mobilization	Mon 10/29/12	Mon 10/29/12
5	Site Setup	Mon 10/29/12	Fri 11/2/12
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12
7	Vegetation Removal (transects)	Mon 11/5/12	Fri 3/1/13
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12
9	DGM Transects	Tue 11/13/12	Fri 3/22/13
10	MEC Recon	Wed 1/9/13	Fri 3/8/13
11	Grid Setup/Staking	Wed 2/27/13	Tue 4/16/13
12	Vegetation Removal (grids)	Thu 2/14/13	Fri 4/12/13
13	DGM Grids	Wed 3/6/13	Fri 4/12/13
14	Reacquire-Grids	Tue 3/19/13	Thu 5/2/13
15	Mag & Dig Transects	Mon 3/11/13	Thu 3/28/13
16	Intrusive-Grids	Tue 3/26/13	Tue 5/7/13
17	Demob	Wed 5/8/13	Fri 5/10/13



Project: Butner RI/FS
Date: Mon 3/18/13

Task | Milestone | Inactive Task | Progress
Split | Summary | Deadline

Week ending: 22 March 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Ronald H. Cates, USACE OESS
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance (of both transects and grids), DGM transect data collection, DGM grid data collection and intrusive investigations within grids were conducted on the ARNG, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
UXO Safety Officer (UXOSO):	Oscar Honne, HydroGeoLogic, Inc.
UXO Quality Control (UXOQC)	Wes Rogers, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Ron Cates, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 18 Mar:	DGM collection of grids at the ARNG MRS. DGM transect data collected in RC1: Gantt property. Continued brush clearance at proposed grid locations on the ARNG MRS and at transects in RC2, properties: Orander and WNA LLC. Conducted seeding of DGM grids. Grid ARNG_88 was relocated and setup at the northern end of ARNG Recon_018. Mr. Oscar Honne returned to the site as UXOSO and Westleon Rogers will continue as UXOQCS. Mr. Seth Alu (Amec UXO Tech II) left the site and was replaced by Mr. Edward

	Patton. AMEC observers were onsite learning DGM collection efforts.
Tuesday 19 Mar:	Collected DGM transect data in RC1, properties: Knap of Reeds LLC, Uzzle D W, and Beard. One Amec Team experienced equipment issues and did not collect data today. Began brush clearance and grid setup at proposed grid locations within RC2, verifying grid locations, etc. Six additional UXO Technicians mobilized to begin intrusive operations. New team members participated in indoctrination and site specific training today. SUXOS met with Mr. Turner (Uzzle Road, LLC) to discuss access and brush clearance on three parcels of land. Mr. Turner indicated no objections to planned brush cutting.
Wednesday 20 Mar:	Collected DGM transects in RC1, properties: Knap of Reeds LLC and Baretto. Amec Team 1 repaired their EM-61 and resumed DGM collection of grids on the ARNG MRS. Continued brush clearance and grid setup at proposed grid locations within RC2. Cut and marked transects in RC2 on the Uzzle Road, LLC property. Began intrusive investigations of grids on the ARNG MRS.
Thursday 21 Mar:	Collected DGM transects in RC2, properties: Uzzle Road, LLC. Continued DGM grid data collection on the ARNG MRS. Cut and marked transects in RC2 on the Uzzle Road, LLC property. Continued intrusive investigation of grids on the ARNG MRS.
Friday 22 Mar:	Collected DGM transects in RC2: Uzzle Road, LLC. Continued DGM grid data collection on ARNG MRS. Cut and setup grids in RC2. Continued intrusive investigation of grids on the ARNG MRS. While investigating grid ARNG_011, Team 1 discovered a 60mm HE Mortar. After notifying National Guard personnel, HGL performed demolition operations and successfully destroyed the item. See photo included.

Visitors this week:	
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 29 March: Brush clearance for grids and transects will continue, and coordination and scheduling with landowners. Continue collection of both transect and grid DGM data. Grid setup and seeding will continue. Intrusive investigation of analog transects and grids will continue.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO Oscar Honne; UXOSO/UXOQCS Wes Rogers; UXO Tech III Gary Cagle and Al Smith; UXO Tech II Jeremy Amiotte, Dawn Weber, Woody Zow; Casie Hood, Jack Bullock; UXO Tech I Rebecca Powers, Charles Richardson, Coty Kaliszewski, Cheryl Okino, Jason Brawner; Amec personnel geophysicists: Jeff Beddingfield and Micah Holzbauer and UXO Tech IIs: Ed Patton and Donald Koetje. OESS Ronald Cates.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	690.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	2364.00
(6) Mar	2326.00
Project Man-hours Total	9603.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Kimberly Vaughn
Deputy Project Manager

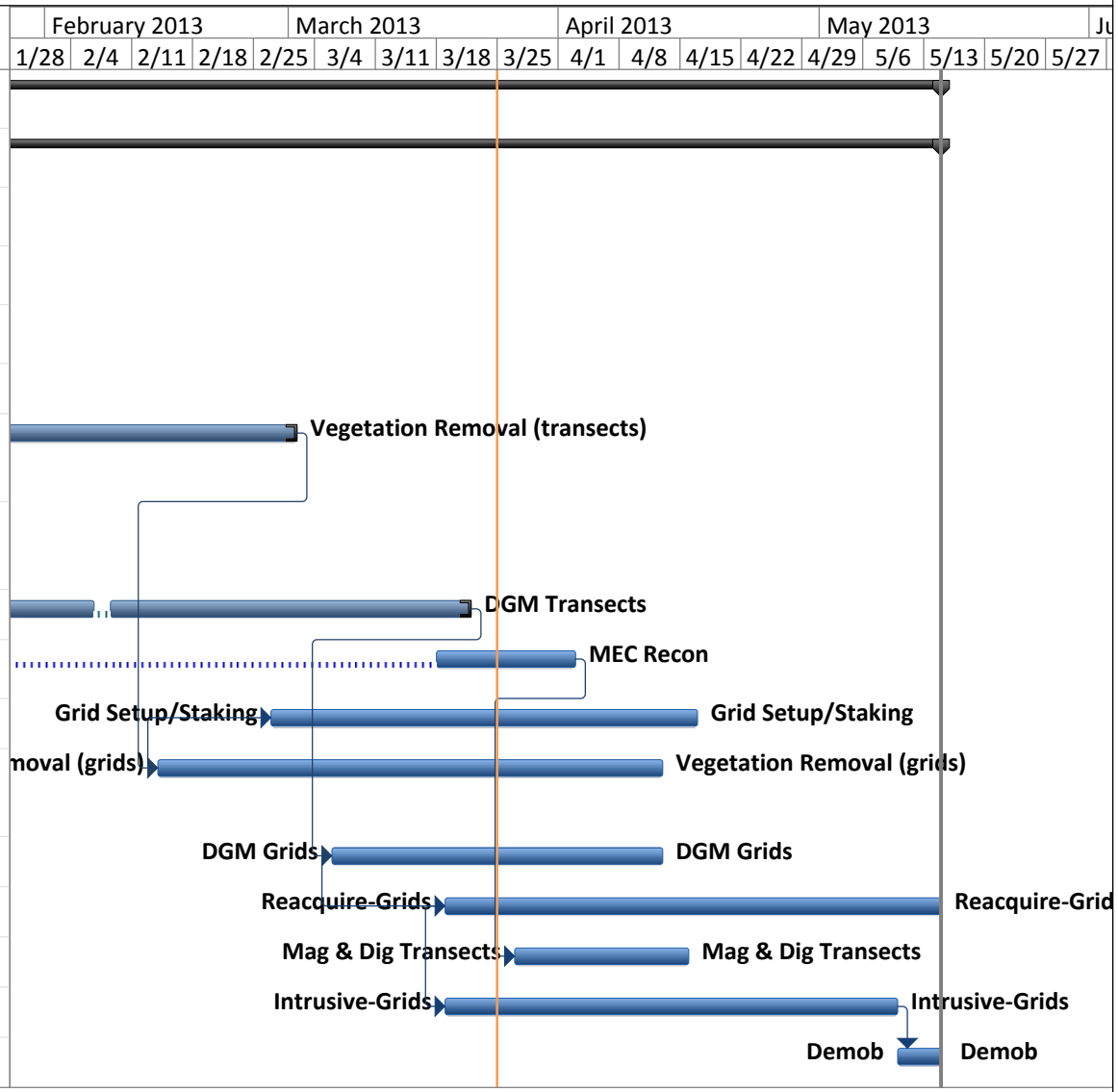


ARNG-001 MEC Item destroyed 3/22/2013;
Date of 3-21-2013 is a typo; correct date found is 3-22-2013

Attachment 1, Butner RI/FS Schedule

Former Camp Butner RI/FS Field Activities Only

ID	Task Name	Start	Finish
1	**Camp Butner**	**Fri 10/12/12**	**Tue 5/14/13**
2	**Task 4 RI/FS Field Activiti**	**Fri 10/12/12**	**Tue 5/14/13**
3	NTP	Fri 10/12/12	Fri 10/12/12
4	Mobilization	Mon 10/29/12	Mon 10/29/12
5	Site Setup	Mon 10/29/12	Fri 11/2/12
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12
7	Vegetation Removal (transects)	Mon 11/5/12	Fri 3/1/13
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12
9	DGM Transects	Tue 11/13/12	Fri 3/22/13
10	MEC Recon	Wed 1/9/13	Tue 4/2/13
11	Grid Setup/Staking	Wed 2/27/13	Tue 4/16/13
12	Vegetation Removal (grids)	Thu 2/14/13	Fri 4/12/13
13	DGM Grids	Wed 3/6/13	Fri 4/12/13
14	Reacquire-Grids	Tue 3/19/13	Tue 5/14/13
15	Mag & Dig Transects	Wed 3/27/13	Mon 4/15/13
16	Intrusive-Grids	Tue 3/19/13	Thu 5/9/13
17	Demob	Fri 5/10/13	Tue 5/14/13



Project: Butner RI/FS
Date: Mon 3/25/13

Task | Milestone | Inactive Task | Progress
Split | Summary | Deadline

SITE MANAGER WEEKLY REPORT

Week ending: 29 March 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Cecil "Bud" Morgan, USAESCH
Elise Goggin, USAESCH
Ronald H. Cates, USACE OESS
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance (of both transects and grids), DGM transect data collection, DGM grid data collection and intrusive investigations within grids were conducted on the ARNG, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
UXO Safety Officer (UXOSO):	Oscar Honne, HydroGeoLogic, Inc.
UXO Quality Control (UXOQC)	Wes Rogers, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Ron Cates, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 25 Mar:	AMEC Team 2 collected transects in RC2, properties: Lee, Scott, Jennings, and Uzzle D W. AMEC Team 1 continued DGM collection of grids on the ARNG MRS. HGL brush teams cut and marked transects in RC1 and RC2, properties: Davis, Obriant, Blair, and Gray. HGL Team 1 intrusively investigated grids inside the range fan on the ARNG MRS.

Tuesday 26 Mar:	AMEC Team 2 collected transects in RC2, properties: WNA LLC, Blair, and Boone. AMEC Team 1 continued DGM collection of grids on the guard property. HGL brush teams cut and marked transects in RC2: Davis property HGL Team 1 intrusively investigated grids outside the range fan on the guard property.
Wednesday 27 Mar:	AMEC Team 2 collected transects in RC2: Davis property. AMEC Team 1 continued DGM collection of grids on the guard property. HGL brush teams cut transects and setup grids in RC2 HGL Team 1 intrusively investigated grids outside the range fan on the guard property.
Thursday 28 Mar:	AMEC Team 2 collected transects in RC1: Stout property. AMEC Team 1 continued DGM collection of grids on the guard property. HGL brush teams cut transects in RC1 and setup grids in RC2. HGL recon survey team collected data in RC2. HGL Team 1 intrusively investigated grids inside the range fan on the guard property.
Friday 29 Mar:	AMEC Teams collected grids in RC2. AMEC trained personnel in preparation to cut staff and collect with a single team for the remainder of the project. HGL brush team cut and setup grids in RC2. HGL Team 1 and 2 intrusively investigated grids outside the range fan on the guard property while the range was active.

Visitors this week:	N/A
Weather delays this week/to date:	N/A
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies

Description of operations planned for the upcoming week ending 05 April:
Brush clearance for grids will continue, and coordination and scheduling with landowners. Continue collection of both transect and grid DGM data. Grid setup and seeding will continue. Intrusive investigation of analog transects and grids will continue.

Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO Oscar Honne; UXOSO/UXOQCS Wes Rogers; UXO Tech III Gary Cagle and Al Smith; UXO Tech II Jeremy Amiotte, Dawn Weber, Woody Zow; Casie Hood, Jack Bullock; UXO Tech I Rebecca Powers, Charles Richardson, Coty Kaliszewski, Cheryl Okino, Jason Brawner; Amec personnel geophysicists: Jeff Beddingfield and Micah Holzbauer and UXO Tech IIs: Ed Patton and Donald Koetje. OESS Ronald Cates.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	939.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	2364.00
(6) Mar	3065.00
Project Man-hours Total	10342.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Percent Complete by MRS and by Task

Field Activities	Weight	ARNG	RC1	RC2	Site Weighted % Complete
Mob/Demob	4%	100%	46%	25%	52%
Transect Brush Clearing (Miles)	8%	100%	101%	100%	101%
Transect DGM (Miles)	18%	100%	92%	92%	94%
Transect Data Processing (Miles)	7%	99.56%	90%	90%	92%
MEC Recon (Miles)	3%	100%	92%	106%	98%
Grids Brush Clearing (Grids)	8%	98%	0%	36%	34%
Grids DGM MEC & Non-MEC (Grids)	19%	97%	0%	5%	24%
Grids Data Processing (Grids)	5%	78%	0%	0%	18%
Grids DGM Reaq for Intrusive (Grids)	3%	29%	0%	0%	7%
Transect Mag & Dig (Miles)	12%	0%	0%	0%	0%
Grids Intrusive (Grids)	12%	29%	0%	0%	7%
MEC Disposal	2%	33%	33%	0%	23%
	100%	74%	36%	39%	**45.65%**
Weighing		23%	45%	32%	100%

Kimberly Vaughn
Deputy Project Manager

Week ending: 12 April 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Sarah Dyer, USAESCH
Elise Goggin, USAESCH
Ronald H. Cates, USACE OESS *(off-site after 4/12/13)*
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance (of both transects and grids), DGM transect data collection, DGM grid data collection and intrusive investigations within grids were conducted on the ARNG, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
UXO Safety Officer (UXOSO):	Oscar Honne, HydroGeoLogic, Inc.
UXO Quality Control (UXOQC)	Wes Rogers, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Ron Cates, USACE *(offsite after 4/12/13)*

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 08 April:	Collected DGM grids in RC2, Brush team cut and setup grids at RC2, Teams 1 and 2 intrusively investigated grids on the ARNG MRS while the range was inactive.

Tuesday 09 April:	Collected DGM grids in RC2 and finished off the guard property, Brush team cut and setup grids at RC1 and RC2, Teams 1 and 2 intrusively investigated grids at ARNG and RC2 MRSs.
Wednesday 10 April:	Collected DGM grids in RC2, Brush teams cut and setup grids at RC2, Recon teams collected data in the power line corridor at transects where DGM data was rejected due to high "noise" levels.
Thursday 11 April:	Collected DGM grids in RC2. Brush teams cut and setup grids at RC2, Recon team collected data in the power line corridor at transects where DGM data was rejected due to high "noise" levels. Team 1 intrusively investigated grids on RC2.
Friday 12 April:	Delayed start (2 hours) in operations due to severe weather in the morning. Collected DGM grids in RC2. Brush teams cut and setup grids at RC1 and RC2. Team 1 intrusively investigated grids on RC2. Team 2 intrusively investigated grids in RC2 and one transect RC2_DGM300_051 (the Ziegler property).

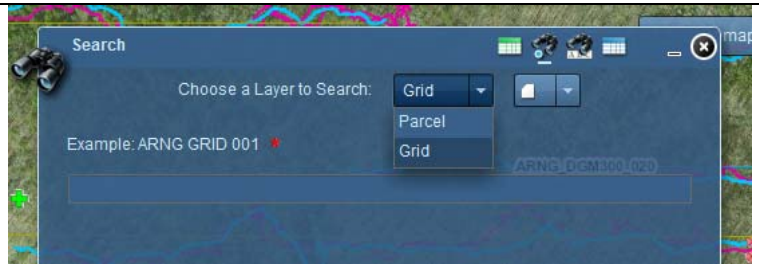
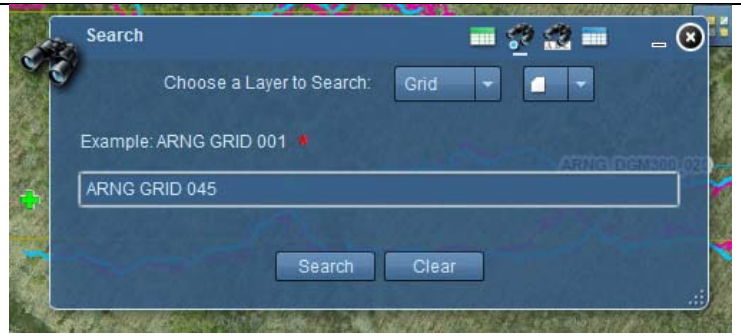
Visitors this week:	N/A
Weather delays this week/to date:	Two hour delayed start due to weather on 4/12.
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 19 April: Setup of grids on RC1 and RC2 will continue with coordination and scheduling with landowners. Continued collection of grid DGM data. Intrusive investigation of analog transects and grids will continue. OESS Hank Counts to replace OESS Ron Cates.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO Oscar Honne; UXOSO/UXOQCS Wes Rogers; UXO Tech III Gary Cagle and Al Smith; UXO Tech II Jeremy Amiotte, Dawn Weber, Woody Zow; Casie Hood, Jack Bullock; UXO Tech I Rebecca Powers, Charles Richardson, Coty Kaliszewski, Cheryl Okino, Jason Brawner; Amec geophysicist: Jeff Beddingfield and UXO Tech II: Donald Koetje.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	800.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	2364.00
(6) Mar	3065.00
(7) Apr	1682.00
Project Man-hours Total	12024.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A

Kimberly Vaughn
Deputy Project Manager

Grid Search Added to Webmap:

1) Open the Search Tool, and select “Grid” using the drop down arrow in the “Choose a Layer to Search” option:	
2) Enter a partial or complete Grid ID:	
3) Use the “Zoom to” function to navigate to the grid location. View the grid status in either the popup list, or by the color coding given to the southwest grid corner symbol.	

Example of Grid Status Shown on Webmap:



ARNG GRID 045 – Color of grid indicator (green) shows that DGM data has been collected.
ARNG GRID 028 – Color of grid indicator (blue) shows that Reac/Intrusive has been completed.
ARNG GRID 045 – Color of grid indicator (Orange) shows that QA is completed.

Week ending: 19 April 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Sarah Dyer, USAESCH
Elise Goggin, USAESCH
Hank Counts, USACE OESS *(onsite 4/15/13)*
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance (of both transects and grids), DGM transect data collection, DGM grid data collection and intrusive investigations within grids were conducted on the ARNG, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
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UXO Safety Officer (UXOSO):	Oscar Honne, HydroGeoLogic, Inc.
UXO Quality Control (UXOQC)	Wes Rogers, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Hank Counts, USACE *(onsite 4/15/13)*

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 15 April:	Amec collected DGM grids in RC2, HGL brush team cut and setup grids at RC2, HGL Team 2 intrusively investigated grids at ARNG and HGL Team 1 intrusively investigated grids at RC2. A property owner, Mr. Robbins, reported the discovery of a possible UXO item on his aunt's parcel, Mrs. Broyhill. Hunters found the item over the weekend. HGL responded and identified the item as an M107 155mm HE projectile. The projectile was located 100 yards

	south of grid RC2_072 adjacent to transect RC2_DGM300_045. After notifying Butner Public Safety, the Butner Fire Marshal and a deputy sheriff arrived onsite to assess potential fire danger and risk to public safety. It was determined that the forestry department should cut a fire break around the demo site, and forestry department personnel completed the fire break. The item was successfully blown in place, with support from Butner Public Safety for public notifications. Photographs were provided in the daily for 15 April and are attached here.
Tuesday 16 April:	Amec collected DGM grids in RC2, HGL brush team cut and setup grids at RC2 and RC1, HGL Team 2 intrusively investigated grids at ARNG and RC2, HGL Team 1 intrusively investigated grids at RC2.
Wednesday 17 April:	Amec collected DGM grids in RC2, HGL brush team cut and setup grids at RC2 and RC1, HGL Team 1 intrusively investigated grids at RC2 and HGL Team 2 intrusively investigated grids at ARNG. During QC of ARNG grid 13, the UXOQCS, accompanied by the OESS, identified an anomaly and requested the intrusive team revisit ARNG-013. During additional investigation of ARNG-013, team discovered a 3.25" rocket near anomaly 005. The rocket has been identified as the M2 Anti-Aircraft Target Rocket and is a piece of munitions debris. HGL planned to penetrate the nose of the rocket with a jet perforator before storing the item as MD for eventual disposal. Additional description of the item and a photograph were attached to the 17 April daily and are attached here.
Thursday 18 April:	Amec collected DGM grids in RC2, HGL brush teams cut and setup grids at RC1, HGL team 2 intrusively investigated grids at ARNG and RC2, Explosive venting operations were performed on two items to ensure they were free of energetic material. After a successful procedure, the M2 3.25" Target Rocket and M70 57mm AP-T Projectile were stored in a locked MD container. Conducted explosive magazine inventory/inspection.
Friday 19 April:	Amec collected DGM grids in RC2, HGL Brush Teams cut and setup grids at RC1, HGL Team 1 and 2 intrusively investigated grids in RC2.

Visitors this week:	N/A
Weather delays this week/to date:	
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 26 April: Setup of grids on RC1 and RC2 will continue with coordination and scheduling with landowners. Continued collection of grid DGM data. Intrusive investigation of analog transects and analog grids will continue, as needed based on landowner coordination.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO Oscar Honne; UXOSO/UXOQCS Wes Rogers; UXO Tech III Gary Cagle and Al Smith; UXO Tech II Jeremy Amiotte, Dawn Weber, Woody Zow; Casie Hood, Jack Bullock; UXO Tech I Rebecca Powers, Charles Richardson, Coty Kaliszewski, Cheryl Okino, Jason Brawner; Amec geophysicist: Jeff Beddingfield and UXO Tech II: Donald Koetje.

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	850.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	2364.00
(6) Mar	3065.00
(7) Apr	2532.00
Project Man-hours Total	12874.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A



Kimberly Vaughn
Deputy Project Manager

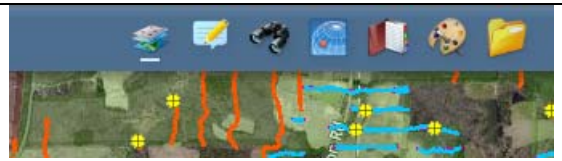
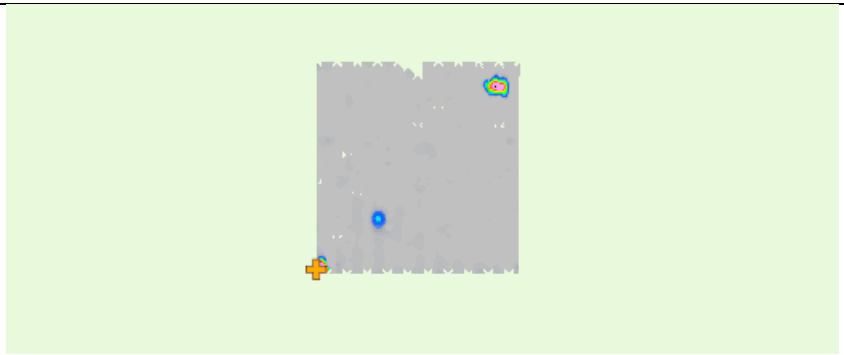
GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011



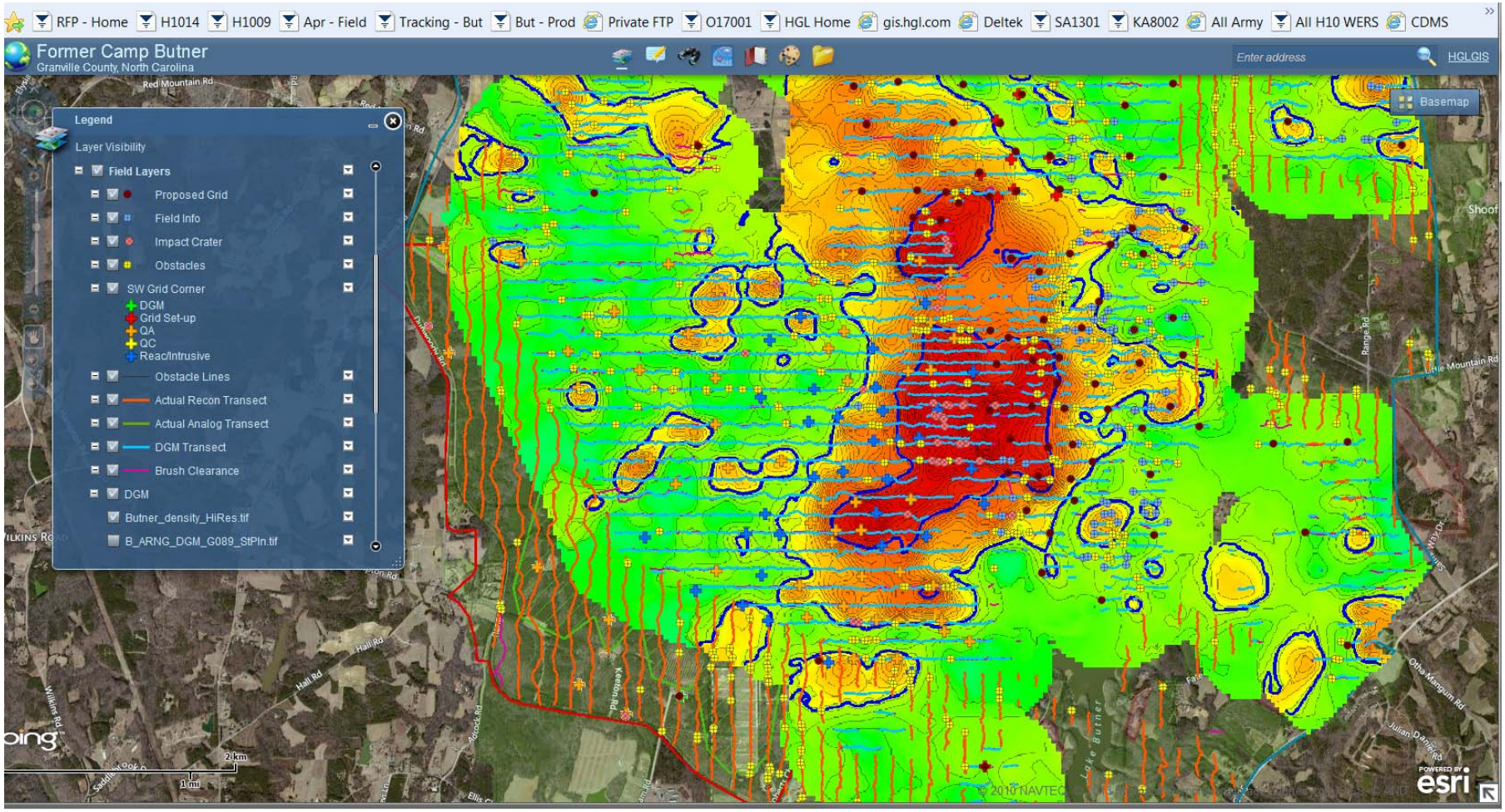


M2 Anti-Aircraft Target Rocket
ARNG-DGM-G013, #005, 4/17/13
Munitions Debris

DGM Anomaly Density layer added to Webmap:

1) Open the Layers Tool by clicking on the icon shown on the far left at the top center of screen.	
2) In the layers menu, activate the layer to “select” the box labeled “DGM” and then select either of the options for tif files that can be displayed. Currently there are two, the overall DGM and one grid.	
3) Currently, one grid is shown. HGL is exploring ways to display all individual grid data, as well. The user can “zoom to” the feature (if the check box is selected) by click on the down arrow to the right of the label, and then clicking on “Zoom to.” Due to the amount of data displayed on the webmap, this is a good way to zoom to a particular feature.	
Grid ARNG 89 DGM data.	

Example of DGM layer added on webmap:



SITE MANAGER WEEKLY REPORT

Week ending: 03 May 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Sarah Dyer, USAESCH
Elise Goggin, USAESCH
Hank Counts, USACE OESS
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance (of both transects and grids), DGM transect data collection, DGM grid data collection and intrusive investigations within grids were conducted on the ARNG, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
UXO Safety Officer (UXOSO):	Oscar Honne, HydroGeoLogic, Inc.
UXO Quality Control (UXOQC)	Wes Rogers, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Hank Counts, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 29 April:	Collected DGM grids in RC1. After completing IVS runs, HGL Geo Team 1 was formed complete DGM collection of grids in RC1. HGL brush team cut and setup grids at RC1. HGL Team 2 intrusively investigated grids at RC2.

Tuesday 30 April:	Collected DGM grids in RC1. HGL Geo Team collected grids in RC2. HGL Brush Team cut and setup grids at RC1. HGL Team 2 intrusively investigated analog grids at RC1. HGL QC continued seeding grids.
Wednesday 01 May:	Collected DGM grids in RC1. HGL Brush Team cut and setup grids at RC1. HGL Teams 1 and 2 intrusively investigated grids at RC2. Team 2 located a M63 37mm TP projectile in grid RC2-019 at Philip Robbins property. Demo operations were performed and the projectile was successfully destroyed. HGL QC continued seeding grids.
Thursday 02 May:	Collected DGM grids in RC1. HGL Brush Team cut and setup grids at RC1. HGL Teams 1 and 2 intrusively investigated grids at RC1 and RC2. HGL QC continued seeding grids.
Friday 03 May:	Re-collected DGM transects at RC2 in areas where data did not pass review. HGL Geo collected DGM grids at RC1, Morris property. HGL Brush Team cut and setup grids at RC1. HGL Teams 1 and 2 intrusively investigated grids at RC1. HGL QC accompanied the OESS to QA check investigated grids in RC1 and RC2.

Visitors this week:	N/A
Weather delays this week/to date:	
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 03 May: Intrusive Investigation of grids on ARNG MRS is complete. Continued coordination with landowners for setup of grids on RC1 and RC2 will continue. Continued collection of grid DGM data and intrusive investigation of analog transects and analog grids will continue at RC1 and RC2. DGM Grid Data collection is anticipated to be completed by 5/10/13.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO Oscar Honne; UXOSO/UXOQCS Wes Rogers; UXO Tech III Gary Cagle and Al Smith; UXO Tech II Jeremy Amiotte, Dawn Weber, Woody Zow; Casie Hood, Jack Bullock; UXO Tech I Rebecca Powers, Charles Richardson, Coty Kaliszewski, Cheryl Okino, Jason Brawner; Amec geophysicist: Jeff Beddingfield and UXO Tech II: Donald Koetje.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	830.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	2364.00
(6) Mar	3065.00
(7) Apr	3712.00
(8) May	500.00
Project Man-hours Total	14554.00
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Field Activities: Task Weighted Percent Complete

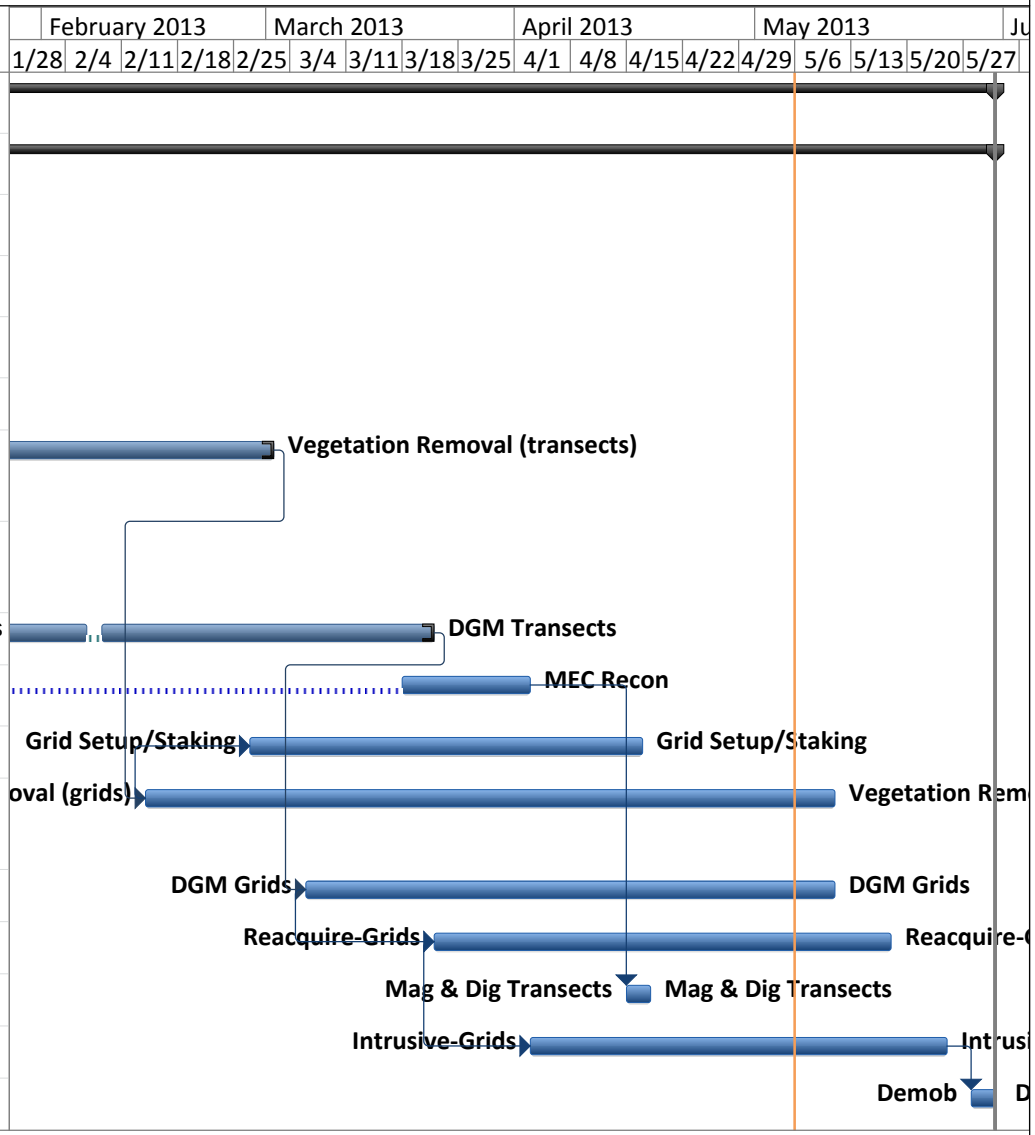
Field Activities	Weight	ARNG	RC1	RC2	Site Weighted % Complete
Mob/Demob	4%	100%	79%	25%	67%
Transect Brush Clearing (Miles)	8%	100%	101%	100%	101%
Transect DGM (Miles)	18%	100%	98%	97%	98%
Transect Data Processing (Miles)	7%	99.56%	92%	94%	94%
MEC Recon (Miles)	3%	100%	97%	109%	102%
Grids Brush Clearing (Grids)	8%	100%	46%	96%	75%
Grids DGM MEC & Non-MEC (Grids)	19%	100%	21%	107%	67%
Grids Data Processing (Grids)	5%	100%	11%	90%	57%
Grids DGM Reaq for Intrusive (Grids)	3%	100%	0%	50%	39%
Transect Mag & Dig (Miles)	12%	0%	0%	11%	3%
Grids Intrusive (Grids)	12%	100%	2%	59%	43%
MEC Disposal	2%	100%	40%	25%	49%
	100%	88%	47%	78%	**66.59%**

(one week lag time for data processing to be incorporated into percent completes)

Kimberly Vaughn
Deputy Project Manager

Former Camp Butner RI/FS Field Activities Only

ID	Task Name	Start	Finish	Duration
1	**Camp Butner**	**Fri 10/12/12**	**Thu 5/30/13**	**154 days**
2	**Task 4 RI/FS Field Activiti**	**Fri 10/12/12**	**Thu 5/30/13**	**154 days**
3	NTP	Fri 10/12/12	Fri 10/12/12	0 days
4	Mobilization	Mon 10/29/12	Mon 10/29/12	1 day
5	Site Setup	Mon 10/29/12	Fri 11/2/12	5 days
6	Transect Setup/Flagging	Mon 11/5/12	Wed 11/14/12	6 days
7	Vegetation Removal (transects)	Mon 11/5/12	Fri 3/1/13	79 days
8	IVS Setup and Data Collection	Tue 11/13/12	Wed 11/14/12	2 days
9	DGM Transects	Tue 11/13/12	Fri 3/22/13	75.01 days
10	MEC Recon	Wed 1/9/13	Tue 4/2/13	20 days
11	Grid Setup/Staking	Wed 2/27/13	Tue 4/16/13	35 days
12	Vegetation Removal (grids)	Thu 2/14/13	Fri 5/10/13	61 days
13	DGM Grids	Wed 3/6/13	Fri 5/10/13	48 days
14	Reacquire-Grids	Fri 3/22/13	Fri 5/17/13	41 days
15	Mag & Dig Transects	Mon 4/15/13	Wed 4/17/13	3 days
16	Intrusive-Grids	Wed 4/3/13	Fri 5/24/13	38 days
17	Demob	Tue 5/28/13	Thu 5/30/13	3 days



Project: Butner RI/FS
Date: Mon 5/6/13

Task | Milestone | Inactive Task | Progress
Split | Summary | Deadline

SITE MANAGER WEEKLY REPORT

Week ending: 13 May 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Sarah Dyer, USAESCH
Elise Goggin, USAESCH
Hank Counts, USACE OESS
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance (of both transects and grids), DGM transect data collection, DGM grid data collection and intrusive investigations within grids were conducted on the ARNG, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
UXO Safety Officer (UXOSO):	Oscar Honne, HydroGeoLogic, Inc.
UXO Quality Control (UXOQC)	Wes Rogers, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Hank Counts, USACE

3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 06 May:	Collected DGM grids in RC1. HGL Geo collected DGM grids at RC1. HGL Teams 1 and 2 intrusively investigated grids at RC1 and RC2. HGL QC continued seeding DGM grids. Intrusive operations were halted due to severe weather.

Tuesday 07 May:	Amec collected DGM grids in RC1. HGL Geo collected DGM grids at RC1. HGL Team 2 intrusively investigated grids at RC1 and RC2. HGL QC continued seeding grids and accompanied the OESS to QA grids. HGL investigated the site of the suspect 37mm projectile. Grid RC2_114 (50'x50') was established for investigation of the coordinates provided by the ESTCP Pilot Study. One of the anomalies investigated was an expended M63 Mod 1, 37mm TP projectile.
Wednesday 08 May:	Amec re-collected DGM transects. HGL Geo collected DGM grids at RC1. HGL Brush Teams cut and setup grids in RC1. HGL Team 2 intrusively investigated grid RC1_018. HGL QC continued seeding grids.
Thursday 09 May:	Amec re-collected DGM transects and grids in RC1 and RC2. HGL Teams 1 and 2 intrusively investigated DGM grids in RC1 and RC2. HGL QC continued seeding grids.
Friday 10 May:	Amec collected grids in RC2, packed up their equipment, and demobilized. HGL Geo 1 collected grids in RC2. HGL Team 1 intrusively investigate analog transects ARNG_ANALOG_001 – 008 to define the extent of grenade training range at grid RNG_082. HGL Team 2 intrusively investigated DGM grids in RC1 and RC2. HGL QC'd analog transects.

Visitors this week:	N/A
Weather delays this week/to date:	
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies

Description of operations planned for the upcoming week ending 10 May:
Intrusive Investigation of grids on ARNG MRS is 100% complete, soil sampling will begin. Continued coordination with landowners for setup of grids on RC1 and RC2 will continue. Collection of grid DGM will be completed. Intrusive investigation of both transects and grids will continue at RC1 and RC2. Intrusive Investigation is anticipated to be complete by May 24th.

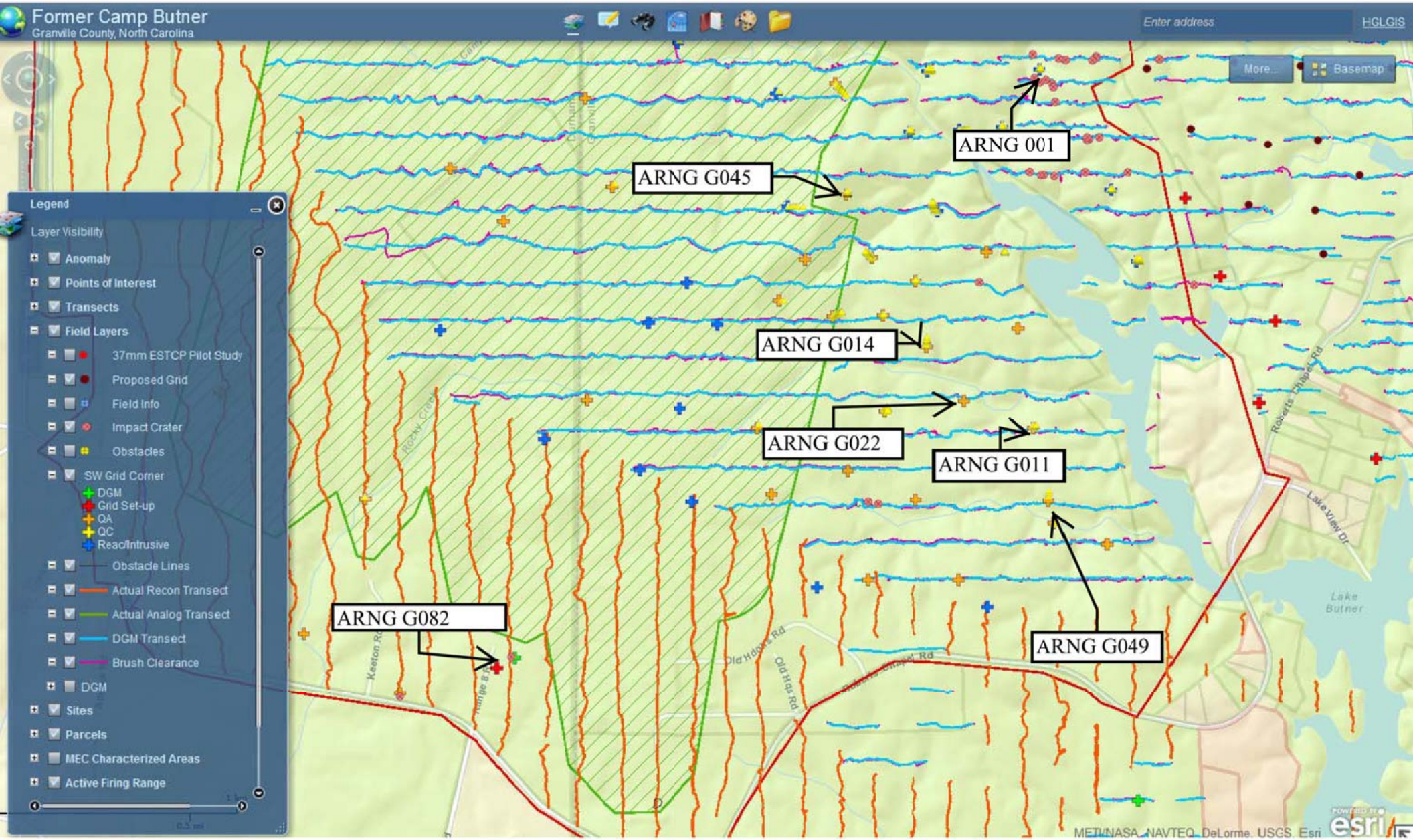
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO Oscar Honne; UXOSO/UXOQCS Wes Rogers; UXO Tech III Gary Cagle and Al Smith; UXO Tech II Jeremy Amiotte, Dawn Weber, Woody Zow; Casie Hood, Jack Bullock; UXO Tech I Rebecca Powers, Charles Richardson, Coty Kaliszewski, Cheryl Okino, Jason Brawner; Amec geophysicist: Jeff Beddingfield and UXO Tech II: Donald Koetje.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

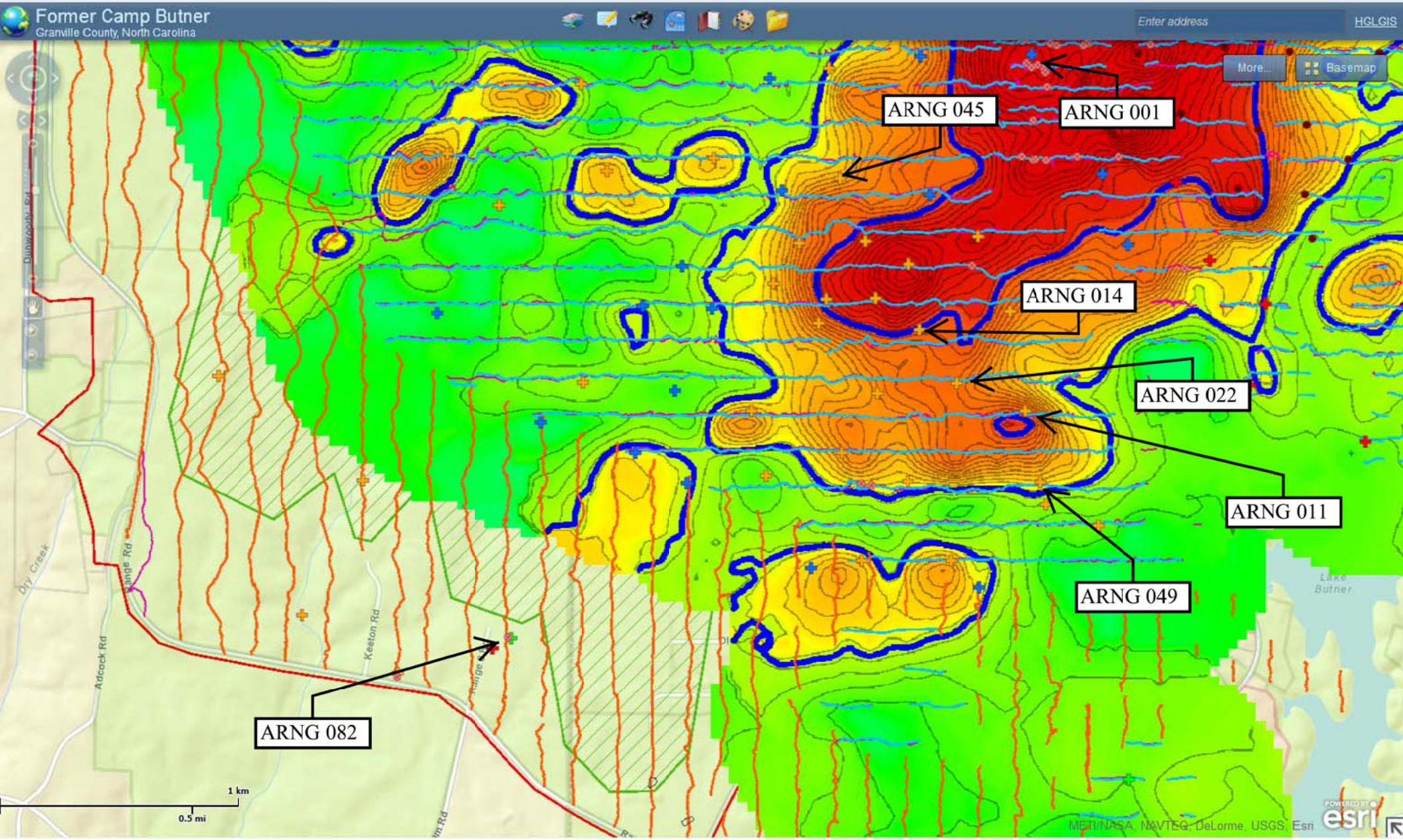
4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	760.50
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	2364.00
(6) Mar	3065.00
(7) Apr	3712.00
(8) May	1260.50
Project Man-hours Total	15314.50
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Kimberly Vaughn
Deputy Project Manager

Soil Sampling Locations on the South portion of the ARNG MRS


Former Camp Butner
Granville County, North Carolina
Enter address
HGLGIS
More...
Basemap
Legend
Layer Visibility
Anomaly
Points of Interest
Transects
Field Layers
37mm ESTCP Pilot Study
Proposed Grid
Field Info
Impact Crater
Obstacles
SW Grid Corner
DGM
Grid Set-up
QA
QC
Reac/Intrusive
Obstacle Lines
Actual Recon Transect
Actual Analog Transect
DGM Transect
Brush Clearance
DGM
Sites
Parcels
MEC Characterized Areas
Active Firing Range
ARNG 001
ARNG G045
ARNG G014
ARNG G022
ARNG G011
ARNG G082
ARNG G049
Lake Butner
Lake View Dr
Roberts Chapel Rd
Old Hqs Rd
Keeton Rd
METI/NASA, NAVTEQ, DeLorme, USGS, Esri

Soil Sampling Locations on the South portion of the ARNG MRS (with DGM layer shown)


Former Camp Butner
Granville County, North Carolina
Enter address
HGLGIS
More...
Basemap
ARNG 045
ARNG 001
ARNG 014
ARNG 022
ARNG 011
ARNG 049
ARNG 082
Dry Creek
Adcock Rd
Range Rd
Keeton Rd
Lake Butner
1 km
0.5 mi
MET/NASA, NAVTEQ, DeLorme, USGS, Esri
esri

SITE MANAGER WEEKLY REPORT

Week ending: 17 May 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Sarah Dyer, USAESCH
Elise Goggin, USAESCH
Hank Counts, USACE OESS
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner.

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance (of both transects and grids), DGM transect data collection, DGM grid data collection and intrusive investigations within grids were conducted on the ARNG, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
UXO Safety Officer (UXOSO):	Oscar Honne, HydroGeoLogic, Inc.
UXO Quality Control (UXOQC)	Wes Rogers, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Hank Counts, USACE
3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 13 May:	HGL Teams 1 and 2 intrusively investigated analog grids in RC1 at the Gantt property. HGL QC continued seeding grids.

Tuesday 14 May:	HGL Teams 1 and 2 intrusively investigated additional analog grids in RC1 at the Gantt property. HGL QC continued seeding grids. HGL QC accompanied OESS to QA check analog and DGM grids in RC1 and RC2.
Wednesday 15 May:	HGL Team 2 intrusively investigated DGM grids at RC1 and RC2. Team 2 located a M63 Mod 1 37mm TP projectile in grid RC2-106 adjacent to Uzzle Rd on the Rouse property (see photograph). Demo operations were performed and the item was destroyed. HGL Brush Team completed the cut and setup the last grids in RC1 and RC2. HGL Geo Team collected the last grids in RC1 and RC2. HGL QC seeded the last grids in RC1 and RC2. HGL QC accompanied OESS to QA check DGM grids in RC2. Cox Environmental collected soil samples at ARNG
Thursday 16 May:	HGL Teams 1 and 2 intrusively investigated DGM grids at RC1 and RC2. Team 1 located a M6 2.36" Rocket warhead in grid RC1-086 adjacent to Isham Chambers Rd on the Poyet property (see photograph). Demo operations were performed and the item was destroyed. HGL QC accompanied the OESS to QA check DGM grids in RC1 and RC2. Cox Environmental collected soil samples at ARNG and RC2.
Friday 17 May:	HGL Teams 1 and 2 intrusively investigated DGM grids at RC1 and RC2. HGL QC accompanied the OESS to QA check DGM grids at RC1 and RC2. Cox Environmental collected soil samples at RC2.

Visitors this week:	N/A
Weather delays this week/to date:	
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 24th May: Intrusive Investigation of grids on ARNG MRS is 100% complete and on RC1 and RC2 is more than 80% complete, incremental soil sampling will be conducted on all three MRSs. Collection of grid DGM data is complete. Intrusive investigation will continue at RC1 and RC2. All Intrusive Investigation and soil sampling will be complete by May 24th.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO Oscar Honne; UXOSO/UXOQCS Wes Rogers; UXO Tech III Gary Cagle and Al Smith; UXO Tech II Jeremy Amiotte, Dawn Weber, Woody Zow; Casie Hood, Jack Bullock; UXO Tech I Rebecca Powers, Charles Richardson, Coty Kaliszewski, Cheryl Okino, Jason Brawner; Amec geophysicist: Jeff Beddingfield and UXO Tech II: Donald Koetje.

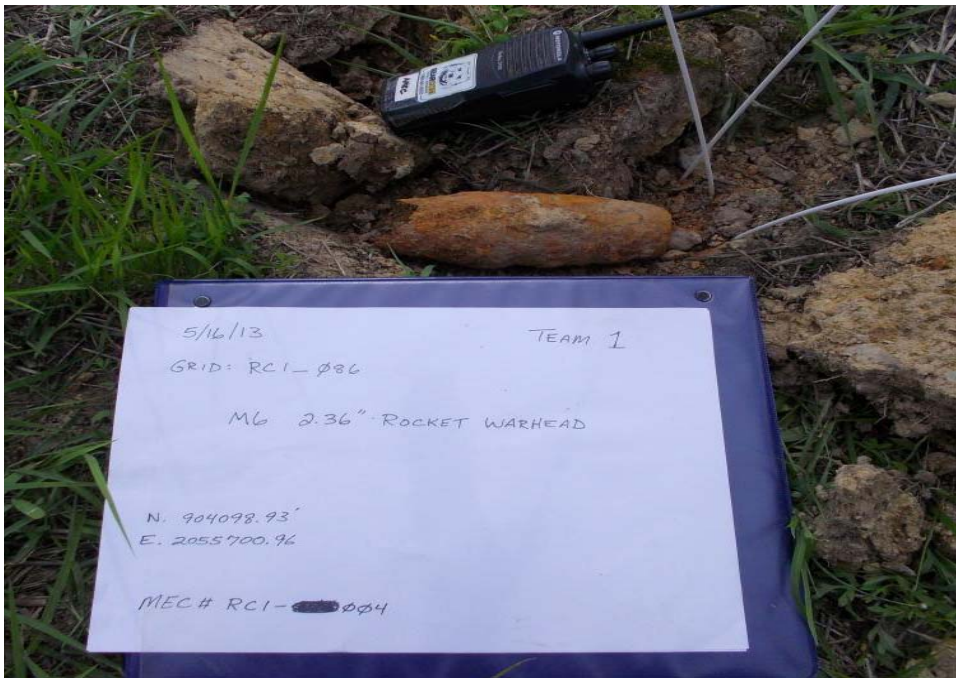
GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	740.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	2364.00
(6) Mar	3065.00
(7) Apr	3712.00
(8) May	2000.50
Project Man-hours Total	16054.50
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A

Photograph of MEC Item RC2-003



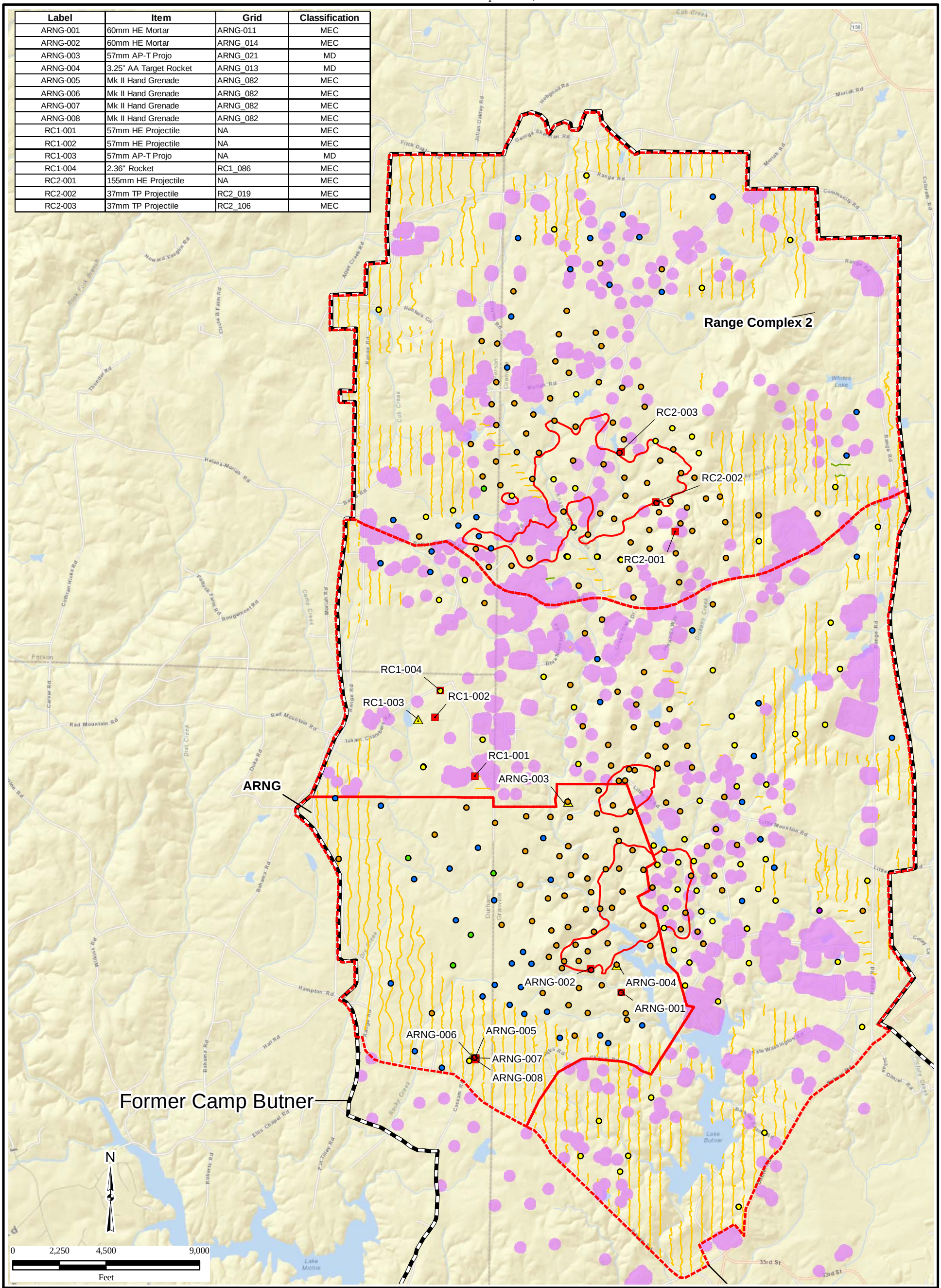
Photograph of MEC Item RC1-004



Kimberly Vaughn
Deputy Project Manager

Summary of Grid Intrusive Results through 5/17/13

Label	Item	Grid	Classification
ARNG-001	60mm HE Mortar	ARNG-011	MEC
ARNG-002	60mm HE Mortar	ARNG_014	MEC
ARNG-003	57mm AP-T Projo	ARNG_021	MD
ARNG-004	3.25" AA Target Rocket	ARNG_013	MD
ARNG-005	Mk II Hand Grenade	ARNG_082	MEC
ARNG-006	Mk II Hand Grenade	ARNG_082	MEC
ARNG-007	Mk II Hand Grenade	ARNG_082	MEC
ARNG-008	Mk II Hand Grenade	ARNG_082	MEC
RC1-001	57mm HE Projectile	NA	MEC
RC1-002	57mm HE Projectile	NA	MEC
RC1-003	57mm AP-T Projo	NA	MD
RC1-004	2.36" Rocket	RC1_086	MEC
RC2-001	155mm HE Projectile	NA	MEC
RC2-002	37mm TP Projectile	RC2_019	MEC
RC2-003	37mm TP Projectile	RC2_106	MEC



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5/20/2013 RB
Source: HGL, ESRI Online Imagery

Legend

- MEC
- Munition Debris

Grid Intrusive Results

- MEC
- Munition Debris
- Cultural Debris
- Other
- SAA, Other
- No Results

- AnalogTransect
- DGM Transect
- Recon Transect
- MRS
- MEC Characterized Area
- Suspected Target Area
- Former Camp Butner

Notes:
ARNG=Army National Guard Property
DGM=Digital Geophysical Mapping
MEC=Munitions and Explosives of Concern
MRS=Munitions Response Site
SAA=Small Arms Ammunition

Camp Butner
MEC and MD Found

SITE MANAGER WEEKLY REPORT

Week ending: 24 May 2013
Contract Number: W912DY-10-D-0023
Delivery Order Number: 0009
Project Description: Remedial Investigation/Feasibility Study former Camp Butner
Project Location: Person, Granville, and Durham Counties, North Carolina

To: Chris Cochrane, US Army Engineering and Support Center Huntsville
Copies: Ray Livermore, USACE Wilmington District
Julie Hiscox, USACE Savannah District,
Kenyatta Spruill, USACE Savannah District
Sarah Dyer, USAESCH
Elise Goggin, USAESCH
Hank Counts, USACE OESS
Neil Feist, HydroGeoLogic, Inc.
Derek Anderson, HydroGeoLogic, Inc.

This site manager's report presents a summary of field activities completed during the week ending stated above in support of the Remedial Investigation, Former Camp Butner. This was the final week of field effort for the field effort.

1. Project Scope and Methodology:

The purpose of this RI is to characterize the nature and extent of contamination to support later evaluation of potential remedial approaches, in accordance with the approved work plan. Brush clearance (of both transects and grids), DGM transect data collection, DGM grid data collection and intrusive investigations within grids were conducted on the ARNG, Range Complex 1 and Range Complex 2 MRSs.

2. Contractor Information:	
Program Manager:	Timothy Hiles, HydroGeoLogic, Inc.
Project Manager:	Derek Anderson, HydroGeoLogic, Inc.
Deputy Project Manager:	Kimberly Vaughn, HydroGeoLogic, Inc.
*Site Manager (*SM*)/Senior UXO Supervisor:*	Joel Sanders, HydroGeoLogic, Inc.
UXO Safety Officer (UXOSO):	Oscar Honne, HydroGeoLogic, Inc.
UXO Quality Control (UXOQC)	Wes Rogers, HydroGeoLogic, Inc.
Project Geophysicist:	Daryl Donatelli, HydroGeoLogic, Inc.
Geophysicist Quality Control:	Tim Deignan, HydroGeoLogic, Inc.
*OE Safety Specialist (*OESS*):*	Hank Counts, USACE

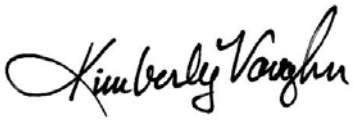
3. Project Field Information Remedial Investigation:	
Summaries of daily production information.	
Monday 20 May:	HGL Teams 1 and 2 intrusively investigated DGM grids at RC1 and RC2. Cox Environmental subcontractor collected soil samples at RC1. Mr. Ray Livermore, USACE Wilmington District, visited site to observe soil sampling.

Tuesday 21 May:	HGL Teams 1 and 2 intrusively investigated DGM grids at RC1 and RC2. HGL Teams 1 and 2 intrusively investigated analog transects at RC2. Cox Environmental subcontractor collected soil samples at RC1. HGL UXOQC accompanied the OESS to QC/QA grids at RC1 and RC2.
Wednesday 22 May:	HGL Team 1 intrusively investigated analog transects at RC2. HGL Team 2 assisted with final demo shot. Several MD items were vented and all demolition materials were destroyed. ATF inspected explosive storage magazines. Cox Environmental subcontractor collected soil samples at background locations. Started demobilization effort, shipping supplies and equipment offiste.
Thursday 23 May:	All personnel except for Westleon Rogers (HGL QC) demobilized. Cox Environmental finished collecting soil samples at background locations. Explosive storage magazines picked up by vendor.
Friday 24 May:	MDAS picked up by shipper. Chain of custody was signed by the shipper. Westleon Rogers demobilized from the site. (All personnel are now offsite).

Visitors this week:	Mr. Ray Livermore observed soil sampling activities on Monday this week.
Weather delays this week/to date:	
Results of daily safety inspections:	No discrepancies
Weekly Explosive Inventory Inspection Completed:	No discrepancies
Description of operations planned for the upcoming week ending 31st May: Field activities are concluded.	
Personnel on Site this week:	HGL: SUXOS Joel Sanders; UXOSO Oscar Honne; UXOSO/UXOQCS Wes Rogers; UXO Tech III Gary Cagle and Al Smith; UXO Tech II Jeremy Amiotte, Dawn Weber, Woody Zow; Casie Hood, Jack Bullock; UXO Tech I Rebecca Powers, Charles Richardson, Coty Kaliszewski, Cheryl Okino, Jason Brawner; Amec geophysicist: Jeff Beddingfield and UXO Tech II: Donald Koetje. Cox Environmental subcontractor Michael Cox for soil sampling effort.

GIS webmap instructions for team members:
Giswebmap accessible at: http://gis.hgl.com/Camp_Butner/
Using Internet Explorer: Username: HGL\giswebmap Password: Gwm2011
Browser such as Firefox or Chrome: Username: giswebmap Password: Gwm2011

4. Personnel work statistics (includes subcontractors)	Hours
a. Total number of man-hours expended during this week:	586.00
b. Total number of man-hours expended during month:	
(1) Oct	30.00
(2) Nov	1517.00
(3) Dec	1360.00
(4) Jan	2006.00
(5) Feb	2364.00
(6) Mar	3065.00
(7) Apr	3712.00
(8) May	2586.50
Project Man-hours Total	16640.50
d. Number of lost workday accidents, during the reported week and cumulative for the project:	0/0
e. Number of lost workdays due to on-the-job accidents during the reported month/week and cumulative for the project:	0/0
f. Number of property damage accidents (includes vehicles) in which property loss value is $2,000 or more, during the reported week and cumulative for the project:	None
g. Days since last reported injury:	N/A
h. Last reported injury:	N/A



Kimberly Vaughn
Deputy Project Manager

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APPENDIX H4

GEOPHYSICAL FIELD NOTES

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①4

Jeremy Amiotte
Coty Kaliszewski

Former Camp Burner

April 29, 2013

EM 61 Serial Numbers
103022
Battery D
Battery F
Battery A
Allegro 31659

0650 Warm up EM 61
0700 Morning Safety Brief
0830 START AM QC
Battery D @ 12.30
A_20130429_QC_AM1
LN Ø Cable Shake
LN 1 Personal Test
LN 2 IRT w/o ISO 3 MIN
LN 3 IRT w/ISO 1 MIN
CHANNEL 1 136
CHANNEL 2 79
CHANNEL 3 38
LN 4 IRT w/o ISO 1 MIN
A_20130429_QC_AM2
LN 5 IVS W→E 5M Fid
LN 6 IVS E→W 5m Fid
LN 7 Clean line 5m Fid
1000 Depart Base
1124 START Grid 013
1144 End Grid 013
1211 START Grid 005
1238 End Grid 005
1400 START Grid 014
1419 End Grid 014
1440 START Grid 007
1453 End Grid 007
1630 START PM QC
Battery 12.45
A_20130429_QC-PM1A

cont →

CA
(2)

LN ∅ Int w/out 3 min.
LN 1 Int w/150 1 min
CA
~~LN 2~~ channel 1 133
channel 2 77
channel 3 38
LN2 Int w/out ISO 1 min
A_20130429_QC_PM2
LN 3 IVS W→E 5m FID (IVS Line ∅ cm offset)
LN 4 IVS E→W 5m FID (IVS Line ∅ cm offset)
LN 5 IVS W→E 5m FID (IVS Line 40 cm offset)
LN 6 IVS E→W 5m FID (IVS Line 50 cm offset)
LN 7 IVS W→E 5m FID (IVS Line 70 cm offset)
LN 8 IVS E→W Clean Line (IVS Line 450 cm offset)
(Initial PM QC Failed so created a Alpha

1730 End of day

Jeremy Amiotte
Coty Kaliszewski

Former Camp Butner

April 30, 2013

0650 Warm up EM61

0700 Morning Safety Brief

0805 START AM QC Battery D @12.45
A_20130430_QC_AM1A
LN Ø Cable SHAKE
LN 1 Personal Test
LN 2 1RT w/o ISO 3 min
LN 3 1RT w/ ISO 1 min
Channel 1) 138 Channel 2) 79 channel 3) 38
LN 4 1RT w/o ISO 1min
A_20130430_QC_AM2A
LN5 1VS W→E 5M FID
LN 6 1VS E→W 5M FID
LN 7 Clean Line

0830 Depart Base

~~0922 START Grid~~

1355 START Grid 091 RC2

1417 END Grid RC2 091

1455 START Grid RC2 070

1522 End Grid RC2 070

1624 START PM QC
Battery @ 12.30
A_20130430_QC_PM1A
LN Ø INT w/o ISO 3min
LN 1 INT w ISO 1min
channel 1) 138 channel 2) 80 channel 3) 38
LN 2 INT w/o ISO 1min

A_20130430_QC_PM2

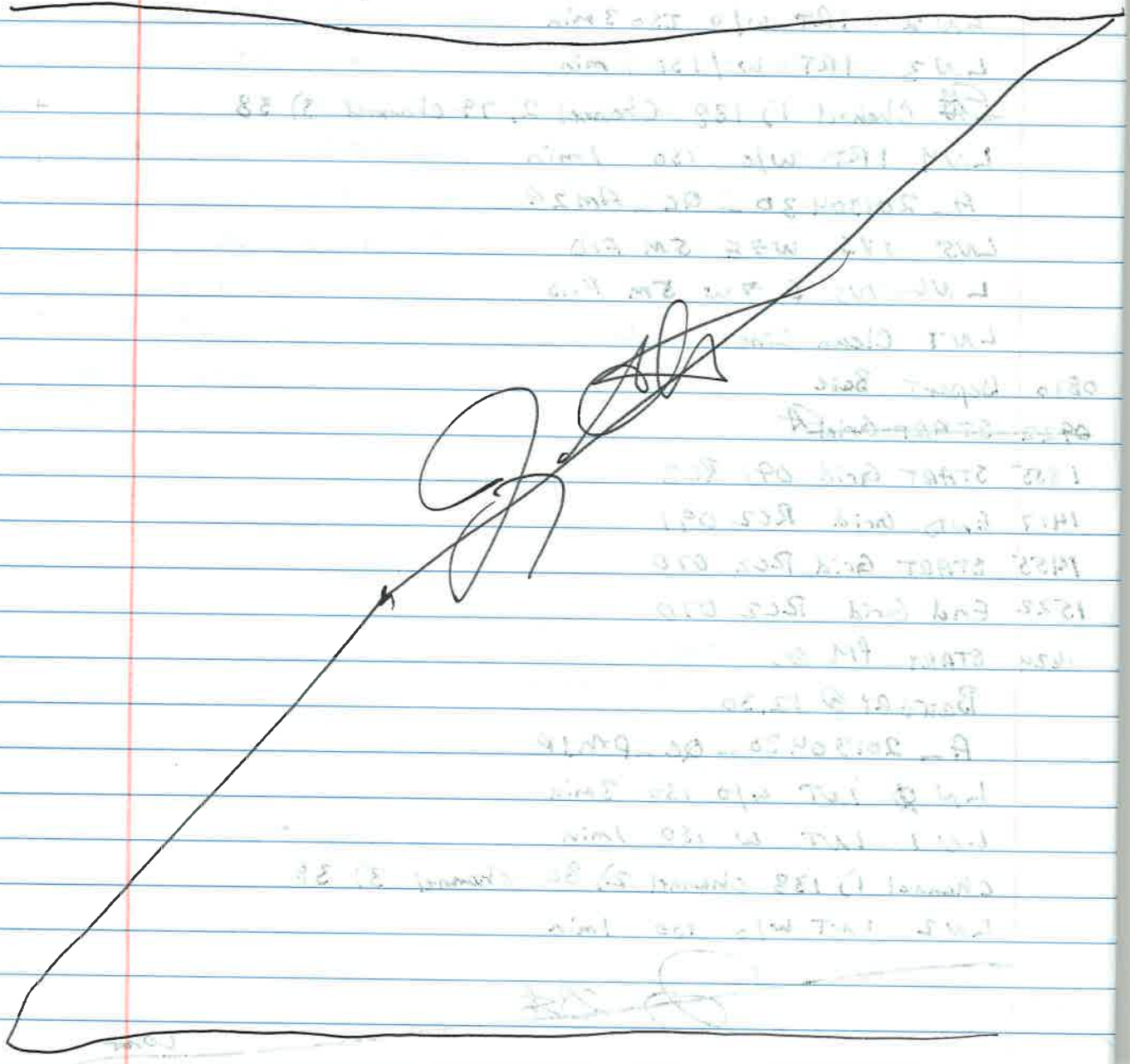
LN3 IVS W→E 5m FID

LN4 IVS E→W 5m FID

LN5 IVS W→E 5m FID

1700 Put Gear away

1730 End of day



JH (5)

Jeremy Amiotte
Coty Kaliszewski

Former Camp Bitter

May 1, 2013

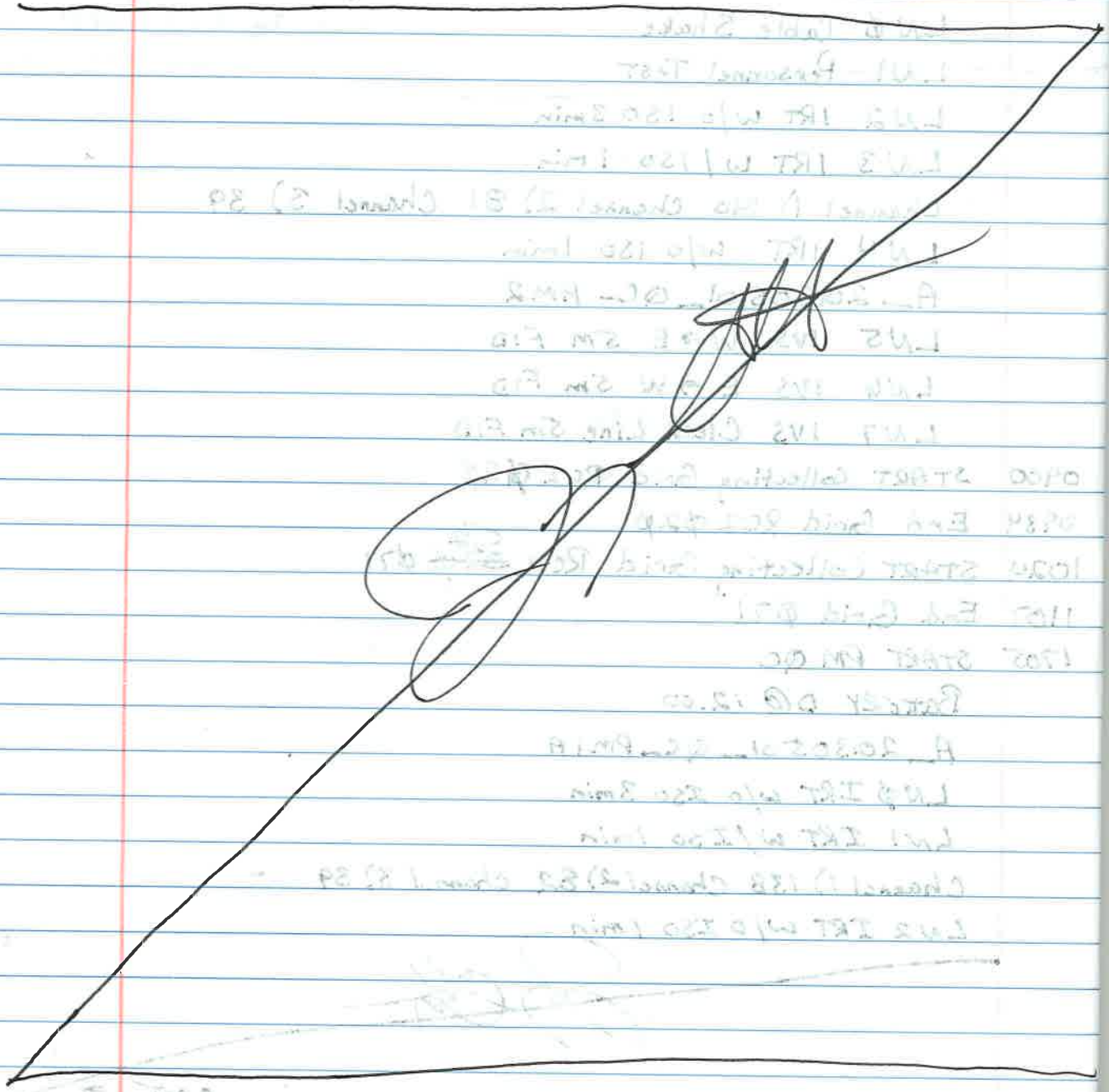
0650 Warm up Em 61
0700 Morning Safety Brief
0717 START AM QC
Battery D @ 12.45
A_20130501_QC_AM1
LN Ø Cable Shake
LN1 Personnel Test
LN2 IRT w/o ISO 3min
LN3 IRT w/ ISO 1 min
Channel 1) 140 Channel 2) 81 Channel 3) 39
LN4 IRT w/o ISO 1min
A_20130501_QC-AM2
LN5 IVS W→E 5M FID
LN6 IVS E→W 5m FID
LN7 IVS Clean Line 5m FID
0900 START Collecting Grid RC2 Ø2Ø
0934 End Grid RC2 Ø2Ø
1024 START Collecting Grid RC2 ~~Ø1Ø~~ Ø71
1107 End Grid Ø71
1705 START PM QC
Battery D@ 12.00
A_20130501_QC_PM1A
LN Ø IRT w/o ISO 3min
LN1 IRT w/ISO 1min
Channel 1) 138 Channel 2) 82 channel 3) 39
LN2 IRT w/o ISO 1 min

CONT →

CA
DE

A_20130501_QC_PM2
LN3 IUS W→E 5m FID
LN4 IUS E→W 5m FID
LN5 IUS Clean Line 5m FID

1730 End of day



Jeremy Amiotte
Coty Kaliszewski

Former Camp Bonnet

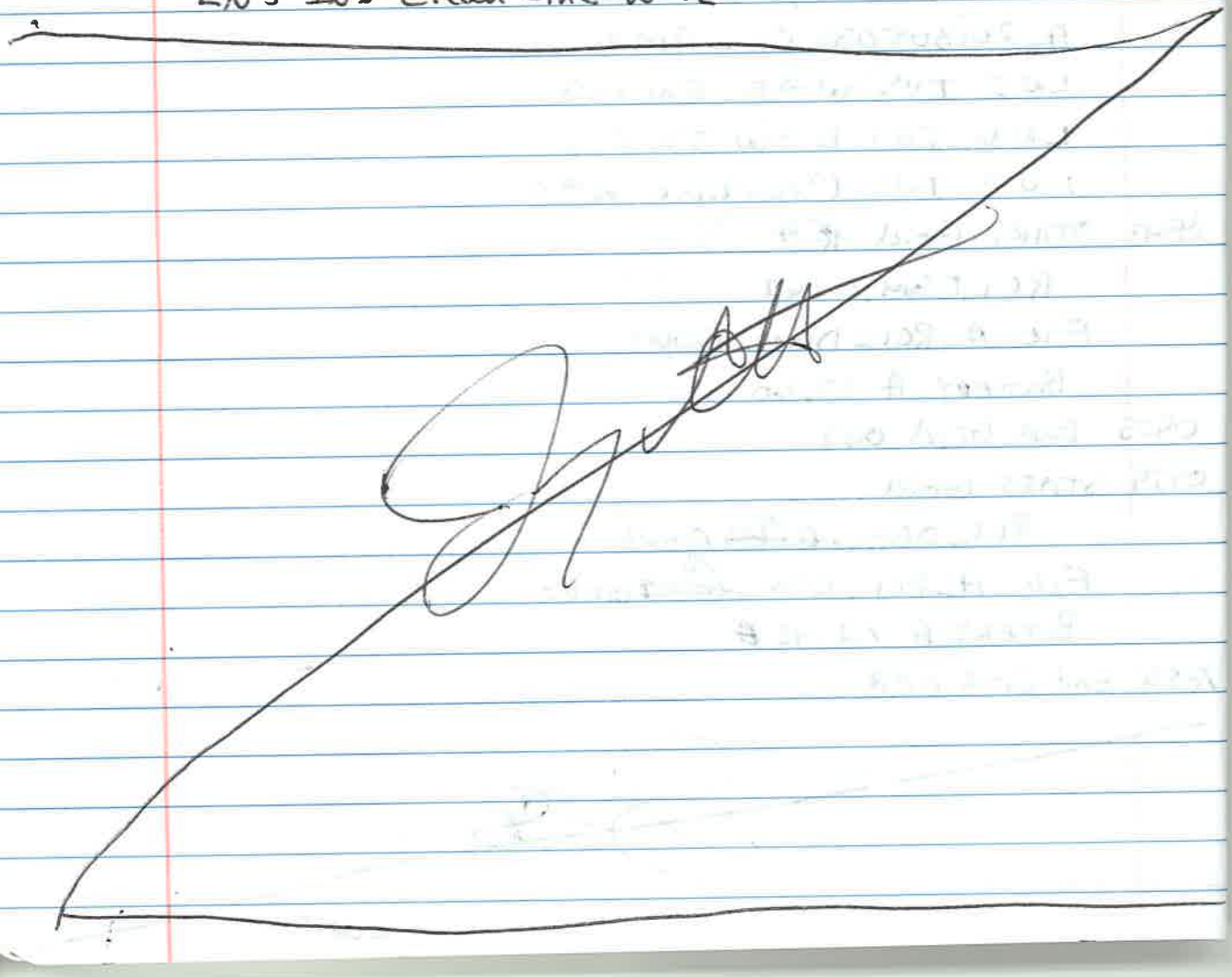
May 3, 2013

0650 Warm up machine
0700 morning Safety Brief
0720 START AM QC
Battery A @ 12.68
A_20130503_QC_AM1
LN 0 Cable Shake
LN 1 Personal Test
LN 2 Int w/o ISO 3min
LN 3 Int w/ ISO 1min
Channel 1) 139 Channel 2) 81 Channel 3) 41
LN 4 Int w/o ISO 1min
A_20130503_QC_AM2
LN 5 IVS W→E 5m FID
LN 6 IVS E→W 5m FID
LN 7 IVS Clean Line W→E
0843 START Grid
RC1_DGM_G067
File A_RC1_DGM_G067
Battery A 12.60
0923 End Grid 067
0959 START Grid
RC1_DGM_G088
File A_RC1_DGM_G088
Battery A 12.45
1056 End Grid 088

cont →

CA
(B)

1142 START PM QC
BATTERY A 12.15
A_20130503_QC_PM1A
LN Ø INT W/O ISO 3min
LN1 INT W/ISO 1min
Channel 1) 135 Channel 2) 78 channel 3) 38
LN2 INT W/O ISO 1min
A_20130503_QC_PM2
LN3 IVS W→E 5m FID
LN4 IVS E→W 5m FID
LN5 IVS Clean Line W→E



CA
(9)

Jeremy Amiotte
Coty Kaliszewski

Former Camp Butner

May 6, 2013

0650 Warm up EM61

0700 Morning Safety Brief

0820 START AM QC
Battery A 12.45
A_20130506_QC_AM1
LN 0 ~~tRT w/o Iso~~ Cable SHAKE
LN1 Personal Test
LN2 IRT w/o ISO 3min
LN3 IRT W/ISO 1min
Channel 1) 135 Channel 2) 79 channel 3) 38
LN4 IRT w/oISO 1min
A_20130506_QC_AM2
LN5 IVS W→E 5m FID
LN6 IVS E→W 5m FID
LN7 IVS Clean Line W→E

0900 START Grid 069
File A_RC1_DGM_G069 Battery A 12.45

0925 End Grid 069 Battery A 12.30

1012 START Grid 050
File A_RC1_DGM_G050 Battery A 12.15

1121 End Grid 050 Battery A 11.20

1227 START Grid 080 Battery D 12.45

~~1243 End Grid~~ File A_RC1_DGM_G080

1243 End Grid 080 Battery D 12.45

CONT →

Team Members
Same

Former Camp
Burner

CA
(10)

May 7, 2013

0650 Warm up Em 61

0700 Morning Safety Brief

0745 START AM QC Battery D 12.00

A_20130507_QC_AM1

LN Ø Cable SHAKE

LN 1 Personal

LN 2 INT w/o ISO 3min

LN 3 INT W/ ISO 1min

Channel 1) 135 channel 2) 79 channel 3) 38

LN 4 Int w/o ISO 1min

A_20130507_QC_AM2

LN 5 IVS W→E 5m FID

LN 6 IVS E→W 5m FID

LN 7 IVS Clean Line W→E

0846 STARTED Grid 071

File A_RC1_DGM-G071A Battery A 12.60

0901 End Grid 071

1017 STARTED Grid 012

File A_RC1_DGM_G012 Battery A 12.45

1027 End Grid 012

1110 STARTED Grid 037

File A_RC1_DGM_G037 Battery A 12.30

1156 Ended Grid 037

1240 STARTED Grid 084

File A_RC1_DGM_G084 Battery A 12.15

CA

1253 Ended Grid 084

1317 STARTED Grid 104

File A_RC1_DGM_G104 Battery E 12.45

Cont

(11) A

May 7, 2013

1405 End Grid 104

1538 START Grid 102

FILE A_RCI-OGM_G102 BATTERY 12.15 E

1557 End Grid 102

1631 START PM QC

A_20130507_QC_PM1

LN0 IRT w/o ISO 3min

LN1 IRT w/ ISO 1min

Channel 1) 135 Channel 2) 79 Channel 3) 38

LN2 IRT w/o ISO 1min

A_20130507_QC_PM1

LN3 IUS W→E 5m FID

LN4 IUS E→W 5m FID

LN5 IUS Clean Line W→E

1700 PUT Gear away

1730 End of day

Team Members
Same

Former Camp Butner

CA
12

May 8, 2013

0650 Warm up EM61
0700 Morning Safety Brief
0730 START AM QC BATTERY A @ 12.60
A_20130508_QC_AM1
LN0 Cable Shake
LN1 Personal Test
LN2 INT w/o ISO 3min
LN3 INT w/ ISO
Channel 1) 138 Channel 2) 80 Channel 3) 40
LN4 INT w/o ISO 1min
A_20130508_QC_AM2
LN5 IVS E→W 5m FID
LN6 IVS W→E 5m FID
LN7 IVS Clean Line W→E
0927 STARTED Grid 099
FILE A_RCI_DGM_G099 BATTERY A 12.45
1007 Ended Grid 099
1118 STARTED Grid 042
FILE A_RCI_DGM_G042 BATTERY A 12.30
1208 Ended Grid 042
1330 STARTED Grid 060
FILE A_RCI_DGM_G060 BATTERY F 12.45
1425 Ended Grid 060
1555 STARTED Grid 103
FILE A_RCI_DGM_G103 BATTERY F 12.30
1636 Ended Grid 103

CONT

CA
(13)

1710 STARTED PM QC BATTERY @ 12.15

A_20130508_QC_[redacted]PM1

LN ϕ INT w/o ISO 3min

LN1 INT w/ ISO 1min

channel 1) 134 channel 2) :78 channel 3) 38

LN 2 INT w/o ISO 1min

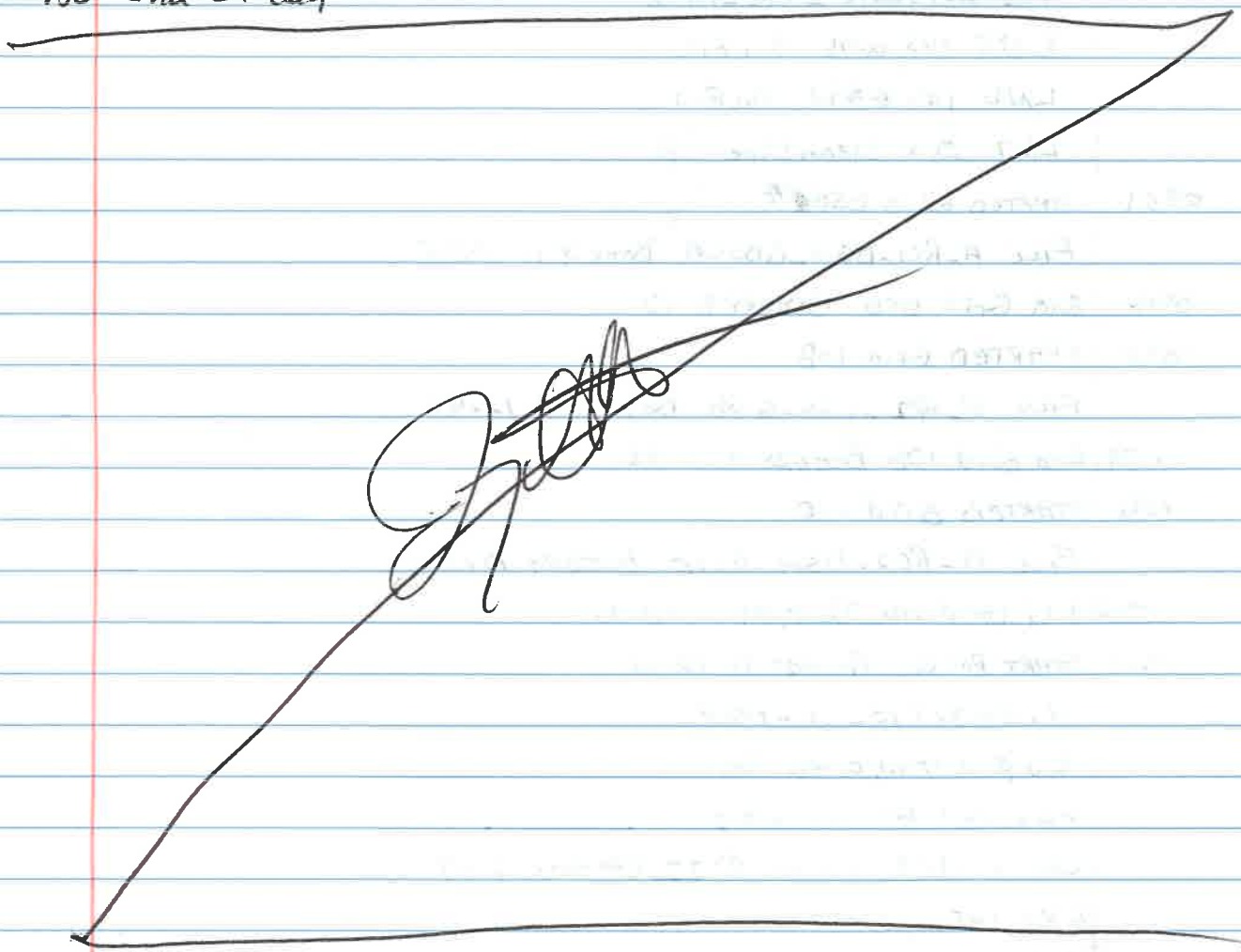
A_20130508_QC_PM2

LN3. IVS E→W 5m FID

LN 4 IVS W→E 5m FID

LN5 IVS clean Line W→E

1730 End of day



(14) A

Team Members
Same

May 10, 2013

0650 Warmup Em 61

0100 Morning Safety Brief

0751 START AM QC BATTERY A @ 12.45

A_20130510_QC_AM1

LN Ø Cable SHAKE

LN 1 Personal Test

LN2 INT W/O ISO 3min

LN3 INT W/ ISO 1min

channel 1) 134 channel 2) 78 channel 3) 38

LN4 INT W/O ISO 1min

A_ 20130510_QC_AM2

LN5 IVS W→E 5m FID

LN6 IVS E→W 5m FID

LN7 IVS Clean Line

0834 STARTED GRID 050A

FILE A_RC1_DGM_G050A BATTERY D 12.45

0916 End Grid 050 BATTERY D 12.30

1055 STARTED Grid 108

FILE A_RC2_DGM_G108 BATTERY A 12.45

1139 End Grid 108 BATTERY A 12.30

1355 STARTED Grid 110

FILE A_RC2_DGM_G110 BATTERY D 12.40

1442 End Grid 110 BATTERY D 12.45

1609 START PM QC BATTERY D 12.45

A_20130510_QC_PM1A

LN Ø INT W/O ISO 3min

LN1 INT W/ ISO 1min

channel 1) 133 channel 2) 77 channel 3) 37

LN2 INT W/O ISO 1min

CONT

(5)

May 10, 2013

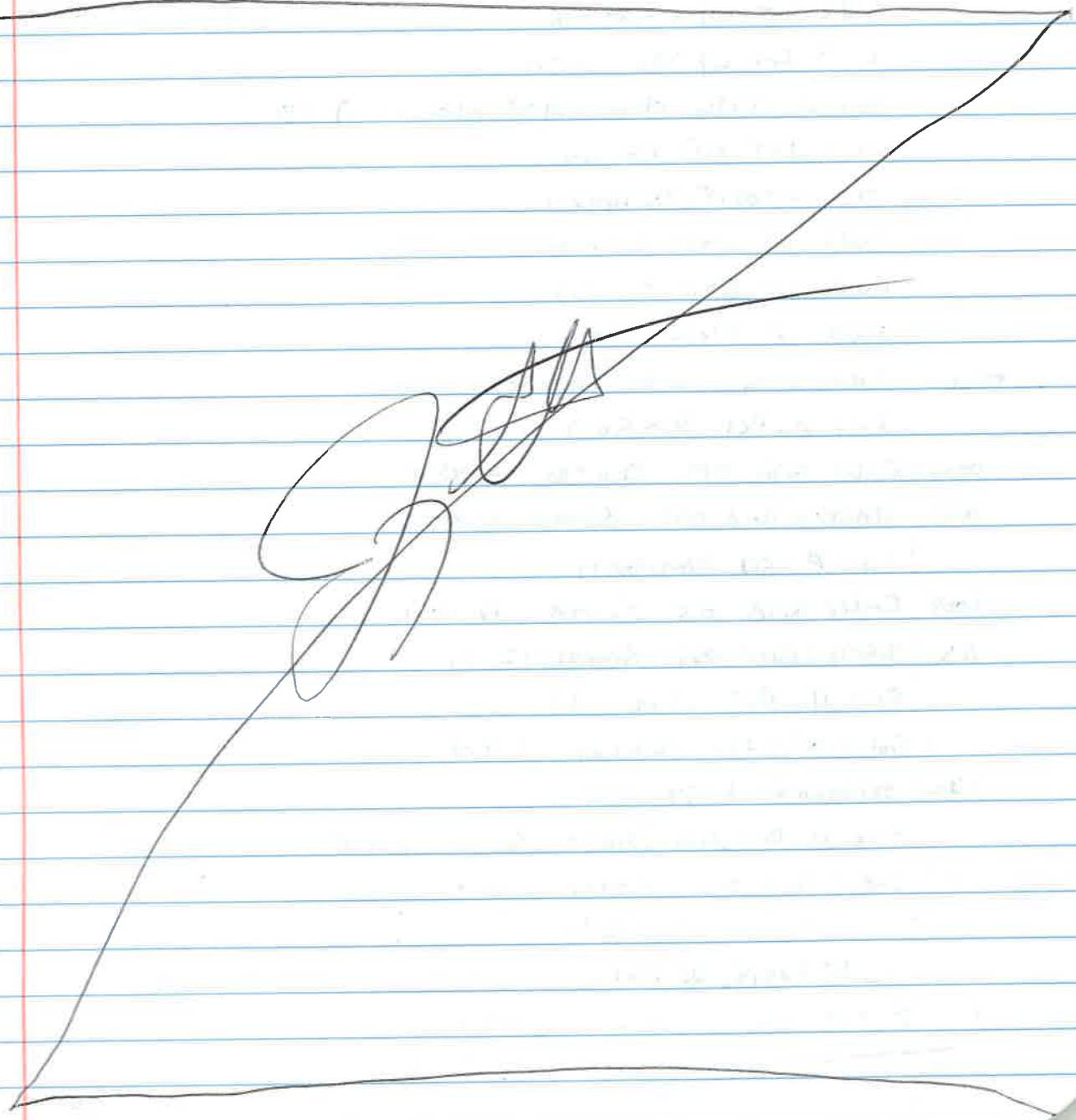
A_20130510_QC-PM2

LN3 IVS E → W 5m FID

LN4 IVS W → E 5m FID

LN5 IVS Clean Line

1730 End of Day



(16) A

Team members
Same

Former Comp

May 15, 2013

0650 Warm up Em61

0720 START QC

A_20130515_QC_Am1

LN Ø Cable SHAKE

LN1 Personal Test

LN2 INT w/o ISO 3min

LN3 INT w/ ISO 1min

channel 1) 136 channel 2) 28 channel 3) 38

LN4 INT w/o ISO 1min

A_20130515_QCAM2A

LN5 IVS W→E 5m FID

LN6 IVS E→W 5m FID

LN7 IVS Clean Line

0820 STARTED Grid 079 BATTERY 12.45A

FILE A-RC1_DGM_G079

0835 Ended Grid 079 BATTERY 12.45A

0945 STARTED Grid 055 BATTERY 12.45 A

FILE A-RC2_DGM_G079

1005 Ended Grid 055 BATTERY 12.30 A

1100 STARTED Grid 065 BATTERY 12.30 A

FILE A-RC2_DGM_G065

1154 Ended Grid 065 BATTERY 12.15A

1330 STARTED Grid 037

FILE A-RC2_DGM_G037 BATTERY 12.45F

1415 Ended Grid 037 BATTERY 12.45 F

1624 Start PM QC Battery F 12.45

A_2013 0515_QC_PM1

LN Ø INT W/O ISO 3min

cont

May 15, 2013

LN1 INT w/ 150 1min

channel 1) 76 channel 2) 129 channel 3) 37

LN 2 INT w/o 150 1min

A_20130515_QC_PM2

LN3 IVS W→E 5m FID

LN4 IVS E→W 5m FID

LN5 IVS clean line

(18) A

Team Members
Same

Former Camp

May 21, 2013

0650 Warm up Engl

0800 START QC AM Battery F @ 12.30

A_20130521_QC-AM1C

LN1 Cable SHAKE

LN0 Personal TEST

LN2 IRT w/o ISO

LN3 IRT w/ ISO

channel 1) 132 channel 2) 76 channel 3) 37

LN4 IRT w/o ISO

A_20130521_QC-AM2A

LN5 IVS W-E 0 cm offset

LN6 IVS E-W 40 cm offset

LN7 IVS W-E 50 cm offset

LN8 IVS E-W 70 cm offset

LN9 IVS W-E 450 cm offset

LN10 X PATTERN E-W

LN11 X PATTERN W-E

1115 CHANGED Readings From 5 TO 10 Readings.

1120 START Collecting RC2 300 ~~44~~ 45 Battery X @ 12.45

File name A_RC2_DGM 300_045_M

1140 START collecting RC2 300 @ 44 Battery X@ 12.45

File Name A_RC2_DGM 300_044_M

1200 START collecting RC2 300 43 Battery X@ 12.45

1230 Lunch

1330 START collecting RC2 500 037

FILE Name A_RC2_DGM 500_037 M Battery X @ 12.45

1400 START collecting RC1 500 13

FILE Name A_RC1_DGM 500_013_M

cont

19

May, 21, 2013

1545 START PM QC

FILE Name A_20130521_QC_~~AM~~ pm1

Line ∅ IRT w/o ISO 3min

Line 1 IRT w/ ISO 1min

~~Line 2~~ Channel 1) 129 Channel 2) 76 Channel 3) 37

Line 2 IRT w/o ISO 1min

~~Line~~ File name A-20130521-QC-pm2

Line 3 IVS W-E 5m FID

Line 4 IVS E-W 5m FID

Line 5 IVS Clean Line

Line 6 X PATTERN E-W

Line 7 X PATTERN W-E

1730 End of Day

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APPENDIX H5

TEAM 1 FIELD NOTES

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0700 SITE SAFETY 03/20/2013

0730 TAILGATE SAFETY

WEATHER 40° CLEAR

PERSONEL: JEREMY AMIOTTE

CASIE HOOD

COTY KALISZEWSKI

CHERYL OKINO

TOPICS: PPE, SLIPS TRIPS FALLS, EMERGENCY PROCEDURES, COLD STRESS

0800 BEGIN OPS GRID #42 INTRUSIVE EM61 133 MV

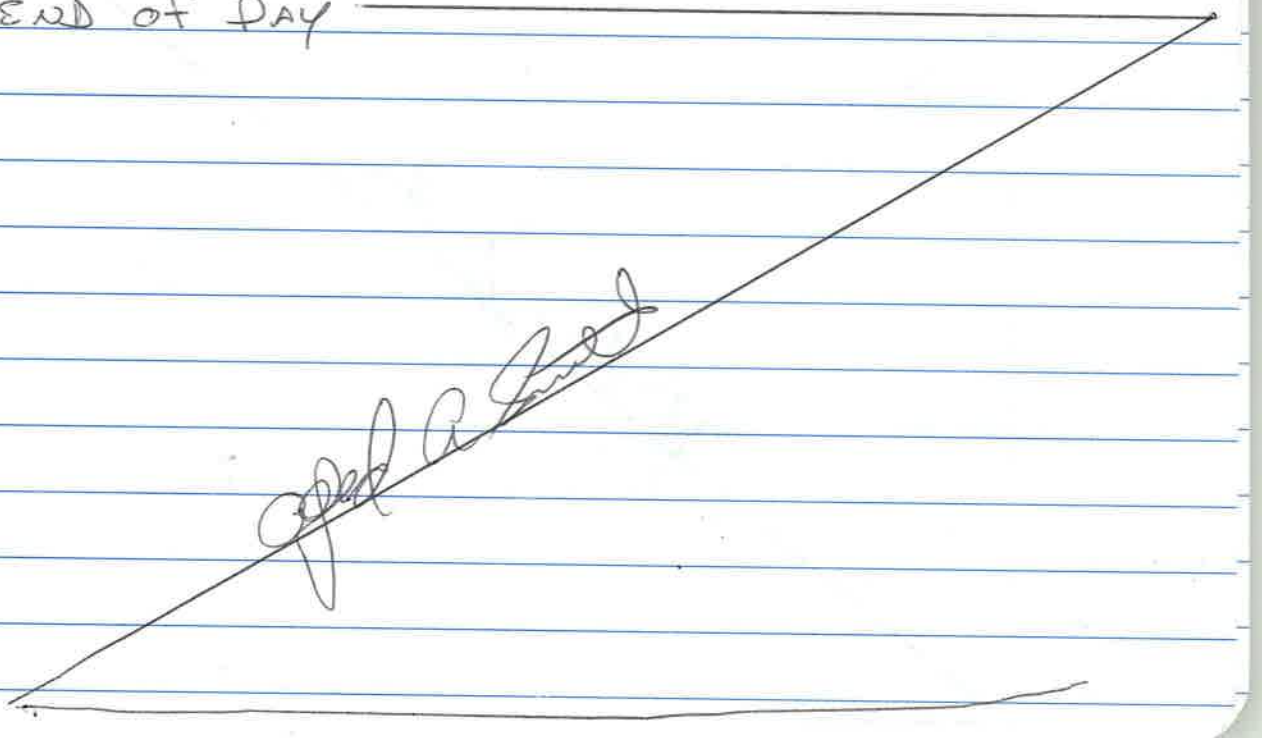
1045 GRID COMP. START GRID 54

1200 LUNCH

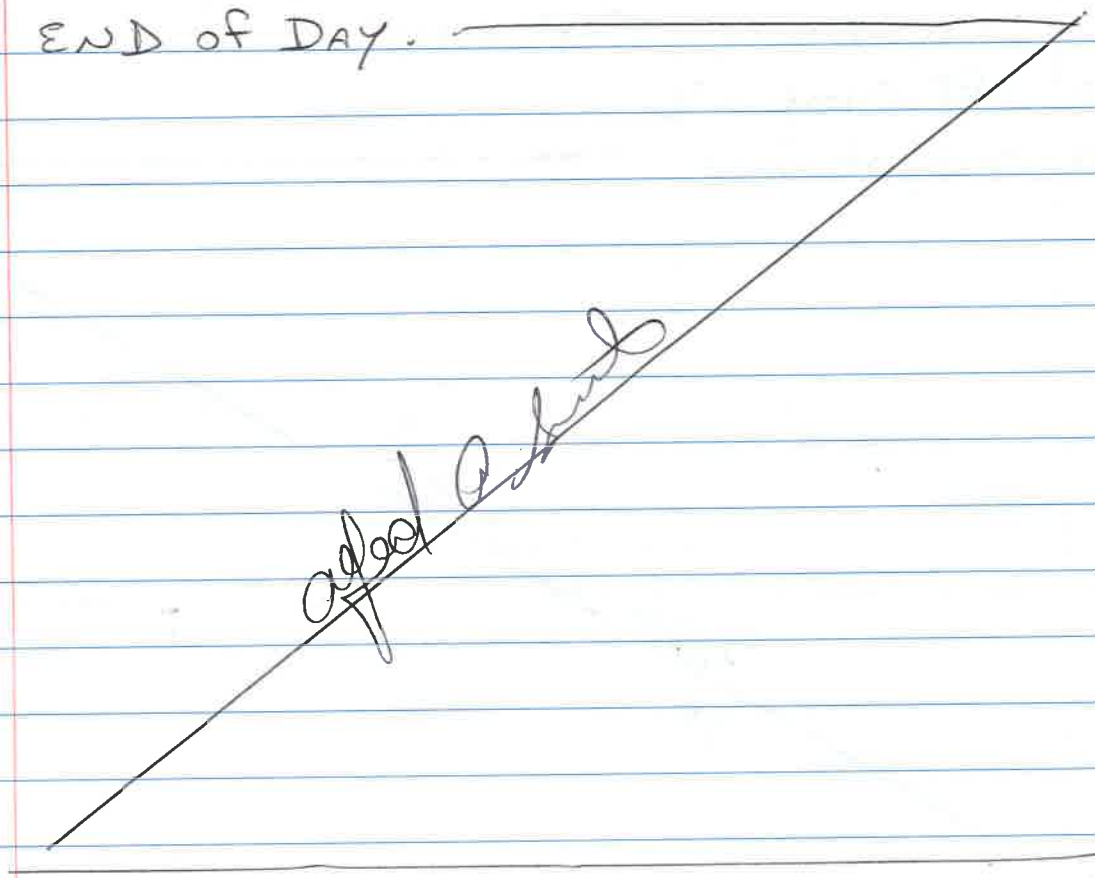
1400 GRID 54 COMP. START GRID 22

1630 OPS COMPLETE

1730 END of DAY



0700 SITE SAFETY BRIEF 03/21/2013
0730 TAILGATE SAFETY
WEATHER 35° CLEAR
PERSONEL: CASIE HOOD
COTY KALISZEWSKI
CHERYL OKINO
TOPICS: SLIPS, TRIP, FALLS, PPE
0800 BEGIN OPS GRID 22 INTRUSIVE OPS
1140 GRID COMP. START GRID 31
1300 LUNCH
1550 GRID 31 COMP
1630 OPS COMPLETE.
1730 END of DAY.



0700 SITE SAFETY BRIEF 03/22/2013

0730 TAILGATE SAFETY

WEATHER 25 CLEAR

PERSONEL: CASIE HOOD

COTY KALISZEWSKI

CHERYL OKINO

TOPICS: PPE, SLIPS, TRIPS, FALLS, COMPLAINCEY

0800 BEGIN OPS GRID 11. INTRUSIVE OPS

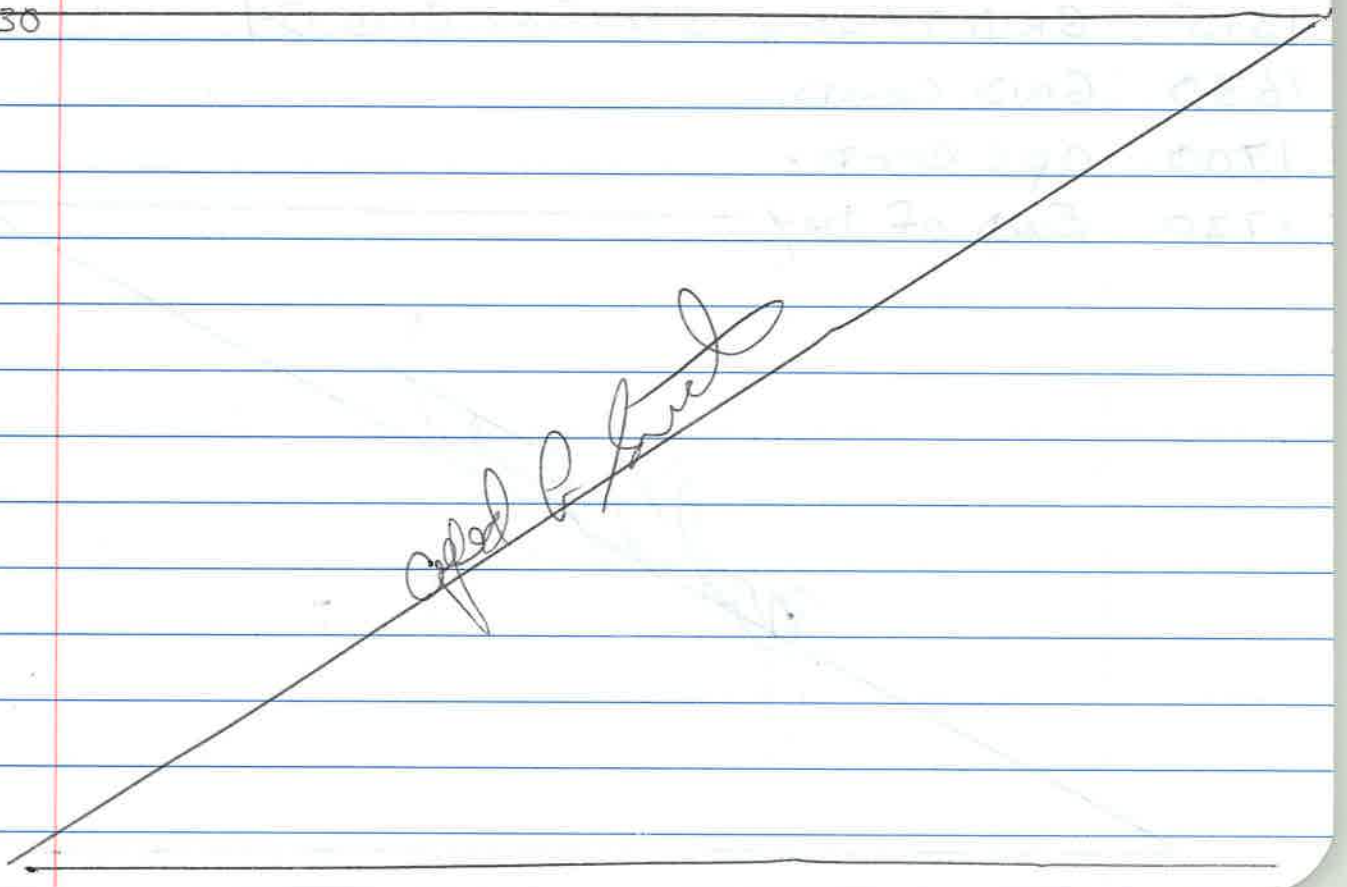
1200 LUNCH

1445 LOCATED 60MM M48 HE MORTAR. NOTIFIED SUXSO

1600 GRID COMPLETE. DOING EQUIP/VEHICLE MAINT

1700 END OF DAY

1730



④

0700 Site Safety Brief 03-25-2013

0730 Tailgate safety

Weather 35°

Personel: Casie Hood

Jack Bullock

Coty Kaliszewski

Cheryl Okino

Topics: PPE, Safe work practices, EUAE

Route/Point

0800 Begin OPS Intrusive Grid 43

1015 Grid comp. Starting Grid 74

1200 Lunch

1315 Grid 74 comp Starting Grid 34

1630 Grid comp.

1700 OPS comp.

1730 End of Day

0700 SITE SAFETY BRIEF 03-26-2013

0730 TAILGATE SAFETY

WEATHER 34°

PERSONEL : CASIE HOOD

JACK BULLOCK

CODY KALISZEWSKI

CHERYL OKINO

TOPICS: PPE, WEATHER, 1ST AID

0800 BEGIN OPS INTRUSIVE GRID 58

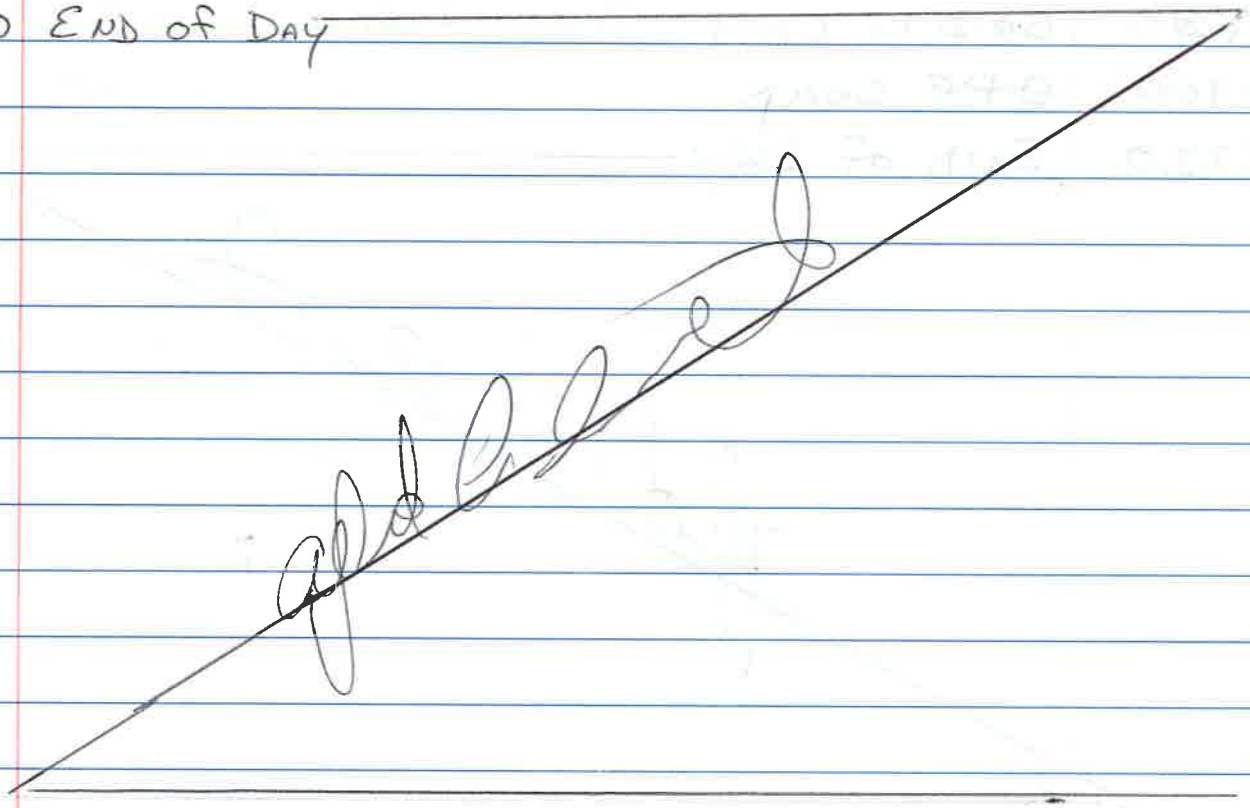
1000 GRID COMP STARTING GRID 78

1200 LUNCH

1615 GRID 78 COMP

1700 TURN IN MD OPS COMP

1730 END of DAY



(6)

0700 SITE SAFETY BRIEF 03-27-2013

0730 TAILGATE SAFETY

WEATHER 35°

PERSONEL : CASIE HOOD

JACK BULLOCK

CODY KALISZEWSKI

CHERYL ORINO

TOPICS: PPE, COMPLACENCY, EVAC ROUTE

0800 BEGIN OPS INTRUSIVE STARTING GRID 18

0915 GRID 18 COMP STARTING GRID 8

1130 GRID 8 COMP STARTING GRID 9

1200 LUNCH

1410 GRID 9 COMP STARTING GRID 15

1630 GRID 15 COMP TURN IN MD

1700 OPS COMP

1730 END of DAY

(7)

0700 Site Safety Brief 03-28-2013

0730 Tailgate Safety

Weather 35°

Personel : Casie Hood

Jack Bullock

Cody Kalis-zewski

Cheryl Okino

Topics: PPE, complacency, 2 man Rule

0800 Begin OPS intrusive starting Grid 37

1200 Lunch

1430 Grid comp starting Grid 66

1530 Grid comp starting Grid 75

1630 Grid comp Turn in MD

1700 OPS complete

1730 End of Day

(8)

0700 Site Safety Brief 3-29-2013

0730 Tailgate Safety

Weather 37°

Personel: Casie Hood

Jeremy Amiotte

Charles Richardson

Cheryl Okino

Topics: PPE, Site Safety, Radio

0800 Begin OPS START GRID 47

1015 GRID Comp. START GRID 29

1200 Lunch

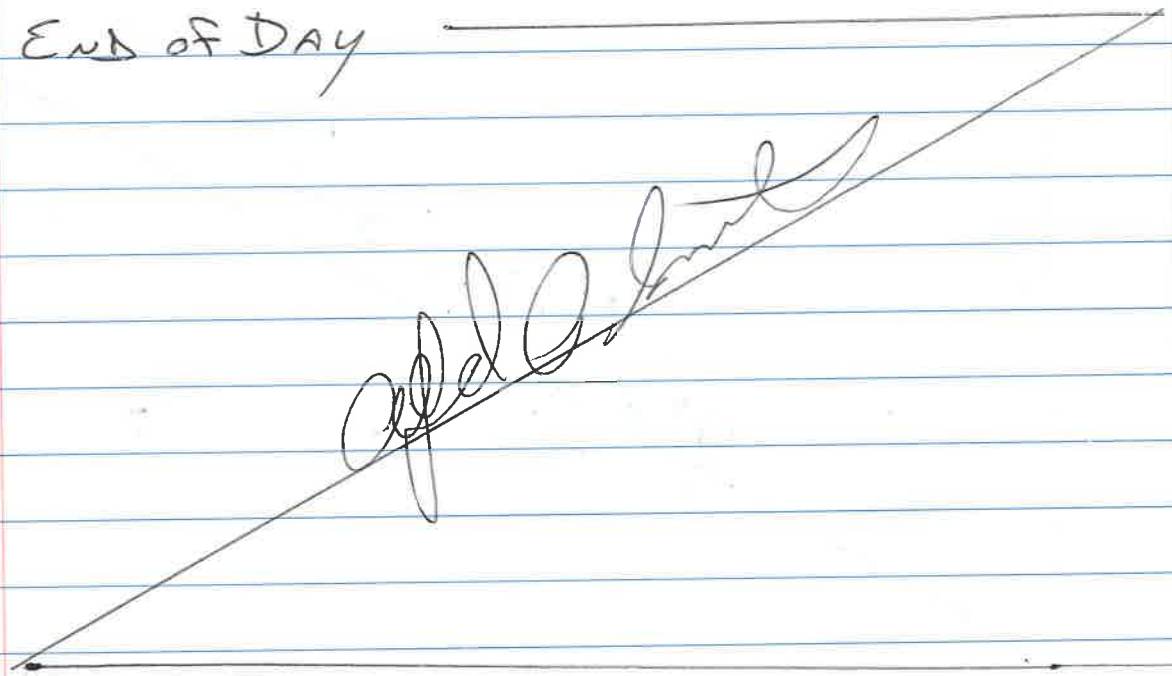
1310 GRID Comp. START GRID 17

1530 GRID Comp. START GRID 10

1615 GRID Comp.

1630 OPS Comp

1730 End of Day



(9)

0700 Site Safety. 4-1-2013

0730 Tailgate Safety

Weather 35°

Personel: Charles Richardson

Casie Lood

Jaremey Amiote

Cheryl Okino

Topics: PPE, 1st Aid, Complaincey

0800 Begin OPS. START GRID 71

0915 GRID Comp. START GRID 49

1030 GRID Comp. START GRID 72

1200 Lunch

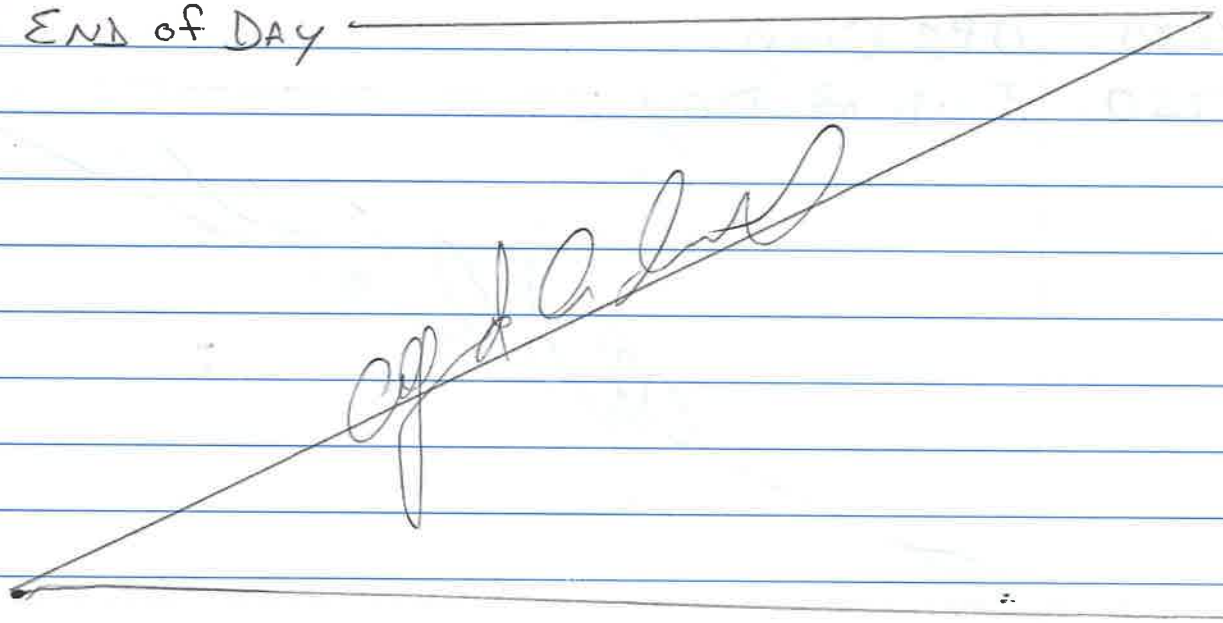
1300 GRID Comp. START GRID 16

1500 GRID Comp. START GRID 39

1620 GRID Comp.

1630 OPS Comp

1730 END of DAY



(10)

0700 SITE SAFETY BRIEF 4-2-2013

0730 TAILGATE SAFETY

WEATHER 37°

PERSONEL: JEREMY AMIOTE

CASIE LOOD

CHARLES RICHARDSON

CHERYL OKINO

TOPICS: PPE, ENVIRONMENTAL HAZARDS, COMPLAINCEY

0800 BEGIN OPS. START GRID 13

1130 GRID COMP. START GRID 14

1200 LUNCH

1400 FOUND 60MM MORTAR. NOTIFIED SUXSO, SAFETY

1415 MOVED TO GRID 2

1500 GRID COMP. START DEMO OPS

1615 DEMO OPS COMP. GRID 14 COMP

1630 OPS COMP

1730 END of DAY

0700 Site Safety Brief. 4-3-2013

0730 Tailgate Safety

Weather 35°

Personel: Jeremy Amiote

Casie Lood

Charles Richardson

Cheryl Okino

Topics: Slips, Trips, Falls, PPE, 1st Aid

0800 Begin OPS. Start Grid 30

1130 Grid Comp. Start Grid 4.

Lunch

1610 Grid Comp

1630 OPS Comp

1730 End of Day

(12)

0700 SITE SAFETY BRIEF 4-4-2013

0730 TAILGATE SAFETY

WEATHER 34° RAINY

PERSONEL : JEREMY AMIOTE

CASIE HOOD

CHARLES RICHARDSON

CHERYL BRIGNO

TOPICS : DIGGING SAFETY, COMPLACENCY, FOUL WEATHER

0800 BEGIN OPS. START GRID 13

~~8~~1015 GRID COMP. START GRID 14

LUNCH

1420 GRID COMP START GRID 2

1620 GRID COMP

1630 OPS COMP

1730 END OF DAY

13

0700 Site Safety Brief 04-05-2013

0730 Tailgate Safety

Weather 35° Cloudy

Personel; Jeremy Amiote

Casie Hood

Charles Richardson

Chesky Okino

Topics: PPE, 1ST AID, SLIPS, TRIPS, FALLS.

0800 Begin OPS. START GRID 59

1000 GRID Comp. START GRID 55

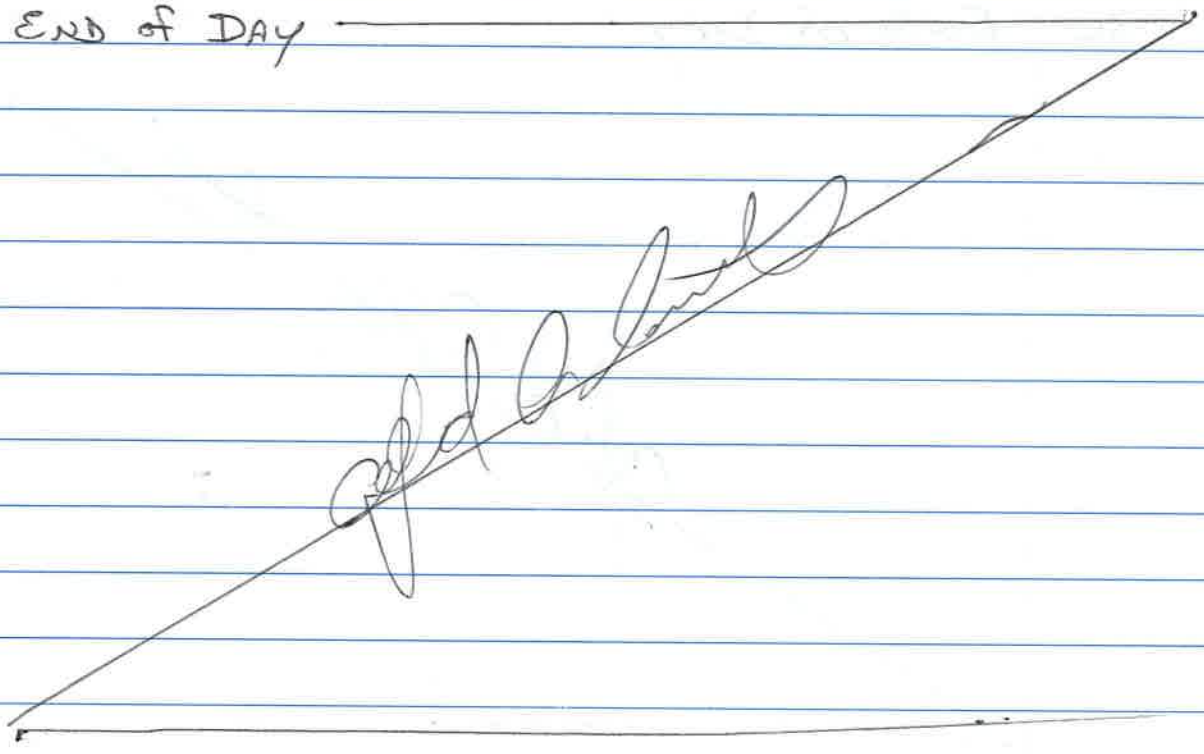
Lunch

1300 GRID Comp. START GRID 61

1625 GRID Comp.

1630 OPS Comp

1730 END of DAY



(14)

0700 Site Safety Brief 4-8-2013

0730 TAILGATE SAFETY

PERSONEL: Jeremy Amiote

CASIE HOOD

CHARLES RICHARDSON

CHERYL OKINO

TOPICS: RADIO/comm, PPE, HYDRATION

0800 BEGIN OPS. START GRID 20

0915 GRID Comp. START GRID 5.

1100 GRID Comp. START GRID 81.

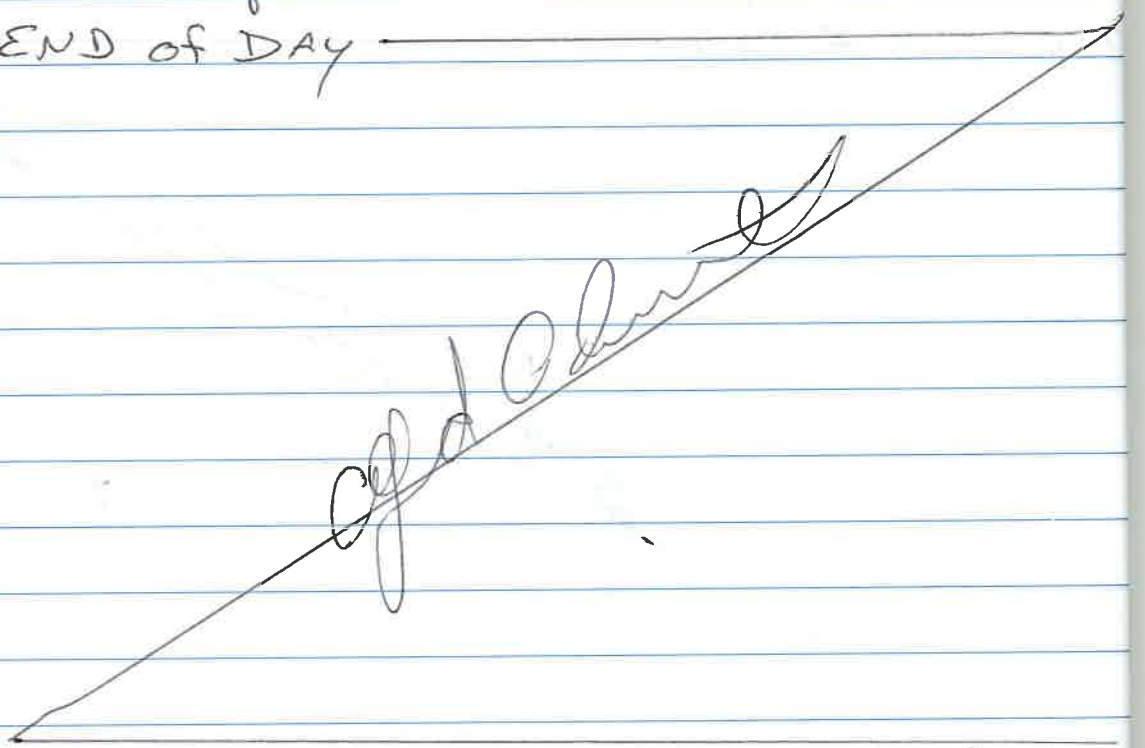
1200 LUNCH

1400 GRID Comp. START GRID 51

1600 GRID Comp.

1630 OPS Comp

1730 END of DAY



0700 SITE SAFETY BRIEF 4-9-2013

0730 TAILGATE SAFETY

PERSONEL: JEREMY AMIOTE

CASIE HOOD

CHARLES RICHARDSON

CHERYL OKINO

TOPICS: PPE, 1ST AID, SLIPS, TRIPS, FALLS.

0800 BEGIN OPS. START GRID 12.

1000 GRID COMP. START GRID 7.

LUNCH

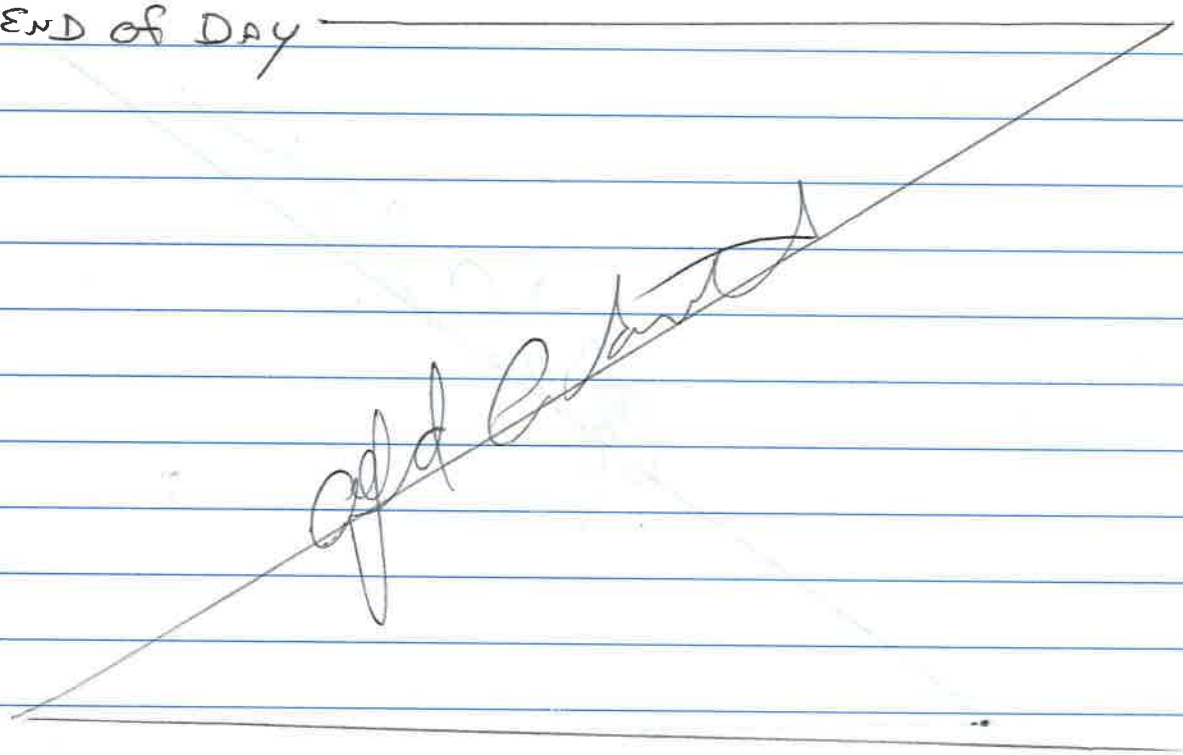
1310 GRID COMP. START GRID 1

1500 GRID COMP. START GRID 6

1600 GRID COMP.

1630 OPS COMP

1730 END OF DAY



(16)

4-10-2013

0700 SITE SAFETY BRIEF

0730 TAILGATE SAFETY

PERSONEL: JEREMY AMIOTE
JASON BRAWNER
DAWN WEBER

TOPICS: GRID PREP, SLIPS, TRIP, FALLS.

0800 BEGIN OPS. SETUP GRID 3

1000 GRID COMP. SETUP GRID 27

LUNCH

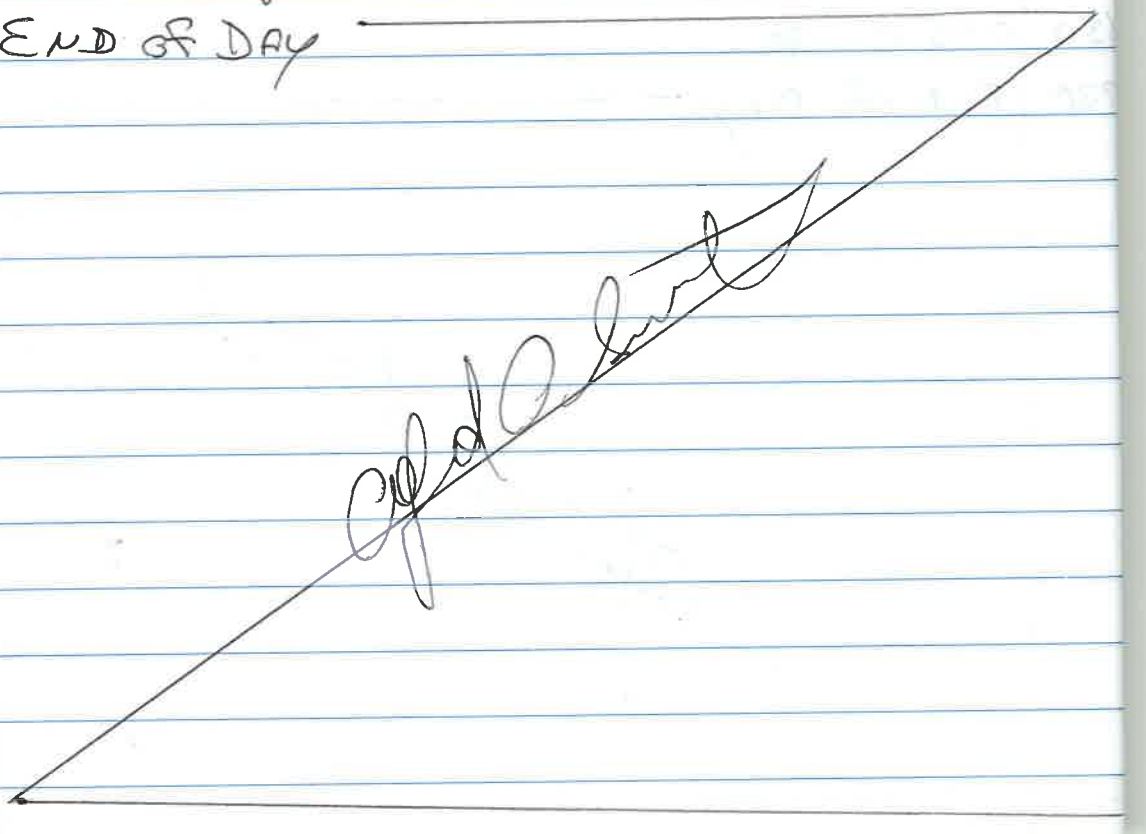
1310 GRID COMP. SETUP GRID 30

1430 GRID COMP. SETUP GRID 31

1600 GRID COMP.

1630 OPS COMP

1730 END OF DAY



4-11-2013

0700 SITE SAFETY BRIEF

0730 TAILGATE SAFETY

PERSONEL : JEREMY AMIOTE
CASIE HOOD
CHARLES RICHARDSON
CHERYL OKINO

TOPICS : PPE, HYDRATION, SAFE DIGGING

0800 BEGIN OPS. START GRID 24

0945 GRID COMP. START GRID 10

1115 GRID COMP. START GRID 8

LUNCH

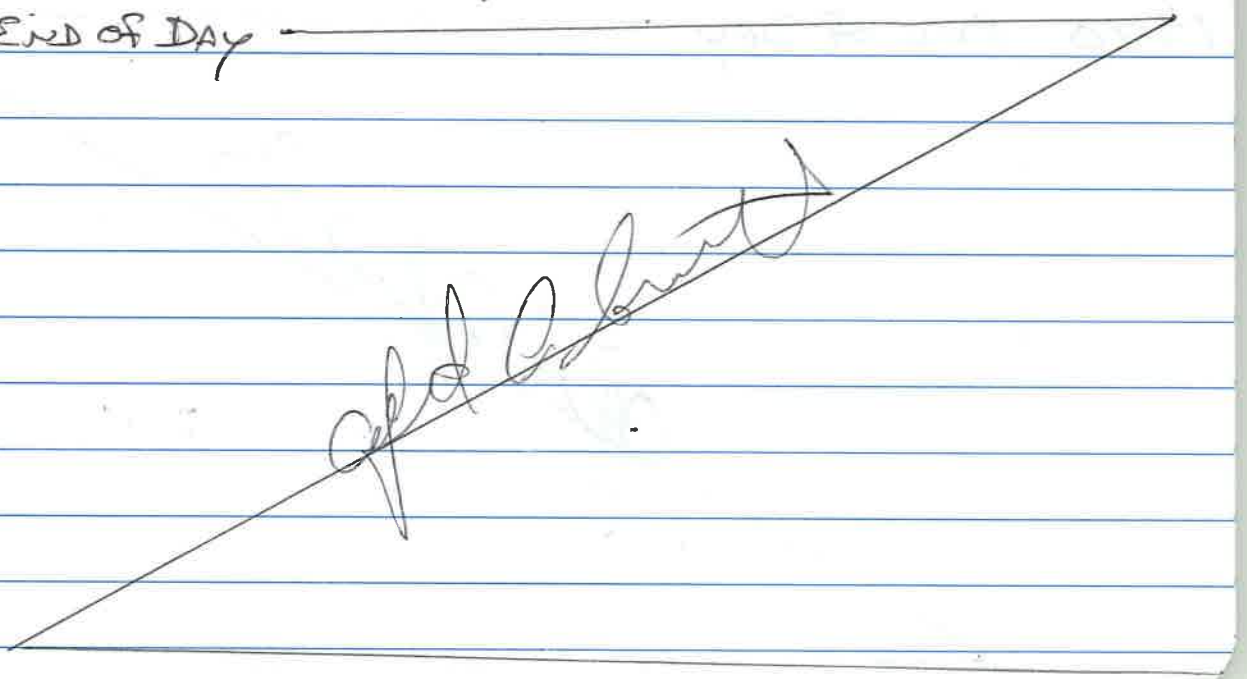
1315 GRID COMP. START GRID 7

1445 GRID COMP. START GRID 9

1600 GRID COMP

1636 ~~END OF D~~ OPS COMP

1730 END OF DAY



(78)

4-12-2013

0900 SITE SAFETY

0930 TAILGATE SAFETY

PERSONEL JACK BULLOCK
CASIE HOOD
JASON BRAUNER
COTY KRALISZEWSKI

TOPICS: PPE, HYDRATE, 1ST AID, RADIO/COMM, SAFE DIGGING, SLIPS, TRIPS, FALLS.

1000 ~~0800~~ BEGIN OPS. STAR GRID 25

LUNCH

1400 GRID COMP. START GRID 35. JASON CUT HIS ARM ON PROTRUDING BOLT FROM EM-61 CUT WAS BANDAGED.

1615 GRID COMP -

1630 OPS COMP

1730 END of DAY

(19)

4-15-2013

0700 SITE SAFETY

0730 TAILGATE SAFETY

PERSONEL: JEREMY AMIOTE
CASIE HOOD
CHARLES RICHARDSON
CHERYL OKINO

TOPICS: PPE, RADIO/COMM, SLIPS, TRIPS, FALLS
HYDRATE.

0800 BEGIN OPS. START GRID 6.

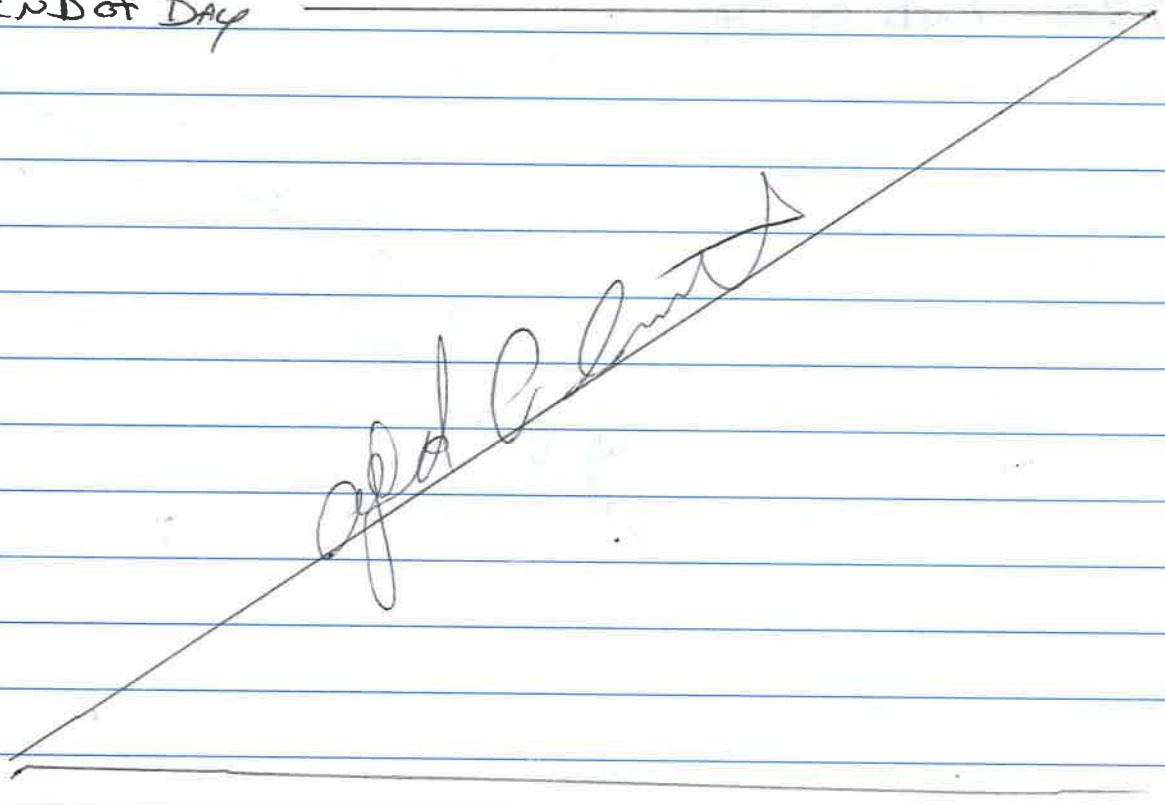
1200 LUNCH

1310 GRID COMP. START GRID 18

1620 GRID COMP.

1630 OPS COMP

1730 END OF DAY



(20)

4-16-2013

0700 Site Safety

0730 Tailgate Safety

Personel: Jeremy Amiotte
Casse Hood
Charles Richardson
Cheryl Okino

0800 Begin OPS. START GRID 16

1030 GRID Comp. START GRID 44.

1200 Lunch

1310 GRID Comp. START GRID 67

1445 GRID Comp. START GRID 86

1620 GRID Comp

1630 OPS Comp

1730 END of DAY

(21)

4-17-2013

0706 SITE SAFETY BRIEF

0730 TAILGATE SAFETY

PERSONEL: JEREMY AMIOTE
CASIE HOOD
CHARLES RICHARDSON
CHERYL OKINA

TOPICS: PPE, HYDRATE, COMPLAINCENCY, TICKS,

0800 BEGIN OPS. START GRID 92.

0945 GRID COMP. START GRID 94

1135 GRID COMP START GRID 47

1200 LUNCH

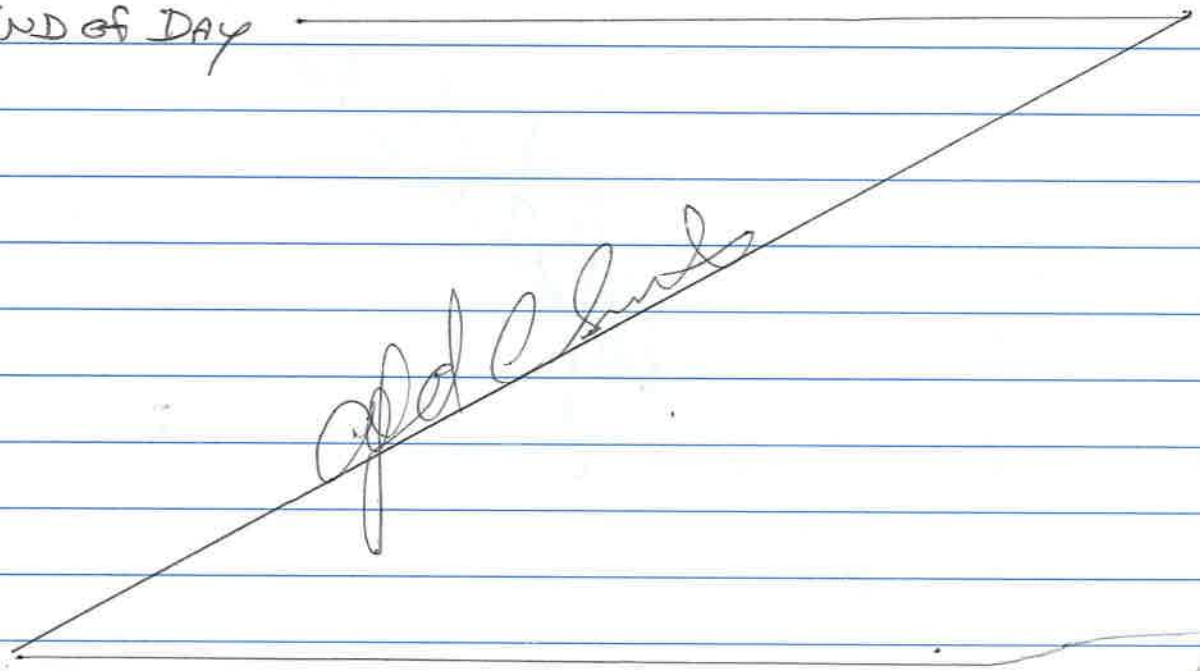
1315 GRID COMP. START GRID 89

1500 GRID COMP. START GRID 75

1625 GRID COMP.

1630 OPS COMP

1730 END OF DAY



(22)

4-18-2013

0700 Site Safety

0730 Tailgate Safety

Personel: Charles Richardson

Topics: machine safety, Hydrate, PPE.

0800 Begin GPS. Grip Prep RC1 Grip 75

1000 Grid Comp. Start Grid 61

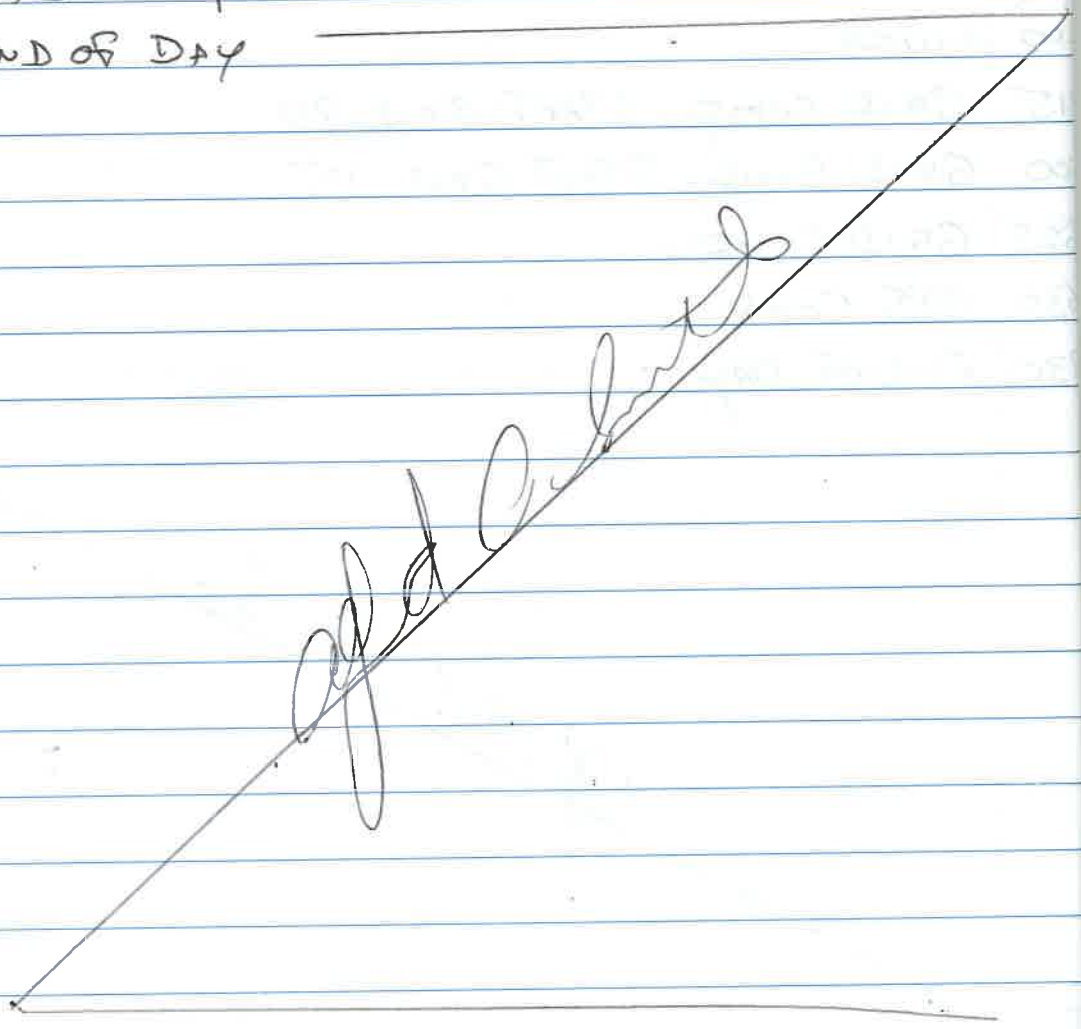
1200 Lunch

1400 Grid Comp. Start Grid 55

1620 Grid Comp

1630 GPS Comp

1730 End of Day



(23)

0700 Site Safety Brief 4-19-2013

0730 Tailgate Safety

Personel: Jeremy Amiste
Casie Hood
Charles Richardson
Cheryl Okino

Topics: PPE, complaincency, Hydrate, safe Digging.

0800 Begin OPS. START GRID 31.

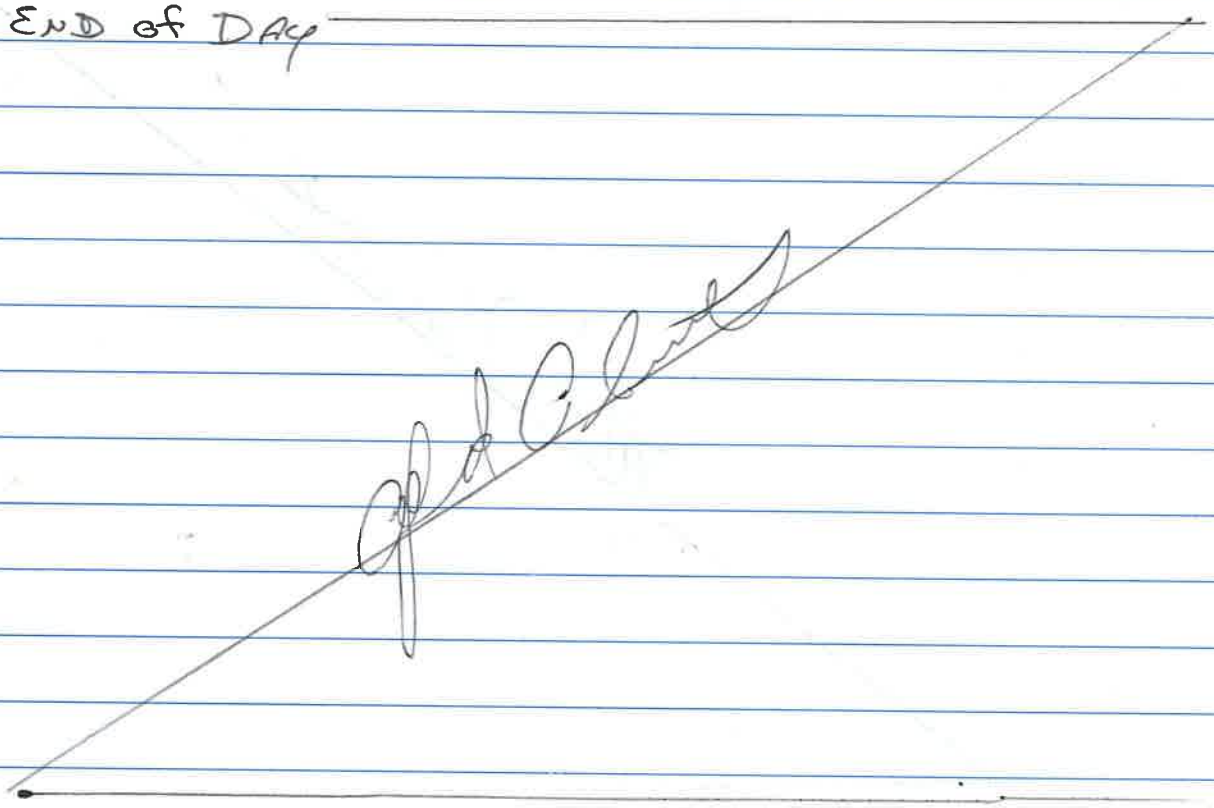
1015 GRID Comp. START GRID 30

Lunch

1300 GRID Comp. START GRID 27

1630 OPS Comp

1730 END of DAY



(24)

4-22-2013

0700 SITE SAFETY

0730 TAILGATE SAFETY

PERSONEL: JEREMY AMIOTE
CASIE HOOD
CHARLES RICHARDSON

TOPICS: PPE, SLIPS, TRIPS, FALLS, COMPLACENCY

0800 BEGIN OPS. START GRID 27

1015 GRID COMPLETE. START GRID 52

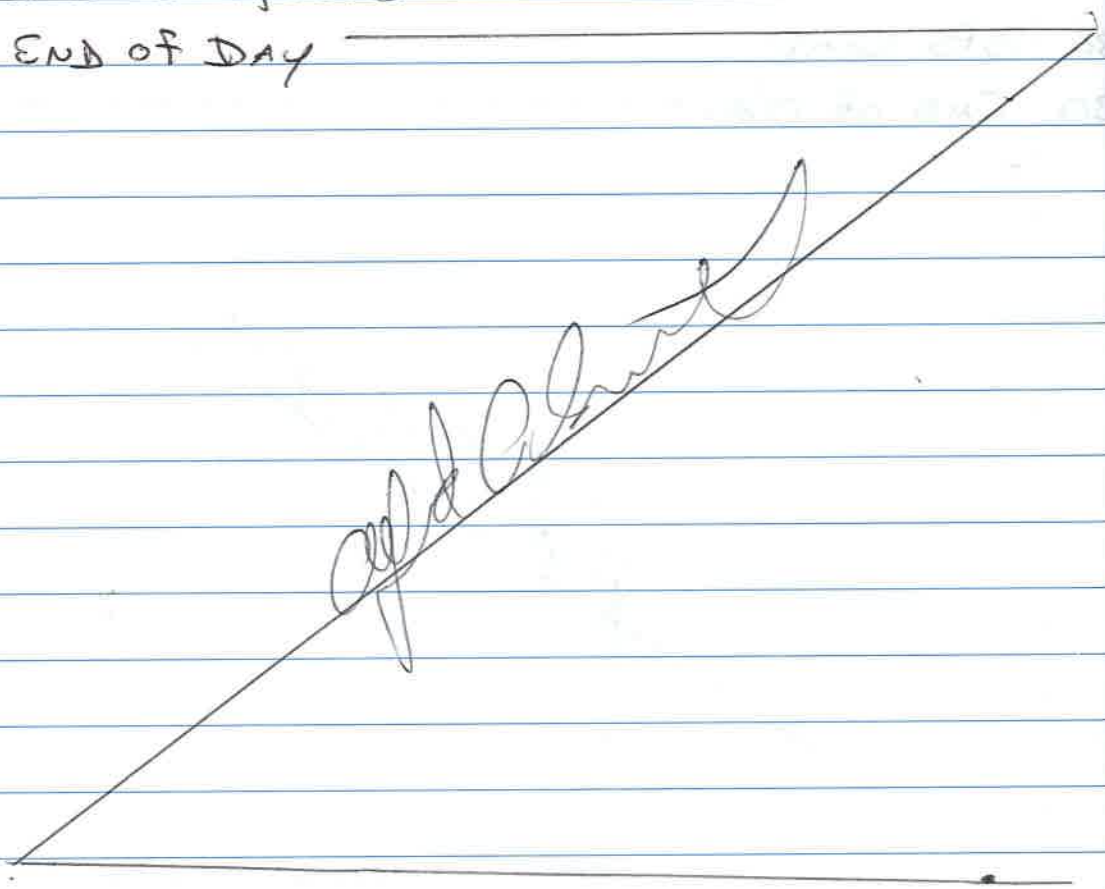
1200 LUNCH

1245 GRID COMPLETE. START GRID 80

1410 GRID COMPLETE. START GRID 62

1620 OPS COMPLETE

1730 END OF DAY



4-23-2013

0700 Site Safety

0730 Tailgate Safety

Personel: Jeremy Amiote
Casie Hood
Charles Richardson
Cheryl Okino

Topics: PPE, 1st Aid, Emergency Egress

0800 Begin Ops. Intrusive. Start Grid 62

0930 Grid 62 comp. Start Grid 81.

1130 Grid Comp. Start Grid 31.

Lunch

1300 Grid Comp. Start Grid 27

1625 Grid Comp.

1630 Ops Comp.

1730 End of Day

(26)

4-24-2013

0700 SITE SAFETY

0730 TAILGATE SAFETY

PERSONEL: Jeremy Amiote
CASIE HOOD
CHARLES RICHARDSON
Cheryl OKINO

TOPICS: PPE, SITE SAFETY, RADIO/COMMM

0800 BEGIN OPS. INTRUSION. START GRID 39

0910 GRID COMP. START GRID 90

1045 GRID COMP. START GRID 85

1145 GRID COMP. START GRID 95

1200 LUNCH

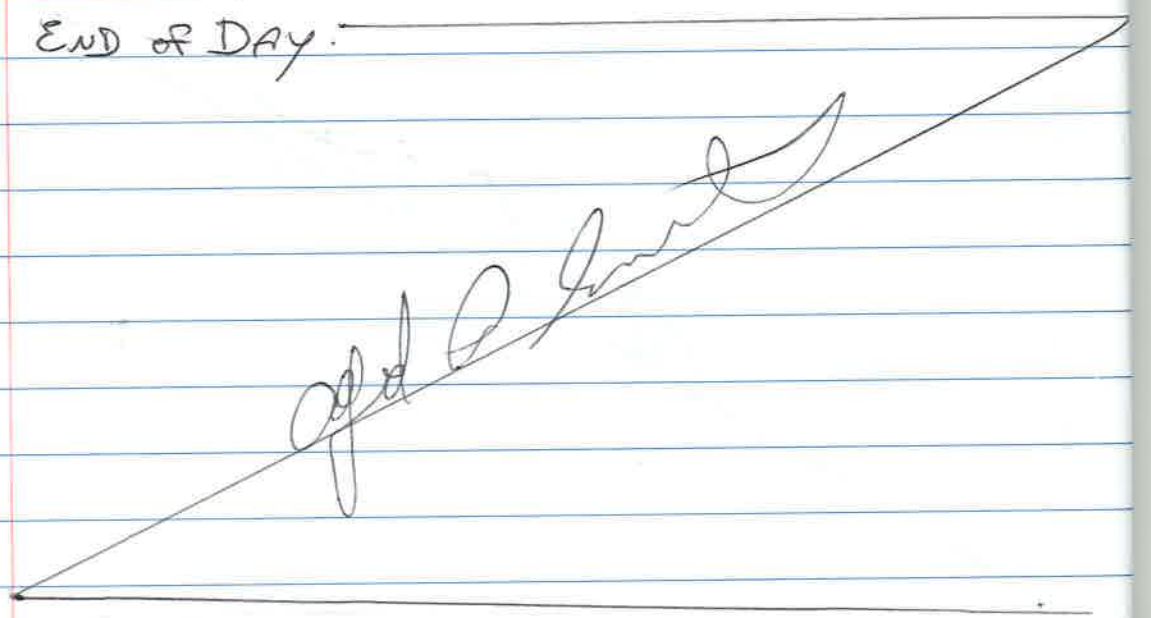
1310 GRID COMP. START GRID 105

1440 GRID COMP. START GRID 63.

1625 GRID COMP.

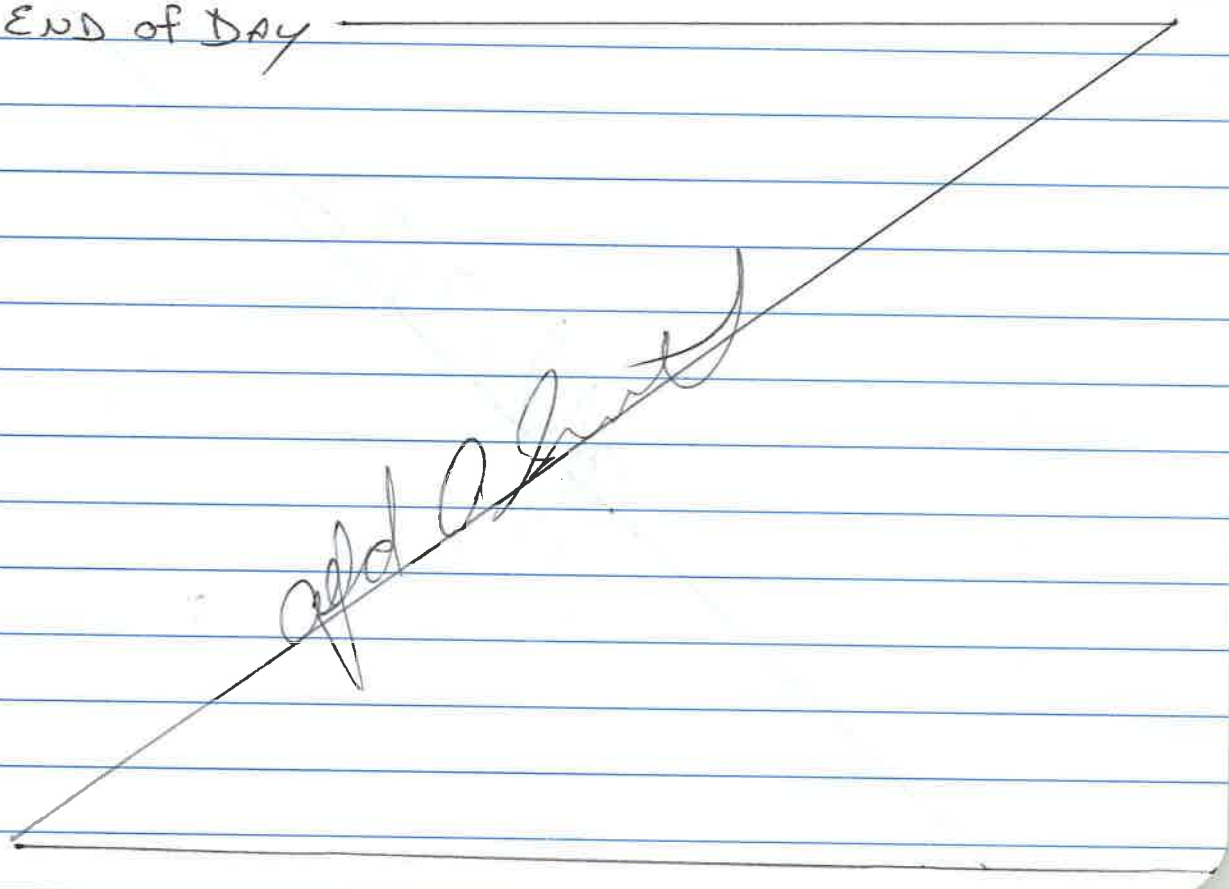
1630 OPS COMP

1730 END of DAY.



4-25-2013

0700 Site Safety
0730 Tailgate Safety
Personel: Jeremy Amiotte
Casie Hood
Charles Richardson
Cheryl Okino
Topics: PPE, slips trips falls, Hydrate
0800 Begin OPS. Intrusive. Start Grids 76.
1200 Lunch
1300 Grid Comp. Start Grid 63
1430 Grid Comp. Start Grid 59
1630 Grid Comp. OPS Comp
1730 End of Day



(28)

4-26-2013

0700 Site Safety Brief

0730 Tailgate Safety

Personel : Casie Hood
Charles Richardson
Cheryl Okino

Topics : PPE, Radio/comm, Hydrate

0800 Begin OPS. Analog grid. Start Grid 21

1100 Grid comp. Start Grid 17

1200 Lunch

1630 OPS Comp. Grid not finished

1730 End of Day

4-29-2013

0700 Site Safety Brief

0730 Tailgate Safety:
Personel: Charles Richardson
Topics: Equipment Clearance, Be Aware of Surroundings.

0800 Begin OPS. Cutting Grids. Start Grid RC1 G 85

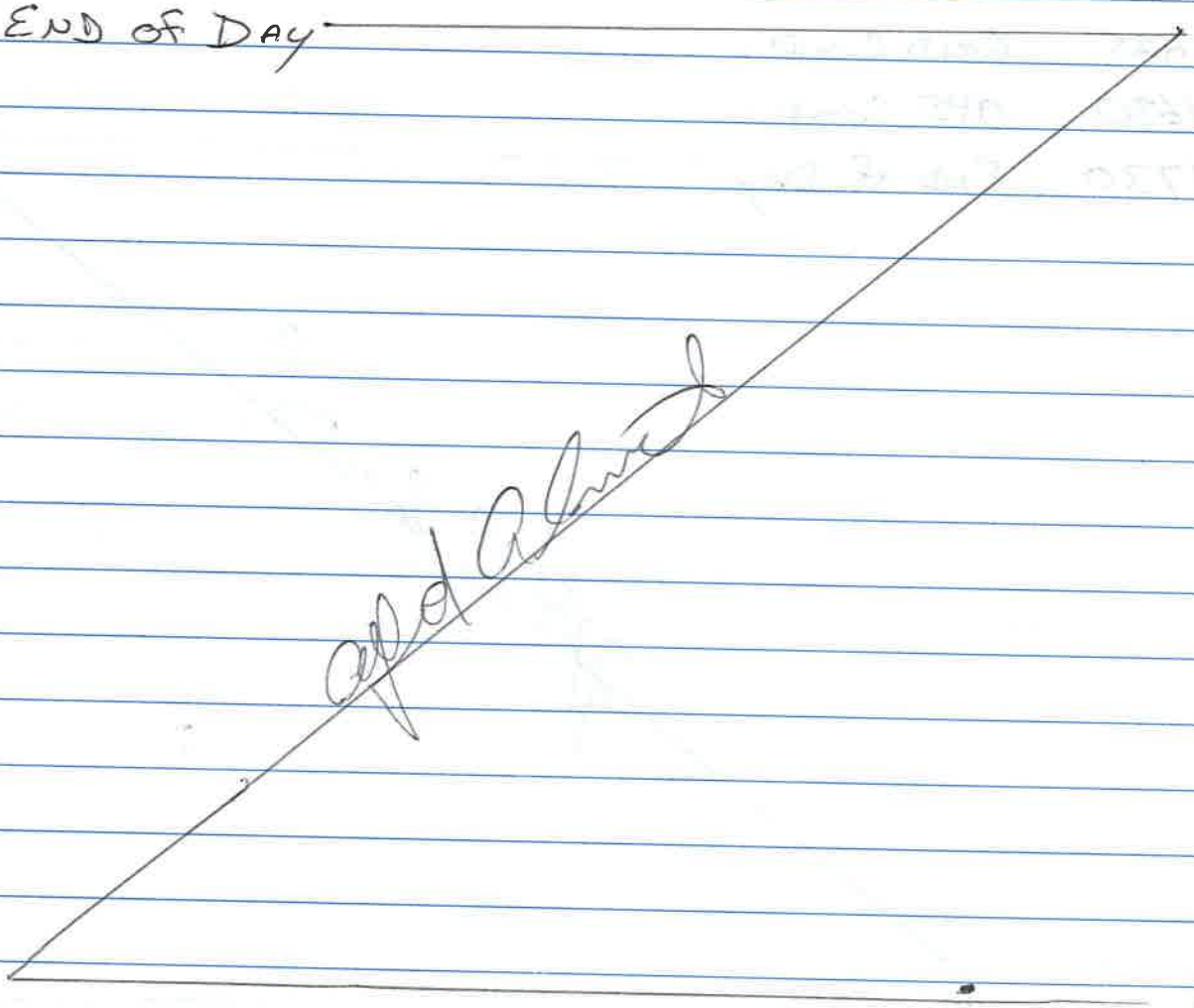
1130 Grid Comp. Start Grid RC2 G 67.

1230 Lunch

1600 Grid Comp

1630 OPS Comp.

1730 End of Day



(30)

0700 Site Safety Brief 4-30-2013

0730 Tailgate Safety:
~~Personel~~ Topics: Charles Richardson
Topics: PPE, site survey, Be Aware of Surroundings

0800 Begin OPS. Cutting Grids. START Grid RC1
Grid 49

1030 Grid Comp. START Grid 92

1200 Lunch

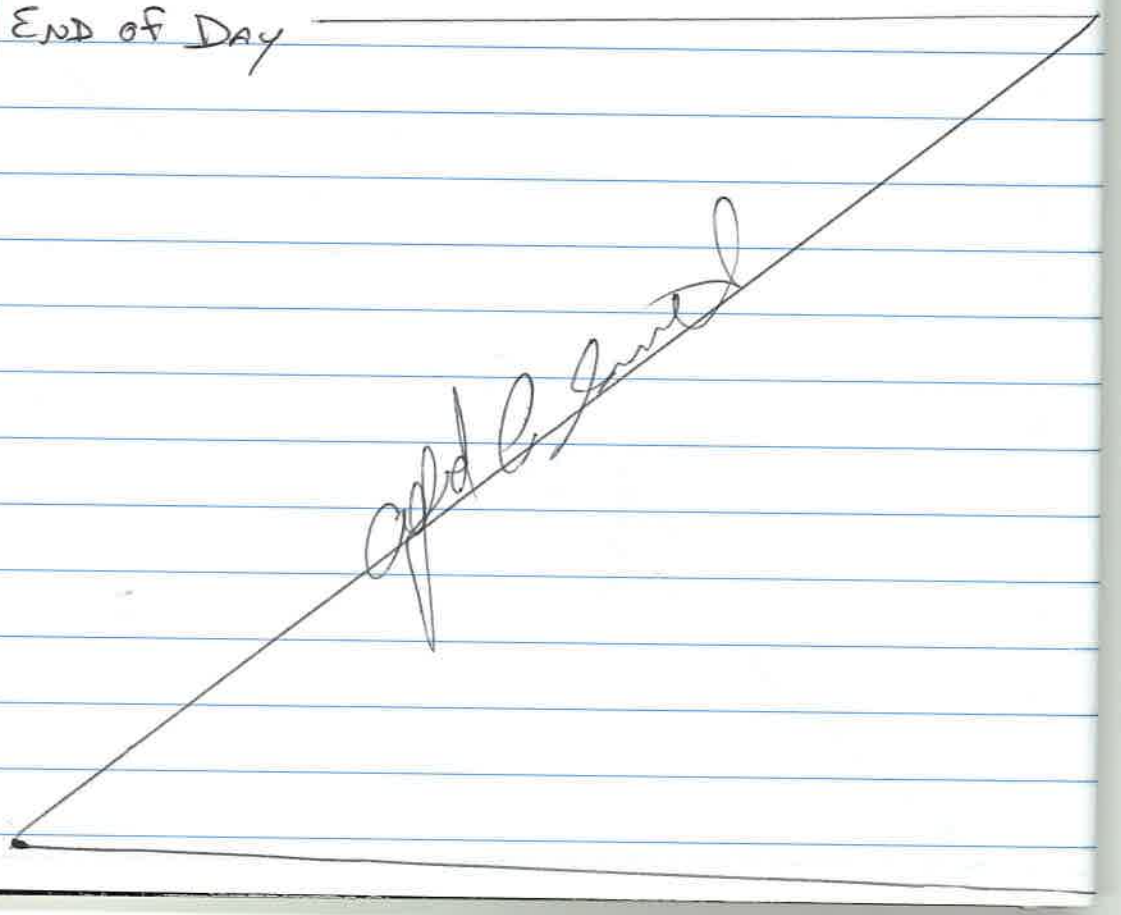
1230 Grid Comp. START Grid 41

1425 Grid Comp. START Grid 90

1625 Grid Comp.

1630 OPS Comp.

1730 End of Day



0700 SITE SAFETY BRIEF 5-1-2013

0730 TAILGATE SAFETY

PERSONEL: JEREMY AMIOTE

CASIE HOOD

CHARLES RICHARDSON

CHARYL OKINO

TOPICS: PPE, HYDRATE, SAFE WORK PRACTICES

0800 BEGIN OPS. INTRUSIVE. START GRID RC1 17.

0915 GRID COMP. START GRID RC2 41.

1100 GRID COMP - START GRID 66.

1200 LUNCH

1230 GRID COMP. START GRID 29

1345 GRID COMP. START GRID 4

1500 GRID COMP. START GRID 78.

1625 GRID COMP.

1630 OPS COMP

1730 END of DAY

(32)

5-2-2013

0700 Site Safety Brief

0730 Tailgate Safety

Personel : Jeremy Amiote
Casie Hood
Charles Richardson
Cheryl Okino

Topics: PPE, Hydrate, Complacency

0800 Begin OPS. Intrusive. START grid 75

0930 grid comp. START grid 16.

1045 grid comp. START grid 40.

1200 Lunch

1245 grid comp. START grid 64.

1445 grid comp. START RC2 grid 100

1620 grid comp.

1630 OPS comp

1730 End of Day

5-3-2013

0700 SITE SAFETY BRIEF

0730 TAILGATE SAFETY

PERSONEL: CHARLES RICHARDSON
WOODY ZOW
CHERYL OKINO

TOPICS: PPE, EQUIPMENT SAFETY, HYDRATE

0800 BEGIN OPS. GRID CUT & SETUP. START GRID 60

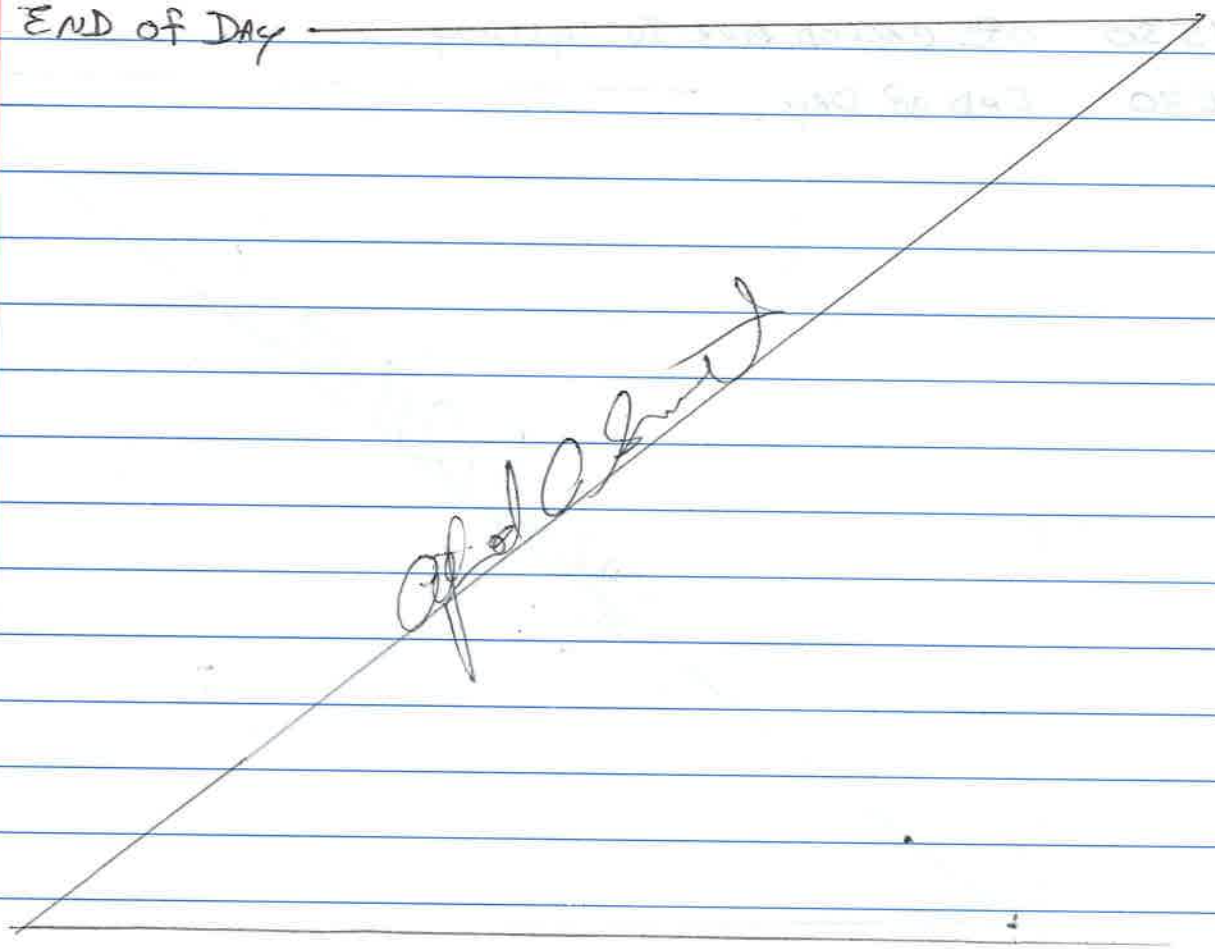
1150 GRID COMP.

1200 LUNCH

1230 START GRID 50

1630 GRID COMP. OPS COMP.

1730 END of DAY



(34)

5-6-2013

0700 Site Safety Brief

0730 TAILGATE SAFETY

0° Personel : CASIE HOOD
CHARLES RICHARDSON
CHERYL OKINO

0800 Begin OPS. INTRUSIVE. START GRID 71

1000 GRID Comp. START GRID 70

~~Lunch~~ 1200 Lunch

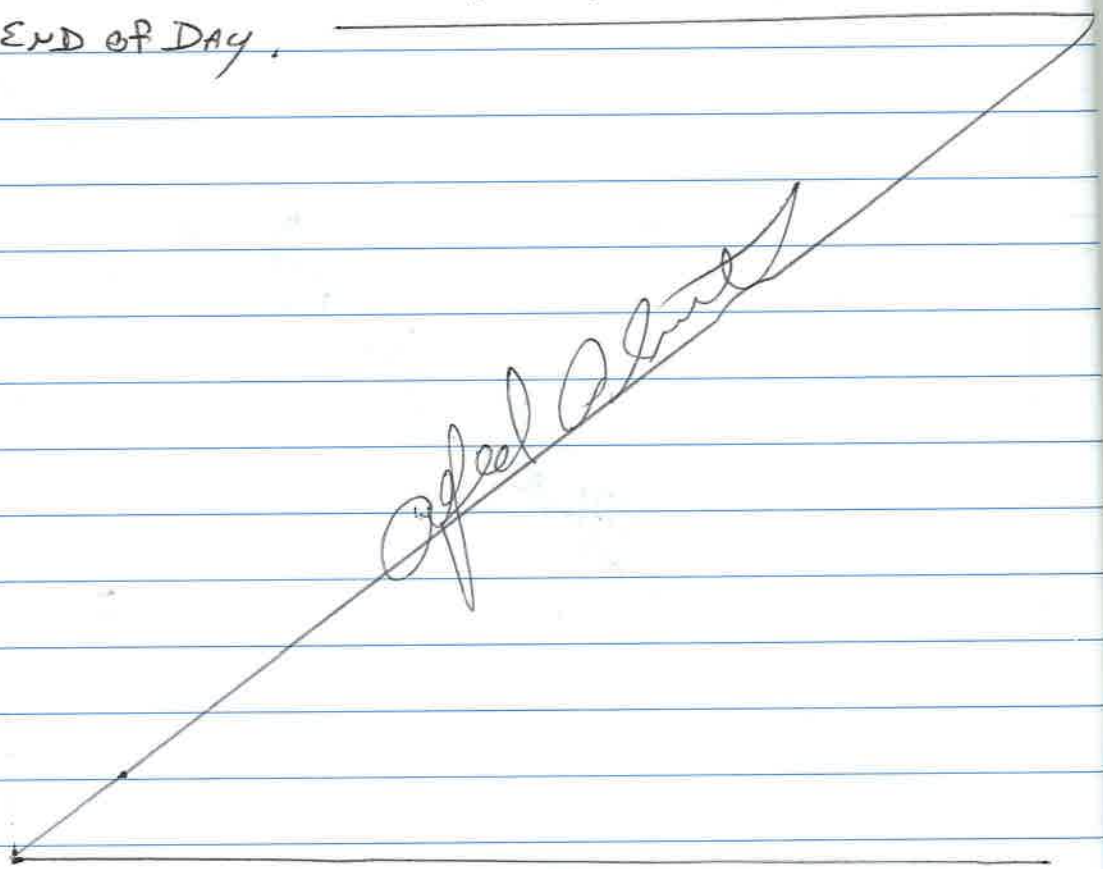
1245 GRID Comp. START GRID 91

1345 GRID Comp.

1400 RAIN / LIGHTNING HOLD

1530 OPS CALLED DUE TO LIGHTNING

1630 END of DAY.



5-7-2013

0700 SITE SAFETY BRIEF

0730 TAILGATE SAFETY

PERSONNEL : AL SMITH

CHUCK RICHARDSON

TOPICS : 1ST AID, HYDRATE

0860 BEGIN OPS. CUTTING PRIDS. START GRID 99.

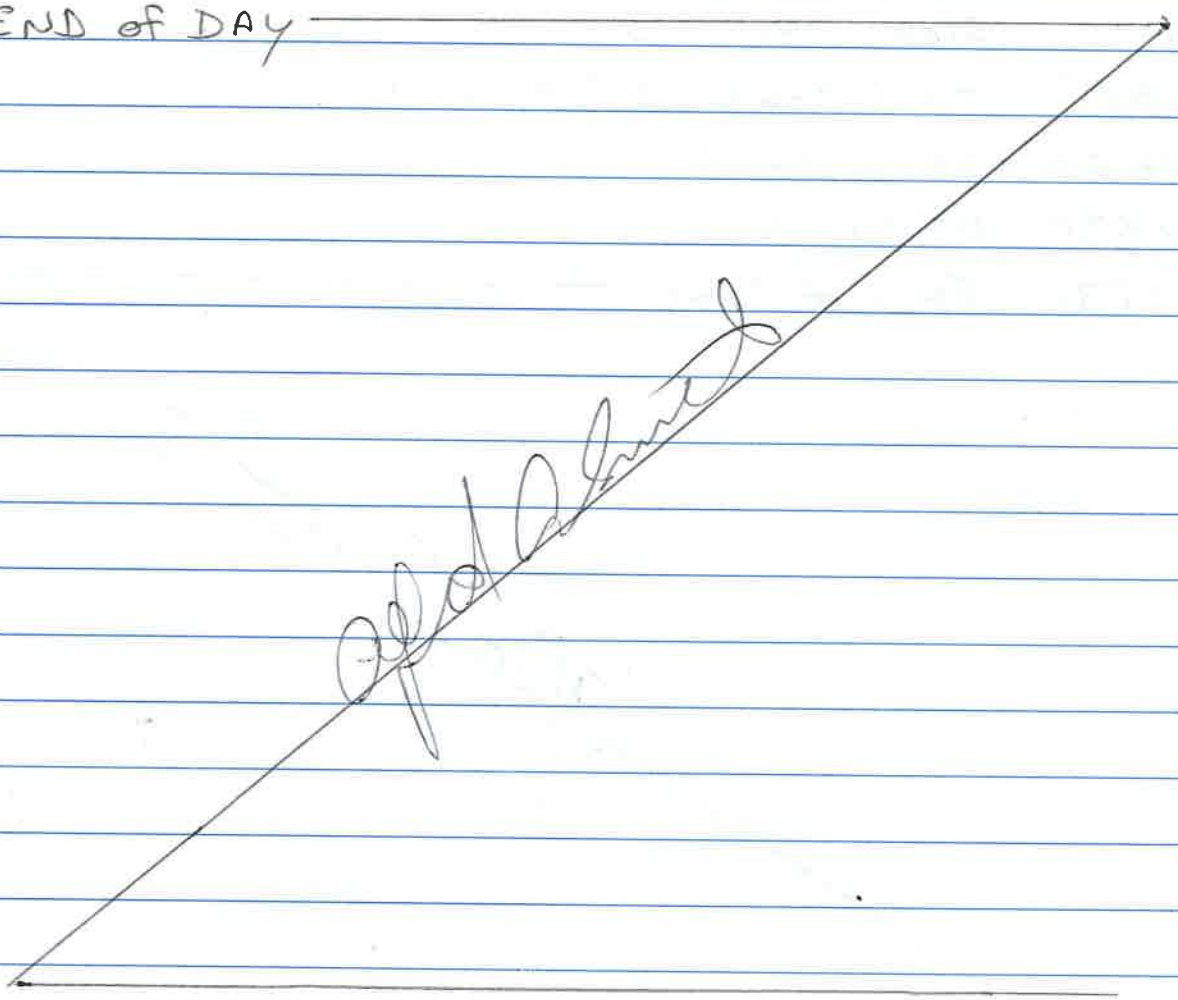
1110 GRID COMP. START GRID 96

1200 LUNCH

1600 GRID COMP

1630 OPS COMP.

1730 END of DAY



(36)

5-8-2013

0700 SITE SAFETY BRIEF

0730 TAILGATE SAFETY

PERSONEL: AC SMITH

CHARLES RICHARDSON

TOPICS: COMMN, HYDRATE, COMPLAINCEY

0800 BEGIN OPS, CUT & SETUP GRIDS, START GRID 112.

1000 GRID COMP. START GRID 107

1145 GRID COMP

1200 LUNCH

1230 START GRID 113.

1415 GRID COMP. START GRID 110

1620 GRID COMP

1630 OP COMP.

1730 END OF DAY

5-9-2013

0700 SITE SAFETY

0730 TAILGATE SAFETY

PERSONEL: AL SMITH

WOODY

CHARLES RICHARDSON

CHERYL OKINO

TOPICS: HYDRATE, POWER TOOL SAFETY.

0800 BEGIN OPS. CUT & SETUP GRIDS. START GRID 29

0915 GRID COMP. START GRID 33.

1000 GRID COMP. START GRID 59.

1200 LUNCH

1300 GRID COMP. START GRID 76

1445 GRID COMP. START GRID 63

1605 GRID COMP.

1630 OPS COMP. CHUCK & CHERYL REPORT TICKS EMBEDDED.

1730 END OF DAY.

(34)

5-10-2013

0700 SITE SAFETY BRIEF

0730 TAILGATE SAFETY

PERSONEL: AL SMITH

CHUCK RICHARDSON

TOPICS: BOBCAT SAFETY, HYDRATE

0800 BEGIN OPS. TRACK BOBCAT FROM RCI GRID 110 TO RANGE 10.

1200 LUNCH

1230 START CUTTING GRID 82

1625 GRID COMP

1630 OPS COMP

1730 END OF DAY

(39)

0700 Site Safety 5-13-2013

0730 Tailgate Safety

Personnel:

(40)

0700	Site Safety Brief	5-14-2013
0730	Tailgate Safety	
	Personel: Woody	
	Jeremy Amiotte	
	Charles Richardson	
	Cheryl Okino	
	Topics: 1st Aid, Hydrate, PPE	
0800	Begin OPS. Intrusive Analog. Start Grid 31	
0945	Grid Comp. Start Grid 57	
1100	Grid Comp. Start Grid 97	
1200	Lunch	
1245	Grid Comp. Start Grid 101	
1330	Grid Comp. Start Grid 52	
1445	Grid Comp. Start Grid 70	
1620	Grid Comp.	
1630	OPS Comp	
1730	End of Day	

5-15-2013

0700 SITE SAFETY

0730 TAILGATE SAFETY

PERSONEL: JEREMY AMIOTE
WOODY
CHARLES RICHARDSON
CHERYL OKING

TOPICS: PPE, COMPLAINCENCY, HYDRATE

0800 BEGIN OPS. START GRID 94

0915 GRID COMP. START GRID 38

1045 GRID COMP. START GRID 84

1130 GRID COMP. START GRID 6

1200 LUNCH

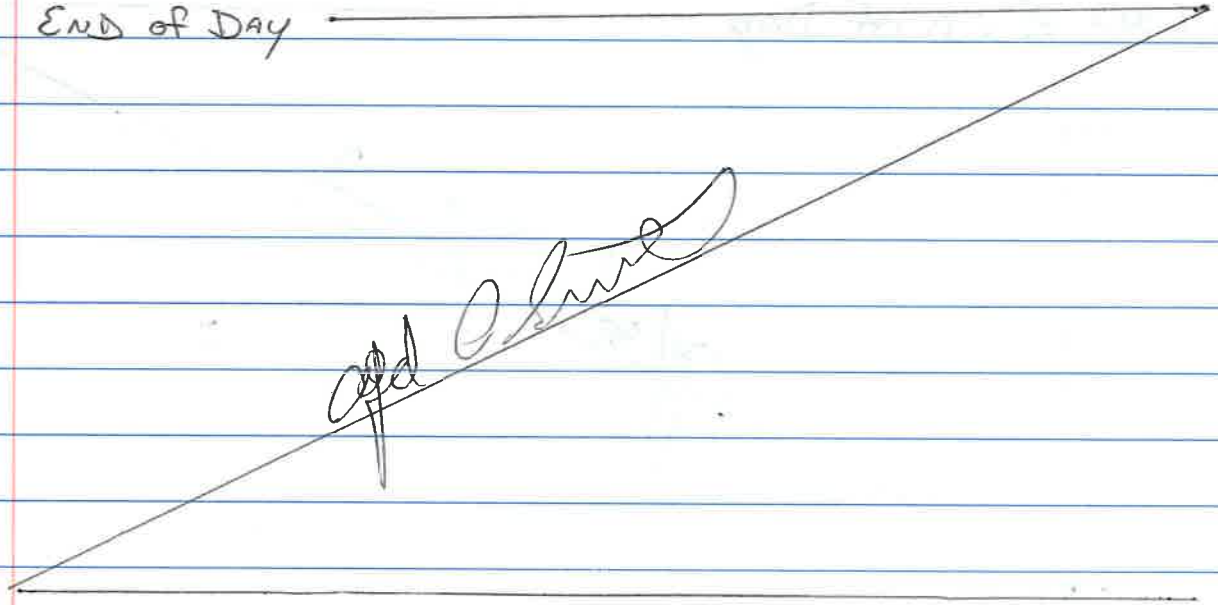
1310 GRID COMP. START GRID 72

1445 GRID COMP. START GRID 53

1620 GRID COMP.

1630 OPS COMP.

1730 END OF DAY



(42)

5-16-2013

0700 SITE SAFETY BRIEF

0730 TAILGATE SAFETY

PERSONEL: WOODY
CASIE HOOD
CHARLES RICHARDSON
CHERYL OKINO

TOPICS: PPE, HYDRATE, COMMS

0800 BEGIN OPS. INTRUSIVES. START GRID 108

0945 GRID COMP. START GRID 110

1050 GRID COMP START GRID 112

1150 GRID COMP. START GRID 113

LUNCH

1300 GRID COMP. START GRID 86

1445 GRID COMP. START GRID 46

1610 GRID COMP.

1630 OPS COMP.

1730 END OF DAY

5-17-2013

0700 SITE SAFETY

0730 TAILGATE SAFETY

PERSONEL: JEREMY AMIOTE
CASIE HOOD
CHARLES RICHARDSON
CHERYL OKINO

TOPICS: PPE, SITE SAFETY, HYDRATE, WORK SAFETY

0800 BEGIN OPS. INTRUSIVE. START GRID 76.

0915 GRID COMP. START GRID 50.

1110 GRID COMP. STRAT GRID 69.

1200 LUNCH

1245 GRID COMP - START GRID 102

1415 GRID COMP. START GRID 103

1530 GRID COMP. START GRID 104

1615 GRID COMP. START GRID 111

1650 GRID COMP. OPS COMP

1730 END OF DAY

(44)

0700	SITE SAFETY	5-20-2013
0730	TAILGATE SAFETY	
	PERSONEL: JEREMY AMIOTE	
	CASIE HOOD	
	CHARLES RICHARDSON	
	CHERYL OKINO	
	TOPICS: PPE, COMMS, COMPLAINCEY	
0800	BEGIN OPS. INTRUSIONS. START GRID 082	
0845	GRID COMP. START GRID 65	
1000	GRID COMP. START GRID 55	
1130	GRID COMP. START GRID 37	
1200	LUNCH	
1400	GRID COMP. START GRID 109 ANALOG	
1610	GRID COMP	
1630	OPS COMP	
1730	END of DAY	

(45)

5-21-2013

0700 SITE SAFETY

0730 TAILGATE SAFETY

PERSONEL: CASIE HOOD

CHARLES RICHARDSON

CHERYL OKINO

TOPICS: PPE, HYDRATE, COMPLAINCEY

0800 BEGIN OPS. ANALOG INTRUSIVE. START GRID 100

1015 GRID COMP. START GRID REDU 28

1150 GRID COMP.

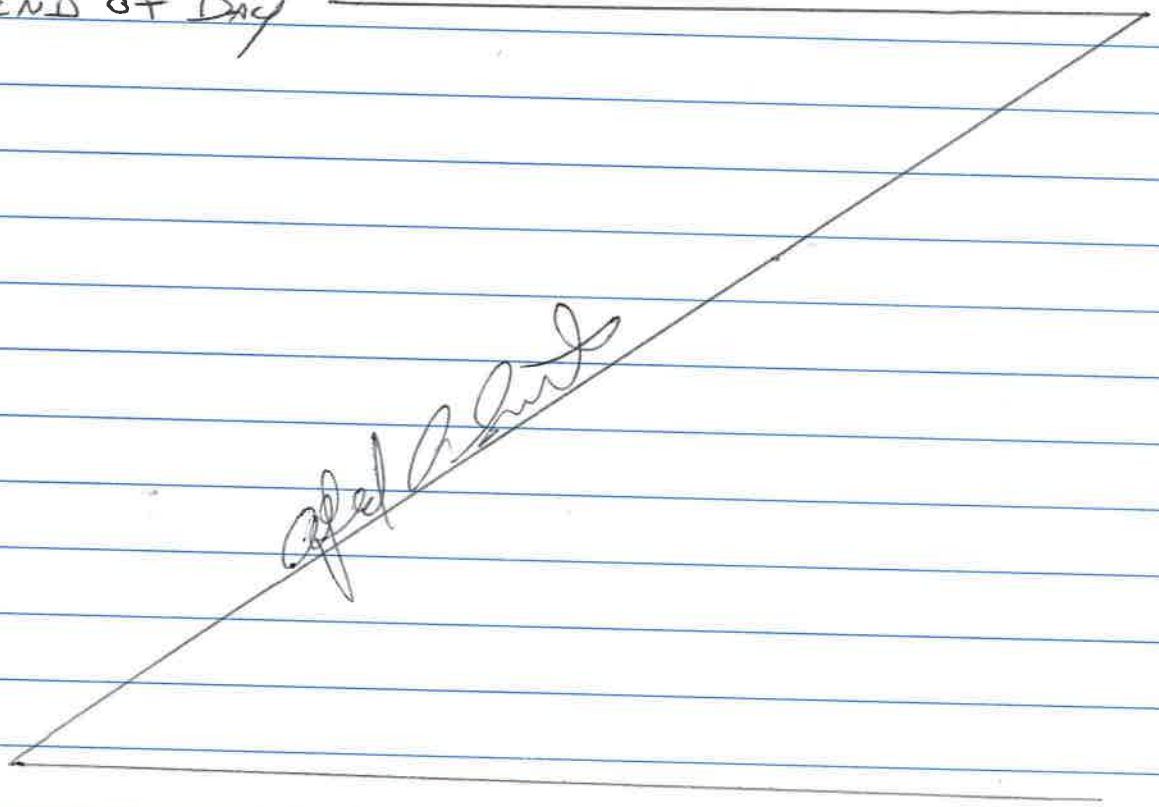
1200 LUNCH

1230 START ANALOG TRANSECT RC2 009

1445 TRANSECT COMP. START TRANSECT RC2 011

1650 OPS COMP.

1730 END of DAY



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APPENDIX H6

TEAM 2 FIELD NOTES

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1 BDC

22 Mar 2013

Camp Butner, NC H1009A

Team: Gary Cagle, Jack Bullock, Dawn Weber, Charlie Richardson.

Instruments: Shonstedt 206714, White 012703000053, EMC1022005, Trimble Juno J3B5.

0700 - Safety/operations brief.

0720 - Loadout equipment and test instruments. All instruments check good.

0750 Transit to grid 36.

0815 Down load equipment and begin operations in grid 36.

1000 Break

1015 Back to work.

1200 Lunch

1230 Back to work.

1435 Locate QC seed 058 at Flag 18.

1450 Break

1505 Back to work.

1510 Load equipment and Transit to grid 8.

1540 Depart area and return to trailer. Due to demo operations. Conduct equipment maintenance and clean up.

1730 Secure for the day

NFE.

Gary D. Cagle

2 YDC

Camp Butner, NC 29 Mar 13 H1009A

Team: Gary Cagle, Jack Bullock, Dawn Weber, Jason Brawner, Cody Kaliszewski.

Instruments: Shonsted ts: 286014, 266435

White: 01270300053, EM61: 022005, Juno: J335

0700 Safety / operations brief.

0720 Load out and check equipment, all good.

0735 Transit to grid 27

0750 Tailgate safety brief.

0800 Begin operations in grid 27

0915 Located QC Seed 16.

1000 Break

1015 Back to work.

1140 Complete grid 27. Load equipment and transit to 38

1210 Lunch

1240 Begin Operations in grid 38.

1325 Located Seed 63.

1410 ~~Begin~~ GDC Completed 38. Load equipment and transit to 57

1505 Begin operations in grid 57.

1540 Located QC seed

1630 Complete grid 57. Load equipment and transit to Conex.

1645 Down load equipment. Clean and store gear.

1730 Secure for the day.

NFE
Gary Cagle

3 HDC

Camp Bartner, NC 1 Apr 2013 H1009A

Team: Gary Cagle, Jack Ballock, Dawn Weber, Jason Brawner
Cody Kaliszewski.

Instruments: Shonstedts; 286014, 266435, White; 01270300053,
EM61: 022005, Juno; J385.

0700 Safety / operations brief

0715 Performed weekly vehicle inspection. Checked instruments, all checked good. Load out equipment.

0750 Transit to grid 53

0830 ~~0815~~ HDC Began operations in grid 53

0910 Located QC Seed

1000 Completed grid 53. Transit to grid 64.

1015 ~~Located QC~~ HDC Began operations in grid 64

1035 Located QC seed

1050 Break

1105 Continued operations.

1139 Completed grid 64. Transit to grid 50.

1200 Lunch

1230 Began operations in grid ~~62~~ 50 HDC.

1250 Located QC seed

1345 Completed grid 50. Transit to grid 62.

1415 Began operations in grid 62.

1445 Located QC seed

1515 Completed grid 62. Transit to grid 70.

1535 Began operations in grid 70.

1545 Located QC seed

4 ATTC

1 Apr 2013 (Cont)

Camp Butner, NC H1009A

1600 Completed grid 70. Transit to grid 48

1615 Began operations in grid 48.

1620 Located QC seed

1635 Completed grid 48. Transit to grid 69.

1650 Began operations in grid 69.

1655 Located QC seed

1715 Completed grid 69. Transit to conex.

1725 Down load equipment.

1730 Secure for the day

NFE
Gary D. Eagle

5 HDE

2 Apr 2013

Camp Butner, NC H1009A

Team: Same, Instruments: Same.

0700 Safety/operations brief.

0720 Check instruments, all good. Load out equipment, and transit to grid 56.

0800 Tailgate Safety brief.

0820 Began operations in grid 56.

0840 Located QC Seed 13 at Flag 11.

0925 Completed grid 56. Transit to grid 44.

1000 Began operations in grid 44.

1020 Located QC Seed 44 at Flag 3.

1100 Completed grid 44. Transit to grid 35.

1130 Lunch

1200 Began operations in grid 35.

1225 Located QC Seed 34 at Flag 4.

1310 Completed grid 35. Transit to grid 40.

1350 Began operations in grid 40

1430 Located QC Seed 81 at Flag 15.

1445 Break

1500 Continue operations in grid 40

1610 Completed grid 40. Transit to magazines

1640 Turn in MD at magazines. Transit to conex.

1700 Down load and clean equipment and sharpen tools.

1730 Secure for the day

NFE

Gary D. Eagle

6 Hde

3 APR 2013

Camp Butner, NC H1009A

Team: Same, Instruments: Same plus White 01270300040

0700 Safety/operations brief.

0720 Checked instruments, all good, load out equipment.

0740 Transit to grid 51

0815 Began operations in grid 51. Start: 188.5 End: 185.3.

0830 Located QC seed at flag 3.

0930 Completed grid 51. Transit to grid 60

1010 Began operations in grid 60. start 201.3 End 198.3

1030 Located QC Seed 32 at flag 6

1200 Lunch

1230 Continued operations in grid 60.

1300 Completed grid 60. Transit to grid 23.

1315 Began operations in grid 23.

1325-1335 Allegro down due to connection.

1345 Located QC Seed at flag 4.

1405 Allegro connector hold down screw broke. Contacted SUXOS and directed to return to conex.

1410 Transit to truck load equipment and transit to conex.

1505 Arrive at conex. Down load EM61, prepare lines and equipment for analog mag and dig operations.

1535 Depart conex and transit to grid RC2-69

1555 Arrive at grid RC2-6, QC placing seeds

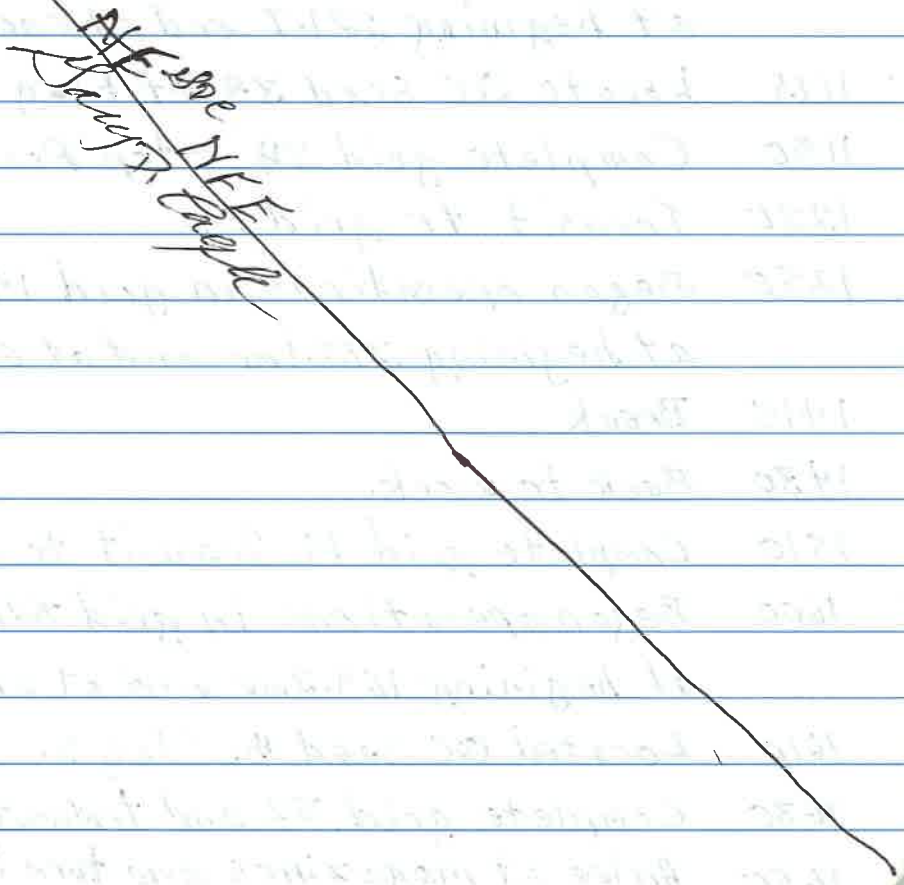
3 Apr 2013 (cont.) 7 HSC

Camp Butner, NC H1009A

1630 Depart grid RC2-69 Transit to conex

1650 Arrive conex, down load and clean equipment.

1730 Secure for the day.



8 USC

4 Apr 2013

Camp Butner, NC H1009A

Team: Same Instruments: Same

0700 Safety / operations brief.

0715 Check instruments, all good, load equipment.

0720 Transit to grid 23.

0810 Continue operations in grid 23. EM61 readings at begining 170.9mv and at end 173.4mv.

1000 Complete grid 23 transit to grid 24.

1015 Break

1030 Back to work.

1050 Began operations in grid 24. EM61 readings at begining 221.7 and at end 224.5.

1115 Locate QC seed 38 at flag 7.

1150 Complete grid 24. Stop for lunch.

1220 Transit to grid 19.

1250 Began operations in grid 19. EM61 readings at begining 273.1mv and at end 270.4mv.

1415 Break

1430 Back to work.

1510 Complete grid 19. Transit to grid 32.

1600 Began operations in grid 32. EM61 readings at begining 169.2mv and at end 162.5mv.

1610 Located QC seed 4. Flag 5.

1630 Complete grid 32 and transit to magazines.

1650 Arrive at magazines and turn in MD.

4Apr2013 (cont.) 9HOE

Camp Butner, NC H1009A

1705 Arrive at conex, down load equipment.

1730 Secure for the day.

NFE
Barry D. Eagle

10 UXO

5 Apr 2013

Camp Butner H1009A

Team: Same, Instruments: Same

0700 Safety/operations brief.

0720 Check instruments, all good, load equipment.

0740 Transit to grid 84

0800 Began operations in grid 84. EM61 readings at begining 152.4mv and at end 156.3mv.

0820 Locate QC Seed 3 at flag ~~12~~ 2 UXO.

0915 Complete grid 84 and Transit to grid 73.

0930 Began operations in grid 73. EM61 readings at begining 154.1mv and at end 155.4mv.

0940 Located QC Seed 46 at flag 4.

1000 Complete grid 73 and transit to grid 67.

1020 Break

1040 Began operations in grid 67. EM61 readings at begining 212.8 mv and at end 209.2 mv.

1050 Located QC seed 12 at flag 4.

1120 Complete grid 67 and transit to grid 63.

1130 Lunch

1215 Began operations in grid 63. EM61 readings at begining 143.1mv and at end 146.2mv.

1225 Located QC Seed 11 at flag 2.

1240 Complete grid 63 and transit to grid 26.

1325 Began operations in grid 26. EM61 readings at begining 189.7mv.

5 Apr 2013 (cont) 11 Hve

Camp Batner H1009A

1415 Break

1430 Continue operations in grid 26

1640 Transit to magazines.

1700 Arrive at magazines and turn in MD.

1710 Down load and clean equipment.

1730 Secure for the day.

NFE
Gary D. Eagle

12 SDE

8 Apr 2013

Camp Butner, NC H1009A

Team: Gary Cagle, Jack Bullock, Dawn Weber, Jason Brawner, Cody Kaliszewski.

Instruments: Shonstedts; 286014, 266435. Whites; 012T0300053, 012T0300040, EM61 022005, Juno J385.

0700 Safety/operations brief.

0720 Performed Weekly Vehicle inspections, Checked instruments, all good and loaded equipment.

0750 Transit to grid 26.

0815 Began operations in grid 26. EM61 readings at begining 209.1 mr and at end 203.1

0855 ~~Locate~~ SDE Located QC Seed 91 Flag 19.

0950 Complete grid 26. Transit to grid 86.

1015 Began operations in grid 86. EM61 readings at begining 209.2 and at end 207.3

1120 Located seed 14 at flag 10

1230 Complete grid 86, Lunch.

1300 Transit to grid 76.

1320 Began operations in grid 76 EM61 readings at begining 181.3 at end 179.1.

1330 Located QC seed 21 at flag 2. Complete grid 76. Transit to grid 80.

1400 Began operations in grid 80. EM61 readings at begining 171.4 at end 174.5.

8 Apr 2013 13 HDC

Camp Butner, NC H1009A

1415 Located QC seed 93 at flag 4.

1425 Completed grid 80. Transit to grid 89.

1450 Began operations in grid 89. EM61 readings at begining 171.6 at end 176.3.

1500 Located QC seed 9 at flag 3.

1520 Completed grid 89. Transit to grid 81.

1530 Break

1545 Began operations in grid 81. EM61 readings at begining 175.9 at end 177.2.

1555 Locate QC seed 88 at flag 2.

1620 Complete grid 81. Transit to magazines.

1640 Drop off MD at magazines. Transit to Conex.

1700 Download and clean equipment, sharpen shovels.

1730 Secure for the day.

NFE
Joey Flagg

14 SDE

9 Apr 2013

Camp Butner, NC H1009A

Team: Same. Instruments: Same.

0700 Safety / operations brief.

0720 Check instruments, all good and load equipment.

0740 Transit to grid 1.

0830 Began operations in grid 1. EM61 readings at begining 155.1 at end 154.7.

0850 Located QC Seed 27 at Flag 7.

1000 Completed grid 1. Transit to grid 7.

1035 Began operations in grid 7. EM61 readings at begining 153.7 at end 157.4.

1050 Located QC Seed 39 at Flag 7. SDE

1135 Completed grid 7. Transit to grid 12.

1150 Began operations in grid 12. EM61 readings at begining 170.3 at end 189.8.

1210 Located QC Seed 28 at Flag 3.

1315 Completed grid 12. Transit to truck.

1350 Lunch

1420 Transit to grid 6.

1455 Began operations in grid 6. EM61 readings at begining 218.5 at end 185.1

1510 Located QC Seed 25 at Flag 10.

1620 Completed grid 6. Transit to magazines.

1645 Drop off MD at magazines and Transit to conex

9 Apr 2013 (cont'd.

15 HDC

Camp Butner, NC H1009A

1700 Arrive at conex. Down load and clean equipment.

1730 Secure for the day.

NFE
Mary D. Cagle

16 BDE

12 Apr 2013

Camp Butner, NC H1009A

Team: Gary Cagle, Cassie Hood, Coty Kaliszewski.

Instruments: Shonsted; 286435, White; 01270300040

Juno; J3.85, EM61; 022005

0700 Safety / operations brief.

0720 Received brief on analog transect data collection.

0800 Transit to RC2

0845 Arrive at site of property owners house.

0900 QC transits to transect and places seeds.

0930 Began operations in transect

1100 Complete transect

1115 Depart for conex.

1155 Arrive conex. Load equipment for intrusive operations.

1210 Lunch

1250 Jeremy Amiotte joins team to operate EM61.

1300 Depart conex and Transit to grid 88.

1345 Began operations in grid 88. EM61 readings at begining 190.9 at the end 193.6.

1355 Locate QC seed 110 at flag 2. Complete grid 88

1400 Transit to grid 102.

1425 Began operations in grid 102. EM61 readings at begining 200.2 at the end 202.1.

Camp Butner, NC H1009A

1435 Located QC seed 108 at flag 2.

1440 Completed grid 102 and transit to grid 97.

1520 Began operations in grid 97. EM61 readings at begining 152.4 at the end 153.8.

1540 Locate QC seed 118 at flag 2.

1550 Complete grid 97 and transit to grid 93

1625 Begin operations in grid 93. EM61 readings at begining 159.2 at the 158.7.

1635 Located QC seed 94 at flag 2.

1645 Completed grid 93. Transit to conex.

1705 Down load and clean equipment.

1730 Secure for the day.

ALE
Gary D. Eagle

18 use

15 Apr 2013

Camp Butner, NC H1009A

Team: Gary Cagle, Jack Bullock, Dawn Weber, Jason Brawner, Coty Kaliszewski.

Instruments: Shonstedts; 286014, 266435, Whites; 012703000053, 012703000040, EM61; 022005, Juno; J385.

0700 Safety/operations brief.

0720 Performed weekly Vehicle inspection. Checked instruments, all good and loaded equipment.

0745 Transit to grid 3.

0855 Began operations in grid 3. EM61 readings at begining 270.1 at end 256.3.

0930 Locate QC seed 60 at flag 10.

1020 Break

1030 Continue operations in grid 3.

1150 Completed grid 3.

1200 Lunch

1230 Transit to grid 21.

1305 Began operations in grid 21. EM61 readings at begining 175.9 at end 174.2.

1335 Located QC seed 22 at flag 4.

1430 Break

1445 Continue operations in grid 21.

1600 Completed grid 21. Transit to truck.

Camp Butner, NC H1009A

1645 Arrive at truck, load equipment and transit to conex.

1715 Arrive at conex, down load and clean equipment.

1730 Secure for the day.

NFE
Gary D. Eagle

20 SDC

16 Apr 2013

Camp Butner, NC H1009A

0700 Safety/operations brief,

0720 Check instruments, all good and load equipment.

0735 Transit to grid 79.

0800 Began operations in grid 79. EM61 readings at begining 153.4 at end 154.1.

0810 Located QC Seed 131 at flag 13.

0825 Complete grid 79. Transit to grid 71.

0835 Begin operations in grid 71.

0845 Complete grid 71. Transit to grid 49.

0855 Began operations in grid 49. EM61 readings at begining 200.7 at end 201.6.

0910 Completed grid 49. Transit to grid 21.

1000 Began operations in grid 21. EM61 readings at begining 200.7 at end 201.6.

1015 Located seed 153 at flag

1150 Completed grid 21.

1200 Lunch

1230 Transit to grid 43.

1250 Began operations in grid 43. EM61 readings at begining 148.9 at end 145.2.

1315 Located QC seed 137 at flag 12.

1410 Completed grid 43.

1420 Break.

Camp Butner, NC H1009A

1435 Transit to grid 51.

1500 Began operations in grid 51. EM61 readings at begining 163.6 at end 160.3.

1510 Complete grid 51. Transit to grid 15.

1535 Begin operations in grid 15.

1545 Complete grid 15. Transit to grid 88.

1615 Began operations in grid 88. EM61 readings. at begining 225.4 at end 225.8.

1625 Located QC seed 8T at Flag

1640 Complete grid 88. Transit to magazines.

1700 Arrive at magazines and turn in MD.

1710 Down load equipment and clean.

1730 Secure For the day.

NFE
Jay D. Eagle

22nd Use

17 Apr 2013

Camp Butner, NC H1009A

0700 Safety / operations brief

0715 Checked instruments, all good. Load equipment.

0735 Transit to grid 53

0800 Began operations in grid 53

0840 Completed operations in grid 53. Transit to grid 13

0900 Began operations in grid 13.

1015 Break

1030 Continued operations in grid 13

1040 Completed 13. Transit to truck.

1100 Lunch

1130 Transit to grid 2

1145 Began operations in grid 2.

1430 Completed grid 2. Transit to grid 14.

1500 Began operations in grid 14.

1520 Completed grid 14. Transit to grid 29

1540 Began operations in grid 29.

1615 Complete grid 29. Transit to grid 11.

1630 Arrive at grid 11. Unable to check questionable flags due to flags removed.

1645 Transit to magazines and turn in MD

1705 Arrive at conex. Down load and clean equipment.

1730 Secure for the day.

18 Apr 2013 23 QC

Camp Butner, NC H1009A

Team: Same. Instruments: Same.

0700 Safety/operations brief.

0715 Check instruments, all good. Load equipment.

0735 Transit to grid 8.

0800 Began operations in grid 8.

0810 Completed grid 8. Transit to grid 37.

0835 Began operations in grid 37.

0910 Completed grid 37. Transit to grid 58.

0930 Began operations in grid 58.

0945 Completed grid 58. Break.

1000 Transit to grid 27.

1015 Began operations in grid 27.

1045 Complete grid 27. Transit to conex.

1100 Pick up new grid sheets. ~~and~~ QC Load additional equipment.

1120 Transit to grid 68.

1150 Arrive at grid 68. Property owner mowing to close to begin operations.

1200 Lunch.

1330 Transit to grid 68.

1250 Begin operations in grid 68. EM61 readings at begining 183.4 at end 192.1

1300 Located QC seed 126 at Flag 2

1330 Completed grid 68. Transit to grid 73.

18 Apr 2013 (cont)

Camp Butner, NC H1009A

1350 Began operations in grid T3. EM61 readings at begining 184.5mv at end 185.2mv.

1420 Located QC Seed 138 at flag 2.

1430 Complete grid T3. Transit to grid T8.

1510 Began operations in grid T8. EM61 readings at begining 172.2mv at end 174.4mv.

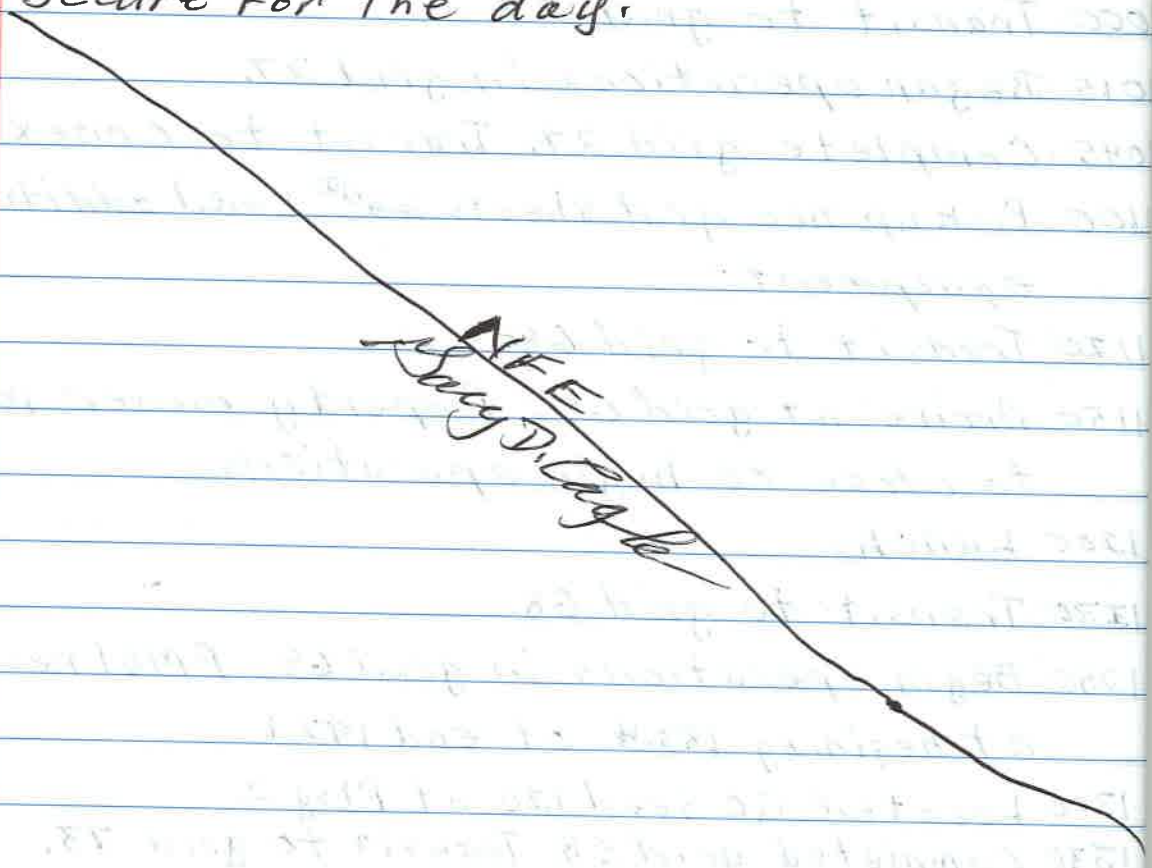
1540 Locate QC Seed 133 at flag 14.

1625 Complete grid T8. Transit to magazines.

1650 Arrive at magazines and turn in MD.

1705 Down load and clean equipment.

1730 Secure for the day.



19 Apr 2013 25 HDC

Camp Butner, NC H1009A

Team: Same. Instruments: Same.

0700 Safety/operations brief.

0710 Checked instruments, all good and load equipment.

0800 Began operations in grid 82. EM61 readings at begining 180.37mv at end 178.43mv.

0810 Located QC Seed 132 at flag 3.

0825 Completed grid 82. Transit to grid 58.

0840 Began operations in grid 58. EM61 readings at begining 225.8mv at end 226.8.

0910 Located QC seed 140 at flag 6.

0950 Completed grid 58. Transit to grid 12.

1010 Break.

1025 Began operations in grid 12. EM61 readings at begining 244.1 at end 246.3mv.

1150 Located QC seed 112 at flag 11.

1300 Complete grid 12. Lunch.

1330 Transit to grid 32.

1345 Began operations in grid 32. EM61 readings at begining 252.2mv at end 254.6mv.

1445 Located QC seed 101 at flag 9.

1545 Completed grid 32.

26 Dec

22 Apr 2013 27 UDC

Camp Butner, NC H1009A

Team: Gary Cagle, Jack Bullock, Dawn Weber, Jason Brawner, Coty Kaliszewski.

Instruments: Shonstedts; 286014, 266435, Whites; 01270300053, 01270300040, EM61; 022005, Juno J7B5.

0700 Safety/operations brief.

0715 Performed weekly vehicle inspections, checked instruments, all good, loaded equipment.

~~0815~~ 0740 Transit to grid 98.

0815 Began operations in grid 98. EM61 readings at begining 105.8 at end 105.5.

0820 Located QC Seed 136 at Flag 2.

0825 Complete grid 98. Transit to conex.

0850 Arrive at conex. Down load EM61 and load equipment to conduct cut, setup and analog mag/dig operations.

0915 Transit to grid 69.

1000 Began operations in grid 69.

1120 Completed grid 69. Transit to grid 23.

1200 Lunch.

1230 Began operations in grid 23.

1315 Completed grid 23. Transit to grid 69.

1330 Began operations in grid 69.

1400 Completed grid 69. Transit to grid 23.

28 YDE

22 Apr 2013 (cont.)

Camp Butner, NC H1009A

1410 Began operations in grid 23.

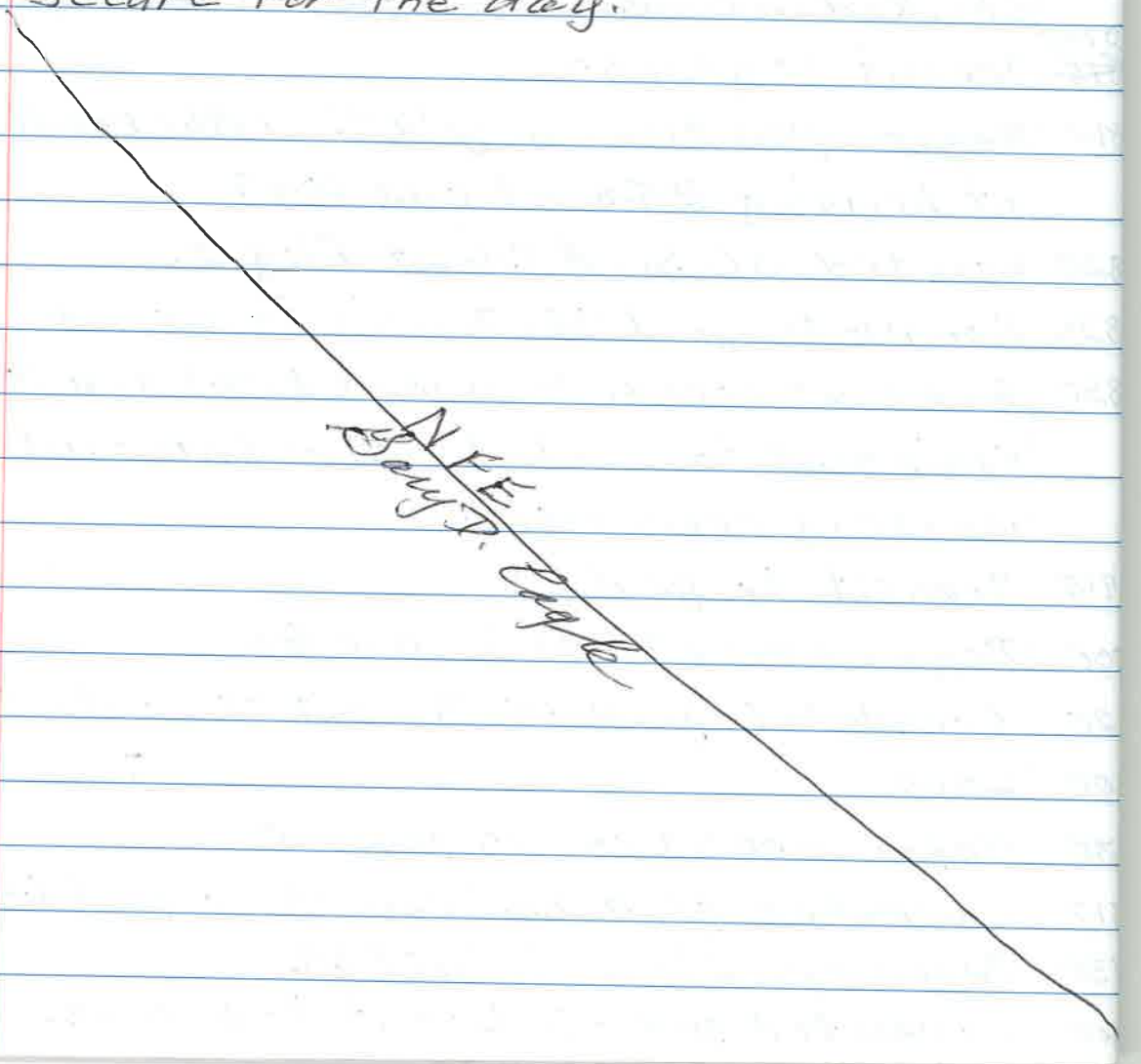
1530 Completed grid 23. Transit to grid 28.

1545 Began operations in grid 28.

1645 Secure operations in grid 28. Transit to conex

1705 Arrive at conex. Down load and clean equipment.

1730 Secure For the day.



23 Apr 2013 29 Use

Camp Butner, NC H1009A

Team: Same. Instruments: Same.

0700 Safety / operations brief.

0715 Check instruments, all good, load equipment.

0740 Transit to grid 28.

0800 Continued operations in grid 28.

0920 Completed grid 28. Transit to grid 101.

1000 Break.

1015 Began operations in grid 101.

1135 Completed grid 101. Transit to grid 96.

1210 Lunch

1240 Began operations in grid 96.

1345 Completed grid 96. Transit to transect RC2-028.

1410 Began analog data collection in transect RC2-028.

1450 Completed transect 28. Transit to transect RC2-027.

1515 Began analog data collection in transect 27.

1630 Completed transect 27. Transit to magazines.

1655 Arrive at magazines turn in MD.

1710 Down load and clean equipment.

1730 Secure for the day.

NFE
Jerry D Eagle

30 USE

24 Apr 2013

Camp Butner, NC H1009A

Team: Same. Instruments: Same.

0700 Safety / operations brief.

0710 Check instruments, all good, load equipmen

0730 Transit to grid 36.

0750 Began operations in grid 36.

0930 Break.

0945 Continde operations in grid 36.

1030 Completed grid 36. Transit to grid 83.

1050. Began operations in grid 83.

1200 Complete grid 83. Transit to truck.

1220 Lunch.

1250 Transit to grid 38.

1315 Began operations in grid 38.

1415 Break.

1425 Continue operations in grid 38.

1440 Complete grid 38. Transit to grid 14.

1550 Complete grid 14. Transit to grid 51.

1625 Unable to locate grid 51. Transit to magazines.

1700 Arrive magazines and turn in MD.

1715 Down load and clean equipment.

1730 Secure for the day.

NFE
Gary D. Eagle

25 Apr 2013 31 Hoe

Camp Butner, NC H1009A

Team: Gary Cagle, Jack Bullock, Dawn Weber, Casie Hood, Cheryl Okino. Instruments: Same.

0700 ~~C.I.~~ 2IC Safety / operations brief.

0715 Check instruments, all good, load equipment.

0735 Transit to grid ~~82~~ 1SG 82. EM61 readings at begining 473.2 at end 470.2.

0800 ~~Begin~~ 1SG Began operations in grid 82.

0905 Located MK2 handgrenade at Flag 16.

0930 Break

0945 Continued operations in grid 82.

1025 Located QC Seed 12T at Flag 31.

1040 Located MK2 handgrenade at Flag 4.

1105 Located MK2 handgrenade at data gap 4.

1200 Located MK2 handgrenade at Flag 20.

1220 Secure operations for demolitions operations of handgrenades.

1240 Arrive at conex. Lunch

1315 Return to grid 82 and continue operations.

1335 Complete grid 82. Transit to grid 51.

1415 Began operations in grid 51.

1530 Break

1540 Continue operations in grid 51.

1630 Complete grid 51. Transit to conex.

1730 Secure for the day.

32 USE

26 Apr 2013

Camp Butner, NC H1009A

Team: Gary Cagle, Jack Bullock, Dawn Weber, Jason Brawner. Instruments: Same.

0700 Safety / operations brief.

0710 Check instruments, all good, load equipment.

0730 Transit to grid 56.

0815 Began operations in grid 56. EM61 readings at begining 449.3 at end 435.9.

0925 Located QC Seed 187 at Flag 13.

0945 Completed grid 56. Transit to grid 50.

1005 Began operations in grid 50. EM61 readings at begining 464.3mv at end 465.7.

1045 Located QC seed 185 at Flag 5.

1120 Complete grid 50. Transit to grid 45.

1150 Began operations in grid 45. EM61 readings at begining 374.6mv at end 370.4mv.

1230 Complete grid 45. Lunch.

1300 Transit to grid 33.

1315 Begin operations in grid 33. EM61 readings at begining 427.3 at end 425.6

1340 Located QC seed 183 at Flag 10.

1440 Completed grid 33. Transit to grid 19.

1510 Began operations in grid 19. EM61 readings at begining 395.3mv.

1540 Located QC seed 123 at Flag 2.

Camp Butner, NC H1009A

1630 Secured operations in grid 19. Transit to magazines.

1655 Arrive at magazines and turn in M.D.

1710 Down load and clean equipment.

1730 Secure For the day

NFE
Jay D. Cagle

34 UXO

29 Apr 2013

Camp Butner, NC H1009A

Team: Gary Cagle, Jack Ballock, Casie Hood, Jason Brawner, Cheryl Okino.

Instruments: Shonstedts; 286014, 266435 whites: 012T0300053, 012T0300040, EM61; 02200 Jano; J3B5

0700 Safety/operations brief.

0710 Perform weekly vehicle inspections. Che instruments, all good. Load equipment.

0735 Transit to grid 64.

0800 Begin operations in grid 64. EM61 readin at begining 495.3 at end 498.3.

0825 Locate seed 180 at flag 8.

0950 Complete grid 64. Transit to grid 5.

1020 Began operations in grid 5. EM61 reading at begining 441.2 at end 453.9.

1040 Located seed 144 at flag 10.

1120 Complete grid 5. Transit to grid 40.

1145 Lunch

1215 continued transit to grid 40.

1235 Began operations in grid 40. EM61 readi at begining 499.4 at end 498.5.

1300 Locate QC seed 165 at flag 5.

1330 Complete grid 40. Transit to grid 84

1400 Began operations in grid 84.

29 Apr 2013 35 QC

Camp Butner, NC H1009A

EM61 readings at begining 452.3 at end 447.6

1405 Located QC seed 191 at Flag 12.

1410 Complete grid 84. Transit to grid 87.

1440 Began operations in grid 87. EM61 readings at begining 492.3 at end 478.3.

1510 Located QC seed 179 at Flag 8.

1520 Complete grid 87. Transit to conex

1545 Arrive at conex down load EM61 and load grid set up equipment.

1555 Transit to RC1-G066.

1615 Set up grid RC1-G066. Transit to RC1-G056

1635 Set up grid RC1-G056.

1645 Transit to magazines.

1700 Arrive at magazines, turn in MD.

1715 Arrive at conex, down load and clean equipment.

1730 Secure for the day.

NFE
Gary D. Cagle

36 USMC

30 Apr 2013

Camp Butner, NC H1009A

0700 Safety and operations brief.

0710 Check instruments, all good. Load equipment.

0730 Transit to grid 74.

0810 Began operations in grid 74.

1055 Completed grid 74. Transit to grid 83 74

1130 Began operations in grid 83.

1200 Lunch

1230 Continue operations in grid 83.

1345 Complete grid 83. Transit to grid 35.

1425 Began operations in grid 35.

1445 Completed set up in grid 35. Transit to grid 92.

1520 Begin operations in grid 92.

1630 Complete grid 92. Transit to magazines

1650 Arrive at magazines and turn in MD.

1705 Arrive at conex. Down load and clean equipment.

1730 Secure for the day.

NFE
Gary D. Cagle

1 May 2013 37 ADE

Camp Butner, NC H1009A

Team: Gary Cagle, Jack Bullock, Dawn Weber, Jason Brawner. Instruments: Same

0700 Safety/operations brief.

0710 Check instruments and load equipment.

0735 Transit to grid 19.

0815 Began operations in grid 19. EM61 readings at end 393.6 mv.

0930 Located M63 Mod 1 37mm Practice projectile with M58 Practice Base Fuze.

0950 Completed grid 19. Transit to grid 77.

1030 Began operations in grid 77. EM61 readings at begining 672.4 at end 685.6.

1040 Located QC seed 148 at flag 2.

1055 Completed grid 77. Transit to grid 61.

1105 Began operations in grid 61.

1200 Complete grid 61. Lunch

1230 Transit to grid 72.

1245 Began operations in grid 72. EM61 readings at begining 356.2mv at end 385.3mv.

1330 Complete grid 72. Transit to grid 104.

1440 Began operations in grid 104. EM61 readings at begining 406.8 at end 458.2.

1445 Locate QC seed 194 at flag 4.

1450 Complete grid 104. Transit to grid 99.

38 SSC

1 May 2013 (cont)

Camp Butner, NC H1009A

1530 Began operations in grid 99.

1630 Completed grid 99. Transit to magazines

1655 Arrive at magazines and turn in MD.

1710 Arrive at conex. Down load and clean equipment.

1730 Secure for the day

NFE
Gary D. Cagle

2 May 2013 39 HDC

Camp Butner, NC H1009A

Team: Gary Cagle, Jack Bullock, Dawn Weber, Jason Brawner, Coty Kaliszewski. Instruments: Same.

0700 Safety/operations brief.

0715 Check instruments, all good. Load Equipment.

0735 Transit to grid 2.

0800 Began operations in grid 2. EM61 readings at begining 628.4 at end 496.5.

0820 Locate QC seed 149 at Flag 5.

1000 Complete grid 2. Break.

1010 Transit to grid 34.

1035 Began operations in grid 34. EM61 readings at begining 463.2 at end 461.6.

1040 A hunter ~~in~~ HDC enters the area. Work stops.

1050 Hunter departs area and work continues.

1055 Locate QC seed 154 at Flag 7.

1100 Complete grid 34. Transit to grid 46.

1130 Began operations in grid 46. EM61 readings. at begining 599.1 at end 511.1.

1140 Locate QC seed 129 at Flag 16.

1230 Complete grid 46. Lunch.

1300 Transit to grid 49.

1325 Began operations in grid 49. EM61 readings at begining 522.9 at end 512.8.

1340 Locate ~~g~~ QC seed 172 at Flag 21.

2 May 2013 (cont.)

Camp Butner, NC H1009A

1410 Complete grid 49. Transit to grid 74.

1440 Began operations in grid 74. EM61 readings at beginning ~~522.9mv~~ 408.6 at end 406.7.

1500 Locate QC seed 122 at flag 11.

1515 Complete grid 74. Transit to grid 103.

1540 Began operations in grid 103. EM61 readings at begining 826.4mv at end 739.4mv.

1555 Locate QC seed 173 at flag 9.

1610 Complete grid 103. Transit to magazine.

1635 Arrive at magazine and turn in MD.

1700 Arrive at conex. Down load equipment and sharpen shovels, machettes and weed wacker blade.

1730 Secure for the day.

NFE
Kay D. Cagle

3 May 2013 41 Use

Camp Butner, NC H1009A

Team: Garg Cagle, Jack Bullock, Dawn Weber, Jason Brawner. Instruments: Same.

0700 Safety/operations brief.

0710 Check instruments, all good. Load equipment.

0730 Transit to grid 77.

0840 Begin operations in grid 77. EM61 readings at begining 412.9 at end 399.9.

0855 Locate QC seed 204 at flag 2.

0930 Complete grid 77. Transit to grid 93.

1000 Break.

1015 Continue transit to grid 93.

1035 Began operations in grid 93. EM61 readings at begining 392.3 at end 390.4.

1055 Located QC seed 206 at flag 3.

1110 Complete grid 93. Transit to grid 34.

1200 Lunch

1230 Continue transit to grid 34.

1250 Began operations in grid 34. EM61 readings at begining 389.3mv at end 386.4.

1320 Locate QC seed 195 at flag 9.

1430 Complete grid 34. Transit to grid 43.

1505 Began operations in grid 43. EM61 readings at begining 379.6

1520 Not getting readings on EM61 at flags.

42 ydc

3 May 2013 (cont.)

1525 Began new set up on x measurements.

1540 Located QC seed with Shonstedt.

1545 Determined that dig sheet completely off.

1605 Transit to conex.

1640 Arrive at conex. Down load equipment. Clean and sharpen shovels, weed whack and machettes. Clean vehicle.

1730 Secure for the day.

NFE
Jay D. Eagle

6 May 2013 43 HDE

Camp Butner, NC H1009A

Team: Gary Cagle, Dawn Weber, Woody Zou, Jason Brawner, Rebecca Powers.

Instruments: 286014, 266435. Whites; 01270300053, 01270300040. EM61; 022005. Juno; J3B5.

0700 Safety / operations brief.

0710 Performed weekly vehicle inspection. Checked instruments, all good. Load equipment.

0740 Transit to RC1-G014.

0820 Begin operations in grid 14. EM61 readings at begining 448.3mv at end 446.4mv.

0910 Located QC seed 223 at flag 28.

1015 Break

1025 Continue operations in grid 14.

1115 Complete grid 14. Transit to grid 7.

1130 Began operations in grid 7. EM61 readings at begining 396.2mv at end 398.6mv.

1155 Located QC seed 188 at flag 13.

1220 Completed grid 7. Transit to truck.

1230 Lunch.

1300 Transit to grid 13.

1310 Began operations in grid 13. EM61 readings at begining 520.6mv.

1320 Located QC seed 213 at flag 3.

1403 SSHO calls lightning hold.

44 USMC

6 May 2013

Camp Butner, NC H1009A

1500 SUXOS directs all personnel to return to conex.

1530 Arrive at conex. Down load and clean equipment.

1600 Secure for the day due to weather.

NFE.
Lacy D. Eagle

7 May 2013 45 HPC

Camp Butner, NC H1009A

Team: Gary Cagle, Dawn Weber, Casie Hood, Jas Brawner Cheryl Okino. Instruments: Same

0700 Safety/operations brief.

0710 Checked instruments and loaded equipment.

0730 Transit to grid 13.

0800 Began operations in grid 13. EM61 reading at end 502.3.

0830 Complete grid 13. Transit to grid 5.

0840 Began operations in grid 5. EM61 readings at begining 582.6 at end 580.3.

0900 Locate QC seed 227 at flag 9.

0930 Complete grid 5. Trans to grid 61.

1015 Began operations in grid 61. EM61 readings at begining 420.3 at end 417.8.

1030 Located QC seed 208 at flag 3.

1100 Completed grid 61.

1110 Lunch

1140 Transit to grid 55.

1200 Began operations in grid 55. EM61 readings at begining 540.1 at ending 553.6.

1235 Locate QC seed 199 at flag 9.

1245 Locate 57mm AP-T M70 projectile, flag 8.

1305 Complete grid 55. Transit to grid 54

1335 Began operations in grid 54.

46 USC

7 May 2013 (cont)

Camp Batner, NC H1009A

1335 (Cont) EM61 readings at begining 582.6 at end 584.3.

1345 Locate QC seed 185 at flag 2.

1400 Complete grid 54. Transit to set up grid in area of reported 37mm projectile.

1430 Began operations in suspected area.

1610 Locate M63 Mod 1 practice projectile without fuze.

1630 Complete operations in area. Transit to magazines.

1700 Arrive magazines and turn in MD.

1715 Down load and clean equipment.

1730 Secure for the day.

NFE Daylight

8 May 2013 47 UXO

Team: Same. Instruments: Same

Camp Butner, NC H1009A

0700 Safety/operations brief.

0710 Checked instruments, all good. Load equipment.

0730 Transit to grid 18.

0820 Began operations in grid 18. EM61 readings at begining 964.2 at 931.8.

1000 Break

1010 Continued operations in grid 18.

1055 Located QC seed 216 at Flag 54.

1200 Lunch

1230 Continued operations in grid 18

1320 Located M70, 57mm AP-T projectile.

1400 Break

1410 ~~1610~~ Continued operations in grid 18.

1630 Completed grid 18. Transit to magazines.

1650 Arrive at magazines and turn in MD

1710 Down load and clean equipment

1730 Secure for the day.

NFE
Mary D Cagle

48 UXO

9 May 2013

Camp Butner, NC H1009A

Team: Gary Cagle, Dawn Weber, Jason Brawner
Coty Kaliszewski, Becca Powers.

Instruments: Same.

0700 Safety/operations brief.

0710 Checked instruments and load equipment.

0730 Transit to grid 47.

0800 Began operations in grid 47 56 UXO EM61 reading at begining 565.3 at end 572.1.

0825 Located QC seed 230 at flag 10.

0910 Completed grid 47. Transit to grid 58.

0930 Began operations in grid 58. EM61 readings at begining 390.5 at end 410.3.

0945 Located QC seed 243 at flag 2.

1010 Complete grid 58. Break

1020 Transit to grid 68.

1030 Began operations in grid 68. EM61 readings at begining 624.5 at end 658.8.

1045 Locate QC seed 212 at flag 8.

1110 Complete grid 68. Transit to grid 48.

1130 Lunch

1200 Began operations in grid 48. EM61 readings at begining 512.4 at end 432.3.

1245 Located QC seed 215 at flag 11.

1410 Completed grid 48. Break

9 May 2013 (cont)

Camp Butner, NC H1009A

1420 Transit to grid 32.

1440 Began operations in grid 32. EM61 readings at begining 505.6 at end 512.8.

1450 Located QC seed 214 at flag 2.

1510 Completed grid 32. Transit to grid 11.

1550 Began operations in grid 11.

1630 Completed grid 11. Transit to magazines

1650 Arrive at magazines and turn in MD.

1710 Down load and clean equipment.

1730 Secure for the day.

NFE
Gary D. Engle

50 QC

10 May 2013

Camp Butner, NC H1009A

Team: Gary Cagle, Dawn Weber, Jason Brawner, Rebecca Powers, Cheryl Okino.

Instraments: Same.

0700 Safety/operations brief.

0710 Check instruments, all good, load equipme

0735 Transit to grid 35.

0820 Began operations in grid 35. EM61 readings at begining 432.8 at end 427.6.

0830 Located QC seed at flag 2

0850 Completed grid 35. Transit to grid 106.

0935 Began operations in grid 106. EM61 readi at begining 562.7.

0950 Secured operations in grid 106 and transi to grid 42.

1020 Began operations in grid 42. EM61 readin at begining 649.3 at end 652.7.

1040 Located QC seed 103 at flag 4.

1200 Complete grid 42. Lunch

1230 Transit to grid 59.

1245 QC Began operations in grid 59. EM61 readings at begining 587.2 at end 573.8.

1306 Located QC seed 98 at flag 12.

1325 Completed grid 59. Transit to grid 45.

1400 Began operations in grid 45.

Camp Butner, NC H1009A

1400 (cont) EM61 readings at begining 461.7 at end 468.2.
1415 Located QC seed 210 at flag 6.
1435 Completed grid 45. Transit to grid 106.
1510 Resumed operations in grid 106.
1620 EM61 malfunctions. Transit to magazines
1655 Arrive at magazines and turn in ~~HDE~~ MD.
1710 Down load and clean equipment.
1730 Secure for the day.

NFE
Jay Hagle

52 Side

13 May 13

Camp Butner, NC H1009A

Team: Gary Cagle, Dawn Weber, Casie Hood, Jason Brawner, Coty Kaliszewski.

Instruments: Shonstedts; 286014, 266435, Whites: 012703000053, 012703000040, EM61; 022005, Juno; J3B5.

0700 Safety/operations brief.

0710 Perform weekly vehicle inspection. Check instruments, all good, and load equipment.

0740 Transit to grid RC1-010.

0830 Began operations in grid 10.

1005 Complete grid 10. Transit to grid 11.

1030 Break

1045 Began operations in grid 11.

1230 Lunch

1300 Continue operations in grid 11.

1330 Complete grid 11. Transit to grid 39.

1350 Began operations in grid 39.

1430 Break.

1445 Continue operations in grid 39.

1500 Complete grid 39. Transit to grid 51.

1520 Began operations in grid 51.

1645 Complete grid 51. Transit to conex.

1710 Down load and clean equipment.

1730 Secure for the day. Gary D. Cagle

14 May 13 53 ESC

Camp Butner, NC H1009A

Team: Same Instruments: Same

0700 Safety/operations brief

0710 Check instruments, all good, load equipment.

0730 Transit to grid RC1-001.

0830 Began operations in grid 1.

0930 Complete grid 1. Break

0945 Transit to grid 8.

1020 Began operations in grid 8.

1115 Complete grid 8. Transit to grid 23.

1145 Began operations in grid 23.

1230 Lunch.

1300 Continued operations in grid 23.

1345 Complete grid 23. Transit to grid 53.

1430 Began operations in grid 53.

1515 Break

1530 Continue operations in grid 53.

1615 Complete grid 53. Transit to magazines.

1645 Arrive at magazines and turn in MD.

1700 Down load and clean equipment.

1730 Secure for the day.

NFE
Gary D. Eagle

SDE
54

15 May 13

Team: Gary Cagle, Dawn Weber, Casie Hood, Jason Brawner, Cheryl Okino, Rebecca Powe
Instruments; Same plus Shonstedt; 262960, White; 012703000033.

0700 Safety/operations brief.
0710 Checked instruments, all good, load equipme
0730 Transit to grid RC2-054
0815 Began operations in grid 54
0930 Complete grid 54. Transit to grid RC1
1015 Began operations in grid 41.
1130 Complete grid 41. Transit to grid RC1-9
1200 Began operations in grid 90.
1230 Lunch.
1300 Continued operations in grid 90.
1325 Complete grid 90. Transit to grid 91.
1355 Began operations in grid 91.
1445 Complete grid 91. Transit to grid 106.
1510 Continue ~~to~~ operations in grid 106.
1530 Located M63 mod 1, 37mm, TP Projectile.
1545 Complete grid 106. Transit to grid 95.
1600 Began operations in grid 95.
1640 Complete grid 95. Transit to conex.
1705 Down load and clean equipment.
1730 Secure for the day.

Gary D. Cagle

16 May 13

Camp Butner, NC H1009A

Team: Garg Cagle, Dawn Weber, Casie Hood, Jason Brawner, Coty Kaliszewski.

Instruments: Shonstedts; 286014, 266435, Whites; 01270300053, 01270300040, EM61; 022005, Juno; J355.

0700 Safety/operations brief.

0710 Check instruments, all good, load equipment.

0735 Transit to grid 12.

0810 Began operations in grid 12. EM61 readings at begining 672.8 at end 563.9.

0855 Located QC seed 283 at flag 16.

0945 Completed grid 12. Transit to grid 37.

0955 Began operations in grid 37.

1010 Located QC seed 285 at flag 4.

1030 Complete grid 37. Transit to grid 56.

1055 Began operations in grid 56. EM61 readings at begining 433.6 at end 485.7.

1115 Located QC seed 282 at flag 2.

1135 Complete grid 56.

1145 Lunch

1215 Transit to grid 66.

1225 Began ~~operat~~ dtc operations in grid 66. EM61 readings at begining 654.6 at end 672.3.

1235 Located QC seed 238 at flag 5.

56 YDC

16 May 13 (cont)

Camp Butner, NC H1009A

1240 Completed grid 66. Transit to grid 71.

1255 Began operations in grid 71. EM61 reading at begining 570.2 at end 553.8.

1305 Located QC seed 233 at flag 3.

1315 Completed grid 71. Transit to grid 89.

1330 Began operations in grid 89. EM61 reading at begining 536.8 at end 551.3.

1345 Located QC seed 281 at flag 4.

1400 Complete grid 89. Transit to grid 98.

1425 Began operations in grid 98.

1435 Located QC seed 286 at flag 3.

1445 Completed grid 98. Transit to grid 80.

1505 Began operations in grid 80. EM61 reading at begining 474.8 at end 493.7.

1515 Located QC seed 175 at flag 3.

1520 Complete grid 80. Transit to conex.

1540 Arrive at conex and pick up dig sheet for grid 76.

1545 Transit to grid 76

1600 Begin relocating grid 76.

1645 Complete relocation and set up of grid 76. Transit to conex.

1705 Down load and Clean equipment.

1730 Secure for the day.

57 HDC

17 May 13

Camp Butner, NC H1009A

Team: Greg Cagle, Dawn Weber, Jason Brawner, Coty Kaliszewski. Instruments: Same

0700 Safety / operations brief.

0710 Check instruments, all good, load equipment.

0735 Transit to grid 99.

0815 Began operations in grid 99. EM61 readings at begining 443.6 at end 457.8.

0825 Located QC seed 287 at flag 5.

0840 Complete grid 99. Transit to grid 49.

0905 Began operations in grid 49. EM61 readings at begining 1162.3 at end 982.7.

0945 Located QC seed 249 at Flag 16.

1010 Completed grid 49. Transit to grid 42.

1030 Began operations in grid 42. EM61 readings at begining 343.6 at end 361.7.

1140 Located QC seed 236 at flag 4.

1150 Completed grid 42.

1200 Lunch

1230 Transit to grid 60

1300 Began operations in grid 60. EM61 readings at begining 537.2 at end 551.8.

1310 Located QC Seed 237 at Flag 2.

1320 Complete grid 60. Transit to grid 62.

1345 Began operations in grid 62.

58 SD

17 May 13 (cont)

Camp Butner, NC H1009A

1345 (cont) EM61 readings at begining 642.3 at end 681

1355 ~~Completed~~ use Located QC seed 220 at Flag

1410 Completed grid 62. Break.

1430 Transit to grid 85.

1520 Begin operations in grid 85. EM61 read
at begining 482.7 at end 503.6.

1630 Complete grid 85. Transit to conex.

1700 Down load and clean equipment.

1730 Secure for the day.

MFE
Gary D. Eagle

20 May 2015

Camp Butner, NC H1009A

Team: Gary Cagle, Dawn Weber, Jason Brawner, Coty Kaliszewski. Instruments: Shonsted ts; 286014, 266435. Whites; 01270300053, 01270300040. EM61; 022005. Juno; J3B5.

0700 Safety / operations brief.

0710 Perfomed weekly vehicle inspection. Checked instruments, all good, loaded equipment.

0740 Transit to RC1-81.

0820 Began operations in grid 81. EM61 readings at begining 593.4 at end 572.8.

0830 Located QC seed 234 at Flag 5.

0850 Complete grid 81. Transit to grid RC1-22.

0925 Began operations in grid 22. EM61 readings at begining 485.5mv at end 515.3mv.

0940 Located QC seed 244 at Flag 3.

1000 Break

1010 Continued operations in grid 22.

1045 Complete grid 22. Transit to RC1-115.

1120 Began operations in grid 115.

1200 Lunch

1250 Continued operations in grid 115.

1325 Complete grid 115. Transit to RC1-96

1415 Began operations in grid 96.

1450 Break.

60 use

20 May 13 (cont)

Camp Butner, NC H1009A

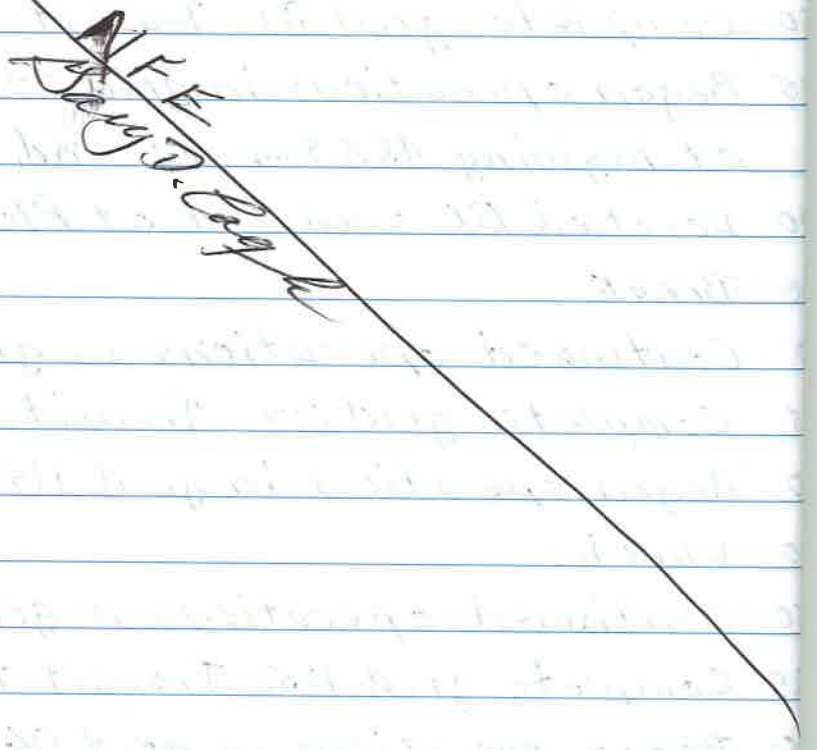
1500 Continue operations in grid 96

1615 Complete grid 96. Transit to magazines

1640 Arrive at magazines and turn in MD.

1705 Down load and clean equipment.

1730 Secure for the day.



61 the
~~60~~ one

21 May 13

Camp Butner, NC H1009A

0700 Safety / operations brief.
0715 Check instruments, all good. Load equipment.
0740 Transit to grid RC2-56.
0830 Began operations in grid 56.
0900 Complete grid 56. Transit to RC2-66.
0950 Began operations in grid 66.
1015 Break.
1030 Continue operations in grid 66.
1100 Complete grid 66. Transit to ARNG-60.
1130 Began operations in grid 60.
1150 Complete grid 60. Lunch
1220 Transit to grid ARNG 25.
1250 Began operations in grid 25
1305 Complete grid 25. Transit to grid ARNG-16.
1345 Began operations in grid 16.
1405 Complete grid 16. Transit to grid ARNG-55
1445 Began operations in grid 55.
1510 Complete grid 55. Transit to grid ARNG-46
1555 Began operations in grid 46.
1610 Complete grid 46. Transit to grid ARNG-48.
1630 Complete grid 48. Transit to conex.
1700 Down load and clean equipment.
1730 Secure for the day.

Sally D. Eagle

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APPENDIX H7

Daily Production Reports from Re-investigation of selected grids, October and November 2014

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Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/28/2014

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Schroepfer, Scott
UXOSO/QCS	Site Management	Keough, Mark
UXO Technician III	Team 1	Thompson, Matt
UXO Technician II	Team 1	Powers, Rebecca
UXO Technician II	Team 1	Cooper, Charles
UXO Technician I	Team 1	Peterson, Ashley
Geophysicist	Team 1 / DGM	Deignan, Tim

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXO Technician III	1	10	10
UXO Technician II	2	10	20
UXO Technician I	1	10	10
Geophysicist	1	10	10
Subcontractors	0	0	0

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Grids Revisit Intrusive (Grids)	0	0	0

Summary of today's work activities:

- Neil Feist (HGL UXO Operations Manager) onsite to observe site operations
- SUXOS and UXOSO/QCS provide initial site training
  - Personnel review Work Plan and sign the APP/SSHP
  - Site operations and procedures
  - Site safety training
- UXOSO/QCS performs daily safety brief and checks in at Range Control
  - UXOSO/QCS issued a Range Control radio
  - ARNG notifies HGL that due to training, Grid ARNG-11 is the only grid accessible due to their EZ
- Team 1 conducted revisit investigation at Grid ARNG-11
  - 31 out of 46 anomalies completed
- Teams secure equipment

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **10/28/2014**

Task Order No: 0009

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	1	1	1
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, Hertz	3	10	30	10/27/14	
EM61 MK2	1	10	10	10/27/14	
Port-a-potties, J&B Septic	1	10	10	10/27/14	
Owned Equipment					
Schonstedt	4	10	40	10/27/14	
Lightning detector	1	10	10	10/27/14	
PDA/GPS	3	10	30	10/27/14	
First aid kit	3	10	30	10/27/14	
Team gear	1	10	10	10/27/14	
Demo kit/RFD	1	10	10	10/27/14	
Computer, laptop	2	10	20	10/27/14	
Printer/copier/scanner/fax	1	10	10	10/27/14	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **10/28/2014**

Task Order No: 0009

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Scott Schroepfer	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/29/2014

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Schroepfer, Scott
UXOSO/QCS	Site Management	Keough, Mark
UXO Technician III	Team 1	Thompson, Matt
UXO Technician II	Team 1	Powers, Rebecca
UXO Technician II	Team 1	Cooper, Charles
UXO Technician I	Team 1	Peterson, Ashley
Geophysicist	Team 1 / DGM	Deignan, Tim

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXO Technician III	1	10	10
UXO Technician II	2	10	20
UXO Technician I	1	10	10
Geophysicist	1	10	10
Subcontractors	0	0	0

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Grids Revisit Intrusive (Grids)	2	2	2

Summary of today's work activities:

- Neil Feist (HGL UXO Operations Manager) onsite to observe site operations
- UXOSO/QCS performs daily safety brief and checks in at Range Control
  - UXOSO/QCS issued a Range Control radio
  - ARNG notifies HGL that ARNG training is still planned for this upcoming weekend.
- Team 1 completed revisit investigation at Grid ARNG-11.
- Team 1 completed revisit investigation at Grid ARNG-44.
- Team 1 revisited all anomalies at Grid ARNG-45 with a Schonstedt. Due to the high concentration of hot rock/soils, Team 1 will revisit Grid ARNG-45 with a Whites all-metals detector to better discriminate hot rocks/soil.
- Team 1 removed vegetation and flagged grid ANRG-53.
- Teams secure equipment.
- Note – UXOQCS and USACE OESSS observing reinvestigation of grids as teams revisit anomalies.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/29/2014

Task Order No: 0009

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	1	2	2
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, Hertz	3	10	30	10/27/14	
EM61 MK2	1	10	10	10/27/14	
Port-a-potties, J&B Septic	1	10	10	10/27/14	
Owned Equipment					
Schonstedt	4	10	40	10/27/14	
Lightning detector	1	10	10	10/27/14	
PDA/GPS	3	10	30	10/27/14	
First aid kit	3	10	30	10/27/14	
Team gear	1	10	10	10/27/14	
Demo kit/RFD	1	10	10	10/27/14	
Computer, laptop	2	10	20	10/27/14	
Printer/copier/scanner/fax	1	10	10	10/27/14	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **10/29/2014**

Task Order No: 0009

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Scott Schroepfer	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/31/2014

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Schroepfer, Scott
UXOSO/QCS	Site Management	Keough, Mark
UXO Technician III	Team 1	Thompson, Matt
UXO Technician II	Team 1	Powers, Rebecca
UXO Technician II	Team 1	Cooper, Charles
UXO Technician I	Team 1	Peterson, Ashley
Geophysicist	Team 1 / DGM	Deignan, Tim

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	8	8
UXOSO/QC	1	8	8
UXO Technician III	1	8	8
UXO Technician II	2	8	16
UXO Technician I	1	8	8
Geophysicist	1	8	8
Subcontractors	0	0	0

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Grids Revisit Intrusive (Grids)	2	6	6

Summary of today's work activities:

- UXOSO/QCS performs daily safety brief and checks in at Range Control
  - UXOSO/QCS issued a Range Control radio
  - ARNG notifies HGL that training will commence at 1200 and that we cannot be inside the EZ. ARNG Training is also scheduled for the weekend.
- Team 1 completed revisit investigation at Grid ARNG-37.
- Team 1 preformed grid set-up and initial DGM at Grid ARNG-40
  - Due to ARNG training EZ, Team 1 relocated outside the EZ prior to 1200.
- Team 1 completed revisit investigation at Grid ARNG-5.
  - Operations conducted in alternate grid ARNG-5 due to location being outside the EZ of ARNG training
  - Teams depart at 1500, no grids available (proposed or alternate) due to ARNG training
- Teams return to Range Control and Hotel to secure equipment, complete timesheets, and complete expense reports.
- Note – UXOQCS and USACE OESSS observing reinvestigation of grids as teams revisit anomalies.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/31/2014

Task Order No: 0009

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	2	5	5
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, Hertz	3	10	30	10/27/14	
EM61 MK2	1	10	10	10/27/14	
Port-a-potties, J&B Septic	1	10	10	10/27/14	
Owned Equipment					
Schonstedt	4	10	40	10/27/14	
Lightning detector	1	10	10	10/27/14	
PDA/GPS	3	10	30	10/27/14	
First aid kit	3	10	30	10/27/14	
Team gear	1	10	10	10/27/14	
Demo kit/RFD	1	10	10	10/27/14	
Computer, laptop	2	10	20	10/27/14	
Printer/copier/scanner/fax	1	10	10	10/27/14	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **10/31/2014**

Task Order No: 0009

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Scott Schroepfer	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/27/2014

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Schroepfer, Scott
UXOSO/QCS	Site Management	Keough, Mark
UXO Technician II	Team 1	Powers, Rebecca
Geophysicist	DGM	Deignan, Tim

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	8	8
UXOSO/QC	1	8	8
UXO Technician III	0	0	0
UXO Technician II	1	8	8
UXO Technician I	0	0	0
Geophysicist	1	8	8
Subcontractors	0	0	0

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Grids Revisit Intrusive (Grids)	0	0	0

Summary of today's work activities:

- SUXOS, UXOSO/QCS, UXO Tech II , and Geophysicist onsite to conduct site preparation
- UXOSO performs daily safety brief and personnel sign the APP/SSHP
- Personnel checked in at Range Control
  - UXOSO/QCS confirms communication procedures and is issued a Range Control radio
  - HGL confirms ARNG training schedule. 10/28 training scheduled from 0800 – 1700. Several alternate grids will be outside training EZ on 10/28. ARNG training scheduled for upcoming weekend 11/1 and 11/2.
  - ARNG will coordinate unlocking of gates as needed.
- Personnel recon 5 EA "proposed" and "alternate" grids selected for revisit.
  - Grid ARNG-36 did not have stakes.
  - Grids ARNG-11, ARNG-45, ARNG-44, and ARNG-5 had stakes at all four corners.
- Personnel recon road access for remaining grids and perform site familiarization.
- HGL personnel inspect and prepare equipment (Team gear, EM61, safety gear)

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **10/27/2014**

Task Order No: 0009

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	0	0	0
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, Hertz	3	10	30	10/27/14	
EM61 MK2	1	10	10	10/27/14	
Port-a-potties, J&B Septic	1	10	10	10/27/14	
Owned Equipment					
Schonstedt	4	10	40	10/27/14	
Lightning detector	1	10	10	10/27/14	
PDA/GPS	3	10	30	10/27/14	
First aid kit	3	10	30	10/27/14	
Team gear	1	10	10	10/27/14	
Demo kit/RFD	1	10	10	10/27/14	
Computer, laptop	2	10	20	10/27/14	
Printer/copier/scanner/fax	1	10	10	10/27/14	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **10/27/2014**

Task Order No: 0009

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Scott Schroepfer	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 10/30/2014

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Schroepfer, Scott
UXOSO/QCS	Site Management	Keough, Mark
UXO Technician III	Team 1	Thompson, Matt
UXO Technician II	Team 1	Powers, Rebecca
UXO Technician II	Team 1	Cooper, Charles
UXO Technician I	Team 1	Peterson, Ashley
Geophysicist	Team 1 / DGM	Deignan, Tim

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	10	10
UXOSO/QC	1	10	10
UXO Technician III	1	10	10
UXO Technician II	2	10	20
UXO Technician I	1	10	10
Geophysicist	1	10	10
Subcontractors	0	0	0

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Grids Revisit Intrusive (Grids)	2	4	4

Summary of today's work activities:

- UXOSO/QCS performs daily safety brief and checks in at Range Control
  - UXOSO/QCS issued a Range Control radio
- Team 1 completed revisit investigation at Grid ARNG-45.
- Team 1 completed revisit investigation at Grid ARNG-53.
- Team 1 conducted revisit investigation at Grid ARNG-37
  - 63 out of 74 anomalies completed
  - Team 1 located a bone in Grid ARNG-37, Anomaly 068 (See photo in Section 12). SUXOS notified HGL PM and OESS notified USACE PM. The bone was located in a high concentration area designated as a "trash pit" or former homestead. Other CD items located at Anomaly 068 included a glass bottle, nails, and latch pin.
- Teams secure equipment.
- Note – UXOQCS and USACE OESSS observing reinvestigation of grids as teams revisit anomalies.

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **10/30/2014**

Task Order No: 0009

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	1	3	3
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, Hertz	3	10	30	10/27/14	
EM61 MK2	1	10	10	10/27/14	
Port-a-potties, J&B Septic	1	10	10	10/27/14	
Owned Equipment					
Schonstedt	4	10	40	10/27/14	
Lightning detector	1	10	10	10/27/14	
PDA/GPS	3	10	30	10/27/14	
First aid kit	3	10	30	10/27/14	
Team gear	1	10	10	10/27/14	
Demo kit/RFD	1	10	10	10/27/14	
Computer, laptop	2	10	20	10/27/14	
Printer/copier/scanner/fax	1	10	10	10/27/14	

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **10/30/2014**

Task Order No: 0009

10. Discrepancies.

N/A

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.



Bone Fragment – Grid ARNG-37, Anomaly 068

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Scott Schroepfer	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/3/2014

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Schroepfer, Scott
UXOSO/QCS	Site Management	Keough, Mark
UXO Technician III	Team 1	Thompson, Matt
UXO Technician II	Team 1	Powers, Rebecca
UXO Technician II	Team 1	Cooper, Charles
UXO Technician I	Team 1	Peterson, Ashley
Geophysicist	Team 1 / DGM	Deignan, Tim

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	9	9
UXOSO/QC	1	9	9
UXO Technician III	1	9	9
UXO Technician II	2	9	18
UXO Technician I	1	9	9
Geophysicist	1	9	9
Subcontractors	0	0	0

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Grids Revisit Intrusive (Grids)	3	3	9

Summary of today's work activities:

- UXOSO/QCS performs daily safety brief and checks in at Range Control
  - UXOSO/QCS issued a Range Control radio
- Team 1 completed revisit investigation at Grid ARNG-40.
- Team 1 completed revisit investigation at Grid ARNG-23.
- Team 1 completed revisit investigation at Grid ARNG-19.
- Note – UXOQCS and USACE OESSS observing reinvestigation of grids as teams revisit anomalies.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail
Grids QC'd	0	0	0	0	0	0

Contract No: W912DY-10-D-0023 **Date:** **11/3/2014**

Task Order No: 0009

Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	1	1	6
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, Hertz	3	10	30	10/27/14	
EM61 MK2	1	10	10	10/27/14	
Port-a-potties, J&B Septic	1	10	10	10/27/14	
Owned Equipment					
Schonstedt	4	10	40	10/27/14	
Lightning detector	1	10	10	10/27/14	
PDA/GPS	3	10	30	10/27/14	
First aid kit	3	10	30	10/27/14	
Team gear	1	10	10	10/27/14	
Demo kit/RFD	1	10	10	10/27/14	
Computer, laptop	2	10	20	10/27/14	
Printer/copier/scanner/fax	1	10	10	10/27/14	

10. Discrepancies.

N/A

Site Daily Production Report

Contract No:	W912DY-10-D-0023	**Date:**	**11/3/2014**
Task Order No:	0009		

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Scott Schroepfer	
Site Manager or SUXOS	Signature

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** 11/4/2014

Task Order No: 0009

1. Location of Work: Former Camp Butner, NC

2. Personnel Summary:

Position/Company if not HGL	Position/Team Assigned	Name
SUXOS	Site Management	Schroepfer, Scott
UXOSO/QCS	Site Management	Keough, Mark
UXO Technician III	Team 1	Thompson, Matt
UXO Technician II	Team 1	Powers, Rebecca
UXO Technician II	Team 1	Cooper, Charles
UXO Technician I	Team 1	Peterson, Ashley
Geophysicist	Team 1 / DGM	Deignan, Tim

3. Manpower Summary

Position	Total Positions Assigned	Hours Per Position	Total Hours
SUXOS	1	4	4
UXOSO/QC	1	4	4
UXO Technician III	1	4	4
UXO Technician II	2	4	8
UXO Technician I	1	4	4
Geophysicist	1	4	4
Subcontractors	0	0	0

4. Work Summary

Army National Guard MRS Production Totals			
Work Activity	**Daily Total**	**Weekly Total**	**MRS Total**
Grids Revisit Intrusive (Grids)	1	4	10

Summary of today's work activities:

- UXOSO/QCS performs daily safety brief and checks in at Range Control
  - UXOSO/QCS issued a Range Control radio
- Team 1 completed revisit investigation at Grid ARNG-26.
- HGL completed revisits at 10 total ARNG grids.
- Team 1 inspects and secures equipment.
- UXOSO/QCS returns Range Control radio and informs Range Control that HGL operations are complete.
- Personnel prepare for demobilization.
- Note – UXOQCS and USACE OESSS observing reinvestigation of grids as teams revisit anomalies.

5. Inspections:

Inspection	Total Daily		Total Weekly		Total Project	
	Pass	Fail	Pass	Fail	Pass	Fail

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **11/4/2014**

Task Order No: 0009

Grids QC'd	0	0	0	0	0	0
Grids QA'd	0	0	0	0	0	0

6. Explosive Usage:

Item	Quantity	Comments

7. MEC Summary:

Item	Grid	Classification			Disposition
		UXO	MPPEH	DMM	

8. Non-MEC Scrap (pounds).

Type	Daily Total (lbs)	Weekly Cumulative Total	Project Total
Munitions Debris (MD)	1	2	7
Other Debris (OD)	-	-	-
Range Related Debris (RRD)	0	0	0

9. Equipment Usage:

Item Description	Quantity	Hours (each)	Total Hours	Date onsite	Date offsite
Rental Equipment					
Truck, pickup, Hertz	3	10	30	10/27/14	10/28/14
EM61 MK2	1	10	10	10/27/14	10/28/14
Port-a-potties, J&B Septic	1	10	10	10/27/14	10/27/14
Owned Equipment					
Schonstedt	4	10	40	10/27/14	
Lightning detector	1	10	10	10/27/14	
PDA/GPS	3	10	30	10/27/14	
First aid kit	3	10	30	10/27/14	
Team gear	1	10	10	10/27/14	
Demo kit/RFD	1	10	10	10/27/14	
Computer, laptop	2	10	20	10/27/14	
Printer/copier/scanner/fax	1	10	10	10/27/14	

10. Discrepancies.

N/A

Site Daily Production Report

Contract No: W912DY-10-D-0023 **Date:** **11/4/2014**

Task Order No: 0009

11. Guidance or Instructions Received From Client.

N/A

12. Attachment Summary.

N/A

13. Continuation/other.

N/A

14. Signature.

CERTIFICATION: I certify the above information is complete and correct and that I, and have determined to the best of my knowledge and belief that noted work activities are in compliance with the plans and specifications, except as may be noted above.

Scott Schroepfer	
Site Manager or SUXOS	Signature

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APPENDIX I

CORRECTIVE ACTION REQUESTS

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TABLE OF CONTENTS

Internal corrective action summary submitted to USAESCH April 12, 2013

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Noncompliance and Corrective Action Report

Report No.:	Site Name and Location:	Grid No. (when required):
001	Camp Butner Remedial Investigation, Creedmoor, NC	RC2, Grid 010

Prepared by:	Position:	Date:
Timothy Deignan	Geophysics Manager	4/8/2013

Nonconformance

Representative Notified:	Date Notified:	Date Corrective Action Plan Due:
HGL PM (K. Vaughn)	4/9/2013	4/9/2013

Description of the Nonconformance:

Interpreted coordinates for a blind seed item exceed the project metric.

Potential Harm:

The dig teams search a 3.3 foot radius around each target location specified on the dig sheet. The target selection protocol is designed to ensure that all sources of significant subsurface metal are encountered and described by the dig teams. If a portion of an anomaly is not investigated, the grid may not be characterized adequately.

Cause:

Grid 10 is characterized by a very high subsurface anomaly density. The blind seed location is directly adjacent to several significant subsurface anomalies and the target selection closest to the actual blind seed location exceeds the metric of 2.4 feet by approximately 1.2 feet. The anomaly pattern near the blind seed item contains a significant data peak from an unknown subsurface source and also has a small "lobe" located adjacent to the data peak where the blind seed is located. The significant data peak was selected for investigation; however, the lobe of the anomaly was not selected.

Corrective Action Plan

Corrective Actions:

The corrective action chosen is a combination of implementation of new procedures and revision/modification of existing procedures: After targets are selected in "cluttered" grids using the existing approved protocol (UX Process-Blakely method), the profile target selector within UX Process will be used to automatically select sum channel data peaks that exceed 11 mV and small symbols will be transcribed onto the map. The data analyst will finalize target selections using information from both the Blakely and profile target selection routines. As a final check, circular symbols with grey fill will be plotted on the interpretation map. The size of the circle will be selected so that it represents the intrusive search diameter. Using this approach, portions of anomalies that might not be investigated by the intrusive teams are more visually apparent to the data analyst and additional target locations will be selected, if warranted. Additionally, the data analyst is in the process of reviewing other “cluttered” grids in ARNG and RC2 MRSs (a total of 17) to ensure no significant anomalies were unselected.

Actions to Prevent Recurrence:

The new/revised procedures were implemented immediately, beginning 4/9/2013.

Estimated Completion	
4/9/2013	

Signature:	Date:
Kimberly Vaughn	4/9/2013
Corrective Action Approval Signature:	**Date:**
Agency Representative Signature:	**Date :**

Corrective Action Closure

Comments:

Approval Signature:	Date:

HGL MEC Form 15.13 (Oct 2010)

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APPENDIX J

PROJECT PHOTOGRAPHS

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TABLE OF CONTENTS

Project Photographs

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11-02-2012 – Site trailer; power connected by Camp Butner facilities personnel.



11-02-2013 – Site trailer; power connected by Camp Butner facilities personnel.



11-05-2012 – Brush team cuts DGM transect 025 and a portion of DGM transect 024.



11-05-2012 – Brush team cuts DGM transect 025 and a portion of DGM transect 024.



11-05-2012 – DGM transect 025 lane following vegetation clearance.



11-05-2012 – DGM transect 024 lane following vegetation clearance.



11-08-2012 – 81mm Illumination Mortar Tail Boom (MD); discovered while marking a path to cut along eastern side of DGM transect 023.



01-14-2013 – Repeater.



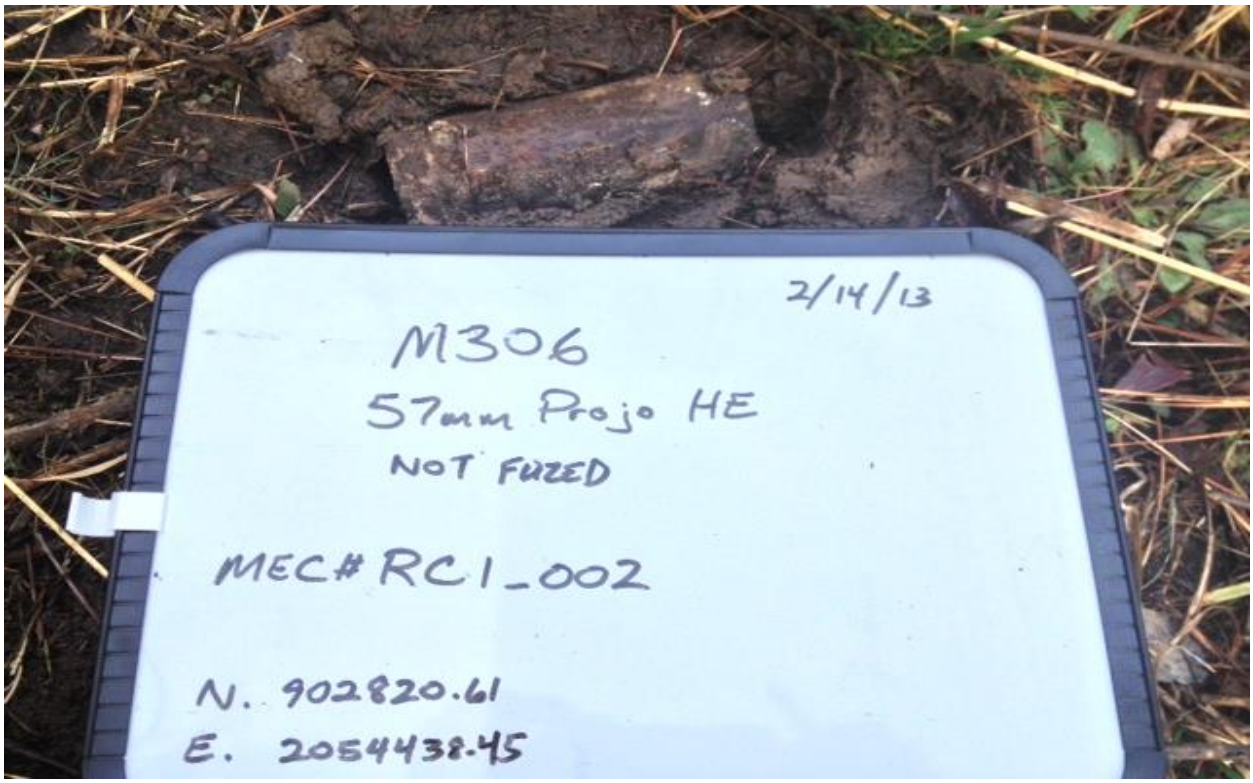
01-14-2013 – Repeater antenna.



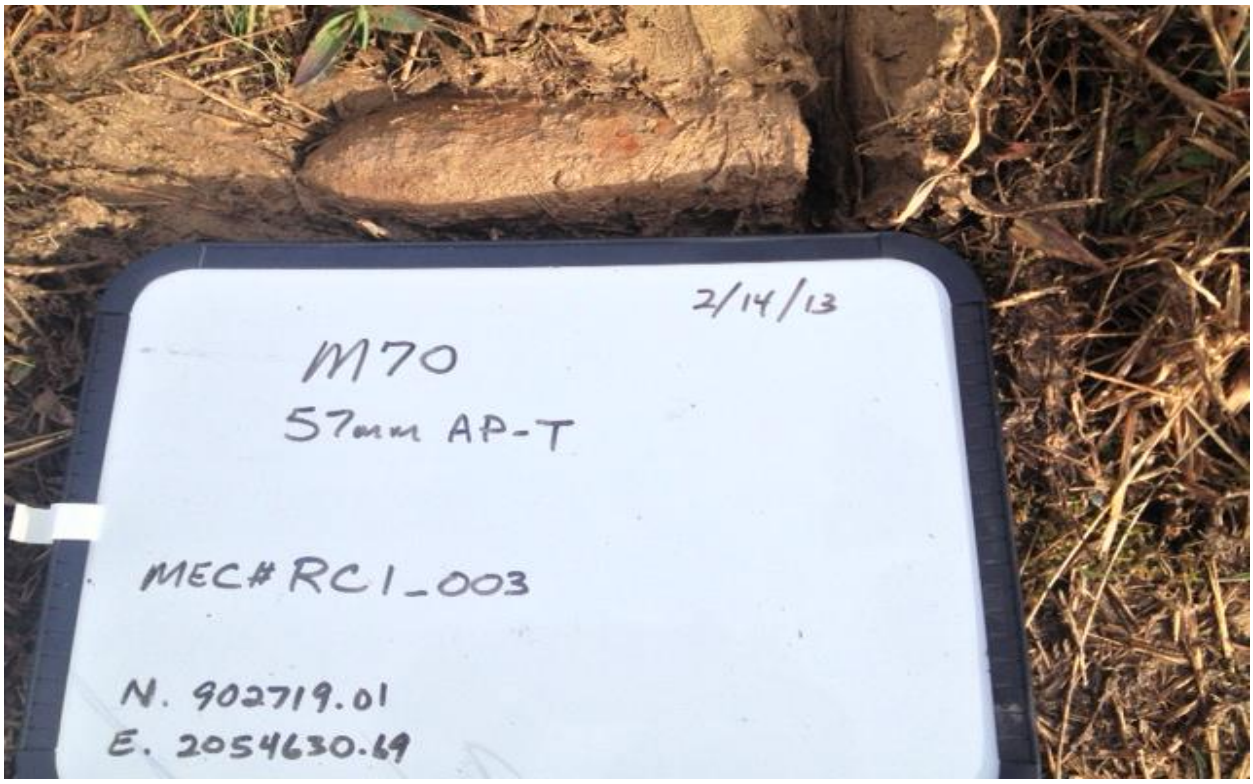
01-24-2013 – 81mm Mortar.



02-13-2013 – RC1-001, M306, 57mm HE Projectile, unfuzed; located by AMEC crew laying on the surface at the Carrington property immediately north of Army National Guard.



02-14-2013 – RC1-002, M306, 57mm HE Projectile, unfuzed; located by SUXOS and UXOSO near the surface at the Poyet property while scouting for a suitable demolition site.



02-14-2013 – RC1-003, M70, 57mm AP-T; located by SUXOS and UXOSO near the surface at the Poyet property while scouting for a suitable demolition site.



02-14-2013 – Demolition activities for RC1-001, RC1-002, RC1-003.



02-14-2013 – Demolition shot holes for RC1-001, RC1-002, and RC1-003.



02-14-2013 – Demolition activities for RC1-001, RC1-002, and RC1-003; demolition shot holes swept by a Schonstedt to ensure all fragmentation was recovered.



02-14-2013 – Demolition activities for RC1-001, RC1-002, and RC1-003; demolition shot holes swept by a Schonstedt to ensure all fragmentation was recovered.



03-15-2013 – 81mm mortar (model unknown) which had functioned leaving behind only the tail boom; discovered by National Guard personnel the previous day.



03-15-2013 – 81mm mortar (model unknown) which had functioned leaving behind only the tail boom; discovered by National Guard personnel the previous day.



03-21-2012 – 60mm HE Mortar, fuzed; found by HGL Team 1 while investigating grid ARNG-011.



03-26-2013 – TBar PD Fuzes.



04-01-2013 – Rifle Grenade Illumination.



04-02-2013 – ARNG-002, M49, 60mm HE Mortar, fuzed; discovered by HGL Team 1 while intrusively investigating grid ARNG-14.



04-02-2013 – Demolition activities for ARNG-002; blown in place.



04-02-2013 – Demolition activities for ARNG-002; blown in place.



04-15-2013 – RC2-001, M107, 155mm HE Projectile; reported by property owner, Mr. Robbins, and located 100 yards south of grid RC2-072 adjacent to transect RC2-DGM300-045.



04-15-2013 – RC2-001, M107, 155mm HE Projectile; reported by property owner, Mr. Robbins, and located 100 yards south of grid RC2-072 adjacent to transect RC2-DGM300-045.



04-17-2013 – M2, 3.25" Anti-Aircraft Target Rocket; identified as an anomaly during QC of grid ARNG-013 by the UXOQCS and OESS, and subsequently revisited by intrusive team and determined to be munitions debris (MD).



04-18-2013 – ARNG-003, M70, 57mm AP-T Projectile; discovered in grid ARNG-023.



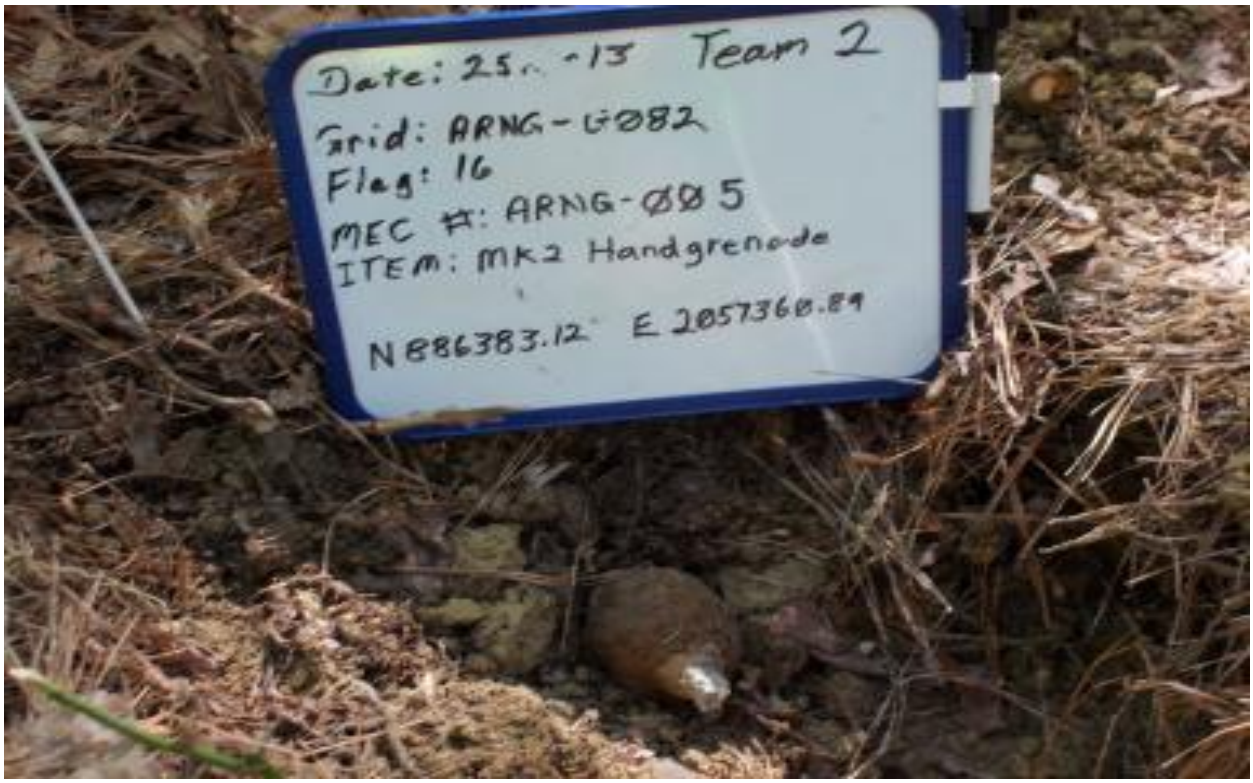
04-18-2013 – ARNG-004, M2, 3.25" Anti-Aircraft Target Rocket; discovered in grid ARNG-013 the previous day.



04-18-2013 – Explosives venting operations for ARNG-003 and ARNG-004 to ensure items were free of energetic material.



04-18-2013 – ARNG-004 following explosives venting operations to ensure item was free of energetic material.



04-25-2013 – ARNG-005, Mk II Hand Grenade; discovered by HGL Team 2 while investigating grid ARNG-082.



04-25-2013 – ARNG-006, Mk II Hand Grenade; discovered by HGL Team 2 while investigating grid ARNG-082.



04-25-2013 – ARNG-007, Mk II Hand Grenade; discovered by HGL Team 2 while investigating grid ARNG-082.



04-25-2013 – ARNG-008, Mk II Hand Grenade; discovered by HGL Team 2 while investigating grid ARNG-082.



05-01-2013 – RC2-002, M63 Mod 1, 37mm TP Projectile; discovered by HGL Team 2 during intrusive investigation operations in grid RC2-019 at Philip Robbins' property.



05-07-2013 – Expended, suspect M63 Mod 1, 37mm TP Projectile, unfuzed; discovered in grid RC2-114.



05-15-2013 – RC2-003, M63 Mod 1, 37mm TP Projectile with M58 Practice Fuze; discovered by HGL Team 2 during intrusive investigation operations in grid RC2-106 adjacent to Uzzle Rd on the Rouse property.



05-16-2013 – RC1-004, M6 2.36" Rocket Warhead; discovered by HGL Team 1 during intrusive operations in grid RC1-086 adjacent to Isham Chambers Rd on the Poyet property.

APPENDIX K

MEC HA WORKBOOKS
AND
MRSPP SCORING SHEETS

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K-2 MRSPP Printed for:
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K-2-3, Air National Guard Hand Grenade Range MRS

These are provided in the electronic version only. Appendix K also includes the following native software documents as electronic only submittals:

The MECHA Automated Workbook Excel Files
and the MRSPP Export files for each MRS.

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K-1
MEC HA PRINTOUTS

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MEC HA Summary Information

		Comments
Site ID:	I04NC000902 Air National Guard Property	
Date:	4/30/2014	

Please identify the single specific area to be assessed in this hazard assessment. From this point forward, all references to "site" or "MRS" refer to the specific area that you have defined.

A. Enter a unique identifier for the site:

Former Camp Butner- ARNG MRS

Provide a list of information sources used for this hazard assessment. As you are completing the worksheets, use the "Select Ref(s)" buttons at the ends of each subsection to select the applicable information sources from the list below.

Ref. No.	Title (include version, publication date)
1	Archives Search Report, Findings, Former Camp Butner, Butner(Rock Island District USACE, September 1993)
2	Engineering Evaluation/Cost Analysis. Former Camp Butner, Butner, North Carolina. (Parsons, July 2004)
3	Archive Search Report Supplement Camp Butner (Rock Island District USACE, November 2004)
4	Remedial Investigation Report, Former Camp Butner (HGL, 2014)
5	
6	
7	
8	
9	
10	
11	
12	

Comments: the

B. Briefly describe the site:

1. Area (include units): 1429.19 acres
2. Past munitions-related use:

Target Area

3. Current land-use activities (list all that occur):

Air National Guard training, hunting

4. Are changes to the future land-use planned? No
5. What is the basis for the site boundaries?

The property is situated in the SW corner of RC1. RC1 MRS contained an artillery impact area, two mortar ranges, and several small arms ranges. The range fan for the artillery impact area was confirmed using historical maps; however the dimensions of the oth.er range fans were established using standard range fans for the individual type of range. The 2014 RI defined the MEC contaminated area.

6. How certain are the site boundaries?

Certain; originally based on historical maps and application of standard range fans. The 2014 RI defined the MEC contaminated area.

Reference(s) for Part B:
Engineering Evaluation/Cost Analysis. Former Camp Butner, Butner, North Carolina. (Parsons, July 2004)
Remedial Investigation Report, Former Camp Butner (HGL, 2014)

C. Historical Clearances

1. Have there been any historical clearances at the site? No, none
2. If a clearance occurred:
   a. What year was the clearance performed?
   b. Provide a description of the clearance activity (e.g., extent, depth, amount of munitions-

Reference(s) for Part C:
Remedial Investigation Report, Former Camp Butner (HGL, 2014)

D. Attach maps of the site below (select 'Insert/Picture' on the menu bar.)

Site ID: **I04NC000902 Air National Guard Property**
Date: **4/30/2014**

Cased Munitions Information

Item No.	Munition Type (e.g., mortar, projectile, etc.)	Munition Size	Munition Size Units	Mark/ Model	Energetic Material Type	Is Munition Fuzed?	Fuzing Type	Fuze Condition	Minimum Depth for Munition (ft)	Location of Munitions	Comments (include rationale for munitions that are "subsurface only")
1	Mortars	81	mm		High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	
2	Mortars	60	mm	M48, M49	High Explosive	Yes	Impact	Armed	0	Surface and Subsurface	2014 RI
3	Rockets	2.36	inches		High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	
4	Rockets	3.25	inches	AA, A2					0	Surface and Subsurface	2014 RI
5	Artillery	155	mm		High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	
6	Artillery	105	mm		High Explosive	UNK	UNK	UNK	0	Surface and Subsurface	
7	Artillery	57	mm	AP-T,M70					0	Surface and Subsurface	2014 RI
8	Artillery	37	mm		High Explosive	UNK	UNK	UNK	0	Surface and Subsurface	
9	Grenades			Rifle	High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	
10	Grenades			Hand, MKII	High Explosive	Yes	Time	Armed	0	Surface and Subsurface	2014 RI
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Reference(s) for table above:

Remedial Investigation Report, Former Camp Butner (HGL, 2014) [redacted]

Bulk Explosive Information

Item No.	Explosive Type	Comments
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Reference(s) for table above:

[redacted]

Site ID: **I04NC000902 Air National Guard Property**
Date: **4/30/2014**

Activities Currently Occurring at the Site

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours per year a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1	ARNG training	200	520	**104,000**	2	200 people, 10 hrs week, 52 weeks a yr
2	hunting	50	80	**4,000**	0	50 people, 40 hrs a week, 2 weeks a yr
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
			Total Potential Contact Time (receptor hrs/yr):	**108,000**		
			Maximum intrusive depth at site (ft):		**2**	

Reference(s) for table above:

[redacted]

Site ID: **I04NC000902 Air National Guard Property**
Date: **4/30/2014**

Planned Remedial or Removal Actions

Response Action No.	Response Action Description	Expected Resulting Minimum MEC Depth (ft)	Expected Resulting Site Accessibility	Will land use activities change if this response action is implemented?	What is the expected scope of cleanup?	Comments
1						
2						
3						
4						
5						
6						

According to the 'Summary Info' worksheet, no future land uses are planned. For those alternatives where you answered 'No' in Column E, the land use activities will be assessed against current land uses.

Reference(s) for table above:

Site ID: **I04NC000902 Air National Guard Property**
Date: **4/30/2014**

This worksheet needs to be completed for each remedial/removal action alternative listed in the 'Remedial-Removal Action' worksheet that will cause a change in land use.

Land Use Activities Planned After Response Alternative #1:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):
Maximum intrusive depth at site (ft):

Reference(s) for table above:

[redacted]

Site ID: I04NC0009 02 Air National Guard Property
Date: 4/30/2014

Energetic Material Type Input Factor Categories

The following table is used to determine scores associated with the energetic materials. Materials are listed in order from most hazardous to least hazardous.

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
High Explosive and Low Explosive Filler in Fragmenting Rounds	100	100	100
White Phosphorus	70	70	70
Pyrotechnic	60	60	60
Propellant	50	50	50
Spotting Charge	40	40	40
Incendiary	30	30	30

The most hazardous type of energetic material listed in the 'Munitions, Bulk Explosive Info' Worksheet falls under the category 'High Explosive and Low Explosive Filler in Fragmenting Rounds'.

	Score
Baseline Conditions:	**100**
Surface Cleanup:	**100**
Subsurface Cleanup:	**100**

Location of Additional Human Receptors Input Factor Categories

1. What is the Explosive Safety Quantity Distance (ESQD) from the Explosive Siting Plan or the Explosive Safety Submission for the MRS? 335 feet
2. Are there currently any features or facilities where people may congregate within the MRS, or within the ESQD arc? No
3. Please describe the facility or feature.

MEC Item(s) used to calculate the ESQD for current use activities

Item #6. Artillery (105mm, High Explosive)

The following table is used to determine scores associated with the location of additional human receptors (current use activities):

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Inside the MRS or inside the ESQD arc	30	30	30
Outside of the ESQD arc	0	0	0

4. Current use activities are 'Outside of the ESQD arc', based on Question 2.'

	Score
Baseline Conditions:	**0**
Surface Cleanup:	**0**
Subsurface Cleanup:	**0**

5. Are there future plans to locate or construct features or facilities where people may congregate within the MRS, or within the ESQD arc? Yes
6. Please describe the facility or feature.

MEC Item(s) used to calculate the ESQD for future use activities

The following table is used to determine scores associated with the location of additional human receptors (future use activities):

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Inside the MRS or inside the ESQD arc	30	30	30

Comments

Outside of the ESQD arc	0	0	0

7. Future use activities are 'Inside the MRS or inside the ESQD arc', based on Question 5.'

	Score
Baseline Conditions:	30
Surface Cleanup:	30
Subsurface Cleanup:	30

Site Accessibility Input Factor Categories

The following table is used to determine scores associated with site accessibility:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Full Accessibility	No barriers to entry, including signage but no fencing	80	80	80
Moderate Accessibility	Some barriers to entry, such as barbed wire fencing or rough terrain	55	55	55
Limited Accessibility	Significant barriers to entry, such as unguarded chain link fence or requirements for special transportation to reach the site	15	15	15
Very Limited Accessibility	A site with guarded chain link fence or terrain that requires special equipment and skills (e.g., rock climbing) to access	5	5	5

Current Use Activities *Score*

Select the category that best describes the site accessibility under the current use scenario:

`Full Accessibility`

Baseline Conditions:	80
Surface Cleanup:	80
Subsurface Cleanup:	80

Future Use Activities

Select the category that best describes the site accessibility under the future use scenario:

`Full Accessibility`

Baseline Conditions:	80
Surface Cleanup:	80
Subsurface Cleanup:	80

Reference(s) for above information:

Response Alternative No. 1:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:
Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 6:
Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Potential Contact Hours Input Factor Categories

The following table is used to determine scores associated with the total potential contact time:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Many Hours	≥1,000,000 receptor-hrs/yr	120	90	30
Some Hours	100,000 to 999,999 receptor hrs/yr	70	50	20
Few Hours	10,000 to 99,999 receptor-hrs/yr	40	20	10
Very Few Hours	<10,000 receptor-hrs/yr	15	10	5

Current Use Activities:

Input factors are only determined for baseline conditions for current use activities. Based on the 'Current and Future Activities' Worksheet, the Total Potential Contact Time is: **108,000** receptor hrs/yr
Based on the table above, this corresponds to a input factor score for baseline conditions of: **70** Score

Future Use Activities:

Input factors are only determined for baseline conditions for future use activities. Based on the 'Current and Future Activities' Worksheet, the Total Potential Contact Time is: **52,000** receptor hrs/yr
Based on the table above, this corresponds to a input factor score of: **40** Score

Response Alternative No. 1:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:
Response Alternative No. 4:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:
Response Alternative No. 5:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: **Score**
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:
Response Alternative No. 6:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: **Score**
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Amount of MEC Input Factor Categories

The following table is used to determine scores associated with the Amount of MEC:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Target Area	Areas at which munitions fire was directed	180	120	30
OB/OD Area	Sites where munitions were disposed of by open burn or open detonation methods. This category refers to the core activity area of an OB/OD area. See the "Safety Buffer Areas" category for safety fans and kick-outs.	180	110	30
Function Test Range	Areas where the serviceability of stored munitions or weapons systems are tested. Testing may include components, partial functioning or complete functioning of stockpile or developmental items.	165	90	25
Burial Pit	The location of a burial of large quantities of MEC items.	140	140	10
Maneuver Areas	Areas used for conducting military exercises in a simulated conflict area or war zone	115	15	5
Firing Points	The location from which a projectile, grenade, ground signal, rocket, guided missile, or other device is to be ignited, propelled, or released.	75	10	5
Safety Buffer Areas	Areas outside of target areas, test ranges, or OB/OD areas that were designed to act as a safety zone to contain munitions that do not hit targets or to contain kick-outs from OB/OD areas.	30	10	5
Storage	Any facility used for the storage of military munitions, such as earth-covered magazines, above-ground magazines, and open-air storage areas.	25	10	5
Explosive-Related Industrial Facility	Former munitions manufacturing or demilitarization sites and TNT production plants	20	10	5

Select the category that best describes the ***most hazardous*** amount of MEC: ***Score***

`Target Area`

Baseline Conditions: **180**
Surface Cleanup: **120**
Subsurface Cleanup: **30**

Minimum MEC Depth Relative to the Maximum Intrusive Depth Input Factor Categories

Current Use Activities

The shallowest minimum MEC depth, based on the 'Cased Munitions Information' Worksheet: **0** ft
The deepest intrusive depth: **2** ft

The table below is used to determine scores associated with the minimum MEC depth relative to the maximum intrusive depth:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.	240	150	95

Baseline Condition: MEC located surface and subsurface, After Cleanup: Intrusive depth does not overlap with subsurface MEC.	240	50	25	
Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth overlaps with minimum MEC depth.	150	N/A	95	
Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.	50	N/A	25	

Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth will overlap after cleanup. MECs are located at both the surface and subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.' For 'Current Use Activities', only Baseline Conditions are considered. **240** ***Score***

Future Use Activities

Deepest intrusive depth: **2** ft

Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth overlaps. MECs are located at both the surface and subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.'. For 'Future Use Activities', only Baseline Conditions are considered. **240** ***Score***

Response Alternative No. 1:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 6:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Migration Potential Input Factor Categories

Is there any physical or historical evidence that indicates it is possible for natural physical forces in the area (e.g., frost heave, erosion) to expose subsurface MEC items, or move surface or subsurface MEC items? No

If "yes", describe the nature of natural forces. Indicate key areas of potential migration (e.g., overland water flow) on a map as appropriate (attach a map to the bottom of this sheet, or as a separate worksheet).

The following table is used to determine scores associated with the migration potential:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Possible	30	30	10
Unlikely	10	10	10

Based on the question above, migration potential is 'Unlikely.' ***Score***

Baseline Conditions: **10**
Surface Cleanup: **10**
Subsurface Cleanup: **10**

Reference(s) for above information:

Draft Remedial Investigation Report, Former Camp Butner (HGL February 2014)

MEC Classification Input Factor Categories

Cased munitions information has been inputed into the 'Munitions, Bulk Explosive Info' Worksheet; therefore, bulk explosives do not comprise all MECs for this MRS.

The 'Amount of MEC' category is 'Target Area'. It cannot be automatically assumed that the MEC items from this category are DMM. Therefore, the conservative assumption is that the MEC items in this MRS are UXO.

Has a technical assessment shown that MEC in the OB/OD Area is DMM?

Are any of the munitions listed in the 'Munitions, Bulk Explosive Info' Worksheet: Yes

- Submunitions
- Rifle-propelled 40mm projectiles (often called 40mm grenades)
- Munitions with white phosphorus filler
- High explosive anti-tank (HEAT) rounds
- Hand grenades
- Fuzes
- Mortars

At least one item listed in the 'Munitions, Bulk Explosive Info' Worksheet was identified as 'fuzed'.

The following table is used to determine scores associated with MEC classification categories:

UXO Special Case	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
UXO Special Case	180	180	180
UXO	110	110	110
Fuzed DMM Special Case	105	105	105
Fuzed DMM	55	55	55
Unfuzed DMM	45	45	45
Bulk Explosives	45	45	45

Based on your answers above, the MEC classification is 'UXO Special Case'.

	Score
Baseline Conditions:	**180**
Surface Cleanup:	**180**
Subsurface Cleanup:	**180**

MEC Size Input Factor Categories

The following table is used to determine scores associated with MEC Size:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Small	Any munitions (from the 'Munitions, Bulk Explosive Info' Worksheet) weigh less than 90 lbs; small enough for a receptor to be able to move and initiate a detonation	40	40	40
Large	All munitions weigh more than 90 lbs; too large to move without equipment	0	0	0

Based on the definitions above and the types of munitions at the site (see 'Munitions, Bulk Explosive Info' Worksheet), the MEC Size Input Factor is: Small

	Score
Baseline Conditions:	**40**
Surface Cleanup:	**40**
Subsurface Cleanup:	**40**

MEC HA Hazard Level Determination		
Site ID: I04NC000902 Air National Guard Property Date: 4/30/2014	Hazard Level Category	Score
a. Current Use Activities	1	900
b. Future Use Activities	1	900
c. Response Alternative 1:		
d. Response Alternative 2:		
e. Response Alternative 3:		
f. Response Alternative 4:		
g. Response Alternative 5:		
h. Response Alternative 6:		
Characteristics of the MRS		
Is critical infrastructure located within the MRS or within the ESQD arc?	Yes	
Are cultural resources located within the MRS or within the ESQD arc?	No	
Are significant ecological resources located within the MRS or within the ESQD arc?	No	

Scoring Summary

Site ID:	I04NC000902 Air National Guard	a. Scoring Summary for Current Use Activities	
Date:	4/30/2014	Response Action Cleanup:	No Response Action
Input Factor		**Input Factor Category**	**Score**
I. Energetic Material Type		High Explosive and Low Explosive Filler in Fragmenting Rounds	100
II. Location of Additional Human Receptors		Outside of the ESQD arc	0
III. Site Accessibility		Full Accessibility	80
IV. Potential Contact Hours		100,000 to 999,999 receptor hrs/yr	70
V. Amount of MEC		Target Area	180
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth		Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.	240
VII. Migration Potential		Unlikely	10
VIII. MEC Classification		UXO Special Case	180
IX. MEC Size		Small	40
		Total Score	**900**
		Hazard Level Category	**1**

MEC HA Summary Information

Comments

Site ID: I04NC000902 Range Complex 1
Date: 3/17/2014

Please identify the single specific area to be assessed in this hazard assessment. From this point forward, all references to "site" or "MRS" refer to the specific area that you have defined.

A. Enter a unique identifier for the site:

Former Camp Butner- RC1 MRS

Provide a list of information sources used for this hazard assessment. As you are completing the worksheets, use the "Select Ref(s)" buttons at the ends of each subsection to select the applicable information sources from the list below.

Ref. No.	Title (include version, publication date)
1	Final Time Critical Removal Action Report, Lakeview Subdivision, Former Camp Butner, Butner, North Carolina (parsons, August 2003)
2	Engineering Evaluation/Cost Analysis. Former Camp Butner, Butner, North Carolina. (Parsons, July 2004)
3	Archive Search Report Supplement Camp Butner (Rock Island District USACE, November 2004)
4	Final Annual Report 2009 Removal Actions at Former Camp Butner, North Carolina. (USA Environmental May 2010)
5	Final Annual Report 2010 Removal Actions at Former Camp Butner, North Carolina. (USA Environmental March 2011)
6	Remedial Investigation Report, Former Camp Butner (HGL, 2014)
7	
8	
9	
10	
11	
12	

B. Briefly describe the site:

1. Area (include units): 3865.33 acres
2. Past munitions-related use:

Target Area

3. Current land-use activities (list all that occur):

residential, recreational

4. Are changes to the future land-use planned? No
5. What is the basis for the site boundaries?

The RC1 MRS contained an artillery impact area, two mortar ranges, and several small arms ranges. The range fan for the artillery impact area was confirmed using historical maps; however the dimensions of the other range fans were established using standard range fans for the individual type of range. The 2014 RI defined the MEC contaminated area.

6. How certain are the site boundaries?

Certain; based on historical maps and application of standard range fans. The 2014 RI defined the MEC contaminated area.

Reference(s) for Part B:
Engineering Evaluation/Cost Analysis. Former Camp Butner, Butner, North Carolina. (Parsons, July 2004)
Remedial Investigation Report, Former Camp Butner (HGL, 2014)

C. Historical Clearances

1. Have there been any historical clearances at the site? Yes, subsurface clearance
2. If a clearance occurred:
   a. What year was the clearance performed?
   b. Provide a description of the clearance activity (e.g., extent, depth, amount of munitions-related items removed, types and sizes of removed items, and whether metal detectors were used):

An EE/CA was conducted that evaluated 77 acres investigating approximately 330 grids (0.25-acre each grid). Grids were distributed throughout suspected former munitions use areas within RC1 and RC2. A TCRA was conducted at the 26-acre Lakeview Subdivision (within Range Complex 1) in tandem with the 2001 EE/CA investigation to remove the immediate and imminent danger to public safety posed by the presence of UXO. The TCRA was conducted between November 2002 and March 2003 and included land survey, brush clearance, intrusive removal action, and post-removal digital geophysical mapping (DGM) (Parsons, 2003). The TCRA included clearing of all metallic items comparable in mass or larger than a 37mm projectile in the top 6 inches of soil. Portions of the Lakeview Subdivision that were previously only cleared to a depth of 6-inches were cleared to depth of detection. In addition, RA activities were completed at more than 250 parcels (average parcel was approximately 1.75 acres). Land parcel grids investigated were distributed throughout RC1 and RC2.

Reference(s) for Part C:

[redacted]

Final Time Critical Removal Action Report, Lakeview Subdivision, Former Camp Butner, Butner, North Carolina (parsons, August 2003)

Engineering Evaluation/Cost Analysis. Former Camp Butner, Butner, North Carolina. (Parsons, July 2004)

Final Annual Report 2009 Removal Actions at Former Camp Butner, North Carolina. (USA Environmental May 2010)

Final Annual Report 2010 Removal Actions at Former Camp Butner, North Carolina. (USA Environmental March 2011)

D. Attach maps of the site below (select 'Insert/Picture' on the menu bar.)

Site ID: **I04NC000902 Range Complex 1**
Date: **3/17/2014**

Cased Munitions Information

Item No.	Munition Type (e.g., mortar, projectile, etc.)	Munition Size	Munition Size Units	Mark/ Model	Energetic Material Type	Is Munition Fuzed?	Fuzing Type	Fuze Condition	Minimum Depth for Munition (ft)	Location of Munitions	Comments (include rationale for munitions that are "subsurface only")
1	Mortars	81	mm		High Explosive	UNK	Impact	UNK		Surface and Subsurface	
2	Mortars	60	mm		High Explosive	UNK	Impact	UNK		Surface and Subsurface	
3	Rockets	2.36	inches		High Explosive	UNK	Impact	UNK		Surface and Subsurface	
4	Artillery	240	mm		High Explosive	UNK	Impact	UNK		Surface and Subsurface	
5	Artillery	155	mm		High Explosive	UNK	Impact	UNK		Surface and Subsurface	
6	Artillery	105	mm		High Explosive	UNK	Impact	UNK		Surface and Subsurface	
7	Artillery	57	mm		High Explosive	No				Surface and Subsurface	2014 RI
8	Artillery	57	mm	AP-T	High Explosive	No				Surface and Subsurface	2014 RI
9	Artillery	40	mm		High Explosive	UNK	UNK	UNK		Surface and Subsurface	
10	Artillery	37	mm		High Explosive	UNK	Impact	UNK		Surface and Subsurface	
11	Grenades			Rifle	High Explosive	UNK	Impact	UNK		Surface and Subsurface	
12											
13											
14											
15											
16											
17											
18											
19											
20											

Reference(s) for table above:

Remedial Investigation Report, Former Camp Butner (HGL, 2014)

Bulk Explosive Information

Item No.	Explosive Type	Comments
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Reference(s) for table above:

Site ID: **I04NC000902 Range Complex 1**
Date: **3/17/2014**

Activities Currently Occurring at the Site

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours per year a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1	residential	1,400	5,840	**8,176,000**	2	350 parcels x 4 people each, 16 hours per day, 365 day per year
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
	Total Potential Contact Time (receptor hrs/yr):			**8,176,000**		
	Maximum intrusive depth at site (ft):				**2**	

Reference(s) for table above:

[redacted]

Site ID: **I04NC000902 Range Complex 1**
Date: **3/17/2014**

Planned Remedial or Removal Actions

Response Action No.	Response Action Description	Expected Resulting Minimum MEC Depth (ft)	Expected Resulting Site Accessibility	Will land use activities change if this response action is implemented?	What is the expected scope of cleanup?	Comments
1						
2						
3						
4						
5						
6						

According to the 'Summary Info' worksheet, no future land uses are planned. For those alternatives where you answered 'No' in Column E, the land use activities will be assessed against current land uses.

Reference(s) for table above:

Site ID: **I04NC000902 Range Complex 1**
Date: **3/17/2014**

This worksheet needs to be completed for each remedial/removal action alternative listed in the 'Remedial-Removal Action' worksheet that will cause a change in land use.

Land Use Activities Planned After Response Alternative #1:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):
Maximum intrusive depth at site (ft):

Reference(s) for table above:

[redacted]

I04NC0009
02 Range
Site ID: Complex 1
Date: 3/17/2014

Energetic Material Type Input Factor Categories

The following table is used to determine scores associated with the energetic materials. Materials are listed in order from most hazardous to least hazardous.

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
High Explosive and Low Explosive Filler in Fragmenting Rounds	100	100	100
White Phosphorus	70	70	70
Pyrotechnic	60	60	60
Propellant	50	50	50
Spotting Charge	40	40	40
Incendiary	30	30	30

The most hazardous type of energetic material listed in the 'Munitions, Bulk Explosive Info' Worksheet falls under the category 'High Explosive and Low Explosive Filler in Fragmenting Rounds'.

	Score
Baseline Conditions:	**100**
Surface Cleanup:	**100**
Subsurface Cleanup:	**100**

Location of Additional Human Receptors Input Factor Categories

1. What is the Explosive Safety Quantity Distance (ESQD) from the Explosive Siting Plan or the Explosive Safety Submission for the MRS? 200 feet
2. Are there currently any features or facilities where people may congregate within the MRS, or within the ESQD arc? Yes
3. Please describe the facility or feature.

residences

MEC Item(s) used to calculate the ESQD for current use activities

[redacted]

The following table is used to determine scores associated with the location of additional human receptors (current use activities):

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Inside the MRS or inside the ESQD arc	30	30	30
Outside of the ESQD arc	0	0	0

4. Current use activities are 'Inside the MRS or inside the ESQD arc', based on Question 2.'

	Score
Baseline Conditions:	**30**
Surface Cleanup:	**30**
Subsurface Cleanup:	**30**

5. Are there future plans to locate or construct features or facilities where people may congregate within the MRS, or within the ESQD arc? Yes
6. Please describe the facility or feature.

MEC Item(s) used to calculate the ESQD for future use activities

[redacted]

The following table is used to determine scores associated with the location of additional human receptors (future use activities):

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Inside the MRS or inside the ESQD arc	30	30	30
Outside of the ESQD arc	0	0	0

7. Future use activities are 'Inside the MRS or inside the ESQD arc', based on Question 5.' *Score*

Baseline Conditions:	**30**
Surface Cleanup:	**30**
Subsurface Cleanup:	**30**

Comments

Site Accessibility Input Factor Categories

The following table is used to determine scores associated with site accessibility:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Full Accessibility	No barriers to entry, including signage but no fencing	80	80	80
Moderate Accessibility	Some barriers to entry, such as barbed wire fencing or rough terrain	55	55	55
Limited Accessibility	Significant barriers to entry, such as unguarded chain link fence or requirements for special transportation to reach the site	15	15	15
Very Limited Accessibility	A site with guarded chain link fence or terrain that requires special equipment and skills (e.g., rock climbing) to access	5	5	5

Current Use Activities ***Score***

Select the category that best describes the site accessibility under the current use scenario:

Full Accessibility

Baseline Conditions: **80**
Surface Cleanup: **80**
Subsurface Cleanup: **80**

Future Use Activities

Select the category that best describes the site accessibility under the future use scenario:

Full Accessibility

Baseline Conditions: 80
Surface Cleanup: 80
Subsurface Cleanup: 80

Reference(s) for above information:

Response Alternative No. 1:
Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:
Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:
Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:
Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:
Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 6:
Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Potential Contact Hours Input Factor Categories

The following table is used to determine scores associated with the total potential contact time:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Many Hours	≥1,000,000 receptor-hrs/yr	120	90	30
Some Hours	100,000 to 999,999 receptor hrs/yr	70	50	20
Few Hours	10,000 to 99,999 receptor-hrs/yr	40	20	10
Very Few Hours	<10,000 receptor-hrs/yr	15	10	5

Current Use Activities:

Input factors are only determined for baseline conditions for current use activities. Based on the 'Current and Future Activities' Worksheet, the Total Potential Contact Time is: **8,176,000** receptor hrs/yr
Based on the table above, this corresponds to a input factor score for baseline conditions of: **120** Score

Future Use Activities:

Input factors are only determined for baseline conditions for future use activities. Based on the 'Current and Future Activities' Worksheet, the Total Potential Contact Time is: **8,176,000** receptor hrs/yr
Based on the table above, this corresponds to a input factor score of: **120** Score

Response Alternative No. 1:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: **Score**
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 6:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: **Score**
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Amount of MEC Input Factor Categories

The following table is used to determine scores associated with the Amount of MEC:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Target Area	Areas at which munitions fire was directed	180	120	30
OB/OD Area	Sites where munitions were disposed of by open burn or open detonation methods. This category refers to the core activity area of an OB/OD area. See the "Safety Buffer Areas" category for safety fans and kick-outs.	180	110	30
Function Test Range	Areas where the serviceability of stored munitions or weapons systems are tested. Testing may include components, partial functioning or complete functioning of stockpile or developmental items.	165	90	25
Burial Pit	The location of a burial of large quantities of MEC items.	140	140	10
Maneuver Areas	Areas used for conducting military exercises in a simulated conflict area or war zone	115	15	5
Firing Points	The location from which a projectile, grenade, ground signal, rocket, guided missile, or other device is to be ignited, propelled, or released.	75	10	5
Safety Buffer Areas	Areas outside of target areas, test ranges, or OB/OD areas that were designed to act as a safety zone to contain munitions that do not hit targets or to contain kick-outs from OB/OD areas.	30	10	5
Storage	Any facility used for the storage of military munitions, such as earth-covered magazines, above-ground magazines, and open-air storage areas.	25	10	5
Explosive-Related Industrial Facility	Former munitions manufacturing or demilitarization sites and TNT production plants	20	10	5

Select the category that best describes the ***most hazardous*** amount of MEC: ***Score***

`Target Area`

Baseline Conditions: **180**
Surface Cleanup: **120**
Subsurface Cleanup: **30**

Minimum MEC Depth Relative to the Maximum Intrusive Depth Input Factor Categories

Current Use Activities

The shallowest minimum MEC depth, based on the 'Cased Munitions Information' Worksheet: **0** ft
The deepest intrusive depth: **2** ft

The table below is used to determine scores associated with the minimum MEC depth relative to the maximum intrusive depth:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.	240	150	95
Baseline Condition: MEC located surface and subsurface, After Cleanup: Intrusive depth does not overlap with subsurface MEC.	240	50	25
Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth overlaps with minimum MEC depth.	150	N/A	95
Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.	50	N/A	25

Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth will overlap after cleanup. MECs are located at both the surface and subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.' For 'Current Use Activities', only Baseline Conditions are considered.

240 ***Score***

Future Use Activities

Deepest intrusive depth: **2** ft

Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth overlaps. MECs are located at both the surface and subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.'. For 'Future Use Activities', only Baseline Conditions are considered.

240 ***Score***

Response Alternative No. 1:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 6:
Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft
Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

	Score
Baseline Conditions:	
Surface Cleanup:	
Subsurface Cleanup:	

Migration Potential Input Factor Categories

Is there any physical or historical evidence that indicates it is possible for natural physical forces in the area (e.g., frost heave, erosion) to expose subsurface MEC items, or move surface or subsurface MEC items? No

If "yes", describe the nature of natural forces. Indicate key areas of potential migration (e.g., overland water flow) on a map as appropriate (attach a map to the bottom of this sheet, or as a separate worksheet).

The following table is used to determine scores associated with the migration potential:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Possible	30	30	10
Unlikely	10	10	10

Based on the question above, migration potential is 'Unlikely.'

	Score
Baseline Conditions:	**10**
Surface Cleanup:	**10**
Subsurface Cleanup:	**10**

Reference(s) for above information:

Draft Remedial Investigation Report, Former Camp Butner (HGL February 2014)

MEC Classification Input Factor Categories

Cased munitions information has been inputed into the 'Munitions, Bulk Explosive Info' Worksheet; therefore, bulk explosives do not comprise all MECs for this MRS.

The 'Amount of MEC' category is 'Target Area'. It cannot be automatically assumed that the MEC items from this category are DMM. Therefore, the conservative assumption is that the MEC items in this MRS are UXO.

Has a technical assessment shown that MEC in the OB/OD Area is DMM?
Are any of the munitions listed in the 'Munitions, Bulk Explosive Info' Worksheet: Yes

- Submunitions
- Rifle-propelled 40mm projectiles (often called 40mm grenades)
- Munitions with white phosphorus filler
- High explosive anti-tank (HEAT) rounds
- Hand grenades
- Fuzes
- Mortars

None of the items listed in the 'Munitions, Bulk Explosive Info' Worksheet were identified as 'fuzed'.

The following table is used to determine scores associated with MEC classification categories:

UXO Special Case	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
UXO Special Case	180	180	180
UXO	110	110	110
Fuzed DMM Special Case	105	105	105
Fuzed DMM	55	55	55
Unfuzed DMM	45	45	45
Bulk Explosives	45	45	45

Based on your answers above, the MEC classification is 'UXO Special Case'.

	Score
Baseline Conditions:	**180**
Surface Cleanup:	**180**
Subsurface Cleanup:	**180**

MEC Size Input Factor Categories

The following table is used to determine scores associated with MEC Size:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Small	Any munitions (from the 'Munitions, Bulk Explosive Info' Worksheet) weigh less than 90 lbs; small enough for a receptor to be able to move and initiate a detonation	40	40	40

	All munitions weigh more than 90 lbs; too large to move without				
Large	equipment	0	0	0	

Based on the definitions above and the types of munitions at the site (see 'Munitions, Bulk Explosive Info' Worksheet), the MEC Size Input Factor is: Small

	Score
Baseline Conditions:	**40**
Surface Cleanup:	**40**
Subsurface Cleanup:	**40**

Scoring Summary

Site ID:	I04NC000902 Range Complex 1	a. Scoring Summary for Current Use Activities	
Date:	3/17/2014	Response Action Cleanup:	No Response Action
Input Factor		**Input Factor Category**	**Score**
I. Energetic Material Type		High Explosive and Low Explosive Filler in Fragmenting Rounds	100
II. Location of Additional Human Receptors		Inside the MRS or inside the ESQD arc	30
III. Site Accessibility		Full Accessibility	80
IV. Potential Contact Hours		≥1,000,000 receptor-hrs/yr	120
V. Amount of MEC		Target Area	180
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth		Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.	240
VII. Migration Potential		Unlikely	10
VIII. MEC Classification		UXO Special Case	180
IX. MEC Size		Small	40
		Total Score	**980**
		Hazard Level Category	**1**

MEC HA Hazard Level Determination		
Site ID: I04NC000902 Range Complex 1 Date: 3/17/2014	Hazard Level Category	Score
a. Current Use Activities	1	980
b. Future Use Activities	1	980
c. Response Alternative 1:		
d. Response Alternative 2:		
e. Response Alternative 3:		
f. Response Alternative 4:		
g. Response Alternative 5:		
h. Response Alternative 6:		

Characteristics of the MRS	
Is critical infrastructure located within the MRS or within the ESQD arc?	Yes
Are cultural resources located within the MRS or within the ESQD arc?	No
Are significant ecological resources located within the MRS or within the ESQD arc?	No

MEC HA Workbook v1.02

December-07

Overview

This workbook is a tool for project teams to assess explosive hazards to human receptors at munitions response sites (MRSs) following the Munitions and Explosives of Concern Hazard Assessment (MEC HA) methodology. The MEC HA allows a project team to evaluate potential explosive hazard associated with a site, given current site conditions, under various cleanup, land use activities, and land use control alternatives. A complete description of the methodology can be found in the MEC HA Guidance (Public Review Draft, November 2006). Please reference this guidance when completing the worksheets.

Instructions

1. Open this file. Enable macros if prompted to do so. This spreadsheet will not work if your security setting is set to 'high' or 'very high'. To change your security level, go to the menu bar and select Tools/Macro/Security. Then close and reopen this spreadsheet.
2. This MS Excel workbook contains 9 worksheets, designed to be used in order. After the '***Instructions***' sheet, the first 5 sheets ask for information about the following topics:

Summary Info - General information regarding the site.
Munitions/Explosive Info - MECs and bulk explosives present at the site.
Current and Future Activities - Current land use activites as well as planned future activities, if any.
Remedial-Removal Action - General information regarding remediation/removal alternatives being considered for the site.
Post-Response Land Use - Land use activities associated with the alternatives listed in the 'Remedial-Removal Action' sheet.

The remaining 3 sheets calculate and summarize the scores. The ***Input Factors*** sheet performs the Input Factor Score calculations, which are summarized in the ***Scoring Summaries*** sheet. The ***Hazard Level*** sheet presents the Hazard Level Category for current use activities, future use activities, and each response alternative based on the respective scores.

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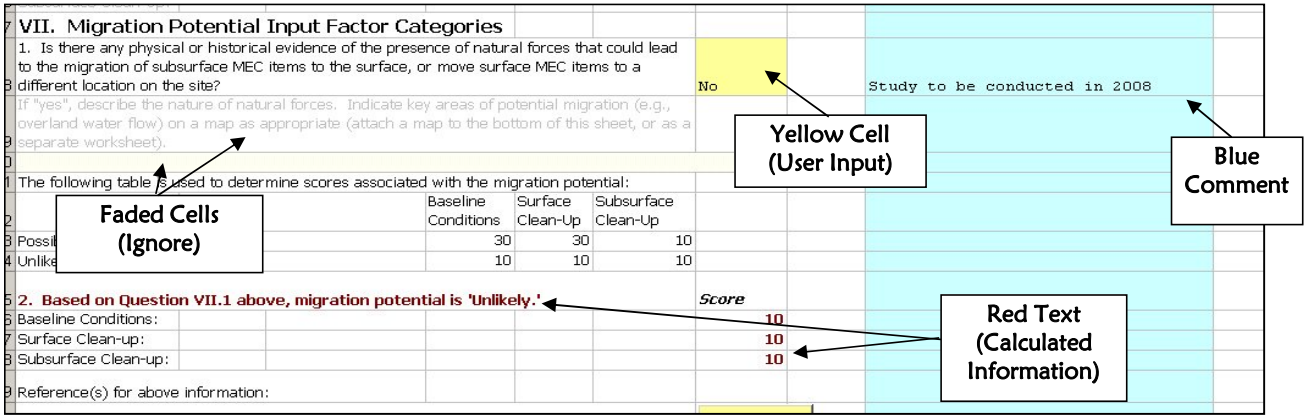
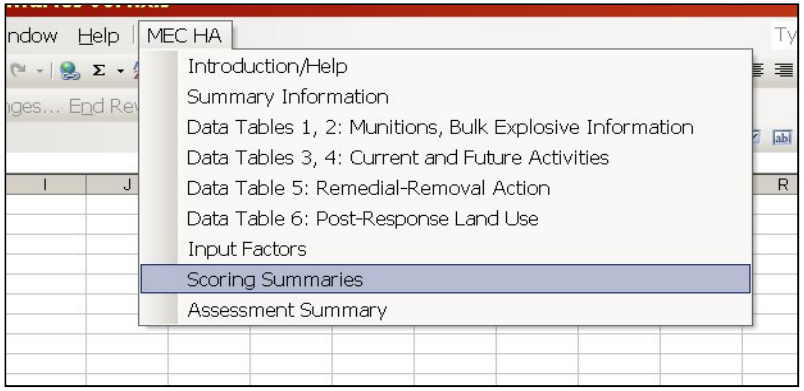
3. Starting with the ***Summary Info*** sheet, fill in any yellow cells. Some cells have drop-down lists from which you can select an answer. Select the cell. A down arrow to the right indicates that a drop-down list is available. Yellow buttons can be used to enter reference information. Blue cells can be used for any general comments you wish to make. Any faded cells can be ignored--these are questions that the spreadsheet has determined are not relevant for your situation.

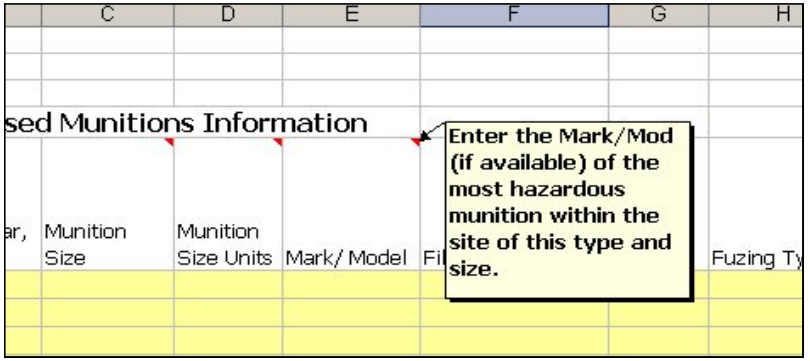
The computer will calculate information based on your inputs. Calculated information will appear as red text.



4. The MEC HA menu bar can be used to navigate to different worksheets.



5. Small red triangles in the upper-right corners indicate that help text is available by putting the mouse cursor on that cell.



MEC HA Summary Information

Comments

Site ID: I04NC000902 Range Complex 2
Date: 3/17/2014

Please identify the single specific area to be assessed in this hazard assessment. From this point forward, all references to "site" or "MRS" refer to the specific area that you have defined.

A. Enter a unique identifier for the site:

Former Camp Butner- RC2 MRS

Provide a list of information sources used for this hazard assessment. As you are completing the worksheets, use the "Select Ref(s)" buttons at the ends of each subsection to select the applicable information sources from the list below.

Ref. No.	Title (include version, publication date)
1	Final Time Critical Removal Action Report, Lakeview Subdivision, Former Camp Butner, Butner, North Carolina (parsons, August 2003)
2	Engineering Evaluation/Cost Analysis. Former Camp Butner, Butner, North Carolina. (Parsons, July 2004)
3	Archive Search Report Supplement Camp Butner (Rock Island District USACE, November 2004)
4	Final Annual Report 2009 Removal Actions at Former Camp Butner, North Carolina. (USA Environmental May 2010)
5	Final Annual Report 2010 Removal Actions at Former Camp Butner, North Carolina. (USA Environmental March 2011)
6	Remedial Investigation Report, Former Camp Butner (HGL, 2014)
7	
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B. Briefly describe the site:

1. Area (include units): 3671.24 acres
2. Past munitions-related use:

Target Area

3. Current land-use activities (list all that occur):

residential, recreational

4. Are changes to the future land-use planned? No
5. What is the basis for the site boundaries?

The RC2 is located on the north side of the site and contained an artillery impact area, a mock village and two machine gun ranges. The range fan for the RC2 artillery impact area was also established using standard range fans for the individual type of ranges. The range fan for the artillery impact area was taken from historical maps, while the remaining range fans used were standard for the individual type of range. All range fans remain within site boundaries, and some range fans overlap with others within the complex. The 2014 RI defined the MEC contaminated area.

6. How certain are the site boundaries?

Certain; based on historical maps and application of standard range fans. The 2014 RI defined the MEC contaminated area.

Reference(s) for Part B:
Engineering Evaluation/Cost Analysis. Former Camp Butner, Butner, North Carolina. (Parsons, July 2004)
Remedial Investigation Report, Former Camp Butner (HGL, 2014)

[redacted]

C. Historical Clearances

1. Have there been any historical clearances at the site? Yes, subsurface clearance
2. If a clearance occurred:
   a. What year was the clearance performed?

   b. Provide a description of the clearance activity (e.g., extent, depth, amount of munitions-related items removed, types and sizes of removed items, and whether metal detectors were used):

An EE/CA was conducted that evaluated 77 acres investigating approximately 330 grids (0.25-acre each grid). Grids were distributed throughout suspected former munitions use areas within RC1 and RC2. A TCRA was conducted at the 26-acre Lakeview Subdivision (within Range Complex 1) in tandem with the 2001 EE/CA investigation to remove the immediate and imminent danger to public safety posed by the presence of UXO. The TCRA was conducted between November 2002 and March 2003 and included land survey, brush clearance, intrusive removal action, and post-removal digital geophysical mapping (DGM) (Parsons, 2003). The TCRA included clearing of all metallic items comparable in mass or larger than a 37mm projectile in the top 6 inches of soil. Portions of the Lakeview Subdivision that were previously only cleared to a depth of 6-inches were cleared to depth of detection. In addition, RA activities were completed at more than 250 parcels (average parcel was approximately 1.75 acres). Land parcel grids investigated were distributed throughout RC1 and RC2.

Reference(s) for Part C:

[redacted]

Final Time Critical Removal Action Report, Lakeview Subdivision, Former Camp Butner, Butner, North Carolina (parsons, August 2003)

Engineering Evaluation/Cost Analysis. Former Camp Butner, Butner, North Carolina. (Parsons, July 2004)
Final Annual Report 2009 Removal Actions at Former Camp Butner, North Carolina. (USA Environmental May 2010)

Final Annual Report 2010 Removal Actions at Former Camp Butner, North Carolina. (USA Environmental March 2011)

D. Attach maps of the site below (select 'Insert/Picture' on the menu bar.)

Site ID: **I04NC000902 Range Complex 2**
Date: **3/17/2014**

Cased Munitions Information

Item No.	Munition Type (e.g., mortar, projectile, etc.)	Munition Size	Munition Size Units	Mark/ Model	Energetic Material Type	Is Munition Fuzed?	Fuzing Type	Fuze Condition	Minimum Depth for Munition (ft)	Location of Munitions	Comments (include rationale for munitions that are "subsurface only")
1	Mortars	81	mm		High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	
2	Mortars	60	mm		High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	
3	Rockets	2.36	inches		High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	
4	Artillery	155	mm		High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	
5	Artillery	105	mm		High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	2014 RI
6	Artillery	57	mm		High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	
7	Artillery	40	mm		High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	
8	Artillery	37	mm	TP	Low Explosive Filler in a fragmenting round				0	Surface and Subsurface	2014 RI; contained black powder simulant
9	Grenades			Rifle	High Explosive	UNK	Impact	UNK	0	Surface and Subsurface	
10	Grenades			Hand	High Explosive	UNK	Time	UNK	0	Surface and Subsurface	
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Reference(s) for table above:

Remedial Investigation Report, Former Camp Butner (HGL, 2014)

Bulk Explosive Information

Item No.	Explosive Type	Comments
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Reference(s) for table above:

Site ID: **I04NC000902 Range Complex 2**
Date: **3/17/2014**

Activities Currently Occurring at the Site

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours per year a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1	residential	1,400	5,840	**8,176,000**	2	350 parcels x 4 people, 16 hours per day, 365 hours per day
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
	Total Potential Contact Time (receptor hrs/yr):			**8,176,000**		
	Maximum intrusive depth at site (ft):				**2**	

Reference(s) for table above:

[redacted]

Site ID: **I04NC000902 Range Complex 2**
Date: **3/17/2014**

Planned Remedial or Removal Actions

Response Action No.	Response Action Description	Expected Resulting Minimum MEC Depth (ft)	Expected Resulting Site Accessibility	Will land use activities change if this response action is implemented?	What is the expected scope of cleanup?	Comments
1						
2						
3						
4						
5						
6						

According to the 'Summary Info' worksheet, no future land uses are planned. For those alternatives where you answered 'No' in Column E, the land use activities will be assessed against current land uses.

Reference(s) for table above:

Site ID: **I04NC000902 Range Complex 2**
Date: **3/17/2014**

This worksheet needs to be completed for each remedial/removal action alternative listed in the 'Remedial-Removal Action' worksheet that will cause a change in land use.

Land Use Activities Planned After Response Alternative #1:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):
Maximum intrusive depth at site (ft):

Reference(s) for table above:

[redacted]

Site ID: **I04NC000902 Range Complex 2**
Date: **3/17/2014**

Energetic Material Type Input Factor Categories

The following table is used to determine scores associated with the energetic materials. Materials are listed in order from most hazardous to least hazardous.

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
High Explosive and Low Explosive Filler in Fragmenting Rounds	100	100	100
White Phosphorus	70	70	70
Pyrotechnic	60	60	60
Propellant	50	50	50
Spotting Charge	40	40	40
Incendiary	30	30	30

The most hazardous type of energetic material listed in the 'Munitions, Bulk Explosive Info' Worksheet falls under the category 'High Explosive and Low Explosive Filler in Fragmenting Rounds'. ***Score***

Baseline Conditions:	**100**
Surface Cleanup:	**100**
Subsurface Cleanup:	**100**

Location of Additional Human Receptors Input Factor Categories

1. What is the Explosive Safety Quantity Distance (ESQD) from the Explosive Siting Plan or the Explosive Safety Submission for the MRS? 200 feet
2. Are there currently any features or facilities where people may congregate within the MRS, or within the ESQD arc? Yes
3. Please describe the facility or feature.

residences

MEC Item(s) used to calculate the ESQD for current use activities

[redacted]

The following table is used to determine scores associated with the location of additional human receptors (current use activities):

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Inside the MRS or inside the ESQD arc	30	30	30
Outside of the ESQD arc	0	0	0

4. Current use activities are 'Inside the MRS or inside the ESQD arc', based on Question 2.' ***Score***

Baseline Conditions:	**30**
Surface Cleanup:	**30**
Subsurface Cleanup:	**30**

5. Are there future plans to locate or construct features or facilities where people may congregate within the MRS, or within the ESQD arc? Yes
6. Please describe the facility or feature.

MEC Item(s) used to calculate the ESQD for future use activities

[redacted]

The following table is used to determine scores associated with the location of additional human receptors (future use activities):

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Inside the MRS or inside the ESQD arc	30	30	30
Outside of the ESQD arc	0	0	0

7. Future use activities are 'Inside the MRS or inside the ESQD arc', based on Question 5.' ***Score***

Baseline Conditions:	**30**
Surface Cleanup:	**30**

Comments

Subsurface Cleanup:	30	

Site Accessibility Input Factor Categories

The following table is used to determine scores associated with site accessibility:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Full Accessibility	No barriers to entry, including signage but no fencing	80	80	80
Moderate Accessibility	Some barriers to entry, such as barbed wire fencing or rough terrain	55	55	55
Limited Accessibility	Significant barriers to entry, such as unguarded chain link fence or requirements for special transportation to reach the site	15	15	15
Very Limited Accessibility	A site with guarded chain link fence or terrain that requires special equipment and skills (e.g., rock climbing) to access	5	5	5

Current Use Activities ***Score***

Select the category that best describes the site accessibility under the current use scenario:

Full Accessibility

Baseline Conditions: **80**
Surface Cleanup: **80**
Subsurface Cleanup: **80**

Future Use Activities

Select the category that best describes the site accessibility under the future use scenario:

Full Accessibility

Baseline Conditions: **80**
Surface Cleanup: **80**
Subsurface Cleanup: **80**

Reference(s) for above information:

Response Alternative No. 1:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 6:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Potential Contact Hours Input Factor Categories

The following table is used to determine scores associated with the total potential contact time:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Many Hours	≥1,000,000 receptor-hrs/yr	120	90	30
Some Hours	100,000 to 999,999 receptor hrs/yr	70	50	20
Few Hours	10,000 to 99,999 receptor-hrs/yr	40	20	10
Very Few Hours	<10,000 receptor-hrs/yr	15	10	5

Current Use Activities:

Input factors are only determined for baseline conditions for current use activities. Based on the 'Current and Future Activities' Worksheet, the Total Potential Contact Time is: **8,176,000** receptor hrs/yr
Based on the table above, this corresponds to a input factor score for baseline conditions of: **120** Score

Future Use Activities:

Input factors are only determined for baseline conditions for future use activities. Based on the 'Current and Future Activities' Worksheet, the Total Potential Contact Time is: **8,176,000** receptor hrs/yr
Based on the table above, this corresponds to a input factor score of: **120** Score

Response Alternative No. 1:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: **Score**
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 6:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: **Score**
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Amount of MEC Input Factor Categories

The following table is used to determine scores associated with the Amount of MEC:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Target Area	Areas at which munitions fire was directed	180	120	30
OB/OD Area	Sites where munitions were disposed of by open burn or open detonation methods. This category refers to the core activity area of an OB/OD area. See the "Safety Buffer Areas" category for safety fans and kick-outs.	180	110	30
Function Test Range	Areas where the serviceability of stored munitions or weapons systems are tested. Testing may include components, partial functioning or complete functioning of stockpile or developmental items.	165	90	25
Burial Pit	The location of a burial of large quantities of MEC items.	140	140	10
Maneuver Areas	Areas used for conducting military exercises in a simulated conflict area or war zone	115	15	5
Firing Points	The location from which a projectile, grenade, ground signal, rocket, guided missile, or other device is to be ignited, propelled, or released.	75	10	5
Safety Buffer Areas	Areas outside of target areas, test ranges, or OB/OD areas that were designed to act as a safety zone to contain munitions that do not hit targets or to contain kick-outs from OB/OD areas.	30	10	5
Storage	Any facility used for the storage of military munitions, such as earth-covered magazines, above-ground magazines, and open-air storage areas.	25	10	5
Explosive-Related Industrial Facility	Former munitions manufacturing or demilitarization sites and TNT production plants	20	10	5

Select the category that best describes the ***most hazardous*** amount of MEC: ***Score***

`Target Area`

Baseline Conditions: **180**
Surface Cleanup: **120**
Subsurface Cleanup: **30**

Minimum MEC Depth Relative to the Maximum Intrusive Depth Input Factor Categories

Current Use Activities

The shallowest minimum MEC depth, based on the 'Cased Munitions Information' Worksheet: **0** ft
The deepest intrusive depth: **2** ft

The table below is used to determine scores associated with the minimum MEC depth relative to the maximum intrusive depth:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.	240	150	95
Baseline Condition: MEC located surface and subsurface, After Cleanup: Intrusive depth does not overlap with subsurface MEC.	240	50	25
Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth overlaps with minimum MEC depth.	150	N/A	95
Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.	50	N/A	25

Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth will overlap after cleanup. MECs are located at both the surface and subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.' For 'Current Use Activities', only Baseline Conditions are considered.

240 ***Score***

Future Use Activities

Deepest intrusive depth: **2** ft

Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth overlaps. MECs are located at both the surface and subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.'. For 'Future Use Activities', only Baseline Conditions are considered. **240** ***Score***

Response Alternative No. 1:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 6:
Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft
Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

	Score
Baseline Conditions:	
Surface Cleanup:	
Subsurface Cleanup:	

Migration Potential Input Factor Categories

Is there any physical or historical evidence that indicates it is possible for natural physical forces in the area (e.g., frost heave, erosion) to expose subsurface MEC items, or move surface or subsurface MEC items? No

If "yes", describe the nature of natural forces. Indicate key areas of potential migration (e.g., overland water flow) on a map as appropriate (attach a map to the bottom of this sheet, or as a separate worksheet).

The following table is used to determine scores associated with the migration potential:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Possible	30	30	10
Unlikely	10	10	10

Based on the question above, migration potential is 'Unlikely.'

	Score
Baseline Conditions:	**10**
Surface Cleanup:	**10**
Subsurface Cleanup:	**10**

Reference(s) for above information:

Draft Remedial Investigation Report, Former Camp Butner (HGL February 2014)

MEC Classification Input Factor Categories

Cased munitions information has been inputed into the 'Munitions, Bulk Explosive Info' Worksheet; therefore, bulk explosives do not comprise all MECs for this MRS.

The 'Amount of MEC' category is 'Target Area'. It cannot be automatically assumed that the MEC items from this category are DMM. Therefore, the conservative assumption is that the MEC items in this MRS are UXO.

Has a technical assessment shown that MEC in the OB/OD Area is DMM?
Are any of the munitions listed in the 'Munitions, Bulk Explosive Info' Worksheet: Yes

- Submunitions
- Rifle-propelled 40mm projectiles (often called 40mm grenades)
- Munitions with white phosphorus filler
- High explosive anti-tank (HEAT) rounds
- Hand grenades
- Fuzes
- Mortars

None of the items listed in the 'Munitions, Bulk Explosive Info' Worksheet were identified as 'fuzed'.
The following table is used to determine scores associated with MEC classification categories:

UXO Special Case	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
UXO Special Case	180	180	180
UXO	110	110	110
Fuzed DMM Special Case	105	105	105
Fuzed DMM	55	55	55
Unfuzed DMM	45	45	45
Bulk Explosives	45	45	45

Based on your answers above, the MEC classification is 'UXO Special Case'.

	Score
Baseline Conditions:	**180**
Surface Cleanup:	**180**
Subsurface Cleanup:	**180**

MEC Size Input Factor Categories

The following table is used to determine scores associated with MEC Size:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Small	Any munitions (from the 'Munitions, Bulk Explosive Info' Worksheet) weigh less than 90 lbs; small enough for a receptor to be able to move and initiate a detonation	40	40	40

Large	All munitions weigh more than 90 lbs; too large to move without equipment	0	0	0

Based on the definitions above and the types of munitions at the site (see 'Munitions, Bulk Explosive Info' Worksheet), the MEC Size Input Factor is: Small

	Score
Baseline Conditions:	**40**
Surface Cleanup:	**40**
Subsurface Cleanup:	**40**

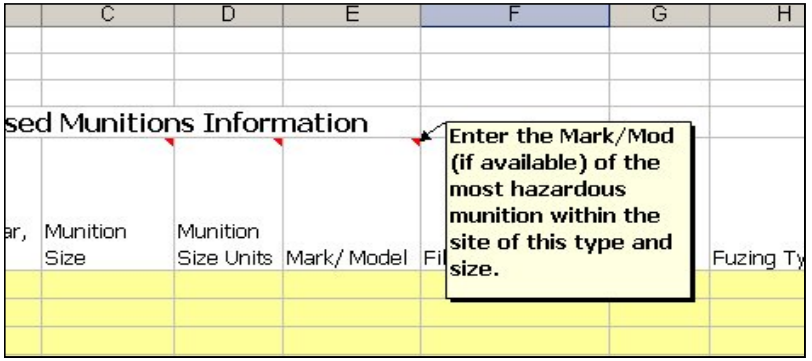
Scoring Summary

Site ID:	I04NC000902 Range Complex 2	a. Scoring Summary for Current Use Activities	
Date:	3/17/2014	Response Action Cleanup:	No Response Action
Input Factor		**Input Factor Category**	**Score**
I. Energetic Material Type		High Explosive and Low Explosive Filler in Fragmenting Rounds	100
II. Location of Additional Human Receptors		Inside the MRS or inside the ESQD arc	30
III. Site Accessibility		Full Accessibility	80
IV. Potential Contact Hours		≥1,000,000 receptor-hrs/yr	120
V. Amount of MEC		Target Area	180
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth		Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.	240
VII. Migration Potential		Unlikely	10
VIII. MEC Classification		UXO Special Case	180
IX. MEC Size		Small	40
		Total Score	**980**
		Hazard Level Category	**1**

MEC HA Hazard Level Determination		
Site ID: I04NC000902 Range Complex 2 Date: 3/17/2014	Hazard Level Category	Score
a. Current Use Activities	1	980
b. Future Use Activities	1	980
c. Response Alternative 1:		
d. Response Alternative 2:		
e. Response Alternative 3:		
f. Response Alternative 4:		
g. Response Alternative 5:		
h. Response Alternative 6:		

Characteristics of the MRS	
Is critical infrastructure located within the MRS or within the ESQD arc?	Yes
Are cultural resources located within the MRS or within the ESQD arc?	No
Are significant ecological resources located within the MRS or within the ESQD arc?	No

5. Small red triangles in the upper-right corners indicate that help text is available by putting the mouse cursor on that cell.



MEC HA Summary Information

		Comments
Site ID:	I04NC000902 Air National Guard Hand Grenade Range	
Date:	4/29/2014	

Please identify the single specific area to be assessed in this hazard assessment. From this point forward, all references to "site" or "MRS" refer to the specific area that you have defined.

A. Enter a unique identifier for the site:

Former Camp Butner- ARNG Hand Grenade MRS

Provide a list of information sources used for this hazard assessment. As you are completing the worksheets, use the "Select Ref(s)" buttons at the ends of each subsection to select the applicable information sources from the list below.

Ref. No.	Title (include version, publication date)
1	Archives Search Report, Findings, Former Camp Butner, Butner(Rock Island District USACE, September 1993)
2	Engineering Evaluation/Cost Analysis. Former Camp Butner, Butner, North Carolina. (Parsons, July 2004)
3	Archive Search Report Supplement Camp Butner (Rock Island District USACE, November 2004)
4	Remedial Investigation Report, Former Camp Butner (HGL, 2014)
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B. Briefly describe the site:

1. Area (include units): 6 acres
2. Past munitions-related use:

Target Area

3. Current land-use activities (list all that occur):

Air National Guard training, hunting

4. Are changes to the future land-use planned? No
5. What is the basis for the site boundaries?

During the RI, investigation of Grid ARNG-G082 resulted in the discovery of a previously unknown hand grenade range. The grid location was selected based on results of the reconnaissance transects and the historical analysis conducted by the Topographic Engineering Center (TEC) (TEC, 2001). During intrusive investigations, 39 anomalies were intrusively investigated and a total of five MkII hand grenades (all identified as MEC) were discovered on April 25, 2013. Additional analog transects identified trenches. Based on the location of the trenches and the MEC found, the range was oriented so that the soldiers threw the grenades to the north. This hand grenade range is bounded by the trenches across the south and the ARNG active training facility constructed onsite to the north and to the west.

6. How certain are the site boundaries?

Certain; based on analog transects and intrusive results

Reference(s) for Part B:

Remedial Investigation Report, Former Camp Butner (HGL, 2014)

C. Historical Clearances

1. Have there been any historical clearances at the site?	No, none	
2. If a clearance occurred:		
a. What year was the clearance performed?		
b. Provide a description of the clearance activity (e.g., extent, depth, amount of munitions-related items removed, types and sizes of removed items, and whether metal detectors were used):		

Reference(s) for Part C:
Remedial Investigation Report, Former Camp Butner (HGL, 2014)

D. Attach maps of the site below (select 'Insert/Picture' on the menu bar.)

Site ID: **I04NC000902 Air National Guard Hand Grenade Range**
Date: **4/29/2014**

Cased Munitions Information

Item No.	Munition Type (e.g., mortar, projectile, etc.)	Munition Size	Munition Size Units	Mark/ Model	Energetic Material Type	Is Munition Fuzed?	Fuzing Type	Fuze Condition	Minimum Depth for Munition (ft)	Location of Munitions	Comments (include rationale for munitions that are "subsurface only")
1	Grenades			Hand, MKII	High Explosive	Yes	Time	Armed	0	Surface and Subsurface	2014 RI
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Reference(s) for table above:

[redacted]

Bulk Explosive Information

Item No.	Explosive Type	Comments
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Reference(s) for table above:

[redacted]

Site ID: **I04NC000902 Air National Guard Hand Grenade Range**
Date: **4/29/2014**

Activities Currently Occurring at the Site

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours per year a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1	ARNG training	200	520	**104,000**	2	200 people, 10 hrs week, 52 weeks a yr
2	hunting	50	80	**4,000**	0	50 people, 40 hrs a week, 2 weeks a yr
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
			Total Potential Contact Time (receptor hrs/yr):	**108,000**		
			Maximum intrusive depth at site (ft):		**2**	

Reference(s) for table above:

[redacted]

Site ID: **I04NC000902 Air National Guard Hand Grenade Range**
Date: **4/29/2014**

Planned Remedial or Removal Actions

Response Action No.	Response Action Description	Expected Resulting Minimum MEC Depth (ft)	Expected Resulting Site Accessibility	Will land use activities change if this response action is implemented?	What is the expected scope of cleanup?	Comments
1						
2						
3						
4						
5						
6						

According to the 'Summary Info' worksheet, no future land uses are planned. For those alternatives where you answered 'No' in Column E, the land use activities will be assessed against current land uses.

Reference(s) for table above:

Site ID: **I04NC000902 Air National Guard Hand Grenade Range**
Date: **4/29/2014**

This worksheet needs to be completed for each remedial/removal action alternative listed in the 'Remedial-Removal Action' worksheet that will cause a change in land use.

Land Use Activities Planned After Response Alternative #1:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):
Maximum intrusive depth at site (ft):

Reference(s) for table above:

[redacted]

Land Use Activities Planned After Response Alternative #2:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):

Maximum intrusive depth at site (ft):

Reference(s) for table above:

Land Use Activities Planned After Response Alternative #3:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):

Maximum intrusive depth at site (ft):

Reference(s) for table above:

Land Use Activities Planned After Response Alternative #4:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):

Maximum intrusive depth at site (ft):

Reference(s) for table above:

Land Use Activities Planned After Response Alternative #5:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):

Maximum intrusive depth at site (ft):

Reference(s) for table above:

Land Use Activities Planned After Response Alternative #6:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):

Maximum intrusive depth at site (ft):

Reference(s) for table above:

I04NC000902 Air
National Guard
Hand Grenade
Site ID: Range
Date: 4/29/2014

Energetic Material Type Input Factor Categories

The following table is used to determine scores associated with the energetic materials. Materials are listed in order from most hazardous to least hazardous.

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
High Explosive and Low Explosive Filler in Fragmenting Rounds	100	100	100
White Phosphorus	70	70	70
Pyrotechnic	60	60	60
Propellant	50	50	50
Spotting Charge	40	40	40
Incendiary	30	30	30

The most hazardous type of energetic material listed in the 'Munitions, Bulk Explosive Info' Worksheet falls under the category 'High Explosive and Low Explosive Filler in Fragmenting Rounds'.

	Score
Baseline Conditions:	**100**
Surface Cleanup:	**100**
Subsurface Cleanup:	**100**

Location of Additional Human Receptors Input Factor Categories

1. What is the Explosive Safety Quantity Distance (ESQD) from the Explosive Siting Plan or the Explosive Safety Submission for the MRS? 335 feet
2. Are there currently any features or facilities where people may congregate within the MRS, or within the ESQD arc? No
3. Please describe the facility or feature.

MEC Item(s) used to calculate the ESQD for current use activities

Item #1. Grenades (High Explosive)

The following table is used to determine scores associated with the location of additional human receptors (current use activities):

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Inside the MRS or inside the ESQD arc	30	30	30
Outside of the ESQD arc	0	0	0

4. Current use activities are 'Outside of the ESQD arc', based on Question 2.'

	Score
Baseline Conditions:	**0**
Surface Cleanup:	**0**
Subsurface Cleanup:	**0**

5. Are there future plans to locate or construct features or facilities where people may congregate within the MRS, or within the ESQD arc? Yes
6. Please describe the facility or feature.

MEC Item(s) used to calculate the ESQD for future use activities

Item #1. Grenades (High Explosive)

The following table is used to determine scores associated with the location of additional human receptors (future use activities):

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Inside the MRS or inside the ESQD arc	30	30	30
Outside of the ESQD arc	0	0	0

7. Future use activities are 'Inside the MRS or inside the ESQD arc', based on Question 5.'

	Score
Baseline Conditions:	**30**
Surface Cleanup:	**30**

Comments

Site Accessibility Input Factor Categories

The following table is used to determine scores associated with site accessibility:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Full Accessibility	No barriers to entry, including signage but no fencing	80	80	80
Moderate Accessibility	Some barriers to entry, such as barbed wire fencing or rough terrain	55	55	55
Limited Accessibility	Significant barriers to entry, such as unguarded chain link fence or requirements for special transportation to reach the site	15	15	15
Very Limited Accessibility	A site with guarded chain link fence or terrain that requires special equipment and skills (e.g., rock climbing) to access	5	5	5

Current Use Activities ***Score***

Select the category that best describes the site accessibility under the current use scenario:

Full Accessibility

Baseline Conditions: **80**
Surface Cleanup: **80**
Subsurface Cleanup: **80**

Future Use Activities

Select the category that best describes the site accessibility under the future use scenario:

Full Accessibility

Baseline Conditions: **80**
Surface Cleanup: **80**
Subsurface Cleanup: **80**

Reference(s) for above information:

Remedial Investigation Report, Former Camp Butner (HGL, 2014)

Response Alternative No. 1:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Potential Contact Hours Input Factor Categories

The following table is used to determine scores associated with the total potential contact time:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Many Hours	≥1,000,000 receptor-hrs/yr	120	90	30
Some Hours	100,000 to 999,999 receptor hrs/yr	70	50	20
Few Hours	10,000 to 99,999 receptor-hrs/yr	40	20	10
Very Few Hours	<10,000 receptor-hrs/yr	15	10	5

Current Use Activities:

Input factors are only determined for baseline conditions for current use activities. Based on the 'Current and Future Activities' Worksheet, the Total Potential Contact Time is: **108,000** receptor hrs/yr
Based on the table above, this corresponds to a input factor score for baseline conditions of: **70** Score

Future Use Activities:

Input factors are only determined for baseline conditions for future use activities. Based on the 'Current and Future Activities' Worksheet, the Total Potential Contact Time is: **52,000** receptor hrs/yr
Based on the table above, this corresponds to a input factor score of: **40** Score

Response Alternative No. 1:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: **Score**
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 6:

Amount of MEC Input Factor Categories

The following table is used to determine scores associated with the Amount of MEC:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Target Area	Areas at which munitions fire was directed	180	120	30
OB/OD Area	Sites where munitions were disposed of by open burn or open detonation methods. This category refers to the core activity area of an OB/OD area. See the "Safety Buffer Areas" category for safety fans and kick-outs.	180	110	30
Function Test Range	Areas where the serviceability of stored munitions or weapons systems are tested. Testing may include components, partial functioning or complete functioning of stockpile or developmental items.	165	90	25
Burial Pit	The location of a burial of large quantities of MEC items.	140	140	10
Maneuver Areas	Areas used for conducting military exercises in a simulated conflict area or war zone	115	15	5
Firing Points	The location from which a projectile, grenade, ground signal, rocket, guided missile, or other device is to be ignited, propelled, or released.	75	10	5
Safety Buffer Areas	Areas outside of target areas, test ranges, or OB/OD areas that were designed to act as a safety zone to contain munitions that do not hit targets or to contain kick-outs from OB/OD areas.	30	10	5
Storage	Any facility used for the storage of military munitions, such as earth-covered magazines, above-ground magazines, and open-air storage areas.	25	10	5
Explosive-Related Industrial Facility	Former munitions manufacturing or demilitarization sites and TNT production plants	20	10	5

Select the category that best describes the ***most hazardous*** amount of MEC: ***Score***

`Target Area`

Baseline Conditions: **180**
Surface Cleanup: **120**
Subsurface Cleanup: **30**

Minimum MEC Depth Relative to the Maximum Intrusive Depth Input Factor Categories

Current Use Activities

The shallowest minimum MEC depth, based on the 'Cased Munitions Information' Worksheet: **0** ft
The deepest intrusive depth: **2** ft

The table below is used to determine scores associated with the minimum MEC depth relative to the maximum intrusive depth:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.	240	150	95
Baseline Condition: MEC located surface and subsurface, After Cleanup: Intrusive depth does not overlap with subsurface MEC.	240	50	25

Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth overlaps with minimum MEC depth.	150	N/A	95
Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.	50	N/A	25

Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth will overlap after cleanup. MECs are located at both the surface and subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.' For 'Current Use Activities', only Baseline Conditions are considered.

240 ***Score***

Future Use Activities

Deepest intrusive depth: **2** ft

Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth overlaps. MECs are located at both the surface and subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.'. For 'Future Use Activities', only Baseline Conditions are considered.

240 ***Score***

Response Alternative No. 1:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 2:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Response Alternative No. 6:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Migration Potential Input Factor Categories

Is there any physical or historical evidence that indicates it is possible for natural physical forces in the area (e.g., frost heave, erosion) to expose subsurface MEC items, or move surface or subsurface MEC items? No

If "yes", describe the nature of natural forces. Indicate key areas of potential migration (e.g., overland water flow) on a map as appropriate (attach a map to the bottom of this sheet, or as a separate worksheet).

The following table is used to determine scores associated with the migration potential:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Possible	30	30	10
Unlikely	10	10	10

Based on the question above, migration potential is 'Unlikely.' ***Score***

Baseline Conditions: **10**
Surface Cleanup: **10**
Subsurface Cleanup: **10**

Reference(s) for above information:

Remedial Investigation Report, Former Camp Butner (HGL, 2014)

MEC Classification Input Factor Categories

Cased munitions information has been inputed into the 'Munitions, Bulk Explosive Info' Worksheet; therefore, bulk explosives do not comprise all MECs for this MRS.

The 'Amount of MEC' category is 'Target Area'. It cannot be automatically assumed that the MEC items from this category are DMM. Therefore, the conservative assumption is that the MEC items in this MRS are UXO.

Has a technical assessment shown that MEC in the OB/OD Area is DMM?

Are any of the munitions listed in the 'Munitions, Bulk Explosive Info' Worksheet: Yes

- Submunitions
- Rifle-propelled 40mm projectiles (often called 40mm grenades)
- Munitions with white phosphorus filler
- High explosive anti-tank (HEAT) rounds
- Hand grenades
- Fuzes
- Mortars

At least one item listed in the 'Munitions, Bulk Explosive Info' Worksheet was identified as 'fuzed'.

The following table is used to determine scores associated with MEC classification categories:

UXO Special Case	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
UXO Special Case	180	180	180
UXO	110	110	110
Fuzed DMM Special Case	105	105	105
Fuzed DMM	55	55	55
Unfuzed DMM	45	45	45
Bulk Explosives	45	45	45

Based on your answers above, the MEC classification is 'UXO Special Case'. ***Score***

Baseline Conditions: **180**
Surface Cleanup: **180**
Subsurface Cleanup: **180**

MEC Size Input Factor Categories

The following table is used to determine scores associated with MEC Size:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Small	Any munitions (from the 'Munitions, Bulk Explosive Info' Worksheet) weigh less than 90 lbs; small enough for a receptor to be able to move and initiate a detonation	40	40	40
Large	All munitions weigh more than 90 lbs; too large to move without equipment	0	0	0

Based on the definitions above and the types of munitions at the site (see 'Munitions, Bulk Explosive Info' Worksheet), the MEC Size Input Factor is: Small

Score

Baseline Conditions: **40**
Surface Cleanup: **40**
Subsurface Cleanup: **40**

Scoring Summary

Site ID:	I04NC000902 Air National Guard	a. Scoring Summary for Current Use Activities	
Date:	4/29/2014	Response Action Cleanup:	No Response Action
Input Factor		**Input Factor Category**	**Score**
I. Energetic Material Type		High Explosive and Low Explosive Filler in Fragmenting Rounds	100
II. Location of Additional Human Receptors		Outside of the ESQD arc	0
III. Site Accessibility		Full Accessibility	80
IV. Potential Contact Hours		100,000 to 999,999 receptor hrs/yr	70
V. Amount of MEC		Target Area	180
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth		Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.	240
VII. Migration Potential		Unlikely	10
VIII. MEC Classification		UXO Special Case	180
IX. MEC Size		Small	40
		Total Score	**900**
		Hazard Level Category	**1**

Site ID:	I04NC000902 Air National Guard	c. Scoring Summary for Future Use Activities	
Date:	4/29/2014	Response Action Cleanup:	No Response Action
Input Factor		**Input Factor Category**	**Score**
I. Energetic Material Type		High Explosive and Low Explosive Filler in Fragmenting Rounds	100
II. Location of Additional Human Receptors		Inside the MRS or inside the ESQD arc	30
III. Site Accessibility		Full Accessibility	80
IV. Potential Contact Hours		10,000 to 99,999 receptor-hrs/yr	40
V. Amount of MEC		Target Area	180
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth		Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.	240
VII. Migration Potential		Unlikely	10
VIII. MEC Classification		UXO Special Case	180
IX. MEC Size		Small	40
		Total Score	**900**
		Hazard Level Category	**1**

Site ID:	I04NC000902 Air National Guard	c. Scoring Summary for Response Alternative 1:	
Date:	4/29/2014	Response Action Cleanup:	
Input Factor		**Input Factor Category**	**Score**
I. Energetic Material Type		High Explosive and Low Explosive Filler in Fragmenting Rounds	
II. Location of Additional Human Receptors		Inside the MRS or inside the ESQD arc	
III. Site Accessibility			
IV. Potential Contact Hours			
V. Amount of MEC		Target Area	
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth			
VII. Migration Potential		Unlikely	
VIII. MEC Classification		UXO Special Case	
IX. MEC Size		Small	
		Total Score	
		Hazard Level Category	

MEC HA Hazard Level Determination		
Site ID: I04NC000902 Air National Guard Hand Grenade Range Date: 4/29/2014	Hazard Level Category	Score
a. Current Use Activities	1	900
b. Future Use Activities	1	900
c. Response Alternative 1:		
d. Response Alternative 2:		
e. Response Alternative 3:		
f. Response Alternative 4:		
g. Response Alternative 5:		
h. Response Alternative 6:		
Characteristics of the MRS		
Is critical infrastructure located within the MRS or within the ESQD arc?	No	
Are cultural resources located within the MRS or within the ESQD arc?	No	
Are significant ecological resources located within the MRS or within the ESQD arc?	No	

MEC HA Summary Information

Comments

Site ID: I04NC000902 Flame Thrower Range MRS
Date: 3/17/2014

Please identify the single specific area to be assessed in this hazard assessment. From this point forward, all references to "site" or "MRS" refer to the specific area that you have defined.

A. Enter a unique identifier for the site:

Former Camp Butner- Flame Thrower Range MRS

Provide a list of information sources used for this hazard assessment. As you are completing the worksheets, use the "Select Ref(s)" buttons at the ends of each subsection to select the applicable information sources from the list below.

Ref. No.	Title (include version, publication date)
1	Final Report- Removal Action at Former Camp Butner, Butner, North Carolina (USA Environmental, March 2006)
2	Archive Search Report Supplement Camp Butner (Rock Island District USACE, November 2004)
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

B. Briefly describe the site:

1. Area (include units): 5 acres
2. Past munitions-related use:

Target Area

3. Current land-use activities (list all that occur):

residential, recreational

4. Are changes to the future land-use planned? No
5. What is the basis for the site boundaries?

The FTR was used to conduct flame thrower training during World War II. The range was situated just north of the former cantonment area. The boundaries were known but the layout of the range was not known. The standard range fan for an FTR as given in TM 9-855, August 1944, was applied. The range fan does not extend beyond site boundaries or overlap other range fans.

6. How certain are the site boundaries?

ASR Supplement defined the FTR as 5 acres; 20 acre area was cleared during the 2006 Removal Action (RA)

Reference(s) for Part B:
Final Report- Removal Action at Former Camp Butner, Butner, North Carolina (USA Environmental, March 2006)
Archive Search Report Supplement Camp Butner (Rock Island District USACE, November 2004)

C. Historical Clearances

1. Have there been any historical clearances at the site? Yes, subsurface clearance
2. If a clearance occurred:
   a. What year was the clearance performed? 2006
   b. Provide a description of the clearance activity (e.g., extent, depth, amount of munitions-related items removed, types and sizes of removed items, and whether metal detectors were used):

Approximately 20 acres were cleared to depth of detection (approximately 2-3 feet) using an analog "mag and dig" approach. During the RA approximately 6,343 subsurface anomalies were excavated. Two MEC items (one M15 white phosphorus smoke grenade, and one M1 training anti-vehicular land mine smoke canister) were located, identified, and disposed, as well as 530 pounds of MD (including expended 81mm practice mortars and smoke grenades).	

Reference(s) for Part C:

Archive Search Report Supplement Camp Butner (Rock Island District USACE, November 2004) [redacted]

D. Attach maps of the site below (select 'Insert/Picture' on the menu bar.)

Site ID: **I04NC000902 Flame Thrower Range MRS**
Date: **3/17/2014**

Cased Munitions Information

Item No.	Munition Type (e.g., mortar, projectile, etc.)	Munition Size	Munition Size Units	Mark/ Model	Energetic Material Type	Is Munition Fuzed?	Fuzing Type	Fuze Condition	Minimum Depth for Munition (ft)	Location of Munitions	Comments (include rationale for munitions that are "subsurface only")
1	Grenades		mm	M15 Smoke	White Phosphorus	UNK	Time	UNK	3	Surface and Subsurface	Stated minimum depth reflects RA clearance to 3 ft bgs.
2	Mines: Sea and Land		mm	M1A1 training, anti-vehicular, smoke	Pyrotechnic	UNK	Pressure	UNK	3	Surface and Subsurface	Stated minimum depth reflects RA clearance to 3 ft bgs.
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Reference(s) for table above:
Final Report- Removal Action at Former Camp Butner, Butner, North Carolina (USA Environmental, March 2006) [redacted]

Bulk Explosive Information

Item No.	Explosive Type	Comments
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Reference(s) for table above: [redacted]

Site ID: **I04NC000902 Flame Thrower Range MRS**
Date: **3/17/2014**

Activities Currently Occurring at the Site

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours per year a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1	agriculture	10	260	**2,600**	2	10 people, 5 hours per week, 52 weeks a year
2	residential use	10	8,736	**87,360**	2	10 people (full time), 168 hours per week, 52 weeks a year
3	trespassing	20	520	**10,400**		10 people, 10 hours per week, 52 weeks a year
4						
5						
6						
7						
8						
9						
10						
11						
12						
			Total Potential Contact Time (receptor hrs/yr):	**100,360**		
			Maximum intrusive depth at site (ft):		**2**	

Reference(s) for table above:

[redacted]

Site ID: **I04NC000902 Flame Thrower Range MRS**
Date: **3/17/2014**

Planned Remedial or Removal Actions

Response Action No.	Response Action Description	Expected Resulting Minimum MEC Depth (ft)	Expected Resulting Site Accessibility	Will land use activities change if this response action is implemented?	What is the expected scope of cleanup?	Comments
1	No further action	3	Full Accessibility	No	cleanup of MECs located both on the surface and subsurface	RA completed.
2						
3						
4						
5						
6						

According to the 'Summary Info' worksheet, no future land uses are planned. For those alternatives where you answered 'No' in Column E, the land use activities will be assessed against current land uses.

Reference(s) for table above:

[redacted]

Site ID: **I04NC000902 Flame Thrower Range MRS**
Date: **3/17/2014**

This worksheet needs to be completed for each remedial/removal action alternative listed in the 'Remedial-Removal Action' worksheet that will cause a change in land use.

Land Use Activities Planned After Response Alternative #1: No further action

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1	Residential	80	24	1,920	2	
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
	Total Potential Contact Time (receptor hrs/yr):			**1,920**		
	Maximum intrusive depth at site (ft):				**2**	

Reference(s) for table above:

[redacted]

Land Use Activities Planned After Response Alternative #2:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):

Maximum intrusive depth at site (ft):

Reference(s) for table above:

Land Use Activities Planned After Response Alternative #3:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):

Maximum intrusive depth at site (ft):

Reference(s) for table above:

Land Use Activities Planned After Response Alternative #4:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):

Maximum intrusive depth at site (ft):

Reference(s) for table above:



Land Use Activities Planned After Response Alternative #5:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):

Maximum intrusive depth at site (ft):

Reference(s) for table above:

Land Use Activities Planned After Response Alternative #6:

Activity No.	Activity	Number of people per year who participate in the activity	Number of hours a single person spends on the activity	Potential Contact Time (receptor hours/year)	Maximum intrusive depth (ft)	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Total Potential Contact Time (receptor hrs/yr):

Maximum intrusive depth at site (ft):

Reference(s) for table above:

Site ID: **I04NC000902 Flame Thrower Range MRS**
Date: **3/17/2014**

Energetic Material Type Input Factor Categories

The following table is used to determine scores associated with the energetic materials. Materials are listed in order from most hazardous to least hazardous.

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
High Explosive and Low Explosive Filler in Fragmenting Rounds	100	100	100
White Phosphorus	70	70	70
Pyrotechnic	60	60	60
Propellant	50	50	50
Spotting Charge	40	40	40
Incendiary	30	30	30

The most hazardous type of energetic material listed in the 'Munitions, Bulk Explosive Info' Worksheet falls under the category 'White Phosphorus'.

Score

Baseline Conditions: **70**
Surface Cleanup: **70**
Subsurface Cleanup: **70**

Location of Additional Human Receptors Input Factor Categories

1. What is the Explosive Safety Quantity Distance (ESQD) from the Explosive Siting Plan or the Explosive Safety Submission for the MRS? 390 feet
2. Are there currently any features or facilities where people may congregate within the MRS, or within the ESQD arc? Yes
3. Please describe the facility or feature.

Privately owned residences

MEC Item(s) used to calculate the ESQD for current use activities

[redacted]

Item #1. Grenades (mmWhite Phosphorus)

The following table is used to determine scores associated with the location of additional human receptors (current use activities):

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Inside the MRS or inside the ESQD arc	30	30	30
Outside of the ESQD arc	0	0	0

4. Current use activities are 'Inside the MRS or inside the ESQD arc', based on Question 2.'

Score

Baseline Conditions: **30**
Surface Cleanup: **30**
Subsurface Cleanup: **30**

5. Are there future plans to locate or construct features or facilities where people may congregate within the MRS, or within the ESQD arc? Yes
6. Please describe the facility or feature.

MEC Item(s) used to calculate the ESQD for future use activities

[redacted]

Item #1. Grenades (mmWhite Phosphorus)

The following table is used to determine scores associated with the location of additional human receptors (future use activities):

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Inside the MRS or inside the ESQD arc	30	30	30
Outside of the ESQD arc	0	0	0

7. Future use activities are 'Inside the MRS or inside the ESQD arc', based on Question 5.'

Score

Baseline Conditions: **30**
Surface Cleanup: **30**
Subsurface Cleanup: **30**

Comments

Site Accessibility Input Factor Categories

The following table is used to determine scores associated with site accessibility:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Full Accessibility	No barriers to entry, including signage but no fencing	80	80	80
Moderate Accessibility	Some barriers to entry, such as barbed wire fencing or rough terrain	55	55	55
Limited Accessibility	Significant barriers to entry, such as unguarded chain link fence or requirements for special transportation to reach the site	15	15	15
Very Limited Accessibility	A site with guarded chain link fence or terrain that requires special equipment and skills (e.g., rock climbing) to access	5	5	5

Current Use Activities

Select the category that best describes the site accessibility under the current use scenario:

Full Accessibility

	Score
Baseline Conditions:	**80**
Surface Cleanup:	**80**
Subsurface Cleanup:	**80**

Future Use Activities

Select the category that best describes the site accessibility under the future use scenario:

Full Accessibility

	Score
Baseline Conditions:	**80**
Surface Cleanup:	**80**
Subsurface Cleanup:	**80**

Reference(s) for above information:

Response Alternative No. 1: No further action

Based on the 'Planned Remedial or Removal Actions' Worksheet, this alternative will lead to 'Full Accessibility'.

Baseline Conditions:	**80**
Surface Cleanup:	**80**
Subsurface Cleanup:	**80**

Response Alternative No. 2:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 6:

Please enter site accessibility information in the 'Planned Remedial or Removal Actions' Worksheet to continue.

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Potential Contact Hours Input Factor Categories

The following table is used to determine scores associated with the total potential contact time:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Many Hours	≥1,000,000 receptor-hrs/yr	120	90	30
Some Hours	100,000 to 999,999 receptor hrs/yr	70	50	20
Few Hours	10,000 to 99,999 receptor-hrs/yr	40	20	10
Very Few Hours	<10,000 receptor-hrs/yr	15	10	5

Current Use Activities :

Input factors are only determined for baseline conditions for current use activities. Based on the 'Current and Future Activities' Worksheet, the Total Potential Contact Time is: **100,360** receptor hrs/yr
Based on the table above, this corresponds to a input factor score for baseline conditions of: **20** Score

Future Use Activities :

Input factors are only determined for baseline conditions for future use activities. Based on the 'Current and Future Activities' Worksheet, the Total Potential Contact Time is: **100,360** receptor hrs/yr
Based on the table above, this corresponds to a input factor score of: **5** Score

Response Alternative No. 1: No further action

Based on the 'Planned Remedial or Removal Actions' Worksheet, land use activities will not change if this alternative is implemented.
Total Potential Contact Time, based on the contact time listed for current use activities (see 'Current and Future Activities' Worksheet) **100,360**
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions: **70**
Surface Cleanup: **50**
Subsurface Cleanup: **20**

Response Alternative No. 2:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: ***Score***
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: **Score**
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 6:

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Total Potential Contact Time
Based on the table above, this corresponds to input factor scores of: **Score**
Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Amount of MEC Input Factor Categories

The following table is used to determine scores associated with the Amount of MEC:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Target Area	Areas at which munitions fire was directed	180	120	30
OB/OD Area	Sites where munitions were disposed of by open burn or open detonation methods. This category refers to the core activity area of an OB/OD area. See the "Safety Buffer Areas" category for safety fans and kick-outs.	180	110	30
Function Test Range	Areas where the serviceability of stored munitions or weapons systems are tested. Testing may include components, partial functioning or complete functioning of stockpile or developmental items.	165	90	25
Burial Pit	The location of a burial of large quantities of MEC items.	140	140	10
Maneuver Areas	Areas used for conducting military exercises in a simulated conflict area or war zone	115	15	5
Firing Points	The location from which a projectile, grenade, ground signal, rocket, guided missile, or other device is to be ignited, propelled, or released.	75	10	5
Safety Buffer Areas	Areas outside of target areas, test ranges, or OB/OD areas that were designed to act as a safety zone to contain munitions that do not hit targets or to contain kick-outs from OB/OD areas.	30	10	5
Storage	Any facility used for the storage of military munitions, such as earth-covered magazines, above-ground magazines, and open-air storage areas.	25	10	5
Explosive-Related Industrial Facility	Former munitions manufacturing or demilitarization sites and TNT production plants	20	10	5

Select the category that best describes the ***most hazardous*** amount of MEC: ***Score***

`Target Area`

Baseline Conditions: **30**
Surface Cleanup: **30**
Subsurface Cleanup: **30**

Minimum MEC Depth Relative to the Maximum Intrusive Depth Input Factor Categories

Current Use Activities

The shallowest minimum MEC depth, based on the 'Cased Munitions Information' Worksheet: **3** ft
The deepest intrusive depth: **2** ft

The table below is used to determine scores associated with the minimum MEC depth relative to the maximum intrusive depth:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Baseline Condition: MEC located surface and subsurface. After Cleanup: Intrusive depth overlaps with subsurface MEC.	240	150	95
Baseline Condition: MEC located surface and subsurface, After Cleanup: Intrusive depth does not overlap with subsurface MEC.	240	50	25
Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth overlaps with minimum MEC depth.	150	N/A	95
Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.	50	N/A	25

Because the shallowest minimum MEC depth is greater than the deepest intrusive depth, the intrusive depth will not overlap after cleanup. MECs are located only subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.' For 'Current Use Activities', only Baseline Conditions are considered.

25 ***Score***

Future Use Activities

Deepest intrusive depth: **2** ft

Because the shallowest minimum MEC depth is greater than the deepest intrusive depth, the intrusive depth does not overlap. MECs are located only subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.'. For 'Future Use Activities', only Baseline Conditions are considered.

25 ***Score***

Response Alternative No. 1: No further action

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): **3** ft

Based on the 'Planned Remedial or Removal Actions' Worksheet, land use activities will not change if this alternative is implemented.

Maximum Intrusive Depth, based on the maximum intrusive depth listed for current use activities (see 'Current and Future Activities' Worksheet) **2** ft

Because the shallowest minimum MEC depth is greater than the deepest intrusive depth, the intrusive depth does not overlap. MECs are located only subsurface, based on the 'Munitions, Bulk Explosive Info' Worksheet. Therefore, the category for this input factor is 'Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.'

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup: **25**

Response Alternative No. 2:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 3:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 4:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Response Alternative No. 5:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:	
Surface Cleanup:	
Subsurface Cleanup:	

Response Alternative No. 6:

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): ft

Not enough information has been entered in the 'Planned Remedial or Removal Actions' Worksheet. Please complete the table before returning to this section.

Maximum Intrusive Depth ft

Not enough information has been entered to calculate this input factor.

Score

Baseline Conditions:
Surface Cleanup:
Subsurface Cleanup:

Migration Potential Input Factor Categories

Is there any physical or historical evidence that indicates it is possible for natural physical forces in the area (e.g., frost heave, erosion) to expose subsurface MEC items, or move surface or subsurface MEC items? No

If "yes", describe the nature of natural forces. Indicate key areas of potential migration (e.g., overland water flow) on a map as appropriate (attach a map to the bottom of this sheet, or as a separate worksheet).

The following table is used to determine scores associated with the migration potential:

	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Possible	30	30	10
Unlikely	10	10	10

Based on the question above, migration potential is 'Unlikely.' *Score*

Baseline Conditions: **10**
Surface Cleanup: **10**
Subsurface Cleanup: **10**

Reference(s) for above information:

MEC Classification Input Factor Categories

Cased munitions information has been inputed into the 'Munitions, Bulk Explosive Info' Worksheet; therefore, bulk explosives do not comprise all MECs for this MRS.

The 'Amount of MEC' category is 'Target Area'. It cannot be automatically assumed that the MEC items from this category are DMM. Therefore, the conservative assumption is that the MEC items in this MRS are UXO.

Has a technical assessment shown that MEC in the OB/OD Area is DMM?

Are any of the munitions listed in the 'Munitions, Bulk Explosive Info' Worksheet: Yes

- Submunitions
- Rifle-propelled 40mm projectiles (often called 40mm grenades)
- Munitions with white phosphorus filler
- High explosive anti-tank (HEAT) rounds
- Hand grenades
- Fuzes
- Mortars

None of the items listed in the 'Munitions, Bulk Explosive Info' Worksheet were identified as 'fuzed'.

The following table is used to determine scores associated with MEC classification categories:

UXO Special Case	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
UXO Special Case	180	180	180
UXO	110	110	110
Fuzed DMM Special Case	105	105	105
Fuzed DMM	55	55	55
Unfuzed DMM	45	45	45
Bulk Explosives	45	45	45

Based on your answers above, the MEC classification is 'UXO Special Case'. *Score*

Baseline Conditions: **180**
Surface Cleanup: **180**
Subsurface Cleanup: **180**

MEC Size Input Factor Categories

The following table is used to determine scores associated with MEC Size:

	Description	Baseline Conditions	Surface Cleanup	Subsurface Cleanup
Small	Any munitions (from the 'Munitions, Bulk Explosive Info' Worksheet) weigh less than 90 lbs; small enough for a receptor to be able to move and initiate a detonation	40	40	40

Large	All munitions weigh more than 90 lbs; too large to move without equipment	0	0	0	

Based on the definitions above and the types of munitions at the site (see 'Munitions, Bulk Explosive Info' Worksheet), the MEC Size Input Factor is: Small

	Score
Baseline Conditions:	**40**
Surface Cleanup:	**40**
Subsurface Cleanup:	**40**

Scoring Summary

Site ID:	I04NC000902 Flame Thrower Range MRS	a. Scoring Summary for Current Use Activities	
Date:	3/17/2014	Response Action Cleanup:	No Response Action
Input Factor		**Input Factor Category**	**Score**
I. Energetic Material Type		White Phosphorus	70
II. Location of Additional Human Receptors		Inside the MRS or inside the ESQD arc	30
III. Site Accessibility		Full Accessibility	80
IV. Potential Contact Hours		100,000 to 999,999 receptor hrs/yr	20
V. Amount of MEC		Target Area	30
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth		Baseline condition: MEC lovlocated only subsurface. Baseline condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.	25
VII. Migration Potential		Unlikely	10
VIII. MEC Classification		UXO Special Case	180
IX. MEC Size		Small	40
		Total Score	**485**
		Hazard Level Category	**4**

Site ID:	I04NC000902 Flame Thrower Range MRS	b. Scoring Summary for Future Use Activities	
Date:	3/17/2014	Response Action Cleanup:	No Response Action
Input Factor		**Input Factor Category**	**Score**
I. Energetic Material Type		White Phosphorus	70
II. Location of Additional Human Receptors		Inside the MRS or inside the ESQD arc	30
III. Site Accessibility		Full Accessibility	80
IV. Potential Contact Hours		Some Hours	20
V. Amount of MEC		Target Area	30
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth		Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.	25
VII. Migration Potential		Unlikely	10
VIII. MEC Classification		UXO Special Case	180
IX. MEC Size		Small	40
		Total Score	**485**
		Hazard Level Category	**4**

Site ID:	I04NC000902 Flame Thrower Range MRS	c. Scoring Summary for Response Alternative 1: No further action	
Date:	3/17/2014	Response Action Cleanup:	cleanup of MECs located both on the surface and subsurface
Input Factor		**Input Factor Category**	**Score**
I. Energetic Material Type		White Phosphorus	70
II. Location of Additional Human Receptors		Inside the MRS or inside the ESQD arc	30
III. Site Accessibility		Full Accessibility	80
IV. Potential Contact Hours		Some Hours	20
V. Amount of MEC		Target Area	30
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth		Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth does not overlap with minimum MEC depth.	25
VII. Migration Potential		Unlikely	10
VIII. MEC Classification		UXO Special Case	180
IX. MEC Size		Small	40
		Total Score	**485**
		Hazard Level Category	**4**

MEC HA Hazard Level Determination		
Site ID: I04NC000902 Flame Thrower Range MRS Date: 3/17/2014	Hazard Level Category	Score
a. Current Use Activities	4	485
b. Future Use Activities	4	485
c. Response Alternative 1: No further action	4	485
d. Response Alternative 2:		
e. Response Alternative 3:		
f. Response Alternative 4:		
g. Response Alternative 5:		
h. Response Alternative 6:		

Characteristics of the MRS	
Is critical infrastructure located within the MRS or within the ESQD arc?	Yes
Are cultural resources located within the MRS or within the ESQD arc?	No
Are significant ecological resources located within the MRS or within the ESQD arc?	No

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Comparison Value Collection: 2014

Table A

MRS Background Information

DIRECTIONS: Record the background information below for the MRS to be evaluated. Much of this information is available from Service and DoD databases. If the MRS is located on a FUDS property, the suitable FUDS property information should be substituted. In the MRS summary, briefly describe the UXO, DMM, or MC that are known or suspected to be present, the exposure setting (the MRS's physical environment), any other incidental nonmunitions-related contaminants (e.g., benzene, trichloroethylene) found at the MRS, and any potentially exposed human and ecological receptors. If possible, include a map of the MRS.

Munitions Response Site Name: MEC Contaminated Area - ARNG, RC1, RC2

Component: U.S. Army Corps of Engineers

Installation/Property Name: Former Camp Butner

Location (City, County, State): Person County, NC; Granville County, NC; Durham County, NC

Site Name/Project Name (Project No.): MEC Contaminated Area - ARNG, RC1, RC2 / FUDS Project I04NC000902

Date Information Entered/Updated: 12/15/2014 5:31:05 AM

Point of Contact (Name/Phone): Ray Livermore / 910-251-4702

Project Phase (check only one):

☐ PA	☐ SI	■ RI	☐ FS	☐ RD
☐ RA-C	☐ RIP	☐ RA-O	☐ RC	☐ LTM

Media Evaluated (check all that apply):

☐ Groundwater	☐ Sediment (human receptor)
■ Surface soil	☐ Surface Water (ecological receptor)
☐ Sediment (ecological receptor)	☐ Surface Water (human receptor)

MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The MEC-contaminated areas of three previously defined MRSs are combined in this MRSPP: the Army National Guard property (ARNG), Range Complex No. 1 (RC1), and Range Complex No. 2 (RC2). The MEC-contaminated area has been defined by the 2013 RI and consists of 10,786 acres; Figure 1.4 from the RI Report shows this area [HGL (2014) RI Report, Sect. 1.4 and Fig. 1.4].

The ARNG portion of RC1 existed near the center of the site and contained an artillery impact area, two mortar ranges, and several small arms ranges. All range fans remain within site boundaries, and some range fans overlap with others within the complex. Munitions found or suspected at the ARNG include small arms, 2.36-inch rockets, rifle grenades, 60mm and 81mm mortars, and 37mm, 105mm, and 155mm projectiles [HGL (2014) RI Report, Sect. 2.3.1].

RC1, excluding the ARNG property, existed near the center of the site and contained an artillery impact area, two mortar ranges, and several small arms ranges. All range fans remain within site boundaries, and some range fans overlap with others within the complex. Munitions types identified at this MRS include 2.36-inch rockets, hand grenades, rifle grenades, 60mm and 81 mm mortars, and 37mm, 40mm, 57mm, 105mm, and 155mm projectiles [HGL (2014) RI Report, Sect. 2.3.2].

RC2 existed on the north side of the site and contained an artillery impact area, a mock village, and two machine gun ranges. All range fans remain within site boundaries, and some range fans overlap others within the complex. Munitions types identified at this MRS included 2.36-inch rockets, hand grenades, rifle grenades, 60mm and 81mm mortars, and 37mm, 40mm, 57mm, 105mm, and 155mm projectiles [HGL (2014) RI Report, Sect. 2.3.3].

No evidence of the use of chemical warfare materiel has been documented in any of the previous reports or investigations for the ARNG property, RC1, or RC2 [HGL (2014) RI Report, Sects. 2.3 and 2.4].

As a FUDS, coordination with stakeholders and public notifications are required prior to fieldwork.

Description of Pathways for Human and Ecological Receptors:

The potential exposure media and associated exposure routes for human receptors are:

• Soil: direct contact with surface soil (ingestion, dermal contact);
• Soil: inhalation of fugitive dust emissions from surface soil;
• Soil: food consumption via soil uptake of chemicals in prey animals; and
•Soil: food consumption via soil uptake of chemicals in foraged plants or crops grown on the site [HGL (2014) RI Report, Sect. 7.2.2.1.1].

Pathways for ecological receptors are both direct contact and, for birds and mammals, exposure to contaminants through uptake in the food chain [HGL (2014) RI Report, Sect. 7.2.3.1.1].

Description of Receptors (Human and Ecological):

Human receptors include:

• Adult and child resident;
• Outdoor worker (represents workers who spend the majority of his/her time in the area on foot such as those involved in site maintenance activities at ARNG or those involved with agricultural or logging activities at RC1 and RC2);
• Maintenance/utility worker (represents a worker involved with trenching activities for subsurface utility lines);
• Construction worker;
• Adult and adolescent recreational user/hunter;
• Adult and adolescent trespasser; and
• Indoor worker [HGL (2014) RI Report, Sect. 7.2.2.1.2].

Ecological receptors include terrestrial plants, soil invertebrates, and terrestrial wildlife (birds and mammals) [HGL (2014) RI Report, Sect. 7.2.3.1.1].

Comparison Value Collection: 2014

Table 1

EHE Module: Munitions Type Data Element Table

DIRECTIONS: Below are 11 classifications of munitions and their descriptions. Circle the scores that correspond with **all** the munitions types known or suspected to be present at the MRS.

Note: The terms practice munitions, small arms ammunition, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
Sensitive	▯ UXO that are considered likely to function upon any interaction with exposed persons (e.g., submunitions, 40mm high-explosive [HE] grenades, white phosphorus [WP] munitions, high-explosive antitank [HEAT] munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions). ▯ Hand grenades containing energetic filler. ▯ Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.	*30*
High explosive (used or damaged)	▯ UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive." ▯ DMM containing a high-explosive filler that have: ▪ Been damaged by burning or detonation ▪ Deteriorated to the point of instability.	25
Pyrotechnic (used or damaged)	▯ UXO containing a pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades). ▯ DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have: ▪ Been damaged by burning or detonation ▪ Deteriorated to the point of instability.	20
High explosive (unused)	▯ DMM containing a high explosive filler that: ▪ Have not been damaged by burning or detonation ▪ Are not deteriorated to the point of instability.	15
Propellant	▯ UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor). ▯ DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are: ▪ Damaged by burning or detonation ▪ Deteriorated to the point of instability.	15
Bulk secondary high explosives, pyrothechnics, or propellant	▯ DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor). ▯ DMM that are bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.	10
Pyrotechnic (not used or damaged)	▯ DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that: ▪ Have not been damaged by burning or detonation ▪ Are not deteriorated to the point of instability.	10
Practice	▯ UXO that are practice munitions that are not associated with a sensitive fuze. ▯ DMM that are practice munitions that are not associated with a sensitive fuze and that have not: ▪ Been damaged by burning or detonation Deteriorated to the point of instability. ▪	5
Riot control	▯ UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	▯ Used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets, demolition charges) were used or are present on the MRS is required for selection of this category.].	2
Evidence of no munitions	▯ Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
MUNITIONS TYPE	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 30).	*30*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Munitions Type*** classifications in the space provided.

MEC items recovered during the 2013 RI include:

• ARNG: one (1) M48 60mm HE Mortar, one (1) M49 60mm HE Mortar, one (1) M70 57mm AP-T projectile, one (1) M2 3.25-inch AA Target Rocket, and four (4) Mk II HE Hand Grenades [HGL (2014) RI Report, Sect. 5.1.2];

• RC1: two (2) M306 57mm HE Projectiles, one (1) M70 57mm AP-T projectile, and one (1) M6 2.36-inch Rocket Warhead [HGL (2014) RI Report, Sect. 5.1.3]; and

• RC2: one (1) M107 155mm HE projectile, and two (2) M63 Mod 1 37mm TP Projectiles [HGL (2014) RI Report, Sect. 5.1.4].

Findings from previous investigations at these areas include:

• ARNG: a 2.36-inch rocket, a 105mm HE projectile, and a 155mm (shrapnel) projectile;

• RC1: 37mm, 57mm, 105mm, and 155mm (M107) HE projectiles, 60mm mortars, 2.36-inch rockets, M9 rifle grenades, Mk II hand grenades, and live projectiles fuzes; and

• RC2: 57mm, 105mm, and 155mm (Mk I/III) HE projectiles, 2.36-inch rockets, and live projectile fuzes [HGL (2014) RI Report, Sect. 2.4.10].

Comparison Value Collection: 2014

Table 2

EHE Module: Source of Hazard Data Element Table

DIRECTIONS: Below are 11 classifications describing sources of explosive hazards. Circle the scores that correspond with **all** the sources of explosive hazards known or suspected to be present at the MRS.

Note: The terms former range, practice munitions, small arms range, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
Former range	The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include impact or target areas and associated buffer and safety zones.	*10*
Former munitions treatment (i.e., OB/OD) unit	The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	8
Former practice munitions range	The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	The MRS is a former military range where only small arms ammunition was used. (There must be evidence that no other types of munitions [e.g., grenades] were used or are present to place an MRS into this category.)	1
Evidence of no munitions	Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
SOURCE OF HAZARD	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 10).	*10*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Source of Hazard*** classifications in the space provided.

The ARNG MRS is located on the western-central area of the Butner project site and contained an artillery impact area, two mortar ranges, and several small arms ranges. Munitions found or suspected at the ARNG MRS include small arms, 2.36-inch rockets, rifle grenades, 60mm and 81mm mortars, and 37mm, 105mm, and 155mm projectiles [HGL (2014) RI Report, Sects. 2.2.1.1.1 and 2.3.1].

The RC1 MRS is most of the center of the site and contained an artillery impact area, two mortar ranges, and several small arms ranges. All range fans remain within site boundaries, and some range fans overlap with others within the complex. Munitions types identified at this MRS include 2.36-inch rockets, hand grenades, rifle grenades, 37mm, 40mm, 57mm, 105mm, and 155mm projectiles, and 60mm and 81mm mortars [HGL (2014) RI Report, Sects. 2.2.1.1.2 and 2.3.2].

The RC2 MRS is located on the north side of the site and contained an artillery impact area, a mock village, and two machine gun ranges. Munitions types identified at this MRS include 2.36-inch rockets, hand grenades, rifle grenades, 37mm, 40mm, 57mm, 105mm, and 155mm projectiles, and 60mm and 81mm mortars [HGL (2014) RI Report, Sects. 2.2.1.1.3 and 2.3.3].

Comparison Value Collection: 2014

Table 3

EHE Module: Location of Munitions Data Element Table

DIRECTIONS: Below are eight classifications of munitions locations and their descriptions. Circle the scores that correspond with **all** the locations where munitions are known or suspected to be present at the MRS.

Note: The terms confirmed, surface, subsurface, small arms ammunition, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
Confirmed surface	▯ Physical evidence indicates that there are UXO or DMM on the surface of the MRS. ▯ Historical evidence (i.e., a confirmed report such as an explosive ordnance disposal [EOD], police, or fire department report that an incident or accident that involved UXO	*25*
Confirmed subsurface, active	▯ Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS,and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM. ▯ Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.	20
Confirmed subsurface, stable	▯ Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed. ▯ Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.	15
Suspected (physical evidence)	▯ There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.	10
Suspected (historical evidence)	▯ There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	▯ There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.	2
Small arms (regardless of location)	▯ The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability (There must be evidence that no other types of munitions [e.g., grenades] were used or are present at the MRS to place an MRS into this category.)	1
Evidence of no munitions	▯ Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
LOCATION OF MUNITIONS	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 25).	*25*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Location of Munitions*** classifications in the space provided.

Several MEC items have been discovered on the surface at the ARNG, RC1, and RC2, including:

• One (1) 155mm HE projectile was discovered by a land owner during the RI on the surface in RC2 [HGL (2014) RI Report, App. D];

• One (1) M48 60mm HE mortar was discovered on the surface at the ARNG property (Anomaly ARNG-11-043) [HGL (2014) RI Report, App. F].

• One (1) M9 Rifle Grenade was discovered on the surface in Area 4A during the NTCRA [USA (2010) Final Annual Report, App. B, Accountability Record].

Comparison Value Collection: 2014

Table 4

EHE Module: Ease of Access Data Element Table

DIRECTIONS: Below are four classifications of barrier types that can surround an MRS and their descriptions. The barrier type is directly related to the ease of public access to the MRS. Circle the score that corresponds with the ease of access to the MRS.

Note: The term barrier is defined in Appendix C of the Primer.

Classification	Description	Score
No barrier	There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	*10*
Barrier to MRS access is incomplete	There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0
EASE OF ACCESS	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 10).	*10*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Ease of Access*** classifications in the space provided.

The ARNG property is owned by the State of North Carolina Army National Guard, and the RC1 and RC2 properties are owned by various private parties/individuals. Aside from gates preventing vehicular access to the ARNG and private properties, there are no known barriers or strict surveillance in place [HGL (2014) RI Report, Sect. 2.2.1.1].

Comparison Value Collection: 2014

Table 5

EHE Module: Status of Property Data Element Table

DIRECTIONS: Below are three classifications of the status of a property within the Department of Defense (DoD) and their descriptions. Circle the score that corresponds with the status of property at the MRS.

Classification	Description	Score
Non-DoD control	▯ The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	*5*
Scheduled for transfer from DoD control	▯ The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the Protocol is applied.	3
DoD control	▯ The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
STATUS OF PROPERTY	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*5*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Status of Property*** classifications in the space provided.

The ARNG property is owned by the State of North Carolina Army National Guard. The RC1 and RC2 properties are owned by various private parties/individuals [HGL (2014) RI Report, Sect. 2.2.1.1].

Comparison Value Collection: 2014

Table 6

EHE Module: Population Density Data Element Table

DIRECTIONS: Below are three classifications for population density and their descriptions. Determine the population density per square mile that most closely corresponds with the population of the MRS, including the area within a two-mile radius of the MRS's perimeter. Circle the most appropriate score.

Note: Use the U.S. Census Bureau tract data available to capture the highest population density within a two-mile radius of the perimeter of the MRS.

Classification	Description	Score
> 500 persons per square mile	▯ There are more than 500 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	5
100–500 persons per square mile	▯ There are 100 to 500 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	*3*
< 100 persons per square mile	▯ There are fewer than 100 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	1
POPULATION DENSITY	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*3*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Population Density*** classifications in the space provided.

Approximately 50 percent of the ARNG property is located within Durham County, with the remaining portion located within Granville County. The majority of the RC1 and RC2 area is located within Granville County, with the remaining portion located within Durham and Person Counties [HGL (2014) RI Report, Sect. 2.2.1.1]. The population density of Granville, Person, and Durham counties is approximately 112.7, 100.6, and 935.7 people per square mile, respectively [HGL (2014) RI Report, Sect. 2.2.2]. However, the majority of the population of Durham County resides within the city of Durham, and outside of the project area. Thus, the approximate population density for the ARNG, RC1, and RC2 area is greater than 100, but less than 500, people per square mile.

Comparison Value Collection: 2014

Table 7

EHE Module: Population Near Hazard Data Element Table

DIRECTIONS: Below are six classifications describing the number of inhabited structures near the MRS. The number of inhabited buildings relates to the potential population near the MRS. Determine the number of inhabited structures within two miles of the MRS boundary and select the score that corresponds with the number of inhabited structures.

Note: The term inhabited structures is defined in Appendix C of the Primer.

Classification	Description	Score
26 or more inhabited structures	There are 26 or more inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	*5*
16 to 25 inhabited structures	There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	4
11 to 15 inhabited structures	There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	3
6 to 10 inhabited structures	There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	2
1 to 5 inhabited structures	There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	1
0 inhabited structures	There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	0
POPULATION NEAR HAZARD	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*5*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Population Near Hazard*** classifications in the space provided.

Per Google Earth, there are well over 26 inhabited structures within, or up 2 miles from, the site.

Comparison Value Collection: 2014

Table 8

EHE Module: Types of Activities/Structures Data Element Table

DIRECTIONS: Below are five classifications of activities and/or inhabited structures and their descriptions. Review the types of activities that occur and/or structures that are present withinn two miles of the MRS and circle the scores that correspond with **all** the activities/structures classifications at the MRS.

Note: The term inhabited structure is defined in Appendix C of the Primer.

Classification	Description	Score
Residential, educational, commercial, or subsistence	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.	*5*
Parks and recreational areas	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.	*4*
Agricultural, forestry	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.	*3*
Industrial or warehousing	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or warehousing.	2
No known or recurring activities	There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.	1
TYPES OF ACTIVITIES/STRUCTURES	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	***5***

DIRECTIONS: Document any MRS-specific data used in selecting the ***Types of Activities/Structures*** classifications in the space provided.

Land use within the ARNG, RC1, and RC2 properties consists of residential, commercial, recreational, agricultural activities, along with ARNG training within the ARNG property [HGL (2014) RI Report, Sect. 2.2.1.2].

Comparison Value Collection: 2014

Table 9

EHE Module: Ecological and/or Cultural Resources Data Element Table

DIRECTIONS: Below are four classifications of ecological and/or cultural resources and their descriptions. Review the types of resources present and circle the score that corresponds with the ecological and/or cultural resources present on the MRS.

Note: The terms ecological resources and cultural resources are defined in Appendix C of the Primer.

Classification	Description	Score
Ecological and cultural resources present	▯ There are both ecological and cultural resources present on the MRS.	5
Ecological resources present	▯ There are ecological resources present on the MRS.	*3*
Cultural resources present	▯ There are cultural resources present on the MRS.	3
No ecological or cultural resources present	▯ There are no ecological resources or cultural resources present on the MRS.	0
ECOLOGICAL AND/OR CULTURAL RESOURCES	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*3*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Ecological and/or Cultural Resources*** classifications in the space provided.

The most currently available information regarding endangered, threatened, and protected species was compiled for the project area using the U.S. Fish and Wildlife Service Endangered Species Act List and the North Carolina Natural Heritage Program, Division of Parks and Recreation, Department of Environmental and Natural Resources List. The information provided included six vertebrate animal species and seven invertebrate species that potentially occur in the local area. There are also various types of wetlands present, including freshwater emergent wetlands, freshwater forested/shrub wetlands, freshwater ponds, and the drinking water reservoir, Lake Butner [HGL (2014) RI Report, Sects. 2.2.7.2 and 2.2.7.3].

Comparison Value Collection: 2014

Table 10

Determining the EHE Module Rating

DIRECTIONS:

1. From Tables 1–9, record the data element scores in the **Score** boxes to the right.
2. Add the **Score** boxes for each of the three factors and record this number in the **Value** boxes to the right.
3. Add the three **Value** boxes and record this number in the **EHE Module Total** box below.
4. Circle the appropriate range for the **EHE Module Total** below.
5. Circle the **EHE Module Rating** that corresponds to the range selected and record this value in the **EHE Module Rating** box found at the bottom of the table.

Note:
An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more data elements, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.

	Source	Score	Value
Explosive Hazard Factor Data Elements			
Munitions Type	Table 1	30	40
Source of Hazard	Table 2	10	
Accessibility Factor Data Elements			
Location of Munitions	Table 3	25	40
Ease of Access	Table 4	10	
Status of Property	Table 5	5	
Receptor Factor Data Elements			
Population Density	Table 6	3	16
Population Near Hazard	Table 7	5	
Types of Activities/ Structures	Table 8	5	
Ecological and /or Cultural Resources	Table 9	3	
EHE MODULE TOTAL			*96*

EHE Module Total	EHE Module Rating
92 to 100	*A*
82 to 91	B
71 to 81	C
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
Alternative Module Ratings	Evaluation Pending
	No Longer Required
	No Known or Suspected Explosive Hazard
EHE MODULE RATING	*A*

Comparison Value Collection: 2014

Table 11

CHE Module: CWM Configuration Data Element Table

DIRECTIONS: Below are seven classifications of CWM configuration and their descriptions. Circle the scores that correspond to **all** the CWM configurations known or suspected to be present at the MRS.

Note: The terms CWM/UXO, CWM/DMM, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
CWM, that are either UXO, or explosively configured damaged DMM	The CWM known or suspected of being present at the MRS is: ▯ CWM that are UXO (i.e., CWM/UXO). ▯ Explosively configured CWM that are DMM (i.e., CWM/DMM) that have been damaged.	30
CWM mixed with UXO	▯ The CWM known or suspected of being present at the MRS are undamaged CWM/DMM or CWM not configured as a munition that are commingled with conventional munitions that are UXO.	25
CWM, explosive configuration that are undamaged DMM	▯ The CWM known or suspected of being present at the MRS are explosively configured CWM/DMM that have not been damaged.	20
CWM/DMM, not explosively configured or CWM, bulk container	The CWM known or suspected of being present at the MRS is: ▯ Nonexplosively configured CWM/DMM either damaged or undamaged. ▯ Bulk CWM (e.g., ton container).	15
CAIS K941 and CAIS K942	▯ The CWM/DMM known or suspected of being present at the MRS is CAIS K941-toxic gas set M-1 or CAIS K942-toxic gas set M-2/E11.	12
CAIS (chemical agent identification sets)	▯ CAIS, other than CAIS K941 and K942, are known or suspected of being present at the MRS.	10
Evidence of no CWM	▯ Following investigation, the physical evidence indicates that CWM are not present at the MRS, or the historical evidence indicates that CWM are not present at the MRS.	*0*
CWM CONFIGURATION	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 30).	*0*

DIRECTIONS: Document any MRS-specific data used in selecting the ***CWM Configuration*** classifications in the space provided.

No evidence of the use of chemical warfare materiel has been documented in any of the previous reports or investigations for the ARNG property, RC1, or RC2 [HGL (2014) RI Report, Sects. 2.3 and 2.4]. Note: Following Army Guidance, Tables 12-19 are omitted.

Comparison Value Collection: 2014

Table 20

Determining the CHE Module Rating

DIRECTIONS:

1. From Tables 11–19, record the data element scores in the **Score** boxes to the right.
2. Add the **Score** boxes for each of the three factors and record this number in the **Value** boxes to the right.
3. Add the three **Value** boxes and record this number in the **CHE Module Total** box below.
4. Circle the appropriate range for the **CHE Module Total** below.
5. Circle the **CHE Module Rating** that corresponds to the range selected and record this value in the **CHE Module Rating** box found at the bottom of the table.

Note:
An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more data elements, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.

	Source	Score	Value
CWM Hazard Factor Data Elements			
CWM Configuration	Table 11	0	
Sources of CWM	Table 12		
Accessibility Factor Data Elements			
Location of CWM	Table 13		
Ease of Access	Table 14		
Status of Property	Table 15		
Receptor Factor Data Elements			
Population Density	Table 16		
Population Near Hazard	Table 17		
Types of Activities/ Structures	Table 18		
Ecological and /or Cultural Resources	Table 19		
CHE MODULE TOTAL			

CHE Module Total	CHE Module Rating
92 to 100	A
82 to 91	B
71 to 81	C
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
Alternative Module Ratings	Evaluation Pending
	No Longer Required
	No Known or Suspected CWM Hazard
CHE MODULE RATING	***No Known Hazard***

Comparison Value Collection: 2014

Table 21

HHE Module: Groundwater Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's groundwater and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional groundwater contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and display the CHF Value. If there is no known or suspected MC hazard present in the groundwater, select the box at the bottom of the table.

Note: Use dissolved, rather than total, metals analyses when both are available.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the groundwater migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the groundwater is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in groundwater has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the groundwater to a potential point of exposure (possibly due to geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the groundwater receptors at the MRS.

Classification	Description	Value
Identified	There is a threatened water supply well downgradient of the source and the groundwater is a current source of drinking water or source of water for other beneficial uses such as irrigation/agriculture (equivalent to Class I or IIA aquifer).	H
Potential	There is no threatened water supply well downgradient of the source and the groundwater is currently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, IIA, or IIB aquifer).	M
Limited	There is no potentially threatened water supply well downgradient of the source and the groundwater is not considered a potential source of drinking water and is of limited beneficial use (equivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Groundwater MC Hazard ☐

Table 21 Comments: No groundwater samples were collected during the 2013 RI or previous investigations [HGL (2014) RI Report, Sects. 2.4 and 4.3].

Comparison Value Collection: 2014

Table 22

HHE Module: Surface Water – Human Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface water and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional surface water contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard for human endpoints present in the surface water, select the box at the bottom of the table.

Note: Use dissolved, rather than total, metals analyses when both are available.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).	

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).	L

MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	L

RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Surface Water (Human Endpoint) MC Hazard ☐

Table 22 Comments: No surface water samples were collected during the 2013 RI or previous investigations [HGL (2014) RI Report, Sects. 2.4 and 4.3].

Comparison Value Collection: 2014

Table 23

HHE Module: Sediment – Human Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's sediment and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional sediment contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with human endpoints present in the sediment, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to sediment to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Sediment (Human Endpoint) MC Hazard ☐

Table 23 Comments: No sediment samples were collected during the 2013 RI or previous investigations [HGL (2014) RI Report, Sects. 2.4 and 4.3].

Table 24

Comparison Value Collection: 2014

HHE Module: Surface Water – Ecological Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface water and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional surface water contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with ecological endpoints present in the surface water, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Surface Water (Ecological Endpoint) MC Hazard ☐

Table 24 Comments: No surface water samples were collected during the 2013 RI or previous investigations [HGL (2014) RI Report, Sects. 2.4 and 4.3].

Comparison Value Collection: 2014

Table 25

HHE Module: Sediment – Ecological Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's sediment and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the ratios together, including any additional sediment contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with ecological endpoints present in the sediment, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to sediment to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Sediment (Ecological Endpoint) MC Hazard ☐

Table 25 Comments: No sediment samples were collected during the 2013 RI or previous investigations [HGL (2014) RI Report, Sects. 2.4 and 4.3].

Comparison Value Collection: 2014

Table 26

HHE Module: Surface Soil Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface soil and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional surface soil contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard present in the surface soil, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios
Zinc	168	23000	mg/Kg	0.0073
Lead	83	400	mg/Kg	0.21
Copper	75.7	3100	mg/Kg	0.024
Antimony	47.3	31	mg/Kg	1.5
2,6-Dinitrotoluene	3.9	18	mg/Kg	0.22

CHF Scale	CHF Value	Sum The Ratios	2
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).	*L*

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface soil migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface soil is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface soil has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface soil to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	*M*

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface soil receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface soil to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface soil to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface soil to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	*H*

No Known or Suspected Surface Soil MC Hazard ☐

Table 26 Comments: Included data is from surface soil sample results obtained during the 2013 RI. Only those analytes showing exceedances of background values are shown [HGL (2014) RI Report, Sect. 7.2.2.2]. Migration of MC in soil is possible, but fate and transport of MC was not evaluated as part of the 2013 RI and subsequent report [HGL (2014) RI Report, Sect. 6.0]. Receptors (including residents, hunters, ARNG personnel, etc.) have access to surface soil on the site [HGL (2014) RI Report, Sects. 2.2.1.1, 2.2.1.2, and 7.2.2.1.2]

Comparison Value Collection: 2014

Table 27

HHE Module: Supplemental Contaminant Hazard Factor Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Only use this table if there are more than five contaminants in any given medium present at the MRS. This is a supplemental table designed to hold information about contaminants that do not fit in the previous tables. Indicate the media in which these contaminants are present. Then record all contaminants, their maximum concentrations and their comparison values (from Appendix B of the Primer) in the table below. Calculate and record the ratio for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF for each medium on the

Note: Dissolved, rather than total, metals analyses are used when both are available.

Media	Contaminant	Maximum Concentration	Comparison Value	Ratio
Surface Soil	1,3-Dinitrobenzene	0.049	6.1	0.008
Surface Soil	2,4-Dinitrotoluene	1.18	120	0.0098
Surface Soil	p-Nitrotoluene	0.048	240	0.0002
Surface Soil	RDX	0.12	230	0.00052
Surface Soil	TNT (2,4,6-Trinitrotoluene)	0.047	36	0.0013

Comparison Value Collection: 2014

Table 28

Determining the HHE Module Rating

DIRECTIONS:

1. Record the letter values (H, M, L) for the Contaminant Hazard, Migration Pathway, and Receptor Factors for the media (from Tables 21–26) in the corresponding boxes below.
2. Record the media's three-letter combinations in the Three-Letter Combination boxes below (three-letter combinations are arranged from Hs to Ms to Ls).
3. Using the HHE Ratings provided below, determine each media's rating (A-G) and record the letter in the corresponding Media Rating box below.

Media (Source)	Contaminant Hazard Factor Value	Migratory Pathway Factor Value	Receptor Factor Value	Three-Letter Combination (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)					
Surface Water/Human Endpoint (Table 22)					
Sediment/Human Endpoint (Table 23)					
Surface Water/Ecological Endpoint (Table 24)					
Sediment/Ecological Endpoint (Table 25)					
Surface Soil (Table 26)	L	M	H	HML	D

DIRECTIONS (cont.):

4. Select the single highest Media Rating (A is highest; G is lowest) and enter the letter in the HHE Module Rating box.

Note:
An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more media, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.

HHE MODULE RATING	***D***

HHE Ratings (for reference only)	
Combination	**Rating**
HHH	A
HHM	B
HHL	C
HMM	C
HML	*D*
MMM	*D*
HLL	E
MML	E
MLL	F
LLL	G
Alternative Module Ratings	Evaluation Pending
	No Longer Required
	No Known or Suspected MC Hazard

Comparison Value Collection: 2014

Table 29
MRS Priority

DIRECTIONS: In the chart below, circle the letter rating for each module recorded in Table 10 (EHE), Table 20 (CHE), and Table 28 (HHE). Circle the corresponding numerical priority for each module. If information to determine the module rating is not available, choose the appropriate alternative module rating. The MRS Priority is the single highest priority; record this relative priority in the MRS Prioriy or Alternative MRS Rating at the bottom of the table.

Note: An MRS assigned Priority 1 has the highest relative priority; an MRS assigned Priority 8 has the lowest relative priority. Only an MRS with CWM known or suspected to be present can be assigned Priority 1; an MRS that has CWM known or suspected to be present cannot be assigned Priority 8.

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		A	1		
A	*2*	B	2	A	2
B	3	C	3	B	3
C	4	D	4	C	4
D	5	E	5	*D*	*5*
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Evaluation Pending		Evaluation Pending		Evaluation Pending	
No Longer Required		No Longer Required		No Longer Required	
No Known or Suspected Explosive Hazard		*No Known or Suspected CWM Hazard*		No Known or Suspected MC Hazard	
MRS PRIORITY or ALTERNATIVE MRS RATING				*2*	

Comparison Value Collection: 2014

Table A

MRS Background Information

DIRECTIONS: Record the background information below for the MRS to be evaluated. Much of this information is available from Service and DoD databases. If the MRS is located on a FUDS property, the suitable FUDS property information should be substituted. In the MRS summary, briefly describe the UXO, DMM, or MC that are known or suspected to be present, the exposure setting (the MRS's physical environment), any other incidental nonmunitions-related contaminants (e.g., benzene, trichloroethylene) found at the MRS, and any potentially exposed human and ecological receptors. If possible, include a map of the MRS.

Munitions Response Site Name: Flame Thrower Range

Component: U.S. Army Corps of Engineers

Installation/Property Name: Former Camp Butner

Location (City, County, State): Granville County, NC

Site Name/Project Name (Project No.): Flame Thrower Range MRS / FUDS Project I04NC000902

Date Information Entered/Updated: 12/16/2014 11:48:53 AM

Point of Contact (Name/Phone): Ray Livermore / 910-251-4702

Project Phase (check only one):

☐ PA	☐ SI	■ RI	☐ FS	☐ RD
☐ RA-C	☐ RIP	☐ RA-O	☐ RC	☐ LTM

Media Evaluated (check all that apply):

☐ Groundwater	☐ Sediment (human receptor)
☐ Surface soil	☐ Surface Water (ecological receptor)
☐ Sediment (ecological receptor)	☐ Surface Water (human receptor)

MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The Flame Thrower Range (FTR) MRS, with an area of 5 acres at the initiation of the RI, was used to conduct flame thrower training during World War II. The range was situated just north of the former cantonment area, but the layout of the range is not known. The standard range fan for an FTR as given in TM 9-855, August 1944, was used for the range fan. The range fan does not extend beyond site boundaries or overlap other range fans. Figure 1.2 shows the location and boundaries of the FTR MRS [HGL (2014) RI Report, Sects. 2.1, 2.3.4, and Fig. 1.2].

The 2006 RA conducted at the FTR cleared approximately 20 acres to depth of detection using analog techniques. During the RA approximately 6,343 subsurface anomalies were excavated. Two MEC items (one M15 white phosphorus smoke grenade, and one M1 training anti-vehicular land mine smoke canister) were located, identified, and disposed, as well as 530 pounds of MD (including expended 81mm practice mortars and smoke grenades). Based on the results of the RA, the report concluded that the nature and extent of MEC at the FTR had been adequately characterized. The FTR was not investigated further during this RI [HGL (2014) RI Report, Sects. 2.3.4 and 2.4.8].

No evidence of the use of chemical warfare materiel has been documented in any of the previous reports or investigations for the FTR MRS [HGL (2014) RI Report, Sects. 2.3.4 and 2.4].

As a FUDS, coordination with stakeholders and public notifications are required prior to fieldwork.

Description of Pathways for Human and Ecological Receptors:

The potential exposure media and associated exposure routes for human receptors are:

• Soil: direct contact with surface soil (ingestion, dermal contact);
• Soil: inhalation of fugitive dust emissions from surface soil;
• Soil: food consumption via soil uptake of chemicals in prey animals; and
•Soil: food consumption via soil uptake of chemicals in foraged plants or crops grown on the site [HGL (2014) RI Report, Sect. 7.2.2.1.1].

Pathways for ecological receptors are both direct contact and, for birds and mammals, exposure to contaminants through uptake in the food chain [HGL (2014) RI Report, Sect. 7.2.3.1.1].

Description of Receptors (Human and Ecological):

Human receptors include:

• Adult and child resident;
• Outdoor worker (represents workers who spend the majority of his/her time in the area on foot such as those involved in site maintenance activities at ARNG or those involved with agricultural or logging activities at RC1 and RC2);
• Maintenance/utility worker (represents a worker involved with trenching activities for subsurface utility lines);
• Construction worker;
• Adult and adolescent recreational user/hunter;
• Adult and adolescent trespasser; and
• Indoor worker [HGL (2014) RI Report, Sect. 7.2.2.1.2].

Ecological receptors include terrestrial plants, soil invertebrates, and terrestrial wildlife (birds and mammals) [HGL (2014) RI Report, Sect. 7.2.3.1.1].

Comparison Value Collection: 2014

Table 1

EHE Module: Munitions Type Data Element Table

DIRECTIONS: Below are 11 classifications of munitions and their descriptions. Circle the scores that correspond with **all** the munitions types known or suspected to be present at the MRS.

Note: The terms practice munitions, small arms ammunition, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
Sensitive	▯ UXO that are considered likely to function upon any interaction with exposed persons (e.g., submunitions, 40mm high-explosive [HE] grenades, white phosphorus [WP] munitions, high-explosive antitank [HEAT] munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions). ▯ Hand grenades containing energetic filler. ▯ Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.	*30*
High explosive (used or damaged)	▯ UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive." ▯ DMM containing a high-explosive filler that have: ▪ Been damaged by burning or detonation ▪ Deteriorated to the point of instability.	25
Pyrotechnic (used or damaged)	▯ UXO containing a pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades). ▯ DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have: ▪ Been damaged by burning or detonation ▪ Deteriorated to the point of instability.	20
High explosive (unused)	▯ DMM containing a high explosive filler that: ▪ Have not been damaged by burning or detonation ▪ Are not deteriorated to the point of instability.	15
Propellant	▯ UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor). ▯ DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are: ▪ Damaged by burning or detonation ▪ Deteriorated to the point of instability.	15
Bulk secondary high explosives, pyrothechnics, or propellant	▯ DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor). ▯ DMM that are bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.	10
Pyrotechnic (not used or damaged)	▯ DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that: ▪ Have not been damaged by burning or detonation ▪ Are not deteriorated to the point of instability.	10
Practice	▯ UXO that are practice munitions that are not associated with a sensitive fuze. ▯ DMM that are practice munitions that are not associated with a sensitive fuze and that have not: ▪ Been damaged by burning or detonation Deteriorated to the point of instability. ▪	5
Riot control	▯ UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	▯ Used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets, demolition charges) were used or are present on the MRS is required for selection of this category.].	2
Evidence of no munitions	▯ Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
MUNITIONS TYPE	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 30).	*30*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Munitions Type*** classifications in the space provided.

During the 2006 RA, one (1) M1 training land mine with smoke canister and one (1) M15 white phosphorus grenade were recovered from the FTR MRS [HGL (2014) RI Report, Sects. 2.4.8 and 2.4.10].

Comparison Value Collection: 2014

Table 2

EHE Module: Source of Hazard Data Element Table

DIRECTIONS: Below are 11 classifications describing sources of explosive hazards. Circle the scores that correspond with **all** the sources of explosive hazards known or suspected to be present at the MRS.

Note: The terms former range, practice munitions, small arms range, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
Former range	The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include impact or target areas and associated buffer and safety zones.	*10*
Former munitions treatment (i.e., OB/OD) unit	The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	8
Former practice munitions range	The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	The MRS is a former military range where only small arms ammunition was used. (There must be evidence that no other types of munitions [e.g., grenades] were used or are present to place an MRS into this category.)	1
Evidence of no munitions	Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
SOURCE OF HAZARD	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 10).	*10*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Source of Hazard*** classifications in the space provided.

The FTR MRS is a former range used to conduct flame thrower training during World War II [HGL (2014) RI Report, Sect. 2.3.4].

Comparison Value Collection: 2014

Table 3

EHE Module: Location of Munitions Data Element Table

DIRECTIONS: Below are eight classifications of munitions locations and their descriptions. Circle the scores that correspond with **all** the locations where munitions are known or suspected to be present at the MRS.

Note: The terms confirmed, surface, subsurface, small arms ammunition, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
Confirmed surface	▯ Physical evidence indicates that there are UXO or DMM on the surface of the MRS. ▯ Historical evidence (i.e., a confirmed report such as an explosive ordnance disposal [EOD], police, or fire department report that an incident or accident that involved UXO	25
Confirmed subsurface, active	▯ Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS,and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM. ▯ Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.	*20*
Confirmed subsurface, stable	▯ Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed. ▯ Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.	15
Suspected (physical evidence)	▯ There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.	10
Suspected (historical evidence)	▯ There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	▯ There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.	2
Small arms (regardless of location)	▯ The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability (There must be evidence that no other types of munitions [e.g., grenades] were used or are present at the MRS to place an MRS into this category.)	1
Evidence of no munitions	▯ Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
LOCATION OF MUNITIONS	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 25).	*20*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Location of Munitions*** classifications in the space provided.

During the 2006 RA, one (1) M15 white phosphorus hand grenade was found 1 inch below ground surface (bgs), and one (1) M1 training land mine with smoke canister was found 10 inches bgs. Other MD was found from the surface down to 30 inches bgs [HGL (2014) RI Report, Sect. 2.4.8; USA (2006) RA Final Report, App. B, MEC and MD Accountability]. Due to the climate, frost heave is possible in this area [HGL (2014) RI Report, Sect. 2.2.4]. The FTR MRS is a FUDS property and is under private ownership with no known access controls or land use restrictions [USACE (2004) ASR Supplement]. Thus, it is possible that UXO or DMM could be uncovered due to naturally occurring phenomena or site activities.

Comparison Value Collection: 2014

Table 4

EHE Module: Ease of Access Data Element Table

DIRECTIONS: Below are four classifications of barrier types that can surround an MRS and their descriptions. The barrier type is directly related to the ease of public access to the MRS. Circle the score that corresponds with the ease of access to the MRS.

Note: The term barrier is defined in Appendix C of the Primer.

Classification	Description	Score
No barrier	There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	*10*
Barrier to MRS access is incomplete	There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0
EASE OF ACCESS	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 10).	*10*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Ease of Access*** classifications in the space provided.

The FTR MRS is a FUDS property and is under private ownership. No known access controls or land use restrictions are in place on the site [USACE (2004) ASR Supplement].

Comparison Value Collection: 2014

Table 5

EHE Module: Status of Property Data Element Table

DIRECTIONS: Below are three classifications of the status of a property within the Department of Defense (DoD) and their descriptions. Circle the score that corresponds with the status of property at the MRS.

Classification	Description	Score
Non-DoD control	▯ The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	*5*
Scheduled for transfer from DoD control	▯ The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the Protocol is applied.	3
DoD control	▯ The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
STATUS OF PROPERTY	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*5*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Status of Property*** classifications in the space provided.

The FTR MRS is a FUDS property and is under private ownership [USACE (2004) ASR Supplement].

Comparison Value Collection: 2014

Table 6

EHE Module: Population Density Data Element Table

DIRECTIONS: Below are three classifications for population density and their descriptions. Determine the population density per square mile that most closely corresponds with the population of the MRS, including the area within a two-mile radius of the MRS's perimeter. Circle the most appropriate score.

Note: Use the U.S. Census Bureau tract data available to capture the highest population density within a two-mile radius of the perimeter of the MRS.

Classification	Description	Score
> 500 persons per square mile	▯ There are more than 500 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	5
100–500 persons per square mile	▯ There are 100 to 500 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	*3*
< 100 persons per square mile	▯ There are fewer than 100 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	1
POPULATION DENSITY	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*3*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Population Density*** classifications in the space provided.

The FTR MRS is located in Granville County, which has a population of 60,436 and a population density of approximately 112.7 people per square mile [HGL (2014) RI Report, Sect. 2.2.2].

Comparison Value Collection: 2014

Table 7

EHE Module: Population Near Hazard Data Element Table

DIRECTIONS: Below are six classifications describing the number of inhabited structures near the MRS. The number of inhabited buildings relates to the potential population near the MRS. Determine the number of inhabited structures within two miles of the MRS boundary and select the score that corresponds with the number of inhabited structures.

Note: The term inhabited structures is defined in Appendix C of the Primer.

Classification	Description	Score
26 or more inhabited structures	There are 26 or more inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	*5*
16 to 25 inhabited structures	There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	4
11 to 15 inhabited structures	There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	3
6 to 10 inhabited structures	There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	2
1 to 5 inhabited structures	There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	1
0 inhabited structures	There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	0
POPULATION NEAR HAZARD	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*5*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Population Near Hazard*** classifications in the space provided.

Per Google Earth, there are well over 26 inhabited structures within, or up 2 miles from, the site.

Comparison Value Collection: 2014

Table 8

EHE Module: Types of Activities/Structures Data Element Table

DIRECTIONS: Below are five classifications of activities and/or inhabited structures and their descriptions. Review the types of activities that occur and/or structures that are present withinn two miles of the MRS and circle the scores that correspond with **all** the activities/structures classifications at the MRS.

Note: The term inhabited structure is defined in Appendix C of the Primer.

Classification	Description	Score
Residential, educational, commercial, or subsistence	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.	*5*
Parks and recreational areas	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.	*4*
Agricultural, forestry	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.	3
Industrial or warehousing	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or warehousing.	2
No known or recurring activities	There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.	1
TYPES OF ACTIVITIES/STRUCTURES	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	***5***

DIRECTIONS: Document any MRS-specific data used in selecting the ***Types of Activities/Structures*** classifications in the space provided.

The 2004 ASR Supplement lists the FTR as a recreational use area, but there are residential and educational/commercial properties within 2 miles of the MRS [HGL (2014) RI Report, Sect. 2.2.1.1.3; USACE (2004) ASR Supplement].

Comparison Value Collection: 2014

Table 9

EHE Module: Ecological and/or Cultural Resources Data Element Table

DIRECTIONS: Below are four classifications of ecological and/or cultural resources and their descriptions. Review the types of resources present and circle the score that corresponds with the ecological and/or cultural resources present on the MRS.

Note: The terms ecological resources and cultural resources are defined in Appendix C of the Primer.

Classification	Description	Score
Ecological and cultural resources present	▯ There are both ecological and cultural resources present on the MRS.	5
Ecological resources present	▯ There are ecological resources present on the MRS.	*3*
Cultural resources present	▯ There are cultural resources present on the MRS.	3
No ecological or cultural resources present	▯ There are no ecological resources or cultural resources present on the MRS.	0
ECOLOGICAL AND/OR CULTURAL RESOURCES	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*3*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Ecological and/or Cultural Resources*** classifications in the space provided.

The most currently available information regarding endangered, threatened, and protected species was compiled for the project area using the U.S. Fish and Wildlife Service Endangered Species Act List and the North Carolina Natural Heritage Program, Division of Parks and Recreation, Department of Environmental and Natural Resources List. The information provided included six vertebrate animal species and seven invertebrate species that potentially occur in the local area [HGL (2014) RI Report, Sects. 2.2.7.2].

Comparison Value Collection: 2014

Table 10

Determining the EHE Module Rating

DIRECTIONS:

1. From Tables 1–9, record the data element scores in the **Score** boxes to the right.
2. Add the **Score** boxes for each of the three factors and record this number in the **Value** boxes to the right.
3. Add the three **Value** boxes and record this number in the **EHE Module Total** box below.
4. Circle the appropriate range for the **EHE Module Total** below.
5. Circle the **EHE Module Rating** that corresponds to the range selected and record this value in the **EHE Module Rating** box found at the bottom of the table.

Note:
An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more data elements, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.

	Source	Score	Value
Explosive Hazard Factor Data Elements			
Munitions Type	Table 1	30	40
Source of Hazard	Table 2	10	
Accessibility Factor Data Elements			
Location of Munitions	Table 3	20	35
Ease of Access	Table 4	10	
Status of Property	Table 5	5	
Receptor Factor Data Elements			
Population Density	Table 6	3	16
Population Near Hazard	Table 7	5	
Types of Activities/ Structures	Table 8	5	
Ecological and /or Cultural Resources	Table 9	3	
EHE MODULE TOTAL			*91*

EHE Module Total	EHE Module Rating
92 to 100	A
82 to 91	*B*
71 to 81	C
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
Alternative Module Ratings	Evaluation Pending
	No Longer Required
	No Known or Suspected Explosive Hazard
EHE MODULE RATING	*B*

Comparison Value Collection: 2014

Table 11

CHE Module: CWM Configuration Data Element Table

DIRECTIONS: Below are seven classifications of CWM configuration and their descriptions. Circle the scores that correspond to **all** the CWM configurations known or suspected to be present at the MRS.

Note: The terms CWM/UXO, CWM/DMM, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
CWM, that are either UXO, or explosively configured damaged DMM	The CWM known or suspected of being present at the MRS is: ▯ CWM that are UXO (i.e., CWM/UXO). ▯ Explosively configured CWM that are DMM (i.e., CWM/DMM) that have been damaged.	30
CWM mixed with UXO	▯ The CWM known or suspected of being present at the MRS are undamaged CWM/DMM or CWM not configured as a munition that are commingled with conventional munitions that are UXO.	25
CWM, explosive configuration that are undamaged DMM	▯ The CWM known or suspected of being present at the MRS are explosively configured CWM/DMM that have not been damaged.	20
CWM/DMM, not explosively configured or CWM, bulk container	The CWM known or suspected of being present at the MRS is: ▯ Nonexplosively configured CWM/DMM either damaged or undamaged. ▯ Bulk CWM (e.g., ton container).	15
CAIS K941 and CAIS K942	▯ The CWM/DMM known or suspected of being present at the MRS is CAIS K941-toxic gas set M-1 or CAIS K942-toxic gas set M-2/E11.	12
CAIS (chemical agent identification sets)	▯ CAIS, other than CAIS K941 and K942, are known or suspected of being present at the MRS.	10
Evidence of no CWM	▯ Following investigation, the physical evidence indicates that CWM are not present at the MRS, or the historical evidence indicates that CWM are not present at the MRS.	*0*
CWM CONFIGURATION	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 30).	*0*

DIRECTIONS: Document any MRS-specific data used in selecting the ***CWM Configuration*** classifications in the space provided.

No evidence of the use of chemical warfare materiel has been documented in any of the previous reports or investigations for the FTR MRS [HGL (2014) RI Report, Sects. 2.3.4 and 2.4]. Note: Following Army Guidance, Tables 12-19 are omitted.

Comparison Value Collection: 2014

Table 20

Determining the CHE Module Rating

DIRECTIONS:

1. From Tables 11–19, record the data element scores in the **Score** boxes to the right.
2. Add the **Score** boxes for each of the three factors and record this number in the **Value** boxes to the right.
3. Add the three **Value** boxes and record this number in the **CHE Module Total** box below.
4. Circle the appropriate range for the **CHE Module Total** below.
5. Circle the **CHE Module Rating** that corresponds to the range selected and record this value in the **CHE Module Rating** box found at the bottom of the table.

Note:
An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more data elements, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.

	Source	Score	Value
CWM Hazard Factor Data Elements			
CWM Configuration	Table 11	0	
Sources of CWM	Table 12		
Accessibility Factor Data Elements			
Location of CWM	Table 13		
Ease of Access	Table 14		
Status of Property	Table 15		
Receptor Factor Data Elements			
Population Density	Table 16		
Population Near Hazard	Table 17		
Types of Activities/ Structures	Table 18		
Ecological and /or Cultural Resources	Table 19		
CHE MODULE TOTAL			

CHE Module Total	CHE Module Rating
92 to 100	A
82 to 91	B
71 to 81	C
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
Alternative Module Ratings	Evaluation Pending
	No Longer Required
	No Known or Suspected CWM Hazard
CHE MODULE RATING	***No Known Hazard***

Comparison Value Collection: 2014

Table 21

HHE Module: Groundwater Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's groundwater and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional groundwater contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and display the CHF Value. If there is no known or suspected MC hazard present in the groundwater, select the box at the bottom of the table.

Note: Use dissolved, rather than total, metals analyses when both are available.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the groundwater migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the groundwater is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in groundwater has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the groundwater to a potential point of exposure (possibly due to geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the groundwater receptors at the MRS.

Classification	Description	Value
Identified	There is a threatened water supply well downgradient of the source and the groundwater is a current source of drinking water or source of water for other beneficial uses such as irrigation/agriculture (equivalent to Class I or IIA aquifer).	H
Potential	There is no threatened water supply well downgradient of the source and the groundwater is currently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, IIA, or IIB aquifer).	M
Limited	There is no potentially threatened water supply well downgradient of the source and the groundwater is not considered a potential source of drinking water and is of limited beneficial use (equivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Groundwater MC Hazard ☐

Table 21 Comments: No groundwater samples were obtained from the FTR during the 2013 RI or previous investigations. [HGL (2014) RI Report, Sects. 2.2.1.1.3 and 2.4].

Comparison Value Collection: 2014

Table 22

HHE Module: Surface Water – Human Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface water and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional surface water contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard for human endpoints present in the surface water, select the box at the bottom of the table.

Note: Use dissolved, rather than total, metals analyses when both are available.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).	

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).	L

MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	L

RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Surface Water (Human Endpoint) MC Hazard ☐

Table 22 Comments: No surface water samples were obtained from the FTR during the 2013 RI or previous investigations. [HGL (2014) RI Report, Sects. 2.2.1.1.3 and 2.4].

Table 23

Comparison Value Collection: 2014

HHE Module: Sediment – Human Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's sediment and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional sediment contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with human endpoints present in the sediment, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to sediment to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Sediment (Human Endpoint) MC Hazard ☐

Table 23 Comments: No sediment samples were obtained from the FTR during the 2013 RI or previous investigations. [HGL (2014) RI Report, Sects. 2.2.1.1.3 and 2.4].

Table 24

Comparison Value Collection: 2014

HHE Module: Surface Water – Ecological Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface water and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional surface water contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with ecological endpoints present in the surface water, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Surface Water (Ecological Endpoint) MC Hazard ☐

Table 24 Comments: No surface water samples were obtained from the FTR during the 2013 RI or previous investigations. [HGL (2014) RI Report, Sects. 2.2.1.1.3 and 2.4].

Comparison Value Collection: 2014

Table 25

HHE Module: Sediment – Ecological Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's sediment and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the ratios together, including any additional sediment contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with ecological endpoints present in the sediment, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to sediment to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Sediment (Ecological Endpoint) MC Hazard ☐

Table 25 Comments: No sediment samples were obtained from the FTR during the 2013 RI or previous investigations. [HGL (2014) RI Report, Sects. 2.2.1.1.3 and 2.4].

Comparison Value Collection: 2014

Table 26

HHE Module: Surface Soil Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface soil and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional surface soil contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard present in the surface soil, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	2
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).	

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface soil migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface soil is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface soil has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface soil to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface soil receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface soil to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface soil to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface soil to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Surface Soil MC Hazard ☐

Table 26 Comments: No surface soil samples were obtained from the FTR during the 2013 RI or previous investigations. [HGL (2014) RI Report, Sects. 2.2.1.1.3 and 2.4].

Comparison Value Collection: 2014

Table 27

HHE Module: Supplemental Contaminant Hazard Factor Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Only use this table if there are more than five contaminants in any given medium present at the MRS. This is a supplemental table designed to hold information about contaminants that do not fit in the previous tables. Indicate the media in which these contaminants are present. Then record all contaminants, their maximum concentrations and their comparison values (from Appendix B of the Primer) in the table below. Calculate and record the ratio for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF for each medium on the

Note: Dissolved, rather than total, metals analyses are used when both are available.

Media	Contaminant	Maximum Concentration	Comparison Value	Ratio

Comparison Value Collection: 2014

Table 28

Determining the HHE Module Rating

DIRECTIONS:

1. Record the letter values (H, M, L) for the Contaminant Hazard, Migration Pathway, and Receptor Factors for the media (from Tables 21–26) in the corresponding boxes below.
2. Record the media's three-letter combinations in the Three-Letter Combination boxes below (three-letter combinations are arranged from Hs to Ms to Ls).
3. Using the HHE Ratings provided below, determine each media's rating (A-G) and record the letter in the corresponding Media Rating box below.

Media (Source)	Contaminant Hazard Factor Value	Migratory Pathway Factor Value	Receptor Factor Value		Three-Letter Combination (Hs-Ms-Ls)		Media Rating (A-G)
Groundwater (Table 21)							
Surface Water/Human Endpoint (Table 22)							
Sediment/Human Endpoint (Table 23)							
Surface Water/Ecological Endpoint (Table 24)							
Sediment/Ecological Endpoint (Table 25)							
Surface Soil (Table 26)							

DIRECTIONS (cont.):

4. Select the single highest Media Rating (A is highest; G is lowest) and enter the letter in the HHE Module Rating box.

Note:
An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more media, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.

HHE MODULE RATING	

HHE Ratings (for reference only)	
Combination	**Rating**
HHH	A
HHM	B
HHL	C
HMM	
HML	D
MMM	
HLL	E
MML	
MLL	F
LLL	G
Alternative Module Ratings	***Evaluation Pending***
	No Longer Required
	No Known or Suspected MC Hazard

Comparison Value Collection: 2014

Table 29
MRS Priority

DIRECTIONS: In the chart below, circle the letter rating for each module recorded in Table 10 (EHE), Table 20 (CHE), and Table 28 (HHE). Circle the corresponding numerical priority for each module. If information to determine the module rating is not available, choose the appropriate alternative module rating. The MRS Priority is the single highest priority; record this relative priority in the MRS Prioriy or Alternative MRS Rating at the bottom of the table.

Note: An MRS assigned Priority 1 has the highest relative priority; an MRS assigned Priority 8 has the lowest relative priority. Only an MRS with CWM known or suspected to be present can be assigned Priority 1; an MRS that has CWM known or suspected to be present cannot be assigned Priority 8.

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		A	1		
A	2	B	2	A	2
B	*3*	C	3	B	3
C	4	D	4	C	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Evaluation Pending		Evaluation Pending		Evaluation Pending	
No Longer Required		No Longer Required		No Longer Required	
No Known or Suspected Explosive Hazard		*No Known or Suspected CWM Hazard*		No Known or Suspected MC Hazard	
MRS PRIORITY or ALTERNATIVE MRS RATING				*3*	

Comparison Value Collection: 2014

Table A

MRS Background Information

DIRECTIONS: Record the background information below for the MRS to be evaluated. Much of this information is available from Service and DoD databases. If the MRS is located on a FUDS property, the suitable FUDS property information should be substituted. In the MRS summary, briefly describe the UXO, DMM, or MC that are known or suspected to be present, the exposure setting (the MRS's physical environment), any other incidental nonmunitions-related contaminants (e.g., benzene, trichloroethylene) found at the MRS, and any potentially exposed human and ecological receptors. If possible, include a map of the MRS.

Munitions Response Site Name: Army National Guard Property - Hand Grenade Range

Component: U.S. Army Corps of Engineers

Installation/Property Name: Former Camp Butner

Location (City, County, State): Granville County, NC; Durham County, NC

Site Name/Project Name (Project No.): Army National Guard Property - Hand Grenade Range / FUDS Project I04NC000902

Date Information Entered/Updated: 12/15/2014 5:31:05 AM

Point of Contact (Name/Phone): Ray Livermore / 910-251-4702

Project Phase (check only one):

☐ PA	☐ SI	■ RI	☐ FS	☐ RD
☐ RA-C	☐ RIP	☐ RA-O	☐ RC	☐ LTM

Media Evaluated (check all that apply):

☐ Groundwater	☐ Sediment (human receptor)
☐ Surface soil	☐ Surface Water (ecological receptor)
☐ Sediment (ecological receptor)	☐ Surface Water (human receptor)

MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

During the 2013 RI, a previously unknown hand grenade range was identified within the Army National Guard Property (ARNG), in Grid ARNG-082. The grid location was selected based on results of the reconnaissance transects and the historical analysis conducted by the Topographic Engineering Center. During intrusive investigations, 39 anomalies were intrusively investigated and a total of five Mk II Hand Grenades (all identified as MEC) were discovered on April 25, 2013. The Mk II Hand Grenades were found at anomalies ARNG-082-16 and ARNG-082-020, within the grid. Eight additional analog transects were completed, which identified trenches. Based on the location of the trenches and the MEC found, the range was oriented so that the soldiers threw the grenades to the north. The Army National Guard Property - Hand Grenade Range (ARNG-HGR) is bounded by the trenches across the south and the ARNG active training facility constructed to the north and west [HGL (2014) RI Report, Sect. 5.1.2.1]. The ARNG-HGR contains 6 acres, and can be seen on Figure 1.4 in the RI Report [HGL (2014) RI Report, Sect. 1.4 and Fig. 1.4].

No evidence of the use of chemical warfare materiel has been documented in any of the previous reports or investigations for the ARNG property [HGL (2014) RI Report, Sects. 2.3 and 2.4].

As a FUDS, coordination with stakeholders and public notifications are required prior to fieldwork.

Description of Pathways for Human and Ecological Receptors:

The potential exposure media and associated exposure routes for human receptors are:

• Soil: direct contact with surface soil (ingestion, dermal contact);
• Soil: inhalation of fugitive dust emissions from surface soil;
• Soil: food consumption via soil uptake of chemicals in prey animals; and
•Soil: food consumption via soil uptake of chemicals in foraged plants or crops grown on the site [HGL (2014) RI Report, Sect. 7.2.2.1.1].

Pathways for ecological receptors are both direct contact and, for birds and mammals, exposure to contaminants through uptake in the food chain [HGL (2014) RI Report, Sect. 7.2.3.1.1].

Description of Receptors (Human and Ecological):

Human receptors include:

• Adult and child resident;
• Outdoor worker (represents workers who spend the majority of his/her time in the area on foot such as those involved in site maintenance activities at ARNG or those involved with agricultural or logging activities at RC1 and RC2);
• Maintenance/utility worker (represents a worker involved with trenching activities for subsurface utility lines);
• Construction worker;
• Adult and adolescent recreational user/hunter;
• Adult and adolescent trespasser; and
• Indoor worker [HGL (2014) RI Report, Sect. 7.2.2.1.2].

Ecological receptors include terrestrial plants, soil invertebrates, and terrestrial wildlife (birds and mammals) [HGL (2014) RI Report, Sect. 7.2.3.1.1].

Comparison Value Collection: 2014

Table 1

EHE Module: Munitions Type Data Element Table

DIRECTIONS: Below are 11 classifications of munitions and their descriptions. Circle the scores that correspond with **all** the munitions types known or suspected to be present at the MRS.

Note: The terms practice munitions, small arms ammunition, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
Sensitive	▯ UXO that are considered likely to function upon any interaction with exposed persons (e.g., submunitions, 40mm high-explosive [HE] grenades, white phosphorus [WP] munitions, high-explosive antitank [HEAT] munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions). ▯ Hand grenades containing energetic filler. ▯ Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.	*30*
High explosive (used or damaged)	▯ UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive." ▯ DMM containing a high-explosive filler that have: ▪ Been damaged by burning or detonation ▪ Deteriorated to the point of instability.	25
Pyrotechnic (used or damaged)	▯ UXO containing a pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades). ▯ DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have: ▪ Been damaged by burning or detonation ▪ Deteriorated to the point of instability.	20
High explosive (unused)	▯ DMM containing a high explosive filler that: ▪ Have not been damaged by burning or detonation ▪ Are not deteriorated to the point of instability.	15
Propellant	▯ UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor). ▯ DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are: ▪ Damaged by burning or detonation ▪ Deteriorated to the point of instability.	15
Bulk secondary high explosives, pyrothechnics, or propellant	▯ DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor). ▯ DMM that are bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.	10
Pyrotechnic (not used or damaged)	▯ DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that: ▪ Have not been damaged by burning or detonation ▪ Are not deteriorated to the point of instability.	10
Practice	▯ UXO that are practice munitions that are not associated with a sensitive fuze. ▯ DMM that are practice munitions that are not associated with a sensitive fuze and that have not: ▪ Been damaged by burning or detonation ▪ Deteriorated to the point of instability.	5
Riot control	▯ UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	▯ Used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets, demolition charges) were used or are present on the MRS is required for selection of this category.].	2
Evidence of no munitions	▯ Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
MUNITIONS TYPE	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 30).	*30*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Munitions Type*** classifications in the space provided.

Five Mk II Hand Grenades were discovered during the 2013 RI [HGL (2014) RI Report, Sect. 5.1.2.1].

Comparison Value Collection: 2014

Table 2

EHE Module: Source of Hazard Data Element Table

DIRECTIONS: Below are 11 classifications describing sources of explosive hazards. Circle the scores that correspond with **all** the sources of explosive hazards known or suspected to be present at the MRS.

Note: The terms former range, practice munitions, small arms range, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
Former range	The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include impact or target areas and associated buffer and safety zones.	*10*
Former munitions treatment (i.e., OB/OD) unit	The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	8
Former practice munitions range	The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	The MRS is a former military range where only small arms ammunition was used. (There must be evidence that no other types of munitions [e.g., grenades] were used or are present to place an MRS into this category.)	1
Evidence of no munitions	Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
SOURCE OF HAZARD	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 10).	*10*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Source of Hazard*** classifications in the space provided.

Delineation of MEC and trenches during the 2013 RI defined the range layout. The range was oriented so that the soldiers threw the grenades to the north. This hand grenade range is bounded by the trenches across the south and the ARNG active training facility constructed onsite to the north and west [HGL (2014) RI Report, Sect. 5.1.2.1].

Comparison Value Collection: 2014

Table 3

EHE Module: Location of Munitions Data Element Table

DIRECTIONS: Below are eight classifications of munitions locations and their descriptions. Circle the scores that correspond with **all** the locations where munitions are known or suspected to be present at the MRS.

Note: The terms confirmed, surface, subsurface, small arms ammunition, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
Confirmed surface	▯ Physical evidence indicates that there are UXO or DMM on the surface of the MRS. ▯ Historical evidence (i.e., a confirmed report such as an explosive ordnance disposal [EOD], police, or fire department report that an incident or accident that involved UXO	25
Confirmed subsurface, active	▯ Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS,and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM. ▯ Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.	*20*
Confirmed subsurface, stable	▯ Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed. ▯ Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.	15
Suspected (physical evidence)	▯ There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.	10
Suspected (historical evidence)	▯ There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	▯ There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.	2
Small arms (regardless of location)	▯ The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability (There must be evidence that no other types of munitions [e.g., grenades] were used or are present at the MRS to place an MRS into this category.)	1
Evidence of no munitions	▯ Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
LOCATION OF MUNITIONS	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 25).	*20*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Location of Munitions*** classifications in the space provided.

The five Mk II Hand Grenades were found at depths of 5-18 inches below ground surface [HGL (2014) RI Report, App. F-9, Geophysical Intrusive Results]. Due to the climate, frost heave is possible in this area [HGL (2014) RI Report, Sect. 2.2.4].

Comparison Value Collection: 2014

Table 4

EHE Module: Ease of Access Data Element Table

DIRECTIONS: Below are four classifications of barrier types that can surround an MRS and their descriptions. The barrier type is directly related to the ease of public access to the MRS. Circle the score that corresponds with the ease of access to the MRS.

Note: The term barrier is defined in Appendix C of the Primer.

Classification	Description	Score
No barrier	There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	*10*
Barrier to MRS access is incomplete	There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0
EASE OF ACCESS	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 10).	*10*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Ease of Access*** classifications in the space provided.

The ARNG property is owned by the State of North Carolina Army National Guard, and aside from gates preventing vehicular access to the ARNG property, there are no known barriers or strict surveillance in place [HGL (2014) RI Report, Sect. 2.2.1.1].

Comparison Value Collection: 2014

Table 5

EHE Module: Status of Property Data Element Table

DIRECTIONS: Below are three classifications of the status of a property within the Department of Defense (DoD) and their descriptions. Circle the score that corresponds with the status of property at the MRS.

Classification	Description	Score
Non-DoD control	▯ The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	*5*
Scheduled for transfer from DoD control	▯ The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the Protocol is applied.	3
DoD control	▯ The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
STATUS OF PROPERTY	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*5*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Status of Property*** classifications in the space provided.

The ARNG property is owned by the State of North Carolina Army National Guard and future land use is not expected to change. However, aside from gates preventing vehicular access to the ARNG property, there are no known barriers or strick surveillance in place [HGL (2014) RI Report, Sects. 2.2.1.1 and 2.2.1.2].

Comparison Value Collection: 2014

Table 6

EHE Module: Population Density Data Element Table

DIRECTIONS: Below are three classifications for population density and their descriptions. Determine the population density per square mile that most closely corresponds with the population of the MRS, including the area within a two-mile radius of the MRS's perimeter. Circle the most appropriate score.

Note: Use the U.S. Census Bureau tract data available to capture the highest population density within a two-mile radius of the perimeter of the MRS.

Classification	Description	Score
> 500 persons per square mile	There are more than 500 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	5
100–500 persons per square mile	There are 100 to 500 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	*3*
< 100 persons per square mile	There are fewer than 100 persons per square mile in the U.S. Census Bureau tract in which the MRS is located.	1
POPULATION DENSITY	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*3*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Population Density*** classifications in the space provided.

Approximately 50 percent of the ARNG property is located within Durham County, with the remaining portion located within Granville County [HGL (2014) RI Report, Sect. 2.2.1.1]. The population density of Granville and Durham counties is approximately 112.7 and 935.7 people per square mile, respectively [HGL (2014) RI Report, Sect. 2.2.2]. However, the majority of the population of Durham County resides within the city of Durham, and outside of the site area. Thus, the approximate population density for the ARNG-HGR area is greater than 100, but less than 500, people per square mile.

Comparison Value Collection: 2014

Table 7

EHE Module: Population Near Hazard Data Element Table

DIRECTIONS: Below are six classifications describing the number of inhabited structures near the MRS. The number of inhabited buildings relates to the potential population near the MRS. Determine the number of inhabited structures within two miles of the MRS boundary and select the score that corresponds with the number of inhabited structures.

Note: The term inhabited structures is defined in Appendix C of the Primer.

Classification	Description	Score
26 or more inhabited structures	There are 26 or more inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	*5*
16 to 25 inhabited structures	There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	4
11 to 15 inhabited structures	There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	3
6 to 10 inhabited structures	There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	2
1 to 5 inhabited structures	There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	1
0 inhabited structures	There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	0
POPULATION NEAR HAZARD	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*5*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Population Near Hazard*** classifications in the space provided.

Per Google Earth, there are well over 26 inhabited structures within, or up 2 miles from, the site.

Comparison Value Collection: 2014

Table 8

EHE Module: Types of Activities/Structures Data Element Table

DIRECTIONS: Below are five classifications of activities and/or inhabited structures and their descriptions. Review the types of activities that occur and/or structures that are present withinn two miles of the MRS and circle the scores that correspond with **all** the activities/structures classifications at the MRS.

Note: The term inhabited structure is defined in Appendix C of the Primer.

Classification	Description	Score
Residential, educational, commercial, or subsistence	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.	*5*
Parks and recreational areas	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.	4
Agricultural, forestry	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.	3
Industrial or warehousing	Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or warehousing.	2
No known or recurring activities	There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.	1
TYPES OF ACTIVITIES/STRUCTURES	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	***5***

DIRECTIONS: Document any MRS-specific data used in selecting the ***Types of Activities/Structures*** classifications in the space provided.

Land use within the ARNG property consists of residential, commercial, recreational, agricultural activities, and ARNG training [HGL (2014) RI Report, Sect. 2.2.1.2].

Comparison Value Collection: 2014

Table 9

EHE Module: Ecological and/or Cultural Resources Data Element Table

DIRECTIONS: Below are four classifications of ecological and/or cultural resources and their descriptions. Review the types of resources present and circle the score that corresponds with the ecological and/or cultural resources present on the MRS.

Note: The terms ecological resources and cultural resources are defined in Appendix C of the Primer.

Classification	Description	Score
Ecological and cultural resources present	▯ There are both ecological and cultural resources present on the MRS.	5
Ecological resources present	▯ There are ecological resources present on the MRS.	*3*
Cultural resources present	▯ There are cultural resources present on the MRS.	3
No ecological or cultural resources present	▯ There are no ecological resources or cultural resources present on the MRS.	0
ECOLOGICAL AND/OR CULTURAL RESOURCES	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 5).	*3*

DIRECTIONS: Document any MRS-specific data used in selecting the ***Ecological and/or Cultural Resources*** classifications in the space provided.

The most currently available information regarding endangered, threatened, and protected species was compiled for the project area using the U.S. Fish and Wildlife Service Endangered Species Act List and the North Carolina Natural Heritage Program, Division of Parks and Recreation, Department of Environmental and Natural Resources List. The information provided included six vertebrate animal species and seven invertebrate species that potentially occur in the local area [HGL (2014) RI Report, Sects. 2.2.7.2].

Comparison Value Collection: 2014

Table 10

Determining the EHE Module Rating

DIRECTIONS:

1. From Tables 1–9, record the data element scores in the **Score** boxes to the right.
2. Add the **Score** boxes for each of the three factors and record this number in the **Value** boxes to the right.
3. Add the three **Value** boxes and record this number in the **EHE Module Total** box below.
4. Circle the appropriate range for the **EHE Module Total** below.
5. Circle the **EHE Module Rating** that corresponds to the range selected and record this value in the **EHE Module Rating** box found at the bottom of the table.

Note:
An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more data elements, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.

	Source	Score	Value
Explosive Hazard Factor Data Elements			
Munitions Type	Table 1	30	40
Source of Hazard	Table 2	10	
Accessibility Factor Data Elements			
Location of Munitions	Table 3	20	35
Ease of Access	Table 4	10	
Status of Property	Table 5	5	
Receptor Factor Data Elements			
Population Density	Table 6	3	16
Population Near Hazard	Table 7	5	
Types of Activities/ Structures	Table 8	5	
Ecological and /or Cultural Resources	Table 9	3	
EHE MODULE TOTAL			*91*

EHE Module Total	EHE Module Rating
92 to 100	A
82 to 91	*B*
71 to 81	C
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
Alternative Module Ratings	Evaluation Pending
	No Longer Required
	No Known or Suspected Explosive Hazard
EHE MODULE RATING	*B*

Comparison Value Collection: 2014

Table 11

CHE Module: CWM Configuration Data Element Table

DIRECTIONS: Below are seven classifications of CWM configuration and their descriptions. Circle the scores that correspond to **all** the CWM configurations known or suspected to be present at the MRS.

Note: The terms CWM/UXO, CWM/DMM, physical evidence, and historical evidence are defined in Appendix C of the Primer.

Classification	Description	Score
CWM, that are either UXO, or explosively configured damaged DMM	The CWM known or suspected of being present at the MRS is: ▯ CWM that are UXO (i.e., CWM/UXO). ▯ Explosively configured CWM that are DMM (i.e., CWM/DMM) that have been damaged.	30
CWM mixed with UXO	▯ The CWM known or suspected of being present at the MRS are undamaged CWM/DMM or CWM not configured as a munition that are commingled with conventional munitions that are UXO.	25
CWM, explosive configuration that are undamaged DMM	▯ The CWM known or suspected of being present at the MRS are explosively configured CWM/DMM that have not been damaged.	20
CWM/DMM, not explosively configured or CWM, bulk container	The CWM known or suspected of being present at the MRS is: ▯ Nonexplosively configured CWM/DMM either damaged or undamaged. ▯ Bulk CWM (e.g., ton container).	15
CAIS K941 and CAIS K942	▯ The CWM/DMM known or suspected of being present at the MRS is CAIS K941-toxic gas set M-1 or CAIS K942-toxic gas set M-2/E11.	12
CAIS (chemical agent identification sets)	▯ CAIS, other than CAIS K941 and K942, are known or suspected of being present at the MRS.	10
Evidence of no CWM	▯ Following investigation, the physical evidence indicates that CWM are not present at the MRS, or the historical evidence indicates that CWM are not present at the MRS.	*0*
CWM CONFIGURATION	**DIRECTIONS:** Record **the single highest score** from above in the box to the right (maximum score = 30).	*0*

DIRECTIONS: Document any MRS-specific data used in selecting the ***CWM Configuration*** classifications in the space provided.

No evidence of the use of chemical warfare materiel has been documented in any of the previous reports or investigations for the ARNG property [HGL (2014) RI Report, Sects. 2.3 and 2.4]. Note: Following Army Guidance, Tables 12-19 are omitted.

Comparison Value Collection: 2014

Table 20

Determining the CHE Module Rating

DIRECTIONS:

1. From Tables 11–19, record the data element scores in the **Score** boxes to the right.
2. Add the **Score** boxes for each of the three factors and record this number in the **Value** boxes to the right.
3. Add the three **Value** boxes and record this number in the **CHE Module Total** box below.
4. Circle the appropriate range for the **CHE Module Total** below.
5. Circle the **CHE Module Rating** that corresponds to the range selected and record this value in the **CHE Module Rating** box found at the bottom of the table.

Note:
An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more data elements, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.

	Source	Score	Value
CWM Hazard Factor Data Elements			
CWM Configuration	Table 11	0	
Sources of CWM	Table 12		
Accessibility Factor Data Elements			
Location of CWM	Table 13		
Ease of Access	Table 14		
Status of Property	Table 15		
Receptor Factor Data Elements			
Population Density	Table 16		
Population Near Hazard	Table 17		
Types of Activities/ Structures	Table 18		
Ecological and /or Cultural Resources	Table 19		
CHE MODULE TOTAL			

CHE Module Total	CHE Module Rating
92 to 100	A
82 to 91	B
71 to 81	C
60 to 70	D
48 to 59	E
38 to 47	F
less than 38	G
Alternative Module Ratings	Evaluation Pending
	No Longer Required
	No Known or Suspected CWM Hazard
CHE MODULE RATING	***No Known Hazard***

Comparison Value Collection: 2014

Table 21

HHE Module: Groundwater Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's groundwater and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional groundwater contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and display the CHF Value. If there is no known or suspected MC hazard present in the groundwater, select the box at the bottom of the table.

Note: Use dissolved, rather than total, metals analyses when both are available.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the groundwater migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the groundwater is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in groundwater has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the groundwater to a potential point of exposure (possibly due to geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the groundwater receptors at the MRS.

Classification	Description	Value
Identified	There is a threatened water supply well downgradient of the source and the groundwater is a current source of drinking water or source of water for other beneficial uses such as irrigation/agriculture (equivalent to Class I or IIA aquifer).	H
Potential	There is no threatened water supply well downgradient of the source and the groundwater is currently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, IIA, or IIB aquifer).	M
Limited	There is no potentially threatened water supply well downgradient of the source and the groundwater is not considered a potential source of drinking water and is of limited beneficial use (equivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Groundwater MC Hazard ☐

Table 21 Comments: No groundwater samples were collected during the 2013 RI or previous investigations [HGL (2014) RI Report, Sects. 2.4 and 4.3].

Comparison Value Collection: 2014

Table 22

HHE Module: Surface Water – Human Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface water and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional surface water contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard for human endpoints present in the surface water, select the box at the bottom of the table.

Note: Use dissolved, rather than total, metals analyses when both are available.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).	

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).	L

MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	L

RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Surface Water (Human Endpoint) MC Hazard ☐

Table 22 Comments: No surface water samples were collected during the 2013 RI or previous investigations [HGL (2014) RI Report, Sects. 2.4 and 4.3].

Comparison Value Collection: 2014

Table 23

HHE Module: Sediment – Human Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's sediment and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional sediment contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with human endpoints present in the sediment, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to sediment to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Sediment (Human Endpoint) MC Hazard ☐

Table 23 Comments: No sediment samples were collected during the 2013 RI or previous investigations [HGL (2014) RI Report, Sects. 2.4 and 4.3].

Table 24

Comparison Value Collection: 2014

HHE Module: Surface Water – Ecological Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface water and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional surface water contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with ecological endpoints present in the surface water, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface water receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Surface Water (Ecological Endpoint) MC Hazard ☐

Table 24 Comments: No surface water samples were collected during the 2013 RI or previous investigations [HGL (2014) RI Report, Sects. 2.4 and 4.3].

Comparison Value Collection: 2014

Table 25

HHE Module: Sediment – Ecological Endpoint Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's sediment and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the ratios together, including any additional sediment contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard with ecological endpoints present in the sediment, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).		

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the sediment receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to sediment to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Sediment (Ecological Endpoint) MC Hazard ☐

Table 25 Comments: No sediment samples were collected during the 2013 RI or previous investigations [HGL (2014) RI Report, Sects. 2.4 and 4.3].

Comparison Value Collection: 2014

Table 26

HHE Module: Surface Soil Data Element Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Record the maximum concentrations of all contaminants in the MRS's surface soil and their comparison values (from Appendix B of the Primer) in the table below. Additional contaminants can be recorded on Table 27. Calculate and record the ratios for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF by adding the contaminant ratios together, including any additional surface soil contaminants recorded on Table 27. Based on the CHF, use the CHF Scale to determine and record the CHF Value. If there is no known or suspected MC hazard present in the surface soil, select the box at the bottom of the table.

Contaminant	Maximum Concentration	Comparison Value	Unit	Ratios

CHF Scale	CHF Value	Sum The Ratios	2
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		

CONTAMINANT HAZARD FACTOR	**DIRECTIONS:** Record **the CHF Value** from above in the box to the right (maximum value = H).	

Migratory Pathway Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface soil migratory pathway at the MRS.

Classification	Description	Value
Evident	Analytical data or observable evidence indicates that contamination in the surface soil is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface soil has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface soil to a potential point of exposure (possibly due to presence of geological structures or physical controls).	L
MIGRATORY PATHWAY FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

Receptor Factor

DIRECTIONS: Circle the value that corresponds most closely to the surface soil receptors at the MRS.

Classification	Description	Value
Identified	Identified receptors have access to surface soil to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface soil to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface soil to which contamination has moved or can move.	L
RECEPTOR FACTOR	**DIRECTIONS:** Record **the single highest value** from above in the box to the right (maximum value = H).	

No Known or Suspected Surface Soil MC Hazard ☐

Table 26 Comments: No surface soil samples were collected within the ARNG-HGR during the 2013 RI or previous investigations [HGL (2014) RI Report, Sects. 2.4 and 4.3].

Comparison Value Collection: 2014

Table 27

HHE Module: Supplemental Contaminant Hazard Factor Table

Contaminant Hazard Factor (CHF)

DIRECTIONS: Only use this table if there are more than five contaminants in any given medium present at the MRS. This is a supplemental table designed to hold information about contaminants that do not fit in the previous tables. Indicate the media in which these contaminants are present. Then record all contaminants, their maximum concentrations and their comparison values (from Appendix B of the Primer) in the table below. Calculate and record the ratio for each contaminant by dividing the maximum concentration by the comparison value. Determine the CHF for each medium on the

Note: Dissolved, rather than total, metals analyses are used when both are available.

Media	Contaminant	Maximum Concentration	Comparison Value	Ratio

Comparison Value Collection: 2014

Table 28

Determining the HHE Module Rating

DIRECTIONS:

1. Record the letter values (H, M, L) for the Contaminant Hazard, Migration Pathway, and Receptor Factors for the media (from Tables 21–26) in the corresponding boxes below.
2. Record the media's three-letter combinations in the Three-Letter Combination boxes below (three-letter combinations are arranged from Hs to Ms to Ls).
3. Using the HHE Ratings provided below, determine each media's rating (A-G) and record the letter in the corresponding Media Rating box below.

Media (Source)	Contaminant Hazard Factor Value	Migratory Pathway Factor Value	Receptor Factor Value		Three-Letter Combination (Hs-Ms-Ls)		Media Rating (A-G)
Groundwater (Table 21)							
Surface Water/Human Endpoint (Table 22)							
Sediment/Human Endpoint (Table 23)							
Surface Water/Ecological Endpoint (Table 24)							
Sediment/Ecological Endpoint (Table 25)							
Surface Soil (Table 26)							

DIRECTIONS (cont.):

4. Select the single highest Media Rating (A is highest; G is lowest) and enter the letter in the HHE Module Rating box.

Note:
An alternative module rating may be assigned when a module letter rating is inappropriate. An alternative module rating is used when more information is needed to score one or more media, contamination at an MRS was previously addressed, or there is no reason to suspect contamination was ever present at an MRS.

HHE MODULE RATING	

HHE Ratings (for reference only)

Combination	Rating
HHH	A
HHM	B
HHL	C
HMM	C
HML	D
MMM	D
HLL	E
MML	E
MLL	F
LLL	G
Alternative Module Ratings	***Evaluation Pending***
	No Longer Required
	No Known or Suspected MC Hazard

Comparison Value Collection: 2014

Table 29
MRS Priority

DIRECTIONS: In the chart below, circle the letter rating for each module recorded in Table 10 (EHE), Table 20 (CHE), and Table 28 (HHE). Circle the corresponding numerical priority for each module. If information to determine the module rating is not available, choose the appropriate alternative module rating. The MRS Priority is the single highest priority; record this relative priority in the MRS Prioriy or Alternative MRS Rating at the bottom of the table.

Note: An MRS assigned Priority 1 has the highest relative priority; an MRS assigned Priority 8 has the lowest relative priority. Only an MRS with CWM known or suspected to be present can be assigned Priority 1; an MRS that has CWM known or suspected to be present cannot be assigned Priority 8.

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		A	1		
A	2	B	2	A	2
B	*3*	C	3	B	3
C	4	D	4	C	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Evaluation Pending		Evaluation Pending		Evaluation Pending	
No Longer Required		No Longer Required		No Longer Required	
No Known or Suspected Explosive Hazard		*No Known or Suspected CWM Hazard*		No Known or Suspected MC Hazard	
MRS PRIORITY or ALTERNATIVE MRS RATING				*3*	

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APPENDIX L

GIS

The GIS submittal is provided on the included DVD.

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