URS

August 30, 2016

Mr. Glen Beckham (CELRL-PM-M-E)
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Subject: **Final RI Report – L2 MRS**
Joliet Army Ammunition Plant, Illinois
Contract W912DY-09-D-0061, Delivery Order CY02

Dear Mr. Beckham:

This letter transmits one hard copy and one CD copy of the Final RI Report to you, and additional copies of the report to the distribution list below. These copies are being provided for your files.

If you have any questions about this transmittal, please call me at 402-952-2543.

Sincerely,

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REPLY TO
ATTENTION OF
Site Manager

30 August 2016

Mr. Tom Barounis
Remedial Project Manager
US Environmental Protection Agency
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77 West Jackson Boulevard
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SUBJECT: Final MMRP Remedial Investigation Report for Site JAAP-002-R-01 (aka L2), Joliet Army Ammunition Plant, Wilmington, Illinois.

1. Forwarded for your information, is the subject report.

2. The point of contact is the undersigned at 815/423-2870.

Sincerely,

Arthur M. Holz
Site Manager

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Final

Remedial Investigation Report

L2 Munitions Response Site
(JAAP-002-R-01)

Joliet Army Ammunition Plant, Illinois

August 2016

Prepared for:

U.S. Department of the Army
Corps of Engineers - Louisville District
600 Dr. Martin Luther King Drive, Room 821
Louisville, KY 40202
Contract No. W912DY-09-D-0061
Delivery Order CY02

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Acronyms and Abbreviations

°F	degrees Fahrenheit
bgs	below ground surface
BSP	Blind Seeding Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CHE	Chemical Warfare Materiel Hazard Evaluation
CHF	Contamination Hazard Factor
cm	centimeter
COC	chemical of concern
CSM	conceptual site model
CTT	Closed, Transferring, and Transferred
CWM	chemical warfare materiel
DDESB	Department of Defense Explosives Safety Board
DGM	Digital Geophysical Mapping
DoD	Department of Defense
DQO	data quality objective
EHE	Explosive Hazard Evaluation
EM	Engineer Manual
EM61	Geonics, Ltd., EM61-MK2
EODT	EOD Technology, Inc.
ESP	Explosives Site Plan
FS	Feasibility Study
GIS	geographic information system
GPS	global positioning system
GSV	Geophysical System Verification
HA	Hazard Assessment
HE	high explosive
HHE	Health Hazard Evaluation
ID	identification
IEPA	Illinois Environmental Protection Agency
ILCA	Illinois Land Conservation Act

IRP	Installation Restoration Program
ISO	industry standard object
IVS	Instrument Verification Strip
JACPC	Joliet Arsenal Citizens Planning Commission
JOAAP	Joliet Army Ammunition Plant
L2	Explosive Burning Ground 1
LAP	Load-Assemble-Package
m	meter
MC	munitions constituents
MD	munitions debris
MDAS	material documented as safe
MEC	munitions and explosives of concern
MFG	Manufacturing
mm	millimeter
MMRP	Military Munitions Response Program
MNTP	Midewin National Tallgrass Prairie
MPF	Migration Pathway Factor
MPPEH	material potentially presenting an explosive hazard
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
MSD	Minimum Separation Distance
NFA	No Further Action
OB/OD	Open Burn/Open Detonation
PCB	polychlorinated biphenyl
PDA	personal digital assistant
PDT	Project Delivery Team
QC	Quality Control
RF	Receptor Factor
RI	Remedial Investigation
ROD	Record of Decision
RTK	real-time kinematic
SI	Site Inspection

SRU	Soil Remedial Unit
SUXOS	Senior UXO Supervisor
SVOC	semi-volatile organic compound
TCRA	Time-Critical Removal Action
TPH	total petroleum hydrocarbons
TPP	Technical Project Planning
URS	URS Group, Inc.
U.S.	United States
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFS	United States Forest Service
UXO	unexploded ordnance
UXOQCS	UXO Quality Control Specialist
UXOQCS/SO	UXO Quality Control Specialist/Safety Officer
VOC	volatile organic compound
VSP	Visual Sample Plan
WP	Work Plan

Purpose and Scope

This Remedial Investigation (RI) report was prepared by URS Group, Inc. for the United States (U.S.) Army Corps of Engineers – Louisville District under Contract Number W912DY-09-D-0061, Delivery Order CY02. This report documents the RI completed at the Explosive Burning Ground 1 (L2) Munitions Response Site (MRS) (JAAP-002-R-01), hereto referred to as L2, at the former Joliet Army Ammunition Plant (JOAAP) located in Will County, Illinois. The RI work falls within the Military Munitions Response Program (MMRP) and the work was completed in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act and the National Contingency Plan.

The objectives of this RI were to:

- Determine if munitions and explosives of concern (MEC) are present at the MRS on the surface or in the subsurface.
- Characterize the nature and extent of MEC, if present.
- Determine if a release of munitions constituents (MC) has occurred, and characterize the nature and extent of that release.
- Provide data necessary to assess the associated threat to human health or the environment.
- Collect adequate information to complete a Feasibility Study or to make a No Further Action (NFA) recommendation.

The principal field activities completed during the RI were a biological/ecological site visit, vegetation removal, geophysical survey, and intrusive investigation. Discrete MC soil sampling was to be performed only if intrusive investigation results indicated the presence of MC sources and release mechanisms, such as exposed explosive filler. Based on the findings of RI field activities, MC soil sampling was not necessary.

Background

The L2 MRS is located in the west-central portion of the former Load-Assemble-Package (LAP) Area, approximately 1 mile west of Chicago Road, and north of Central Road. The majority of the MRS is south of Prairie Creek; however, the site overlaps the creek and includes a small area to the north of the creek bed. The L2 MRS was used from the 1940s to the 1970s for open burning of explosives and explosive wastes. The L2 MRS is owned by the U.S. Army and is currently not used. The U.S. Army intends to transfer the property to the U.S. Department of Agriculture (USDA) for inclusion into the Midewin National Tallgrass Prairie (MNTP). The land surrounding the L2 MRS boundary has already been transferred to and is owned by the USDA. The U.S. Forest Service, a branch of the USDA, manages the MNTP property.

Various investigations and removals have already been completed at L2:

- Under an Installation Restoration Program (IRP) Phase I RI, sampling indicated areas of L2 were impacted by explosives, metals, volatile organic compounds, semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons, and total phosphorus (Dames and Moore 1993). The Phase II RI for L2 included additional soil sampling to supplement the

results of the Phase I RI. The Phase II report provided the interpreted volume of explosives and metals contamination in soils.

- Contamination at L2 identified by the Phase I and Phase II RIs was addressed under a Record of Decision (ROD) for the JOAAP LAP Area (AEC 2004). The ROD identified the final remedial goals and the selected remedies for Soil Remedial Units (SRUs) 1 (explosives) and 2 (metals) at L2.
- In 2007, remedial action activities identified in the 2004 ROD were completed at L2. Approximately 950 cubic yards of SRU 1 soils and 7,000 cubic yards of SRU 2 soils were excavated and disposed off-site. Confirmation soil sampling was completed to verify the areas had been successfully excavated to meet the lower and upper cleanup values established in the 2004 ROD.
- An Ordnance Removal and Site Characterization were completed in 2001 to locate, identify, and dispose of all surface and subsurface unexploded ordnance (UXO). During the removal action at L2, 92 UXO items were found including M48 nose fuzes, M66 base fuzes, miscellaneous fuze boosters, and 75 millimeter projectiles. The Ordnance Removal and Site Characterization Report also recommended that a removal action to 1 foot below ground surface (bgs) be completed within the 200-foot buffer area surrounding the L2 IRP site because MEC was located up to the boundary of the site.
- A Closed, Transferring, and Transferred Range/Site Inventory Report was completed in 2002. The findings of the report documented the potential munitions types at L2 (e.g., fuzes, boosters, high explosive [HE] bombs, medium caliber HE rounds, and small arms), the potential for MC at L2 and that L2 was MMRP eligible.
- A Site Inspection (SI) was completed in 2005. During planning, it was determined that no fieldwork was needed and the SI would evaluate previously collected data. The SI report indicated that extensive MC sampling had been completed under the IRP and MC contamination had been sufficiently characterized. However, the SI also indicated that MEC had not been sufficiently characterized at the site and that the potential remained for MEC to be present within the 200-foot perimeter.
- As part of the remedial action completed to address soil contamination, the IRP portions of L2 underwent a MEC surface and subsurface removal. In 2006, 155 grids at L2 underwent MEC removal to a depth of 1 foot bgs. Approximately 2,100 MEC items, 13,000 pounds of munitions debris (MD), and 5,000 pounds of range-related debris were recovered during the removal. In 2007, the 200-Foot Buffer MRS (JAAP-002-R-01) portion of L2 also underwent a MEC surface and subsurface removal. A total of 28 acres within the buffer underwent MEC removal to 1 foot bgs. Approximately 290 MEC items, 3,600 pounds of MD, and 4,900 pounds of other debris were recovered during the removal.

RI Fieldwork

This RI investigated the L2 MRS using a combination of geophysical surveys and intrusive investigation of anomalies. A total of 5.47 acres of geophysical survey coverage and 435 intrusive investigations were completed in October and November 2015. Eighteen MEC items were identified during intrusive investigations at depths ranging from 2 to 18 inches bgs. MD

was also found to be widely distributed across the MRS with depths ranging from 1 to 36 inches bgs. Discrete MC soil sampling was to be performed only if intrusive investigation results indicated the presence of an MC source and release mechanism, such as MEC with exposed explosive filler. However, no MC source and release mechanisms were identified at L2 during the RI fieldwork.

Conclusions and Recommendations

Eighteen MEC items were identified in shallow subsurface soil at the L2 MRS. The MEC conceptual site model was updated to reflect new information collected during the RI. A MEC Hazard Assessment Level Category rating of 3 was assigned to the L2 MRS based primarily on the types of MEC identified during the RI, site accessibility, and anticipated future land use. The Munitions Response Site Prioritization Protocol (MRSPP) rating is C, which corresponds to a priority of 4, the third highest priority per the Department of Defense MRSPP Primer (DoD 2007) for an MRS without chemical warfare materiel. Based on these results, MEC poses an unacceptable potential hazard to current and future receptors at the L2 MRS. Therefore, the L2 MRS is recommended for further munitions response action to address MEC.

No additional MC sampling was necessary during this RI because no potential sources of MC contamination (e.g., MEC items with exposed explosive filler) were identified. The MC conceptual site model was revised to show that there are no complete exposure pathways for potential receptors at the L2 MRS because there is no source of MC.

URS Group, Inc. (URS) was contracted by the United States (U.S.) Army Corps of Engineers (USACE) – Louisville District under Contract Number W912DY-09-D-0061, Delivery Order CY02 to complete munitions response services at the former Joliet Army Ammunition Plant (JOAAP) located in Will County, Illinois. The work falls within the Military Munitions Response Program (MMRP) and all work was completed in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Contingency Plan. This Remedial Investigation (RI) report addresses the Explosive Burning Ground 1 (L2) Munitions Response Site (MRS) (JAAP-002-R-01), hereto referred to as L2.

1.1 OBJECTIVES

The objectives of this RI were to:

- Determine if munitions and explosives of concern (MEC) are present at the MRS on the surface or in the subsurface.
- Characterize the nature and extent of MEC, if present.
- Determine if a release of munitions constituents (MC) has occurred, and characterize the nature and extent of that release.
- Provide data necessary to assess the associated threat to human health or the environment.
- Collect adequate information to complete a Feasibility Study (FS) or to make a No Further Action (NFA) recommendation.

The RI fieldwork at the L2 MRS included a biological/ecological site visit, vegetation removal, geophysical data collection, and intrusive investigation of target anomalies to determine if MEC were present. Additionally, discrete MC soil sampling was to be performed only if intrusive investigation results indicated the presence of an MC source and release mechanism, such as MEC with exposed explosive filler. Based on the findings of the RI field activities, MC soil sampling was not necessary.

1.2 PROPERTY DESCRIPTION AND SITE BACKGROUND

1.2.1 Facility Location and History

The former JOAAP facility is located in Will County, Illinois, approximately 10 miles south of Joliet and 40 miles southwest of Chicago (**Figure 1-1**). Interstate 80 runs east to west approximately 10 miles north of the facility and Interstate 55 runs north to south, just to the west of the facility. The former JOAAP facility encompassed 36,000 acres.

JOAAP is a former Army munitions production facility that operated from 1940 to 1999, when all defense contractor leases ended. Prior to military use, the land comprising JOAAP was used for agricultural purposes. In 1940, the Army bought land from local farmers to develop the Elwood Ordnance Plant and the Kankakee Ordnance Works. In 1945, these two facilities were consolidated to form the Joliet Arsenal, which would later become JOAAP. JOAAP was divided

into two main functional areas by Route 53, which runs north to south through the central portion of the former facility. The Manufacturing (MFG) Area was located to the west of Route 53 and the Load-Assemble-Package (LAP) Area was located to the east of Route 53.

The MFG Area was placed on the National Priorities List in July 1987. This portion of the installation was used to manufacture trinitrotoluene, dinitrotoluene, 2,4,6-trinitrophenylmethylnitramine, and other chemical constituents of munitions, propellants, and explosives. The production facilities were located in the northern part of the MFG Area and an extensive explosives storage facility occupied the southern half of the MFG Area. The LAP Area was placed on the National Priorities List in March 1989. The LAP Area was used to load, assemble, and pack bombs, shells, mines, and supplementary charge munitions for shipping, and included a demilitarization area. Chemical warfare materiel (CWM) was not produced in either the LAP or the MFG Areas at any time in the history of JOAAP and its predecessors.

The majority of the original 36,000 acres comprising the JOAAP facility has been transferred from military ownership. Approximately 13,000 acres were transferred in the early 1960s prior to CERCLA and other environmental regulations. When the Army declared JOAAP excess property in 1993, government officials assembled a 24-person Joliet Arsenal Citizens Planning Commission (JACPC) to formulate a reuse plan for the remaining property. This group, which included members from federal, state, and local governments and non-governmental organizations, was designed to ensure that the reuse plan would be thoroughly evaluated. In accordance with the Illinois Land Conservation Act (ILCA) of 1995 and following the JACPC's reuse plan, the Army cleaned up and transferred excess property to various federal, state, and local state jurisdictions from 1996 until 2005.

Current property ownership at the former JOAAP facility is illustrated on **Figure 1-2**. Approximately 1,500 acres of JOAAP are still under military ownership. While a small complement of Army staff is present at JOAAP, the facility is not industrially active. The Midewin National Tallgrass Prairie (MNTP) now occupies approximately 19,100 acres of the former JOAAP installation. MNTP lands are owned by the U.S. Department of Agriculture (USDA) and managed by the U.S. Forest Service (USFS). These lands consist mostly of open fields, agricultural areas, or undeveloped woodlands. Other major property owners include Department of Veterans Affairs (Abraham Lincoln National Veterans Cemetery), State of Illinois Industrial Parks (various uses), and Will County (Prairie View Recycling and Disposal Facility).

1.2.2 L2 MRS Location and History

The L2 MRS is located in the west-central portion of the former LAP Area, approximately 1 mile west of Chicago Road, and north of Central Road (**Figure 1-3**). The majority of the MRS is south of Prairie Creek; however, the site overlaps the creek and includes a small area to the north of the creek bed. The L2 MRS was used from the 1940s to the 1970s for open burning of explosives and explosive wastes. The site included six burning pads (each approximately 650 feet long), three popping furnaces, a bermed area, and three oil pits. These historical site features, and associated contamination, have been addressed during previous remedial actions performed under the Installation Restoration Program (IRP). The total size of the L2 MRS is 52 acres. The

L2 MRS is owned by the U.S. Army and is currently not used. The U.S. Army intends to transfer the property to the USDA for inclusion into the MNTP. The L2 MRS is surrounded by the 396-acre L2-L3 Extended Buffer Area MRS (JAAP-001-R-02), which has already been transferred to and is owned by the USDA.

1.3 PREVIOUS INVESTIGATIONS AND ACTIONS

The L2 site has undergone investigations under the IRP as well as under the MMRP. In addition, removal actions have been completed.

1.3.1 IRP Investigations and Remedial Actions

IRP Phase I and Phase II RIs were completed at the LAP Area from 1991 through 1994. These RIs were performed to identify the type, concentration, and extent of contamination throughout the LAP Area at JOAAP. A total of 35 sites were investigated, including L2. At the time the Phase I RI was completed, the L2 IRP site comprised six 650-foot-long by 50-foot-wide gravel burning pads, three popping furnaces, and three oil disposal pits totaling approximately 5.5 acres. During the Phase I RI, soil samples, surface water samples, and sediment samples were collected at the former L2 IRP site to evaluate potential contamination of Prairie Creek and Kemery Lake due to runoff from contaminated areas. The Phase I RI sampling indicated areas of L2 that were impacted by explosives, metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH), and total phosphorus (Dames and Moore 1993). Samples were also analyzed for polychlorinated biphenyls (PCBs)/pesticides, but these chemicals were not detected at concentrations of concern. The Phase II RI (Dames and Moore 1994) for L2 included additional soil sampling for explosives, metals, and anions at the burning pads to supplement the results of the Phase I RI (**Appendix A**). Additional soil samples were also collected at the popping furnaces for metals and anions, and at the oil pits for explosives, metals, anions, VOCs, SVOCs, TPH, PCBs, and pesticides. The Phase II RI Report interpreted the volume of explosives and metals contamination in soils as follows:

- Burning Pads - 35,000 cubic yards of explosives-contaminated soil
- Popping Furnaces - 3,070 cubic yards of metals-contaminated soil
- Oil Pits - 4,000 cubic yards of explosives- and SVOC-contaminated soil

Contamination at L2 identified by the Phase I and Phase II RIs was addressed under a Record of Decision (ROD) for the JOAAP LAP Area (AEC 2004). The ROD identified the final remedial goals and the selected remedies for Soil Remedial Units (SRUs) 1 (explosives) and 2 (metals) at L2. In 2007, remedial action activities identified in the 2004 ROD were completed at L2. Approximately 950 cubic yards of SRU 1 soils and 7,000 cubic yards of SRU 2 soils were excavated. The lateral and vertical extent of excavation at the burning pads were smaller than anticipated due to additional characterization sampling completed during the remedial action, which resulted in lower excavation quantities than estimated in the Phase II RI Report. Confirmation soil sampling verified the areas had been successfully excavated to meet the lower

and upper cleanup values established in the 2004 ROD. Confirmation soil sampling results are presented in **Appendix A** (MWH 2009).

1.3.2 MMRP Removal Actions and Investigations

In 2001, the U.S. Army Engineering & Support Center, Huntsville contracted EOD Technology, Inc. (EODT) to complete an Ordnance Removal and Site Characterization at L2. The objective was to perform a removal action (to locate, identify, and dispose of all surface and subsurface unexploded ordnance [UXO]). During the removal action at L2, 92 UXO items were found including M48 nose fuzes, M66 base fuzes, miscellaneous fuze boosters, and 75 millimeter (mm) projectiles. In addition, because MEC was located up to the boundary of the site, it was also recommended a removal action be completed within a 200-foot buffer surrounding the IRP site boundary to 1 foot below ground surface (bgs) (EODT 2001).

In 2002, L2 was included in a Closed, Transferring, and Transferred (CTT) Range/Site Inventory Report. Although no fieldwork was completed at L2 during the CTT Inventory, project personnel conducted a 3-day visit to JOAAP to complete the data collection portion of the CTT. The findings of the CTT Inventory indicated:

- Potential munitions types at L2 included fuzes, boosters, high explosive (HE) bombs, medium caliber HE rounds, and small arms
- There was potential for MC
- L2 was MMRP eligible
- L2 was approximately 45 acres (e2M 2002)

An SI was completed at L2 in 2005 (e2M 2005). During the Technical Project Planning (TPP) for the SI, it was determined that no fieldwork was needed and that the SI would evaluate previously collected data. The SI report indicated that extensive MC sampling had been completed under the IRP and MC contamination had been sufficiently characterized. The SI also indicated that MEC had not been sufficiently characterized at the site and that MEC was potentially present within a 200-foot buffer area (MWH 2009).

As part of the remedial action completed to address soil contamination (MWH 2009), the IRP portions of L2 underwent a MEC surface and subsurface removal. In 2006, 155 grids at L2 underwent MEC removal to a depth of 1 foot bgs. Approximately 2,100 MEC items, 13,000 pounds of MD and 5,000 pounds of range-related debris were recovered during the removal (USAE 2007). In 2007, the 200-Foot Buffer MRS (JAAP-002-R-01) portion of L2 (28 acres) also underwent a MEC surface and subsurface removal to a depth of 1 foot bgs. Approximately 290 MEC items, 3,600 pounds of MD, and 4,900 pounds of other debris were recovered during the removal (MKM 2010).

The list of MEC items recovered from the L2 MRS prior to this RI is provided in **Table 1-1**.

1.4 REPORT ORGANIZATION

This RI report is organized as follows:

- **Section 1: Introduction** presents the objectives, property description, and results of previous investigations.
- **Section 2: General Environmental Setting** presents the general environmental setting.
- **Section 3: Study Area Investigation** presents the RI data quality objectives (DQOs) and investigation activities that were completed.
- **Section 4: MEC Characterization** summarizes the RI results, describes the nature and extent of MEC impact at the L2 MRS, and MEC fate and transport.
- **Section 5: Revised Conceptual Site Model (CSM)** revises the CSM developed during previous investigations.
- **Section 6: MEC Hazard Assessment (HA) and Munitions Response Site Prioritization Protocol (MRSPP)** addresses the MEC HA scoring and rationale and MRSPP score.
- **Section 7: Summary and Conclusions** presents a summary of the findings and conclusions of this RI.
- **Section 8: References** presents a list of references for this RI report.
- **Appendix A: Historical Site Data** provides data from previously completed investigations and removal actions.
- **Appendix B: Biological/Ecological Site Visit** presents the findings of the biological/ ecological site visit completed prior to the start of fieldwork for this RI.
- **Appendix C: TPP Meeting Minutes** contains the TPP meeting notes that document TPP meetings held with project stakeholders.
- **Appendix D: Photographic Log** presents photographs taken during RI field activities.
- **Appendix E: Digital Geophysical Mapping (DGM) Survey Data and Instrument Verification Strip (IVS) Memorandum** presents the data generated during DGM transect and grid surveys and the Final IVS Memorandum.
- **Appendix F: MEC Accountability Log** presents cradle-to-grave tracking for MEC completed during the RI.
- **Appendix G: Daily Field Management Reports** presents the daily field reports completed during RI field activities.
- **Appendix H: Target Excavation Data** presents intrusive investigation data generated during the RI.
- **Appendix I: Summary of Analytical Data** presents the analytical results of post-demolition soil sampling completed as part of the RI.

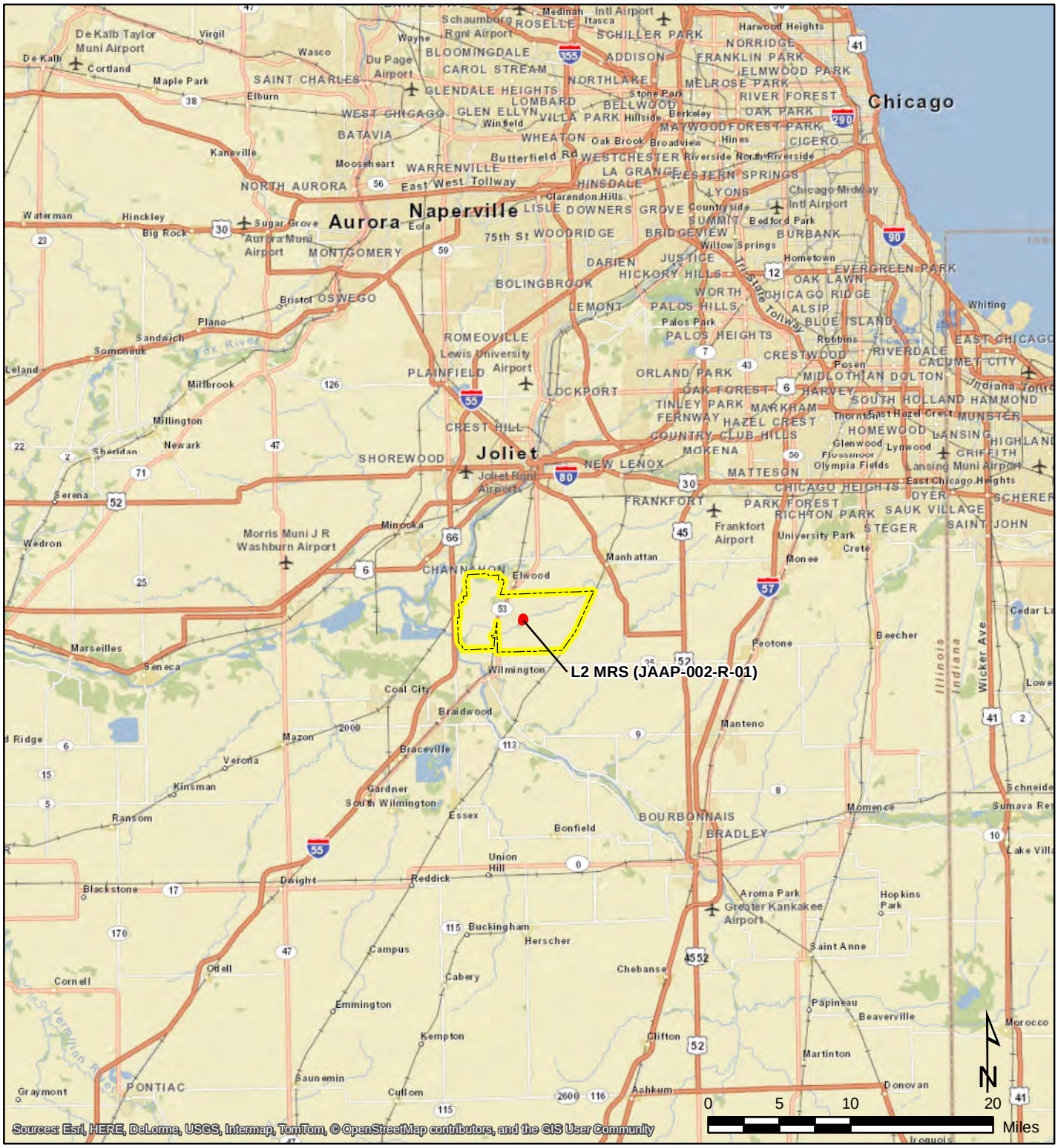
- **Appendix J: Data Review and Validation** presents data review and validation findings for the chemistry data.
- **Appendix K: MEC HA Workbook** presents the worksheets and scoring generated during the MEC HA.
- **Appendix L: MRSPP Tables** presents the MRSPP scores.
- **Appendix M: Responses to Comments** contains responses to regulator comments on the RI Report and approval letter.

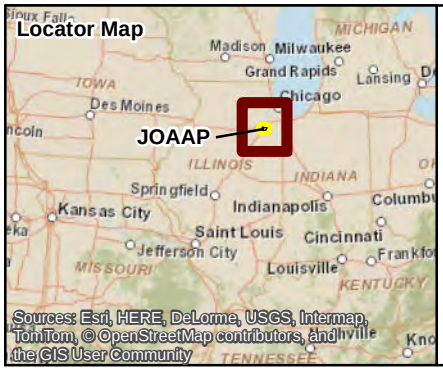
Table 1-1
MEC Items Recovered During Previous Removal Actions

Item	Quantity
106mm unknown	1
155mm MK1 shrapnel	15
4" long pipe with HE	1
4" piece of detonation cord	1
4.5" rocket warhead	2
40mm frag ball	30
40mm HE grenade	1
57mm HEAT	10
75mm HCHE	1
75mm shrapnel round	204
76mm APHE	14
90mm w/ M51 fuze	4
Base of 75mm HE	6
Base of 75mm shrapnel	15
Base of 90mm HE	10
Base of M43 fuze	11
Base of M48 fuze	2
BLU 26	1
BLU 26 half shell	2
BLU 26 half shell without fuze	3
Booster	2,015
Broken 75mm HE	4
Broken 90mm HE	17
Flash tube	6
Frag ball from M39	1
Fuze BD M66A1	213
Fuze BD M68	8
Fuze bomb nose	1
Fuze M51	1
Fuze M60	12

Item	Quantity
Unknown primer	1
Fuze M61	1
Fuze M66	25
Fuze MT M43	60
Fuze MT M54	1
Fuze MT M61A2	1
Fuze MT M67A1	1
Fuze MT M67A2	1
Unknown fuze MT	2
Fuze PD M183	1
Fuze PD M48	21
Fuze PD T83	2,388
Fuze PTTF AA MK III A 2	1
Fuze PTTF MK III	2
Fuze MT M43A1	5
High explosive chunks	15
M5 landmine	2
Nose of 75mm HE	24
Projectile 20mm HE	14
Projectile 30mm HE	3
Projectile 30mm T328	2
Projectile 40mm HE	1
Projectile 40mm smoke	1
Projectile 57mm HE	8
Projectile 75mm HE	20
Projectile 90mm HE	31
Propellant grain	2
Shotgun shell	1
Small piece of HE	1
Supplemental charge	9

Notes:
Source: MKM 2010, USAE 2007
APHE = armor-piercing high explosive
BD = base detonating
BLU = bomb live unit
HCHE = high-capacity high explosive
HE = high explosive
HEAT = high explosive anti-tank
HPHE = high explosive
mm = millimeter
MT = mechanical time
PD = point detonation
PTTF = powder train time fuze





Legend

- Former Joliet Army Ammunition Plant
- L2 MRS (JAAP-002-R-01)

URS

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JOAAP Location Map
Joliet AAP
Joliet, Illinois

Drawn By:	Date:	
JZ	12/15/2015	**Figure 1-1**
Checked By:	Project No.	
ZT	60419079/16170871	

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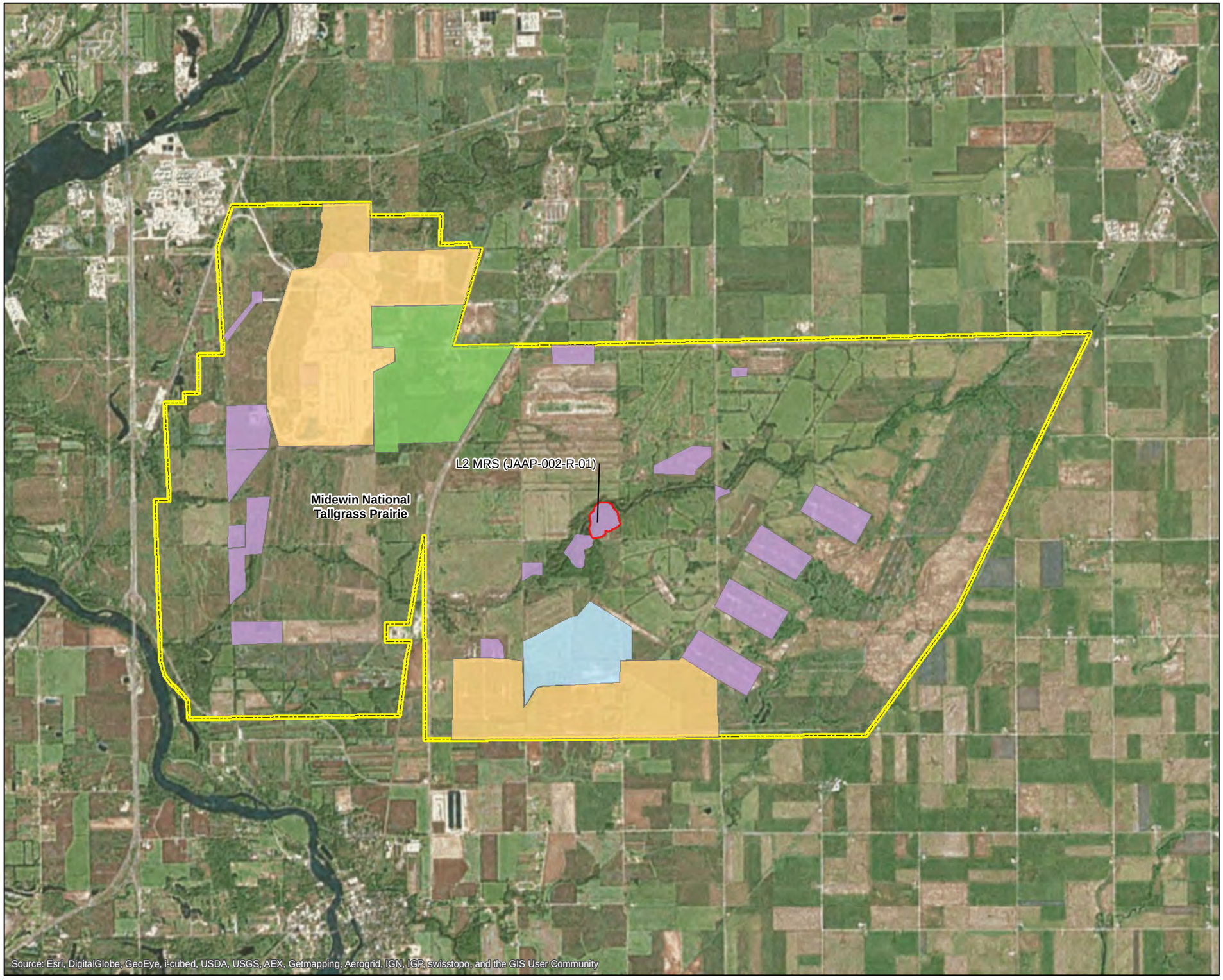

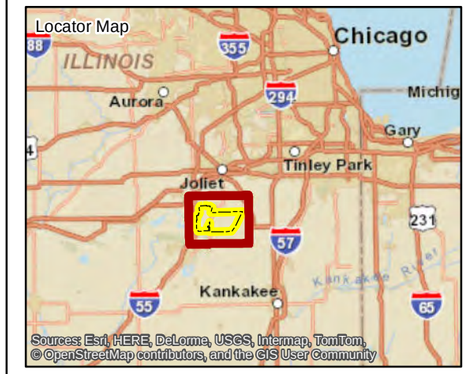

Legend

- Former Joliet Army Ammunition Plant
- L2 MRS (JAAP-002-R-01)
- U.S. Army Property
- State of Illinois Industrial Parks
- Will County Landfill
- Department of Veteran Affairs National Cemetery

N

0 0.5 1 2 Miles

URS

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Land Ownership Map
Joliet AAP
Joliet, Illinois

Drawn By: JZ	Date: 1/15/2016	**Figure 1-2**
Checked By: ZT	Project No. 60419079/16170871	

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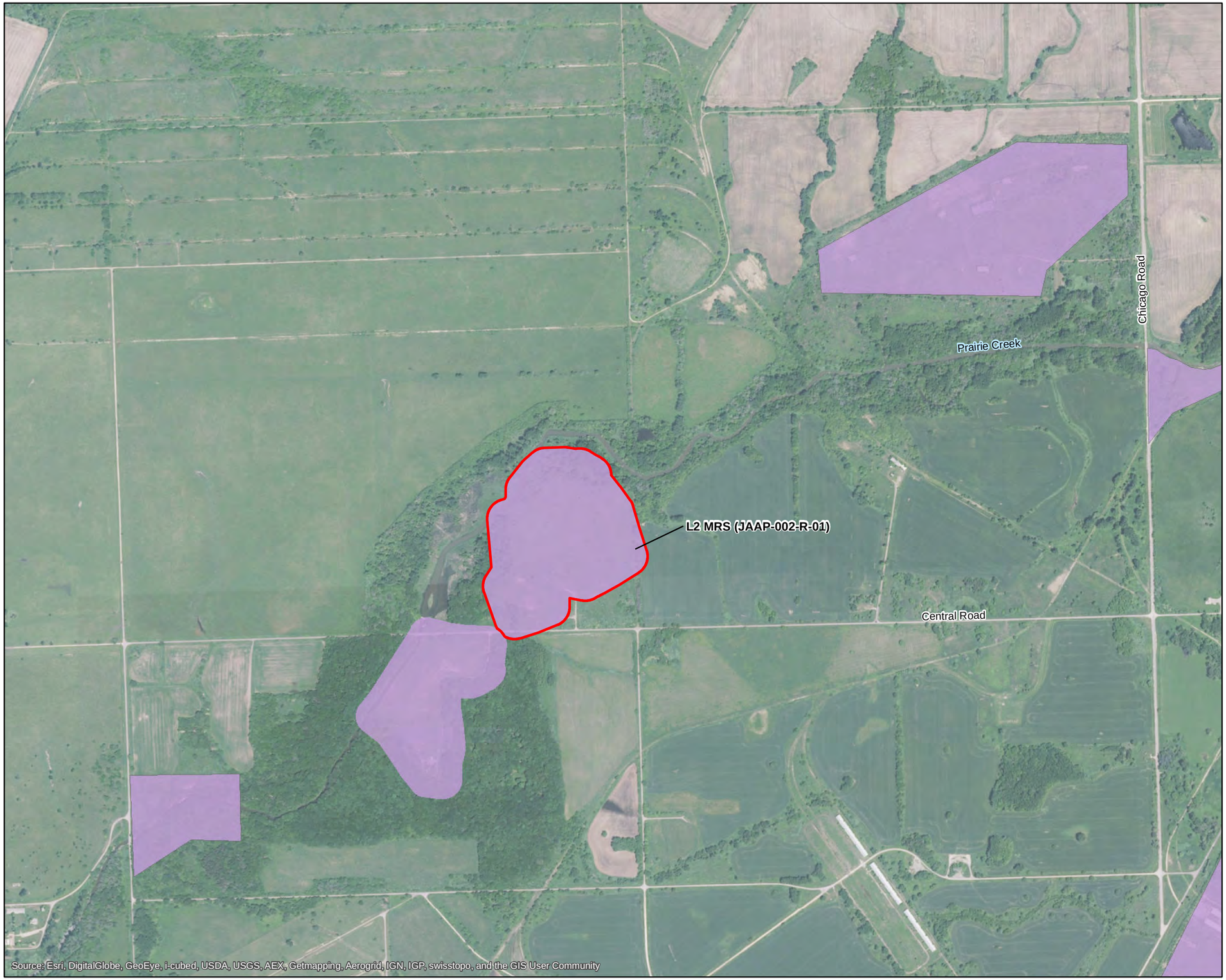

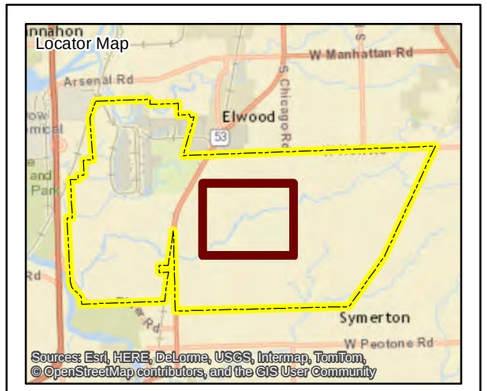

Legend

- Former Joliet Army Ammunition Plant
- L2 MRS (JAAP-002-R-01)
- U.S. Army Property

N

0 500 1,000 2,000 Feet

URS

US Army Corps of Engineers®

MRS Location Map
Joliet AAP
Joliet, Illinois

Drawn By: JM	Date: 1/15/2016	**Figure 1-3**
Checked By: ZT	Project No. 60419079/16170871	

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2.1 PHYSIOGRAPHY, TOPOGRAPHY, AND HYDROLOGY

JOAAP is located near the fork of the confluence of the Des Plaines and Kankakee Rivers, within the northern part of the extensive Central Lowlands physiographic province. The site is included within the northern part of the extensive Central Lowlands physiographic province and characterized by relatively flat topography and low relief.

The topography at L2 slopes north-northeast toward Prairie Creek. Ground elevation ranges from approximately 600 feet above mean sea level along Prairie Creek to 635 feet above mean sea level in the southeastern corner. The most notable topographic features at the site are two abandoned earth covered magazines, which are elevated above the surrounding land surface. Surface elevations at L2 are presented on **Figure 2-1**. Surface water runoff from L2 flows north-northeast to Prairie Creek.

Portions of L2 overlap Prairie Creek, and the area immediately surrounding Prairie Creek is a low-lying flood plain that is generally wet. Prairie Creek flows to the west along the northern boundary of the site and eventually discharges to the Kankakee River just outside the former JOAAP boundary. Prairie Creek lies within a Federal Emergency Management Agency-identified 100-year floodplain and is subject to flooding. Flooding at Prairie Creek is assumed to be limited to inland flooding events linked to significant precipitation events where precipitation accumulates over several days or substantial precipitation falls over a short period of time. The creek does not appear to receive storm water runoff associated with storm water infrastructure and is assumed to receive runoff only via overland flow from the surrounding lands. Beyond the former JOAAP facility boundary, Prairie Creek traverses through sparsely populated agricultural lands (AEC 2004).

2.2 CLIMATE AND PRECIPITATION

The average summer temperatures at JOAAP are in the 70 to 80 degrees Fahrenheit (°F) range and average winter temperatures are in the 20 to 30°F range. July is the warmest month of the year with an average maximum temperature of 84°F. January is the coldest month of the year with an average minimum temperature of 17°F. Precipitation is generally distributed evenly throughout the year, but July tends to be the wettest month, receiving an average of 4.3 inches of rain. Average annual precipitation is 37 inches, including an average of 24 inches of snow per year (USA 2015).

2.3 GEOLOGY AND SOILS

JOAAP lies within an area that was part of the Wisconsin glaciation period, characterized by unconsolidated glacial drift deposits of varying thicknesses (Henry and Wedron Formations) overlying dolomitic bedrock. The Henry Formation is 5 to 25 feet thick and includes sandy and gravelly silts as well as distinct beds of sand and gravel. The Wedron Formation is extensive in upland areas of JOAAP and is composed of clayey silt with minor sand. The combined thickness of the Wedron and Henry formations is generally less than 25 feet in the western part

of JOAAP and increases to 60 to 70 feet in the central part (Advent 2015). Overburden soils at L2 are composed of glacial deposits, primarily clayey or silty sand and silty clays. Nine borings drilled between 1981 and 1991 at L2 encountered dolomite bedrock at depths ranging from 18 to 28 feet bgs, with bedrock elevation ranging from approximately 579 to 591 feet above mean sea level.

According to the USDA Web Soil Survey (USDA 2015), Elliot silty clay loam accounts for the majority of the soils located at L2. Soil slopes range from 0 to 2 percent in the central and eastern portion of the site. The remainder of the site is comprised of Elliot silt loam which slopes 2 to 4 percent in the south portion of the site; Beecher silt loams which slopes 2 to 4 percent in the western portion of the site; Ashkum silty clay loam which slopes 0 to 2 percent in the southwestern corner, western portion, and the east portion of the site; Ozaukee silt loam which slopes 4 to 6 percent in the western and southwestern portion of the site; Joliet silt loam which slopes 0 to 2 percent in the west and northwest portion of the site; and Markham silt loam which slopes 4 to 6 percent in the south portion of the site. The surface soils present at the L2 MRS are shown on **Figure 2-2**.

2.4 HYDROGEOLOGY

Groundwater occurs in several aquifers beneath the former JOAAP facility. Regional groundwater flow is generally westward, but is locally influenced by streams, including Prairie Creek. A shallow overburden aquifer is located within glacial drift soils. Below the glacial drift is a Silurian dolomite water-bearing zone. Deeper Cambrian and Ordovician bedrock aquifers are isolated from the shallow aquifers by low-permeability shale beds of the Maquoketa Group.

Groundwater at the JOAAP facility has been determined by the Illinois Environmental Protection Agency (IEPA) to be both Class I (potable) and Class II (non-potable general resource); however, the IEPA has classified the glacial drift aquifer as Class II because its low yield does not supply usable quantities of potable groundwater. The Silurian dolomite is considered a Class I groundwater resource and it is used as a potable water source on a limited basis in the vicinity of the JOAAP facility despite elevated levels of sulfate and iron (e2M 2005).

During the October 2012 semi-annual groundwater monitoring at L2, the depth to groundwater varied from approximately 6 to 23 feet bgs. Groundwater flow direction in the overburden and bedrock aquifers is generally toward the northwest. Based on the groundwater data flow data, Prairie Creek is the likely discharge point for all shallow groundwater in the vicinity of L2.

2.5 VEGETATION AND ECOLOGY

A large portion of JOAAP is located in the MNTP, and vegetation includes both upland (e.g., little bluestem and sideoats gramma) and lowland grasses (e.g., Indian grass and switchgrass). The woodlands at JOAAP are primarily a mix of hardwoods species, including oak, maple, ash, black walnut, shagbark hickory, cottonwood, elm, locust, box elder, osage orange, black cherry, hackberry, red mulberry, Kentucky coffeetree, field cedar, and hawthorn. Thick, nearly

impassible vegetation is present within the L2 MRS, especially along the banks of Prairie Creek and in the southwest portion of the MRS (Advent 2015).

On July 30, 2015, a site visit was completed by a URS Biologist to evaluate the potential for threatened and endangered species habitat the L2 MRS. The site visit indicated that L2 is an ecologically disturbed area dominated by *Cirsium altissimum* (tall thistle), *Dipsacus* species (teasel), *Lactuca biennis* (wild lettuce), *Trifolium* species (clover), *Solidago* species (goldenrod), *Coronilla varia* (crown vetch), *Daucus carota* (Queen Anne's lace), unidentified grasses (not in flower), and *Elaegnus angustifolia* (Russian olive). The area has been historically disturbed and currently contains a road through the center area, with adjacent ditches. Prairie Creek is located within the MRS, but at this location its banks are steep and it possesses a gravel and rock shoreline; therefore, no Blanding's turtle habitat is present at the creek in this MRS. It was determined that no native vegetative communities are intact at this location, and there is no habitat present for protected species. The complete Biological/Ecological Survey is presented in **Appendix B**.

2.6 DEMOGRAPHICS

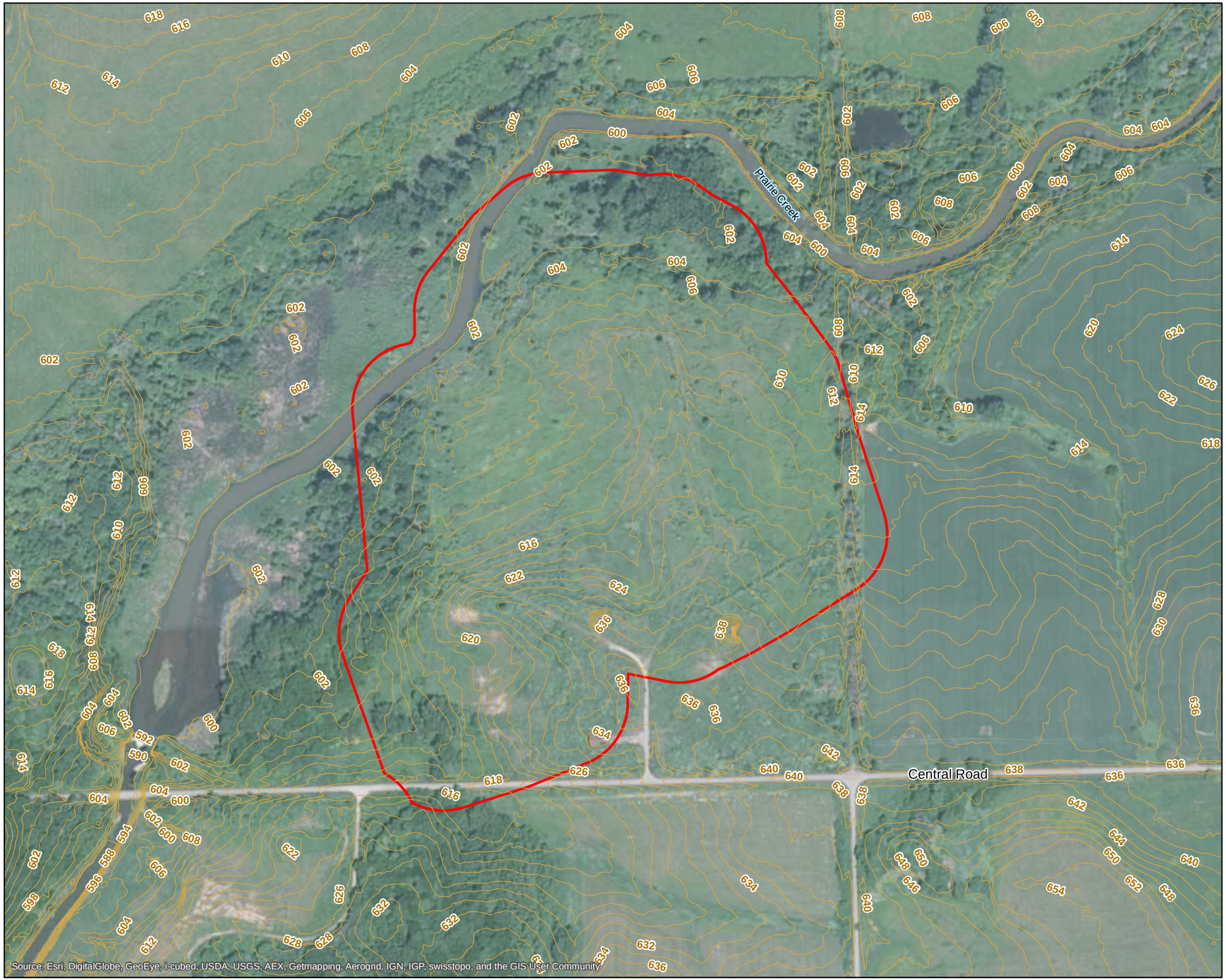
According to the U.S. Census Bureau 2010 data, the population density of Will County is 810 persons per square mile. However, Census Tract 9800, which contains the L2 MRS, has a population density of 0 persons per square mile. Census Tract 9800 is a special Census Tract code used specifically to identify special land-use census tracts that are defined to encompass a large area with little or no residential population with special characteristics (i.e., large parks or employment areas).

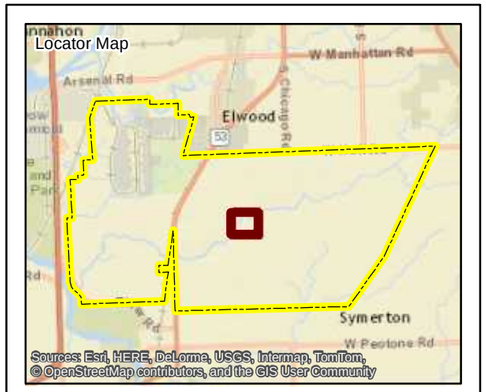
The highest population density within a 2-mile radius of the L2 MRS occurs at Census Tract 8833.06 (144 persons per square mile). Census Tract 8833.06 contains parts of the villages of Elwood and Channahon, located to the north and northeast of the L2 MRS. Additional surrounding Census Tracts (8833.04, 8835.09, and 8834.02) have population densities between 30 and 244 persons per square mile. Several incorporated areas (i.e., towns, villages), however, are located up to 2 miles from the boundary of the L2 MRS. These incorporated areas include at least parts of Joliet [city], Wilmington [city], Symerton [village], Elwood [village], and Channahon [village].

2.7 CURRENT AND PROJECTED LAND USE

The L2 MRS is owned by the U.S. Army and is currently not used. The U.S. Army intends to transfer the property to the USDA for inclusion into the MNTP. The L2 MRS is surrounded by the L2-L3 Extended Buffer Area MRS (JAAP-001-R-02), which has already been transferred to and is owned by the USDA. The USFS, a branch of the USDA, manages the L2-L3 Extended Buffer Area MRS property as part of the MNTP. The MNTP is an ecological area designated by the ILCA of 1995 and is the first national tallgrass prairie in the country. The preserve was created with the objectives of enhancing, restoring, and conserving native flora and fauna;

providing opportunities for environmental education and research; allowing continuation of existing agriculture; and providing appropriate recreational activities.





Legend

- Former Joliet Army Ammunition Plant
- L2 MRS (JAAP-002-R-01)
- – 614 – Elevation Contours (Contour Interval = 2 feet)

Note: Elevation contours in feet above mean sea level.
Contour Source: Will County, Illinois, GIS Department

N

0 150 300 600 Feet

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L2 Topography
Joliet AAP
Joliet, Illinois

Drawn By: JZ	Date: 3/17/2016	**Figure 2-1**
Checked By: ZT	Project No. 60419079/16170871	

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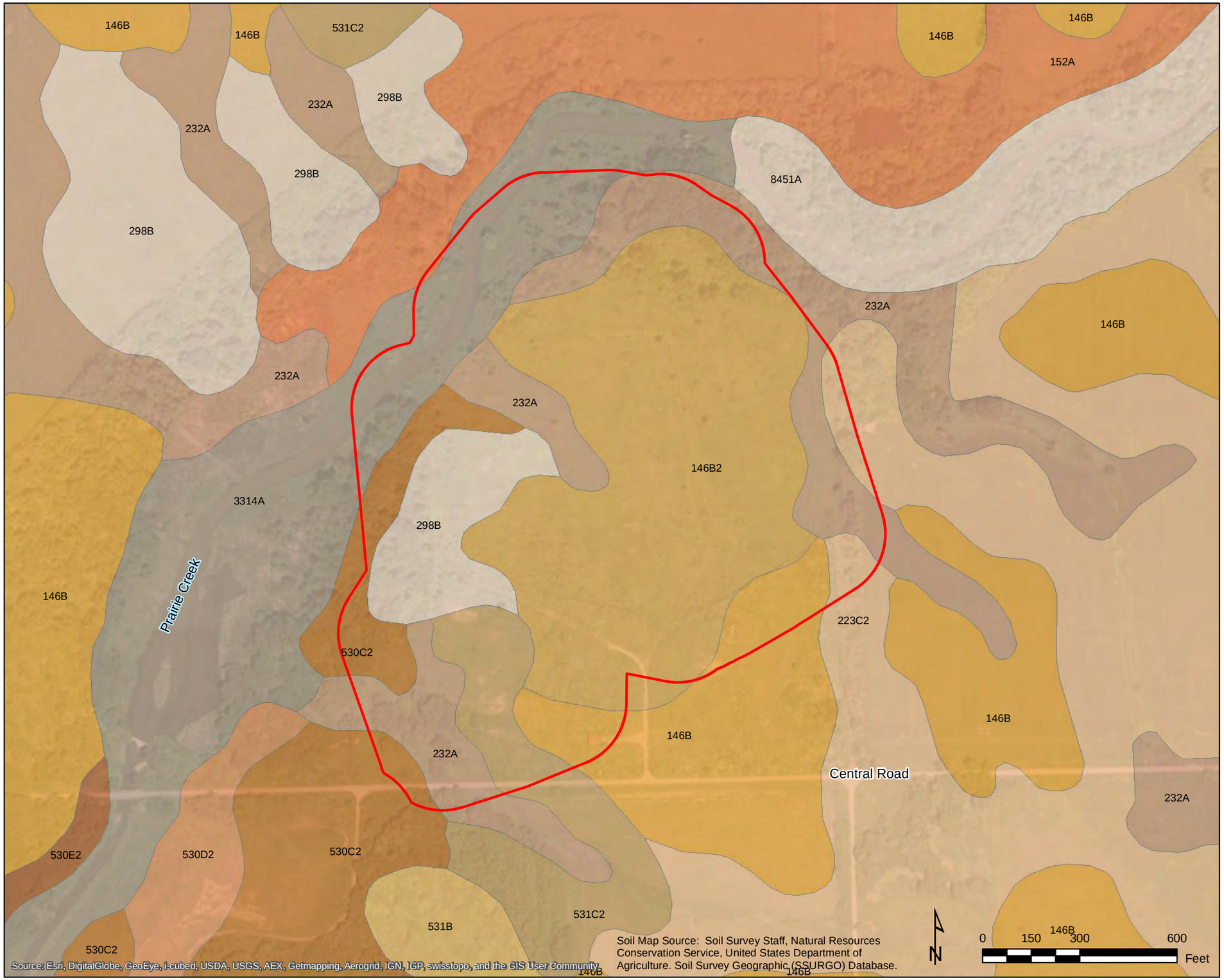

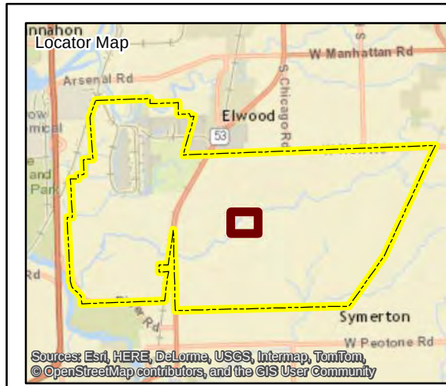

Legend

- Former Joliet Army Ammunition Plant
- L2 MRS (JAAP-002-R-01)
- Ashkum silty clay loam, 0 to 2 percent slopes (232A)
- Beecher silt loam, 2 to 4 percent slopes (298B)
- Drummer silty clay loam, 0 to 2 percent slopes (152A)
- Elliott silt loam, 2 to 4 percent slopes (146B)
- Elliott silty clay loam, 2 to 4 percent slopes, eroded (146B2)
- Joliet silt loam, 0 to 2 percent slopes (3314A)
- Lawson silt loam, 0 to 2 percent slopes, occasionally flooded (8451A)
- Markham silt loam, 2 to 4 percent slopes (531B)
- Markham silt loam, 4 to 6 percent slopes, eroded (531C2)
- Ozaukee silt loam, 4 to 6 percent slopes, eroded (530C2)
- Ozaukee silt loam, 6 to 12 percent slopes, eroded (530D2)
- Ozaukee silt loam, 12 to 20 percent slopes, eroded (530E2)
- Varna silt loam, 4 to 6 percent slopes, eroded (233C2)

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Surface Soils Map
Joliet AAP
Joliet, Illinois

Drawn By: JZ	Date: 12/17/2015	**Figure 2-2**
Checked By: ZT	Project No. 60419079/16170871	

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3.1 REMEDIAL INVESTIGATION DATA QUALITY OBJECTIVES

The DQO process is a systematic planning tool that is used for establishing data quality criteria and for developing a data collection approach. The DQO process was followed for the RI to identify data needs and to collect the type, quantity, and quality of data necessary to evaluate the L2 MRS and to support decisions for the L2 MRS. The steps of the DQO development process (USEPA 2006) include:

1. **State the Problem** – Define the problem that necessitates the study. Review prior studies and existing information to gain a sufficient understanding to define the problem.

2. **Identify the Goals of the Study** – State how data will be used in meeting objectives and solving the problem, identify study questions, and define alternative outcomes.

3. **Identify Information Inputs** – Identify data and information needed to answer study questions.

4. **Define the Boundaries of the Study** – Specify the target population and characteristics of interest, define spatial and temporal limits, and scale of inference.

5. **Develop the Analytic Approach** – Define the parameters of interest considered to be important to make inferences about the target population and develop the logic for drawing conclusions from findings.

6. **Specify the Performance or Acceptance Criteria** – Specify probability limits for false rejection and false acceptance decision errors. Develop performance criteria for new data being collected or acceptable criteria for existing data being considered for use.

7. **Develop the Plan for Obtaining Data** – Select the resource-effective sampling and analysis plan that meets the performance criteria.

The DQOs developed for the L2 MRS during the TPP process are presented in **Table 3-1** and attached in **Appendix C**. Deviations from the planned DQOs are presented in **Section 4**.

Preliminary CSMs for the L2 MRS, one for MEC and another for MC, were also developed during the TPP process. The preliminary CSMs addressed potential MEC and MC based on historical information and previous data, and identified potential sources and pathways. These preliminary CSMs are provided as **Figures 3-1** and **3-2**.

3.2 REMEDIAL INVESTIGATION ACTIVITIES

The RI at L2 MRS consisted of the following field activities, which are documented in the Photographic Log (**Appendix D**):

- Biological/ecological site visit to determine if threatened and endangered species or their habitats were present.

- Vegetation removal to prepare for digital and analog geophysical surveys
- Digital and analog geophysical surveys to identify subsurface target anomalies potentially representing MEC
- Intrusive investigation of target anomalies to characterize the nature and extent of MEC
- Material potentially presenting an explosive hazard (MPPEH) inspection process
- MEC disposal

Sampling and analysis to characterize MC was planned; however, no evidence of a MC release mechanism (e.g., MEC with exposed filler) was observed during the RI activities at L2. MC contaminants were sampled for and evaluated during the IRP Phase I and II RIs. A remedial action to address these contaminants was completed in 2007. Bulk HE chunks were previously identified and removed from the L2 MRS. Soil sampling completed near the locations of these HE chunks during the IRP Phase I, IRP Phase II, and remedial action confirmed that there was no release of MC to soil. Therefore, MC soil sampling and analysis were not required to achieve the RI objectives.

3.2.1 Biological / Ecological Site Visit

A biological/ecological site visit was completed by a URS Biologist prior to other RI fieldwork to identify potential sensitive ecological receptors and critical habitats. This fieldwork was supported by a qualified UXO technician implementing MEC and anomaly avoidance procedures in accordance with Engineer Manual (EM) 385-1-97. It was determined that no habitat for protected species was present at the L2 MRS. This site visit is documented in **Appendix B**.

3.2.2 Vegetation Removal

To support effective DGM data collection activities, vegetation removal was completed using a skid steer with mower attachment. Vegetation was cut parallel to the ground and as close to the ground surface as reasonably possible to support effective DGM operations. Cut vegetation was moved to the side of the survey area. A qualified UXO technician implemented MEC and anomaly avoidance procedures during vegetation removal activities. Vegetation removal was completed wherever practical and safe; however, several areas could not be cleared due to marshy terrain and areas of impenetrable growth. Areas in the northern portion of the MRS along Prairie Creek were moderately wet during RI field activities and could not undergo vegetation removal with mechanized equipment. In addition, the western portion of the MRS was heavily wooded and could not be effectively cleared of canopy vegetation; therefore, an analog geophysical survey was completed in these areas.

3.2.3 Geophysical System Verification

As part of the DGM survey, a Geophysical System Verification (GSV) process was used to determine background noise levels and confirm that the geophysical detection system was

operating properly. The GSV included an initial instrument detection demonstration, identification of background noise levels, daily quality control (QC) checks, and a Blind Seeding Program (BSP).

3.2.3.1 Instrument Verification Strip

The objectives of the IVS were to verify the geophysical detection system was operating as designed, to capture daily background noise levels due to site conditions, and to streamline daily QC checks. The IVS was composed of two linear tracks each 50 feet in length. Three small industry standard objects (ISOs), nominal 4-inch by 1-inch welded steel pipe nipples, with known characteristic responses were used as seeds and aligned and buried in the first track, no closer than 15 feet apart. No seed items were emplaced in the second track, and it was separated from the first track by at least 10 feet. The second track was used to quantify background noise during DGM. An as-built table showing the measured seed locations, seed descriptions, and IVS track endpoints is included in the IVS Report (**Appendix E**).

The IVS tracks were scanned prior to emplacement of the seed items to confirm that no subsurface metal or anomalies were present beneath either track. No substantial pre-existing anomalies were identified. The initial IVS location was identified prior to any DGM survey, and used the same IVS location as during previous fieldwork completed at the L2-L3 Extended Buffer MRS (JAAP-001-R-02).

An IVS Report was generated after completion of the initial tests in the IVS. It included a description of the IVS as-built, dynamic peak response values, offset dynamic peak response values, percent difference from expected response, positioning offsets for seed items, background noise levels, and minimum expected response for seed items. Plots showing depth versus response for expected munitions, local background noise levels, and proposed selection criteria were also included in the IVS Report, which was submitted to the USACE for review and approval (**Appendix E**).

3.2.3.2 Blind Seeding

A BSP was conducted as part of the DGM Survey and intrusive investigations and was incorporated in areas of grid-based surveys. The main purpose of the BSP was to provide ongoing confirmation that targets of interest were detected and recovered during the intrusive investigation process. The BSP included burying seed items (ISOs) in digital geophysical survey areas that would be blind to the data collection team, data processor, and UXO teams, and at a sufficient frequency such that they were useful for quality checks. A real-time kinematic (RTK) global positioning system (GPS) was used to record blind seed locations. Approximately one seed item was buried per DGM grid or 10,000 feet of linear transect. Small ISOs (McMaster-Carr Supply Company [part number 44615K466]) were used as blind seeds. These seed items were used to best represent the types of MEC identified in previous investigations at the site. The BSP was developed, implemented, and verified by the QC Geophysicist, Munitions Response Quality Program Manager and the UXO Quality Control Specialist (UXOQCS).

A total of 10 blind seeds were placed throughout the survey area, with six in complete coverage grids and four placed along transects. Two of the four blind seeds placed along transects were not targeted for investigation. The EM61 traveled directly over the seeds; however, the two unpicked transect seeds were buried too deeply (i.e., 8 and 10 inches) to produce a response above the pick threshold. All other blind seeds were picked within applicable performance standards.

3.2.4 Geophysical Surveys

This section provides an overview of the general approaches, methods, and field procedures used to complete the geophysical investigations. Detailed geophysical surveying procedures and equipment were used as described in the Final RI Work Plan (WP) (URS 2015). **Appendix E** includes the geophysical survey deliverable data and the IVS Report.

3.2.4.1 Geophysical Survey Instrumentation and Positioning Equipment

A time-domain electromagnetic system Geonics, Ltd., EM61-MK2 (EM61) system paired with a Trimble R8 RTK GPS for horizontal positioning were used during the RI to collect DGM data. The EM61 system consisted of a 1.0 meter (m) by 0.5 m coil with both a transmitter and receiver. The coil was located 42 centimeter (cm) above the ground surface for optimal data collection using the standard wheels.

The Trimble R8 RTK GPS was used to determine the location of the EM61 sensor. The system consisted of a rover and base station and provided cm-level accuracy. The Trimble R8 Rover was mounted directly over the EM61 sensor and interfaced with the Allegro data logger, which recorded positional data coincident with instrument readings and reported locations in real-time to the operator to ensure proper line spacing. Correction data were radio-transmitted from the base station to the R8 rover. The positional information was logged in the Illinois State Plane, U.S. Survey Feet. The control point and coordinates used are shown on **Figure 3- 3**.

Limited analog surveys were completed in areas where vegetation could not be removed using a Schonstedt GA-52Cx flux gate magnetic gradiometer that produces an audible tone. The tone varies with changes in the local magnetic gradient.

3.2.4.2 Geophysical Survey Approach

The objective of the geophysical survey was to detect subsurface anomalies that were indicative of MEC or MPPEH. DGM was performed to identify anomalies that were to be intrusively investigated during the target anomaly investigation phase of the RI field investigation to determine if MEC was present. DGM data was also used to validate and augment the data collected in previous investigations and analyses to further identify and evaluate suspect MEC locations at the site, and to further refine the CSM. Finally, the data was used to estimate the distribution and density of potential MEC and MPPEH in the MRS. In areas where DGM could not be conducted, an analog geophysical survey was completed.

Both transect- and grid-based surveys were chosen to meet the RI objectives. The transect-based survey mode was utilized as a reconnaissance approach to evaluate MEC impact throughout the area by systematic surveying along semi-linear paths to locate high-density anomaly areas. Parallel transects were laid out on a nominal 60-foot spacing with at least one swath collected on each transect, and two swaths collected on a majority of the transects. UXO Estimator was used to determine the amount of geophysical survey coverage necessary to provide a 95 percent confidence level that there was no more than 1.0 MEC item/acre at the L2 MRS if no MEC items were recovered. This approach was developed under the assumption that the MRS contained low anomaly density based on the previous removal actions completed.

The grid-based surveys were used to augment the results of transect-based surveys. This additional evaluation more thoroughly characterized the nature and extent of MEC and MPPEH within the grids. Grid-based surveys were performed through deployment of a fixed line pattern with approximately 2.5-feet (0.75 m) line spacing, resulting in 100 percent coverage and consistent data density throughout the survey area. Square grids measuring approximately 50 feet by 50 feet were used and the grids were systematically surveyed in selected locations based on DGM transect survey results. Grids were located to help gain further data on areas with high anomaly densities. Prior to conducting the survey, grid corner coordinates were exported from the geographic information system (GIS) system for location in the field.

3.2.4.3 General Field Procedures

Field procedures were followed to facilitate the collection of accurate and reliable geophysical data. Most important was the proper operation and function of the geophysical instruments, and proper function of the positioning equipment. Checks were conducted daily in conjunction with the IVS to assess those functions.

The Site Geophysicist completed a static background check followed by a cable shake and personnel check at the beginning and end of each day to record instrument background readings, measure electronic drift, monitor for spikes, and confirm that cable connections and operators were not a significant noise source. The morning test included: (1) a minimum of 3 minutes of static background collection after a 15-minute instrument warm-up, (2) a cable shake check, and (3) each operator approaching and stepping away from the instrument. The evening static background test consisted of one minute of static background data collection. In addition, twice-daily dynamic checks were used to verify peak instrument response, sensor location accuracy, and sensor latency.

All QC checks were recorded electronically, and included as part of the geophysical data deliverable (**Appendix E**).

The main elements and general sequence of the field procedures were:

- The geophysical team arrived at the MRS with the RI WP and were familiar with it.
- Shape files and points of interest were uploaded into the GPS controller so the field operator was able to see his position and the corresponding background in real time.

- A visual check of the instruments for obvious physical damage was performed, and the team confirmed that batteries were charged.
- Geophysical and navigational instruments were assembled and deployed.
- After warming up of equipment, opening QC checks were completed.
- Once QC checks were completed, the operator began IVS data collection.
- Data collection with obstacles and deviations from the planned survey path were documented and recorded in the field log.
- At the completion of data collection, both the closing QC checks and IVS were performed.
- At the end of the day, instruments and cables were visually checked for wear, and batteries were recharged.
- Data was downloaded, backed up, and sent to the data processor.

Data was collected using a single coil in man-portable mode. Using a collection rate of 10 hertz, the DGM sampling interval was approximately one reading per 10 cm. Data was recorded using a Juniper Systems Allegro data logger.

3.2.4.4 Data Processing, Corrections, and Analysis

Geophysical sensor and positional data were processed and interpreted using Geonics NAV61MK2 and Geosoft Oasis montaj programs. Subsequent to data acquisition, field data was downloaded to a personal computer and backed up daily to an external hard drive or equivalent as well as electronically transmitted for back up to a central server. Data processing was conducted in three major steps:

- Initial data editing
- Initial data processing
- Standard data processing

3.2.4.5 Initial Data Processing

Initial data processing (sometimes referred to as “pre-processing”) of the geophysical data included incorporation of navigation and positional information, instrument drift and leveling, and latency corrections.

The initial processing flow for EM61 data generally included the following major steps:

- Raw binary data converted to American Standard Code for Information Interchange files using NAV61MK2 software.
- The location of the geophysical system was interpolated from the geometry of geophysical system and the GPS information included in the data.
- Data were imported into Oasis montaj.

- The following initial standard quality checks of the data were performed to verify the quality and/or identify substandard values:
  - The static, personnel, and cable shake checks were reviewed for quality compliance.
  - The latency correction was determined from the IVS results.
  - Data were checked for spikes.
  - The data were drift corrected (leveled) using an iterated rolling median with responses typical of metallic sources removed.

3.2.4.6 Standard Data Processing and Target Selection

After initial data processing, a standard comprehensive processing procedure was applied. It included noise analyses, digital filtering for various corrections, merging of positional and geophysical data, gridding of the data, and forming maps. The steps for the standard processing of EM61 data generally included the following sequence:

- As determined in the IVS Report (**Appendix E**), Channel 1 was gridded.
- Gridded data were plotted.
- Maps were made and data were displayed in gridded format as a contour plot using a color scheme where the response to the object was displayed as an isolated feature or "anomaly" above the background level.

All processing parameters were documented so results could be checked and procedures verified. The targets were picked using the following steps:

- Isolated electromagnetic anomalies were selected from the gridded data (Channel 1) utilizing the peak-picking algorithm included in UX-Process (Blakely test or equivalent), while transect data were picked along profiles.
- A value cutoff level (threshold) of 10 millivolts (Channel 1) was used in agreement with MRS-specific requirements as indicated in the IVS Report (**Appendix E**).
- The locations of known cultural features recorded during the survey were plotted on the same map. Anomalies that were in close proximity to those features were masked and excluded from target selection.
- Data was reviewed visually by the processor, and any anomalies that may have been missed by the profile peak-picking algorithm but with peak value above the threshold, or areas masked by larger adjacent anomalies, were manually selected, and any overlapping or duplicate anomalies were manually removed.
- Anomalies selected for final target list inclusion were summarized in an anomaly table and were assigned a unique target identification (ID) number.

3.2.5 Anomaly Ranking

Anomaly prioritization was applied as determined by the project team. All targeted anomalies within the low anomaly density area (as described in **Section 4.1.1**) were selected for intrusive investigation.

Transect anomalies within the high anomaly density area were ranked by the data processor, based on the likelihood that the response was associated with a burial or burn pit. Responses were qualitatively chosen based on high peak response amplitude, relative smoothness of the peak, and significant lateral extents of the anomalous response. All three of these criteria can be indicative of concentrations of metal buried below the previous investigation limits of 12 inches bgs.

Grid anomalies were chosen to represent the widest possible range of targeted anomalies, to more completely characterize the subsurface metal present in the grids. Criteria included peak response, physical location, and inclusion/exclusion from features that might be burn trenches or subsurface burials.

3.2.6 Anomaly Reacquisition

The purpose of anomaly reacquisition was to verify that targeted anomalies were marked for investigation and resolution. The anomaly reacquisition team reacquired the geophysical anomalies identified for excavation on the electronic dig sheets using the same type of instrument as the original digital survey (e.g., EM61). The anomaly reacquisition was conducted separately or in conjunction with intrusive operations using the following general sequence and procedures:

- Targets were generated on a dig list with unique ID numbers, easting and northing positional data, peak value, and target file name.
- The target lists were given to the reacquisition team, who reacquired the targets using RTK GPS and marked the location.
- After relocation, the team used the EM61 to locate the peak of the response. They passed over the anomaly in two perpendicular directions in order to locate the response peak as accurately as possible and marked it with a polyvinyl chloride pin flag.
- Finally, the distance between the pin flag and position of the recovered material was recorded on the dig sheet, as well as the peak response.

The anomaly reacquisition team also documented anomalies that could not be reacquired (no-finds) for follow-up by the QC Team.

3.2.7 Quality Control for Geophysical Surveys

The geophysical investigation followed a multi-step process to verify high-quality data capture, processing, and interpretation and execution of good-quality workmanship. These steps were intended to (1) verify positional accuracy and precision of collected data; (2) observe and verify

good field practices are employed; (3) verify equipment is operating and that data are repeatable; (4) confirm adequate data coverage, completeness of data, and sufficient contrast between target and background response to identify significant geophysical anomalies; (5) evaluate the data to determine if discovered subsurface sources are representative of the geophysical anomaly that led to their detection and mapping; and (6) verify the project DQOs were met.

QC inspections/surveillance points performed during establishment of the IVS included area selection, seed item placement and survey, repeat data, anomaly reacquisition, and static position test QC checks. All IVS establishment QC actions were performed or confirmed by the QC Geophysicist.

QC inspections/surveillance points performed as part of the DGM surveys included equipment maintenance, daily IVS checks, instrument standardizations checks, battery strength checks, positioning accuracy check, warm-up check, null instrument check, personnel check, cable shake check, static check, standard instrument response check, latency test, and repeatability test. These DGM QC actions were performed by the geophysical team and reviewed by the UXOQCS and/or QC Geophysicist. Data download checks were performed by the geophysical team/Processing Geophysicist and reviewed by the QC Geophysicist. Field record checks were performed and reviewed by the QC Geophysicist.

QC inspections/surveillance points performed as part of the digital geophysical data processing included data quality checks, office review of field forms, instrument standardization checks, data sample spacing checks, and instrument drift checks. These QC actions or processes were performed by the Processing Geophysicist and reviewed by the QC Geophysicist. Processed data checks were performed by the Processing Geophysicist or Project Geophysicist and reviewed by the QC Geophysicist. Data deliverable checks were performed by the Processing Geophysicist or Project Geophysicist and reviewed by the QC Geophysicist.

Verification of the target anomaly resolution process was initially performed by the UXO teams and reviewed by the Project Geophysicist/Senior UXO Supervisor (SUXOS) prior to turning over the product for final QC acceptance inspections. The UXOQCS continuously observed the UXO team and verified they were conducting the resolution process in accordance with the WP procedures. Additionally, the UXOQCS conducted final acceptance sampling inspections of a minimum of 10 percent of the completed target anomaly locations turned over by operations to verify target anomaly resolution was in compliance with the WP.

A three-phase control process was implemented by the UXOQCS and QC Geophysicist covering the MEC-related definable features of work identified in the RI WP. Preparatory, initial, and follow-up inspections were documented by the UXOQCS in the Daily Quality Control Reports in **Appendix G, Daily Field Management Reports**.

3.2.8 Intrusive Investigation Plan

Intrusive activities were completed in accordance with the approved RI WP, Department of Defense Explosives Safety Board (DDESB)-approved Explosives Site Plan (ESP), and applicable guidance documents.

3.2.8.1 General Intrusive Investigation Methodology

Field activities did not begin until the UXO Quality Control Specialist/Safety Officer (UXOQCS/SO) had given a safety briefing, communications were established and the work area was determined to be clear of all non-essential personnel. Target anomaly excavations were conducted manually in accordance with EM 385-1-97 by qualified UXO technicians meeting or exceeding DDESB Technical Paper 18 requirements. Recovered material underwent the MPPEH inspection process in accordance with Final RI WP. The final explosive safety status determination of any discovered MEC or MPPEH was made by the SUXOS and the UXOQCS/SO.

3.2.8.2 Dig Sheets

Target anomaly locations selected for intrusive investigation along DGM and analog transects and in DGM grids were recorded digitally using electronic personal digital assistants (PDAs). Details of the investigated target anomalies were added to location information of the PDA record. PDA records were uploaded daily to the project database. The SUXOS and UXOQCS conducted daily and weekly inspections of the database to verify the completeness and correctness of the intrusive dig results. A complete list of target anomalies investigated is presented in **Appendix H**.

3.2.8.3 Target Anomaly Investigation Procedures

Minimum Separation Distances (MSDs) were established in accordance with the approved ESP prior to commencing intrusive operations. The UXO team investigated target anomalies using hand shovels, hand-held detectors, and an EM61. Target anomaly locations were investigated until the anomaly was resolved in accordance with WP requirements. The UXO Team Leader (UXO Technician III) documented the finding at each of the target anomaly locations for database entry. All target anomaly findings were subjected to the MPPEH inspection process, as described in Section 3.2.9.

3.2.8.4 Target Anomaly Source Identification

If applicable, for each target anomaly finding the team recorded the following information: the standard official nomenclature (if possible), item description and condition, item and size estimates, depth of location, and location coordinates. A digital photograph of each MEC and MPPEH item and significant or unusual items recovered from the intrusive investigation were taken and entered into the GIS database. The database included an accounting of all target anomaly excavation findings.

3.2.9 MPPEH Inspection Process

MPPEH procedures were completed in accordance with Department of Defense (DoD) Instruction 4140.62 (DoD 2015) and EM 385-1-97 (USACE 2008). MPPEH was assessed and its explosive safety status determined and documented prior to transfer within or release from DoD control. Prior to release to the public, MPPEH was documented by authorized and

technically-qualified personnel as material documented as safe (MDAS) after a 100 percent inspection and an independent 100 percent re-inspection to determine that it was safe from an explosives safety perspective. Details of the MPPEH inspection process, including individual responsibilities, are discussed below.

MPPEH was initially 100 percent inspected by a UXO Technician II (or higher). The initial inspection assessed the explosive safety status of the item as MDAS or material documented as an explosive hazard. Each item was re-inspected by a UXO Technician III (or higher) to verify the initial assessment.

The UXOQCS/SO conducted daily audits of the procedure used by the UXO teams and individuals for processing MPPEH. The UXOQCS/SO also conducted and documented random inspections of the material collected from the team to verify the explosive safety status determination. The UXOQCS/SO ensured the specific procedures and responsibilities for processing MPPEH for certification as MDAS were being followed.

Munitions-related MDAS generated during the RI was turned over on a daily basis to another URS field team completing a concurrent Time Critical Removal Action (TCRA) at an adjacent MRS. The TCRA SUXOS performed an independent inspection process to verify that the MDAS was free from explosive hazards necessary to complete the DD 1348-1A form. The TCRA SUXOS ensured that turned over inspected materials were placed in closed, labeled, and sealed containers at the end of each work day.

The following certification/verification statement was entered and signed by the TCRA SUXOS on each DD 1348-1A for turn-over of MDAS:

"This certifies that the material listed has been 100 percent properly inspected by a qualified UXO technician and 100 percent re-inspected by a second qualified UXO technician and, to the best of our knowledge and belief, is free of explosive hazard."

All MDAS recovered during the RI was shipped to Belson Steel in Bourbonnais, Illinois for final disposition.

3.2.10 MEC Disposal

The discovered MEC items were determined to be acceptable to move by the SUXOS and UXOQCS/SO, and relocated within the MRS to a collection point pending consolidation shot disposal (i.e., multiple MEC items consolidated at a single disposal location) at the end of the same day the MEC was discovered. Additional MEC disposal details and soil sampling procedures are presented in Section 4.3. MEC disposal operations were performed by qualified UXO personnel within the MRS. MEC disposal operations were supervised by the SUXOS and coordinated with the on-site Ordnance and Explosives Safety Specialist. All explosive operations followed the procedures outlined in EM 385-1-97 and Technical Manual A-1-1-31 (DA 2014). Transportation of donor explosives was conducted in accordance with applicable sections of 49 Code of Federal Regulations (CFR) Part 397.

Six MEC disposal operations were completed during the RI field activities to dispose of the 18 discovered MEC items. In accordance with site requirements, prior to any MEC disposal operations, the SUXOS notified the Cook County Bomb Squad, JOAAP Site Manager, USDA/USFS, and the USACE. After each MEC disposal operation was completed, the MEC Disposal Team Leader and UXOQCS/SO conducted an inspection of the disposal area to confirm all explosives were consumed. Appropriately-qualified UXO technicians conducted an MPPEH inspection on any remaining material. The MEC accountability log specific to the RI fieldwork is included in **Appendix F**.

3.2.11 Post-Demolition Soil Sampling

An incremental surface soil sample was collected after MEC disposal operations in accordance with the Final RI WP to determine if soil was contaminated. The post-MEC disposal sample was collected at the consolidated shot location following the completion of all disposal operations. The post-MEC disposal incremental sample was collected using a systematic random sampling pattern from a decision unit that covered the entire area impacted by the demolition operation (i.e., the resulting crater). Sampling personnel entered craters to lay out the systematic random sampling pattern and to collect increments. A total of 36 increments of uniform volume (i.e., 6-inch by 7/8-inch cylindrical core) were collected for each incremental sample using a stainless steel step probe from the top 0.5 foot of soil. The use of a step probe provided a uniform, cylindrical volume for each increment. The post-demolition sample was analyzed for the explosives chemicals of concern (COCs) in the 2004 ROD and compared to the lower cleanup values determined in the 2004 ROD, which are presented on **Table 3-2**.

3.3 INVESTIGATION DERIVED WASTE MANAGEMENT

No spills of mechanical fluids occurred during investigation activities; therefore, spill containment materials and/or affected soils were not generated. Additionally, as no equipment required wet decontamination, no decontamination fluids requiring disposal were generated.

Field personnel collected all project-related and personal non-hazardous general refuse from the work area, including personal protective equipment and plastic sheeting. These materials were placed in a roll-off container located near the on-site field trailer. All waste was handled and disposed of as municipal solid waste.

3.4 FIELD HEALTH AND SAFETY

Site-specific training was conducted by the UXO management team during the initial mobilization effort prior to conducting any fieldwork. This training involved reviewing all work plans to include the Accident Prevention Plan, Site Safety and Health Plan, Quality Control Plan, ESP, and project specific Activity Hazard Analyses. The training also discussed potential MEC types, terrain, vegetation, and wildlife that pose a hazard to site personnel. Additional site safety meetings were held each morning prior to commencement of work, including when new personnel, subcontractors, or visitors arrived on site. Daily Field Management Reports are

included in **Appendix G**. Given the short duration and relatively low risk associated with the L2 MRS, no health and safety audit was scheduled.

3.5 QUALITY CONTROL

Given the short duration and relatively low risk associated with the L2 MRS, no QC audit was scheduled. The UXOQCS conducted daily QC surveillance of project activities and documented them in the Daily QC Reports, which are included in **Appendix G, Daily Field Management Reports**.

Table 3-1
Data Quality Objectives

DQO	Project-Specific DQO Considerations
1. State the Problem	▪ MEC remaining within the MRS poses an acute hazard of unintentional detonation to receptors. It is also possible that surface and subsurface MEC remaining at the MRS have been partially detonated or deteriorated over time, and may have contaminated soil.
2. Identify the Goal of the Study	Complete an RI that answers the following questions: ▪ Is MEC present at the MRS in surface and subsurface soil? ▪ What is the nature and extent of MEC? ▪ Has a release of MC occurred (i.e., concentrations above the 2004 ROD lower cleanup values)? ▪ If a release has occurred, what is the nature and extent of the MC release? ▪ Does remaining MEC/MC pose a potential hazard/risk to current and future receptors?
3. Identify Information Inputs	▪ Historical information and reports from previously completed investigations and remedial/removal actions. ▪ The COCs and remediation goals established in the 2004 ROD. ▪ Decisions made during TPP meetings. ▪ Most reasonably anticipated future land use is recreational (i.e., Midewin National Tallgrass Prairie). ▪ DGM and analog transect and grid surveys and intrusive investigations of anomalies. ▪ Discrete MC samples (metals and explosives).
4. Define the Boundaries of the Study	▪ Spatial boundaries of the investigation will include the entire MRS (IRP L2 site plus the 200-ft Buffer MRS [JAAP-002-R-01] = 52 acres). ▪ The vertical boundaries of the study will be from the ground surface to the maximum depth of detection of the geophysical instrument in use.
5. Develop the Analytical Approach	▪ If an anomaly detected during DGM survey meets anomaly selection criteria, then intrusively investigate the anomaly. ▪ If site conditions prevent collection of DGM data, then complete analog survey and intrusively investigate all anomalies. ▪ If DGM transect identifies high anomaly density areas or evidence of a pit, then 100 percent coverage grids or additional transects to delineate. ▪ If MEC items with exposed filler are discovered, then collect discrete MC soil samples directly below the item. ▪ If sample results exceed the lower cleanup value (2004 ROD), collect additional samples vertically (at 2-ft intervals) and horizontally (at 10-ft step-outs). ▪ If MC surface soil (0 to 0.5 ft bgs) result exceeds the lower cleanup goal (2004 ROD), then collect surface soil sample(s) in downgradient direction to evaluate potential migration to Prairie Creek. ▪ If downgradient surface soil samples exceed a lower cleanup value (2004 ROD) and potential migration is apparent, then collect surface water and sediment samples. ▪ If MEC is found during the RI, then complete the MEC Hazard Assessment.

6. Specify the Performance or Acceptance Criteria	▪ Geophysical activities will achieve applicable quality objectives as stated in the GIP which will be confirmed by the GSV process. ▪ Data usability assessment, in combination with professional judgment, will evaluate the usability of analytical data for decision making. ▪ Analytical method reporting and/or detection limits will be sufficiently low to meet the lower cleanup values (2004 ROD) for each constituent. ▪ MC sample results used for decision making purposes will meet the PARCCS parameters criteria. ▪ Replicate incremental samples will provide a measure of total sampling error. Replicate data will be used to calculate an RSD, which will be considered acceptable if less than 30%.
7. Develop the Plan for Obtaining Data	▪ Collect approximately 37,000 linear ft of 3-ft wide transects, 60-ft spacing, DGM (EM-61) and analog transect survey to provide a 95 percent confidence that there is no more than 1.0 MEC item/acre at L2. ▪ Intrusively investigate anomalies that meet the anomaly selection criteria. ▪ Collect additional 100 percent coverage grids in high anomaly density areas that are identified by the VSP output. ▪ Collect MC soil samples at intrusive investigation locations where MEC with exposed explosive filler is identified. ▪ Collect incremental surface soil samples after MEC demolition operations to determine if explosives in soil exceed the lower cleanup values (2004 ROD).

Notes:

COC = chemical of concern
DGM = digital geophysical mapping
GIP = Geophysical Investigation Plan
GSV = Geophysical System Verification
IRP = Installation Restoration Program
MC = munitions constituents
MEC = munitions and explosives of concern
MRS = Munitons Response Site
PARCCS = Precision, Accuracy, Representativeness, Completeness, Comparability, and Sensitivity
RI = Remedial Investigation
ROD = Record of Decision
RSD = relative standard deviation
TPP = Technical Project Planning
VSP = Visual Sample Plan

Table 3-2
JOAAP Remediation Goals

Analyte	*Lower Cleanup Value (mg/kg)
1,3,5-TNB	17
2,4,6-TNT	200
2,4-DNT	20
2,6-DNT	20
HMX	2,860
RDX	107

Notes:

*Lower Cleanup Value is derived from the U.S. Army and USEPA 2004 Record of Decision, Joliet Army Ammunition Plant, Appendix A, Table 1

mg/kg = milligram per kilogram

1,3,5-TNB = 1,3,5-Trinitrobenzene

2,4,6-TNT = 2,4,6-Trinitrotoluene

2,4-DNT = 2,4-Dinitrotoluene

2,6-DNT = 2,6-Dinitrotoluene

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine

USEPA = United States Environmental Protection Agency

FIGURE 3-1
PRELIMINARY MEC CONCEPTUAL SITE MODEL (GRAPHICAL) FOR L2

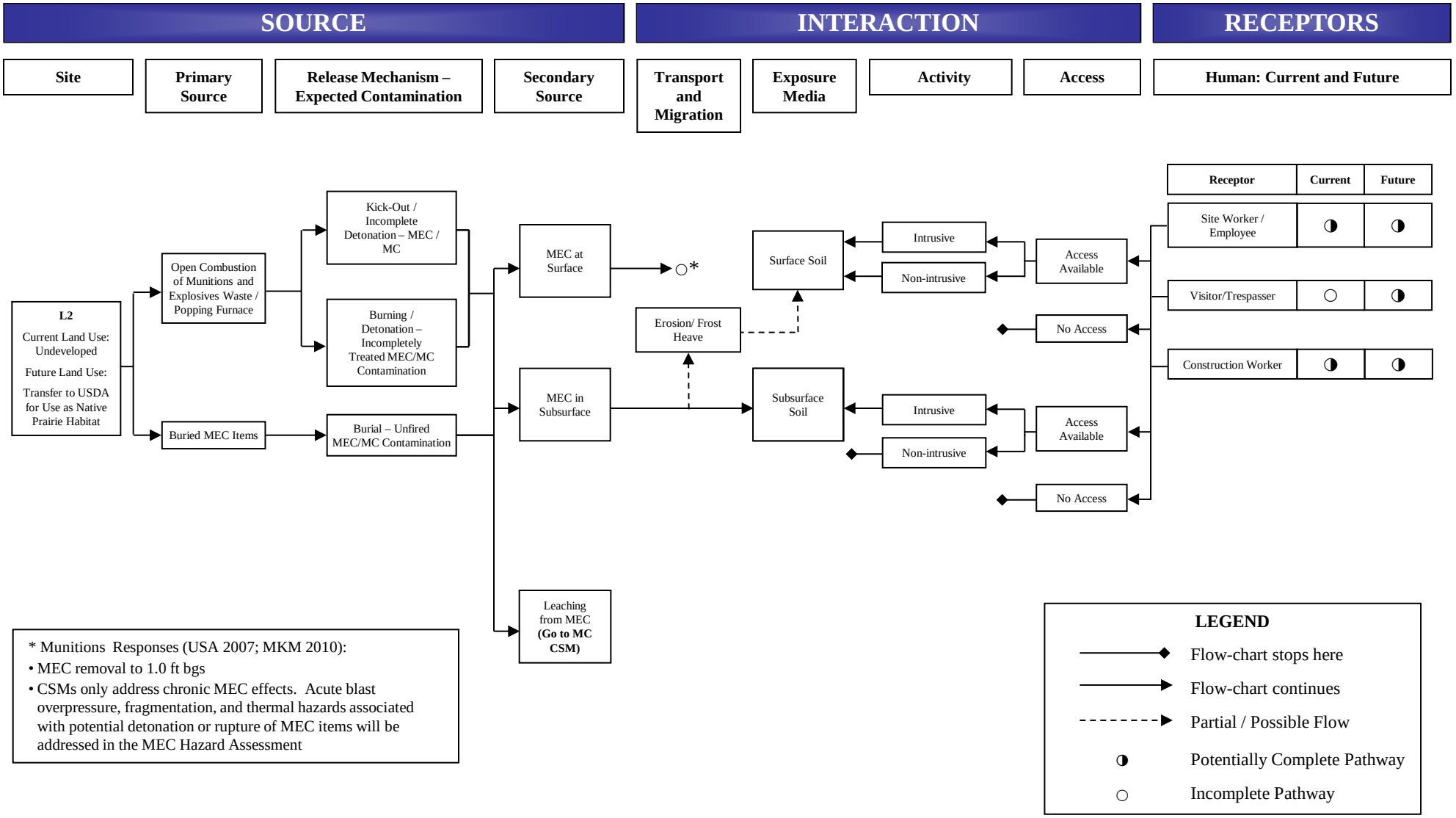
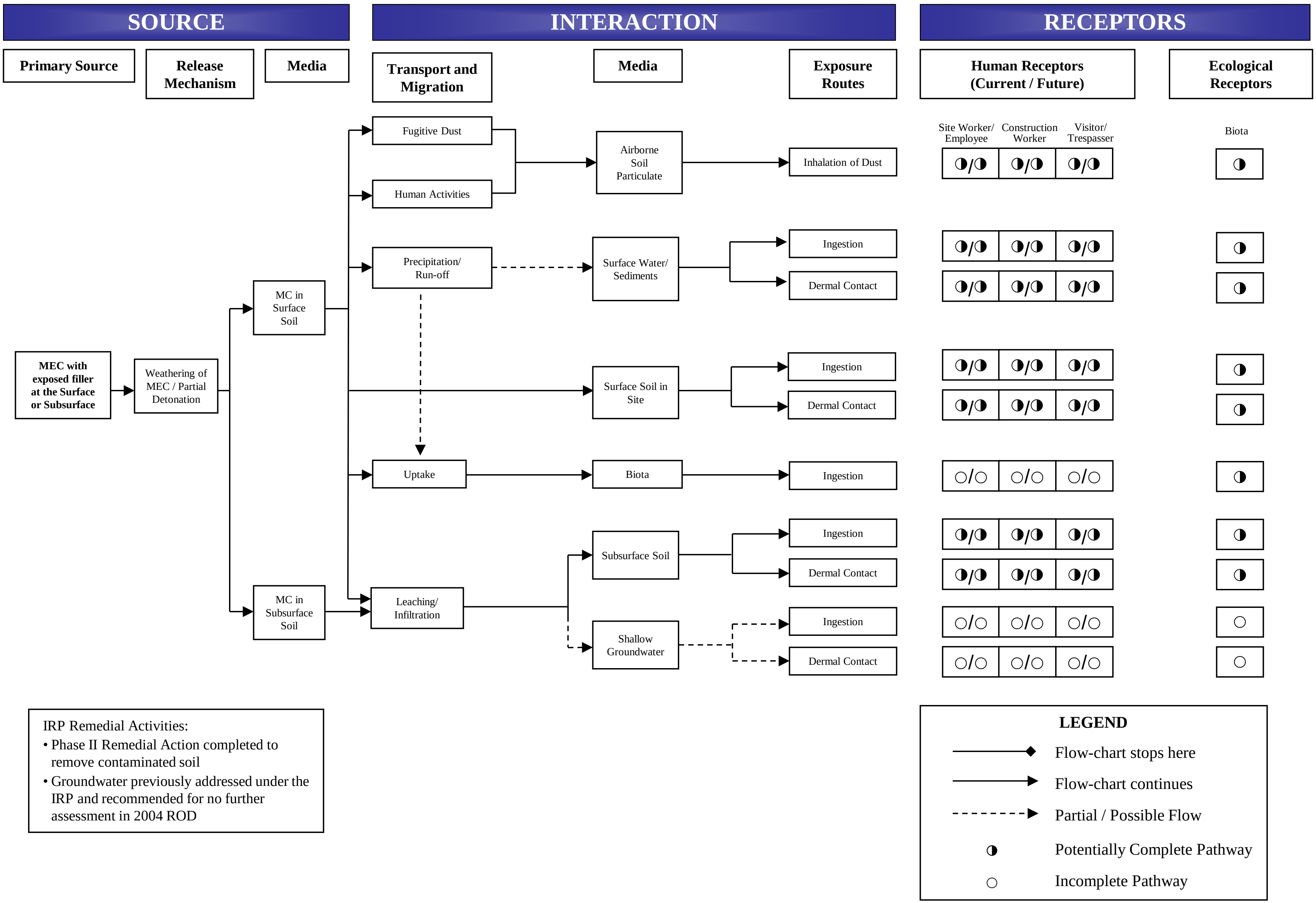
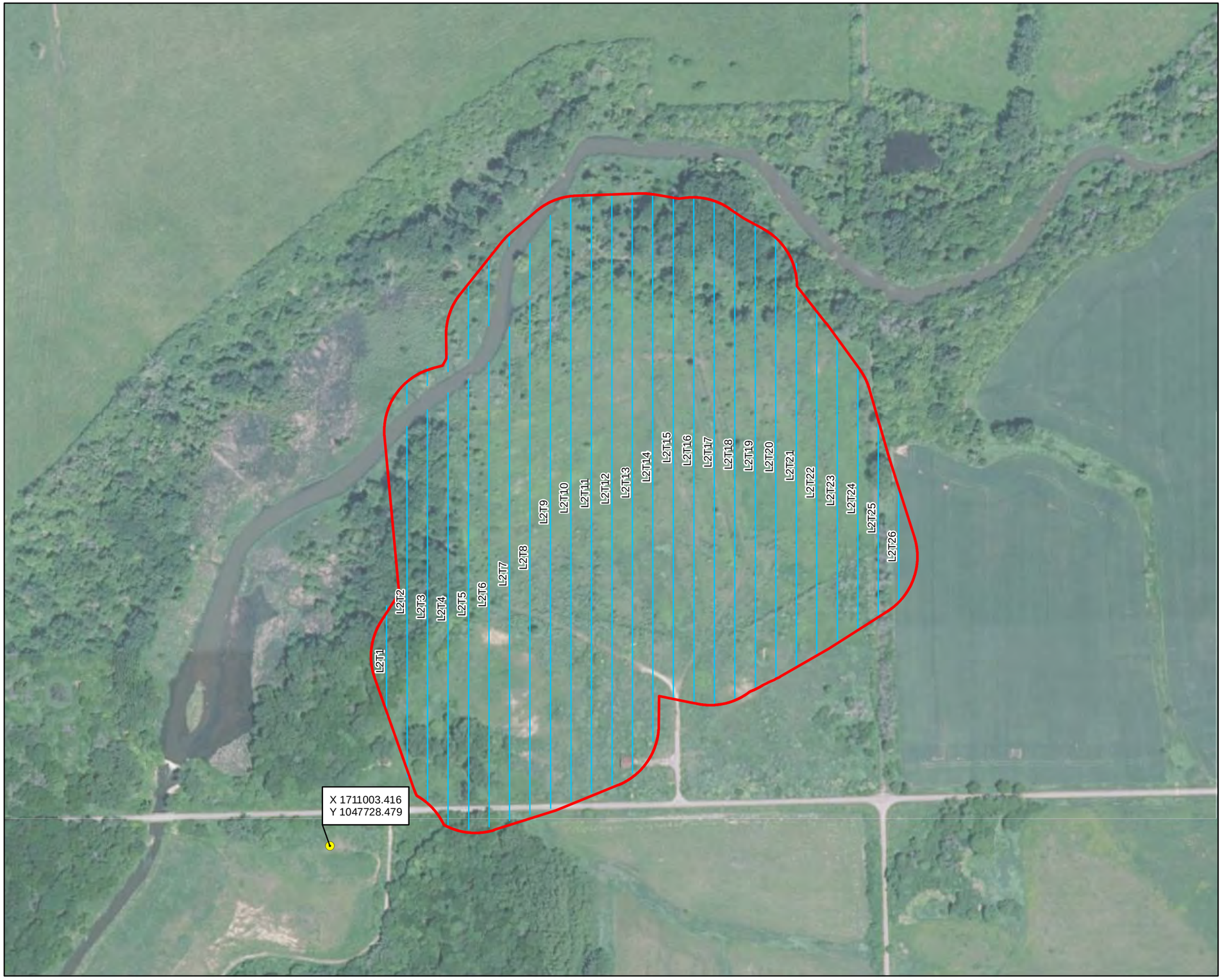


FIGURE 3-2
PRELIMINARY MC CONCEPTUAL SITE MODEL (GRAPHICAL) FOR L2





Legend

- Joliet AAP
- MRS Boundary
- Proposed Geophysical Transect Line
- Control Point

Note:
Grid placement was to be based on the results of the geophysical transect survey.

N

0 150 300 600 Feet

URS

US Army Corps of Engineers®

Site Investigation Plan
Joliet AAP
Joliet, Illinois

Drawn By: MDG	Date: 12/21/2015	**Figure 3-3**
Checked By: ZT	Project No. 16170871	

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4.1 NATURE AND EXTENT OF MEC

The RI investigated the 52-acre MRS using a combination of DGM transects, analog transects, DGM 100 percent coverage grids, and intrusive investigation of target anomalies. The results of the RI field activities are presented below.

4.1.1 Geophysical Survey Results

A total of 3.68 acres (i.e., 48,932 linear feet by 3.28 feet wide) of DGM transects were completed as part of the RI at the L2 MRS, and 1,244 targeted anomalies were identified (**Figure 4-1**). The results of the transect surveys were interpreted using Visual Sample Plan (VSP) to create an anomaly density map from the sample DGM transect data using the geostatistical mapping of anomaly density feature. The anomaly density map output from VSP depicted the probable locations of high anomaly density areas. Based on a histogram of gridded anomaly densities evaluated in VSP, a cutoff between high anomaly density and low anomaly density was defined at the 375 anomalies per acre contour (**Figure 4-2**), modified somewhat to maintain a more simple boundary shape. Based on discussions with the project team, it was determined that investigating all 1,244 anomalies was not the most efficient approach to achieving project objectives. Instead, seven 50-foot by 50-foot, 100 percent DGM coverage grids (0.4 acres) were placed in the highest anomaly density areas and were intrusively investigated to assess if burial pits were present. This was a deviation from the approved RI Work Plan, which is further discussed in Section 4.1.4. Because the grids were placed in highly saturated areas, the Project Delivery Team (PDT) developed a list of target anomalies within the grids that were representative of a range of target anomaly responses, including those most likely to represent a burial pit, and these anomalies were selected for investigation. Targets with high amplitude responses (i.e., greater than 50 millivolts) and a relatively large aerial footprint were selected to identify potential burial pits. Targets with lower amplitude responses (i.e., less than 50 millivolts) were chosen to provide a representative sample of targets within the grids. That is, the grids were not 100 percent intrusively investigated due to high saturation of metallic debris (more than 800 anomalies per acre). In addition, a list of 23 DGM-targeted anomalies along transects within the high anomaly density area with signatures most likely to represent burial pits (i.e., amplitude greater than 50 millivolts) was also developed. A total of 154 anomalies were identified for investigation along transects and grids within the high anomaly density areas. A total of 239 anomalies were identified in low anomaly density areas, all of which were selected for intrusive investigation. In total, 435 anomalies were investigated (393 anomalies identified during DGM and 42 anomalies identified by analog survey).

A total of 1.39 acres (i.e., 20,200 linear feet by 3 feet wide) of analog transects were also completed as part of the RI in areas where DGM could not be completed due to marshy terrain or dense vegetation. Forty-two anomalies were detected during the analog survey and all were intrusively investigated. Analog transects are shown on **Figure 4-1**.

4.1.2 Intrusive Investigation Results

Intrusive investigation operations along transects and in grids were conducted from October 21, 2015 through November 11, 2015. A combined total of 394 anomalies were investigated on both DGM and analog transects, while 41 target anomalies were investigated within the DGM grids. A total of 18 MEC items and 209 munitions-related MDAS items were recovered during intrusive investigation. In addition, other debris (e.g., nails, banding, etc.), hot rocks, and false positives were documented during intrusive investigation. The locations of items recovered during the intrusive investigations are depicted on **Figure 4-3**. No munitions burial pits were identified during the intrusive investigations completed as part of the RI.

Table 4-1 presents a list of MEC and munitions-related MDAS items recovered, as well as the quantity of each type. The 18 recovered MEC items consisted of 15 fuzes, two boosters, and one igniter tube. The 209 recovered munitions-related MDAS items consisted of expended fuzes, igniter tubes, boosters, unidentifiable fuze components, ceramic mine components, mortar tail boom, and unidentifiable munition fragments. All munitions-related MDAS items (totaling approximately 105 pounds) were recovered from 160 separate intrusive investigation locations.

4.1.3 Nature and Extent of MEC Conclusions

The results of the intrusive investigations (**Figure 4-3**) indicate that MEC remains present within the 52-acre MRS and near the MRS boundary. The evaluation of the lateral extent of MEC was limited to the L2 MRS boundary because the MRS is surrounded by the L2-L3 Extended Buffer Area MRS (JAAP-001-R-02), which was addressed under a separate RI (Advent 2015). MEC items recovered from intrusive investigations were located in subsurface soil with depths ranging from 2 to 18 inches bgs, while munitions-related MDAS was recovered from 1 to 36 inches bgs (**Table 4-3**). A complete list of target anomalies investigated, including non-munitions related finds is presented in **Appendix H**.

The results of intrusive investigations indicate MEC and munitions-related MDAS are present within the 52-acre MRS in a random distribution. No clustered or concentrated areas containing MEC were noted during the RI. Based on the expected release mechanism (kickout from open detonation) identified in the CSM, a random distribution of MEC and munitions-related MDAS within the MRS is to be expected. Because of the random distribution, a definitive relationship between MEC/MDAS and the high anomaly density areas has not been defined. Although there is no apparent relationship, it should be noted that anomaly densities are highest in or near the previously identified open burn areas at the center of the MRS (**Figure 4-2**). DGM grid data and ground reconnaissance indicate the highest anomaly densities are associated with several narrow, parallel depressions, which are visible in aerial imagery and shown on **Figure 4-3**. These depressions are interpreted to be trenches where material was laid out for open burning. The lower anomaly densities appear to be at the perimeter of the MRS, further away from the historical source areas.

In accordance with the DQOs established in the TPP meetings (**Appendix C**), the results of the geophysical survey and intrusive investigations were used to calculate the average number of

MEC items per acre within the low anomaly density areas. Using VSP, it was determined with a 95 percent confidence level that no more than 6.5 MEC items per acre exist in the low anomaly density portion of the L2 MRS. Input parameters to this calculation were 30.7 acres of low anomaly density area, 2.37 acres of geophysical coverage in the low anomaly density area, and 9 MEC finds within this area. A similar calculation could not be completed for the high anomaly density portion of the MRS (greater than 375 anomalies per acre) due to a modified approach used in this area, which is further discussed in **Section 4.1.4**. The use of UXO Estimator and/or VSP to calculate MEC density is not intended to be used in high anomaly density areas because the calculation requires 100 percent intrusive investigation. Therefore, a MEC density was not calculated for the high anomaly density portion of the MRS.

4.1.4 Deviations from the WP

A total of 5.47 acres were investigated at the L2 MRS, which exceeded the planned 3.7 acres of coverage estimated in the Final RI WP. The proposed acreage of geophysical coverage in the Final RI WP was based on calculations by UXO Estimator for the area of coverage needed to achieve a 95 percent confidence that the MRS contained less than 1.0 MEC items per acre. This estimate assumed a low density of MEC at the L2 MRS because of the previously completed removal actions. However, due to site conditions observed at the MRS that differed from the preliminary CSM (i.e., large areas of high anomaly density and multiple MEC items recovered in the upper 12 inches of soil), it was determined that calculating the density of MEC items per acre in the high anomaly density area would not help to achieve project objectives (i.e., determine if MEC is present at the MRS and determine the nature and extent of MEC, if present). Based on discussions with the PDT, it was determined that high anomaly density areas would require a modified approach in order to achieve project objectives. This modified approach included the placement of seven 50-foot by 50-foot, 100 percent DGM coverage grids in the highest anomaly density areas, and intrusive investigation to determine if burial pits were present. With USACE concurrence, the PDT also developed an intrusive investigation list of 23 DGM-targeted anomalies along transects within the high anomaly density area with signatures most likely to represent potential burial pits. The modified approach developed by the PDT allowed the field team to focus resources on areas that potentially represented burial pits and determine the nature and extent of the subsurface metallic anomalies in the high density areas. Because not all anomalies were investigated in the high density area, the MEC density in the high anomaly density area could not be calculated using VSP or UXO Estimator.

4.2 FATE AND TRANSPORT OF MEC

Erosion of soil caused by wind and water (precipitation and runoff) can, over time, result in exposure of buried MEC due to removal of the overlying soil. In locations where precipitation concentrates, small wash outs and gullies can form causing erosion which may uncover MEC items. Small wash outs and gullies are present within the L2 MRS boundary, primarily in northern portion of the MRS near Prairie Creek. The presence of wash outs and gullies indicates that surface water flows are sufficient to cause erosion that could potentially uncover buried MEC; however it is not known if surface water flows are sufficient to move MEC. Based on the MEC distances from Prairie Creek observed during the RI, it is unlikely that stream bank erosion

would transport MEC. In addition to erosion, buried objects can be moved to the surface by frost heave. This occurs when a frost front penetrates the subsurface and freezes water below a buried object causing the water to expand and push the object upward. Maximum frost depths in Illinois range from 38 inches bgs to as deep as 64 inches bgs (UFC 2005). Because the frost depths are greater than the shallowest MEC recovered during the RI, there is a potential for migration via frost heave. Additionally, human-related activities such as plowing, tilling, and MNTP activities (e.g., fence construction, road and/or trail construction and maintenance, and tree and shrub removal) could affect the location and exposure of MEC items. The L2 MRS will be transferred to the USDA for inclusion into the MNTP. While the USDA has not released any future re-use plans for the L2 MRS, activities such as fence construction, road and/or trail construction and maintenance, and tree and shrub removal are potential activities for future receptors (e.g., MNTP employees, MNTP volunteers, and authorized construction workers). Each of the activities described have the potential to be intrusive in nature; therefore, each could cause subsurface MEC to be unearthed.

Portions of the L2 MRS are bordered by Prairie Creek, which undergoes periods of elevated water levels. Portions of the stream banks are susceptible to erosion during periods of high water flow, and it is likely that the stream experiences flows strong enough to erode the stream banks. MEC was not observed near Prairie Creek during the RI; therefore the potential for stream bank erosion to transport MEC is unlikely. Significant precipitation events have the potential to occur at and in the vicinity of the MRS. These significant precipitation events could cause flooding. Flooding of Prairie Creek does have the possibility of eroding soil, which could either expose or bury potential MEC items beyond the creek banks. During the RI, no MEC items were found within approximately 350 feet of Prairie Creek and no MEC items were observed on the ground surface of the MRS. Also, well established vegetation is present within the MRS, especially along the bank of Prairie Creek and in the southwest portion of the MRS. Therefore, the transport of MEC via flood waters is unlikely. It should be noted that the northern portion of the L2 MRS falls within a FEMA 100-year floodplain. While significant flooding of this area is uncommon, top soil beyond the banks of Prairie Creek could erode in areas with insufficient vegetation (if present). However, the northern portion of the MRS is well vegetated and significant erosion is unlikely to occur.

4.3 POST-MEC DISPOSAL SAMPLING

RI MEC disposal operations were completed using consolidated shot methods at a single collection point. After all MEC disposal operations were completed at the collection point, an incremental sample was collected consisting of 36 increments in a systematic random sampling pattern and analyzed for explosive COCs identified in the 2004 ROD (AEC 2004). Sample results confirmed that concentrations of explosives were below the lower cleanup values presented in the 2004 ROD. Post-MEC disposal sampling results are presented in **Table 4-4** and in **Appendix I**. Data review and validation findings for the post-MEC disposal sampling are presented in **Appendix J**.

Table 4-1
Types of MEC and MDAS Recovered

Category	Debris Type	Formal Nomenclature	Quantity
MEC	Booster	Mk-III booster	2
MEC	Fuze	M66 BD fuze	15
MEC	Igniter tube	Igniter tube	1
MDAS	Fuze	Unidentifiable component	65
MDAS	Fuze	M66 BD fuze	32
MDAS	Fuze	M48 PD fuze	6
MDAS	Booster	Booster cup	2
MDAS	Booster	Mk-III booster	19
MDAS	Booster	Unknown booster	5
MDAS	Ceramic mine	M5 unidentifiable component	4
MDAS	Indeterminate fragments	Fragment	56
MDAS	Igniter tube	Unidentifiable	4
MDAS	Tail boom	81mm mortar	1
MDAS	Other	Slag/debris	14
MDAS	Small arms	.50 caliber	1

Notes:
BD = base detonating
MDAS = material documented as safe
MEC = munitions and explosives of concern
mm = millimeter
PD = point detonating

Table 4-2
Summary of Intrusive Investigation Results

Surveyed Investigation Areas (acres)	MEC	Area Breakdown		MDAS[1]	Area Breakdown	
		High Density	Low Density		High Density	Low Density
Analog Transects (1.39 acres / 20,200 LF)	3	3	0	12	6	6
DGM Transects (3.68 acres / 48,932 LF)	15	6	9	160	30	130
DGM Grids (0.4 acres)	0	0	0	37	37	0

Notes:

[1] MDAS was found at 160 intrusive investigation locations. Some locations contained multiple MDAS items. MDAS counts presented in this table only refer to munitions-related MDAS items.

DGM = digital geophysical mapping

LF = linear feet

MDAS = material documented as safe

MEC = munitions and explosives of concern

Table 4-3
Depth Distribution of MEC and MDAS Items

Depth (inches)	Total (MEC/MDAS)		MEC		MDAS[1]	
	Quantity	Total (percent)	Quantity	Total (percent)	Quantity	Total (percent)
0	0	0	0	0	0	0
0 to 6	91	40	9	50	82	40
6 to 12	72	32	4	22	68	33
12 to 18	45	20	5	28	40	19
18 to 24	9	4	0	0	9	4
24 to 30	7	3	0	0	7	3
30 to 36	3	1	0	0	3	1
Total	**227**	**100**	**18**	**100**	**209**	**100**

Notes:

[1]MDAS counts presented in this table only refer to munitions-related MDAS items.

MDAS = material documented as safe

MEC = munitions and explosives of concern

Table 4-4
Post-MEC Disposal Sampling Results

		JAAP-L2-IS01-0.5				JAAP-L2-IS101-0.5[1]				JAAP-L2-IS201-0.5[1]			
Explosives	*Lower Cleanup Value (mg/kg)	Result	LOD	LOQ	Qualifier	Result	LOD	LOQ	Qualifier	Result	LOD	LOQ	Qualifier
1,3,5-TNB	17	<	0.200	0.50	U	<	0.200	0.50	U	<	0.200	0.50	U
2,4,6-TNT	200	<	0.200	0.50	U	<	0.200	0.50	U	<	0.200	0.50	U
2,4-DNT	20	<	0.200	0.50	U	<	0.200	0.50	U	<	0.200	0.50	U
2,6-DNT	20	<	0.200	0.50	U	<	0.200	0.50	U	<	0.200	0.50	U
HMX	2860	<	0.200	0.50	U	<	0.200	0.50	U	<	0.200	0.50	U
RDX	107	<	0.200	0.50	U	<	0.200	0.50	U	<	0.200	0.50	U

Notes:

[1]Sample IDs JAAP-L2-IS101-0.5 and JAAP-L2-IS201-0.5 represent replicate samples

Samples were collected December 8, 2015

Explosives were analyzed using Method 8330B

*Lower Cleanup Value is derived from the U.S. Army and USEPA 2004 Record of Decision, Joliet Army Ammunition Plant, Appendix A, Table 1

< = less than the LOD

mg/kg = milligrams per kilogram

1,3,5-TNB = 1,3,5-Trinitrobenzene

2,4,6-TNT = 2,4,6-Trinitrotoluene

2,4-DNT = 2,4-Dinitrotoluene

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

JAAP = Joliet Army Ammunition Plant

LOD = Limit of Detection

LOQ - Limit of Quantitation

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine

U = non-detect

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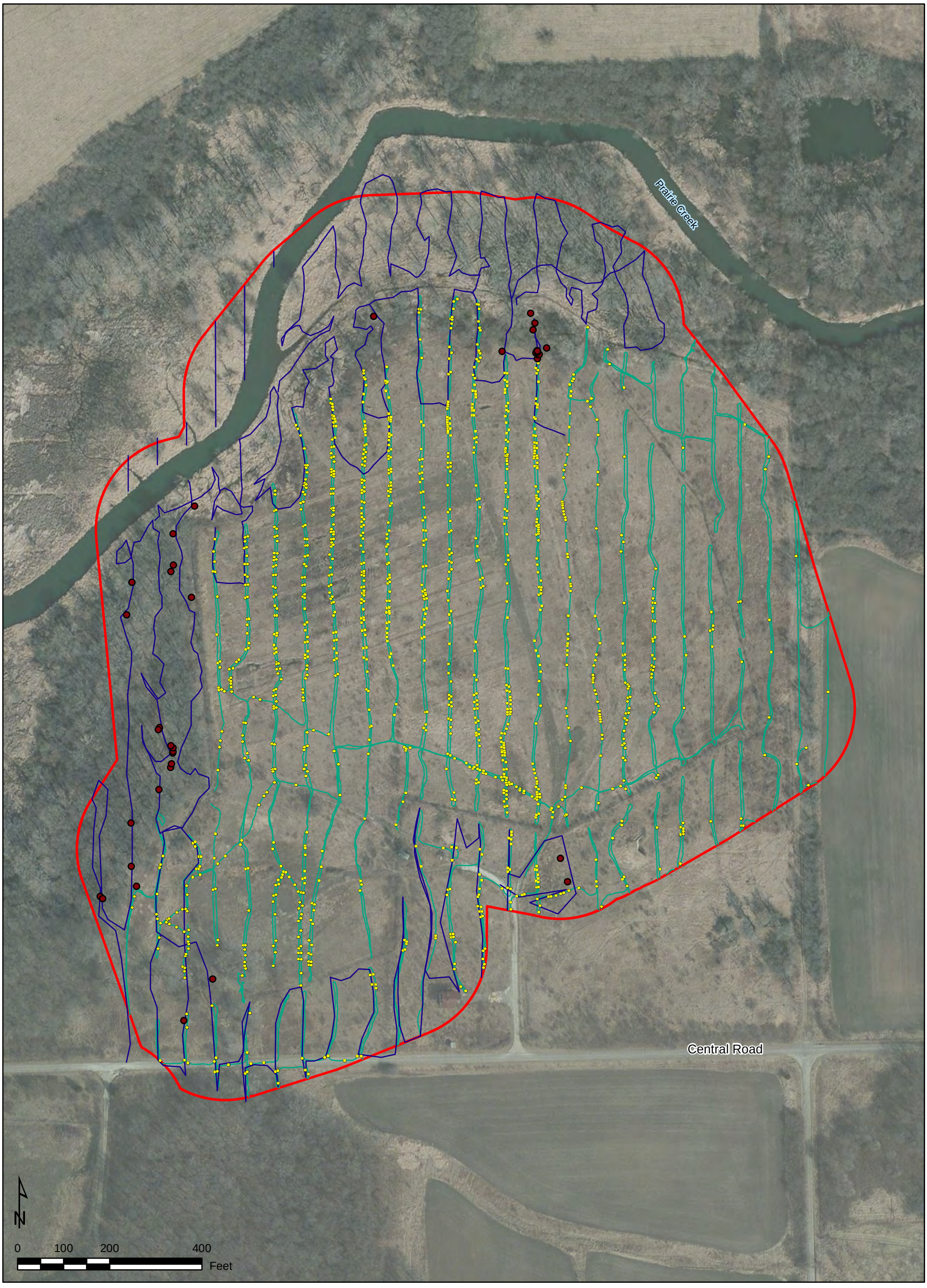

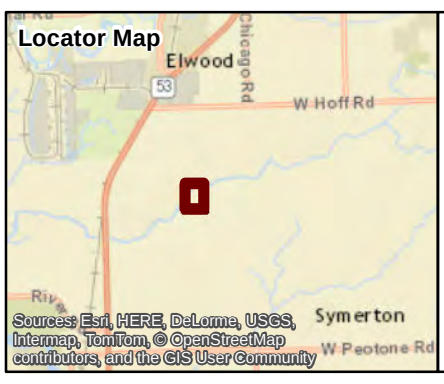

Legend

- MRS Boundary
- DGM Transect Path
- Analog Transect
- DGM Target Anomaly
- Analog Anomaly

Note:
GPS malfunction occurred along transects north of Prairie Creek. Rising water levels prohibited the team from returning to recollect GPS data, so transects shown are estimated locations.

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DGM Transect Results
Joliet AAP
Joliet, Illinois

Drawn By: JM	Date: 1/14/2016	**Figure 4-1**
Checked By: ZT	Project No. 60419079	

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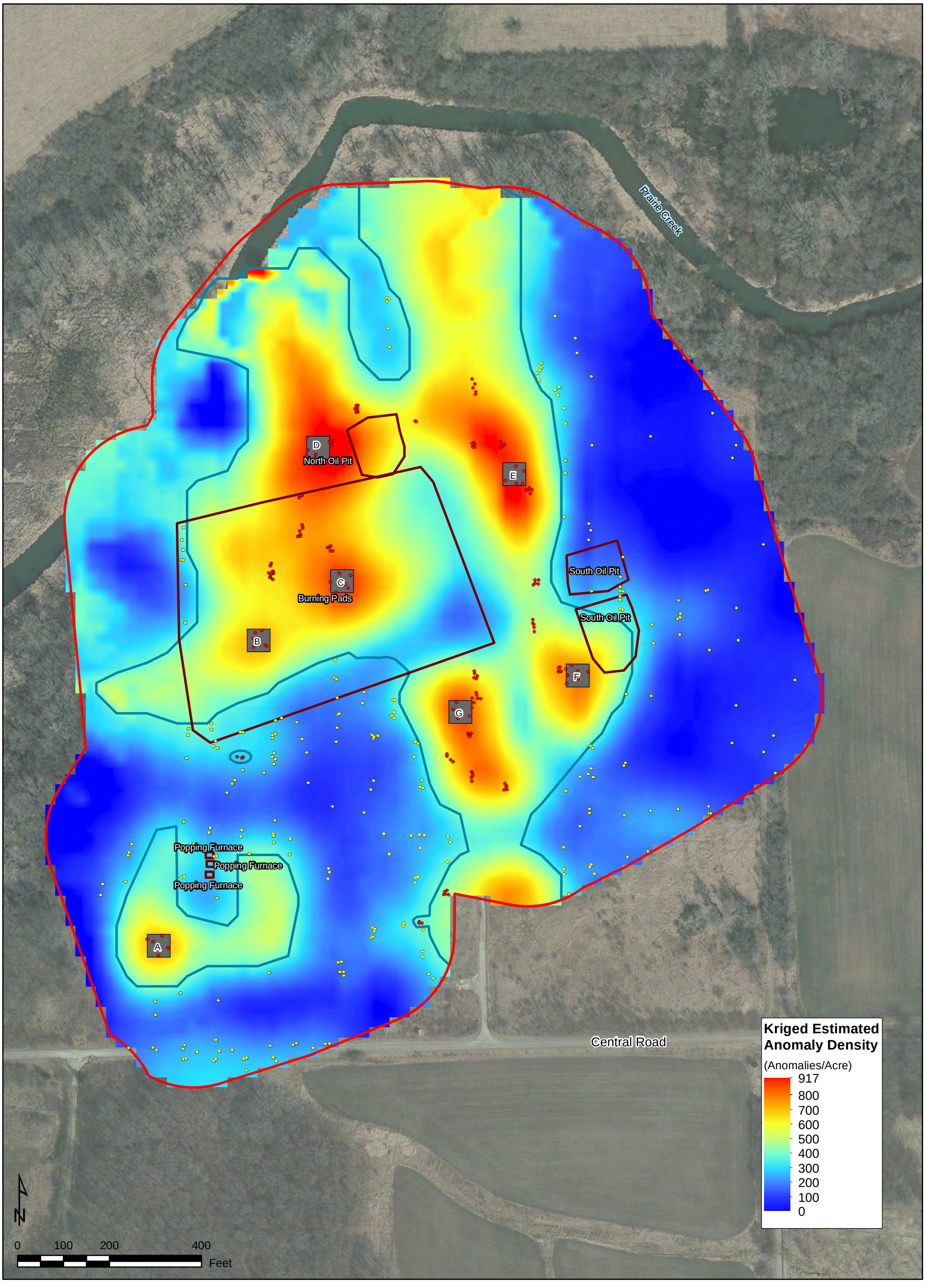

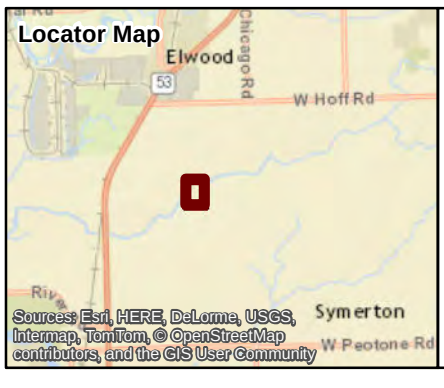

Legend

- MRS Boundary
- 100% Coverage Grid
- Historical Site Feature
- High Anomaly Density Targets
- Low Anomaly Density Targets
- High Anomaly Density Area Boundary

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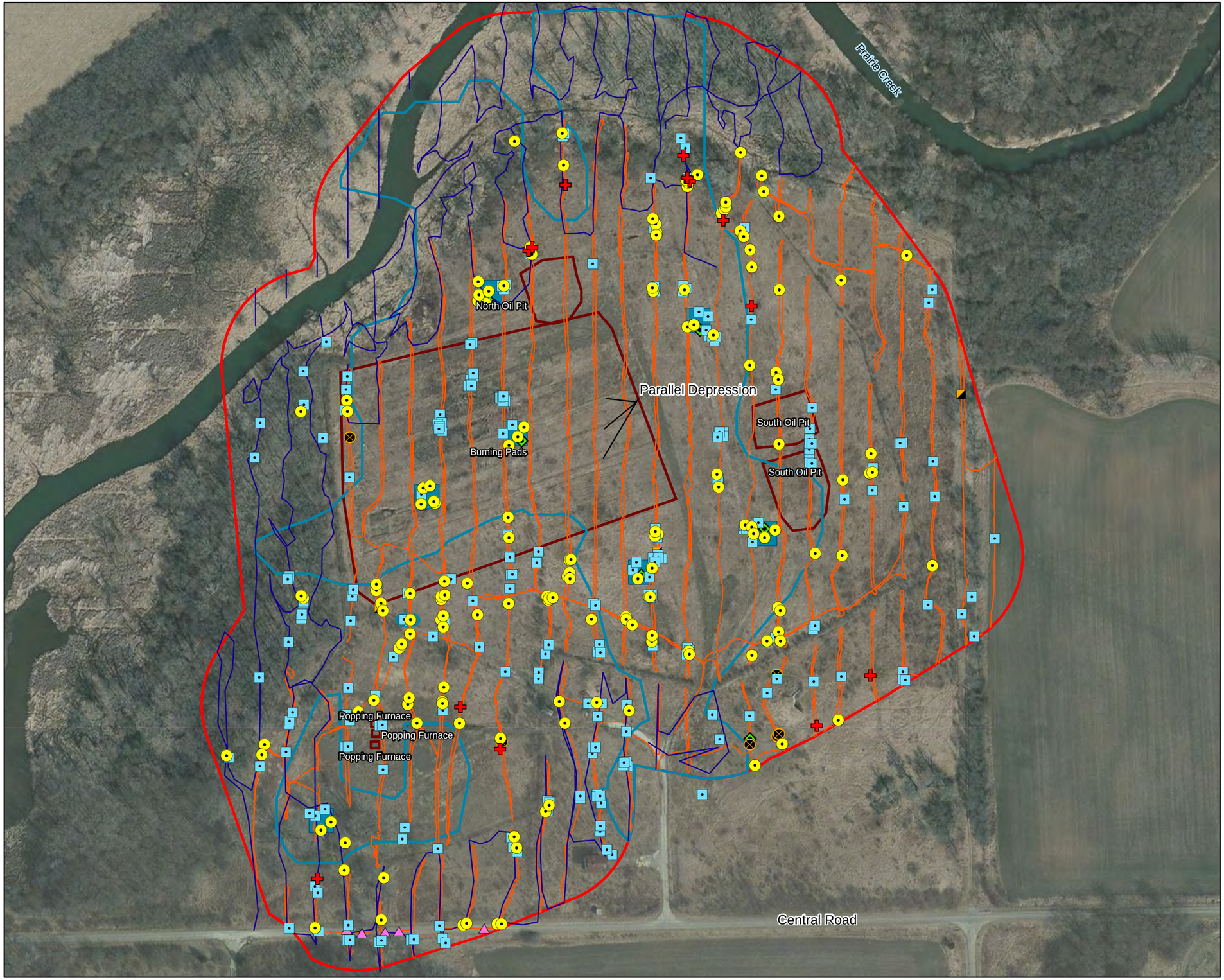
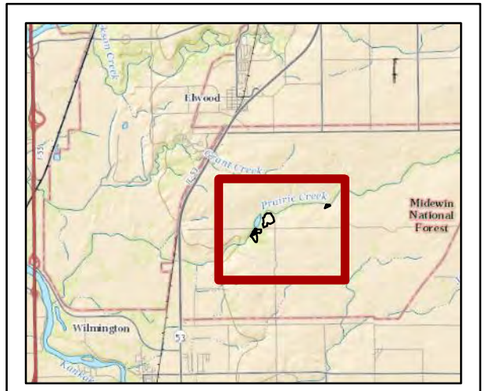
Combined Low Density and High Density Targets
Joliet AAP
Joliet, Illinois

Drawn By: JZ	Date: 1/14/2016	**Figure 4-2**
Checked By: CJ	Project No. 60419079	





Legend

- MRS Boundary
- 100% DGM Grid
- Historical Site Feature
- Analog Transect
- DGM Transect
- High Anomaly Density Area Boundary

Anomaly type

- MEC (18 MEC items found at 13 separate locations)
- MDAS (Munitions-Related)
- Other Debris
- Hot Rock
- False Positive
- QC Blind Seed
- Not Investigated (target in road)

Note:
GPS malfunction occurred along transects north of Prairie Creek. Rising water levels prohibited the team from returning to recollect GPS data, so transects shown are estimated locations.

N

0 100 200 400 Feet

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Intrusive Investigation Results
Joliet AAP
Joliet, Illinois

Drawn By: JM	Date: 3/17/2016	**Figure 4-3**
Checked By: ZT	Project No. 60419079	

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5.1 REVISED MEC CSM

RI activities at the L2 MRS were designed to provide data to support an assessment of hazards associated with potential MEC impacts. The MEC CSM for the L2 MRS was revised based on results from this RI and information from previous investigations and previous removal actions. The recovery of MEC and knowledge of potential human receptors confirms that there is risk associated with potential exposure to MEC within the L2 MRS.

5.1.1 MEC Exposure Analysis

As discussed in Chapter 14, Hazard and Risk Assessment, of EM 200-1-15 (USACE 2012), MEC exposure pathways and potential explosives safety hazards are directly dependent on three critical elements:

- MEC presence/source
- MEC exposure receptors
- Interaction between source and receptor

A completed pathway, indicating a MEC hazard, can only exist if all three elements are present. Risk management response actions can be developed and implemented effectively based on each of the three elements; therefore, an understanding of these elements as they pertain to the MRS where MEC was encountered is necessary. These elements are discussed in more detail below.

5.1.1.1 Presence and Source of MEC

Primary factors affecting hazards associated with MEC sources are the quantity and density of MEC. The more MEC that is present, the greater likelihood of interaction with a receptor. During the RI fieldwork at the L2 MRS, 18 MEC items were recovered during intrusive investigation. The results of the RI were entered into VSP to estimate the number of MEC items per acre in the low anomaly density areas. VSP determined the anomaly density to be less than 6.5 MEC items/acre. Additionally, the following factors must also be taken into consideration with respect to military munitions: munitions type (HE, practice, etc.), fuzed/unfuzed items, low order/incomplete detonations, UXO items, and discarded military munitions items. MEC items encountered during the RI at the L2 MRS included fuzes and boosters with HE filler. No MEC was considered to be a fuzed item, low order/incomplete detonation, UXO item, or discarded military munition.

A source of MEC at the L2 MRS is the historical open burning of explosives and explosive wastes completed at the site between the 1940s and 1970s. An additional source of MEC is kickout from the adjacent Demolition Area (L3) MRS (JAAP-001-R-01) where open burning of explosives and explosive wastes was also performed. Intrusive investigations performed during the RI confirmed the presence of MEC in the subsurface of the L2 MRS.

5.1.1.2 Receptors and Access

MEC exposure receptors were considered by weighing the exposure media and accessibility against the range of potential activities and uses that are likely to occur at the MRS. These receptors include site workers (i.e., MNTP volunteers), employees (i.e., MNTP employees), visitor/trespassers, and construction workers. The types of activities engaged in by site workers and employees are expected to be similar, but the duration of exposure and frequency would differ. It is assumed that a volunteer would only be exposed for short durations over irregular periods of time, while a MNTP employee would work in the area every day for a longer duration, thus exposures would be different.

The former JOAAP installation is fenced along the perimeter, thereby limiting general public access to the MRS. However, visitors (e.g., hikers, hunters) can access the installation using a walk-through gate at the Chicago Road entrance along the northern boundary, which is approximately 3 miles from the L2 MRS. The majority of the land surrounding L2 MRS is MNTP land that is not currently open to visitors. However, a small portion of the MRS north of Prairie Creek is open to prairie visitors, but accessibility is likely limited due to dense vegetation and rough terrain. Any receptor accessing the MRS south of Prairie Creek would be considered a trespasser as the land is U.S. Army-owned and not open to prairie visitors. The MRS is not completely fenced and receptors could potentially access the site.

5.1.1.3 Interaction between Source and Receptor

The site worker and employee exposure activities leading to an interaction with subsurface MEC may include planting, farming, weeding, maintaining trails and infrastructure, burning, and tilling to an anticipated depth of 12 inches. The construction worker exposure activities leading to an interaction with subsurface MEC may include constructing trails and infrastructure to depths of 12 inches or more. The visitor and trespasser exposure activities may include recreation (e.g., field trips, camping, trail activities, and hunting). Site visitors and trespassers may be exposed to surface and subsurface MEC. Restrictions are in place to prevent residential land use; therefore, residents are not considered potential receptors. Restrictions are specified in the 1998 ROD, which indicates that land designated for the USDA cannot be used for industrial or residential use (AEC 1998).

The interaction potential between receptors and MEC is affected by depth of MEC, site stability, depth of receptor activity, and the number of receptor hours. RI results indicate that MEC is present starting at relatively shallow depths (2 inches bgs), which overlaps the probable depths of receptor activities. The maximum depths of receptor activities are assumed to be 12 inches bgs for planting, farming, weeding, maintaining and constructing trails, burning and tilling. Recreational receptor activities are assumed to be mostly limited to the surface; however, subsurface activities may occur in a limited capacity (e.g., campers driving in tent stakes). Construction worker exposure activities may occur at depths greater than 12 inches bgs resulting in the potential for interaction with MEC at depths of 12-18 inches. In addition, frost heave and erosion are potential transport mechanisms associated with the L2 MRS. Therefore, the potential exists for subsurface MEC to move toward the ground surface due to natural physical processes.

Although MEC is present within the MRS and the observed MEC depth overlaps with the maximum depth of intrusive receptor activities, the number of receptor hours is very low. Therefore, the likelihood of interaction between a receptor and MEC is considered unlikely.

5.1.2 MEC Exposure Conclusions

Data collected during this RI were used to revise the current CSM for the L2 MRS and to identify all complete, potentially complete, or incomplete source-receptor interactions for current and anticipated future land uses. Based on the RI results and the results of previous investigations and removal actions, MEC explosive hazards are present at the site in subsurface soil. Because of the potential for migration, complete pathways are identified for all potential receptors accessing surface and subsurface soil. The revised MEC CSM presenting the exposure pathway analysis for the L2 MRS is presented as **Figure 5-1**.

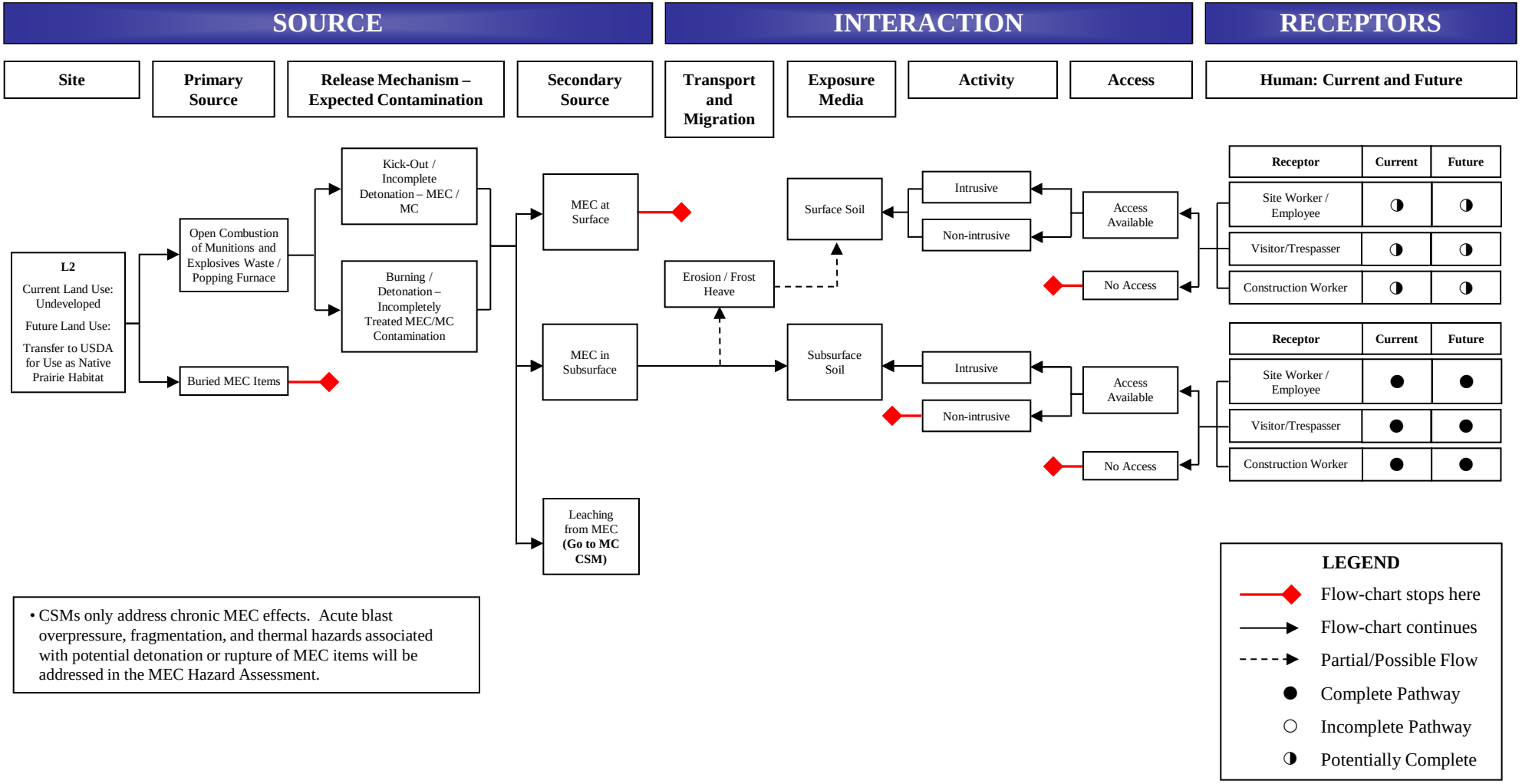
5.1.3 Uncertainties with Revised MEC CSM

The purpose of the DQO process is to develop a plan to collect data of the right type, quality, and quantity to support defensible site decisions. Extensive effort was undertaken during the TPP process and meetings to ensure that proper DQOs were developed prior to the RI fieldwork. Project DQOs and data quality standards developed for the RI were achieved. All principal MEC and MC study questions identified in Step 2 of the DQO process were answered using the information inputs of the investigation and in accordance with Step 5 of the DQO process. QC surveillance of geophysical activities was completed daily, which ensured the applicable quality objectives stated in the Geophysical Investigation Plan were met and this was verified by the GSV process. A data usability assessment confirmed usability prior to using that data to make decisions in accordance with Step 6 of the DQO process. Geophysical coverage and transect spacing met or exceeded the requirements described in Step 7 of the DQO process (e.g., 37,000 linear feet of coverage at 60-foot spacing). Finally, the results of the geophysical survey and intrusive investigations were used to estimate the MEC density of the low anomaly density areas. The transect survey was developed to provide a 95 percent confidence that there was no more than 1.0 MEC items/acre at L2; however, RI results indicated that no more than 6.5 MEC items/acre were present. However, there are minimal levels of uncertainties associated with the RI results at the L2 MRS. Intrusive investigation results at the L2 MRS indicated that MEC items are present within the MRS. These results eliminate any uncertainty as to whether MEC is still present at the L2 MRS following the previously completed removal actions (USA 2007, MKM 2010). Uncertainty regarding the horizontal extent of MEC is greatly reduced because the L2 MRS boundary is bound on all sides by other MRSs also known to contain MEC. These adjacent MRSs are also undergoing separate RIs to characterize the nature and extent of MEC. A minimal amount of uncertainty remains regarding the depth of contamination within the L2 MRS. RI intrusive investigation results documented MEC to a depth of 18 inches bgs; however, munitions-related MDAS was documented to a depth 36 inches bgs. It is possible that MEC may be present a depths greater than 18 inches bgs based on the observed depths of MDAS.

5.2 REVISED MC CONCEPTUAL SITE MODEL

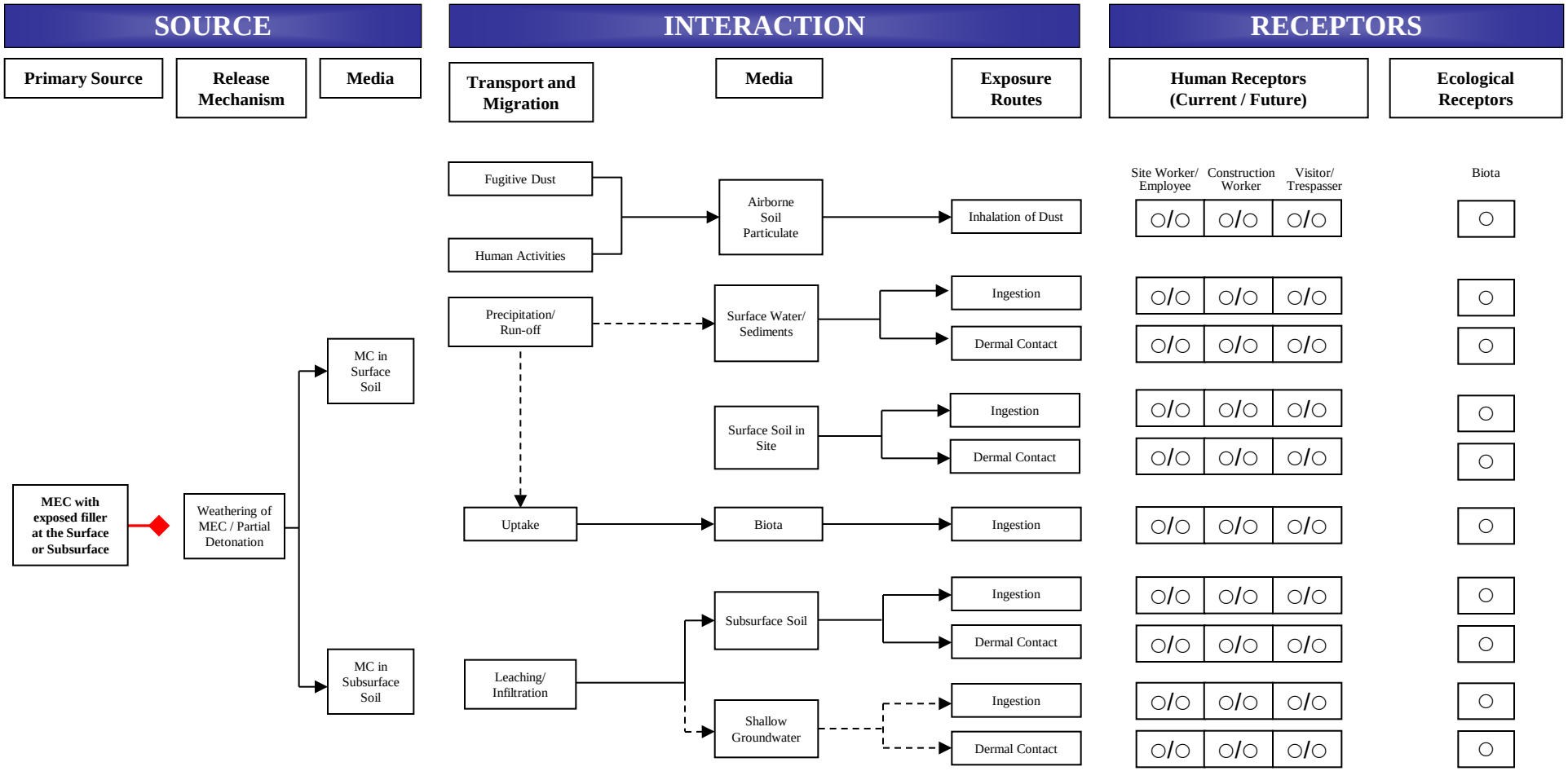
RI activities at the L2 MRS were also designed to provide data to support an assessment of risks associated with potential MC. The revised MC CSM identifies only incomplete pathways between MC sources and receptors at the MRS. The MC CSM for the L2 MRS was revised based on results from this RI. Only incomplete pathways exist because no source of MC (e.g., MEC with exposed filler) was identified at the L2 MRS during the RI. Bulk HE chunks were previously identified and removed from the L2 MRS. Soil sampling completed near the locations of these HE chunks during the IRP Phase I and IRP Phase II, and remedial action confirmed that there was no release of MC to soil. Therefore, MC soil sampling and analysis were not required to achieve the RI objectives. The revised MC CSM presenting the exposure pathway analysis for the L2 MRS is presented as **Figure 5-2**.

FIGURE 5-1
REVISED MEC CONCEPTUAL SITE MODEL (GRAPHICAL) FOR L2



- CSMs only address chronic MEC effects. Acute blast overpressure, fragmentation, and thermal hazards associated with potential detonation or rupture of MEC items will be addressed in the MEC Hazard Assessment.

FIGURE 5-2
REVISED MC CONCEPTUAL SITE MODEL (GRAPHICAL) FOR L2



IRP Remedial Activities:
- Phase II Remedial Action completed to remove contaminated soil
- Groundwater previously addressed under the IRP and recommended for no further assessment in 2004 ROD

LEGEND

Flow-chart stops here

Flow-chart continues

Partial/Possible Flow

Incomplete Pathway

6.1 MEC HA

The October 2008 Interim MEC HA, which was developed by the Technical Working Group for Hazard Assessment (USEPA 2008), was used to assess the explosive hazards at the MRS impacted by MEC. This model enables an evaluation of potential explosive hazards at an MRS under current conditions and under various cleanup, land use, and land use control alternatives. The MEC HA is a series of worksheets that characterize MRS-specific MEC hazards. The scores are summed from individual worksheets, and a Hazard Level Category is assigned to each MRS. The higher the score, the higher the potential hazard. The MEC HA is primarily designed to be used at two points in the CERCLA process: 1) following a removal action or 2) at the end of an RI to assess baseline explosive hazards and relative hazard reductions associated with remedial alternatives developed in the RI/FS report. Because no remedial alternatives have been developed for the L2 MRS, only the MEC HA score for the baseline conditions was calculated. The MEC HA worksheets, model assumptions, and output are included in **Appendix K**. The MEC HA includes the following worksheets:

- **Summary Information**. Includes the reference documents used gather information, a brief site description, and descriptions of historical clearances that have been completed at the MRS.
- **Munitions, Bulk Explosives Information**. Documents the types of munitions evaluated in the assessment including the munition type, size, model, energetic material type, fuze type, and fuze condition.
- **Current and Future Activities**. Describes the current and future land uses at the MRS, and the potential contact time (hours per year) and maximum intrusive depth associated with each activity.
- **Input Factors**. Provides the scoring for each of the input factors used in the overall MEC HA scoring and Hazard Level Category Ranking. Input factors include energetic material type, location of additional human receptors, site accessibility, potential contact hours, amount of MEC, minimum MEC depth relative to maximum receptor intrusive depth, migration potential, MEC classification, and MEC size.
- **Typical Remedial or Removal Actions**. Presents the potential or planned alternatives for the remedial actions that will be selected and evaluated in an FS. The general assumption is that additional surface and subsurface clearances would reduce the potential hazards associated with MEC, but no future actions are planned at this time.
- **Post-Response Land Use**. Presents the anticipated land use that would result following the completion of remedial actions; however, no future actions are planned at this time.

The following sections discuss the components comprising the MEC HA and provide rationale for the input factors chosen in order to determine the final MEC HA scoring for the L2 MRS.

6.1.1 Severity

The severity component is described by two input factors related to the potential consequences to a human receptor should a MEC item detonate:

- Energetic Material Type
- Location of Additional Human Receptors

6.1.1.1 Energetic Material Type

The energetic material type selected falls under the category of "High Explosive and Low Explosive Filler In Fragmenting Rounds." This input factor was selected based on the MEC items identified during the RI fieldwork (e.g., M66 fuzes, Mk-III boosters). The "High Explosive and Low Explosive Filler In Fragmenting Rounds" input factor category is associated with the highest possible score for this input category.

6.1.1.2 Location of Additional Human Receptors

Evaluation of aerial photography indicates that the Star Grove Cemetery is located within the 1,939-foot explosives safety quantity distance arc documented in the ESP, which is considered a feature or facility where humans may congregate. Examples of places where people may congregate include athletic fields, picnic areas, campgrounds, cultural resources/sacred areas, and inhabited buildings (USEPA 2008). Based on the proximity of the cemetery to the MRS, the highest possible score is assigned for this input factor category.

6.1.2 Accessibility

The accessibility component is described by the following input factors related to the likelihood that a human receptor will be able to access the site and come into contact with a MEC item:

- Site Accessibility
- Potential Contact Hours
- Amount of MEC
- Minimum MEC Depth Relative to the Maximum Receptor Intrusive Depth
- Migration Potential

6.1.2.1 Site Accessibility

The former JOAAP installation is fenced along the perimeter, thereby limiting general public access to the MRS. However, visitors (e.g., hikers, hunters) can access the installation using a walk-through gate at the Chicago Road entrance along the northern boundary, which is approximately 3 miles from the L2 MRS. The MRS is not completely fenced and receptors could potentially access the site with relative ease using paved roads. Therefore, moderate site

accessibility is assumed, which corresponds to the second highest possible score for this input factor category.

6.1.2.2 Potential Contact Hours

The L2 MRS is currently undeveloped and unused, but annual groundwater monitoring and farming activities are completed at the MRS. Annual groundwater monitoring potential contact hours are based on the assumption that two authorized persons spend two 10-hour days completing fieldwork at the site, totaling 40 hours per year. The eastern portion of the MRS overlaps approximately 0.35 acres of cropland, which is currently farmed. There are no readily available or accurate site data regarding potential contact hours associated with farming, so the numbers used in the model are estimated. It is assumed that two authorized persons spend 8 hours per year farming the 0.35-acre parcel, totaling 16 hours per year. The total receptor contact hours are less than 10,000 hours per year, which corresponds to the lowest possible score for this input factor category under baseline conditions.

6.1.2.3 Amount of MEC

This input factory category is selected from a list of applicable categories that are based on the type of MEC and associated munitions activities performed at the site. The input category of "Open Burn/Open Detonation (OB/OD) Area" was selected as the applicable category for the L2 MRS based on historical open burning activities that took place at the MRS. The "OB/OD Area" classification corresponds to the highest possible score for this input factor category.

6.1.2.4 Minimum MEC Depth Relative to Maximum Receptor Intrusive Depth

This input factor category is determined based on the minimum depth of MEC encountered at the MRS relative to the maximum intrusive depth of receptor activities. During the RI, MEC was found as shallow as 2 inches bgs, which overlaps with the anticipated intrusive depth of 12 inches for receptors. Because only subsurface MEC was observed during the RI, the second highest possible score is assigned for this input factor category.

6.1.2.5 Migration Potential

This input factor category addresses the potential for MEC items to be moved by natural physical forces such as erosion, frost heave, or surface water flow. As discussed in **Section 4.2**, there is the potential for migration of MEC within the L2 MRS from erosion, frost heave, and/or surface water flow. Based on the potential for migration of MEC, the highest possible score is assigned for this input factor category.

6.1.3 Sensitivity

The sensitivity component is described by the following input factors related to the likelihood that a MEC item will detonate if a human receptor interacts with it:

- MEC Classification

- MEC Size

6.1.3.1 MEC Classification

This input factor addresses how easily a receptor might initiate an unintentional detonation of a MEC item. Based on the types of MEC encountered during the RI (e.g., M66 fuzes and Mk-III boosters), the MEC classification selected is "Fuzed DMM." This classification corresponds to the fourth highest possible score in this input factor category. This classification was selected in accordance with Table 14-5 of the MEC HA Guidance (USEPA 2008), which specifies that unarmed fuzes not installed on munitions (similar to the M66 fuzes found during the RI) are considered fuzed DMM.

6.1.3.2 MEC Size

This input factor evaluates the ease with which a MEC item can be moved by a receptor, which could potentially cause an unintentional detonation. Input factor categories used to describe MEC size in this assessment are "large" and "small." A MEC item is considered large if it is equal to or greater than 90 pounds. A receptor is less likely to pick up or interact with a large item because it would be easier to identify and more difficult to move when compared to a smaller item. The MEC items identified at the L2 MRS were all less than 90 pounds and classified as "small" in size, which corresponds to the highest possible score for this input factor category.

6.1.4 MEC Hazard Assessment Results

As stated previously, the MEC HA calculates scores and assigns a Hazard Level Category. There are four categories, with 1 being the highest level of hazard/risk and 4 being the lowest level. The L2 MRS was assigned a Hazard Level Category of 3 with a total score of 650. The MEC HA worksheet scores and Hazard Level Category for the MRS are summarized in **Table 6-1**.

6.2 MUNITIONS RESPONSE SITE PRIORITIZATION PROTOCOL

The DoD proposed the MRSPP (32 CFR Part 179) to assign a relative risk priority to each MRS in the MMRP Inventory for response activities. This priority is based on the overall condition of each MRS and takes into consideration various factors related to explosive and environmental hazards. Relative priorities are assigned on a scale ranging from 1 to 8. Priority 1 indicates the highest potential hazard and Priority 8 indicates the lowest potential hazard. Under certain circumstances, a non-numerical alternative priority rating may also be assigned to an MRS. The overall MRSPP priorities for the MRS are as follows: the EHE Module rating was C, the CHE Module rating was No Known or Suspected CWM Hazard, and the HHE Module rating was No Known or Suspected MC Hazard. Therefore, the overall MRSPP rating for the MRS is C, which corresponds to a priority of 4, the third highest priority rating (for an MRS without CWM).

Table 6-1
Summary of MEC Hazard Assessment Scoring

Input Factor	Input Score Range	L2 MRS Score
Energetic Material Type	30 to 100	100
Location of Additional Human Receptors	0 to 30	0
Site Accessibility	5 to 80	80
Potential Contact Hours	5 to 120	15
Amount of MEC	5 to 180	180
Minimum MEC Depth Relative to the Maximum Intrusive Depth	25 to 240	150
Migration Potential	10 to 30	30
MEC Classification	45 to 180	55
MEC Size	0 to 40	40
Total	**125 to 1,000**	**650**
MEC Hazard	**1 to 4**	**3**

Notes:

MEC = munitions and explosives of concern

MRS = munitons response site

7.1 SUMMARY OF RI ACTIVITIES

This RI compiled and evaluated information about the L2 MRS relating to the nature and extent of MEC impact and associated contamination of environmental media from MC. The RI included evaluation of previously collected data, vegetation clearance, geophysical surveys, and intrusive investigation of anomalies. This information was evaluated and used to determine if MEC are present, interpret the nature and extent of MEC and MC (if present), refine the CSMs for potential exposures to MEC and MC, assess MEC hazards, and update the MRSPP tables.

7.2 SUMMARY OF RI FINDINGS

The RI resulted in the collection, synthesis, and evaluation of a large quantity of information regarding past military munitions-related activities at the L2 MRS, current on-site conditions with respect to the nature and extent of MEC and MC, and physical setting and land use. A summary of the findings for the L2 MRS is provided below.

- **Type:** Open Burning
- **Size:** 52 acres
- **Ownership:** U.S. Army owned, pending transfer to USDA
- **Topography:** Relatively flat
- **Vegetative Cover:** Tall grass, dense brush, and woods in some areas
- **Soil Type:** Clayey silt with minor sand
- **Features:** A chain link fence surrounds the former L2 IRP site boundary, which is mostly still intact. The site historically included six burning pads (each approximately 650 feet long), which are still evident at the MRS.
- **Access:** Moderate
- **Geophysical Survey:** 3.68 acres of DGM transects, 1.19 acres of analog transects, and 0.4 acres of DGM grids were completed
- **Target Anomaly Density:** High anomaly density was defined as greater than 375 anomalies per acre based on VSP output. Highest anomaly densities correlate with historical site features (e.g., burning pads).
- **Intrusive Investigation:** A total of 435 intrusive investigations were completed; MEC and MD were identified throughout the MRS.
- **MEC/MDAS:** MEC and munitions-related MDAS were recovered in subsurface soil.
- **MC Sampling Media:** No MEC with exposed filler was identified during RI field activities; therefore, MC sampling was not necessary.
- **MEC HA Hazard Level Category:** 3
- **MRSPP Score:** C (4)

7.3 CONCLUSIONS AND RECOMMENDATIONS

The L2 MRS has been sufficiently characterized using the results from previous investigations and removal actions and from this RI. MEC items were identified in subsurface soil at the L2 MRS to a depth of 18 inches bgs. The results of the intrusive investigations indicate that MEC remains present within the 52-acre MRS. The MEC HA Level Category rating for the L2 MRS is 3. The MRSPP rating is C, which corresponds to a priority of 4, the third highest priority per the DoD MRSPP Primer (DoD 2007).

Based on the results of this RI, remaining MEC poses a potential hazard to current and future receptors at the L2 MRS. Therefore, the L2 MRS is recommended for an FS to address issues associated with MEC.

In 2007, MC contamination identified by the IRP Phase II report was remediated and results were documented in the L2 Closure Report. Potential sources of MC contamination (e.g., MEC items with exposed explosive filler) were not identified during RI field work so MC sampling was not necessary. The L2 MRS is now recommended for NFA for MC, which is consistent with the IRP ROD (AEC 2004) and L2 Closure Report (MWH 2009).

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Historical Site Data
(provided on CD)

Final Phase II Remedial Investigation Report, Joliet Army Ammunition Plant

Dames & Moore. 1994.

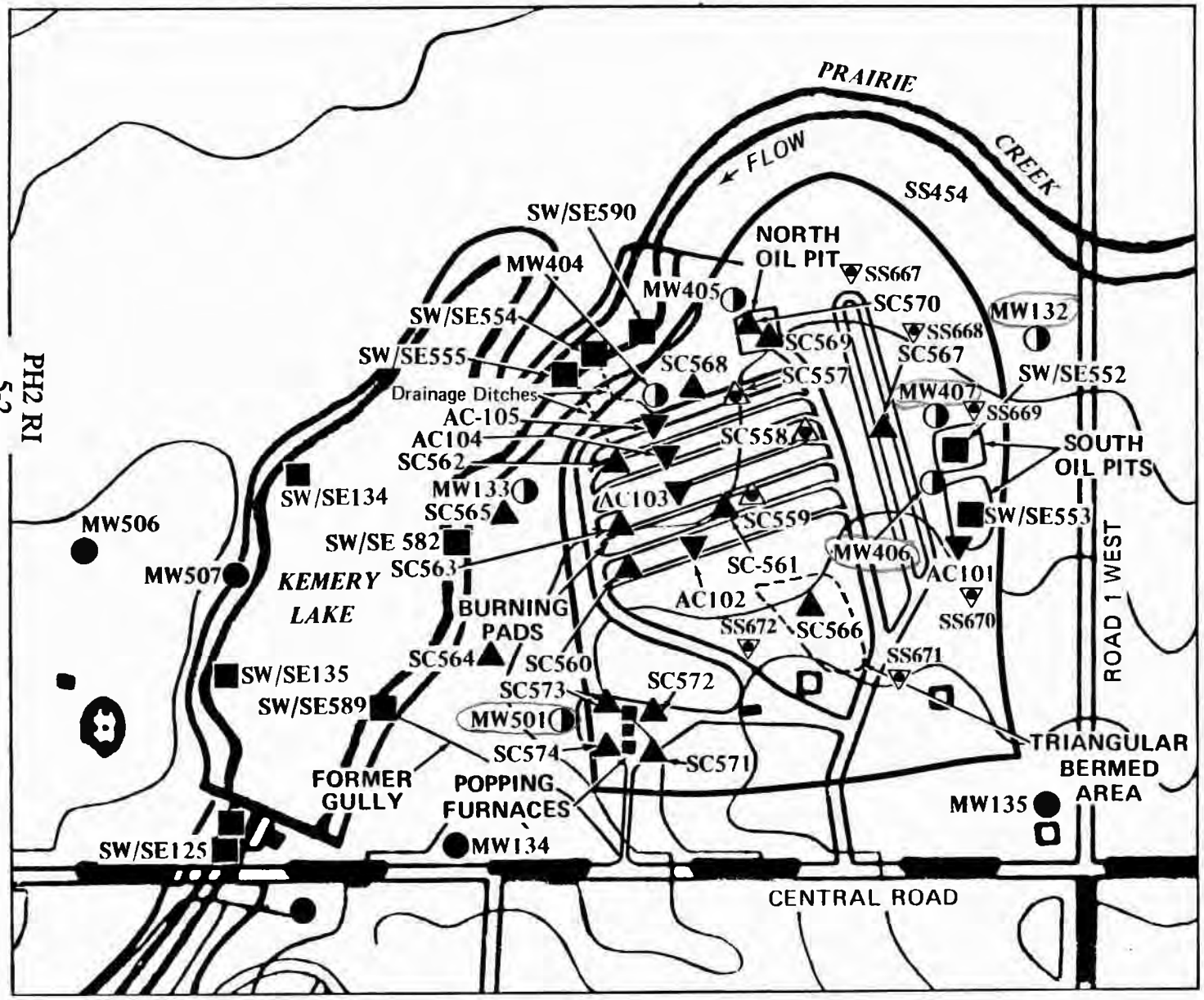


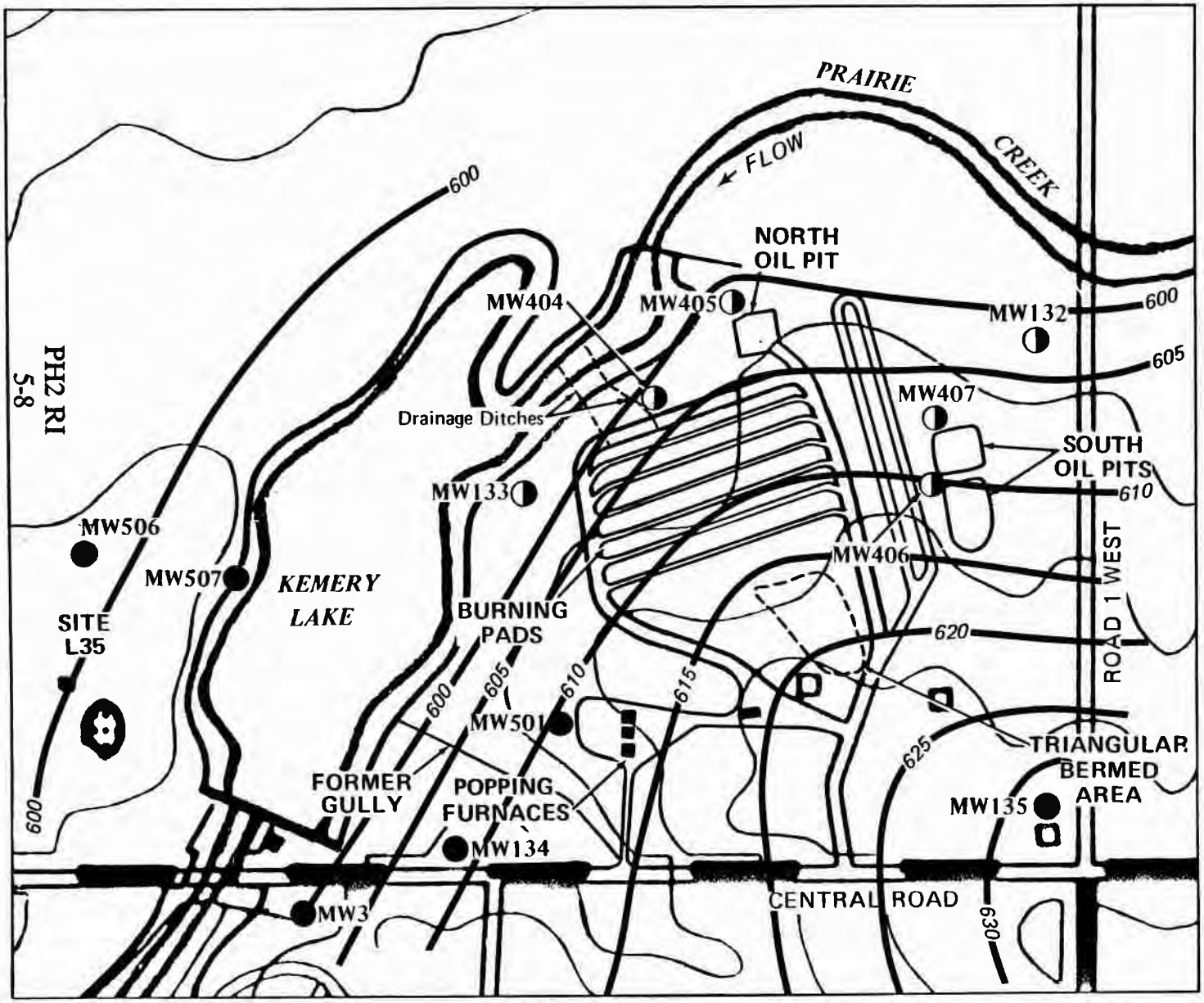
FIGURE 5.1-1
PH2 RI AND PREVIOUS INVESTIGATION SAMPLE LOCATIONS
SITE L2 - JAAP
EXPLOSIVE BURNING GROUNDS

Dames & Moore

TABLE 5.1-1
Monitoring Well Data
Site L2--Explosive Burning Grounds

Well No.	Investi-gation (a)	Well Installation Date	Screened Interval (b)	Ground Elevation (feet)	Depth to Bedrock (feet)	Bedrock Elevation (feet)	Depth of Well (feet)	Water Elevation (feet)	Date Measured
MW132	IRS	04/28/81	C	603.7	18.0	585.7	27.5	602.25	11/18/91
MW133	IRS	04/29/81	C	599.0	19.5	579.5	27.2	597.14	11/18/91
MW134	IRS	04/08/81	U	609.7	--	--	26.7	608.18	11/18/91
MW135	IRS	04/01/81	U	631.8	--	--	26.0	630.63	11/18/91
MW404	PH1 RI	08/08/91	C	603.06	12.0	591.1	18.0	601.63	11/18/91
MW405	PH1 RI	07/15/91	C	604.14	16.0	588.1	21.0	600.76	11/18/91
MW406	PH1 RI	07/15/91	C	620.00	28.8	591.2	34.0	608.13	11/18/91
MW407	PH1 RI	07/17/91	C	616.99	25.5	591.5	31.0	607.32	11/18/91
MW501	PH1 RI	08/12/91	C	614.72	--	--	23.0	610.91	11/18/91

(a) IRS: Installation Restoration Surveys, Donohue & Associates, November 1982
PH1 RI: Phase 1 Remedial Investigation, Dames & Moore, 1993b
(b) U= Overburden
C= Combined overburden and bedrock



LEGEND:

- Overburden monitoring well
- Combined monitoring well
- 615 Groundwater Elevation Contour

Water levels measured on 11/18/91

0 500 Feet

FIGURE 5.1-4
SHALLOW GROUNDWATER POTENTIOMETRIC SURFACE
SITE L2 – EXPLOSIVE BURNING GROUNDS

Dames & Moore

Table 5.1-3
Summary of Positive Detections for Explosives in PH2 RI Samples
Site L2, Explosive Burning Grounds
Soil--ug/g

Sample ID:	SC557-SS		SC558		SC559-SS		SS667		SS667D		SS668		SS669	
Sample Date:	07/12/93		07/12/93		07/12/93		07/12/93		07/12/93		07/12/93		07/12/93	
Depth(feet):	0.0		0.0		0.0		0.0		0.0		0.0		0.0	
	L V		L V		L V		L V		L V		L V		L V	
1,3-DINITROBENZENE	LT	0.496		2.580		1.880	LT	0.496	LT	0.496	LT	0.496	LT	0.496
1,3,5-TRINITROBENZENE		26.000		100.000		100.000	LT	0.488	LT	0.488	LT	0.488	LT	0.488
2,4,6-TRINITROTOLUENE		210.000		7800.000		830.000	LT	0.456	LT	0.456	LT	0.456	LT	0.456
2,4-DINITROTOLUENE	LT	0.424		16.400		5.740	LT	0.424	LT	0.424	LT	0.424	LT	0.424
2,6-DINITROTOLUENE	LT	0.524	LT	0.524		4.880	LT	0.524	LT	0.524	LT	0.524	LT	0.524
2-NITROTOLUENE		0.575		13.800		13.200	LT	0.307	LT	0.307	LT	0.307	LT	0.307
HMX		4.230		33.300		12.300	LT	0.666	LT	0.666	LT	0.666	LT	0.666
RDX		10.200		21.700		31.000	LT	0.587	LT	0.587	LT	0.587	LT	0.587
TETRYL	LT	0.731		0.838		1.060	LT	0.731	LT	0.731	LT	0.731	LT	0.731
NITROBENZENE		7.590		44.000	LT	2.410	LT	2.410	LT	2.410	LT	2.410	LT	2.410

Sample ID:	SS670		SS671		SS672	
Sample Date:	07/12/93		07/12/93		07/12/93	
Depth(feet):	0.0		0.0		0.0	
	L V		L V		L V	
1,3-DINITROBENZENE	LT	0.496	LT	0.496	LT	0.496
1,3,5-TRINITROBENZENE	LT	0.488	LT	0.488	LT	0.488
2,4,6-TRINITROTOLUENE	LT	0.456	LT	0.456	LT	0.456
2,4-DINITROTOLUENE	LT	0.424	LT	0.424	LT	0.424
2,6-DINITROTOLUENE	LT	0.524	LT	0.524	LT	0.524
2-NITROTOLUENE	LT	0.307	LT	0.307	LT	0.307
HMX	LT	0.666	LT	0.666	LT	0.666
RDX	LT	0.587	LT	0.587	LT	0.587
TETRYL		1.060	LT	0.731	LT	0.731
NITROBENZENE	LT	2.410	LT	2.410	LT	2.410

Note:
Sample I.D. ending in "D" indicates duplicate sample

Abbreviations:
HMX -- CYCLOTETRAMETHYLENETETRANITRAMINE
RDX -- CYCLOTRIMETHYLENETRINITRAMINE
TETRYL -- N-METHYL-N,2,4,6-TETRANITRAMINE

Booleans:
LT -- Less than the maximum certified limit.

Table 5.1–4
Statistical Summary of Positive Detections
Site L2, Burning Pads
Surface Soil– –ug/g

Detected Analytes:	Number of Samples (N)	Number of Detections	Maximum Concentration	Location of Maximum	Date Collected	Minimum Concentration	Mean (X) Concentration
EXPLOSIVES							
1,3,5–TRINITROBENZENE	7	7	217.50	AC104	06/02/81	26.00	100.17
1,3–DINITROBENZENE	3	2	2.58	SC558	07/12/93	1.88	1.57
2,4,6–TRINITROTOLUENE	7	7	7800.00	SC558	07/12/93	210.00	2730.29
2,4–DINITROTOLUENE	7	3	60.80	AC103	06/02/81	5.74	12.89
2,6–DINITROTOLUENE	7	4	15.40	AC103	06/02/81	1.60	3.86
2–NITROTOLUENE	7	3	13.80	SC558	07/12/93	0.58	4.48
HMX	3	3	33.30	SC558	07/12/93	4.23	16.61
RDX	7	4	90.30	AC102	06/02/81	10.20	31.29
TETRYL	7	3	52.65	AC104	06/02/81	0.84	8.32
NITROBENZENE	3	2	44.00	SC558	07/12/93	7.59	17.60
ANIONS							
NITRATE	4	4	27.00	AC103	06/02/81	16.15	22.34
PHOSPHATE	4	4	276.00	AC103	06/02/81	114.00	202.50
SULFATE	4	4	305.00	AC103	06/02/81	17.00	179.25
METALS							
ARSENIC	4	4	11.50	AC104	06/02/81	9.80	10.55
CHROMIUM	4	4	53.10	AC102	06/02/81	40.40	44.90
COPPER	4	4	62.30	AC102	06/02/81	36.90	45.59
IRON	4	4	26300.00	AC102	06/02/81	20900.00	23337.50
LEAD	4	4	500.00	AC102	06/02/81	103.00	310.88
MANGANESE	4	4	1395.00	AC104	06/02/81	902.00	1124.50

Notes:
Surface soil depth is 0 to 2.0 feet.
Samples included are AC102, AC103, AC104, AC105, SC557–SS, SC558, and SC559–SS.
Duplicate samples concentrations were averaged with respective primary samples.
All statistics were calculated using 1/2 the certified reporting limit for nondetects.

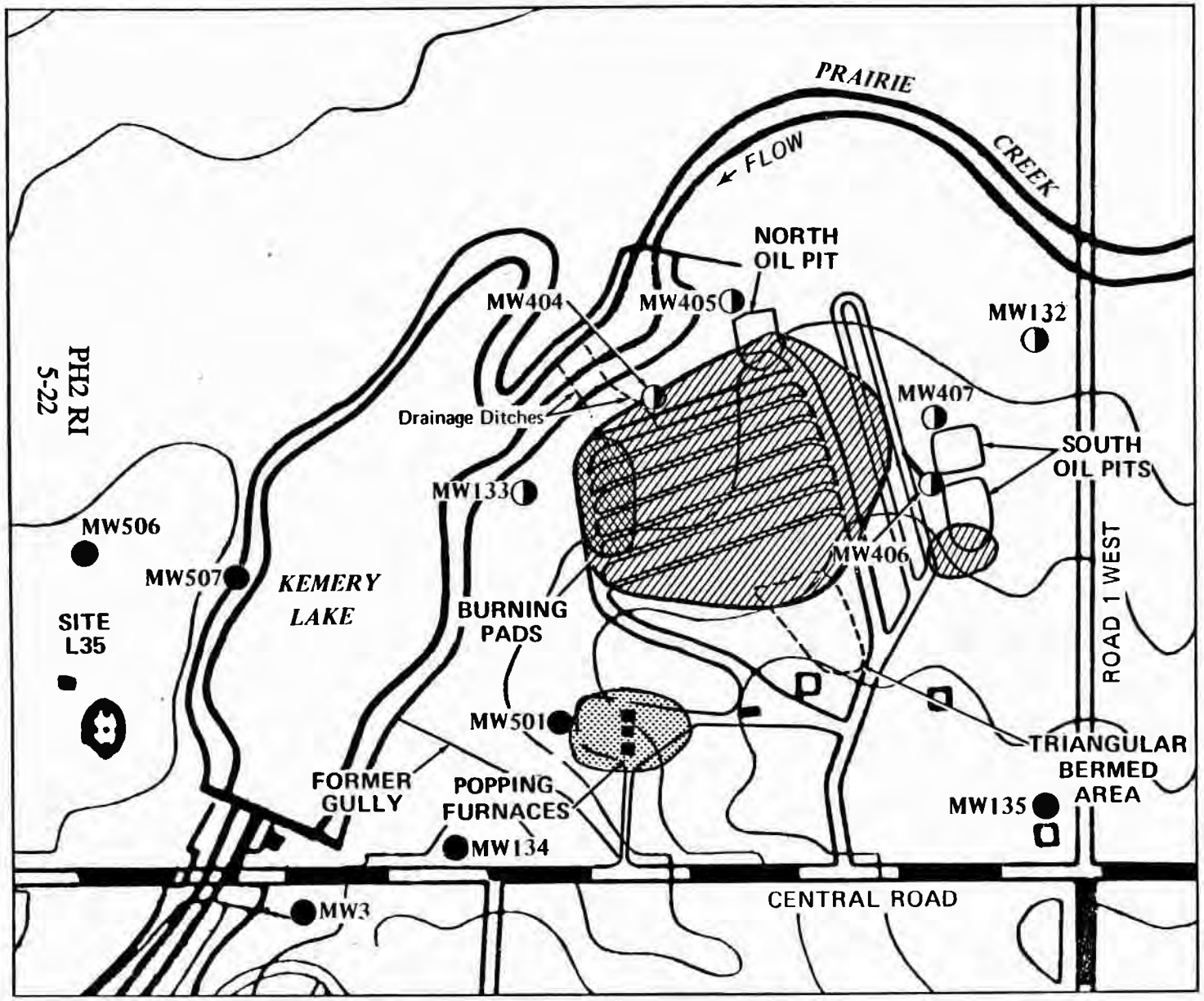
RDX = CYCLOTRIMETHYLENETRINITRAMINE
HMX = CYCLOTETRAMETHYLENETETRANITRAMINE

Table 5.1–5
Statistical Summary of Positive Detections
Site L2, Burning Pads
Deep Soil– –ug/g

Detected Analytes:	Number of Samples (N)	Number of Detections	Maximum Concentration	Location of Maximum	Date Collected	Minimum Concentration	Mean (X) Concentration
EXPLOSIVES							
1,3,5–TRINITROBENZENE	21	1	2.14	SC562C	08/13/91	2.14	0.33
2,4,6–TRINITROTOLUENE	21	5	860.00	SC562C	08/13/91	0.68	57.14
HMX	21	2	5.23	SC563A	08/13/91	0.87	0.61
RDX	21	2	2.72	SC562C	08/13/91	1.02	0.44
ANIONS							
NITRATE/NITRITE	21	18	3.70	SC562A	08/13/91	0.75	1.30
TOTAL PHOSPHATES	21	21	444.00	SC563C	08/13/91	187.00	308.79
METALS							
ALUMINUM	21	21	20100.00	SC558A	08/08/91	8400.00	13462.86
ANTIMONY	21	15	10.10	SC563C	08/13/91	4.10	5.89
ARSENIC	21	21	75.00	SC562C	08/13/91	10.40	31.12
BARIUM	21	21	165.00	SC561A	08/08/91	41.70	85.44
BERYLLIUM	21	21	4.04	SC558A	08/08/91	0.71	1.72
CADMIUM	21	2	1.25	SC562C	08/08/91	0.49	0.40
CALCIUM	21	21	74000.00	SC561C	08/08/91	2430.00	37780.00
CHROMIUM	21	21	32.80	SC558A	08/08/91	16.80	22.81
COBALT	21	21	22.70	SC563C	08/13/91	8.50	13.99
COPPER	21	21	40.20	SC558A	08/08/91	17.70	27.77
IRON	21	21	36300.00	SC558A	08/08/91	19700.00	25380.95
LEAD	21	21	48.90	SC563A	08/13/91	14.50	22.43
MAGNESIUM	21	21	33200.00	SC558B	08/08/91	4630.00	20525.00
MANGANESE	21	21	1060.00	SC563A	08/13/91	339.00	618.64
MERCURY	21	11	0.09	SC563A	08/13/91	0.03	0.04
NICKEL	21	21	61.00	SC561A	08/08/91	21.70	35.01
POTASSIUM	21	21	3690.00	SC558B	08/08/91	1060.00	2248.81
SELENIUM	21	1	0.15	SC557A	08/08/91	0.15	0.13
SILVER	21	6	0.08	SC560A	08/13/91	0.03	0.02
SODIUM	21	21	575.00	SC558C	08/08/91	320.00	428.26
THALLIUM	21	7	19.30	SC558B	08/08/91	9.69	6.82
VANADIUM	21	21	47.20	SC558A	08/08/91	23.60	32.84
ZINC	21	21	120.00	SC563C	08/13/91	67.50	82.76

Notes:
Deep soil depth is > 2.0 feet.
Duplicate samples concentrations were averaged with respective primary samples.
All statistics were calculated using 1/2 the certified reporting limit for nondetects.
RDX = CYCLOTRIMETHYLENETRINITRAMINE
HMX = CYCLOTETRAMETHYLENETETRANITRAMINE

Samples included are:
SC557A,B,C
SC558A,B,C
SC559A,B,C
SC560A,B,C
SC561A,B,C
SC562A,B,C
SC563A,B,C



LEGEND:

- Overburden monitoring well
- Combined monitoring well
- Interpreted extent of explosives detected in surface soil
- Interpreted extent of explosives detected at depths >2.5 feet
- Interpreted extent of metals detected in surface at elevated concentrations

FIGURE 5.1-5
AREAL EXTENT OF EXPLOSIVES DETECTED IN SOILS
SITE L2, EXPLOSIVE BURNING GROUNDS

Dames & Moore

Table 5.1–6
Statistical Summary of Positive Detections
Site L2, Areas Around the Burning Pads
Surface Soil– –ug/g

Detected Analytes:	Number of Samples (N)	Number of Detections	Maximum Concentration	Location of Maximum	Date Collected	Minimum Concentration	Mean (X) Concentration
EXPLOSIVES							
2,4,6–TRINITROTOLUENE	11.00	2.00	1.97	SC566A	08/06/91	0.23	0.43
HMX	11.00	1.00	39.60	SC568A	08/08/91	0.33	3.90
TETRYL	11.00	1.00	1.06	SS670	07/12/93	0.37	0.43
NITROBENZENE	11.00	1.00	1.01	SC566A	08/06/91	1.01	1.19
ANIONS							
NITRATE/NITRITE	5.00	5.00	24.00	SC564A	08/06/91	2.24	9.52
TOTAL PHOSPHATES	5.00	5.00	422.00	SC565A	08/06/91	214.50	318.30
METALS							
ALUMINUM	5.00	5.00	14850.00	SC564A	08/06/91	11500.00	13420.00
ANTIMONY	5.00	3.00	8.00	SC567A	08/13/91	3.57	5.07
ARSENIC	5.00	5.00	44.00	SC565A	08/06/91	8.36	28.77
BARIUM	5.00	5.00	170.50	SC564A	08/06/91	95.70	126.94
BERYLLIUM	5.00	5.00	1.50	SC565A	08/06/91	1.05	1.31
CADMIUM	5.00	5.00	2.62	SC566A	08/06/91	0.76	1.67
CALCIUM	5.00	5.00	43100.00	SC566A	08/06/91	3420.00	12682.00
CHROMIUM	5.00	5.00	21.50	SC567A	08/13/91	18.30	20.64
COBALT	5.00	5.00	15.20	SC567A	08/13/91	9.64	11.89
COPPER	5.00	5.00	63.60	SC566A	08/06/91	25.00	38.15
IRON	5.00	5.00	22600.00	SC566A	08/06/91	19000.00	20640.00
LEAD	5.00	5.00	72.80	SC564A	08/06/91	36.25	52.01
MAGNESIUM	5.00	5.00	22800.00	SC566A	08/06/91	3130.00	7581.00
MANGANESE	5.00	5.00	1120.00	SC564A	08/06/91	431.00	820.00
MERCURY	5.00	5.00	0.47	SC564A	08/06/91	0.05	0.18
NICKEL	5.00	5.00	44.70	SC566A	08/06/91	19.35	25.97
POTASSIUM	5.00	5.00	2230.00	SC567A	08/13/91	1325.00	1945.00
SELENIUM	5.00	3.00	0.27	SC565A	08/06/91	0.13	0.17
SILVER	5.00	5.00	0.28	SC565A	08/06/91	0.04	0.13
SODIUM	5.00	5.00	433.00	SC566A	08/06/91	287.00	377.10
THALLIUM	5.00	1.00	13.60	SC566A	08/06/91	3.31	5.37
VANADIUM	5.00	5.00	38.85	SC564A	08/06/91	27.30	33.65
ZINC	5.00	5.00	175.00	SC566A	08/06/91	105.00	124.10

Notes:
HMX = CYCLOTETRAMETHYLENETETRANITRAMINE
Surface soil depth is 0 to 2.0 feet.
Samples included are SC564A, SC565A, SC566A, SC567A, SC568A, SS667, SS668, SS669, SS670, SS671 and SS672.
Duplicate samples concentrations were averaged with respective primary samples.
All statistics were calculated using 1/2 the certified reporting limit for nondetects.
Minimum concentrations may include 1/2 the certified reporting limit.

Table 5.1–7
Statistical Summary of Positive Detections
Site L2, Areas Around the Burning Pads
Deep Soil– –ug/g

Detected Analytes:	Number of Samples (N)	Number of Detections	Maximum Concentration	Location of Maximum	Date Collected	Minimum Concentration	Mean (X) Concentration
EXPLOSIVES							
RDX	7.00	1.00	1.09	SC568B	08/08/91	0.29	0.41
ANIONS							
NITRATE/NITRITE	7.00	7.00	3.46	SC568B	08/08/91	1.08	2.13
TOTAL PHOSPHATES	7.00	7.00	297.00	SC568B	08/08/91	141.00	245.14
METALS							
ALUMINUM	7.00	7.00	16700.00	SC564B	08/06/13	9560.00	11565.71
ANTIMONY	6.00	5.00	11.90	SC567B	08/13/91	3.57	6.90
ARSENIC	7.00	7.00	96.00	SC565B	08/06/91	0.00	35.00
BARIUM	7.00	7.00	126.00	SC564B	08/06/13	51.90	70.47
BERYLLIUM	7.00	7.00	1.64	SC567B	08/13/91	1.12	1.28
CADMIUM	7.00	2.00	0.72	SC566B	08/06/91	0.35	0.42
CALCIUM	7.00	7.00	66000.00	SC566B	08/06/91	2030.00	39472.86
CHROMIUM	7.00	7.00	23.50	SC564B	08/06/91	15.40	19.79
COBALT	7.00	7.00	23.80	SC568C	08/08/91	10.10	13.77
COPPER	7.00	7.00	37.30	SC567B	08/13/91	17.60	28.09
IRON	7.00	7.00	40500.00	SC567B	08/13/91	20300.00	25100.00
LEAD	6.00	5.00	44.20	SC567B	08/13/91	17.50	25.72
MAGNESIUM	7.00	7.00	30900.00	SC566B	08/06/91	2900.00	21515.71
MANGANESE	7.00	7.00	844.00	SC568C	08/08/91	373.00	636.57
MERCURY	7.00	4.00	0.04	SC565B	08/06/91	0.03	0.03
NICKEL	6.00	5.00	44.40	SC568C	08/08/91	19.90	32.32
POTASSIUM	7.00	7.00	2160.00	SC568B	08/08/91	0.00	1363.29
SELENIUM	7.00	1.00	0.20	SC564B	08/06/91	0.13	0.14
SILVER	7.00	3.00	0.02	SC564B	08/06/91	0.01	0.02
SODIUM	7.00	7.00	500.00	SC566B	08/06/91	333.00	409.14
THALLIUM	6.00	4.00	11.20	SC568C	08/08/91	3.31	7.96
VANADIUM	6.00	5.00	42.50	SC564B	08/06/91	25.80	30.75
ZINC	6.00	5.00	86.10	SC568C	08/08/91	67.60	78.72

Notes:
RDX = CYCLOTRIMETHYLENETRINITRAMINE
Deeper soil is > 2.0 feet.
Samples included are SC564B, SC565B, SC566B, SC567B,C and SC568B,C.
Duplicate samples concentrations were averaged with respective primary samples.
All statistics were calculated using 1/2 the certified reporting limit for nondetects.
Minimum concentrations may include 1/2 the certified reporting limit.

Table 5.1–8
Statistical Summary of Positive Detections
Site L2, Popping Furnaces
Shallow Soil– –ug/g

Detected Analytes:	Number of Samples (N)	Number of Detections	Maximum Concentration	Location of Maximum	Date Collected	Minimum Concentration	Mean (X) Concentration
ANIONS							
NITRATE/NITRITE	4	4	2.03	SC572A	08/07/91	1.250	1.61
TOTAL PHOSPHATES	4	4	321.00	SC571A	08/06/91	186.500	261.38
METALS							
ALUMINUM	4	4	10900.00	SC573A	08/07/91	9695.000	10323.75
ANTIMONY	4	4	6.60	SC571A	08/06/91	4.700	5.33
ARSENIC	4	4	70.00	SC573A	08/07/91	40.000	55.13
BARIUM	4	4	142.00	SC571A	08/06/91	45.500	80.33
BERYLLIUM	4	4	1.54	SC574A	08/07/91	1.150	1.33
CADMIUM	4	4	27.50	SC571A	08/06/91	0.458	9.41
CALCIUM	4	4	57000.00	SC574A	08/07/91	8550.000	29037.50
CHROMIUM	4	4	18.80	SC573A	08/07/91	16.300	17.73
COBALT	4	4	13.70	SC571A	08/06/91	11.900	12.76
COPPER	4	4	513.00	SC571A	08/06/91	26.800	207.83
IRON	4	4	23750.00	SC572A	08/07/91	20600.000	22037.50
LEAD	4	4	471.00	SC573A	08/07/91	21.100	181.66
MAGNESIUM	4	4	34100.00	SC574A	08/07/91	6360.000	18415.00
MANGANESE	4	4	922.00	SC571A	08/06/91	553.000	679.38
MERCURY	4	3	0.10	SC571A	08/06/91	0.036	0.05
NICKEL	4	4	30.00	SC574A	08/07/91	23.000	25.54
POTASSIUM	4	4	2470.00	SC574A	08/07/91	1630.000	1980.00
SILVER	4	4	120.00	SC571A	08/07/91	0.031	30.98
SODIUM	4	4	443.00	SC574A	08/07/91	325.000	397.25
THALLIUM	4	1	12.80	SC574A	08/07/91	6.035	5.68
VANADIUM	4	4	28.60	SC573A	08/07/91	26.300	27.43
ZINC	4	4	732.00	SC571A	08/07/91	74.000	315.50

Notes:
Shallow soil depth is 0 to 2.0 feet.
Samples included are SC571A, SC527A, SC573A and SC574A.
Duplicate samples concentrations were averaged
with respective primary samples.
All statistics were calculated using 1/2 the
certified reporting limit for nondetects.

Table 5.1–9
Statistical Summary of Positive Detections
Site L2, Popping Furnaces
Deep Soil– –ug/g

Detected Analytes:	Number of Samples (N)	Number of Detections	Maximum Concentration	Location of Maximum	Date Collected	Minimum Concentration	Mean (X) Concentration
ANIONS							
NITRATE/NITRITE	4	4	3.71	SC571B	08/06/91	0.941	1.67
TOTAL PHOSPHATES	4	4	291.00	SC574B	08/07/91	166.000	233.25
METALS							
ALUMINUM	4	4	12200.00	SC571B	08/06/91	9810.000	11177.50
ANTIMONY	4	3	4.80	SC573B	08/07/91	4.100	4.22
ARSENIC	4	4	86.00	SC573B	08/07/91	44.000	67.50
BARIUM	4	4	150.00	SC571B	08/06/91	35.300	87.68
BERYLLIUM	4	4	1.72	SC572B	08/07/91	1.200	1.44
CADMIUM	4	3	1.12	SC571B	08/06/91	0.498	0.67
CALCIUM	4	4	61000.00	SC574B	08/07/91	2380.000	29302.50
CHROMIUM	4	4	19.80	SC572B	08/07/91	17.600	18.85
COBALT	4	4	14.10	SC572B	08/07/91	10.700	12.60
COPPER	4	4	37.40	SC572B	08/07/91	22.300	32.20
IRON	4	4	29600.00	SC572B	08/07/91	20300.000	23725.00
LEAD	4	4	27.60	SC572B	08/07/91	17.600	22.73
MAGNESIUM	4	4	36800.00	SC574B	08/07/91	3760.000	19045.00
MANGANESE	4	4	845.00	SC571B	08/06/91	513.000	702.25
MERCURY	4	3	0.05	SC574B	08/07/91	0.036	0.04
NICKEL	4	4	44.70	SC572B	08/07/91	20.400	31.30
POTASSIUM	4	4	2320.00	SC574B	08/07/91	1190.000	1720.00
SILVER	4	3	0.31	SC571B	08/06/91	0.081	0.14
SODIUM	4	4	453.00	SC574B	08/07/91	300.000	388.25
THALLIUM	4	2	15.90	SC574B	08/07/91	12.500	8.76
VANADIUM	4	4	30.50	SC571B	08/06/91	24.200	28.08
ZINC	4	4	94.80	SC571B	08/06/91	62.900	81.78

Notes:
Deep soil depth is > 2.0 feet.
Samples included are SC571B, SC527B, SC573B and SC574B.
Duplicate samples concentrations were averaged with respective primary samples.
All statistics were calculated using 1/2 the certified reporting limit for nondetects.

Table 5.1–10
Statistical Summary of Positive Detections
Site L2, Northern Oil Pit
Deep Soil– –ug/g

Detected Analytes:	Number of Samples (N)	Number of Detections	Maximum Concentration	Location of Maximum	Date Collected	Minimum Concentration	Mean (X) Concentration
EXPLOSIVES							
2–NITROTOLUENE	6	1	0.82	SC569A	08/13/91	0.820	0.26
VOCs							
ACETONE	6	6	0.19	SC569A	08/13/91	0.032	0.09
BENZENE	6	3	48.70	SC569A	08/13/91	0.011	8.16
ETHYLBENZENE	6	4	24.10	SC569A	08/13/91	0.004	4.30
TETRACHLOROETHYLENE	6	1	0.01	SC569A	08/13/91	0.012	0.00
TOLUENE	6	3	48.70	SC569A	08/13/91	0.018	8.13
XYLENES	6	4	49.10	SC569A	08/13/91	0.067	10.15
BNAs							
2–METHYLNAPHTHALENE	6	4	112.00	SC569A	08/13/91	1.410	20.02
DIBENZOFURAN	6	1	68.90	SC569A	08/13/91	68.900	11.59
FLUORENE	6	4	18.10	SC569A	08/13/91	0.234	3.29
NAPHTHALENE	6	4	21.70	SC569A	08/13/91	0.681	4.45
PHENANTHRENE	6	4	64.00	SC569A	08/13/91	0.608	11.61
PYRENE	6	3	36.70	SC569A	08/13/91	1.380	6.62
PCBs/Pesticides							
PCB 1260	6	2	0.10	SC570B	08/13/91	0.085	0.06
TPHCs							
TPHC	6	6	80600.00	SC569A	08/13/91	305.000	14719.83
ANIONS							
NITRATE/NITRITE	6	5	5.50	SC570B	08/13/91	1.370	2.28
SULFATE	6	1	406.00	SC569A	08/13/91	406.000	105.33
TOTAL PHOSPHATES	6	6	769.00	SC569A	08/13/91	269.000	488.83
METALS							
ALUMINUM	6	6	17800.00	SC570A	08/13/91	10400.000	13616.67
ANTIMONY	6	6	10.90	SC570A	08/13/91	6.200	8.02
ARSENIC	6	6	24.00	SC569C	08/13/91	7.120	13.38
BARIUM	6	6	152.00	SC569A	08/13/91	50.500	98.17
BERYLLIUM	6	6	2.36	SC570B	08/13/91	1.220	1.63
CADMIUM	6	3	3.03	SC569A	08/13/91	0.483	0.90
CALCIUM	6	6	43100.00	SC569B	08/13/91	2110.000	19563.33
CHROMIUM	6	6	30.20	SC570A	08/13/91	18.600	23.97
COBALT	6	6	18.60	SC570B	08/13/91	10.800	14.22
COPPER	6	6	87.40	SC569A	08/13/91	18.900	39.72
IRON	6	6	33100.00	SC570B	08/13/91	17800.000	25950.00
LEAD	6	6	149.00	SC569A	08/13/91	15.900	49.45
MAGNESIUM	6	6	27600.00	SC569B	08/13/91	5440.000	14475.00
MANGANESE	6	6	874.00	SC569A	08/13/91	364.000	624.67
MERCURY	6	3	0.31	SC569A	08/13/91	0.076	0.12
NICKEL	6	6	49.40	SC570B	08/13/91	19.500	35.77
POTASSIUM	6	6	2430.00	SC570A	08/13/91	1620.000	2053.33
SELENIUM	6	4	0.24	SC570A	08/13/91	0.149	0.16
SILVER	6	3	0.44	SC569A	08/13/91	0.045	0.10
SODIUM	6	6	798.00	SC569A	08/13/91	317.000	434.00
THALLIUM	6	1	12.80	SC569B	08/13/91	12.800	4.89
VANADIUM	6	6	40.10	SC570A	08/13/91	23.900	33.42
ZINC	6	6	144.00	SC569A	08/13/91	68.600	105.68

Notes:
Deep soil depth is > 2.0 feet.
Samples included are SC569A,B,C and SC570A,B,C.
Duplicate samples concentrations were averaged with respective primary samples.
All statistics were calculated using 1/2 the certified reporting limit for nondetects.

Table 5.1–11
Statistical Summary of Positive Detections
Site L2, Southern Oil Pits
Surface Water––ug/L

Detected Analytes:	Number of Samples (N)	Number of Detections	Maximum Concentration	Location of Maximum	Date Collected	Minimum Concentration	Mean (X) Concentration
EXPLOSIVES							
2,4,6–TRINITROTOLUENE	2	1	5.64	SW552	08/16/91	0.32	2.98
RDX	2	1	3.33	SW552	08/16/91	0.59	1.96
VOCs							
ACETONE	2	2	16.50	SW552	08/16/91	15.40	15.95
CARBON DISULFIDE	2	1	4.99	SW553	08/16/91	0.25	2.62
METHYLENE CHLORIDE	2	2	3.11	SW552	08/16/91	3.02	3.07
TOLUENE	2	1	0.60	SW553	08/16/91	0.25	0.42
PCBs/Pesticides							
ENDRIN	2	2	1.29	SW553	08/16/91	0.36	0.82
PCB 1248	2	2	100.00	SW553	08/16/91	30.00	65.00
PCB 1260	2	2	21.90	SW553	08/16/91	9.84	15.87
TPHCs							
TPHC	2	2	360000.00	SW553	08/16/91	48100.00	204050.00
METALS							
ALUMINUM	2	1	10700.00	SW553	08/16/91	70.50	5385.25
ARSENIC	2	2	25.70	SW552	08/16/91	5.33	15.52
BARIUM	2	2	599.00	SW553	08/16/91	10.60	304.80
BERYLLIUM	2	1	2.10	SW553	08/16/91	2.10	2.30
CADMIUM	2	1	16.30	SW553	08/16/91	2.01	9.15
CALCIUM	2	2	81000.00	SW553	08/16/91	26600.00	53800.00
CHROMIUM	2	1	121.00	SW553	08/16/91	3.01	62.01
COBALT	2	1	29.80	SW553	08/16/91	12.50	21.15
COPPER	2	1	1410.00	SW553	08/16/91	4.05	707.02
IRON	2	2	61900.00	SW553	08/16/91	1770.00	31835.00
LEAD	2	2	5400.00	SW553	08/16/91	8.24	2704.12
MAGNESIUM	2	2	27900.00	SW553	08/16/91	13000.00	20450.00
MANGANESE	2	2	1460.00	SW553	08/16/91	696.00	1078.00
MERCURY	2	1	0.10	SW553	08/16/91	0.10	0.11
NICKEL	2	1	76.70	SW553	08/16/91	17.15	46.93
POTASSIUM	2	2	11000.00	SW553	08/16/91	4060.00	7530.00
SELENIUM	2	1	1.90	SW553	08/16/91	1.51	1.71
SILVER	2	1	12.00	SW553	08/16/91	0.13	6.06
SODIUM	2	2	24300.00	SW552	08/16/91	5340.00	14820.00
VANADIUM	2	1	57.60	SW553	08/16/91	5.50	31.55
ZINC	2	1	2040.00	SW553	08/16/91	10.55	1025.28

Notes:
Samples included are SW552 and SW553.
All statistics were calculated using 1/2 the
certified reporting limit for nondetects.
RDX = CYCLOTRIMETHYLENETRINITRAMINE
TPHC = TOTAL PETROLEUM HYDROCARBONS

Table 5.1–12
Statistical Summary of Positive Detections
Site L2, Southern Oil Pits
Sediment– –ug/g

Detected Analytes:	Number of Samples (N)	Number of Detections	Maximum Concentration	Location of Maximum	Date Collected	Minimum Concentration	Mean (X) Concentration
EXPLOSIVES							
1,3,5–TRINITROBENZENE	4	1	1.61	SE552A	08/16/91	0.24	0.59
2,4,6–TRINITROTOLUENE	4	2	2.14	SE552A	08/16/91	0.23	1.01
NITROBENZENE	4	1	0.92	SE552B	08/16/91	0.92	1.13
VOCs							
ACETONE	4	3	0.74	SE552A	08/16/91	0.01	0.23
BENZENE	4	2	0.01	SE553B	08/16/91	0.00	0.01
ETHYLBENZENE	4	1	0.05	SE553B	08/16/91	0.00	0.01
TOLUENE	4	1	0.10	SE552A	08/16/91	0.00	0.03
BNAs							
2–METHYLNAPHTHALENE	4	1	18.40	SE553B	08/16/91	0.25	16.91
DIBENZOFURAN	4	1	1.98	SE553B	08/16/91	0.18	9.29
NAPHTHALENE	4	1	2.97	SE553B	08/16/91	0.19	10.04
PHENANTHRENE	4	3	169.00	SE552A	08/16/91	1.28	48.01
PYRENE	4	2	2.71	SE553B	08/16/91	0.59	9.07
PESTICIDES/PCBs							
DDT	4	4	106.00	SE553A	08/16/91	0.10	34.82
DDE	4	4	108.00	SE553A	08/16/91	0.24	35.23
ENDRIN	4	3	7.52	SE553A	08/16/91	0.02	2.10
HEPTACHLOR	4	4	17.30	SE553A	08/16/91	0.05	7.65
HEPTACHLOR EPOXIDE	4	4	110.00	SE553A	08/16/91	0.07	31.47
ISODRIN	4	3	12.40	SE553A	08/16/91	0.14	3.22
PCB 1248	4	3	3520.00	SE553A	08/16/91	0.04	1139.80
PCB 1254	4	2	1720.00	SE553A	08/16/91	0.04	431.80
TPHCs							
TPHC	4	4	368000.00	SE552A	08/16/91	3720.00	154180.00
METALS							
ALUMINUM	4	4	13400.00	SE553B	08/16/91	3220.00	10305.00
ANTIMONY	4	3	7.30	SE552A	08/16/91	3.57	5.74
ARSENIC	4	4	18.00	SE553B	08/16/91	5.42	11.51
BARIUM	4	4	167.00	SE552A	08/16/91	127.00	141.50
BERYLLIUM	4	3	1.84	SE552B	08/16/91	0.25	1.24
CADMIUM	4	2	4.82	SE552A	08/16/91	0.35	2.30
CALCIUM	4	4	15500.00	SE553A	08/16/91	2850.00	11387.50
CHROMIUM	4	4	25.40	SE553A	08/16/91	23.70	24.45
COBALT	4	4	36.50	SE553B	08/16/91	5.73	17.16
COPPER	4	4	203.00	SE553A	08/16/91	32.10	98.40
IRON	4	4	31600.00	SE553B	08/16/91	6480.00	21220.00
LEAD	4	4	969.00	SE553A	08/16/91	35.80	504.05
MAGNESIUM	4	4	11500.00	SE552B	08/16/91	4910.00	7922.50
MANGANESE	4	4	2000.00	SE552B	08/16/91	173.00	676.00
NICKEL	4	4	81.30	SE553B	08/16/91	16.30	41.45
POTASSIUM	4	3	1730.00	SE552B	08/16/91	50.00	1030.00
SELENIUM	4	1	0.65	SE553A	08/16/91	0.13	0.26
SILVER	4	4	1.42	SE553A	08/16/91	0.05	0.52
SODIUM	4	4	849.00	SE553A	08/16/91	309.00	484.75
VANADIUM	4	4	35.90	SE552A	08/16/91	17.60	29.78
ZINC	4	4	449.00	SE553A	08/16/91	101.00	257.25

Notes:
Samples included are SE552A,B and SE553A,B.
All statistics were calculated using 1/2 the certified reporting limit for nondetects.
Minimum concentrations may include 1/2 the certified reporting limit.
TPHC = TOTAL PETROLEUM HYDROCARBONS

When laboratory data indicated analyte concentrations were > a specific value, statistical calculations used the value.

Final L2 Closure Report,
Joliet Army Ammunition Plant

MWH. 2009.

Table 3-2

Characterization Soil Sample Results
Site L2 - North-South Burning Pads
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Test Kit Results[1]	XRF Unit Results
Sample Designation	**Sample Identification**	**2,4,6-TNT (mg/kg)**	**Lead (mg/kg)**
	LRG	**200**	**500**
	URG	**459**	**500**
CP1	JPL2-CP1(1)	0.4136	38
CP2	JPL2-CP2(1)	-0.348	26
CP3	JPL2-CP3(1)	-0.851	25
CP4	JPL2-CP4(1)	-1.08	35
CP5	JPL2-CP5(1)	-1.044	22
CP6	JPL2-CP6(1)	-0.735	27
CP7	JPL2-CP7(1)	-0.812	32
CP8	JPL2-CP8(1)	-1.96	37
CP9	JPL2-CP9(1)	-0.8125	24
CP10	JPL2-CP10(1)	169.89	40
CP11	JPL2-CP11(1)	-0.775	35
CP12	JPL2-CP12(1)	-0.735	28
CP13	JPL2-CP13(1)	0.93	60
CP14	JPL2-CP14(1)	1.27	37
CP15	JPL2-CP15(1)	0.657	23
CP16	JPL2-CP16(1)	0.155	30
CP17	JPL2-CP17(1)	-0.193	26
CP18	JPL2-CP18(1)	0.58	<19
CP19	JPL2-CP19(1)	0.541	22
CP20	JPL2-CP20(1)	0.0386	52
CP21	JPL2-CP21(1)	0.696	34
CP22	JPL2-CP22(1)	0.541	50
CP23	JPL2-CP23(1)	0.038	42
CP24	JPL2-CP24(1)	0.348	28
CP25	JPL2-CP25(1)	-0.775	86
CP26	JPL2-CP26(1)	0.348	150

Notes:

[1] Negative test kit results are to be interpreted as non-detects.

LRG = lower remediation goal

mg/kg = milligrams per kilogram

TNT = trinitrotoluene

URG = upper remediation goal

XRF = x-ray fluorescence

Table 3-3

Confirmation and Characterization Soil Sampling Results
Site L2 - East-West Burning Pads
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Test Kit Results[1]	XRF Unit Results	Fixed Laboratory Results				
Sample Designation	**Sample Identification**	**2,4,6-TNT (mg/kg)**	**Lead (mg/kg)**	**1,3,5-TNB (mg/kg)**	**2,4,6-TNT (mg/kg)**	**2,4-DNT (mg/kg)**	**RDX (mg/kg)**	**Lead (mg/kg)**
	LRG	**200**	**500**	**17**	**200**	**20**	**107**	**500**
	URG	**459**	**500**	**386**	**459**	**20**	**125**	**500**
AF14	JPL2-AF14(8)	-1.586	--	--	--	--	--	--
AF15	JPL2-AF15(8)	-2.631	--	--	--	--	--	--
AF16	JPL2-AF16(8)	-2.28	--	--	--	--	--	--
AF17	JPL2-AF17(8)	-2.36	--	--	--	--	--	--
AF18	JPL2-AF18(8)	-2.2	--	--	--	--	--	--
AF19	JPL2-AF19(2)	-0.232	--	--	--	--	--	--
AF20	JPL2-AF20(2)	--	--	0.24 U	0.24 U	0.24 U	0.24 U	--
AF21	JPL2-AF21(2)	-1.08	--	--	--	--	--	--
AF22	JPL2-AF22(2)	-1.43	--	--	--	--	--	--
AF23	JPL2-AF23(2)	0.386	--	--	--	--	--	--
AF24	JPL2-AF24(2)	0.154	--	--	--	--	--	--
AF25	JPL2-AF25(2)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--
AF26	JPL2-AF26(2)	0.27	--	--	--	--	--	--
AF27	JPL2-AF27(2)	-0.541	--	--	--	--	--	--
AF28	JPL2-AF28(2)	--	--	0.24 U	0.24 U	0.24 U	0.24 U	--
AF29	JPL2-AF29(2)	--	--	0.24 U	0.24 U	0.24 U	0.24 U	--
AF30	JPL2-AF30(1)	--	--	0.24 U	1.3	0.26	0.4	--
AF31	JPL2-AF31(1)	--	--	0.25 U	3	0.25 U	1.5	--
AF32	JPL2-AF32(1)	--	--	0.25 U	3.8	0.25 U	0.78	--
AF33	JPL2-AF33(1)	--	--	1.5	4.4	0.25 U	1.9	--
AF37	JPL2-AF37(2)	--	--	0.25 U	6.5	0.25 U	0.25 U	--
AF38	JPL2-AF38(2)	--	--	0.25 U	0.46	0.25 U	0.59	--
AF39	JPL2-AF39(2)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--
AF40	JPL2-AF40(2)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--

Table 3-3

Confirmation and Characterization Soil Sampling Results
Site L2 - East-West Burning Pads
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Test Kit Results[1]	XRF Unit Results	Fixed Laboratory Results				
Sample Designation	**Sample Identification**	**2,4,6-TNT (mg/kg)**	**Lead (mg/kg)**	**1,3,5-TNB (mg/kg)**	**2,4,6-TNT (mg/kg)**	**2,4-DNT (mg/kg)**	**RDX (mg/kg)**	**Lead (mg/kg)**
	LRG	**200**	**500**	**17**	**200**	**20**	**107**	**500**
	URG	**459**	**500**	**386**	**459**	**20**	**125**	**500**
AF41	JPL2-AF41(2)	--	--	0.4	4.6	0.25 U	2.3	--
AF42	JPL2-AF42(2)	--	--	0.24 U	2.1	0.24 U	0.24 U	--
AF43	JPL2-AF43(2)	--	--	0.24 U	0.24 U	0.24 U	0.24 U	--
AF59	JPL2-AF59(2)	--	--	--	--	--	--	18
AF60	JPL2-AF60(2)	--	--	--	--	--	--	15
AF61	JPL2-AF61(2)	--	--	--	--	--	--	26
AF64	JPL2-AF64(1)	--	--	--	--	--	--	14
AF65	JPL2-AF65(1)	--	--	--	--	--	--	240
AF66	JPL2-AF66(1)	--	--	--	--	--	--	15
AP1	JPL2-AP1(1)	0.116	--	--	--	--	--	--
AP2	JPL2-AP2(1)	-0.1547	--	--	--	--	--	--
AP3	JPL2-AP3(1)	-0.464	--	--	--	--	--	--
AP4	JPL2-AP4(2)	0.154	--	--	--	--	--	--
AP5	JPL2-AP5(2)	-0.154	--	--	--	--	--	--
AP6	JPL2-AP6(2)	-0.464	--	--	--	--	--	--
AP7	JPL2-AP7(2)	-0.696	--	--	--	--	--	--
AP8	JPL2-AP8(1)	-0.967	--	--	--	--	--	--
AP9	JPL2-AP9(1)	-1.16	--	--	--	--	--	--
AP10	JPL2-AP10(1)	-1.74	--	--	--	--	--	--
AP11	JPL2-AP11(1)	-1.58	--	--	--	--	--	--
AP12	JPL2-AP12(3)	-1.547	--	--	--	--	--	--
AP13	JPL2-AP13(3)	-1.664	--	--	--	--	--	--
AP14	JPL2-AP14(3)	-1.818	--	--	--	--	--	--
AP15	JPL2-AP15(6)	-0.878	--	--	--	--	--	--

Table 3-3

Confirmation and Characterization Soil Sampling Results
Site L2 - East-West Burning Pads
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Test Kit Results[1]	XRF Unit Results	Fixed Laboratory Results				
Sample Designation	**Sample Identification**	**2,4,6-TNT (mg/kg)**	**Lead (mg/kg)**	**1,3,5-TNB (mg/kg)**	**2,4,6-TNT (mg/kg)**	**2,4-DNT (mg/kg)**	**RDX (mg/kg)**	**Lead (mg/kg)**
	LRG	**200**	**500**	**17**	**200**	**20**	**107**	**500**
	URG	**459**	**500**	**386**	**459**	**20**	**125**	**500**
AP16	JPL2-AP16(6)	-1.393	--	--	--	--	--	--
AP17	JPL2-AP17(6)	-1.702	--	--	--	--	--	--
AP18	JPL2-AP18(6)	-1.354	--	--	--	--	--	--
AP19	JPL2-AP19(6)	-1.664	--	--	--	--	--	--
AP20	JPL2-AP20(6)	-1.509	--	--	--	--	--	--
AP21	JPL2-AP21(6)	-1.664	--	--	--	--	--	--
AP22	JPL2-AP22(1)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--
AP23	JPL2-AP23(1)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--
AP24	JPL2-AP24(1)	-1.664	--	--	--	--	--	--
AP25	JPL2-AP25(1)	-1.741	--	--	--	--	--	--
AP26	JPL2-AP26(1)	-1.625	--	--	--	--	--	--
AP27	JPL2-AP27(1)	-0.541	--	--	--	--	--	--
AP28	JPL2-AP28(1)	-1.005	--	--	--	--	--	--
AP29	JPL2-AP29(1)	-0.232	--	--	--	--	--	--
AP30	JPL2-AP30(1)	0.812	--	--	--	--	--	--
AP31	JPL2-AP31(1)	0.154	--	--	--	--	--	--
AP32	JPL2-AP32(1)	-0.348	--	--	--	--	--	--
AP33	JPL2-AP33(1)	-1.006	--	--	--	--	--	--
AP34	JPL2-AP34(1)	--	--	0.24 U	0.24 U	0.24 U	0.24 U	--
AP35	JPL2-AP35(1)	--	--	0.24 U	0.24 U	0.24 U	0.24 U	--
AP36	JPL2-AP36(0.5)	--	--	0.24 U	0.76	0.32	0.24 U	--
AP37	JPL2-AP37(0.5)	--	--	2.7	48	3.7	0.4	--
AP38	JPL2-AP38(0.5)	--	--	0.25 U	17	0.25 U	1.1	--
AP39	JPL2-AP39(0.5)	--	--	0.83	42	0.64	0.48	--

Table 3-3

Confirmation and Characterization Soil Sampling Results
Site L2 - East-West Burning Pads
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Test Kit Results[1]	XRF Unit Results	Fixed Laboratory Results				
Sample Designation	**Sample Identification**	**2,4,6-TNT (mg/kg)**	**Lead (mg/kg)**	**1,3,5-TNB (mg/kg)**	**2,4,6-TNT (mg/kg)**	**2,4-DNT (mg/kg)**	**RDX (mg/kg)**	**Lead (mg/kg)**
	LRG	**200**	**500**	**17**	**200**	**20**	**107**	**500**
	URG	**459**	**500**	**386**	**459**	**20**	**125**	**500**
AP40	JPL2-AP40(0.5)	--	--	4.5	110	0.3	13	--
AP41	JPL2-AP41(0.5)	--	--	7.5	92	0.23 U	1.4	--
AP45	JPL2-AP45(0.5)	--	--	12	33	1.7	6.2	--
AP46	JPL2-AP46(0.5)	--	--	0.52	3	0.25 U	14	--
AP47	JPL2-AP47(0.5)	--	--	0.25 U	2.9	0.53	4.9	--
AP49	JPL2-AP49(0.5)	--	--	1.2	8.7	0.25 U	0.28	--
AP51	JPL2-AP51(0.5)	--	--	0.25 U	0.62	0.25 U	0.59	--
AP52	JPL2-AP52(0.5)	--	--	0.25 U	0.32	0.25 U	0.25 U	--
AP57	JPL2-AP57(0.5)	--	--	5.6	17	0.43	2.6	--
AP58	JPL2-AP58(0.5)	--	--	0.83	13	0.26	0.81	--
AP59	JPL2-AP59(0.5)	--	--	0.25 U	43	0.25 U	0.25 U	--
AP61	JPL2-AP61(0.5)	--	--	0.47	31	0.25 U	0.39	--
AP62	JPL2-AP62(0.5)	--	--	0.25 U	2.4	0.25 U	0.25 U	--
AP63	JPL2-AP63(0.5)	--	--	1.1	4.9	0.43	0.86	--
AP64	JPL2-AP64(0.5)	--	--	0.37	3.2	0.44	1.2	--
AP65	JPL2-AP65(0.5)	--	--	1.1	40	0.65	6.6	--
AP66	JPL2-AP66(0.5)	--	--	0.25	0.8	0.25 U	0.25 U	--
AP67	JPL2-AP67(0.5)	--	--	0.25 U	1	0.25 U	0.25 U	--
AP70	JPL2-AP70(0.5)	--	--	0.25 U	120	0.25 U	0.25 U	--
AP71	JPL2-AP71(0.5)	--	--	0.49	46	0.25 U	0.25 U	--
AP73	JPL2-AP73(0.5)	--	--	0.74	19	0.6	1.5	--
AP74	JPL2-AP74(0.5)	--	--	0.25 U	0.79	0.25 U	0.25 U	--
AP75	JPL2-AP75(0.5)	--	--	5.3	88	0.45	47	--
AP79	JPL2-AP79(0.5)	--	--	0.66	4.1	0.25 U	0.33	--

Table 3-3

Confirmation and Characterization Soil Sampling Results
Site L2 - East-West Burning Pads
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Test Kit Results[1]	XRF Unit Results	Fixed Laboratory Results				
Sample Designation	**Sample Identification**	**2,4,6-TNT (mg/kg)**	**Lead (mg/kg)**	**1,3,5-TNB (mg/kg)**	**2,4,6-TNT (mg/kg)**	**2,4-DNT (mg/kg)**	**RDX (mg/kg)**	**Lead (mg/kg)**
	LRG	**200**	**500**	**17**	**200**	**20**	**107**	**500**
	URG	**459**	**500**	**386**	**459**	**20**	**125**	**500**
AP80	JPL2-AP80(0.5)	--	--	3.5	100	1	0.73	--
AP82	JPL2-AP82(0.5)	--	--	0.25 U	2.6	0.25 U	0.25 U	--
AP83	JPL2-AP83(0.5)	--	--	0.25 U	0.46	0.25 U	0.25 U	--
AP84	JPL2-AP84(0.5)	--	--	0.25 U	0.42	0.25 U	0.3	--
AP85	JPL2-AP85(0.5)	--	--	0.25 U	0.25 U	0.25 U	3.6	--
AP86	JPL2-AP86(0.5)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--
AP88	JPL2-AP88(0.5)	--	--	0.78	2.1	0.25 U	0.25 U	--
AP89	JPL2-AP89(0.5)	--	--	0.55	1.6	0.25 U	0.27	--
AP90	JPL2-AP90(0.5)	--	--	0.25 U	0.42	0.25 U	0.25 U	--
AP91	JPL2-AP91(0.5)	--	--	0.25 U	3.2	0.25 U	4.3	--
AP92	JPL2-AP92(0.5)	--	--	2.4	7.3	0.51	1.5	--
AP93	JPL2-AP93(0.5)	--	--	0.25 U	0.67	0.25 U	1.6	--
AP94	JPL2-AP94(0.5)	--	--	0.25 U	0.25 U	0.25 U	2.3	--
AP125	JPL2-AP125(0.5)	--	--	--	--	--	--	68
AP126	JPL2-AP126(0.5)	--	--	--	--	--	--	33
AP127	JPL2-AP127(0.5)	--	--	--	--	--	--	28
AP128	JPL2-AP128(0.5)	--	--	--	--	--	--	40
AP149	JPL2-AP149(0.5)	--	--	--	--	--	--	40
AP150	JPL2-AP150(0.5)	--	--	--	--	--	--	36
AP151	JPL2-AP151(0.5)	--	--	--	--	--	--	56
AP152	JPL2-AP152(0.5)	--	--	--	--	--	--	29
AS-A, -B, -C, -D	JPL2-AS(0.5)[2]	--	--	--	--	--	--	--
CP27	JPL2-CP27(1)	5.76	--	--	--	--	--	--
CP28	JPL2-CP28(1)	-0.773	--	--	--	--	--	--

Table 3-3

Confirmation and Characterization Soil Sampling Results
Site L2 - East-West Burning Pads
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Test Kit Results[1]	XRF Unit Results	Fixed Laboratory Results				
Sample Designation	**Sample Identification**	**2,4,6-TNT (mg/kg)**	**Lead (mg/kg)**	**1,3,5-TNB (mg/kg)**	**2,4,6-TNT (mg/kg)**	**2,4-DNT (mg/kg)**	**RDX (mg/kg)**	**Lead (mg/kg)**
	LRG	**200**	**500**	**17**	**200**	**20**	**107**	**500**
	URG	**459**	**500**	**386**	**459**	**20**	**125**	**500**
CP29	JPL2-CP29(1)	-0.851	--	--	--	--	--	--
CP30	JPL2-CP30(1)	-0.0146	--	--	--	--	--	--
CP31	JPL2-CP31(1)	--	--	0.25 U	1.7	0.25 U	0.25 U	--
CP33	JPL2-CP33(1)	0.851	--	--	--	--	--	--
CP34	JPL2-CP34(1)	5.45	--	--	--	--	--	--
CP35	JPL2-CP35(1)	0.464	--	--	--	--	--	--
CP37	JPL2-CP37(1)	--	<19	0.32	5.4	0.24 U	0.24 U	--
CP38	JPL2-CP38(1)	--	--	0.25 U	31	0.25 U	0.25 U	--
CP41	JPL2-CP41(1)	--	--	0.25 U	0.94	0.25 U	0.25 U	--
CP43	JPL2-CP43(1)	--	--	0.25 U	2.5	0.25 U	0.25 U	--
CP44	JPL2-CP44(1)	2.274	--	--	--	--	--	--
CP45	JPL2-CP45(1)	1.292	91	--	--	--	--	--
CP46	JPL2-CP46(1)	6.25	--	--	--	--	--	--
CP47	JPL2-CP47(1)	2.688	--	--	--	--	--	--
CP48	JPL2-CP48(1)	125.01	--	--	--	--	--	--
CP55	JPL2-CP55(2)	-2.378	--	--	--	--	--	--
CP56	JPL2-CP56(4)	-2.43	--	--	--	--	--	--
CP57	JPL2-CP57(2)	-1.87	--	--	--	--	--	--
CP58	JPL2-CP58(4)	-1.702	--	--	--	--	--	--
CP59	JPL2-CP59(2)	-2.28	--	--	--	--	--	--
CP60	JPL2-CP60(4)	-1.04	--	--	--	--	--	--
CP61	JPL2-CP61(2)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--
CP62	JPL2-CP62(2)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--
CP63	JPL2-CP63(2)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--

Table 3-3

Confirmation and Characterization Soil Sampling Results
Site L2 - East-West Burning Pads
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Test Kit Results[1]	XRF Unit Results	Fixed Laboratory Results				
Sample Designation	**Sample Identification**	**2,4,6-TNT (mg/kg)**	**Lead (mg/kg)**	**1,3,5-TNB (mg/kg)**	**2,4,6-TNT (mg/kg)**	**2,4-DNT (mg/kg)**	**RDX (mg/kg)**	**Lead (mg/kg)**
	LRG	**200**	**500**	**17**	**200**	**20**	**107**	**500**
	URG	**459**	**500**	**386**	**459**	**20**	**125**	**500**
CP64	JPL2-CP64(2)	--	--	0.25 U	5	0.25 U	0.25 U	--
CP65	JPL2-CP65(2)	--	--	0.25 U	0.25 U	0.25 U	0.4	--
CP66	JPL2-CP66(0.5)	--	--	0.25 U	1.2	0.25 U	0.25 U	--
CP67	JPL2-CP67(0.5)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--
CP68	JPL2-CP68(0.5)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--
CP69	JPL2-CP69(8)	--	--	0.25 U	0.25 U	0.25 U	4.4	--
CP70	JPL2-CP70(8)	--	--	0.25 U	0.25 U	0.25 U	3.8	--
CP71	JPL2-CP71(8)	--	--	0.25 U	0.25 U	0.25 U	5.7	--
CP72	JPL2-CP72(8)	--	--	0.25 U	0.25 U	0.25 U	7.1	--
CP73	JPL2-CP73(0.5)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--
CP74	JPL2-CP74(0.5)	--	--	0.25 U	0.51	0.25 U	0.25 U	--
CP75	JPL2-CP75(0.5)	--	--	0.25 U	0.54	0.25 U	0.25 U	--
CP76	JPL2-CP76(0.5)	--	--	0.25 U	0.33	0.25 U	0.25 U	--
CP77	JPL2-CP77(0.5)	--	--	0.25 U	2.6	0.25 U	0.25 U	--
CP79	JPL2-CP79(0.5)	--	--	0.24 U	2.6	0.24 U	0.24 U	--
CP81	JPL2-CP81(0.5)	--	--	0.25 U	8.9	0.25 U	0.25 U	--
CP82	JPL2-CP82(0.5)	--	--	0.25 U	0.7	0.25 U	0.25 U	--
CP85	JPL2-CP85(0.5)	--	--	0.37	11	0.25 U	0.68	--
CP87	JPL2-CP87(0.5)	--	--	0.25 U	1.6	0.25 U	0.25 U	--
CP88	JPL2-CP88(0.5)	--	--	0.25 U	3.9	0.25 U	0.25 U	--
CP89	JPL2-CP89(0.5)	--	--	0.27	89	0.25 U	0.25 U	--
CP92	JPL2-CP92(0.5)	--	--	2.8	8.8	0.44	4.9	--
CP93	JPL2-CP93(0.5)	--	--	--	--	--	--	89
CP95	JPL2-CP95(0.5)	--	--	--	4.3	--	3	260

Table 3-3

Confirmation and Characterization Soil Sampling Results
Site L2 - East-West Burning Pads
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Test Kit Results[1]	XRF Unit Results	Fixed Laboratory Results				
Sample Designation	**Sample Identification**	**2,4,6-TNT (mg/kg)**	**Lead (mg/kg)**	**1,3,5-TNB (mg/kg)**	**2,4,6-TNT (mg/kg)**	**2,4-DNT (mg/kg)**	**RDX (mg/kg)**	**Lead (mg/kg)**
	LRG	**200**	**500**	**17**	**200**	**20**	**107**	**500**
	URG	**459**	**500**	**386**	**459**	**20**	**125**	**500**
CP96	JPL2-CP96(0.5)	--	--	--	0.69	--	0.3	210
CP97	JPL2-CP97(0.5)	--	--	--	0.25 U	--	0.25 U	160
SP1	JPL2-SP1(0)	--	--	0.78	20	0.25 U	1.3	--
SP2	JPL2-SP2(0)	--	--	0.33	9.1	0.3	0.25 U	--
SP4	JPL2-SP4(1)	--	--	0.25 U	0.25 U	0.25 U	0.25 U	--

Notes:

[1] Negative test kit results are to be interpreted as non-detects.

[2] Sample JPL2-AS(0.5) is a composite of sample locations AS-A, AS-B, AS-C, and AS-D

-- = not analyzed

DNT = dinitrotoluene

LRG = lower remediation goal

mg/kg = milligrams per kilogram

RDX = royal demolition explosive

TNB = trinitrobenzene

TNT = trinitrotoluene

URG = upper remediation goal

XRF = x-ray fluorescence

Qualifiers:

B = The compound was also detected in the method blank.

U = Indicates that the compound or analyte was analyzed for, but not detected above the stated limit.

Table 3-4

Confirmation Soil Sample Results
Site L2 - Former Popping Furnaces Area
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Fixed Laboratory Results											
Sample Designation	**Sample Identification**	**Arsenic (mg/kg)**	**Cadmium (mg/kg)**	**Copper (mg/kg)**	**Lead (mg/kg)**	**Silver (mg/kg)**	**Zinc (mg/kg)**	**TPH-DRO (mg/kg)**	**TPH-GRO (mg/kg)**	**Acenaphthene (µg/kg)**	**Acenaphthylene (µg/kg)**	**Anthracene (µg/kg)**	**Benzo(a)anthracene (µg/kg)**
	LRG	**21**	**63**	**190**	**500**	**16**	**720**	**2,500**	**2,500**	**98,386,000**	**NE**	**491,930,000**	**17,000**
	URG	**84**	**220**	**925**	**500**	**9,467**	**2,500**	**2,500**	**2,500**	**98,386,000**	**NE**	**491,930,000**	**17,000**
Former Popping Furnaces Area													
AF34	JPL2-AF34(2)	16	0.48	44	24	0.13 B	98	--	--	--	--	--	--
AF35	JPL2-AF35(2)	8.2	3.5	43	21	0.12 B	91	--	--	--	--	--	--
AF36	JPL2-AF36(2)	6.5	0.58	20	16	0.12 B	57	--	--	--	--	--	--
AF44	JPL2-AF44(2)	6.9	4.5	81	25	0.60 B	140	--	--	--	--	--	--
AF47	JPL2-AF47(2)	12	0.23 U	32	18	0.19 B	76	--	--	--	--	--	--
AF48	JPL2-AF48(2)	8.4	0.27 U	26	17	0.32 B	58	--	--	--	--	--	--
AF49	JPL2-AF49(2)	7.5	0.22 U	21	15	0.54 U	54	--	--	--	--	--	--
AF50	JPL2-AF50(3)	11	--	--	--	--	--	--	--	--	--	--	--
AF51	JPL2-AF51(3)	--	--	79	--	--	150	--	--	--	--	--	--
AF52	JPL2-AF52(2)	13	0.24 U	32	20	0.19 B	71	--	--	--	--	--	--
AF53	JPL2-AF53(2)	13	2	110	28	0.27 B	170	--	--	--	--	--	--
AF54	JPL2-AF54(2)	13	0.17 B	30	18	0.58 U	77	--	--	--	--	--	--
AF55	JPL2-AF55(2)	14	0.38	36	19	0.54 U	93	--	--	--	--	--	--
AF56	JPL2-AF56(2)	6.2	0.12 B	17	13	0.61 U	48	--	--	--	--	--	--
AF57	JPL2-AF57(2)	9.3	0.069 B	19	17	0.18 B	51	--	--	--	--	--	--
AF58	JPL2-AF58(2)	10	0.35	31	25	0.37 B	66	--	--	--	--	--	--
AF63	JPL2-AF63(12)	--	--	--	--	0.21 J	--	--	--	--	--	--	--
AP53	JPL2-AP53(1)	6.4	0.54	20	14	0.52 U	70	--	--	--	--	--	--
AP95	JPL2-AP95(0.5)	--	--	48	--	--	--	--	--	--	--	--	--
AP97	JPL2-AP97(0.5)	13	0.21 U	34	17	0.53 U	80	--	--	--	--	--	--
AP100	JPL2-AP100(0.5)	8.6	0.52	37	22	0.59 U	82	--	--	--	--	--	--
AP102	JPL2-AP102(0.5)	--	--	150	--	--	--	--	--	--	--	--	--
AP103	JPL2-AP103(0.5)	12	0.24 U	31	19	0.14 B	79	--	--	--	--	--	--
AP105	JPL2-AP105(0.5)	12	0.18 B	31	17	0.59 U	89	--	--	--	--	--	--
AP106	JPL2-AP106(0.5)	8.6	0.10 B	18	13	0.59 U	44	--	--	--	--	--	--
AP110	JPL2-AP110(0.5)	7.6	4.4	79	39	0.24 B	150	--	--	--	--	--	--
AP114	JPL2-AP114(0.5)	9.5	7	190	62	1.9	270	--	--	--	--	--	--
AP120	JPL2-AP120(0.5)	8.8	1.6	190	33	1.3	240	--	--	--	--	--	--
AP123	JPL2-AP123(0.5)	6.2	1.3	48	18	2.1	74 B	--	--	--	--	--	--
AP124	JPL2-AP124(0.5)	15	1.2	55	18	0.44 J	110 B	--	--	--	--	--	--
AP139	JPL2-AP139(1)	15	--	36 B	21	0.45 J	86 B	--	--	--	--	--	--
AP140	JPL2-AP140(8)	--	--	--	--	0.24 J	--	--	--	--	--	--	--
AP141	JPL2-AP141(1)	9.6	--	18 B	12	0.58 U	40 B	--	--	--	--	--	--

Table 3-4

Confirmation Soil Sample Results
Site L2 - Former Popping Furnaces Area
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Fixed Laboratory Results											
Sample Designation	**Sample Identification**	**Arsenic (mg/kg)**	**Cadmium (mg/kg)**	**Copper (mg/kg)**	**Lead (mg/kg)**	**Silver (mg/kg)**	**Zinc (mg/kg)**	**TPH-DRO (mg/kg)**	**TPH-GRO (mg/kg)**	**Acenaphthene (µg/kg)**	**Acenaphthylene (µg/kg)**	**Anthracene (µg/kg)**	**Benzo(a)anthracene (µg/kg)**
	LRG	**21**	**63**	**190**	**500**	**16**	**720**	**2,500**	**2,500**	**98,386,000**	**NE**	**491,930,000**	**17,000**
	URG	**84**	**220**	**925**	**500**	**9,467**	**2,500**	**2,500**	**2,500**	**98,386,000**	**NE**	**491,930,000**	**17,000**
AP142	JPL2-AP142(8)	10	--	22 B	13	0.21 J	57 B	--	--	--	--	--	--
AP143	JPL2-AP143(1)	--	--	22 B	--	--	--	--	--	--	--	--	--
AP144	JPL2-AP144(8)	--	--	24 B	--	--	--	--	--	--	--	--	--
AP145	JPL2-AP145(1)	--	--	27 B	--	--	--	--	--	--	--	--	--
AP146	JPL2-AP146(8)	7.9	--	--	--	--	--	--	--	--	--	--	--
AP147	JPL2-AP147(0.5)	--	--	29	--	--	72 B	--	--	--	--	--	--
AP148	JPL2-AP148(0.5)	--	--	27	--	--	79 B	--	--	--	--	--	--
PF4	JPL2-PF4(4)	15	0.36	24	17	0.23 J	65 B	--	--	--	--	--	--
PF5	JPL2-PF5(4)	11	0.68	100	29	0.44 J	160 B	1,200	0.1	300	41 U	290	26 J
PF6	JPL2-PF6(6)	17	0.52	32	15	0.51 U	110 B	490	10	120	34 U	70	34 U
SP6	JPL2-SP6(0)	4.2	1.7	46	20	0.24 B	70	--	--	--	--	--	--
SP7	JPL2-SP7(0)	7.3	2.3	120	26	1.1	120	--	--	--	--	--	--
SP10	JPL2-SP10(1)	--	--	14	14	--	--	--	--	--	--	--	--
SP11	JPL2-SP11(1)	--	--	30	22	--	--	--	--	--	--	--	--
SP17	JPL2-SP17(1)	--	--	16 B	17	0.24 J	55 B	--	--	--	--	--	--
SP18	JPL2-SP18(1)	--	--	14 B	14	0.18 J	46B	--	--	--	--	--	--
SP19	JPL2-SP19(1)	--	--	28 B	15	0.14 J	60 B	--	--	--	--	--	--
SP20	JPL2-SP20(1)	--	--	27 B	16	0.16 J	58	--	--	--	--	--	--
TF3	JPL2-TF3(5)	--	--	--	--	--	--	16	0.057 U	37 U	37 U	37 U	12 J
TF4	JPL2-TF4(7)	--	--	--	--	--	--	900	49	56	38 U	38 U	38 U
TP4	JPL2-TP4(1)	--	--	--	--	--	--	360	0.053 U	350 U	350 U	350 U	350 U
TP5	JPL2-TP5(1)	--	--	--	--	--	--	62	0.051 U	340 U	340 U	340 U	86 J
TP6	JPL2-TP6(1)	--	--	--	--	--	--	28	0.057 U	36 U	36 U	36 U	14 J

Table 3-4

Confirmation Soil Sample Results
Site L2 - Former Popping Furnaces Area
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Fixed Laboratory Results											
Sample Designation	**Sample Identification**	**Benzo(a)pyrene (µg/kg)**	**Benzo(b)fluoranthene (µg/kg)**	**Benzo(g,h,i)perylene (µg/kg)**	**Benzo(k)fluoranthene (µg/kg)**	**Chrysene (µg/kg)**	**Dibenzo(a,h)anthracene (µg/kg)**	**Fluoranthene (µg/kg)**	**Fluorene (µg/kg)**	**Indeno(1,2,3-cd)pyrene (µg/kg)**	**Naphthalene (µg/kg)**	**Phenanthrene (µg/kg)**	**Pyrene (µg/kg)**
	LRG	**2,000**	**17,000**	**NE**	**171,000**	**1,708,000**	**1,700**	**65,591,000**	**65,591,000**	**17,000**	**32,793,000**	**NE**	**49,193,000**
	URG	**2,000**	**17,000**	**NE**	**171,000**	**1,708,000**	**1,700**	**65,591,000**	**65,591,000**	**17,000**	**32,793,000**	**NE**	**49,193,000**
Former Popping Furnaces Area													
AF34	JPL2-AF34(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF35	JPL2-AF35(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF36	JPL2-AF36(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF44	JPL2-AF44(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF47	JPL2-AF47(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF48	JPL2-AF48(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF49	JPL2-AF49(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF50	JPL2-AF50(3)	--	--	--	--	--	--	--	--	--	--	--	--
AF51	JPL2-AF51(3)	--	--	--	--	--	--	--	--	--	--	--	--
AF52	JPL2-AF52(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF53	JPL2-AF53(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF54	JPL2-AF54(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF55	JPL2-AF55(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF56	JPL2-AF56(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF57	JPL2-AF57(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF58	JPL2-AF58(2)	--	--	--	--	--	--	--	--	--	--	--	--
AF63	JPL2-AF63(12)	--	--	--	--	--	--	--	--	--	--	--	--
AP53	JPL2-AP53(1)	--	--	--	--	--	--	--	--	--	--	--	--
AP95	JPL2-AP95(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP97	JPL2-AP97(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP100	JPL2-AP100(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP102	JPL2-AP102(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP103	JPL2-AP103(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP105	JPL2-AP105(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP106	JPL2-AP106(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP110	JPL2-AP110(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP114	JPL2-AP114(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP120	JPL2-AP120(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP123	JPL2-AP123(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP124	JPL2-AP124(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP139	JPL2-AP139(1)	--	--	--	--	--	--	--	--	--	--	--	--
AP140	JPL2-AP140(8)	--	--	--	--	--	--	--	--	--	--	--	--
AP141	JPL2-AP141(1)	--	--	--	--	--	--	--	--	--	--	--	--

Table 3-4

Confirmation Soil Sample Results
Site L2 - Former Popping Furnaces Area
Closure Report - Sites L2, L5, L23A, M3, M4, and M12
Phase 2 Remedial Action
Joliet Army Ammunition Plant
Wilmington, Illinois

		Fixed Laboratory Results											
Sample Designation	**Sample Identification**	**Benzo(a)pyrene (µg/kg)**	**Benzo(b)fluoranthene (µg/kg)**	**Benzo(g,h,i)perylene (µg/kg)**	**Benzo(k)fluoranthene (µg/kg)**	**Chrysene (µg/kg)**	**Dibenzo(a,h)anthracene (µg/kg)**	**Fluoranthene (µg/kg)**	**Fluorene (µg/kg)**	**Indeno(1,2,3-cd)pyrene (µg/kg)**	**Naphthalene (µg/kg)**	**Phenanthrene (µg/kg)**	**Pyrene (µg/kg)**
	LRG	**2,000**	**17,000**	**NE**	**171,000**	**1,708,000**	**1,700**	**65,591,000**	**65,591,000**	**17,000**	**32,793,000**	**NE**	**49,193,000**
	URG	**2,000**	**17,000**	**NE**	**171,000**	**1,708,000**	**1,700**	**65,591,000**	**65,591,000**	**17,000**	**32,793,000**	**NE**	**49,193,000**
AP142	JPL2-AP142(8)	--	--	--	--	--	--	--	--	--	--	--	--
AP143	JPL2-AP143(1)	--	--	--	--	--	--	--	--	--	--	--	--
AP144	JPL2-AP144(8)	--	--	--	--	--	--	--	--	--	--	--	--
AP145	JPL2-AP145(1)	--	--	--	--	--	--	--	--	--	--	--	--
AP146	JPL2-AP146(8)	--	--	--	--	--	--	--	--	--	--	--	--
AP147	JPL2-AP147(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
AP148	JPL2-AP148(0.5)	--	--	--	--	--	--	--	--	--	--	--	--
PF4	JPL2-PF4(4)	--	--	--	--	--	--	--	--	--	--	--	--
PF5	JPL2-PF5(4)	20 J	41 U	41 U	41 U	39 J	41 U	170	770	41 U	41 U	580	320
PF6	JPL2-PF6(6)	34 U	34 U	34 U	34 U	34 U	34 U	34 U	270	34 U	34 U	400	39
SP6	JPL2-SP6(0)	--	--	--	--	--	--	--	--	--	--	--	--
SP7	JPL2-SP7(0)	--	--	--	--	--	--	--	--	--	--	--	--
SP10	JPL2-SP10(1)	--	--	--	--	--	--	--	--	--	--	--	--
SP11	JPL2-SP11(1)	--	--	--	--	--	--	--	--	--	--	--	--
SP17	JPL2-SP17(1)	--	--	--	--	--	--	--	--	--	--	--	--
SP18	JPL2-SP18(1)	--	--	--	--	--	--	--	--	--	--	--	--
SP19	JPL2-SP19(1)	--	--	--	--	--	--	--	--	--	--	--	--
SP20	JPL2-SP20(1)	--	--	--	--	--	--	--	--	--	--	--	--
TF3	JPL2-TF3(5)	23 J	24 J	33 J	21 J	14 J	37 U	37 U	37 U	37 U	37 U	37 U	37 U
TF4	JPL2-TF4(7)	38 U	38 U	16 J	38 U	38 U	38 U	38 U	210	38 U	720	430	13 J
TP4	JPL2-TP4(1)	350 U	350 U	160 J	350 U	350 U	350 U	350 U	350 U	350 U	350 U	350 U	350 U
TP5	JPL2-TP5(1)	150 J	120 J	450	180 J	130 J	340 U	140 J	340 U	340 U	340 U	340 U	140 J
TP6	JPL2-TP6(1)	22 J	23 J	22 J	26 J	20 J	36 U	36 U	36 U	36 U	36 U	36 U	36 U

Notes:
-- = not analyzed
DRO = diesel-range organics
GRO = gasoline-range organics
LRG = lower remediation goal
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
NE = not established
TPH = total petroleum hydrocarbons
URG = upper remediation goal

Qualifiers:
B = The compound was also detected in the method blank.
J = Indicates an estimated value.
U = Indicates that the compound or analyte was analyzed for, but not detected at or above the stated limit.

SITE PREPARATION:

1. INSTALLATION OF SILT FENCE WILL BE AT DISCRETION OF CONSTRUCTION SUPERINTENDENT BASED UPON SITE CONDITIONS PRIOR TO EXCAVATION AND RESULTS OF PRE-EXCAVATION SAMPLING. INSTALL SILT FENCE IN ACCORDANCE WITH MANUFACTURERS WRITTEN DIRECTIONS, SPEC. SECTION 02276, AND THE SILT FENCE INSTALLATION DETAIL.
2. INSTALLATION OF ROCKCHECK DAM WILL BE AT DISCRETION OF CONSTRUCTION SUPERINTENDENT BASED UPON SITE CONDITIONS PRIOR TO EXCAVATION AND RESULTS OF PRE-EXCAVATION SAMPLING. ROCK CHECK DAMS TO BE INSTALLED ACCORDING TO INSTALLATION DETAIL.
3. LOCATION OF MOBILE EQUIPMENT DECONTAMINATION PAD WILL BE AT THE DISCRETION OF CONSTRUCTION SUPERINTENDENT PRIOR TO EXCAVATION ACTIVITIES.
4. TEMPORARY ROAD WILL BE CONSTRUCTED, IF NECESSARY, TO LOCATIONS OF CONTAMINATION BY GRADING ON-SITE MATERIAL, OR PLACING 2-INCH DIAMETER STONE AS REQUIRED.
5. TEST KIT ANALYSIS AND XRF UNIT WILL BE UTILIZED ON SOIL FROM AREAS DESIGNATED FOR EXCAVATION AND SCREENING TO CONFIRM PRESENCE OF EXPLOSIVES AND METALS IN SOIL.
6. CHARACTERIZATION SAMPLING WILL BE CONDUCTED IN THE POPPING FURNACE AREA TO IDENTIFY THE PRESENCE OF TCLP CHARACTERISTIC WASTE.
7. MEC CLEARANCE ACTIVITIES WILL BE COMPLETED AT THE SITE PRIOR TO MOBILIZATION OF RA ACTIVITIES. MEC CLEARANCE ACTIVITIES WILL BE CONDUCTED IN ACCORDANCE WITH APPROVED ESS PLAN.
8. SAMPLING ACTIVITIES WILL BE CONDUCTED AT THE EAST-WEST BURN PADS TO VERIFY THAT ARSENIC IS PRESENT IN SURFACE SOILS AT LEVELS LESS THAN THE ESTABLISHED LRG (21 mg/kg). ONE SOIL SAMPLE FROM 0 TO 1 FOOT WILL BE COLLECTED FROM EACH QUADRANT OF THE BURN PADS. THE FOUR ALIQUOTS WILL BE COMPOSITED INTO ONE SAMPLE AND SUBMITTED FOR LABORATORY ANALYSIS TO VERIFY THAT THE ARSENIC CONCENTRATIONS ARE LESS THAN OR EQUAL TO 21 mg/kg. IF SAMPLE RESULTS INDICATE CONCENTRATIONS GREATER THAN 21 mg/kg, THEN ADDITIONAL SAMPLING WILL BE CONDUCTED TO ISOLATE ELEVATED ARSENIC CONCENTRATIONS WITHIN THE BURN PADS. APPROPRIATE RA ACTIVITIES WILL BE CONDUCTED AS NECESSARY TO ADDRESS IMPACTED AREAS.

SOIL EXCAVATION:

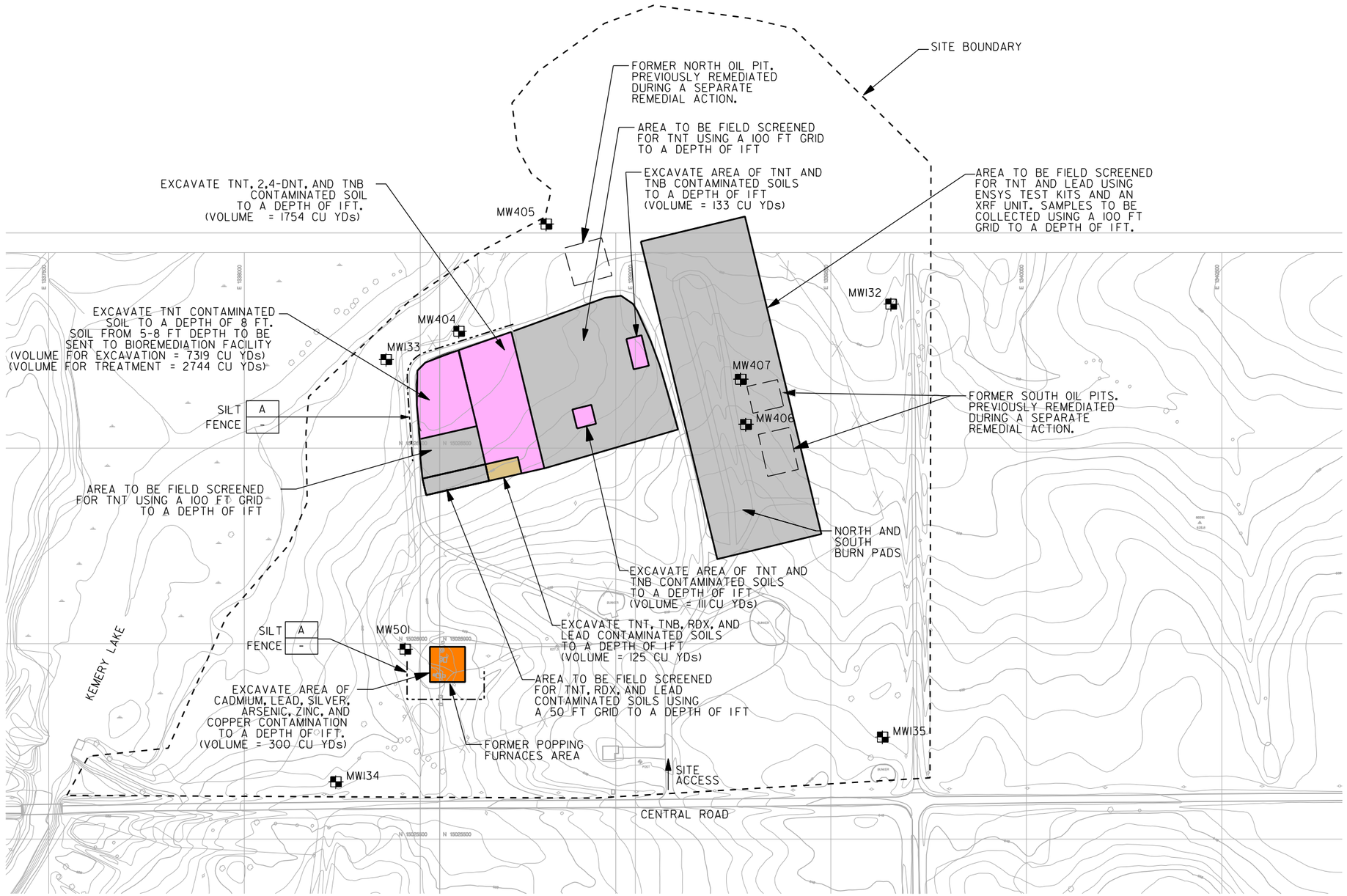
1. MWH WILL DELINEATE THE PROPOSED LIMITS OF EXCAVATION.
2. EXCAVATE SOIL WITHIN LIMITS OF EXCAVATION TO THE DEPTH SHOWN. PLACE EXCAVATED SOIL PNTO TRUCKS FOR TRANSPORT TO THE BIOREMEDIATION TREATMENT FACILITY (SRU1 SOILS) OR TO THE APPROVED OFF-SITE DISPOSAL FACILITY (SRU2 SOILS).
3. FOLLOWING COMPLETION OF EXCAVATION ACTIVITIES, CONFIRMATION SAMPLES WILL BE OBTAINED AS DESCRIBED IN THE PHASE 2 - SAMPLING AND ANALYSIS PLAN.
4. IF ADDITIONAL EXCAVATION IS REQUIRED, EXCAVATE IN 6 IN INCREMENTS UNTIL SAMPLING INDICATES THAT REQUIRED LRG AND URG CRITERIA HAVE BEEN ACHIEVED.
5. REMOVE CONCRETE FLOOR SLABS AS REQUIRED DURING EXCAVATION. CONTAMINATED CONCRETE WILL BE DISPOSED AT AN APPROPRIATE OFFSITE FACILITY. CLEAN CONCRETE WILL EITHER BE DISPOSED AT AN APPROPRIATE OFFSITE FACILITY, OR USED AS BACKFILL IN EXCAVATIONS AT THE SITE.
6. SOIL FROM THE EAST-WEST BURN PADS WILL BE SAMPLED FOR EXPLOSIVES FOLLOWING MECHANICAL SCREENING OPERATIONS FOR MUNITIONS AND EXPLOSIVES OF CONCERN. ESTIMATED VOLUME OF SOIL REQUIRING MECHANICAL SCREENING = 16,000 CUBIC YARDS. SOIL THAT DOES NOT MEET LRG AND URG CRITERIA FOR SRU1 SOILS OVER THE AREA OF EXCAVATION WILL BE TRANSPORTED, AS NECESSARY, TO THE SITE M4 BIOREMEDIATION FACILITY FOR TREATMENT. ESTIMATED VOLUME OF SOIL REQUIRING TREATMENT = 10,000 CUBIC YARDS.
7. MEC IDENTIFICATION/AVOIDANCE OVERSIGHT WILL BE PROVIDED ON-SITE DURING EXCAVATION ACTIVITIES.
8. MEC DISPOSAL WILL BE CONDUCTED IN ACCORDANCE WITH THE PROTOCOL ESTABLISHED IN THE APPROVED EXPLOSIVES SAFETY SUBMISSION.

BACKFILLING AND RESTORATION:

1. UPON VERIFICATION THAT LRG AND URG CRITERIA HAVE BEEN ACHIEVED, GRADE EXCAVATION WITH SURROUNDING MATERIAL TO PROMOTE PROPER DRAINAGE.
2. ONCE GRASS IS ESTABLISHED TO A HEIGHT OF 4 INCHES, REMOVE SILT FENCE (IF INSTALLED AT SITE).
3. BACKFILLING WILL BE CONDUCTED IN ACCORDANCE WITH SPEC. SECTION 02220.
4. TEMPORARY ROADS CONSTRUCTED FOR RA ACTIVATES WILL BE REMOVED, AS REQUIRED, FOLLOWING THE COMPLETION OF CONSTRUCTION/HAULING ACTIVITIES AT THE SITE.

EQUIPMENT DECONTAMINATION:

1. EQUIPMENT WILL BE CLEANED, AS REQUIRED, ON EQUIPMENT DECONTAMINATION PAD TO REMOVE SOIL PARTICLES IN ACCORDANCE WITH SPEC. SECTION 01560.
2. ONCE EXCAVATION IS COMPLETED AND ALL EQUIPMENT IS DECONTAMINATED, MOBILE DECONTAMINATION PADS WILL BE PROPERLY DEMOBILIZED AND MOVED TO ANOTHER PHASE 2 RA SITE FOR REUSE, OR DISPOSED AT AN APPROPRIATE OFFSITE FACILITY.



LEGEND

- FENCE LINE
- SRU1 SOILS
- SRU2 SOILS
- AREA TO BE FIELD SCREENED AND SAMPLED FOR POTENTIALLY IMPACTED SOILS
- SRU1 AND SRU2 SOILS
- MW132 MONITORING WELL LOCATION AND NUMBER
- SILT FENCE

north

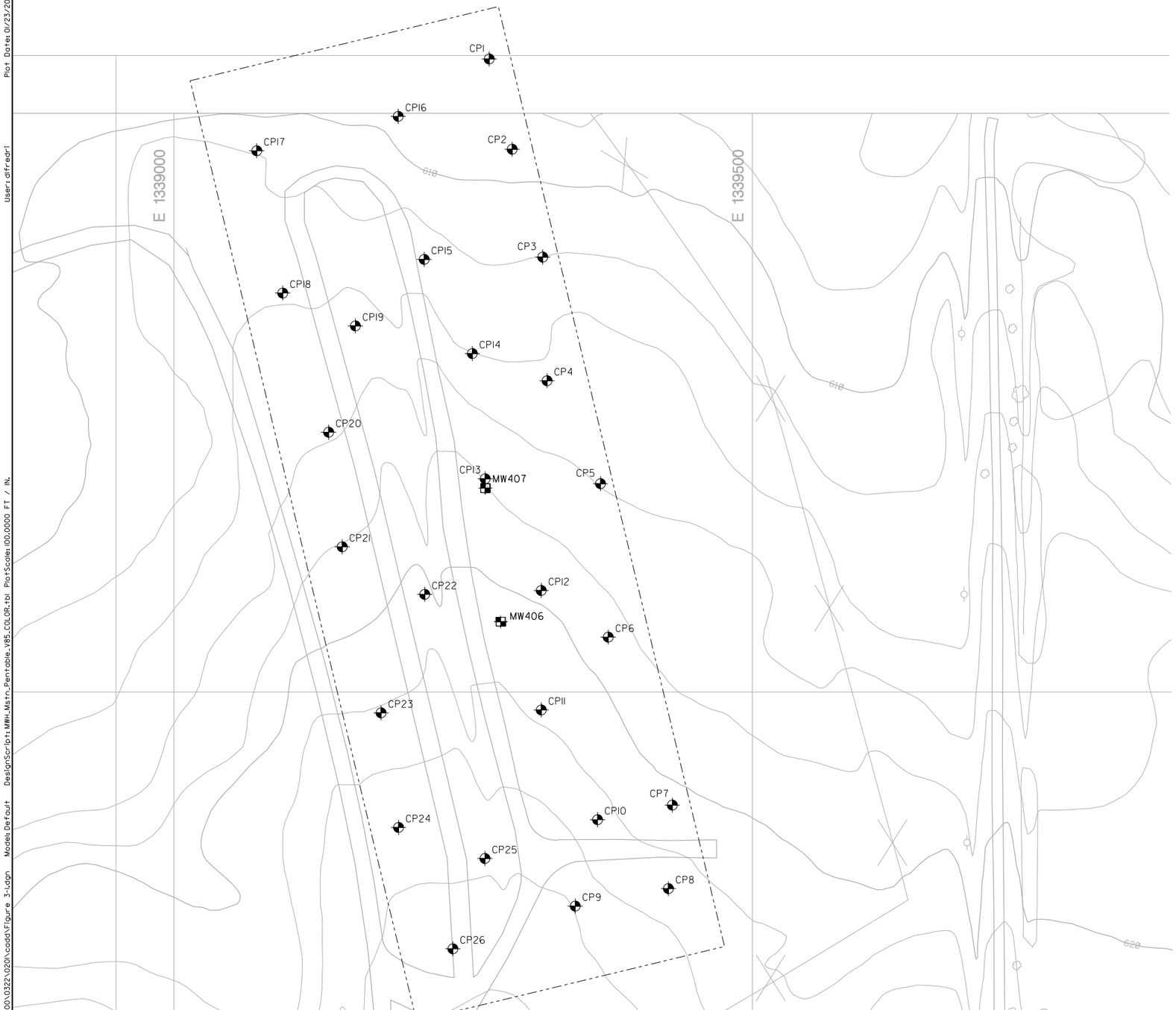
LHP DEVELOPED BY	DLF DRAWN BY	CONTRACT NO. DACW27-97-D-0015 TASK ORDER NO. 4016	SITE L2 – REMEDIAL DESIGN PLAN
APPROVED BY	DATE	VERIFY SCALE 0 ½ 1 BAR REPRESENTS ONE INCH	SCALE 1" = 300'
REVISIONS	DATE		

CLOSURE REPORT - SITES L2, L5, L23A, M3, M4, AND M12
PHASE 2 REMEDIAL ACTION
JOLIET ARMY AMMUNITION PLANT
WILMINGTON, ILLINOIS

FIGURE 1–3

MWH

File: L:\JOBS\209\0900\032\020\cadd\Figure 1-3.dgn Models: Default DesignScript: MWH-Mstn-Pentable-V85-COLOR.tbl PlotScale: 284.327 FT / IN. User: dlfreder1 Plot Date: 11/08/2007 02:14:21 PM



LEGEND

- FENCE LINE
- MW407 — MONITORING WELL LOCATION AND NUMBER
- CP1 — SAMPLE POINT LOCATION AND DESIGNATION
- CHARACTERIZATION BOUNDARY

GENERAL NOTES

1. REFER TO TABLE 3-2 FOR ANALYTICAL RESULTS FOR THE NOTED SAMPLE LOCATIONS.

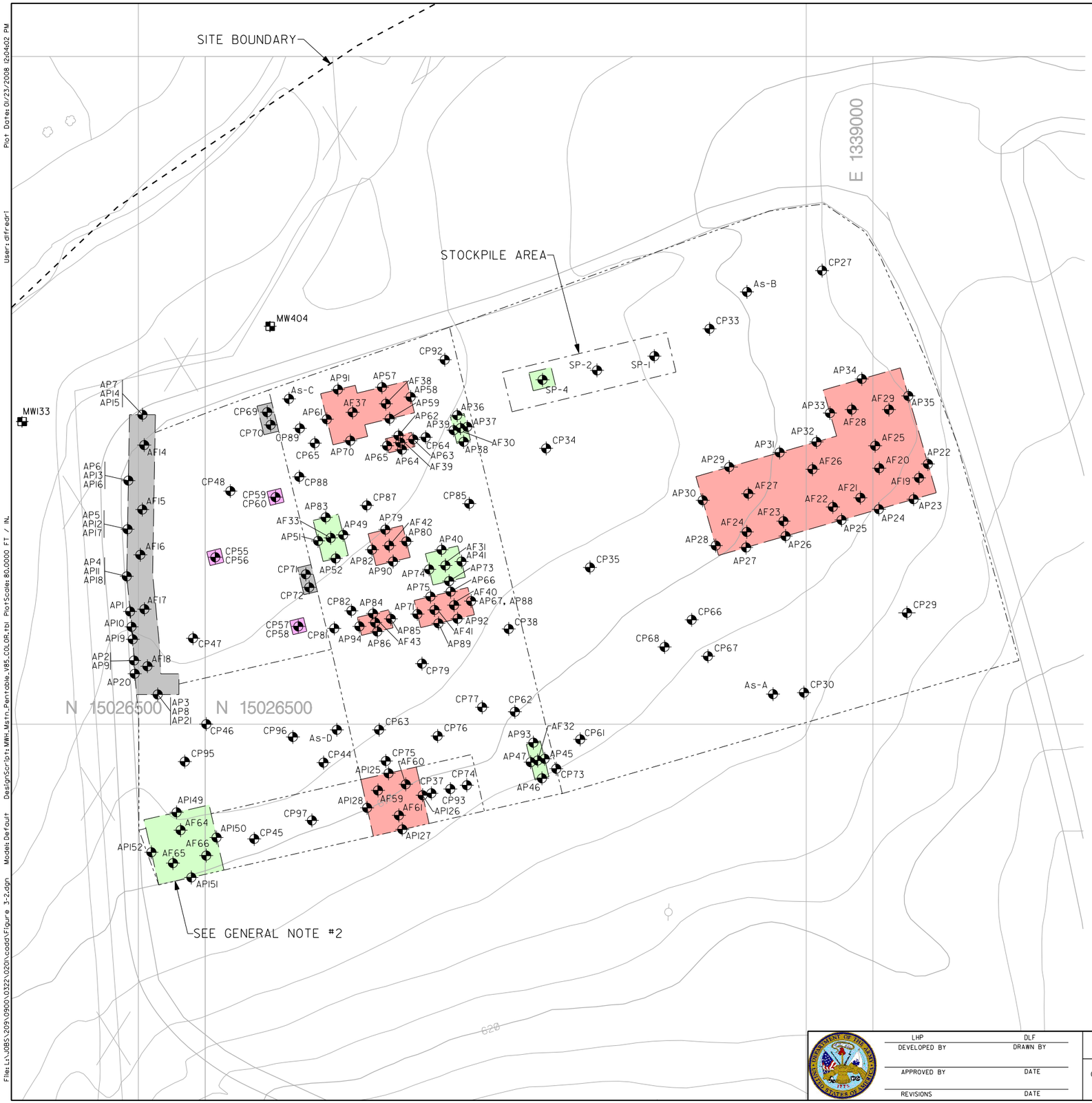
north

LHP DEVELOPED BY	DLF DRAWN BY	CONTRACT NO. DACW27-97-D-0015 TASK ORDER NO. 4016	RA EXCAVATION AND SAMPLING ACTIVITIES – SITE L2 – NORTH–SOUTH BURNING PADS
APPROVED BY	DATE	VERIFY SCALE 0 ½ 1 BAR REPRESENTS ONE INCH	SCALE 1" = 100'
REVISIONS	DATE		CLOSURE REPORT - SITES L2, L5, L23A, M3, M4, AND M12 PHASE 2 REMEDIAL ACTION JOLIET ARMY AMMUNITION PLANT WILMINGTON, ILLINOIS

FIGURE 3–1

MWH

File:L:\JOBS\209\0900\0322\020\cadd\Figure 3-1.dgn Model:Default DesignScript:MWH_Mstn_Pentable.V85_COLOR.tbl PlotScale:100.0000 FT / IN. User:dfredri Plot Date:01/23/2008 11:34:53 AM



LEGEND

- FENCE LINE
- MW133 — MONITORING WELL LOCATION AND NUMBER
- AF14 — SAMPLE POINT LOCATION AND DESIGNATION
- DEPTH OF EXCAVATION TO 1.0 FOOT
- DEPTH OF EXCAVATION TO 2.0 FEET
- DEPTH OF EXCAVATION TO 4.0 FEET
- DEPTH OF EXCAVATION TO 8.0 FEET
- EXCAVATION BOUNDARY
- CHARACTERIZATION BOUNDARY
- STOCKPILE BOUNDARY

GENERAL NOTES

1. ONLY PASSING CHARACTERIZATION AND CONFIRMATION SAMPLES ARE SHOWN. ANY SAMPLE LOCATIONS WHERE FURTHER EXCAVATION WAS CONDUCTED DUE TO SAMPLE EXCEEDANCES ARE NOT INCLUDED.
2. APPROXIMATELY 125 CY OF SRU1 AND SRU2 SOILS WERE TO BE EXCAVATED FROM THE SOUTHERN PORTION OF THE EAST-WEST BURNING PADS. THE AREA WAS CHARACTERIZED FOR EXPLOSIVES AND LEAD PRIOR TO THE PROPOSED EXCAVATION TO 1 FOOT BGS. EXPLOSIVES WERE NOT DETECTED DURING THE INITIAL CHARACTERIZATION, HOWEVER, LEAD EXCEEDED LRG AND URG CRITERIA. THE WESTERN PORTION WAS EXCAVATED TO 2 FEET BGS AND CONFIRMATION SAMPLING FOR LEAD ONLY WAS CONDUCTED.
3. REFER TO TABLE 3-3 FOR ANALYTICAL RESULTS FOR THE NOTED SAMPLE LOCATIONS.

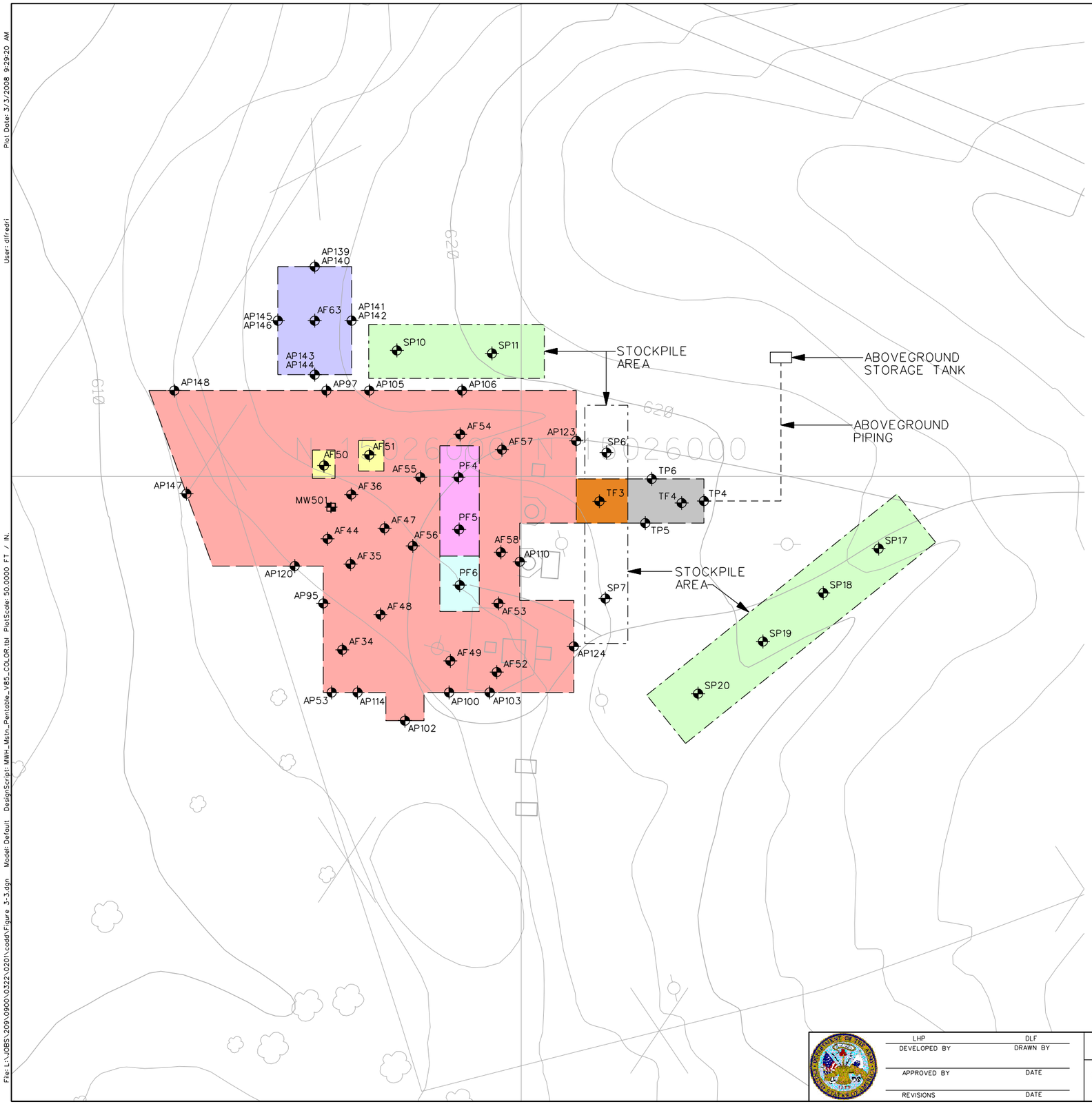
north

LHP — DEVELOPED BY	DLF — DRAWN BY	CONTRACT NO. DACW27-97-D-0015 TASK ORDER NO. 4016	RA EXCAVATION AND SAMPLING ACTIVITIES – SITE L2 – EAST-WEST BURNING PADS
APPROVED BY	DATE	VERIFY SCALE 0 ½ 1 BAR REPRESENTS ONE INCH	SCALE 1" = 80'
REVISIONS	DATE		CLOSURE REPORT - SITES L2, L5, L23A, M3, M4, AND M12 PHASE 2 REMEDIAL ACTION JOLIET ARMY AMMUNITION PLANT WILMINGTON, ILLINOIS

FIGURE 3–2

MWH

File:L:\JOBS\209\0900\0322\020\cadd\Figure 3-2.dgn Model:Default DesignScript:MWH_Ms1n_Pentable_V85_COLOR.tbl PlotScale:80.0000 FT / IN. User:dlfredri Plot Date:01/23/2008 12:04:02 PM



LEGEND

	FENCE LINE
MW501	MONITORING WELL LOCATION AND NUMBER
AP53	SAMPLE POINT LOCATION AND DESIGNATION
SP6	STOCKPILE SAMPLE POINT AND DESIGNATION
PF4	POPPING FURNACE SAMPLE POINT AND DESIGNATION
TF3	TRENCH FLOOR SAMPLE POINT AND DESIGNATION
TP4	TRENCH PERIMETER SAMPLE POINT AND DESIGNATION
	DEPTH OF EXCAVATION TO 1 FOOT
	DEPTH OF EXCAVATION TO 2 FEET
	DEPTH OF EXCAVATION TO 3 FEET
	DEPTH OF EXCAVATION TO 4 FEET
	DEPTH OF EXCAVATION TO 5 FEET
	DEPTH OF EXCAVATION TO 6 FEET
	DEPTH OF EXCAVATION TO 7 FEET
	DEPTH OF EXCAVATION TO 12 FEET
	EXCAVATION BOUNDARY
	STOCKPILE AREA

GENERAL NOTES

1. ONLY PASSING CONFIRMATION SAMPLES ARE SHOWN. ANY SAMPLE LOCATIONS WHERE FURTHER EXCAVATION WAS CONDUCTED DUE TO SAMPLE EXCEEDANCES ARE NOT INCLUDED.
2. REFER TO TABLE 3-4 FOR ANALYTICAL RESULTS FOR THE NOTED SAMPLE LOCATIONS.

north

LHP DEVELOPED BY	DLF DRAWN BY	CONTRACT NO. DACW27-97-D-0015 TASK ORDER NO. 4016	RA EXCAVATION AND SAMPLING ACTIVITIES – SITE L2 – FORMER POPPING FURNACES AREA
APPROVED BY	DATE	VERIFY SCALE 0 ½ 1 BAR REPRESENTS ONE INCH	SCALE 1" = 50'
REVISIONS	DATE		CLOSURE REPORT - SITES L2, L5, L23A, M3, M4, AND M12 PHASE 2 REMEDIAL ACTION JOLIET ARMY AMMUNITION PLANT WILMINGTON, ILLINOIS

FIGURE 3–3

MWH

File: L:\JOBS\209\0900\0322\0201\cadd\Figure 3-3.dgn Model: Default DesignScript: MWH_Mstn_Pentable_V85_COLOR.tbl PlotScale: 50.0000 FT / IN. User: dfredri Plot Date: 3/3/2008 9:29:20 AM

After Action Report,
Joliet Army Ammunition Plant

USA. 2007.

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-L11-01	8/21/2006	Booster	2	N	H	Y	Y	N 41 22'02.6"	W 088 05'48.2"	9/7/2006
L2-M11-01	8/21/2006	Booster	1	N	H	Y	Y	N 41 22'02.6"	W 088 05'47.6"	9/7/2006
L2-M10-01	8/21/2006	Booster	1	N	H	Y	Y	N 41 22'03.0"	W 088 05'48.8"	9/7/2006
L2-M10-02	8/21/2006	Booster	1	N	H	Y	Y	N 41 22'02.7"	W 088 05'48.8"	9/7/2006
L2-G3-01	8/22/2006	Booster	1	N	H	Y	Y	N 41 21'58.7"	W 088 06'00.0"	9/7/2006
L2-G5-01	8/22/2006	Fuze MT M67A2	1	N	H	Y	N	N 41 21'58.5"	W 088 05'56.4"	9/7/2006
L2-G5-02	8/22/2006	Booster	1	N	H	Y	Y	N 41 21'58.9"	W 088 05'56.6"	9/7/2006
L2-G5-03	8/22/2006	Booster	1	N	H	Y	Y	N 41 21'58.9"	W 088 05'56.9"	9/7/2006
L2-G1-01	8/23/2006	Booster	1	N	H	Y	Y	N 41 21'59.3"	W 088 06'01.6"	9/7/2006
L2-G1-02	8/23/2006	Flash Tube	1	N	H	Y	Y	N 41 21'59.0"	W 088 06'01.9"	9/7/2006
L2-G2-01	8/23/2006	Booster	1	N	H	Y	Y	N 41 21'59.6"	W 088 06'00.1"	9/7/2006
L2-F2-01	8/28/2006	Booster	1	N	H	Y	Y	N 41 21'58.4"	W 088 06'00.6"	9/7/2006
L2-F3-01	8/29/2006	Flash Tube	1	N	H	Y	Y	N 41 21'58.4"	W 088 06'00.0"	9/7/2006
L2-F4-01	8/29/2006	Flash Tube	2	N	H	Y	Y	N 41 21'57.6"	W 08805'59.0"	9/7/2006
L2-F4-02	8/29/2006	Flash Tube	1	N	H	Y	Y	N 41 21'57.1"	W 088 05'59.0"	9/7/2006
L2-F5-01	8/30/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 21'57.2"	W 088 05'57.2"	9/7/2006
l2-F5-02	8/30/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 21'57.8"	W 088 05'57.0"	9/7/2006
L2-G7-01	8/30/2006	Booster	2	N	H	Y	Y	N 41 21'57.6"	W 088 05'53.8"	9/7/2006
L2-G8-01	8/30/2006	Booster	1	N	H	Y	Y	N 41 21'57.7"	W 088 05'52.8"	9/7/2006
L2-G8-02	8/30/2006	Flash Tube	1	N	H	Y	Y	N 41 21'57.8"	W 088 05'52.7"	9/7/2006
L2-G9-01	8/30/2006	Booster	1	N	H	Y	Y	N 41 21'58.3"	W 088 05'51.7"	9/7/2006
L2-E5-01	9/5/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 21'56.7"	W 088 05'57.9"	9/7/2006
L2-E5-02	9/5/2006	Booster	1	N	H	Y	Y	N 41 21'556.2"	W 088 05'57.3"	9/7/2006
L2-E5-03	9/5/2006	Booster	2	N	H	Y	Y	N 41 21'57.3"	W 088 05'57.7"	9/7/2006
L2-E4-01	9/6/2006	Flash Tube	1	N	H	Y	Y	N 41 21'56.3"	W 088 05'58.7"	9/7/2006
L2-E4-2	9/6/2006	Booster	2	N	H	Y	Y	N 41 21'56.4"	W 088 05'58.7"	9/7/2006
L2-E4-03	9/6/2006	Fuze MT M67A1	1	N	H	Y	N	N 31 21'56.6"	W 088 05'58.9"	9/7/2006
L2-E3-01	9/7/2006	Projo 40mm Smoke	1	N	SMOKE	Y	N	N 41 21'57.1"	W 088 05'59.2"	9/7/2006
L2-E3-02	9/7/2006	Booster	1	N	H	Y	Y	N 41 21'57.1"	W 088 05'59.7"	9/7/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-E3-03	9/7/2006	Fuze PD M48 Series	1	N	H	Y	N	N 41 21'56.9"	W 088 06'00.0"	9/7/2006
L2-E3-04	9/7/2006	Booster	1	N	H	Y	N	N 41 21'56.7"	W 088 06'00.6"	9/7/2006
L2-H10-01	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.7"	W 088 05'50.9"	9/15/2006
L2-H10-02	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.9"	W 088 05'50.8"	9/15/2006
L2-H10-03	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.9"	W 088 05'50.3"	9/15/2006
L2-H10-04	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.9"	W 088 05'50.3"	9/15/2006
L2-H10-05	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.7"	W 088 05'50.5"	9/15/2006
L2-H10-06	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.5"	W 088 05'50.7"	9/15/2006
L2-H10-07	9/13/2006	Booster	1	N	H	Y	N	N 41 21'51.9"	W 088 05'50.3"	9/15/2006
L2-H10-08	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.9"	W 088 05'50.3"	9/15/2006
L2-H10-09	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.7"	W 088 05'50.1"	9/15/2006
L2-H10-10	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.4"	W 088 05'50.3"	9/15/2006
L2-H10-11	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.4"	W 088 05'50.3"	9/15/2006
L2-H10-12	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.3"	W 088 05'50.1"	9/15/2006
L2-H10-13	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.4"	W 088 05'50.1"	9/15/2006
L2-H10-14	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.4"	W 088 05'50.0"	9/15/2006
L2-H10-15	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.5"	W 088 05'50.2"	9/15/2006
L2-H10-16	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.5"	W 088 05'49.8"	9/15/2006
L2-H10-17	9/13/2006	Booster	2	N	H	Y	N	N 41 21'58.6"	W 088 05'49.8"	9/15/2006
L2-H10-18	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.9"	W 088 05'49.8"	9/15/2006
L2-H10-19	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.6"	W 088 05'49.8"	9/15/2006
L2-H10-20	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.5"	W 088 05'49.8"	9/15/2006
L2-H10-21	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.2"	W 088 05'50.0"	9/15/2006
L2-H11-01	9/13/2006	Booster	1	N	H	Y	N	N 41 21'58.7"	W 088 05'49.4"	9/15/2006
L2-H11-02	9/13/2006	Booster	1	N	H	Y	N	N 41 21'59.0"	W 088 05'49.5"	9/15/2006
L2-H11-03	9/14/2006	Booster	1	N	H	Y	N	N 41 21'58.5"	W 088 05'49.5"	9/15/2006
L2-H11-04	9/14/2006	Booster	1	N	H	Y	N	N 41 21'58.6"	W 088 05'49.0"	9/15/2006
L2-H11-06	9/14/2006	Booster	1	N	H	Y	N	N 41 21'58.6"	W 088 05'48.9"	9/15/2006
L2-H11-07	9/14/2006	Booster	1	N	H	Y	N	N 41 21'58.6"	W 088 05'48.9"	9/15/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-H11-08	9/14/2006	Booster	1	N	H	Y	N	N 41 21'58.7"	W 088 05'48.7"	9/15/2006
L2-I10-01	9/14/2006	Booster	1	N	H	Y	N	N 41 21'58.9"	W 088 05'49.6"	9/15/2006
L2-I10-02	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.1"	W 088 05'49.7"	9/15/2006
L2-I10-03	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.2"	W 088 05'49.5"	9/15/2006
L2-I10-04	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.3"	W 088 05'49.6"	9/15/2006
L2-I10-05	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.5"	W 088 05'49.6"	9/15/2006
L2-I10-06	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.4"	W 088 05'49.5"	9/15/2006
L2-I11-01	9/14/2006	Booster	1	N	H	Y	N	N 41 21'58.8"	W 088 05'48.5"	9/15/2006
L2-I11-02	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.0"	W 088 05'48.5"	9/15/2006
L2-I11-03	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.4"	W 088 05'48.4"	9/15/2006
L2-I11-04	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.4"	W 088 05'48.7"	9/15/2006
L2-I11-05	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.3"	W 088 05'48.7"	9/15/2006
L2-I11-06	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.4"	W 088 05'48.8"	9/15/2006
L2-I11-07	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.7"	W 088 05'48.8"	9/15/2006
L2-I11-08	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.5"	W 088 05'49.0"	9/15/2006
L2-I11-09	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.6"	W 088 05'49.1"	9/15/2006
L2-I11-10	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.8"	W 088 05'49.2"	9/15/2006
L2-I11-11	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.6"	W 088 05'49.3"	9/15/2006
L2-I11-12	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.4"	W 088 05'49.3"	9/15/2006
L2-I11-13	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.3"	W 088 05'49.0"	9/15/2006
L2-I11-14	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.3"	W 088 05'49.1"	9/15/2006
L2-I11-15	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.1"	W 088 05'49.1"	9/15/2006
L2-I11-16	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.2"	W 088 05'48.8"	9/15/2006
L2-J11-01	9/14/2006	Booster	1	N	H	Y	N	N 41 21'59.8"	W 088 05'48.9"	9/15/2006
L2-J11-02	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'48.5"	9/15/2006
L2-J11-03	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'48.5"	9/15/2006
L2-J11-04	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'48.4"	9/15/2006
L2-J11-05	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'48.4"	9/15/2006
L2-J11-06	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'48.3"	9/15/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-J11-07	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.2"	W 088 05'47.9"	9/15/2006
L2-J11-08	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.6"	W 088 05'48.2"	9/15/2006
L2-J11-09	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.7"	W 088 05'48.3"	9/15/2006
L2-J11-10	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.6"	W 088 05'48.4"	9/15/2006
L2-J11-11	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.6"	W 088 05'48.8"	9/15/2006
L2-J11-12	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.6"	W 088 05'48.9"	9/15/2006
L2-J11-13	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.5"	W 088 05'49.0"	9/15/2006
L2-J11-14	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.5"	W 088 05'48.9"	9/15/2006
L2-J11-15	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.3"	W 088 05'48.9"	9/15/2006
L2-J11-16	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.3"	W 088 05'49.0"	9/15/2006
L2-J11-17	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.3"	W 088 05'49.1"	9/15/2006
L2-J11-18	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'49.1"	9/15/2006
L2-J11-19	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.0"	W 088 05'49.2"	9/15/2006
L2-J11-20	9/14/2006	Booster	1	N	H	Y	N	N 41 22'00.0"	W 088 05'49.2"	9/15/2006
L2-H11-05	9/14/2006	Booster	1	N	H	Y	N	N 41 21'58.6"	W 088 05'49.0"	12/14/2006
L2-I10-07	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.6"	W 088 05'49.3"	9/15/2006
L2-I10-08	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.6"	W 088 05'49.5"	9/15/2006
L2-I10-09	9/15/2006	Booster	3	N	H	Y	N	N 41 21'59.8"	W 088 05'49.6"	9/15/2006
L2-I10-10	9/15/2006	Booster	2	N	H	Y	N	N 41 21'59.8"	W 088 05'49.9"	9/15/2006
L2-I10-11	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.8"	W 088 05'50.1"	9/15/2006
L2-I10-12	9/15/2006	Booster	1	N	H	Y	N	N 41 22'00.0"	W 088 05'50.1"	9/15/2006
L2-I10-13	9/15/2006	Booster	1	N	H	Y	N	N 41 22'00.0"	W 088 05'50.1"	9/15/2006
L2-I10-14	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.6"	W 088 05'50.1"	9/15/2006
L2-I10-15	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.6"	W 088 05'50.0"	9/15/2006
L2-I10-16	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.6"	W 088 05'50.1"	9/15/2006
L2-I10-17	9/15/2006	Booster	2	N	H	Y	N	N 41 22'00.0"	W 088 05'50.4"	9/15/2006
L2-I10-18	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.7"	W 088 05'50.3"	9/15/2006
L2-I10-19	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.8"	W 088 05'50.4"	9/15/2006
L2-I10-20	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.2"	W 088 05'50.2"	9/15/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-I10-21	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.1"	W 088 05'50.2"	9/15/2006
L2-I10-22	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.1"	W 088 05'50.2"	9/15/2006
L2-I10-23	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.0"	W 088 05'50.3"	9/15/2006
L2-I10-24	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.0"	W 088 05'50.3"	9/15/2006
L2-I10-25	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.1"	W 088 05'50.5"	9/15/2006
L2-I10-26	9/15/2006	Fuze BD M66A1	1	N	H	Y	N	N 41 21'59.2"	W 088 05'50.3"	9/15/2006
L2-I10-27	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.3"	W 088 05'50.3"	9/15/2006
L2-I10-28	9/15/2006	Booster	3	N	H	Y	N	N 41 21'59.2"	W 088 05'50.4"	9/15/2006
L2-I10-29	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.3"	W 088 05'50.4"	9/15/2006
L2-I10-30	9/15/2006	Booster	1	N	H	Y	N	N 41 21'59.3"	W 088 05'50.2"	9/15/2006
I2-i12-01	9/18/2006	Booster	1	N	H	Y	N	N 41 21'59.4"	W 088 05'47.4"	9/21/2006
L2-J13-01	9/18/2006	Booster	1	N	H	Y	N	N 41 21'59.9"	W 088 05'46.5"	9/21/2006
L2-J12-01	9/18/2006	Booster	1	N	H	Y	N	N 41 21'59.9"	W 088 05'47.9"	9/21/2006
L2-J12-02	9/18/2006	Booster	1	N	H	Y	N	N 41 22'00.3"	W 088 05'47.7"	9/21/2006
L2-J12-03	9/18/2006	Booster	1	N	H	Y	N	N 41 22'00.0"	W 088 05'47.3"	9/21/2006
L2-J12-04	9/18/2006	Booster	1	N	H	Y	N	N 41 21'59.8"	W 088 05'47.4"	9/21/2006
L2-J12-05	9/18/2006	Booster	1	N	H	Y	N	N 41 21'59.6"	W 088 05'47.1"	9/21/2006
L2-J12-06	9/18/2006	Booster	1	N	H	Y	N	N 41 22'00.2"	W 088 05'46.7"	9/21/2006
L2-K12-01	9/18/2006	Booster	1	N	H	Y	N	N 41 22'00.6"	W 088 05'47.6"	9/21/2006
L2-K12-02	9/18/2006	Booster	1	N	H	Y	N	N 41 22'00.8"	W 088 05'46.9"	9/21/2006
L2-K12-03	9/18/2006	Booster	1	N	H	Y	N	N 41 22'00.5"	W 088 05'46.8"	9/21/2006
L2-L11-01	9/18/2006	Booster	1	N	H	Y	N	N 41 22'02.1"	W 088 05'48.1"	9/21/2006
L2-L11-02	9/18/2006	Booster	1	N	H	Y	N	N 41 22'02.2"	W 088 05'47.9"	9/21/2006
L2-L11-03	9/18/2006	Booster	1	N	H	Y	N	N 41 22'01.6"	W 088 05'47.5"	9/21/2006
L2-L11-04	9/18/2006	Fuze BD M66A1	1	N	H	Y	N	N 41 22'01.7"	W 088 05'47.8"	9/21/2006
L1-L11-05	9/18/2006	Booster	1	N	H	Y	N	N 41 22'02.1"	W 088 05'48.1"	9/21/2006
L2-L12-01	9/18/2006	Booster	1	N	H	Y	N	N 41 22'01.8"	W 088 05'47.1"	9/21/2006
L2-I12-02	9/18/2006	Booster	1	N	H	Y	N	N 41 21'59.2"	W 088 05'48.0"	9/1/2106
L2-K11-01	9/19/2006	Booster	1	N	H	Y	N	N 41 22'01.2"	W 088 05'48.0"	9/21/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-K11-02	9/19/2006	Booster	1	N	H	Y	N	N 41 22'01.0"	W 088 05'48.1"	9/21/2006
L2-K11-03	9/19/2006	Booster	1	N	H	Y	N	N 41 22'01.2"	W 088 05'48.3"	9/21/2006
L2-K11-04	9/19/2006	Booster	1	N	H	Y	N	N 41 22'01.2"	W 088 05'48.5"	9/21/2006
L2-K11-05	9/19/2006	Booster	1	N	H	Y	N	N 41 22'01.5"	W 088 05'48.6"	9/21/2006
L2-K11-06	9/19/2006	Booster	1	N	H	Y	N	N 41 22'01.6"	W 088 05'48.5"	9/21/2006
L2-J10-01	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.0"	W 088 05'49.3"	9/21/2006
L2-J10-02	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.0"	W 088 05'49.2"	9/21/2006
L2-J10-03	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.3"	W 088 05'49.2"	9/21/2006
L2-J10-04	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.5"	W 088 05'49.1"	9/21/2006
L2-J10-05	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.5"	W 088 05'49.2"	9/21/2006
L2-J10-06	9/19/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'00.4"	W 088 05'49.3"	9/21/2006
L2-J10-07	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.6"	W 088 05'49.2"	9/21/2006
L2-J10-08	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.7"	W 088 05'49.1"	9/21/2006
L2-J10-09	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.6"	W 088 05'49.3"	9/21/2006
L2-J10-10	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.5"	W 088 05'49.3"	9/21/2006
L2-J10-11	9/19/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'00.3"	W 088 05'49.9"	9/21/2006
L2-J10-12	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.2"	W 088 05'49.7"	9/21/2006
L2-J10-13	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.3"	W 088 05'49.6"	9/21/2006
L2-J10-14	9/19/2006	Booster	2	N	H	Y	N	N 41 22'00.4"	W 088 05'49.4"	9/21/2006
L2-J10-16	9/19/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'50.0"	9/21/2006
L2-L10-04	9/19/2006	Booster	1	N	H	Y	N	N 41 22'02.0"	W 088 05'48.7"	9/21/2006
L2-L10-05	9/19/2006	Booster	1	N	H	Y	N	N 41 22'02.4"	W 088 05'48.6"	9/21/2006
L2-L10-6	9/19/2006	Booster	1	N	H	Y	N	N 41 22'02.4"	W 088 05'48.7"	9/21/2006
L2-J10-15	9/19/2006	Fuze BD M66A1	1	N	H	Y	N	N 41 22'00.6"	W 088 05'49.8"	9/1/2106
L2-L10-01	9/19/2006	Booster	1	N	H	Y	N	N 41 22'02.8"	W 088 05'49.0"	9/1/2106
L2-L10-02	9/19/2006	Booster	1	N	H	Y	N	N 41 22'02.6"	W 088 05'48.9"	9/1/2106
L2-L10-03	9/19/2006	Booster	1	N	H	Y	N	N 41 22'01.9"	W 088 05'48.7"	9/1/2106
L2-M11-02	9/20/2006	Booster	1	N	H	Y	N	N 41 22'03.0"	W 088 05'48.3"	9/21/2006
L2-M10-03	9/20/2006	Booster	1	N	H	Y	N	N 41 22'03.0"	W 088 05'49.2"	9/21/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-M10-04	9/20/2006	Fuze BD M66A1	1	N	H	Y	N	N 41 22'03.3" W 088 05'49.1"	9/21/2006
L2-M10-05	9/20/2006	Booster	1	N	H	Y	N	N 41 22'03.3" W 088 05'48.7"	9/21/2006
L2-M10-06	9/20/2006	Booster	1	N	H	Y	N	N 41 22'03.4" W 088 05'48.7"	9/21/2006
L2-M10-07	9/20/2006	Booster	1	N	H	Y	N	N 41 22'03.2" W 088 05'48.7"	9/21/2006
L2-M10-08	9/20/2006	Booster	1	N	H	Y	N	N 41 22'02.9" W 088 05'49.0"	9/21/2006
L2-M10-09	9/20/2006	Booster	1	N	H	Y	N	N 41 22'02.9" W 088 05'49.0"	9/21/2006
L2-N10-01	9/20/2006	Booster	1	N	H	Y	N	N 41 22'03.9" W 088 05'48.9"	9/21/2006
L2-N10-02	9/20/2006	Booster	1	N	H	Y	N	N 41 22'04.1" W 088 05'48.6"	9/21/2006
L2-N10-03	9/20/2006	Booster	1	N	H	Y	N	N 41 22'04.6" W 088 05'48.3"	9/21/2006
L2-N10-04	9/20/2006	Booster	1	N	H	Y	N	N 41 22'04.1" W 088 05'48.9"	9/21/2006
L2-N10-05	9/20/2006	Booster	1	N	H	Y	N	N 41 22'04.3" W 088 05'48.8"	9/21/2006
L2-N10-06	9/20/2006	Booster	1	N	H	Y	N	N 41 22'04.4" W 088 05'49.1"	9/21/2006
L2-N10-07	9/20/2006	Booster	1	N	H	Y	N	N 41 22'04.4" W 088 05'49.1"	9/21/2006
L2-N10-08	9/20/2006	Booster	1	N	H	Y	N	N 41 22'03.9" W 088 05'49.1"	9/21/2006
L2-O9-01	9/20/2006	Booster	1	N	H	Y	N	N 41 22'05.0" W 088 05'49.7"	9/21/2006
L2-O9-02	9/20/2006	Booster	1	N	H	Y	N	N 41 22'05.0" W 088 05'50.1"	9/21/2006
L2-O9-03	9/20/2006	Booster	1	N	H	Y	N	N 41 22'05.2" W 088 05'50.2"	9/21/2006
L2-O9-04	9/20/2006	Booster	1	N	H	Y	N	N 41 22'05.1" W 088 05'50.3"	9/21/2006
L2-O9-05	9/20/2006	Booster	1	N	H	Y	N	N 41 22'05.1" W 088 05'50.4"	9/21/2006
L2-O9-06	9/20/2006	Booster	1	N	H	Y	N	N 41 22'05.2" W 088 05'50.4"	9/21/2006
L2-O9-07	9/20/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'49.9"	9/21/2006
L2-O9-08	9/20/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'49.7"	9/21/2006
L2-O9-09	9/20/2006	Booster	1	n	h	y	n	n 41 22'05.3" w 088 05'50.1"	9/21/2006
L2-O9-10	9/21/2006	Booster	1	N	H	Y	N	N 41 22'05.6" W 088 05'50.2"	9/21/2006
L2-O9-11	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.0" W 088 05'49.9"	9/21/2006
L2-O9-12	9/21/2006	Booster	1	N	H	Y	N	N 41 22'05.9" W 088 05'49.4"	9/21/2006
L2-P8-01	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.5" W 088 05'50.3"	9/21/2006
L2-P8-02	9/21/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.3" W 088 05'50.6"	9/21/2006
L2-P8-03	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.3" W 088 05'50.6"	9/21/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-P8-04	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.5" W 088 05'50.2"	9/21/2006
L2-P8-05	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.2" W 088 05'51.0"	9/21/2006
L2-P8-06	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.5" W 088 05'51.2"	9/21/2006
L2-P8-07	9/21/2006	Fuze BD M66A1	1	N	H	Y	N	N 41 22'06.3" W 088 05'51.3"	9/21/2006
L2-P8-08	9/21/2006	Booster	1	n	h	y	n	n 41 22'06.6" w 088 05'51.2"	9/21/2006
L2-P8-09	9/21/2006	Booster	1	N	H	Y	N	N 41 22'07.0" W 088 05'50.9"	9/21/2006
L2-P8-10	9/21/2006	Booster 1 EACH	1/1/1900	N	H	Y	N	N 41 22'06.6" W 088 05'50.9"	9/21/2006
L2-P8-11	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.6" W 088 05'50.6"	9/21/2006
L2-P8-12	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.7" W 088 05'50.6"	9/21/2006
L2-P8-13	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.7" W 088 05'51.1"	9/21/2006
L2-P8-14	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.8" W 088 05'51.0"	9/21/2006
L2-P8-14	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.7" W 088 05'51.0"	9/21/2006
L2-P8-16	9/21/2006	Booster	1	N	H	Y	N	N 41 22'06.9" W 088 05'51.0"	9/21/2006
L2-P8-17	9/21/2006	Booster	1	N	H	Y	N	N 41 22'07.1" W 088 05'51.0"	9/21/2006
L2-O8-01	9/21/2006	Booster	1	N	H	Y	N	N 41 22'05.5" w 088 05'50.7"	9/28/2006
L2-O8-02	9/21/2006	Booster	1	N	H	Y	N	N 41 22'05.6" W 088 05'50.4"	9/28/2006
L2-O8-03	9/21/2006	Booster	1	N	H	Y	N	N 41 22'50.4" W 088 05'50.4"	9/28/2006
L2-O8-04	9/25/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.6" W 088 05'51.5"	9/28/2006
L2-O8-05	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.5" W 088 05'50.4"	9/28/2006
L2-O8-06	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.6" W 088 05'50.4"	9/28/2006
L2-O8-07	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'50.5"	9/28/2006
L2-O8-08	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.7" w 088 05'50.3"	9/28/2006
L2-O8-09	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.7" w 088 05'50.5"	9/28/2006
L2-O8-10	9/25/2006	Booster	1	N	H	Y	N	N 41 22'06.0" W 088 05'50.4'	9/28/2006
L2-O8-11	9/25/2006	Booster	1	N	H	Y	N	N 41 22'06.2" W 088 05'50.6"	9/28/2006
L2-O8-12	9/25/2006	Booster	1	N	H	Y	N	N 41 22'06.1" W 088 05'50.8"	9/28/2006
L2-O8-13	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.8" W088 05'50.9"	9/28/2006
L2-O8-14	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.1" W 088 05'50.7"	9/28/2006
L2-O8-15	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.1" W088 05'51.0"	9/28/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-O8-16	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.3' W088 05'50.8"	9/28/2006
L2-O8-17	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.2" w 088 05'50.9"	9/28/2006
L2-O8-18	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'50.7"	9/28/2006
L2-O8-19	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'51.0"	9/28/2006
L2-O8-20	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.2" w 088 05'51.3"	9/28/2006
L2-O8-21	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.3" w 088 05'51.3"	9/28/2006
L2-O8-22	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'51.1"	9/28/2006
L2-O8-23	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'51.0"	9/28/2006
L2-O8-24	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'05.6" W 088 05'51.3"	9/28/2006
L2-O8-25	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.5" W 088 05'51.3"	9/28/2006
L2-O8-26	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'51.2"	9/28/2006
L2-O8-27	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.6" W 088 05'51.1"	9/28/2006
L2-O8-28	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.7" w 088 05'51.3"	9/28/2006
L2-O8-29	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'51.2"	9/28/2006
L2-O8-30	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'51.2"	9/28/2006
L2-O8-31	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'51.1"	9/28/2006
L2-O8-32	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'05.7" W 088 05'51.1"	9/28/2006
L2-O8-33	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.8" W 088 05'51.0"	9/28/2006
L2-O8-34	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'06.0" W 088 05'51.4"	9/28/2006
L2-O8-35	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'51.4"	9/28/2006
L2-O8-36	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'05.8" W 088 05'51.5"	9/28/2006
L2-O8-37	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'05.6" W 088 05'51.4"	9/28/2006
L2-N8-01	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'04.8" W 088 05'52.3"	9/28/2006
L2-N8-02	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'05.1" W 088 05'51.8"	9/28/2006
L2-N8-03	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'05.2" W 088 05'51.5"	9/28/2006
L2-N8-04	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'05.0" W 088 05'51.7"	9/28/2006
L2-N8-05	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'04.9" w 088 05'51.6"	9/28/2006
L2-N8-06	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'04.9" W 088 05'51.6"	9/28/2006
L2-N8-07	9/25/2006	Booster	1	N	H	Y	N	N 41 22'04.9" W 088 05'51.6"	9/28/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-N8-08	9/25/2006	Booster	1	N	H	Y	N	N 41 22'04.7" W 088 05'51.7"	9/28/2006
L2-N8-09	9/25/2006	FuzeBD M66A1	1	N	H	Y	Y	N 41 22'04.7" W 088 05'51.7"	9/28/2006
L2-N8-10	9/25/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'51.7"	9/28/2006
L2-N8-11	9/25/2006	Booster	1	N	H	Y	N	N 41 22'04.4" W 088 05'51.8"	9/28/2006
L2-N8-12	9/25/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.1" W 088 05'51.5"	9/28/2006
L2-N8-13	9/25/2006	Booster	1	N	H	Y	N	N 31 22'05.1" W 088 05'51.3"	9/28/2006
L2-N8-14	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.0" W 088 05'51.4"	9/28/2006
L2-N8-15	9/25/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.2" W 088 05'51.6"	9/28/2006
L2-N8-16	9/25/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.7" W 088 05'51.3"	9/28/2006
L2-N8-17	9/25/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.8" W 088 05'51.3"	9/28/2006
L2-N8-18	9/25/2006	Booster	1	N	H	Y	N	N 41 22'04.9" W 088 05'51.0"	9/28/2006
L2-N8-19	9/25/2006	Booster	1	N	H	Y	N	N 41 22'04.7" W 088 05'51.2"	9/28/2006
L2-N8-20	9/25/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.6" W 088 05'51.2"	9/28/2006
L2-N8-21	9/25/2006	Booster	1	N	H	Y	N	N 41 22'04.6" w 088 05'51.2"	9/28/2006
L2-N8-22	9/25/2006	Booster	1	N	H	Y	N	N 41 22'05.1" W 088 05'51.0"	9/28/2006
L2-M5-01	9/25/2006	Booster	1	N	H	Y	N	N 41 22'04.2" w 088 05'55.0"	9/28/2006
L2-N8-35	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'51.0"	9/28/2006
L2-N8-37	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'50.8"	9/28/2006
L2-N8-23	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.4" W 088 05'51.2"	9/28/2006
L2-N8-24	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.6" W 088 05'51.2"	9/28/2006
L2-N8-25	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'51.3"	9/28/2006
L2-N8-26	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.2" W 088 05'51.1"	9/28/2006
L2-N8-27	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.3" W 088 05'51.1"	9/28/2006
L2-N8-28	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'51.1"	9/28/2006
L2-N8-29	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.7" W 088 05'51.0"	9/28/2006
L2-N8-30	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.7" W 088 05'51.2"	9/28/2006
L2-N8-31	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.9" W 088 05'50.9"	9/28/2006
L2-N8-32	9/26/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.1" W 088 05'50.8"	9/28/2006
L2-N8-33	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'51.0"	9/28/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-N8-34	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.5" w 088 05'51.1"	9/28/2006
L2-N8-36	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.4" w 088 05'50.9"	9/28/2006
L2-N8-38	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.6" W 088 05'51.0"	9/28/2006
L2-N8-39	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.0" W 088 05'50.9"	9/28/2006
L2-N8-40	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.8" W 088 05'50.6"	9/28/2006
L2-N8-41	9/26/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.7" w 088 05'50.7"	9/28/2006
L2-N8-42	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'51.2"	9/28/2006
L2-N8-43	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.2" W 088 05'50.8"	9/28/2006
L2-N8-44	9/26/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.5" W 088 05'50.7"	9/28/2006
L2-N8-45	9/26/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.5" W 088 05'50.6"	9/28/2006
L2-N8-46	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.6" w 088 05'50.7"	9/28/2006
L2-N9-01	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.3" W 088 05'50.6"	9/28/2006
L2-N9-02	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.3" w 088 05'50.5"	9/28/2006
L2-N9-03	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.4" W 088 05'50.3"	9/28/2006
L2-N9-04	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'50.2"	9/28/2006
L2-N9-05	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'50.1"	9/28/2006
L2-N9-06	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.7" W 088 05'50.2"	9/28/2006
L2-N9-07	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.8" w 088 05'50.2"	9/28/2006
L2-N9-08	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.9" W 088 05'50.3"	9/28/2006
L2-N9-09	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.1" w 088 05'49.7"	9/28/2006
L2-N9-10	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.2" w 088 05'50.1"	9/28/2006
L2-N9-11	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.3" W 088 05'50.2"	9/28/2006
L2-N9-12	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.8" W 088 05'49.7"	9/28/2006
L2-N9-13	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.0" W 088 05'50.1"	9/28/2006
L2-N9-14	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.2" W 088 05'49.7"	9/28/2006
L2-N9-15	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.4" W 088 05'49.5"	9/28/2006
L2-N9-16	9/26/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'49.4"	9/28/2006
L2-K5-01	9/26/2006	Fuze PD M48	1	N	H	Y	N	N 41 22'02.2" W 088 05'55.6"	9/28/2006
L2-L5-01	9/26/2006	Booster	1	N	H	Y	N	N 41 22'03.4" W 088 05'56.0"	9/28/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-M9-01	9/26/2006	Booster	1	N	H	Y	N	N 41 22'03.0"	W 088 05'49.7"	9/28/2006
L2-M9-02	9/26/2006	Booster	1	N	H	Y	N	N 41 22'03.6"	W 088 05'49.7"	9/28/2006
L2-M9-03	9/26/2006	Booster	1	N	H	Y	N	N 41 22'03.7"	W 088 05'49.6"	9/28/2006
L2-M9-04	9/26/2006	Booster	1	N	H	Y	N	N 41 22'03.4"	W 088 05'49.9"	9/28/2006
L2-M9-05	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.4"	W 088 05'50.0"	9/28/2006
L2-M9-06	9/27/2006	Booster	1	N	H	Y	N	N 41 22'04.0"	W 088 05'49.9"	9/28/2006
L2-M9-07	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.4"	W 088 05'50.3"	9/28/2006
L2-M9-08	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.6"	W 088 05'50.3"	9/28/2006
L2-M9-09	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.9"	W 088 05'50.3"	9/28/2006
L2-M9-10	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.8"	W 088 05'50.4"	9/28/2006
L2-M9-11	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.7"	w 088 05'50.3"	9/28/2006
L2-M9-12	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.7"	W 088 05'50.3"	9/28/2006
L2-M9-13	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.8"	W 088 05'50.4"	9/28/2006
L2-M9-14	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.4"	W 088 05'50.4"	9/28/2006
L2-M9-15	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.5"	W 088 05'50.6"	9/28/2006
L2-M9-16	9/27/2006	Booster	1	N	H	Y	N	N 41 22'04.1"	W 088 05'50.7"	9/28/2006
L2-M9-17	9/27/2006	Booster	1	N	H	Y	N	N 41 22'04.0"	w 088 05'50.7"	9/28/2006
L2-M9-18	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.8"	w 088 05'50.7"	9/28/2006
L2-M9-19	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.6"	W 088 05'50.7"	9/28/2006
L2-M9-20	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.4"	w 088 05'50.8"	9/28/2006
L2-M9-21	9/27/2006	Booster	1	N	H	Y	N	N 41 22'03.4"	W 088 05'50.8"	9/28/2006
L2-M9-22	9/27/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'03.6"	W 088 05'50.3"	9/28/2006
L2-M9-23	9/27/2006	Booster	1	N	H	Y	N	N 41 22'04.0"	W 088 05'50.8"	9/28/2006
L2-O8-01 RD	9/27/2006	Booster	1	N	H	Y	N	N 41 22'05.5"	W 088 05'50.6"	9/28/2006
L2-O8-02 RD	9/27/2006	Booster	1	N	H	Y	N	N 41 22'05.5"	W 088 05'50.6"	9/28/2006
L2-O8-03 RD	9/27/2006	Booster	1	N	H	Y	N	N 41 22'05.1"	W 088 05'50.8"	9/28/2006
L2-O8-04 RD	9/27/2006	Booster	1	N	H	Y	N	N 41 22'05.3"	W 088 05'51.2"	9/28/2006
L2-O8-05 RD	9/27/2006	Booster	1	N	H	Y	N	N 41 22'05.1"	W 088 05'51.1"	9/28/2006
L2-O8-06 RD	9/27/2006	Booster	1	N	H	Y	N	N 41 22'05.4"	W 088 05'50.8"	9/28/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-O8-07 RD	9/27/2006	Booster	1	N	H	Y	N	N 41 22'05.5" W 088 05'50.5"	9/28/2006
L2-O8-08 RD	9/27/2006	Booster	1	N	H	Y	N	N 41 22'05.6" W 088 05'50.3"	9/28/2006
L2-K5-02	9/27/2006	Supplemental Charge	1	N	H	Y	Y	N 41 22'02.1" W 088 05'56.1"	9/28/2006
L2-K5-03	9/27/2006	Supplemental Charge	1	N	H	Y	Y	N 41 22'02.6" W 088 05'55.7"	9/28/2006
L2-O8-09 RD	9/28/2006	Booster	1	N	H	Y	N	N 41 22'05.4" w 088 05'51.4"	9/28/2006
L2-O8-10 RD	9/28/2006	Booster	1	N	H	Y	N	N 41 22'05.2" W 088 05'50.7"	9/28/2006
L2-O8--11 R	9/28/2006	Booster	1	N	H	Y	N	N 41 22'06.2" w 088 05'51.1"	9/28/2006
L2-O8-12 RD	9/28/2006	Booster	1	N	H	Y	N	N 41 22'06.3" W 088 05'51.2"	9/28/2006
L2-M8-01	9/28/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'03.9" W 088 05'51.2"	9/28/2006
L2-M8-02	9/28/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'03.9" W 088 05'51.0"	9/28/2006
L2-M8-03	9/28/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'03.9" W 088 05'50.8"	9/28/2006
L2-M8-04	9/28/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'03.8" W 088 05'51.0"	9/28/2006
L2-M8-05	9/28/2006	Booster	1	N	H	Y	N	N 41 22'04.0" W 088 05'50.9"	9/28/2006
L2-M8-06	9/28/2006	Booster	1	N	H	Y	N	N 41 22'03.4" W 088 05'51.7"	9/28/2006
L2-M8-07	10/2/2006	Booster	1	N	H	Y	N	N 41 22'03.1" w 088 05'52.1"	10/5/2006
L2-M8-08	10/2/2006	Booster	1	N	H	Y	N	N 41 22'03.3" W 088 05'52.0"	10/5/2006
L2-M8-09	10/2/2006	Booster	1	N	H	Y	N	N 41 22'03.4" W 088 05'51.9"	10/5/2006
L2-M8-10	10/2/2006	Booster	1	N	H	Y	N	N 41 22'03.6" W 088 05'51.9"	10/5/2006
L2-M8-11	10/2/2006	Booster	1	N	H	Y	N	N 41 22'03.7" W 088 05'51.9"	10/5/2006
L2-M8-12	10/2/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'03.8" w 088 05'52.0"	10/5/2006
L2-M8-13	10/2/2006	Booster	1	N	H	Y	N	N 41 22'03.8" W 088 05'52.0"	10/5/2006
L2-M8-14	10/2/2006	Booster	1	N	H	Y	N	N 41 22'04.0" W 088 05'52.0"	10/5/2006
L2-M8-15	10/2/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'03.9" w 088 05'52.1"	10/5/2006
L2-L8-01	10/2/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.5" W 088 05'52.5"	10/5/2006
L2-L8-02	10/2/2006	Shotgun Shell	1	N	H	Y	Y	N 41 22'03.1" W 088 05'52.1"	10/5/2006
L2-L8-03	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.6" W 088 05'52.1"	10/5/2006
L2-L8-04	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.8" W 088 05'52.2"	10/5/2006
L2-L8-05	10/3/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.8" W088 05'52.2"	10/5/2006
L2-L8-06	10/3/2006	Booster	1	N	H	Y	N	n 41 22'02.9" w 088 05'52.2"	10/5/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-L8-07	10/3/2006	Booster	1	N	H	Y	N	N 41 22'03.0"	W 088 05'52.3"	10/5/2006
L2-L8-08	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.9"	W 088 05'52.4"	10/5/2006
L2-L8-09	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.8"	W 088 05'52.3"	10/5/2006
L2-L8-10	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.7"	W 088 05'52.4"	10/5/2006
L2-L8-11	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.6"	W088 05'52.4"	10/5/2006
L2-L8-12	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.6"	W 088 05'52.4"	10/5/2006
L2-L8-13	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.9"	W 088 05'52.4"	10/5/2006
L2-L8-14	10/3/2006	Fuze PD M183	1	N	H	Y	Y	N 41 22'02.3"	W 088 05'52.4"	10/5/2006
L2-L8-15	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.9"	W 088 05'52.2"	10/5/2006
L2-L8-16	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.6"	W 088 05'52.3"	10/5/2006
L2-L8-17	10/3/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.5"	W 088 05'52.3"	10/5/2006
L2-L8-18	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.8"	w 088 05'52.2"	10/5/2006
L2-L8-19	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.5"	W 088 05'52.2"	10/5/2006
L2-L8-20	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.5"	W 088 05'52.2"	10/5/2006
L2-L8-21	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.5"	W 088 05'52.3"	10/5/2006
L2-L8-22	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.5"	W 088 05'52.3"	10/5/2006
L2-L8-23	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.8"	W 088 05'52.2"	10/5/2006
L2-L8-24	10/3/2006	Booster	1	N	H	Y	N	N 41 22'03.1"	W 088 05'52.3"	10/5/2006
L2-L8-25	10/3/2006	Booster	1	N	H	Y	N	N 41 22'02.9"	w 088 05'51.8"	10/5/2006
L2-I4-01	10/3/2006	Fuze MT UNK NOMEN	1	N	H	Y	Y	N 41 22'00.8"	W 088 05'58.1"	10/5/2006
L2-L8-26	10/4/2006	Booster	1	N	H	Y	N	N 41 22'02.3"	W 088 05'52.4"	10/5/2006
L2-L8-27	10/4/2006	Booster	1	N	H	Y	N	N 41 22'02.3"	W 088 05'52.4"	10/5/2006
L2-L8-28	10/4/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.6"	W 088 05'51.6"	10/5/2006
L2-I8-29	10/4/2006	Booster	1	N	H	Y	N	N 41 22'02.8"	W 088 05'51.7"	10/5/2006
L2-L8-30	10/4/2006	Booster	1	N	H	Y	N	N 41 22'02.9"	W 088 05'51.7"	10/5/2006
L2-L8-31	10/4/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.7"	W 088 05'51.6"	10/5/2006
L2-L8-32	10/4/2006	Booster	1	N	H	Y	N	N 41 22'02.3"	w 088 05'51.5"	10/5/2006
L2-L8-33	10/4/2006	Booster	1	N	H	Y	N	N 41 22'02.4"	W 088 05'51.6"	10/5/2006
L2-L8-34	10/4/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.4"	W 088 05'51.6"	10/5/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-L8-35	10/4/2006	Booster	1	N	H	Y	N	N 41 22'02.5" W 088 05'51.6"	10/5/2006
L2-L8-36	10/4/2006	Booster	1	N	H	Y	N	N 41 22'03.0" W 088 05'51.4"	10/5/2006
L2-L8-37	10/4/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.4" W 088 05'51.5"	10/5/2006
L2-I6-01	10/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'00.0" W 088 05'54.7"	10/5/2006
L2-I7-01	10/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'59.7"	10/5/2006
L2-I7-02	10/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'59.8" W 088 05'54.6"	10/5/2006
L2-K9-01	10/5/2006	Booster	1	N	H	Y	N	N 41 22'01.6" W 088 05'50.9"	10/5/2006
L2-K9-02	10/5/2006	Booster	1	N	H	Y	N	N 41 22'01.6" w 088 05'50.9"	10/5/2006
L2-K9-03	10/5/2006	Booster	1	N	H	Y	N	N 41 22'01.3" W 088 05'51.1"	10/5/2006
L2-K9-04	10/5/2006	Booster	1	N	H	Y	N	N 41 22'01.5" W088 05'51.3"	10/5/2006
L2-H7-01	10/9/2006	Booster	1	N	H	Y	N	N 41 21'59.2" W 088 05'54.3"	10/12/2006
L2-K9-05	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.2" W 088 05'51.3"	10/12/2006
L2-K9-06	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.2" W 088 05'51.4"	10/12/2006
L2-K9-07	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'51.2"	10/12/2006
L2-K9-08	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'51.2"	10/12/2006
L2-K9-09	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W088 05'51.2"	10/12/2006
L2-K9-10	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W088 05'51.3"	10/12/2006
L2-K9-11	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.4" w 088 05'51.3"	10/12/2006
L2-K9-12	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'51.3"	10/12/2006
L2-K9-13	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.5" W 088 05'51.3"	10/12/2006
L2-K9-14	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.8" W 088 05'51.2"	10/12/2006
L2-K9-15	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.7" W 088 05'51.5"	10/12/2006
L2-K9-16	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.7" W 088 05'51.5"	10/12/2006
L2-K9-17	10/9/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'01.7" W 088 05'51.3"	10/12/2006
L2-K9-18	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.6" W 088 05'51.4"	10/12/2006
L2-K9-19	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.6" W 088 05'51.4"	10/12/2006
L2-K9-20	10/9/2006	Fuze BD M66A1	1	N	H	Y	Y	N 4122'01.7" W 088 05'51.4"	10/12/2006
L2-K9-21	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.7" W 088 05'51.4"	10/12/2006
L2-K9-22	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.7" W 088 05'51.4"	10/12/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-K9-23	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.7" w 088 05'51.4"	10/12/2006
L2-K9-24	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.7" W 088 05'51.4"	10/12/2006
L2-K9-25	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.7" W 088 05'51.4"	10/12/2006
L2-K9-26	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.6" W 088 05'51.5"	10/12/2006
L2-K9-27	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.6" W 088 05'51.5"	10/12/2006
L2-K9-28	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.6" W 088 05'51.5"	10/12/2006
L2-K9-29	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.6" W 088 05'51.5"	10/12/2006
L2-K9-30	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'51.5"	10/12/2006
L2-K8-01	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.9" W 088 05'51.5"	10/12/2006
L2-K8-02	10/9/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.3" W 088 05'51.5"	10/12/2006
L2-K8-03	10/9/2006	Booster	1	N	H	Y	N	N 41 22'01.5" W 088 05'51.8"	10/12/2006
L2-K8-04	10/9/2006	BLU26 Half ShellW/O Fuze	1	N	H	Y	N	N 41 22'01.5" W 088 05'51.8"	10/12/2006
L2-K8-05	10/10/2006	Booster	1	N	H	Y	N	N 41 22'01.6" W 088 05'51.9"	10/12/2006
L2-K8-06	10/10/2006	Booster	1	N	H	Y	N	N 41 22'02.0" W 088 05'51.6"	10/12/2006
L2-K8-07	10/10/2006	Booster	1	N	H	Y	N	N 41 22'02.2" W 088 05'51.6"	10/12/2006
L2-K8-08	10/10/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.2" W 088 05'51.6"	10/12/2006
L2-K8-09	10/10/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.1" W 088 05'51.4"	10/12/2006
L2-K8-10	10/10/2006	Booster	1	N	H	Y	N	N 41 22'01.6" W 088 05'51.9"	10/12/2006
L2-K8-11	10/10/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'51.7"	10/12/2006
L2-K8-12	10/10/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'51.7"	10/12/2006
L2-K8-13	10/10/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'01.4" W 088 05'51.7"	10/12/2006
L2-K8-14	10/10/2006	Booster	1	N	H	Y	N	N 41 22'01.5" W 088 05'51.8"	10/12/2006
L2-K8-15	10/10/2006	Booster	1	N	H	Y	N	N 41 22'01.4' w 088 05'51.8"	10/12/2006
L2-K8-16	10/10/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'01.4" W 088 05'51.9"	10/12/2006
L2-K8-17	10/10/2006	Booster	1	N	H	Y	N	N 41 22'01.6" w 088 05'51.9"	10/12/2006
L2-K8-18	10/10/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'52.1"	10/12/2006
L2-K8-19	10/10/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'52.1"	10/12/2006
L2-K8-20	10/10/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'01.4" W 088 05'52.1"	10/12/2006
L2-K8-21	10/10/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'01.4" w 088 05'52.1"	10/12/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-K8-22	10/11/2006	Booster	1	N	H	Y	N	N 41 22'01.5" w 088 05'52.2"	10/12/2006
L2-K8-23	10/11/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'52.0"	10/12/2006
L2-K8-24	10/11/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'51.8"	10/12/2006
L2-K8-25	10/11/2006	Booster	1	N	H	Y	N	N 41 22'01.6" W 088 05'51.9"	10/12/2006
L2-K8-26	10/11/2006	Booster	1	N	H	Y	N	N 41 22'01.7" W 088 05'52.1"	10/12/2006
L2-K8-27	10/11/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'52.0"	10/12/2006
L2-K8-28	10/11/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.0" W 088 05'52.0"	10/12/2006
L2-K8-29	10/11/2006	Booster	1	N	H	Y	N	N 41 22'01.7" W088 05'52.1"	10/12/2006
L2-K8-30	10/11/2006	Booster	1	N	H	Y	N	N 41 22'01.8" W 088 05'51.9"	10/12/2006
L2-K8-31	10/11/2006	Fuze BDM66A1	1	N	H	Y	Y	N 41 22'01.8" W 088 05'51.9"	10/12/2006
L2-K8-32	10/12/2006	Booster	1	N	H	Y	N	N 41 22'01.6" W 088 05'51.9"	10/12/2006
L2-K8-33	10/12/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.0" W 088 05'52.0"	10/12/2006
L2-K8-34	10/12/2006	Booster	1	N	H	Y	N	N 41 22'01.8" W 088 05'52.0"	10/12/2006
L2-K8-35	10/12/2006	Booster	1	N	H	Y	N	N 41 22'01.8" W 088 05'52.0"	10/12/2006
L2-K8-36	10/12/2006	Booster	1	N	H	Y	N	N 41 22'01.9" W 088 05'52.1"	10/12/2006
L2-K8-37	10/12/2006	Booster	1	N	H	Y	N	N 41 22'01.8" W 088 05'52.0"	10/12/2006
L2-K8-38	10/12/2006	Booster	1	N	H	Y	N	N 41 22'01.5" W 088 05'52.1"	10/12/2006
L2-K8-39	10/16/2006	Booster	1	N	H	Y	N	N 41 22'01.3" W 088 05'52.3"	10/19/2006
L2-K8-40	10/16/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'01.3" w 088 05'52.3"	10/19/2006
L2-K8-41	10/16/2006	Fuxe PD T83	1	N	H	Y	Y	N 41 22'01.3" W 088 05'52.3"	10/19/2006
L2-K8-42	10/16/2006	Booster	1	N	H	Y	N	N 41 22'02.1" W 088 05'52.0"	10/19/2006
L2-K8-43	10/16/2006	Booster	1	N	H	Y	N	N 41 22'01.5" W 088 05'52.5"	10/19/2006
L2-K8-44	10/16/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'01.6" w 088 05'52.3"	10/19/2006
L2-K8-45	10/16/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.1" W 088 05'52.1"	10/19/2006
L2-K8-46	10/16/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'52.3"	10/19/2006
L2-K8-47	10/16/2006	Booster	1	N	H	Y	N	N 41 22'01.56" W 088 05'52.4"	10/19/2006
L2-K8-48	10/16/2006	Booster	1	N	H	Y	N	N 41 22'01.7" W 088 05'52.3"	10/19/2006
L2-K8-49	10/16/2006	Booster	1	N	H	Y	N	N 41 22'01.9" W 088 05'52.1"	10/19/2006
L2-K8-50	10/16/2006	Booster	1	N	H	Y	N	N 41 22'01.9" W 088 05'52.1"	10/19/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-K8-51	10/16/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'01.9" w 088 05'52.1"	10/19/2006
L2-K8-52	10/16/2006	Booster	1	N	H	Y	N	N 41 22'02.1" W 088 05'52.2"	10/19/2006
L2-K8-53	10/16/2006	Booster	1	N	H	Y	N	N 41 22'02.1" w 088 05'52.2"	10/19/2006
L2-K8-54	10/16/2006	Supplemental Charge	1	N	H	Y	N	N 41 22'02.1" W 088 05'52.2"	10/19/2006
L2-K8-55	10/16/2006	Booster	1	N	H	Y	N	N 41 22'02.2" W 088 05'52.3"	10/19/2006
L2-K8-73	10/17/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'01.9" W 088 05'52.5"	10/19/2006
L2-K8-56	10/17/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'01.6" W 088 05'52.5"	10/19/2006
L2-K8-57	10/17/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'01.9" W 088 05'52.3"	10/19/2006
L2-K8-58	10/17/2006	Booster	1	N	H	Y	N	N 41 22'02.1" W 088 05'52.2"	10/19/2006
L2-K8-59	10/17/2006	Booster	1	N	H	Y	N	N 41 22'02.2" w 088 05'52.1"	10/19/2006
L2-K8-60	10/17/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.2" W 088 05'52.1"	10/19/2006
L2-K8-61	10/17/2006	Booster	1	N	H	Y	N	N 41 22'02.4" W 088 05'52.3"	10/19/2006
L2-K8-62	10/17/2006	Booster	1	N	H	Y	N	N 41 22'01.9" W 088 05'52.5"	10/19/2006
L2-K8-63	10/17/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.0" W 088 05'52.0"	10/19/2006
L2-K8-64	10/17/2006	Booster	1	N	H	Y	N	N 41 22'02.2" W 088 05'52.3"	10/19/2006
L2-K8-65	10/17/2006	Booster	1	N	H	Y	N	N 41 22'02.2" W 088 05'52.3"	10/19/2006
L2-K8-66	10/17/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'52.6"	10/19/2006
L2-K8-67	10/17/2006	Booster	1	N	H	Y	N	N 41 22'01.8" W 088 05'52.4"	10/19/2006
L2-K8-68	10/17/2006	Boosfer	1	N	H	Y	N	N 41 22'01.9" w 088 05'52.5"	10/19/2006
L2-K8-69	10/17/2006	Booster	1	N	H	Y	N	N 41 22'02.0" W 088 05'52.5"	10/19/2006
L2-K8-70	10/17/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'02.1" W 088 05'52.5"	10/19/2006
L2-K8-71	10/17/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.1" W 088 05'52.5"	10/19/2006
L2-K8-72	10/17/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'02.4" W 088 05'52.6"	10/19/2006
L2-K8-74	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.9" W 088 05'52.5"	10/19/2006
L2-J9--01	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.1" W 088 05'51.2"	10/19/2006
L2-J9-02	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.1" W 088 05'51.1"	10/19/2006
L2-J9-03	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.1" w 088 05'51.1"	10/19/2006
L2-J9-04	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.1" W 088 05'51.1"	10/19/2006
L2-J9-05	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.2" W 088 05'51.2"	10/19/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-J9-06	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.1"	W 088 05'51.1"	10/19/2006
L2-J9-07	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.1"	W 088 05'51.1"	10/19/2006
L2-J9-08	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.0"	W 088 05'51.2"	10/19/2006
L2-J9-09	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.0"	w 088 05'51.2"	10/19/2006
L2-J9-10	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.0"	W 088 05'51.2"	10/19/2006
L2-J9-11	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.0"	W 088 05'51.2"	10/19/2006
L2-J9-12	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.0"	w 088 05'52.1"	10/19/2006
L2-J9-13	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.0"	W 088 05'51.2"	10/19/2006
L2-J9-14	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.0"	W 088 05'51.7"	10/19/2006
L2-J9-15	10/18/2006	Booster	1	N	H	Y	N	N 41 22'00.9"	W 088 05'51.7"	10/19/2006
L2-J9-16	10/18/2006	Booster	1	N	H	Y	N	N 41 22'00.8"	W 088 05'51.1"	10/19/2006
L2-J9-17	10/18/2006	Booster	1	N	H	Y	N	N 41 22'00.8"	W 088 05'51.1"	10/19/2006
L2-J9-18	10/18/2006	Booster	1	N	H	Y	N	N 41 22'00.8"	W 088 05'51.1"	10/19/2006
L2-J9-19	10/18/2006	Booster	1	N	H	Y	N	N 41 22'01.0"	W 088 05'51.7"	10/19/2006
L2-H2-01	10/18/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'59.9"	W 088 06'01.5"	10/19/2006
L2-H2-02	10/18/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'00.4"	W 088 06'01.4"	10/19/2006
L2-j9-20	10/19/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'00.7"	W 088 05'51.0"	10/19/2006
L2-J9-21	10/19/2006	Booster	1	N	H	Y	N	N 41 22'00.6"	W 088 05'50.9"	10/19/2006
L2-J9-22	10/19/2006	Booster	1	N	H	Y	N	N 41 22'00.6"	W 088 05'50.9"	10/19/2006
L2-J9-23	10/19/2006	Booster	1	N	H	Y	N	N 41 22'00.6"	W 088 05'50.9"	10/19/2006
L2-J9-24	10/19/2006	Booster	1	N	H	Y	N	N 41 22'00.5"	W 088 05'50.9"	10/19/2006
L2-J9-25	10/19/2006	Booster	1	N	H	Y	N	N 41 22'00.6"	W 088 05'50.9"	10/19/2006
L2-J9-26	10/19/2006	Booster	1	N	H	Y	N	N 41 22'00.9"	W 088 05'51.6"	10/19/2006
L2-J9-27	10/19/2006	Booster	1	N	H	Y	N	N 41 22'00.9"	W 088 05'51.6"	10/19/2006
L2-I3-01	10/23/2006	Fuze PTTF AA MK III A 2	1	N	H	Y	Y	N 41 22'010"	W 088 05'59.6"	10/26/2006
L2-I3-02	10/23/2006	Fuze MT M 43	1	N	H	Y	Y	N 41 22'01.2"	W 088 05'59.2"	10/26/2006
L2-J9-28	10/23/2006	Booster	1	N	H	Y	N	N 41 22'01.2"	W 088 05'50.5"	10/26/2006
L2-J9-29	10/23/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'00.5"	W 088 05'50.7"	10/26/2006
L2-J9-30	10/23/2006	Booster	1	N	H	Y	N	N 41 22'00.4"	W 088 05'50.9"	10/26/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-J9-31	10/23/2006	Booster	1	N	H	Y	N	N 41 22'00.5"	W 088 05'51.0"	10/26/2006
L2-J9-32	10/23/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'00.5"	W 088 05'51.0"	10/26/2006
L2-J9-33	10/23/2006	Booster	1	N	H	Y	N	N 41 22'00.3"	W 088 05'50.9"	10/26/2006
L2-J9-34	10/24/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'50.8"	10/26/2006
L2-J9-35	10/24/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'50.8"	10/26/2006
L2-J9-36	10/24/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'50.8"	10/26/2006
L2-J9-37	10/24/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'50.8"	10/26/2006
L2-J9-38	10/24/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'50.8"	10/26/2006
L2-J9-39	10/24/2006	Booster	1	N	H	Y	N	N 41 22'00.3"	W 088 05'51.4"	10/26/2006
L2-J9-40	10/24/2006	Booster	1	N	H	Y	N	N 41 22'00.2"	W 088 05'51.2"	10/26/2006
L2-J9-41	10/24/2006	High ExplosiveChunks (4)	1	N	H	Y	N	N 41 22'00.2"	W 088 05'51.0"	10/26/2006
L2-J9-42	10/24/2006	Booster	1	N	H	Y	N	N 41 22'00.3"	W 088 05'51.4"	10/26/2006
L2-J9-43	10/24/2006	BLU 26 Half w/o fuze	1	N	H	Y	N	N 41 22'00.4"	W 088 05'51.6"	10/26/2006
L2-I0-01	10/24/2006	Fuze MT M 43	1	N	H	Y	Y	N 41 22'01.5"	W 088 06'02.2"	10/26/2006
L2-I9-01	10/24/2006	Booster	1	N	H	Y	N	N 41 21'59.9"	W 088 05'50.8"	10/26/2006
L2-I9-02	10/24/2006	Booster	1	N	H	Y	N	N 41 21'59.9"	W 088 05'50.8"	10/26/2006
L2-I0-03	10/24/2006	Booster	1	N	H	Y	N	N 41 21'59.9"	W 088 05'51.6"	10/26/2006
L2-I9-04	10/24/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'00.0"	W 088 05'51.4"	10/26/2006
L2-I9-05	10/24/2006	Booster	1	N	H	Y	N	N 41 21'59.9"	W 088 05'51.1"	10/26/2006
L2-I9-06	10/24/2006	Booster	1	N	H	Y	N	N 41 21'59.9"	W 088 05'51.1"	10/26/2006
I2-i9-07	10/25/2006	Booster	1	N	H	Y	N	N 41 22'oo.7"	W 088 05'51.0"	10/26/2006
L2-I9-08	10/25/2006	Booster	1	N	H	Y	N	N 41 22'00.7"	W 088 05'51.0"	10/26/2006
L2-I9-09	10/25/2006	Booster	1	N	H	Y	N	N 41 22'00.1"	W 088 05'51.4"	10/26/2006
L2-I9-10	10/25/2006	Booster	1	N	H	Y	N	N 41 21'59.9"	W 088 05'51.8"	10/26/2006
L2-I1-01	10/25/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'01.1"	W 088 06'01.2"	10/26/2006
L2-I9-11	10/26/2006	Booster	1	N	H	Y	N	N 41 21'59.4"	W 088 05'51.7"	10/26/2006
L2-I9-12	10/26/2006	Booster	1	N	H	Y	N	N 41 21'59.4"	W 088 05'51.7"	10/26/2006
L2-I9-13	10/26/2006	Booster	1	N	H	Y	N	N 41 21'59.3"	W 088 05'50.9"	10/26/2006
L2-H9-02	10/30/2006	Booster	1	N	H	Y	N	N 41 21'59.1"	W 088 05'51.6"	1/2/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-I9-14	10/30/2006	Booster	1	N	H	Y	N	N 41 21'59.5"	W 088 05'52.1"	11/2/2006
L2-I9-15	10/30/2006	Booster	1	N	H	Y	N	N 41 21'59.5"	W 088 05'52.1"	11/2/2006
L2-H9-01	10/30/2006	Booster	1	N	H	Y	N	N 41 21'59.2"	W 088 05'51.8"	11/2/2006
L2-H9-03	10/30/2006	Booster	1	N	H	Y	N	N 41 21'58.5"	W 088 05'51.0"	11/2/2006
L2-H9-04	10/30/2006	Booster	1	N	H	Y	N	N 41 21'58.6"	W 088 05'51.8"	11/2/2006
L2-H9-05	10/30/2006	Booster	1	N	H	Y	N	N 41 21'58.4"	W 088 05'51.8"	11/2/2006
L2-H9-06	10/30/2006	Booster	1	N	H	Y	N	N 41 21'58.4"	W 088 05'51.8"	11/2/2006
L2-H9-07	10/30/2006	Booster	1	N	H	Y	N	N 41 21'58.4"	W 088 05'51.8"	11/2/2006
L2-D5-01	10/31/2006	Fuze PD M48	1	N	H	Y	Y	N 41 21'556.1"	W 088 05'57.9"	11/2/2006
L2-D5-02	10/31/2006	Booster	1	N	H	Y	N	N 41 21'56.0"	W 088 05'57.8"	11/2/2006
L2-D5-03	10/31/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 21'56.0"	W 088 05'57.9"	11/2/2006
L2-D5-04	10/31/2006	Booster	1	N	H	Y	N	N 41 21'55.9"	W 088 05'57.9"	11/2/2006
L2-D5-05	10/31/2006	Booster	1	N	H	Y	N	N 41 21'55.2"	W 088 05'58.4"	11/2/2006
L2-R7-01	10/31/2006	Booster	1	N	H	Y	N	N 41 22'08.4"	W 088 05'51.7"	11/2/2006
L2-R7-02	10/31/2006	Booster	1	N	H	Y	N	N 41 22'08.6"	W 088 05'51.5"	11/2/2006
L2-Q7-01	10/31/2006	Fuze PD T83	1	N	H	Y	N	N 41 22'06.8"	W 088 05'50.7"	11/2/2006
L2-Q7-02	10/31/2006	Booster	1	N	H	Y	N	N 41 22'08.2"	W 088 05'52.0"	11/2/2006
L2-Q7-03	10/31/2006	Booster	1	N	H	Y	N	N 41 22'07.9"	W 088 05'51.2"	11/2/2006
L2-H1-01	10/31/2006	High Explosive Chunks (approx	1	N	H	Y	N	N 41 21'59.1"	W 088 05'53.2"	11/2/2006
L2-P7-01	10/31/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.7"	W 088 05'51.6"	11/2/2006
L2-P7-02	10/31/2006	Booster	1	N	H	Y	N	N 41 22'06.4"	W 088 05'51.5"	11/2/2006
L2-P7-03	10/31/2006	Booster	1	N	H	Y	N	N 41 22'06.4"	W 088 05'51.5"	11/2/2006
L2-P7-04	10/31/2006	Booster	1	N	H	Y	N	N 41 22'06.7"	W 088 05'51.4"	11/2/2006
L2-C4-01	10/31/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'54.8"	W 088 05'58.9"	11/2/2006
L2-P7-05	11/1/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'51.5"	11/2/2006
L2-P7-06	11/1/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.6"	W 088 05'51.6"	11/2/2006
L2-P7-07	11/1/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'51.6"	11/2/2006
L2-P7-08	11/1/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'51.0"	11/2/2006
L2-P7-09	11/1/2006	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'52.2"	11/2/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-P7-10	11/1/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'52.3"	11/2/2006
L2-P7-11	11/1/2006	Booster	1	N	H	Y	N	N 41 22'06.6"	W 088 05'51.8"	11/2/2006
L2-P7-12	11/1/2006	Booster	1	N	H	Y	N	N 41 22'06.6"	W 088 05'51.7"	11/2/2006
L2-P7-13	11/1/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.7"	W 088 05'52.1"	11/2/2006
L2-P7-14	11/1/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.7"	W 088 05'52.2"	11/2/2006
L2-P7-15	11/1/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.7"	W 088 05'52.2"	11/2/2006
L2-P7-16	11/1/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.6"	W 088 05'52.2"	11/2/2006
L2-P7-17	11/1/2006	Booster	1	N	H	Y	N	N 41 22'06.4"	W 088 05'52.1"	11/2/2006
L2-P7-18	11/1/2006	Booster	1	N	H	Y	N	N 41 22'06.4"	W 088 05'52.3"	11/2/2006
L2-P7-19	11/1/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'52.2"	11/2/2006
L2-P7-20	11/1/2006	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'52.1"	11/2/2006
L2-P7-21	11/1/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'52.4"	11/2/2006
L2-P7-22	11/1/2006	Booster	1	N	H	Y	N	N 41 22'06.3"	W 088 05'52.4"	11/2/2006
L2-P7-23	11/1/2006	Booster	1	N	H	Y	N	N 41 22'06.3"	W 088 05'52.5"	11/2/2006
L2-P7-24	11/1/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.1"	W 088 05'52.5"	11/2/2006
L2-P7-25	11/1/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.8"	W 088 05'52.4"	11/2/2006
L2-P7-26	11/1/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.8"	W 088 05'52.5"	11/2/2006
L2-P7-27	11/1/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.2"	W 088 05'52.7"	11/2/2006
L2-P7-28	11/1/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'52.3"	11/2/2006
L2-P7-29	11/1/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'52.2"	11/2/2006
L2-P7-30	11/1/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'52.2"	11/2/2006
L2-P7-31	11/1/2006	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'52.5"	11/2/2006
L2-P7-32	11/1/2006	Booster	1	N	H	Y	N	N 41 22'07.8"	w 088 05'52.5"	11/2/2006
L2-H8-02	11/1/2006	Booster	1	N	H	Y	N	N 41 21'58.9"	W 088 05'53.3"	11/2/2006
L2-I8-01	11/1/2006	Booster	1	N	H	Y	N	N 41 21'59.8"	W 088 05'53.0"	11/2/2006
L2-I8-02	11/1/2006	Booster	1	N	H	Y	N	N 41 22'00.0"	W 088 05'53.0"	11/2/2006
L2-I8-03	11/1/2006	Booster	1	N	H	Y	N	N 41 21'59.7"	W 088 05'51.9"	11/2/2006
L2-I8-04	11/1/2006	Booster	1	N	H	Y	N	N 41 21'59.7"	W 088 05'51.9"	11/2/2006
L2-I8-05	11/1/2006	Booster	1	N	H	Y	N	N 41 21'59.5"	W 088 05'52.6"	11/2/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-I8-06	11/1/2006	Booster	1	N	H	Y	N	N 41 21'59.5" W 088 05'52.6"	11/2/2006
L2-I8-07	11/1/2006	Booster	1	N	H	Y	N	N 41 21'59.5" W 088 05'52.6"	11/2/2006
L2-L1--01	11/1/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.1" W 088 06'01.3"	11/2/2006
L2-L1-02	11/1/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.3" W 088 06'00.6"	11/2/2006
L2-I8-08	11/2/2006	Booster	1	N	H	Y	N	N 41 21'59.8" W 088 05'52.3"	11/2/2006
L2-I8-09	11/2/2006	Booster	1	N	H	Y	N	N 41 21'59.8" W 088 05'52.3"	11/2/2006
L2-I8-10	11/2/2006	Booster	1	N	H	Y	N	N 41 21'59.8" W 088 05'52.2"	11/2/2006
L2-O7-01	11/2/2006	Booster	1	N	H	Y	N	N 41 22'0.5.7" W 088 05'52.6"	11/2/2006
L2-O7-02	11/2/2006	Booster	1	N	H	Y	N	N 41 22'05.6" W088 05'52.5"	11/2/2006
L2-O7-03	11/2/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.6" W 088 05'52.5"	11/2/2006
L2-O7-04	11/2/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.2" W 088 05'51.6"	11/2/2006
L2-O7-05	11/2/2006	Booster	1	N	H	Y	N	N 41 22'06.3" W 088 05'52.0"	11/2/2006
L2-O7-06	11/2/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.0" W 088 05'52.5"	11/2/2006
L2-O7-07	11/2/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.5" W 088 05'51.8"	11/2/2006
L2-O7-08	11/2/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.6" W 088 05'51.7"	11/2/2006
L2-O7-09	11/2/2006	Booster	1	N	H	Y	N	N 41 22'06.4" W 088 05'51.5"	11/2/2006
L2-J8-01	11/2/2006	Booster	1	N	H	Y	N	N 41 22'00.9" W 088 05'52.1"	11/2/2006
L2-J8-02	11/2/2006	Booster	1	N	H	Y	N	N 41 22'00.8" W 088 05'52.4"	11/2/2006
L2-J8-03	11/2/2006	Booster	1	N	H	Y	N	N 41 22'011" W 088 05'51.9"	11/2/2006
L2-J8-04	11/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'01.0" W 088 05'52.2"	11/9/2006
L2-J8-05	11/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'01.2" W 088 05'51.9"	11/9/2006
L2-J8-06	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.1" W 088 05'51.8"	11/9/2006
L2-J8-07	11/6/2006	Booster	1	N	H	Y	N	N41 22'01.2" W 088 05'52.0"	11/9/2006
L2-J8-08	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.2" W 088 05'52.0"	11/9/2006
L2-J8-09	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.2" W 088 05'52.0"	11/9/2006
L2-J8-10	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.2" W 088 05'52.0"	11/9/2006
L2-J8-11	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.2" W 088 05'52.0"	11/9/2006
L2-J8-12	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.2" W 088 05'52.0"	11/9/2006
L2-J8-13	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.2" W 088 05'52.1"	11/9/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-J8-14	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.2" W 088 05'52.1"	11/9/2006
L2-J8-15	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.0" W 088 05'51.6"	11/9/2006
L2-J8-16	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.0" W 088 05'51.6"	11/9/2006
L2-J8-17	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.1" W 088 05'51.8"	11/9/2006
L2-J8-18	11/6/2006	Booster	1	N	H	Y	N	N 41 22'01.1" W 088 05'51.8"	11/9/2006
L2-J8-19	11/6/2006	Booster	1	N	H	Y	N	N 41 22'00.8" W 088 05'51.6"	11/9/2006
L2-D4-01	11/6/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 21'55.9" W 088 05'59.0"	11/9/2006
L2-D4-02	11/6/2006	Booster	1	N	H	Y	N	N 41 21'55.9" W 088 05'59.0"	11/9/2006
L2-D4-03	11/6/2006	Booster	1	N	H	Y	N	N 41 21'55.9" W 088 05'59.0"	11/9/2006
L2-D4-04	11/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'55.3" W 088 05'59.2"	11/9/2006
L2-M7-01	11/6/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'03.1" W 088 05'52.2"	11/9/2006
L2-M7-02	11/6/2006	Booster	1	N	H	Y	N	N 41 22'03.5" W 088 05'52.2"	11/9/2006
L2-M7-03	11/6/2006	Booster	1	N	H	Y	N	N 41 22'04.7" W 088 05'51.7"	11/9/2006
L2-M7-04	11/6/2006	Booster	1	N	H	Y	N	N 41 22'04.8" W 088 05'51.8"	11/9/2006
L2-M7-05	11/6/2006	Booster	1	N	H	Y	N	N 41 22'03.6" W 088 05'52.3"	11/9/2006
L2-M7-06	11/6/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'52.6"	11/9/2006
L2-M7-07	11/6/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'52.7"	11/9/2006
L2-M7-08	11/6/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.4" W 088 05'52.4"	11/9/2006
L2-M7-09	11/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'03.6" W 088 05'52.9"	11/9/2006
L2-M7-10	11/6/2006	Booster	1	N	H	Y	N	N 41 22'03.4" W 088 05'53.0"	11/9/2006
L2-M7-11	11/6/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'03.5" W 088 05'53.0"	11/9/2006
L2-M7-12	11/6/2006	Booster	1	N	H	Y	N	N 41 22'03.9" W 088 05'52.7"	11/9/2006
L2-M7-13	11/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.2" W 088 05'53.1"	11/9/2006
L2-M7-14	11/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.2" W 088 05'53.0"	11/9/2006
L2-M7-15	11/7/2006	Booster	1	N	H	Y	N	N 41 22'04.3" W 088 05'53.2"	11/9/2006
L2-J8-20	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.4" W 088 05'51.2"	11/9/2006
L2-N7-01	11/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.5" W 088 05'52.9"	11/9/2006
L2-N7-02	11/7/2006	Booster	1	N	H	Y	N	N 41 22'04.5" w 088 05'53.1"	11/9/2006
L2-N7-03	11/7/2006	Booster	1	N	H	Y	N	N 41 22'04.6" W 088 05'53.4"	11/9/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-N7-04	11/7/2006	Booster	1	N	H	Y	N	N 41 22'04.6"	W 088 05'53.4"	11/9/2006
L2-N7-05	11/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.6"	W 088 05'53.4"	11/9/2006
L2-N7-06	11/7/2006	Booster	1	N	H	Y	N	N 41 22'04.7"	W 088 05'53.2"	11/9/2006
L2-N7-07	11/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.1"	W 088 05'52.6"	11/9/2006
L2-N7-08	11/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.7"	W 088 05'52.9"	11/9/2006
L2-N7-09	11/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.4"	W 088 05'52.0"	11/9/2006
L2-N7-10	11/7/2006	Booster	1	N	H	Y	N	N 41 22'04.9"	W 088 05'52.9"	11/9/2006
L2-J7-01	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.1"	W 088 05'54.0"	11/9/2006
L2-J7-02	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.1"	W 088 05'54.3"	11/9/2006
L2-J7-03	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.5"	W 088 05'54.5"	11/9/2006
L2-J7-04	11/7/2006	Booster	1	N	H	Y	N	N 41 22'00.9"	W 088 05'53.6"	11/9/2006
L2-J7-05	11/7/2006	Booster	1	N	H	Y	N	N 541 22'01.1"	W 088 05'53.7"	11/9/2006
L2-J7-06	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.0"	W 088 05'53.6"	11/9/2006
L2-J7-07	11/7/2006	Booster	1	N	H	Y	N	N 41 22'00.8"	W 088 05'53.4"	11/9/2006
L2-J7-08	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.3"	W 088 05'53.6"	11/9/2006
L2-J7-09	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.3"	w 088 05'53.6"	11/9/2006
L2-J7-10	11/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'01.3"	W 088 05'53.6"	11/9/2006
L2-J7-11	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.1"	W 088 05'53.2"	11/9/2006
L2-J7-12	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.6"	W 088 05'52.9"	11/9/2006
L2-J7-13	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.5"	W 088 05'53.0"	11/9/2006
L2-K7-01	11/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'02.0"	W 088 05'53.2"	11/9/2006
L2-K7-02	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.9"	W 088 05'53.5"	11/9/2006
L2-K7-03	11/7/2006	Booster	1	N	H	Y	N	N 41 22'01.9"	W 088 05'53.5"	11/9/2006
L2-K7-04	11/7/2006	Booster	1	N	H	Y	N	N 41 22'02.1"	W 088 05'53.1"	11/9/2006
L2-K7-05	11/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'02.3"	W 088 05'53.0"	11/9/2006
L2-K7-06	11/7/2006	Booster	1	N	H	Y	N	N 41 22'02.5"	W 088 05'52.8"	11/9/2006
L2-K7-07	11/7/2006	Booster	1	N	H	Y	N	N 41 22'02.5"	W 088 05'52.8"	11/9/2006
L2-K7-08	11/7/2006	Booster	1	N	H	Y	N	N 41 22'02.5"	W 088 05'53.2"	11/9/2006
L2-K7-09	11/8/2006	Booster	1	N	H	Y	N	N 41 22'02.1"	W 088 05'53.6"	11/9/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-K7-10	11/8/2006	Booster	1	N	H	Y	N	N 41 22'02.1"	W 088 05'53.6"	11/9/2006
L2-K7-11	11/8/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.1"	W 088 05'53.6"	11/9/2006
L2-K7-12	11/8/2006	Booster	1	N	H	Y	N	N 41 22'02.1"	W 088 05'53.8"	11/9/2006
L2-K7-13	11/8/2006	Booster	1	N	H	Y	N	N 41 22'01.6"	W 088 05'53.8"	11/9/2006
L2-D1-01	11/8/2006	Booster	1	N	H	Y	N	N 41 21'56.5"	W 088 06'02.4"	11/9/2006
L2-D1-02	11/8/2006	Booster	1	N	H	Y	N	N 41 21'55.8"	W 088 06'02.8"	11/9/2006
L2-D1-03	11/8/2006	Fuze MT M61A2	1	N	H	Y	Y	N 41 21'55.8"	W 088 06'02.8"	11/9/2006
L2-R6-01	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.6"	W 088 05'52.8"	11/9/2006
L2-R6-02	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.6"	W 088 05'52.8"	11/9/2006
L2-R6-03	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.6"	W 088 05'53.0"	11/9/2006
L2-R6-04	11/8/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'08.6"	W 088 05'53.1"	11/9/2006
L2-R6-05	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.1"	W 088 05'53.5"	11/9/2006
L2-R6-06	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'52.7"	11/9/2006
L2-L2-01	11/8/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.6"	W 088 05'59.9"	11/9/2006
L2-L2-02	11/8/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.8"	W 088 05'59.9"	11/9/2006
L2-E1-01	11/8/2006	Booster	1	N	H	Y	N	N 41 21'57.5"	W 088 06'02.4"	11/9/2006
L2-L7-01	11/8/2006	Booster	1	N	H	Y	N	N 41 22'03.7"	W 088 05'53.8"	11/9/2006
L2-L7-02	11/8/2006	Booster	1	N	H	Y	N	N 41 22'02.4"	W 088 05'53.7"	11/9/2006
L2-L7-03	11/8/2006	Booster	1	N	H	Y	N	N 41 22'04.3"	W 088 05'54.0"	11/9/2006
L2-L7-04	11/8/2006	Booster	1	N	H	Y	N	N 41 22'02.8"	W 088 05'53.2"	11/9/2006
L2-L7-05	11/8/2006	Booster	1	N	H	Y	N	N 41 22'02.8"	W 088 05'53.2"	11/9/2006
L2-L7-06	11/8/2006	Booster	1	N	H	Y	N	N 41 22'03.4"	W 088 05'53.1"	11/9/2006
L2-Q6-01	11/8/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.4"	W 088 05'52.7"	11/9/2006
L2-Q6-02	11/8/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.4"	W 088 05'52.7"	11/9/2006
L2-Q6-03	11/8/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'08.7"	W 088 05'51.0"	11/9/2006
L2-Q7-04	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.5"	W 088 05'51.5"	11/9/2006
L2-Q6-05	11/8/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'08.4"	W 088 05'51.7"	11/9/2006
L2-Q6-06	11/8/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'08.4"	W 088 05'52.2"	11/9/2006
L2-Q6-07	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.1"	W 088 05'53.1"	11/9/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-Q6-08	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.2" W 088 05'53.0"	11/9/2006
L2-Q6-09	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.0" W 088 05'52.7"	11/9/2006
L2-Q6-10	11/8/2006	Booster	1	N	H	Y	N	N 41 22'07.9" W 088 05'52.8"	11/9/2006
L2-Q6-11	11/8/2006	Booster	1	N	H	Y	N	N 41 22'07.0" W 088 05'53.7"	11/9/2006
L2-Q6-12	11/8/2006	Booster	1	N	H	Y	N	N 41 22'07.7" W 088 05'52.8"	11/9/2006
L2-Q6-13	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.4" W 088 05'53.6"	11/9/2006
L2-Q6-14	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.8" W 088 06'53.7"	11/9/2006
L2-Q6-15	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.2" W 088 05'53.7"	11/9/2006
L2-Q6-16	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.2" W 088 05'53.7"	11/9/2006
L2-Q6-17	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.2" W 088 05'53.7"	11/9/2006
L2-Q6-18	11/8/2006	Booster	1	N	H	Y	N	N 41 22'08.0" W 088 05'52.9"	11/9/2006
L2-L7-07	11/9/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'03.3" W 088 05'53.1"	11/9/2006
L2-L7-08	11/9/2006	Booster	1	N	H	Y	N	N 41 22'03.4" W 088 05'53.2"	11/9/2006
L2-L7-09	11/9/2006	Booster	1	N	H	Y	N	N 41 22'03.4" W 088 05'53.1"	11/9/2006
L2-L7-10	11/9/2006	Booster	1	N	H	Y	N	N 41 22'03.2" W 088 05'53.6"	11/9/2006
L2-L7-11	11/9/2006	Booster	1	N	H	Y	N	N 41 22'03.0" W 088 05'53.5"	11/9/2006
L2-L7-12	11/9/2006	Booster	1	N	H	Y	N	N 41 22'02.8" W 088 05'53.0"	11/9/2006
L2-L7-13	11/9/2006	Booster	1	N	H	Y	N	N 41 22'02.6" W 088 05'52.1"	11/9/2006
L2-L7-14	11/9/2006	Booster	1	N	H	Y	N	N 41 22'02.5" W 088 05'52.8"	11/9/2006
L2-L7-15	11/9/2006	Booster	1	N	H	Y	N	N 41 22'02.5" W 088 05'52.8"	11/9/2006
L2-L7-16	11/9/2006	Booster	1	N	H	Y	N	N 41 22'02.5" W 088 05'52.8"	11/9/2006
L2-L7-17	11/9/2006	Booster	1	N	H	Y	N	N 41 22'02.4" W 088 05'52.5"	11/9/2006
L2-L7-18	11/9/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'03.0" W 088 05'52.9"	11/9/2006
L2-L7-19	11/9/2006	Booster	1	N	H	Y	N	N 41 22'03.0" W 088 05'52.9"	11/9/2006
L2-L7-20	11/9/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'03.4" W 088 05'52.9"	11/9/2006
L2-L7-21	11/9/2006	Booster	1	N	H	Y	N	N 41 22'03.4" W 088 05'52.5"	11/9/2006
L2-L7-22	11/9/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'02.4" W 088 05'52.5"	11/9/2006
L2-L7-23	11/9/2006	Booster	1	N	H	Y	N	N 41 22'02.8" W 088 05'52.0"	11/9/2006
L2-L7-24	11/9/2006	BLU 26 Half w/o Fuze	1	N	H	Y	N	N 41 22'02.8" W 088 05'52.0"	11/9/2006

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-L7-25	11/9/2006	Booster	1	N	H	Y	N	N 41 22'03.0" W 088 05'52.5"	11/9/2006
L2-L7-26	11/9/2006	Booster	1	N	H	Y	N	N 41 22'02.9" W 088 05'52.4"	11/9/2006
L2-L7-27	11/9/2006	Booster	1	N	H	Y	N	N 41 22'02.0" W 088 05'52.5"	11/9/2006
L2-L7-28	11/9/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.5" W 088 05'52.7"	11/9/2006
L2-Q5-01	11/9/2006	Booster	1	N	H	Y	N	N 41 22'07.8" W 088 05'53.3"	11/9/2006
L2-Q5-02	11/9/2006	Booster	1	N	H	Y	N	N 41 22'07.9" W 088 05'53.2"	11/9/2006
L2-Q5-03	11/9/2006	Booster	1	N	H	Y	N	N 41 22'08.0" W 088 05'53.9"	11/9/2006
L2-Q5-04	11/9/2006	Booster	1	N	H	Y	N	N 41 22'08.0" W 088 05'53.9"	11/9/2006
L2-Q5-05	11/9/2006	Booster	1	N	H	Y	N	N 41 22'08.7" W 088 05'53.9"	11/9/2006
L2-Q5-06	11/9/2006	Booster	1	N	H	Y	N	N 41 22'08.0" w 088 05'54.4"	11/9/2006
L2-Q5-07	11/9/2006	Booster	1	N	H	Y	N	N 41 22'08.0" w 088 05'54.4"	11/9/2006
L2-Q5-08	11/9/2006	Booster	1	N	H	Y	N	N 41 22'08.0" W 088 05'55.2"	11/9/2006
L2-Q5-09	11/9/2006	Booster	1	N	H	Y	N	N 41 22'07.8" W 088 05'54.9"	11/9/2006
L2-R5-01	11/9/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'09.0" W 088 05'53.8"	11/9/2006
L2-R5-02	11/9/2006	Booster	1	N	H	Y	N	N 41 22'08.4" W 088 05'53.9"	11/9/2006
L2-R5-03	11/9/2006	Booster	1	N	H	Y	N	N 41 22'08.4" W 088 05'53.1"	11/9/2006
L2-M1-01	11/9/2006	Fuze PD T83	1	N	H	Y	N	N 41 22'05.5" W 088 06'00.0"	11/9/2006
L2-M1-02	11/9/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.1" W 088 05'59.8"	11/9/2006
L2-M1-03	11/9/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.1" W 088 05'59.6"	11/9/2006
L2-M1-04	11/9/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.4" W 088 06.00.5"	11/9/2006
L2-M1-05	11/9/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 06'00.3"	11/9/2006
L2-M1-06	11/9/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.7" W 088 06'00.4"	11/9/2006
L2-M1-07	11/9/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 06.00.5"	11/9/2006
L2-R4-01	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.0" W 088 05'54.4"	11/6/2006
L2-R4-02	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.5" W 088 05'54.3"	11/6/2006
L2-Q5-10	11/13/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'08.1" w 088 05'54.8"	11/6/2006
L2-Q5-11	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.0" W 088 05'54.8"	11/6/2006
L2-Q5-12	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.2" W 088 05'54.2"	11/6/2006
L2-Q5-13	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.5" W 088 05'55.2"	11/6/2006
L2-Q5-14	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.5" W 088 05'55.6"	11/6/2006
L2-Q5-15	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.4" W 088 05'55.3"	11/6/2006
L2-Q5-16	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.3" W 088 05'55.3"	11/6/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-Q5-17	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.5"	W 088 05'54.9"	11/6/2006
L2-Q5-18	11/13/2006	Booster	1	N	H	Y	N	N 41 22'09.2"	W 088 05'54.5"	11/6/2006
L2-Q5-19	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.9"	W 088 05'54.5"	11/6/2006
L2-M6-01	11/13/2006	Booster	1	N	H	Y	N	N 41 22'03.9"	W 088 05'54.7"	11/6/2006
L2-M6-02	11/13/2006	Booster	1	N	H	Y	N	N 41 22'03.9"	W 088 05'54.2"	11/6/2006
L2-M6-03	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.2"	W 088 05'53.9"	11/6/2006
L2-M6-04	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.2"	W 088 05'53.9"	11/6/2006
L2-M6-05	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.2"	W 088 05'53.9"	11/6/2006
L2-M6-06	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.2"	W 088 05'53.9"	11/6/2006
L2-M6-07	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.1"	W 088 05'53.5"	11/6/2006
L2-M6-08	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.6"	W 088 05'53.6"	11/6/2006
L2-M6-09	11/13/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.4"	W 088 05'53.7"	11/6/2006
L2-M6-10	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.4"	W 088 05'53.6"	11/6/2006
L2-M6-11	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.4"	W 088 05'53.6"	11/6/2006
L2-M6-12	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.3"	W 088 05'53.4"	11/6/2006
L2-M6-13	11/13/2006	Booster	1	N	H	Y	N	N 41 22'03.6"	W 088 05'53.4"	11/6/2006
L2-M6-14	11/13/2006	Booster	1	N	H	Y	N	n 41 22'03.6"	W 088 05'53.4"	11/6/2006
L2-M6-15	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.4"	W 088 05'53.5"	11/6/2006
L2-M6-16	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.0"	w 088 05'53.2"	11/6/2006
L2-M2-01	11/13/2006	Fuze PD T83	1	N	H	Y	Y	41 22'05.2"	W 088 05'59.8"	11/6/2006
L2-M2-02	11/13/2006	Booster	1	N	H	Y	N	N 41 22'04.9"	W 088 05'59.8"	11/6/2006
L2-M2-03	11/13/2006	Booster	1	N	H	Y	N	N 41 22'05.1"	W 088 05'59.6"	11/6/2006
L2-M2-04	11/13/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.4"	W 088 05'59.2"	11/6/2006
L2-M2-05	11/13/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.3"	W 088 05'59.5"	11/6/2006
L2-M2-06	11/13/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.5"	W 088 05'59.8"	11/6/2006
L2-M2-07	11/13/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.4"	W 088 05'59.6"	11/6/2006
L2-M2-08	11/13/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.7"	W 088 05'59.5"	11/6/2006
L2-M2-09	11/13/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.8"	W 088 05'59.4"	11/6/2006
L2-Q4-01	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'55.2"	11/6/2006
L2-Q4-02	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'55.2"	11/6/2006
L2-Q4-03	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'55.3"	11/6/2006
L2-Q4-04	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.3"	W 088 05'54.4"	11/6/2006
L2-Q4-05	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.7"	W 088 05'54.4"	11/6/2006
L2-Q4-06	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.6"	W 088 05'54.7"	11/6/2006
L2-Q4-07	11/13/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.8"	W 088 05'55.7"	11/6/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-Q4-08	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'55.0"	11/6/2006
L2-Q4-09	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.2"	W 088 05'55.1"	11/6/2006
L2-Q4-10	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.7"	W 088 05'54.6"	11/6/2006
L2-Q4-11	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.4"	W 088 05'54.8"	11/6/2006
L2-Q4-12	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.5"	W 088 05'55.1"	11/6/2006
L2-Q4-13	11/13/2006	Booster	1	N	H	Y	N	N 41 22'09.5"	W 088 05'54.6"	11/6/2006
L2-Q4-14	11/13/2006	Booster	1	N	H	Y	N	N 41 22'07.6"	W 088 05'54.8"	11/6/2006
L2-Q4-15	11/13/2006	Booster	1	N	H	Y	N	N 41 22'07.6"	W 088 05'54.8"	11/6/2006
L2-Q4-16	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.8"	W 088 05'54.7"	11/6/2006
L2-Q4-17	11/13/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'55.3"	11/6/2006
L2-Q4-18	11/13/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'08.0"	W 088 05'55.3"	11/6/2006
L2-Q4-19	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.1"	W 088 05'56.1"	11/6/2006
L2-Q4-20	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.2"	W 088 05'55.4"	11/6/2006
L2-Q4-21	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.7"	W 088 05'55.2"	11/6/2006
L2-Q4-22	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.7"	W 088 05'55.2"	11/6/2006
L2-Q4-23	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.6"	W 088 05'55.5"	11/6/2006
L2-Q4-24	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.6"	W 088 05'55.5"	11/6/2006
L2-Q4-25	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.7"	W 088 05'55.4"	11/6/2006
L2-Q4-26	11/14/2006	Booster	1	N	H	Y	N	N 41 22'09.2"	W 088 05'54.9"	11/6/2006
L2-Q4-27	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.7"	W 088 05'55.3"	11/6/2006
L2-Q4-28	11/14/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'08.5"	W 088 05'55.6"	11/6/2006
L2-Q4-29	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.9"	W 088 05'55.3"	11/6/2006
L2-Q4-30	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.8"	W 088 05'55.7"	11/6/2006
L2-Q4-31	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'55.6"	11/6/2006
L2-Q4-32	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'55.3"	11/6/2006
L2-Q4-33	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'55.3"	11/6/2006
L2-Q4-34	11/14/2006	Fuze Time & SQ M54	1	N	H	Y	Y	N 41 22'08.5"	W 088 05'55.8"	11/6/2006
L2-Q4-35	11/14/2006	Booster	1	N	H	Y	N	N 41 22'07.9"	W 088 05'56.6"	11/6/2006
L2-Q4-36	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'56.6"	11/6/2006
L2-Q4-37	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'55.9"	11/6/2006
L2-Q4-38	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'55.9"	11/6/2006
L2-Q4-39	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.8"	W 088 05'56.5"	11/6/2006
L2-Q4-40	11/14/2006	Booster	1	N	H	Y	N	N 41 22'09.0"	W 088 05'56.8"	11/6/2006
L2-Q4-41	11/14/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'09.5"	W 088 05'57.9"	11/6/2006
L2-Q4-42	11/14/2006	Booster	1	N	H	Y	N	N 41 22'09.5"	W 088 05'57.9"	11/6/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-L6-01	11/14/2006	Booster	1	N	H	Y	N	N 41 22'03.4"	W 088 05'54.2"	11/6/2006
L2-M2-10	11/14/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.9"	W 088 05'59.2"	11/6/2006
L2-M2-11	11/14/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.4"	W 088 05'59.21"	11/6/2006
L2-M2-12	11/14/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.2"	W 088 05'59.0"	11/6/2006
L2-M2-13	11/14/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.4"	W 088 05'59.4"	11/6/2006
L2-M2-14	11/14/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.4"	W 088 05'58.9"	11/6/2006
L2-M2-15	11/14/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.4"	W 088 05'58.8"	11/6/2006
L2-Q3-01	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.3"	W 088 05'56.2"	11/6/2006
L2-Q3-02	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.5"	W 088 05'56.0"	11/6/2006
L2-Q3-03	11/14/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'08.5"	W 088 05'56.0"	11/6/2006
L2-Q3-04	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.8"	W 088 05'56.8"	11/6/2006
L2-Q3-05	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.3"	W 088 05'56.7"	11/6/2006
L2-Q3-06	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.9"	W 088 05'56.0"	11/6/2006
L2-Q3-07	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.9"	W 088 05'55.9"	11/6/2006
L2-Q3-08	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.9"	W 088 05'55.9"	11/6/2006
L2-Q3-09	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.9"	W 088 05'56.0"	11/6/2006
L2-Q3-10	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.9"	W 088 05'56.0"	11/6/2006
L2-Q3-11	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.3"	W 088 05'56.7"	11/6/2006
L2-Q3-12	11/14/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'08.3"	W 088 05'56.7"	11/6/2006
L2-Q3-13	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.6"	W 088 05'56.9"	11/6/2006
L2-Q3-14	11/14/2006	Booster	1	N	H	Y	N	N 41 22'08.6"	W 088 05'56.9"	11/6/2006
L2-M2-16	11/15/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.1"	W 088 05'58.4"	11/6/2006
L2-M2-17	11/15/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.2"	W 088 05'58.5"	11/6/2006
L2-M2-18	11/15/2006	Fuze PD T83	1	N	H	Y	y	N 41 22'05.4"	W 088 05'58.7"	11/6/2006
L2-Q3-15	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.8"	W 088 05'57.2"	11/6/2006
L2-Q3-16	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.7"	W 088 05'57.2"	11/6/2006
L2-Q3-17	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.7"	W 088 05'57.2"	11/6/2006
L2-Q3-18	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.9"	W 088 05'56.9"	11/6/2006
L2-Q3-19	11/15/2006	Booster	1	N	H	Y	N	N 41 22'09.1"	W 088 05'56.7"	11/6/2006
L2-Q3-20	11/15/2006	Booster	1	N	H	Y	N	N 41 22'09.1"	W 088 05'56.7"	11/6/2006
L2-Q3-21`	11/15/2006	Booster	1	N	H	Y	N	N 41 22'09.1"	W 088 05'56.7"	11/6/2006
L2-Q3-22	11/15/2006	Booster	1	N	H	Y	N	N 41 22'009.5"	W 088 05'56.8"	11/6/2006
L2-Q3-23	11/15/2006	Booster	1	N	H	Y	N	N 41 22'09.5"	W 088 05'56.8"	11/6/2006
L2-Q3-24	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.3"	W 088 05'56.8"	11/6/2006
L2-Q3-28	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.3"	W 088 05'56.8"	11/6/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-Q3-26	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.1"	W 088 05'57.3"	11/6/2006
L2-Q3-27	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.1"	W 088 05'57.3"	11/6/2006
L2-Q3-28	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.3"	W 088 05'56.3"	11/6/2006
L2-Q3-29	11/15/2006	Fuze MT M43A1	1	N	H	Y	Y	N 41 22'08.7"	W 088 05'55.7"	11/6/2006
L2-Q3-30	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.3"	W 088 05'57.5"	11/6/2006
L2-Q3-31	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.3"	W 088 05'57.5"	11/6/2006
L2-Q3-32	11/15/2006	Booster	1	N	H	Y	N	N 41 22'09.3"	W 088 05'57.7"	11/6/2006
L2-Q3-33	11/15/2006	Booster	1	N	H	Y	N	N 41 22'09.3"	W 088 05'57.7"	11/6/2006
L2-Q3-34	11/15/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'08.5"	w 088 05'57.9"	11/6/2006
L2-Q3-35	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.5"	W 088 05'57.9"	11/6/2006
L2-Q3-36	11/15/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'08.7"	W 088 05'56.9"	11/6/2006
L2-Q3-37	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.8"	w 088 05'57.4"	11/6/2006
L2-Q3-38	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.7"	W 088 05'57.3"	11/6/2006
L2-Q2-01	11/15/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'09.0"	W 088 05'57.9"	11/6/2006
L2-Q2-02	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.8"	W 088 05'57.9"	11/6/2006
L2-Q2-03	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.7"	W 088 05'57.8"	11/6/2006
L2-Q2-04	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.4"	W 088 05'57.8"	11/6/2006
L2-Q2-05	11/15/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'08.4"	W 088 05'57.8"	11/6/2006
L2-Q2-06	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.3"	W 088 05'57.7"	11/6/2006
L2-Q2-07	11/15/2006	Fuze MT M43A1	1	N	H	Y	Y	N 41 22'09.0"	W 088 05'59.2"	11/6/2006
L2-Q2-08	11/15/2006	Fuze MT M43A1	1	N	H	Y	Y	N 41 22'09.3"	W 088 05'59.5"	11/6/2006
L2-K6-01	11/15/2006	Fuze MT M43A1	1	N	H	Y	Y	N 41 22'01.9"	W 088 05'54.9"	11/6/2006
L2-K6-02	11/15/2006	Booster	1	N	H	Y	N	N 41 22'01.4"	W 088 05'54.2"	11/6/2006
L2-K6-03	11/15/2006	Booster	1	N	H	Y	N	N 41 22'01.4"	W 088 05'54.2"	11/6/2006
L2-N2-01	11/15/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.5"	W 088 05'58.2"	11/6/2006
L2-N2-02	11/15/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.9"	W 088 05'58.2"	11/6/2006
L2-N2-03	11/15/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.3"	W 088 05'58.4"	11/6/2006
L2-P6-01	11/15/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.2"	W 088 05'52.6"	11/6/2006
L2-P6-02	11/15/2006	Booster	1	N	H	Y	N	N 41 22'07.2"	w 088 05'52.6"	11/6/2006
L2-P6-03	11/15/2006	Booster	1	N	H	Y	N	N 41 22'06.9"	W 088 05'52.8"	11/6/2006
L2-P6-04	11/15/2006	Booster	1	N	H	Y	N	N 41 22'06.9"	W 088 05'52.8"	11/6/2006
L2-P6-05	11/15/2006	Booster	1	N	H	Y	N	N 41 22'06.9"	W 088 05'52.8"	11/6/2006
L2-P6-06	11/15/2006	Booster	1	N	H	Y	N	N 41 22'06.9"	W 088 05'52.8"	11/6/2006
L2-P6-07	11/15/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.0"	W 088 05'52.8"	11/6/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-P6-08	11/15/2006	Booster	1	N	H	Y	N	N 41 22'06.6"	W 088 05'52.9"	11/6/2006
L2-P6-09	11/15/2006	Booster	1	N	H	Y	N	N 41 22'08.3"	W 088 05'55.0"	11/6/2006
L2-P6-10	11/15/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'53.0"	11/6/2006
L2-P6-11	11/15/2006	Booster	1	N	H	Y	N	N 41 22'07.8"	W 088 05'53.5"	11/6/2006
L2-P6-12	11/15/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.7"	W 088 05'54.1"	11/6/2006
L2-P6-13	11/15/2006	Booster	1	N	H	Y	N	N 41 22'06.7"	w 088 05'54.9"	11/6/2006
L2-C3-01	11/15/2006	Booster	1	N	H	Y	N	N 41 22'54.7"	W 088 06'00.3"	11/6/2006
L2-N2-05	11/16/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.7"	W 088 05'58.8"	11/29/2006
L2-P6-14	11/16/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.8"	W 088 05'53.3"	11/6/2006
L2-P6-15	11/16/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.0"	w 088 05'53.2"	11/6/2006
L2-P6-16	11/16/2006	Booster	1	N	H	Y	N	N 41 22'06.7"	W 088 05'53.6"	11/6/2006
L2-J6-01	11/16/2006	Booster	1	N	H	Y	N	N 41 22'0.1"	W 088 05'54.4"	11/6/2006
L2-J6-02	11/16/2006	Booster	1	N	H	Y	N	N 41 22'01.5"	W 088 05'53.9"	11/6/2006
L2-N2-04	11/16/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.8"	W 088 05'58.7"	11/29/2006
L2-N2-06	11/16/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.9"	w 088 05'59.2"	11/29/2006
L2-J6-03	11/16/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'01.4"	W 088 0554.6"	11/29/2006
L2-J6-04	11/16/2006	Booster	1	N	H	Y	N	N 41 22'01.4"	w 088 05'54.8"	11/29/2006
L2-J6-05	11/16/2006	Booster	1	N	H	Y	N	N 41 22'01.3"	W 088 05'54.9"	11/29/2006
L2-J6-06	11/16/2006	Booster	1	N	H	Y	N	N 41 22'00.9"	W 088 05'54.9"	11/29/2006
L2-J6-07	11/16/2006	Booster	1	N	H	Y	N	N 41 22'00.9"	W 088 05'54.9"	11/29/2006
L2-J6-08	11/16/2006	Booster	1	N	H	Y	N	N 41 22'00.9"	W 088 05'54.9"	11/29/2006
L2-P6-17	11/16/2006	Booster	1	N	H	Y	N	N 41 22'06.6"	W 088 05'53.9"	11/29/2006
L2-P6-18	11/16/2006	Booster	1	N	H	Y	N	N 41 22'06.7"	W 088 05'53.5"	11/29/2006
L2-P6-19	11/16/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	w 088 05'53.6"	11/29/2006
L2-P6-20	11/16/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'54.2"	11/29/2006
L2-P6-21	11/16/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'54.3"	11/29/2006
L2-P6-22	11/16/2006	Booster	1	N	H	Y	N	N 41 22'07.0"	W 088 05'54.1"	11/29/2006
L2=P6-23	11/16/2006	Booster	1	N	H	Y	N	N 41 22'06.9"	W 088 05'53.6"	11/29/2006
L2-P6-24	11/16/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.9"	W 088 05'53.6"	11/29/2006
L2-P6-25	11/16/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	w 088 05'53.8"	11/29/2006
L2-P6-26	11/16/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'53.6"	11/29/2006
L2-B3-01	11/16/2006	Projo 30mm T328	1	N	H	Y	Y	N 41 21'53.8"	W 088 06'00.0"	11/29/2006
L2-B3-02	11/16/2006	Projo 30mm T328	1	N	H	Y	Y	N 41 22'53.8"	W 088 06'00.0"	11/29/2006
L2-P5-01	11/16/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'54.5"	11/29/2006
L2-P5-02	11/16/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'54.5"	11/29/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-P5-03	11/16/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.5"	W 088 05'54.1"	11/29/2006
L2-P5-04	11/16/2006	Booster	1	N	H	Y	N	N 41 22'07.5"	W 088 05'54.0"	11/29/2006
L2-P5-05	11/16/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.4"	W 088 05'54.1"	11/29/2006
L2-P5-06	11/16/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'54.4"	11/29/2006
L2-P5-07	11/16/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'54.4"	11/29/2006
L2-P5-08	11/16/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'54.4"	11/29/2006
L2-P5-09	11/19/2006	Booster	1	N	H	Y	N	N 41 22'06.9"	W 088 05'53.7"	11/29/2006
L2-P5-10	11/19/2006	Booster	1	N	H	Y	N	N 41 22'07.0"	W 088 05'54.4"	11/29/2006
L2-P5-11	11/19/2006	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'54.4"	11/29/2006
L2-P5-12	11/19/2006	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'54.9"	11/29/2006
L2-P5-13	11/19/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'54.0"	11/29/2006
L2-P5-14	11/19/2006	Booster	1	N	H	Y	N	N 41 22'08.1"	W 088 05'52.5"	11/29/2006
L2-B3-03	11/19/2006	Fuze MT M43A1	1	N	H	Y	Y	`N 41 21'54.6"	W 088 06'00.9"	11/29/2006
L2-B3-04	11/19/2006	Booster	1	N	H	Y	N	N 41 21'54.1"	W 088 06'00.3"	11/29/2006
L2-B3-05	11/19/2006	Booster	1	N	H	Y	N	N 41 21'54.4"	W 088 06'00.8"	11/29/2006
L2-B3-06	11/19/2006	Booster	1	N	H	Y	N	N 41 21'54.4"	W 088 06'01.3"	11/29/2006
L2-N2-07	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.8"	W 088 05'59.1"	11/29/2006
L2-N2-08	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.3"	W 088 05'58.7"	11/29/2006
L2-N2-09	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.6"	W 088 05'59.2"	11/29/2006
L2-N2-10	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.3"	W 088 05'59.2"	11/29/2006
L2-N2-11	11/19/2006	Booster	1	N	H	Y	N	N 41 22'06.3"	W 088 05'59.1"	11/29/2006
L2-N2-12	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.3"	W 088 05'59.1"	11/29/2006
L2-N2-13	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.1"	W 088 05'59.4"	11/29/2006
L2-N2-14	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.2"	W 088 05'59.2"	11/29/2006
L2-N2-15	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.9"	W 088 05'59.0	11/29/2006
L2-N2-16	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.7"	W 088 05'59.1"	11/29/2006
L2-N2-17	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.7"	W 088 05'59.5"	11/29/2006
L2-N2-18	11/19/2006	Booster	1	N	H	Y	N	N 41 22'05.7"	W 088 05'59.3"	11/29/2006
L2-N2-19	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.3"	W 088 05'59.1"	11/29/2006
L2-N2-20	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.0"	W 088 05'59.3"	11/29/2006
L2-N2-21	11/19/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.1"	w 088 05'59.6"	11/29/2006
L2-N2-22	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.1"	W 088 05'59.4"	11/29/2006
L2-N2-23	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.8"	W 088 05'59.9"	11/29/2006
L2-N2-24	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.8"	W 088 05'58.6"	11/29/2006
L2-B4-01	11/20/2006	Booster	1	N	H	Y	N	N 41 21'54.2"	W 088 05'59.9"	11/29/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-N1-01	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.0"	W 088 05'59.8"	11/29/2006
L2-N1-02	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.9"	W 088 05'59.8"	11/29/2006
L2-N1-03	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N41 22'05.7"	w 088 05'59.5"	11/29/2006
L2-N1-04	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.7"	W 088 05'59.7"	11/29/2006
L2-N1-05	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.0"	W 088 05'59.8"	11/29/2006
L2-N1-06	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.6"	W 088 05'59.7"	11/29/2006
L2-N1-07	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.9"	W 088 05'59.6"	11/29/2006
L2-O1-01	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.8"	W 088 05'59.6"	11/29/2006
L2-O1-02	11/20/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'59.6"	11/29/2006
L2-O1-03	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.4"	W 088 05'59.6"	11/29/2006
L2-O1-04	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.8"	W 088 05'59.0"	11/29/2006
L2-P5-15	11/20/2006	BOOSTERS	139	N	H	Y	N	N 41 22'07.4"	W 088 05'54.2"	11/29/2006
L2-P5-16	11/20/2006	FUZE BD M66A1	30	N	H	Y	N	N 41 22'07.4"	W 088 05'54.2"	11/29/2006
L2-P5-17	11/20/2006	BOOSTERS	412	N	H	Y	N	N 41 22'07.4"	W 088 05'54.4"	11/29/2006
L2-P5-18	11/20/2006	FUZE BD M66A1	34	N	H	Y	Y	N 41 22'07.4"	W 088 05'54.4"	11/29/2006
L2-P5-19	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.7"	W 088 05'54.3"	11/29/2006
L2-P5-20	11/20/2006	Booster	1	N	H	Y	N	N 41 22'06.7"	W 088 05'54.3"	11/29/2006
L2-P5-21	11/20/2006	Booster	1	N	H	Y	N	N 41 22'06.7"	W 088 05'54.3"	11/29/2006
L2-P5-22	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'54.5"	11/29/2006
L2-P5-23	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'54.3"	11/29/2006
L2-P5-24	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'54.3"	11/29/2006
L2-P5 25	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'54.3"	11/29/2006
L2-P5-26	11/20/2006	Booster	1	N	H	Y	N	N 4122'07.2"	W 088 05'54.3"	11/29/2006
L2-P5-27	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'54.3"	11/29/2006
L2-P5-28	11/20/2006	Booster	1	N	H	Y	N	N 41 22'08.1"	W 088 05'54.7"	11/29/2006
L2-P5-29	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.7"	W 088 05'54.2"	11/29/2006
L2-P5-30	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.4"	W 088 05'54.4"	11/29/2006
L2-P5-31	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'54.4"	11/29/2006
L2-P5-32	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'54.4"	11/29/2006
L2-P5-33	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.3"	W 088 05'54.4"	11/29/2006
L2-P5-34	11/20/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.3"	W 088 05'54.4"	11/29/2006
L2-P5-35	11/20/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.3"	W 088 05'54.4"	11/29/2006
L2-P5-36	11/20/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.3"	W 088 05'54.4"	11/29/2006
L2-P5-37	11/20/2006	Booster	1	N	H	Y	N	N 4122'07.3"	W 088 05'5.4"	11/29/2006
L2-P5-38	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'55.1"	11/29/2006

USA Environmental, Inc.
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SITE: . Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-P5-39	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'55.1"	11/29/2006
L2-P5-40	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'55.1"	11/29/2006
L2-P5-41	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'55.1"	11/29/2006
L2-P5-42	11/20/2006	Boosteer	1	N	H	Y	N	N 41 22'07.3"	W 088 05'55.1"	11/29/2006
L2-P5-43	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'55.1"	11/29/2006
L2-P5-44	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'55.1"	11/29/2006
L2-P5-45	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.8"	W 088 05'54.7"	11/29/2006
L2-P5-46	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.9"	W 088 05'54.3"	11/29/2006
L2-P5-47	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'54.9"	11/29/2006
L2-P5-48	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'54.9"	11/29/2006
L2-P5-49	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'54.9"	11/29/2006
L2-P5-50	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'54.9"	11/29/2006
L2-P5-51	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'54.9"	11/29/2006
L2-P5-52	11/20/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'54.9"	11/29/2006
L2-O2-01	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.2"	W 088 05'58.7"	11/29/2006
L2-O2-02	11/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.8"	w 088 05'58.5"	11/29/2006
L2-O2-03	11/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.3"	W 088 05'58.3"	11/29/2006
L2-O2-04	11/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.0"	W 088 05'58.9"	11/29/2006
L2-O2-05	11/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.7"	W 088 05'58.0"	11/29/2006
L2-O2-06	11/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.7"	W 088 05'58.2"	11/29/2006
L2-O2-07	11/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.7"	W 088 05'58.2"	11/29/2006
L2-O2-08	11/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.8"	W 088 05'58.0"	11/29/2006
L2-O2-09	11/21/2006	Fuze MT M54	1	N	H	Y	Y	N 41 22'06.6"	W 088 05'58.5"	11/29/2006
L2-O6-01	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'54.3"	11/29/2006
L2-O6-02	11/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.5"	W 088 05'54.2"	11/29/2006
L2-O6-03	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.5"	W 088 05'54.2"	11/29/2006
L2-O6-04	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.5"	W 088 05'54.2"	11/29/2006
L2-O6-05	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.5"	W 088 0554.2"	11/29/2006
L2-O6-06	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.4"	W 088 05'53.7"	11/29/2006
L2-O6-07	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.5"	W 088 05'53.7"	11/29/2006
L2-O6-08	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.5"	W 088 05'53.7"	11/29/2006
L2-O6-09	11/21/2006	Booster	1	N	H	Y	N	N 41 22'07.0"	W 088 05'53.8"	11/29/2006
L2-O6-10	11/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.5"	W 088 05'53.6"	11/29/2006
L2-O6-11	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.7"	W 088 05'53.7"	11/29/2006
L2-O6-12	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.8"	W 088 05'54.2"	11/29/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-O6-13	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.9"	W 088 05'53.9"	11/29/2006
L2-O6-14	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.9"	W 088 05'53.6"	11/29/2006
L2-O6-15	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.8"	W 088 05'53.7"	11/29/2006
L2-O6-16	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.7"	W 088 05'53.7"	11/29/2006
L2-O6-17	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.7"	W 088 05'53.7"	11/29/2006
L2-O6-18	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.1"	W 088 05'52.5"	11/29/2006
L2-O6-19	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.2"	W 088 05'52.6"	11/29/2006
L2-O6-20	11/21/2006	FUZE BD M66A1	1	N	H	Y	Y	N 41 22'05.6"	W 088 05'53.1"	11/29/2006
L2-O6-21	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.4"	W 088 05'53.2"	11/29/2006
L2-O6-22	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.4"	W 088 05'53.2"	11/29/2006
L2-O6-23	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'53.5"	11/29/2006
L2-O6-24	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'53.5"	11/29/2006
L2-O6-25	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'53.1"	11/29/2006
L2-O6-26	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'53.1"	11/29/2006
L2-O6-27	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.1"	W 088 05'53.0"	11/29/2006
L2-O6-28	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.1"	W 088 05'53.0"	11/29/2006
L2-O6-29	11/21/2006	Booster	1	N	H	Y	N	N 41 22'06.1"	W 088 05'53.0"	11/29/2006
L2-O6-30	11/21/2006	FUZE BD M66A1	1	N	H	Y	Y	N 41 22'05.6"	W 088 05'53.2"	11/29/2006
L2-O6-31	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.6"	W 088 05'53.2"	11/29/2006
L2-O6-32	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.6"	W 088 05'53.1"	11/29/2006
L2-O6-33	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.6"	W 088 05'53.1"	11/29/2006
L2-O6-34	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.7"	W 088 05'53.3"	11/29/2006
L2-N6-01	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.4"	W 088 05'53.3"	11/29/2006
L2-N6-02	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.3"	W 088 05'53.6"	11/29/2006
L2-N6-03	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.3"	W 088 05'53.5"	11/29/2006
L2-N6-04	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.3"	W 088 05'53.5"	11/29/2006
L2-N6-05	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.3"	W 088 05'53.5"	11/29/2006
L2-N6-06	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.3"	W 088 05'53.5"	11/29/2006
L2-N6-07	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.3"	W 088 05'53.5"	11/29/2006
L2-N6-08	11/21/2006	FUZE BD M66A1	1	N	H	Y	Y	N 41 22'05.1"	W 088 05'53.5"	11/29/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-N6-09	11/21/2006	FUZE BD M66A1	1	N	H	Y	Y	N 41 22'05.4"	W 088 05'53.5"	11/29/2006
L2-N6-10	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.4"	W 088 05'53.5"	11/29/2006
L2-N6-11	11/21/2006	Booster	1	N	H	Y	N	N 41 22'05.3"	W 088 05'53.5"	11/29/2006
L2-P4-01	12/4/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'56.1"	12/14/2006
L2-P4-02	12/4/2006	Booster	1	N	H	Y	N	N 41 22'07.1"	W 088 05'56.1"	12/14/2006
L2-C2-01	12/4/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'55.9"	W 088 06'02.2"	12/14/2006
L2-C2-02	12/4/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'55.9"	W 088 06'02.2"	12/14/2006
L2-L3-01	12/4/2006	Booster	1	N	H	Y	N	N 41 22'03.9"	W 088 05'58.4"	12/14/2006
L2-L3-02	12/4/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.2"	W 088 05'58.3"	12/14/2006
L2-L3-03	12/4/2006	Propellent Grain (1 each)	1	N	H	Y	Y	N 41 22'04.2"	W 088 05'58.3"	12/14/2006
L2-O3-01	12/4/2006	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'57.6"	12/14/2006
L2-O3-02	12/4/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'07.3"	W 088 05'57.6"	12/14/2006
L2-O3-03	12/4/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'07.3"	W 088 05'57.6"	12/14/2006
L2-O3-04	12/4/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'07.1"	W 088 05'57.9"	12/14/2006
L2-O3-05	12/4/2006	Fuze PD M48	1	N	H	Y	Y	N 41 22'06.6"	W 088 05'58.0"	12/14/2006
L2-O3-06	12/4/2006	Fuze PD M48	1	N	H	Y	Y	N 41 22'06.6"	W 088 05'58.0"	12/14/2006
L2-O3-07	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.3"	W 088 05'57.9"	12/14/2006
L2-O3-08	12/4/2006	Booster	1	N	H	Y	N	N 41 22'07.0"	W 088 05'57.4"	12/14/2006
L2-O3-09	12/4/2006	Fuze PD M48	1	N	H	Y	Y	N 41 22'07.0"	W 088 05'57.4"	12/14/2006
L2-O3-10	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.0"	W 088 05'57.4"	12/14/2006
L2-O3-11	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.0"	W 088 05'57.4"	12/14/2006
L2-O3-12	12/4/2006	Fuze PD M48	1	N	H	Y	Y	N 41 22'07.0"	W 088 05'57.3"	12/14/2006
L2-O3-13	12/4/2006	Booster	1	N	H	Y	N	N 41 22'07.4"	W 088 05'57.7"	12/14/2006
L2-O3-14	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.0"	W 088 05'58.0"	12/14/2006
L2-O3-15	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.4"	W 088 05'57.3"	12/14/2006
L2-O3-16	12/4/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'06.8"	W 088 05'58.0"	12/14/2006
L2-O3-17	12/4/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'06.9"	W 088 05'58.0"	12/14/2006
L2-O3-18	12/4/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'06.9"	W 088 05'58.0"	12/14/2006
L2-O3-19	12/4/2006	Fuze PD M48	1	N	H	Y	Y	N 41 22'07.2"	W 088 05'57.9"	12/14/2006
L2-O3-20	12/4/2006	Fuze PD M48	1	N	H	Y	Y	N 41 22'07.0"	W 088 05'57.3"	12/14/2006
L3-L12-01	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.1"	W 088 06'06.7"	12/14/2006
L3-L12-02	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.1"	W 088 06'06.9"	12/14/2006
L3-L12-03	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.1"	W 088 06'06.9"	12/14/2006
L3-L12-04	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.5"	W 088 06'06.1"	12/14/2006
L3-L12-05	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'47.9"	W 088 06'06.6"	12/14/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L3-L13-01	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.2"	W 088 06'05.5"	12/14/2006
L3-L13-02	12/4/2006	Fuze BD M60 Adapter	1	N	H	Y	Y	N 41 21'49.5"	W 088 06'05.9"	12/14/2006
L3-L13-03	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.7"	W 088 06'06.0"	12/14/2006
L3-L13-04	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.3"	W 088 06'06.2"	12/14/2006
L3-L13-05	12/4/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.5"	W 088 06'05.8"	12/14/2006
L2-O3-21	12/5/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'57.6"	12/14/2006
L2-O3-22	12/5/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'57.6"	12/14/2006
L2-O3-23	12/5/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'06.8"	W 088 05'57.6"	12/14/2006
L2-O3-24	12/5/2006	Booster	1	N	H	Y	N	N 41 22'06.7"	W 088 05'56.8"	12/14/2006
L2-o3-25	12/5/2006	Booster	1	N	H	Y	N	N 41 22'06.7"	W 088 05'56.8"	12/14/2006
L2-O3-26	12/5/2006	Booster	1	N	H	Y	N	N 41 22'06.7"	W 088 05'56.8"	12/14/2006
L2-O3-27	12/5/2006	Booster	1	N	H	Y	N	N 41 22'06.5"	W 088 05'56.8"	12/14/2006
L2-O3-28	12/5/2006	Booster	1	N	H	Y	N	N 41 22'06.3"	W 088 05'57.0"	12/14/2006
L2-O3-29	12/5/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.3"	W 088 05'57.0"	12/14/2006
L2-O3-30	12/5/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.7"	W 088 05'57.1"	12/14/2006
L2-O3-31	12/5/2006	Fuze BD M68	1	N	H	Y	Y	N 41 22'05.7"	W 088 05'57.1"	12/14/2006
L2-O3-32	12/5/2006	Booster	1	N	H	Y	N	N 41 22'06.1"	W 088 05'56.6"	12/14/2006
L2-O3-33	12/5/2006	Booster	1	N	H	Y	N	N 41 22'06.1"	W 088 05'56.6"	12/14/2006
L2-O3-34	12/5/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.1"	W 088 05'56.6"	12/14/2006
L2-O3-35	12/5/2006	Fuze BD M68	1	N	H	Y	Y	N 41 22'06.1"	W 088 05'56.6"	12/14/2006
L2-O3-36	12/5/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.3"	W 088 05'56.9"	12/14/2006
L2-O3-37	12/5/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'57.3"	12/14/2006
L2-O3-38	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.3"	W 088 05'57.4"	12/14/2006
L2-O3-39	12/5/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.5"	W 088 05'57.2"	12/14/2006
L2-O3-40	12/5/2006	Booster	1	N	H	Y	N	N 41 22'05.5"	w 088 05'57.2"	12/14/2006
L2-O3-41	12/5/2006	Booster	1	N	H	Y	N	N 41 22'05.5"	W 088 05'57.2"	12/14/2006
L2-L4-01	12/5/2006	Booster	1	N	H	Y	N	N 41 22'03.6"	W 088 05'57.3"	12/14/2006
L2-L4-02	12/5/2006	Booster	1	N	H	Y	N	N 41 22'02.9"	W 088 05'56.8"	12/14/2006
L2-L4-03	12/5/2006	Suppl Charge	1	N	H	Y	N	N 41 22'02.9"	W 088 05'56.8"	12/14/2006
L2-D1-01	12/5/2006	Booster	1	N	H	Y	N	N 41 21'56.1"	W 088 06'02.2"	12/14/2006
L2-I2-01	12/5/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'01.1"	W 088 06'00.2"	12/14/2006
L2-I2-02	12/5/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'01.1"	W 088 06'00.2"	12/14/2006
L2-I2-03	12/5/2006	Fuze PTTF MK III	1	N	H	Y	Y	N 41 22'01.1"	W 088 06'00.2"	12/14/2006
L2-I2-04	12/5/2006	Fuze PTTF MK III	1	N	H	Y	Y	N 41 22'01.1"	W 088 06'00.2"	12/14/2006
L2-K13-01	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.8"	W 088 06'07.7"	12/14/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-K13-02	12/5/2006	Nose of Projo 120mm AA	1	N	H	Y	N	N 41 21'48.8" W 088 06'07.7"	12/14/2006
L3-K12-01	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'46.9" W 088 06'07.3"	12/14/2006
L3-K12-02	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.4" W 088 06'07.3"	12/14/2006
L3-K12-03	12/5/2006	Bomb Fuze Nose 100 Series	1	N	H	Y	N	N 41 21'48.8" w 088 06'07.0"	12/14/2006
L3-K12-04	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'47.9" W 088 06'07.7"	12/14/2006
L3-K12-05	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.0" W 088 06'07.8"	12/14/2006
L3-K12-06	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.3" W 088 06'07.9"	12/14/2006
L3-K12-07	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.3" W 088 06'07.9"	12/14/2006
L3-K12-08	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.7" W 088 06'07.5"	12/14/2006
L3-K12-09	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'47.8" w 088 06'08.5"	12/14/2006
L3-K12-10	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.2" W 088 06'08.0"	12/14/2006
L3-K12-11	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.6" W 088 06'07.6"	12/14/2006
L3-k12-12	12/5/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.6" W 088 06'08.3"	12/14/2006
L2-I2-05	12/6/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'00.8" W 088 06'00.2"	12/14/2006
L2-i2-06	12/6/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'00.8" W 088 06'00.2"	12/14/2006
L2-H1-01	12/6/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'00.4" W 088 06'01.3"	12/14/2006
L2-N3-01	12/6/2006	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'57.8"	12/14/2006
L2-N3-02	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.7" W 088 05'58.2"	12/14/2006
L2-N3-03	12/6/2006	Booster	1	N	H	Y	N	N 41 22'057" W 088 05'57.8"	12/14/2006
L2-N3-04	12/6/2006	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'57.8"	12/14/2006
L2-O3-42	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.3" W 088 05'57.4"	12/14/2006
L2-O3-43	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.3" W 088 05'57.4"	12/14/2006
L2-O3-44	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.4" W 088 05'57.6"	12/14/2006
L2-O3-45	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.4" W 088 05'57.6"	12/14/2006
L2-O3-46	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.4 W 088 05'57.6"	12/14/2006
L2-O3-47	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.8" W 088 05'57.2"	12/14/2006
L2-O3-48	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.8" W 088 05'57.2"	12/14/2006
L2-O3-49	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.8" W 088 05'57.2"	12/14/2006
L2-O3-50	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.8" W 088 05'57.2"	12/14/2006
L2-O3-51	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.8" W 088 05'57.2"	12/14/2006
L2-O3-52	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.8" W 088 05'57.2"	12/14/2006
L2-O3-53	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.8" W 088 05'57.2"	12/14/2006
L2-O3-54	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.8" W 088 05'57.2"	12/14/2006

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-O3-55	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'57.2"	12/14/2006
L2-O3-56	12/6/2006	Booster	1	N	H	Y	N	N 41 22'06.8"	W 088 05'57.2"	12/14/2006
L3-J14-01	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.6"	W 088 06'09.2"	12/14/2006
L3-J14-02	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.8"	W 088 06'09.2"	12/14/2006
L3-J14-03	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.8"	W 088 06'09.0"	12/14/2006
L3-J14-04	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.8"	W 088 06'08.9"	12/14/2006
L3-J14-05	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.5"	W 088 06'08.9"	12/14/2006
L3-K14-01	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.8"	W 088 06'07.7"	12/14/2006
L3-K14-02	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.3"	W 088 06'08.0"	12/14/2006
L3-K14-03	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.3"	W 088 06'08.0"	12/14/2006
L3-K14-04	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.0"	W 088 06'08.3"	12/14/2006
L3-K14-05	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.8"	W 088 06'08.1"	12/14/2006
L3-K14-06	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.2"	W 088 06'07.3"	12/14/2006
L3-K14-07	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.4"	W 088 06'07.4"	12/14/2006
L3-k14-08	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.5"	W 088 06'07.4"	12/14/2006
L3-K14-09	12/6/2006	Projo 75mm HE (PARTIAL)	1	N	H	Y	N	N 41 21'51.0"	W 088 06'08.5"	12/14/2006
L3-K14-10	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.8"	W 088 06'08.6"	12/14/2006
L3-K14-11	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.8"	W 088 06'08.6"	12/14/2006
L3-K14-12	12/6/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.3"	W 088 06'08.3"	12/14/2006
L2-N3-05	12/7/2006	Booster	1	N	H	Y	N	N 41 22'05.3"	W 088 05'57.9"	12/14/2006
L2-N3-06	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.3"	W 088 05'57.9"	12/14/2006
L2-N3-07	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.3"	W 088 05'57.7"	12/14/2006
L2-N3-08	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.3"	W 088 05'57.5"	12/14/2006
L2-N3-09	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.2"	W 088 05'57.5"	12/14/2006
L2-N3-10	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.2"	W 088 05'57.5"	12/14/2006
L2-N3-11	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.4"	W 088 05'57.7"	12/14/2006
L2-N3-12	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.3"	W 088 05'57.6"	12/14/2006
L2-N3-13	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.3"	W 088 05'57.6"	12/14/2006
L2-N3-14	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.3"	W 088 05'57.6"	12/14/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-N3-15	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.3"	W 088 05'57.6"	12/14/2006
L2-N3-16	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.3"	W 088 05'57.6"	12/14/2006
L2-N3-17	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.3"	W 088 05'57.6"	12/14/2006
L2-N3-18	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.5"	W 088 05'57.2"	12/14/2006
L2-N3-19	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.4"	W 088 05'58.0"	12/14/2006
L2-N3-20	12/7/2006	Booster	1	N	H	Y	N	N41 22'05.4"	W088 05'58.0"	12/14/2006
L2-N3-21	12/7/2006	Booster	1	N	H	Y	N	N 41 22'05.4"	W 088 05'58.0"	12/14/2006
L2-N3-22	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.8"	W 088 05'57.3"	12/14/2006
L2-N3-23	12/7/2006	Booster	1	N	H	Y	N	N 41 22'05.8"	W 088 05'57.6"	12/14/2006
L2-N3-24	12/7/2006	Booster	1	N	H	Y	N	N 41 22'05.8"	W 088 05'57.6"	12/14/2006
L2-N3-25	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'57.9"	12/14/2006
L2-N3-26	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'57.9"	12/14/2006
L2-N3-27	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'57.9"	12/14/2006
L2-N3-28	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'57.9"	12/14/2006
L2-N3-29	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'57.9"	12/14/2006
L2-N3-30	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'57.9"	12/14/2006
L2-N3-31	12/7/2006	Booster	1	N	H	Y	N	N 41 22'57.9"	W 088 05'57.9"	12/14/2006
L2-N3-32	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'57.9"	12/14/2006
L2-N3-33	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.2"	W 088 05'57.9"	12/14/2006
L2-N3-34	12/7/2006	Fuze MT M43	1	N	H	Y	Y	N 41 22'06.4"	W 088 05'58.0"	12/14/2006
L2-N3-35	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.1"	W 088 05'57.8"	12/14/2006
L2-N3-36	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.1"	W 088 05'57.8"	12/14/2006
L2-N3-37	12/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.2"	W 088 05'57.2"	12/14/2006
L2-N3-38	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.0"	W 088 05'57.2"	12/14/2006
L2-N3-39	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.0"	W 088 05'57.2"	12/14/2006
L2-N3-40	12/7/2006	Fuze BD M68	1	N	H	Y	Y	N 41 22'06.0"	W 088 05'57.2"	12/14/2006
L2-N3-41	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.1"	W 088 05'56.9"	12/14/2006
L2-N3-42	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.1"	W 088 05'56.9"	12/14/2006
L2-N3-43	12/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.1"	W 088 05'56.9"	12/14/2006
L2-N3-44	12/7/2006	Fuze BD M68	1	N	H	Y	Y	N 41 22'06.4"	W 088 05'57.1"	12/14/2006
L2-N3-45	12/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.1"	W 088 05'57.0"	12/14/2006
L2-N3-46	12/7/2006	Booster	1	N	H	Y	N	N 41 22'06.1"	W 088 05'57.1"	12/14/2006
L2-N3-47	12/7/2006	Fuze BD M68	1	N	H	Y	Y	N 41 22'06.1"	W 088 05'57.1"	12/14/2006
L2-N3-48	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.5"	W 088 05'57.5"	12/14/2006
L2-N3-49	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.5"	W 088 05'57.5"	12/14/2006

USA Environmental, Inc.
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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-N3-50	12/7/2006	Booster	1	N	H	Y	N	N 41 22'05.6" W 088 05'56.9"	12/14/2006
L2-N3-51	12/7/2006	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.6" W 088 05'56.9"	12/14/2006
L3-J13-01	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.0" W 088 06'09.3"	12/14/2006
L3-J13-02	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.9" W 088 06'08.9"	12/14/2006
L3-L13-03	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.9" W 088 06'08.7"	12/14/2006
L3-J13-04	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.6" w 088 06'08.2"	12/14/2006
l3-j13-05	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.4" W 088 06'07.8"	12/14/2006
L3-J13-06	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.7" W 088 06'08.1"	12/14/2006
L3-J13-07	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.1" W 088 06'07.6"	12/14/2006
L3-J12-01	12/7/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.4" W 088 06'10.1"	12/14/2006
L3-J12-02	12/7/2006	Fuze PD T83	1	N	H	Y	N	N 41 21'48.4" W 088 06'09.9"	12/14/2006
L2-M3-01	12/11/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.0"	12/14/2006
L2-M3-02	12/11/2006	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'57.8"	12/14/2006
L2-M3-03	12/11/2006	Booster	1	N	H	Y	N	N 41 22'04.7" W 088 05'57.1"	12/14/2006
L2-M3-04	12/11/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.0" W 088 05'58.2"	12/14/2006
L2-M3-05	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.1" W 088 05'58.0"	12/14/2006
L2-M3-06	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.2" W 088 05'57.9"	12/14/2006
L2-M3-07	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.2" W 088 05'57.9"	12/14/2006
L2-M3-08	12/11/2006	Booster	1	N	H	Y	N	N 41 22'04.8" W 088 05'58.2"	12/14/2006
L2-M3-09	12/11/2006	Booster	1	N	H	Y	N	N 41 22'04.8" W 088 05'52.0"	12/14/2006
L2-M3-10	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.5" W 088 05'58.2"	12/14/2006
L2-M3-11	12/11/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.3" W 088 05'58.8"	12/14/2006
L2-M3-12	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.2" W 088 05'58.2"	12/14/2006
L2-M3-13	12/11/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.5" W 088 05'58.2"	12/14/2006
L2-M3-14	12/11/2006	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.2" W 088 05'58.0"	12/14/2006
L2-M3-15	12/11/2006	Booster	1	N	H	Y	N	N 41 22'04.6" W 088 05'59.0"	12/14/2006
L2-M3-16	12/11/2006	Booster	1	N	H	Y	N	N 41 22'04.6" W 088 05'59.0"	12/14/2006
L2-M3-17	12/11/2006	Booster	1	N	H	Y	N	N 41 22'04.6" W 088 05'59.0"	12/14/2006
L2-M3-18	12/11/2006	Booster	1	N	H	Y	N	N 41 22'04.6" W 088 05'59.0"	12/14/2006
L2-M3-19	12/11/2006	Booster	1	N	H	Y	N	N 41 22'04.6" W 088 05'59.0"	12/14/2006
L2-M3-20	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'58.5"	12/14/2006
L2-M3-21	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'58.5"	12/14/2006
L2-M3-22	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'58.5"	12/14/2006
L2-M3-23	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'58.5"	12/14/2006
L2-M3-24	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'58.5"	12/14/2006

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-M3-25	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'58.5"	12/14/2006
L2-M3-26	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'58.5"	12/14/2006
L2-M3-27	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'58.5"	12/14/2006
L2-M3-28	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'58.5"	12/14/2006
L2-M4-01	12/11/2006	Booster	1	N	H	Y	N	N 41 22'04.4" W 088 05'57.4"	12/14/2006
L2-M4-02	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.1" W 088 05'57.0"	12/14/2006
L2-M4-03	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'56.9"	12/14/2006
L2-M4-04	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'56.9"	12/14/2006
L2-M4-05	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'56.9"	12/14/2006
L2-M4-06	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'56.9"	12/14/2006
L2-M4-07	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'56.9"	12/14/2006
L2-M4-08	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'56.9"	12/14/2006
L2-M4-09	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'56.9"	12/14/2006
L2-M4-10	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'56.9"	12/14/2006
L2-M4-11	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'56.9"	12/14/2006
L2-M4-12	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'56.9"	12/14/2006
L2-M4-13	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'56.9"	12/14/2006
L2-M4-14	12/11/2006	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'56.9"	12/14/2006
L3-H9-01	12/12/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'45.1" W 088 06'12.1"	12/14/2006
L3-H9-02	12/12/2006	Booster	1	N	H	Y	N	N 41 21'45.0" W 088 06'12.1"	12/14/2006
L3-H9-03	12/13/2006	Flash Tube	1	N	H	Y	N	N 41 21'45.7" W 088 06'11.9"	12/14/2006
L3-H9-04	12/13/2006	Flash Tube	1	N	H	Y	N	N 41 21'45.7" W 088 06'11.9"	12/14/2006
L3-H9-05	12/13/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'45.5" W 088 06'11.9"	12/14/2006
L3-I12-01	12/13/2006	Booster	1	N	H	Y	N	N 41 21'48.1" W 088 06'10.2"	12/14/2006
L3-D9-01	12/14/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'45.3" W 088 06'16.4"	1/5/2007
L3-D9-02	12/14/2006	Ctg 40mm w/Primer Only	1	N	H	Y	N	N 41 21'45.9" W 088 06'16.1"	1/5/2007
L3-D9-03	12/18/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'44.7" W 088 06'16.4"	1/5/2007
L3-D9-04	12/18/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'44.7" W 088 06'16.4"	1/5/2007
L3-D9-05	12/18/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'44.7" W 088 06'16.4"	1/5/2007
L3-D9-06	12/18/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'45.2" W 088 06'16.1"	1/5/2007
L3-D9-07	12/18/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'45.2" W 088 06'16.1"	1/5/2007
L3-D9-08	12/18/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'45.2" W 088 06'16.1"	1/5/2007
L3-D9-09	12/18/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'45.2" W 088 06'16.1"	1/5/2007
L3-D9-10	12/18/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'45.2" W 088 06'16.1"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-D9-11	12/18/2006	37mm Encased in Slag	1	N	H	Y	Y	N 41 21'45.2" W 088 06'16.1"	1/5/2007
L3-D9-12	12/18/2006	Booster	1	N	H	Y	N	N 41 21'45.0" W 088 06'16.4"	1/5/2007
L3-D12-01	12/18/2006	Burster Tube	1	N	H	Y	N	N 41 21'48.1" W 088 06'16.2"	1/5/2007
L3-D12-02	12/18/2006	Burster Tube	1	N	H	Y	N	N 41 21'48.1" W 088 06'16.2"	1/5/2007
L3-D12-03	12/18/2006	Booster	1	N	H	Y	N	N 41 21'48.1" W 088 06'16.2"	1/5/2007
L3-D12-04	12/18/2006	HE Chunk	1	N	H	Y	N	N 41 21'48.1" W 088 06'16.2"	1/5/2007
L3-D12-05	12/18/2006	HE Chunk	1	N	H	Y	N	N 41 21'48.1" W 088 06'16.2"	1/5/2007
L3-D12-06	12/18/2006	HE Ball to M39 GP Submunition	1	N	H	Y	N	N 41 21'48.1" W 088 06'16.2"	1/5/2007
L3-D12-07	12/18/2006	HE Ball to M39 GP Submunition	1	N	H	Y	N	N 41 21'48.1" W 088 06'16.2"	1/5/2007
L3-D12-08	12/18/2006	HE Ball to M39 GP Submunition	1	N	H	Y	N	N 41 21'48.1" W 088 06'16.2"	1/5/2007
L3-D9-13	12/19/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'44.9" W 088 06'16.0"	1/5/2007
L3-D9-14	12/19/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'44.9" W 088 06'16.0"	1/5/2007
L3-D12-09	12/19/2006	HE Chunk	1	N	H	Y	N	N 41 21'48.1" W 088 06'16.2"	1/5/2007
L3-D12-10	12/19/2006	Booster	1	N	H	Y	N	N 41 21'48.1" W 088 06'16.3"	1/5/2007
L3-D12-11	12/19/2006	Projo 57mm RR Heat	1	N	H	Y	N	N 41 21'48.1" W 088 06'16.3"	1/4/2007
L3-D9-15	12/20/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'45.6" W 088 06'16.1"	1/5/2007
L3-D9-16	12/20/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'45.6" W 088 06'16.1"	1/5/2007
L3-D9-17	12/20/2006	CTG from 105mm w/Flash Tube	1	N	H	Y	Y	N 41 21'45.6" W 088 06'16.1"	1/5/2007
L3-D12-12	12/20/2006	Pipe W/HE from Bldg	1	N	H	Y	N	N 41 21'47.8" W 088 06'16.6"	1/5/2007
L3-D12-13	12/20/2006	Pipe End W/HE from Bldg	1	N	H	Y	N	N 41 21'47.8" W 088 06'16.6"	1/5/2007
L3-H1-01	12/20/2006	HE Ball to M39 GP Submunition	1	N	H	Y	N	N 41 21'39.8" W 088 06'10.3"	1/5/2007
L3-I14-01	12/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.5" W 088 06'10.1"	1/5/2007
L3-I14-02	12/20/2006	Booster	1	N	H	Y	N	N 41 21'50.5" W 088 06'10.1"	1/5/2007
L3-I14-03	12/20/2006	Fuze BD M60	1	N	H	Y	Y	N 41 21'50.5" W 088 06'10.1"	1/4/2007
L3-H2-01	12/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'38.2" W 088 06'11.2"	1/5/2007
L3-I13-01	12/20/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'48.4" W 088 06'10.0"	1/5/2007
L3-G1-01	12/20/2006	Booster	1	N	H	Y	Y	N 41 21'37.0" W 088 06'14.2"	1/5/2007
L3-D12-14	12/21/2006	Pipe W/HE from Bldg	1	N	H	Y	N	N 41 21'48.4" W 088 06'17.2	1/5/2007
L3-I14-04	12/21/2006	Booster	1	N	H	Y	N	N 41 21'49.2" W 088 06'09.8"	1/5/2007
L3-I14-05	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.2" W 088 06'09.8"	1/5/2007
L3-I14-06	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.2" W 088 06'09.8"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-I14-07	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'49.2" W 088 06'09.8"	1/5/2007
L3-E5-01	12/21/2006	Fuze Bomb100 Series	1	N	H	Y	Y	N 41 21'43.7" W 088 06'16.4"	1/5/2007
L3-E5-02	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.7" W 088 06'15.0"	1/5/2007
L3-E5-03	12/21/2006	40mm HE Ball inside Ctg M406	1	N	H	Y	N	N 41 21'40.7" W 088 06'15.0"	1/5/2007
L3-E5-04	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.8" W 088 06'15.1"	1/5/2007
L3-E5-05	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.8" W 088 06'15.1"	1/5/2007
L3-E5-06	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.8" W 088 06'15.9"	1/5/2007
L3-E5-07	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.7" W 088 06'15.2"	1/5/2007
L3-E5-08	12/21/2006	Fuze PD T83	1	N	H	Y	N	N 41 21'40.8" W 088 06'15.1"	1/5/2007
L3-E5-09	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.8" W 088 06'15.7"	1/5/2007
L3-E4-01	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.7" W 088 06'12.5"	1/5/2007
L3-E4-02	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.6" W 088 06'15.9"	1/5/2007
L3-E4-03	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.5" W 088 06'16.6"	1/5/2007
L3-E4-04	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.5" W 088 06'15.7"	1/5/2007
L3-E4-05	12/21/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.5" W 088 06'15.7"	1/5/2007
L3-E4-06	12/21/2006	Ctg to 40mm HEM406	1	N	H	Y	Y	N 41 21'41.5" W 088 06'15.9"	1/5/2007
L3-E4-07	12/21/2006	Ctg to 40mm HEM406	1	N	H	Y	Y	N 41 21'41.5" W 088 06'15.9"	1/5/2007
L3-E4-08	12/21/2006	Ctg to 40mm HEM406	1	N	H	Y	Y	N 41 21'41.5" W 088 06'15.9"	1/5/2007
L3-E4-09	12/21/2006	Ctg to 40mm HEM406	1	N	H	Y	Y	N 41 21'41.5" W 088 06'15.9"	1/5/2007
L3-E4-10	12/21/2006	Ctg to 40mm HEM406	1	N	H	Y	Y	N 41 21'41.5" W 088 06'15.9"	1/5/2007
L3-E4-11	12/21/2006	Ctg to 40mm HEM406	1	N	H	Y	Y	N 41 21'41.5" W 088 06'15.9"	1/5/2007
L3-E4-12	12/21/2006	Ctg to 40mm HEM406	1	N	H	Y	Y	N 41 21'41.5" W 088 06'15.9"	1/5/2007
L3-E4-13	12/21/2006	Ctg to 40mm HEM406	1	N	H	Y	Y	N 41 21'41.5" W 088 06'15.9"	1/5/2007
L3-E4-14	12/21/2006	Ctg to 40mm HEM406	1	N	H	Y	Y	N 41 21'41.5" W 088 06'15.9"	1/5/2007
L3-E5-10	12/27/2006	Ctg to 40mm HE M406	1	N	H	Y	N	N 41 21'40.5" W 088 06'15.1"	1/5/2007
L3-D4-01	12/27/2006	90mm Projo HE (Possibly)	1	N	H	Y	Y	N 41 21'39.0" W 088 06'15.7"	1/4/2007
L3-D4-02	12/27/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'39.0" W 088 06'15.7"	1/5/2007
L3-D4-03	12/27/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.3" W 088 06'16.2"	1/5/2007
L3-D4-04	12/27/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.7" W 088 06'16.3"	1/5/2007
L3-D4-05	12/27/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.7" W 088 06'16.3"	1/5/2007
L3-D4-06	12/27/2006	Fuze Adapter for M60 Fuze	1	N	H	Y	Y	N 41 21'42.0" W 088 06'21.1"	1/4/2007

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Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-D4-07	12/27/2006	Base of 75mm HE w/Approx 2 oz	1	N	H	Y	N	N 41 21'42.0" W 088 06'21.1"	1/4/2007
L3-D12-15	12/28/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'48.1" W 088 06'15.7"	1/5/2007
L3-I15-01	12/28/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'51.3" W 088 06'11.1"	1/5/2007
L3-I15-02	12/28/2006	100 Series Bomb Fuze	1	N	H	Y	N	N 41 21'50.9" W 088 06'09.7"	1/5/2007
L3-I15-03	12/28/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.9" W 088 06'09.7"	1/5/2007
L3-C5-01	12/28/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.2" W 088 06'17.0"	1/5/2007
L3-C5-02	12/28/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.4" W 088 06'17.2"	1/5/2007
L3-C5-03	12/28/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.2" W 088 06'16.1"	1/5/2007
L3-C5-04	12/28/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.4" W 088 06'16.6"	1/5/2007
L3-G1-01	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	N	N 41 21'38.0" W 088 06'12.9"	1/5/2007
L3-G1-02	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.0" W 088 06'10.1"	1/5/2007
L3-G1-03	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'36.8" W 088 06'12.6"	1/5/2007
L3-G1-04	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.2" W 088 06'11.7"	1/5/2007
L3-G1-05	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.3" W 088 06'12.7"	1/5/2007
L3-G1-06	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.4" W 088 06'12.9"	1/5/2007
L3-F1-01	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.0" W 088 06'12.8"	1/5/2007
L3-F1-02	12/28/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'37.8" W 088 06'12.5"	1/5/2007
L3-F1-03	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.8" W 088 06'13.8"	1/5/2007
L3-F1-04	12/28/2006	Ctg to-40mm HE M406	1	N	H	Y	Y	N 41 21'37.9" W 088 06'13.9"	1/5/2007
L3-F1-05	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.9" W 088 06'13.9"	1/5/2007
L3-F1-06	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.9" W 088 06'13.5"	1/5/2007
L3-F1-07	12/28/2006	BLU 26 Half w/o fuze	1	N	H	Y	N	N 41 21'37.9" W 088 06'13.5"	1/5/2007
L3-F1-08	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.0" W 088 06'14.6"	1/5/2007
L3-F1-09	12/28/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'37.8" W 088 06'14.5"	1/5/2007
L3-F1-10	12/28/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.8" W 088 06'14.5"	1/5/2007
L3-D5-16	12/29/2006	Fuze PD M48	1	N	H	Y	Y	N 41 21'47.5" W 088 06'16.3"	1/5/2007
L3-H1-01	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'11.7"	1/5/2007
L3-H1-02	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.5" W 088 06'11.6"	1/5/2007
L3-H1-03	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.5" W 088 06'11.6"	1/5/2007
L3-H1-04	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.2" W 088 06'10.7"	1/5/2007
L3-H1-05	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.2" W 088 06'10.7"	1/5/2007
L3-H1-06	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'36.9" W 088 06'11.9"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-H1-07	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'36.9" W 088 06'11.9"	1/5/2007
L3-H1-08	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.1" W 088 06'11.9"	1/5/2007
L3-H1-09	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'38.1" W 088 06'11.9"	1/5/2007
L3-H1-10	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-11	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-12	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-13	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-14	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-15	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-16	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-17	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-18	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-19	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-20	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-21	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-22	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-23	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-24	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-25	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.3" W 088 06'12.0"	1/5/2007
L3-H1-26	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.1" W 088 06'11.7"	1/5/2007
L3-H1-27	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.1" W 088 06'11.8"	1/5/2007
L3-H1-28	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.1" W 088 06'11.8"	1/5/2007
L3-H1-29	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.1" W 088 06'11.8"	1/5/2007
L3-H1-30	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'39.1" W 088 06'12.7"	1/5/2007
L3-H1-31	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'39.1" W 088 06'12.7"	1/5/2007
L3-H1-32	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'39.1" W 088 06'12.7"	1/5/2007
L3-H1-33	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'32.9" W 088 06'13.9"	1/5/2007
L3-H1-34	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'35.4" W 088 06'13.2"	1/5/2007
L3-H1-35	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'38.6" W 088 06'12.1"	1/5/2007
L3-H2-01	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.3" W 088 06'12.1"	1/5/2007
L3-H2-02	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.3" W 088 06'12.1"	1/5/2007
L3-H2-03	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.9" W 088 06'11.3"	1/5/2007
L3-H2-04	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.7" W 088 06'11.1"	1/5/2007
L3-H2-05	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'38.2" W 088 06'11.2"	1/5/2007
L3-H2-06	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.5" W 088 06'11.6"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-H2-07	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.8" W 088 06'11.4"	1/5/2007
L3-H2-08	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.6" W 088 06'10.9"	1/5/2007
L3-H2-09	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'37.9" W 088 06'11.4"	1/5/2007
L3-H2-10	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	N	N 41 21'37.7" W 088 06'11.1"	1/5/2007
L3-H2-11	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.9" W088 06'11.5"	1/5/2007
L3-H2-12	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.3" W 088 06'13.1"	1/5/2007
L3-H2-13	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.3" W 088 06'13.1"	1/5/2007
L3-H2-14	12/29/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'37.6" W 088 06'11.9"	1/5/2007
L3-H2-15	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.7" W 088 06'11.5"	1/5/2007
L3-H2-16	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.7" W 088 06'11.7"	1/5/2007
L3-H2-17	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.6" W 088 06'10.7"	1/5/2007
L3-H2-18	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.7" W 088 06'12.1"	1/5/2007
L3-H2-19	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.6" W 088 06'12.3"	1/5/2007
L3-H2-20	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.6" W 088 06'12.3"	1/5/2007
L3-H2-21	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.6" W 088 06'12.3"	1/5/2007
L3-H2-22	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.9" W 088 06'12.5"	1/5/2007
L3-H2-23	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.9" W 088 06'12.5"	1/5/2007
L3-H2-24	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.8" W 088 06'12.8"	1/5/2007
L3-H2-25	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.8" W 088 06'12.8"	1/5/2007
L3-H2-26	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'37.8" W 088 06'12.8"	1/5/2007
L3-H2-27	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.5" W 088 06'12.9"	1/5/2007
L3-H2-28	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.5" W 088 06'12.9"	1/5/2007
L3-H2-29	12/29/2006	HE Ball to M39 Submunition	1	N	H	Y	N	N 41 21'38.5" W 088 06'12.9"	1/5/2007
L2-H2-30	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.0" W 088 06'12.8"	1/5/2007
L3-H2-31	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.2" W 088 06'12.3"	1/5/2007
L3-H2-32	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.2" W 088 06'12.3"	1/5/2007
L3-H2-33	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.2" W 088 06'12.3"	1/5/2007
L3-H2-34	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.4" W 088 06'11.9"	1/5/2007
L3-H2-35	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.4" W 088 06'11.9"	1/5/2007
L3-H2-36	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.4" W 088 06'11.9"	1/5/2007
L3-H2-37	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.4" W 088 06'11.9"	1/5/2007
L3-H2-38	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.4" W 088 06'11.9"	1/5/2007
L3-H2-39	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.2" W 088 06'11.4"	1/5/2007
L3-H2-40	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.5" W 088 06'11.5"	1/5/2007
L3-H2-41	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.5" W 088 06'11.5"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-H2-42	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.5" W 088 06'11.5"	1/5/2007
L3-H2-43	12/29/2006	Ctg to 40mm HE M406	1	N	H	Y	Y	N 41 21'38.5" W 088 06'11.5"	1/5/2007
L3-H6-01	12/29/2006	Booster	1	N	H	Y	N	N 41 21'41.5" W 088 06'10.5"	1/5/2007
L3-H6-02	12/29/2006	Booster	1	N	H	Y	N	N 41 21'41.5" W 088 06'10.5"	1/5/2007
L3-D5-01	12/29/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.4" W 088 06'16.1"	1/5/2007
L3-D5-02	12/29/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.2" W 088 06'16.7"	1/5/2007
L3-D5-03	12/29/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.2" W 088 06'16.7"	1/5/2007
L3-D5-04	12/29/2006	Booster	1	N	H	Y	N	N 41 21'41.2" W 088 06'16.7"	1/5/2007
L3-D5-05	12/29/2006	Booster	1	N	H	Y	N	N 41 21'41.2" W 088 06'16.7"	1/5/2007
L3-D5-06	12/29/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'40.5" W 088 06'14.9"	1/5/2007
L3-D5-07	12/29/2006	Projo 90mm HE	1	N	H	Y	Y	N 41 21'40.5" W 088 06'14.9"	1/4/2007
L3-D5-08	12/29/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.2" W 088 06'16.3"	1/5/2007
L3-D5-09	12/29/2006	Projo 57mm HE	1	N	H	Y	Y	N 41 21'41.4" W 088 06'16.0"	1/4/2007
L3-D5-10	12/29/2006	Booster	1	N	H	Y	N	N 41 21'41.4" W 088 06'16.0"	1/5/2007
L3-D5-11	12/29/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.4" W 088 06'16.0"	1/5/2007
L3-D5-12	12/30/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.1" W 088 06'16.6"	1/5/2007
L3-D5-13	12/30/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.1" W 088 06'16.6"	1/5/2007
L3-D5-14	12/30/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'39.7" W 088 06'15.5"	1/5/2007
L3-D5-15	12/30/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'39.7" W 088 06'15.5"	1/5/2007
L3-D5-16	12/30/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'37.9" W 088 06'15.5"	1/5/2007
L3-D5-17	12/30/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'37.9" W 088 06'15.5"	1/5/2007
L3-D5-18	12/30/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.4" W 088 06'16.0"	1/5/2007
L3-H6-03	12/30/2006	Fuze MT M43	1	N	H	Y	Y	N 41 21'42.6" W 088 06'11.2"	1/5/2007
L3-H7-01	12/30/2006	Booster	1	N	H	Y	N	N 41 21'44.5" W 088 06'11.0"	1/5/2007
L3-H7-02	12/30/2006	Booster	1	N	H	Y	N	N 41 21'44.5" W 088 06'11.0"	1/5/2007
L3-H7-03	12/30/2006	Booster	1	N	H	Y	N	N 41 21'44.5" W 088 06'11.0"	1/5/2007
L3-H7-04	12/30/2006	Booster	1	N	H	Y	N	N 41 21'43.3" W 088 06'11.7"	1/5/2007
L3-H7-05	12/30/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.3" W 088 06'11.7"	1/5/2007
L3-H7-06	12/30/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.6" W 088 06'11.9"	1/5/2007
L3-G2-01	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.1" W 088 06'12.8"	1/5/2007
L3-G2-02	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.1" W 088 06'12.8"	1/5/2007
L3-G2-03	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.7" W 088 06'12.0"	1/5/2007
L3-G2-04	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'36.4" W 088 06'16.3"	1/5/2007
L3-G2-05	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.0" W 088 06'12.5"	1/5/2007
L3-G2-06	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.0" W 088 06'12.4"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L3-G2-07	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.0"	W 088 06'12.7"	1/5/2007
L3-G2-08	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.2"	W 088 06'12.8"	1/5/2007
L3-G2-09	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.2"	W 088 06'12.6"	1/5/2007
L3-G2-10	12/30/2006	HE Ball to 40mm M406	1	N	H	Y	N	N 41 21'38.2"	W 088 06'12.6"	1/5/2007
L3-G2-11	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.3"	W088 06'12.0"	1/5/2007
L3-G2-12	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'37.9"	W 088 06'12.5"	1/5/2007
L3-G2-13	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'37.8"	W 088 06'12.7"	1/5/2007
L3-G2-14	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.1"	W 088 06'12.3"	1/5/2007
L3-G2-15	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.1"	W 088 06'12.3"	1/5/2007
L3-G2-16	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.1"	W 088 06'12.3"	1/5/2007
L3-G2-17	12/30/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'38.7"	W 088 06'12.6"	1/5/2007
L3-G2-18	12/30/2006	HE Ball to 40mm M406	1	N	H	Y	N	N 41 21'37.9"	W 088 06'12.4"	1/5/2007
L3-G2-19	12/30/2006	Fuze PD T83	1	N	H	Y	Y	N 41 21'37.6"	W 088 06'12.7"	1/5/2007
L3-G2-20	12/30/2006	HE Ball to 40mm M406	1	N	H	Y	N	N 41 21'36.6"	W 088 06'13.6"	1/5/2007
L3-G2-21	12/30/2006	HE Ball to 40mm M406	1	N	H	Y	N	N 41 21'36.6"	W 088 06'13.6"	1/5/2007
L3-G2-22	12/30/2006	Ctgto 40mm M406	72	N	H	Y	N	N 41 21'38.0"	W 088 06'09.8"	1/5/2007
L3-G2-23	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.4"	W 088 06'11.5"	1/5/2007
L3-G2-24	12/30/2006	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.4"	W 088 06'11.5"	1/5/2007
L3-G2-25	12/30/2006	Projo 40mm M406 (UNFIRED)	1	N	H	Y	Y	N 41 21'37.8"	W 088 06'12.5"	1/5/2007
L3-D6-01	1/2/2007	Booster	1	N	H	Y	N	N 41 21'41.5"	W 088 06'16.7"	1/5/2007
L3-D6-02	1/2/2007	Booster	1	N	H	Y	N	N 41 21'41.5"	W 088 06'16.7"	1/5/2007
L3-D6-03	1/2/2007	Booster	1	N	H	Y	N	N 41 21'41.5"	W 088 06'16.7"	1/5/2007
L3-D6-04	1/2/2007	Booster	1	N	H	Y	N	N 41 21'41.5"	W 088 06'16.7"	1/5/2007
L3-D6-05	1/2/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.5"	W 088 06'16.7"	1/5/2007
L3-D6-06	1/2/2007	100 Series Bomb Fuze	1	N	H	Y	N	N 41 21'41.5"	W 088 06'16.7"	1/5/2007
L3-D6-07	1/2/2007	100 Series BombFuze	1	N	H	Y	N	N 41 21'41.5"	W 088 06'16.7"	1/5/2007
L3-D6-08	1/2/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.5"	W 088 06'16.7"	1/5/2007
L3-H7-07	1/2/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'44.2"	W 088 06'07.6"	1/5/2007
L3-H7-08	1/2/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.2"	W 088 06'11.5"	1/5/2007
L3-H7-09	1/2/2007	Fuze MT M43	1	N	H	Y	Y	N 41 21'43.2"	W 088 06'11.5"	1/5/2007
L3-H7-10	1/2/2007	Fuze MT M43	1	N	H	Y	Y	N 41 21'43.2"	W 088 06'11.5"	1/5/2007
L3-H7-11	1/2/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.7"	W 088 06'11.9"	1/5/2007
L3-H7-12	1/2/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.7"	W 088 06'11.9"	1/5/2007
L3-H7-13	1/2/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.7"	W 088 06'11.9"	1/5/2007
L3-F2-01	1/2/2007	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'38.5"	W 088 06'13.7"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-F2-02	1/2/2007	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'39.1" W 088 06'14.6"	1/5/2007
L3-F2-03	1/2/2007	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'39.5" W 088 06'12.0"	1/5/2007
L3-F2-04	1/2/2007	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'39.5" W 088 06'12.0"	1/5/2007
L3-F2-05	1/2/2007	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'37.4" W 088 06'13.9"	1/5/2007
L3-F2-06	1/2/2007	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'37.4" W 088 06'13.9"	1/5/2007
L3-F2-07	1/2/2007	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'37.7" W 088 06'14.0"	1/5/2007
L3-F2-08	1/2/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'37.7" W 088 06'14.0"	1/5/2007
L3-F2-09	1/2/2007	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'37.7" W 088 06'14.0"	1/5/2007
L3-F2-10	1/2/2007	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'37.8" W 088 06'14.3"	1/5/2007
L3-F2-11	1/2/2007	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'37.8" W 088 06'14.3"	1/5/2007
L3-F2-12	1/2/2007	Ctg to 40mm M406	1	N	H	Y	Y	N 41 21'37.8" W 088 06'14.3"	1/5/2007
L3-F2-13	1/2/2007	100 Series BombFuze	1	N	H	Y	Y	N 41 21'38.0" W 088 06'13.9"	1/5/2007
L3-F2-14	1/2/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'38.1" W 088 06'13.6"	1/5/2007
L3-F2-15	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.4" W 088 06'13.9"	1/5/2007
L3-F2-16	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.4" W 088 06'13.9"	1/5/2007
L3-F2-17	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.4" W 088 06'13.9"	1/5/2007
L3-F2-18	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.4" W 088 06'13.9"	1/5/2007
L3-F2-19	1/2/2007	Submunition M38	1	N	H	Y	Y	N 41 21'38.4" W 088 06'13.9"	1/5/2007
L3-F2-20	1/2/2007	Submunition M38	1	N	H	Y	Y	N 41 21'38.4" W 088 06'13.9"	1/5/2007
L3-F2-21	1/2/2007	Submunition M38	1	N	H	Y	N	N 41 21'38.4" W 088 06'13.9"	1/5/2007
L3-F2-22	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.4" W 088 06'13.9"	1/5/2007
L3-F2-23	1/2/2007	Projo 57mm HE (Mostly Empty)	1	N	H	Y	Y	N 41 21'38.0" W 088 06'13.0"	1/4/2007
L3-F2-24	1/2/2007	Projo 40mm Shotgun Round	1	N	H	Y	Y	N 41 21'37.4" W 088 06'13.4"	1/5/2007
L3-F2-25	1/2/2007	HE Ball to 40mm M406	1	N	H	Y	Y	N 41 21'37.4" W 088 06'13.4"	1/5/2007
L3-F2-26	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.3" W 088 06'12.8"	1/5/2007
L3-F2-27	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.3" W 088 06'12.8"	1/5/2007
L3-F2-28	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.3" W 088 06'12.8"	1/5/2007
L3-F2-29	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.3" W 088 06'12.8"	1/5/2007
L3-F2-30	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.3" W 088 06'12.8"	1/5/2007
L3-F2-31	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.1" W 088 06'13.8"	1/5/2007
L3-F2-32	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.2" W 088 06'13.5"	1/5/2007
L3-F2-33	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.2" W 088 06'13.5"	1/5/2007
L3-F2-34	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.9" W 088 06'14.9"	1/5/2007
L3-F2-35	1/2/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.9" W 088 06'14.9"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-F3-01	1/3/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'40.0" W 088 06'13.1"	1/5/2007
L3-F3-02	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'39.3" W 088 06'14.5"	1/5/2007
L3-F3-03	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'39.2" W 088 06'14.2"	1/5/2007
L3-F3-04	1/3/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'39.2" W 088 06'14.1"	1/5/2007
L3-G3-01	1/3/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.6" W 088 06'12.8"	1/5/2007
L3-G3-02	1/3/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.6" W 088 06'12.8"	1/5/2007
L3-G3-03	1/3/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.1 W 088 06'12.4"	1/5/2007
L3-G3-04	1/3/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.1" W 088 06'12.4"	1/5/2007
L3-G3-05	1/3/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.1" W 088 06'12.4"	1/5/2007
L3-G3-06	1/3/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.1" W 088 06'12.4"	1/5/2007
L3-G3-07	1/3/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.1" W 088 06'12.4"	1/5/2007
L3-G3-08	1/3/2007	Projo 40mm Shotgun Round	1	N	H	Y	Y	N 41 21'39.3" W 088 06'12.0"	1/5/2007
L3-C6-01	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.8" W 088 06'17.3"	1/5/2007
L3-C6-02	1/3/2007	Booster	1	N	H	Y	N	N 41 21'41.8" W 088 06'17.3"	1/5/2007
L3-C6-03	1/3/2007	Booster	1	N	H	Y	N	N 41 21'41.8" W 088 06'17.3"	1/5/2007
L3-C6-04	1/3/2007	100 Series Bomb Fuze	1	N	H	Y	N	N 41 21'41.8" W 088 06'17.3"	1/5/2007
L3-C6-05	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.1" W 088 06'17.0"	1/5/2007
L3-C6-06	1/3/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'41.1" W 088 06'17.0"	1/5/2007
L3-C6-07	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.1" W 088 06'17.0"	1/5/2007
L3-C6-08	1/3/2007	Booster	1	N	H	Y	N	N 41 21'41.1" W 088 06'17.0"	1/5/2007
L3-C6-09	1/3/2007	100 Series Bomb Fuze	1	N	H	Y	Y	N 41 21'41.1" W 088 06'17.0"	1/5/2007
L3-C6-10	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.1" W 088 06'17.0"	1/5/2007
L3-C6-11	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.1" W 088 06'17.0"	1/5/2007
L3-C6-12	1/3/2007	Booster	1	N	H	Y	N	N 41 21'41.1" W 088 06'17.0"	1/5/2007
L3-C6-13	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'41.1" W 088 06'17.0"	1/5/2007
L3-H3-01	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'39.2" W 088 06'11.7"	1/5/2007
L3-H3-02	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'39.4" W 088 06'09.4"	1/5/2007
L3-H3-03	1/3/2007	Projo 40mm Shotgun Round	1	N	H	Y	Y	N 41 21'39.4" W 088 06'09.4"	1/5/2007
L3-H3-04	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'39.4" W 088 06'09.4"	1/5/2007
L3-H3-05	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'39.3" W 088 06'11.5"	1/5/2007
L3-H3-06	1/3/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'39.3" W 088 06'11.5"	1/5/2007
L3-H3-07	1/3/2007	Ctg to 40mm M406	1	N	H	Y	N	N 4121'39.3" W 088 06'11.5"	1/5/2007
L3-H3-08	1/3/2007	HE Ball to 40mm M406	1	N	H	Y	N	N 41 21'39.4" W 088 06'11.6"	1/5/2007
L3-H3-09	1/3/2007	HE Ball to 40mm M406	1	N	H	Y	N	N 41 21'39.4" W 088 06'11.6"	1/5/2007
L3-H3-10	1/3/2007	Ctg to 40mm M406	89	N	H	Y	N	N 4121'38.9" W 088 06'11.4"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-G7-01	1/3/2007	Booster	1	N	H	Y	N	N 41 21'43.0" W 088 06'12.8"	1/5/2007
L3-G7-02	1/3/2007	Booster	1	N	H	Y	N	N 41 21'43.0" W 088 06'12.8"	1/5/2007
L3-G7-03	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.0" W 088 06'12.8"	1/5/2007
L3-G7-04	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.0" W 088 06'12.8"	1/5/2007
L3-G7-05	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.0" W 088 06'12.8"	1/5/2007
L3-G7-06	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.0" W 088 06'12.8"	1/5/2007
L3-G7-07	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.0" W 088 06'12.8"	1/5/2007
L3-C7-01	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.2" W 088 06'17.9"	1/5/2007
L3-C7-02	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.2" W 088 06'17.9"	1/5/2007
L3-C7-03	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.2" W 088 06'17.9"	1/5/2007
L3-C6-14	1/3/2007	Booster	1	N	H	Y	N	N 41 21'42.4" W 088 06'17.6"	1/5/2007
L3-C6-15	1/3/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'17.6"	1/5/2007
L3-F3-05	1/4/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.5" W 088 06'14.3"	1/5/2007
L3-F3-06	1/4/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'38.5" W 088 06'14.3"	1/5/2007
L3-E3-01	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'38.7" W 088 06'13.9"	1/5/2007
L3-E3-02	1/4/2007	Flash Tube	1	N	H	Y	N	N 41 21'39.1" W 088 06'14.8"	1/5/2007
L3-E3-03	1/4/2007	Fuze MT M43 Booster Only	1	N	H	Y	N	N 41 21'39.0" W 088 06'14.7"	1/5/2007
L3-E3-04	1/4/2007	37mm Projo HE	1	N	H	Y	Y	N 41 21'38.9" W 088 06'14.3"	1/5/2007
L3-E3-05	1/4/2007	Flash Tube	1	N	H	Y	N	N 41 21'39.5" W 088 06'14.4"	1/5/2007
L3-C7-04	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.3" W 088 06'18.4"	1/5/2007
L3-C7-05	1/4/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'42.3" W 088 06'18.4"	1/5/2007
L3-C7-06	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.3" W 088 06'18.4"	1/5/2007
L3-C7-07	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.3" W 088 06'18.4"	1/5/2007
L3-C7-08	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.3" W 088 06'18.4"	1/5/2007
L3-C7-09	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.3" W 088 06'18.4"	1/5/2007
L3-C7-10	1/4/2007	Booster	1	N	H	Y	N	N 41 21'42.3" W 088 06'18.4"	1/5/2007
L3-C7-11	1/4/2007	Fuze MT M43	1	N	H	Y	Y	N 41 21'42.3" W 088 06'18.4"	1/5/2007
L3-C7-12	1/4/2007	Projo 75mm Shrapnel Partially	1	N	H	Y	Y	N 41 21'42.3" W 088 06'18.4"	1/4/2007
L3-C7-13	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.3" W 088 06'18.4"	1/5/2007
L3-C7-14	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.3" W 088 06'18.4"	1/5/2007
L3-C7-15	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.3" W 088 06'17.7"	1/5/2007
L3-C7-16	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.3" W 088 06'17.7"	1/5/2007
L3-C7-17	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.3" W 088 06'17.7"	1/5/2007
L3-C7-18	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.3" W 088 06'17.7"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-C7-19	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.3" W 088 06'17.7"	1/5/2007
L3-C7-20	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.3" W 088 06'17.7"	1/5/2007
L3-C7-21	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.3" W 088 06'17.7"	1/5/2007
L3-C7-22	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.3" W 088 06'17.7"	1/5/2007
L3-C7-23	1/4/2007	Fuze BD M60 Adapter Only	1	N	H	Y	N	N 41 21'43.3" W 088 06'17.7"	1/4/2007
L3-G7-08	1/4/2007	20mm HE Partial Round	1	N	H	Y	N	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-09	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-10	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-11	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-12	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-13	1/4/2007	Fuze BD M60 Adapter Only	1	N	H	Y	N	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-14	1/4/2007	Fuze PD M48	1	N	H	Y	N	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-15	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-16	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-17	1/4/2007	Burster Tube	1	N	H	Y	N	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-18	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-19	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.6" W 088 06'13.3"	1/5/2007
L3-G7-20	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-21	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-22	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-23	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-24	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-25	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-26	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-27	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-28	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-29	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-30	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-31	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-32	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-33	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-34	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-35	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-36	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-37	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-G7-38	1/4/2007	BLU26 Half w/o Fuze	1	N	H	Y	N	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-39	1/4/2007	BLU26 Half w/o Fuze	1	N	H	Y	N	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-40	1/4/2007	BLU26 Half w/o Fuze	1	N	H	Y	N	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-41	1/4/2007	BLU26 Half w/o Fuze	1	N	H	Y	N	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-42	1/4/2007	BLU26 Half w/o Fuze	1	N	H	Y	N	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-43	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-44	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-45	1/4/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.8" W 088 06'12.9"	1/5/2007
L3-G7-46	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-47	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-48	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
l3-g7-49	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-50	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-51	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-52	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-53	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-54	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-55	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-56	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-57	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-58	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-59	1/5/2007	Booster	1	N	H	Y	N	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-60	1/5/2007	57mm Projo HE Partial	1	N	H	Y	N	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-G7-61	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'42.4" W 088 06'12.4"	1/5/2007
L3-C7-24	1/5/2007	75mm Projo Shrapnel	1	N	H	Y	N	N 41 21'43.2" W 088 06'17.6"	1/5/2007
L3-C7-25	1/5/2007	90mm Projo HE	1	N	H	Y	N	N 41 21'43.2" W 088 06'17.6"	1/5/2007
L3-C7-26	1/5/2007	Pipe Fitting w/HE	1	N	H	Y	N	N 41 21'43.2" W 088 06'17.6"	1/5/2007
L3-C7-27	1/5/2007	HE Ball to 40mm M406	1	N	H	Y	N	N 41 21'43.6" W 088 06'16.0"	1/5/2007
L3-C7-28	1/5/2007	57mm Projo w/Fuze PD T83	1	N	H	Y	Y	N 41 21'43.5" W 088 06'18.6"	1/5/2007
L3-C7-29	1/5/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.5" W 088 06'18.6"	1/5/2007
L3-C7-30	1/5/2007	Booster	1	N	H	Y	N	N 41 21'43.5" W 088 06'18.6"	1/5/2007
L3-G4-01	1/5/2007	Fuze MT M43	1	N	H	Y	N	N 41 21'39.8" W 088 06'12.0"	1/5/2007
L3-G4-02	1/5/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'40.2" W 088 06'12.5"	1/5/2007
L3-G4-03	1/5/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'40.2 W 088 06'12.5"	1/5/2007
L3-G4-04	1/5/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'40.2" W 088 06'12.5"	1/5/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-G4-05	1/5/2007	Ctg to 40mm M406	1	N	H	Y	N	N 41 21'40.2" W 088 06'12.5"	1/5/2007
L3-B7-01	1/8/2007	Booster	1	N	H	Y	N	N 41 21'43.6" W 088 06'18.1"	1/11/2007
L3-B7-02	1/8/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.6" W 088 06'18.1"	1/11/2007
L3-B7-03	1/8/2007	100 Series Bomb Fuze	1	N	H	Y	N	N 41 21'43.6" W 088 06'18.1"	1/11/2007
L3-B7-04	1/8/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.6" W 088 06'18.1"	1/11/2007
L3-B7-05	1/8/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.6" W 088 06'18.1"	1/11/2007
L3-B7-06	1/8/2007	Fuze PD T83	1	N	H	Y	Y	N 41 21'43.6" W 088 06'18.1"	1/11/2007
L3-B7-07	1/8/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'43.7" W 0988 06'20.2"	1/11/2007
L3-B7-08	1/8/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'43.7" W 0988 06'20.2"	1/11/2007
L3-B7-09	1/8/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'43.7" W 0988 06'20.2"	1/11/2007
L3-B7-10	1/8/2007	100 Series Bomb Fuze	1	N	H	Y	N	N 41 21'43.7" W 0988 06'20.2"	1/11/2007
L3-G4-06	1/8/2007	57mm projo Fuzed Unfired	1	N	H	Y	Y	N 41 21'40.6" W 088 06'13.1"	1/11/2007
L3-G7-07	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.7" W 088 06'12.9"	1/11/2007
L3-G7-08	1/8/2007	Booster	1	N	H	Y	N	N 41 21'39.9" W 088 06'13.1"	1/11/2007
L3-D7-01	1/8/2007	Booster	1	N	H	Y	N	N 41 21'46.8" W 088 06'12.8"	1/11/2007
L3-D7-02	1/8/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'44.0" W 088 06'17.2"	1/11/2007
L3-D7-03	1/8/2007	90mm Projo HE Unfuzed	1	N	H	Y	Y	N 41 21'44.0" W 088 06'17.2"	1/11/2007
L3-G7-62	1/8/2007	Fuze PD T83	84	N	H	Y	N	N 41 21'42.8" W 088 06'12.5"	1/11/2007
L3-G7-63	1/8/2007	Fuze PD T83	20	N	H	Y	N	N 41 21'43.2" W 088 06'13.0"	1/11/2007
L3-G7-64	1/8/2007	Suppl Charge	1	N	H	Y	N	N 41 21'43.2" W 088 06'13.0"	1/11/2007
L3-G7-65	1/8/2007	Booster	1	N	H	Y	N	N 41 21'43.2" W 088 06'13.0"	1/11/2007
L3-G7-66	1/8/2007	57mm Projo Unfuzed	1	N	H	Y	Y	N 41 21'43.2" W 088 06'13.0"	1/11/2007
L3-G7-67	1/8/2007	57mm Projo Unfuzed	1	N	H	Y	Y	N 41 21'43.2" W 088 06'13.0"	1/11/2007
L3-G7-68	1/8/2007	57mm Projo Unfuzed	1	N	H	Y	Y	N 41 21'43.2" W 088 06'13.0"	1/11/2007
L3-H4-01	1/8/2007	75mm Projo Fuzed Unfired	1	N	H	Y	Y	N 41 21'40.8" W 088 06'11.5"	1/11/2007
L3-H4-02	1/8/2007	Booster	1	N	H	Y	N	N 41 21'39.8" W 088 06'11.6"	1/11/2007
L3-H4-03	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'39.8" W 088 06'11.6"	1/11/2007
L3-H4-04	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'39.8" W 088 06'11.6"	1/11/2007
L3-H4-05	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'39.8" W 088 06'11.6"	1/11/2007
L3-H4-06	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'39.8" W 088 06'11.6"	1/11/2007
L3-H4-07	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.5" W 088 06'11.5"	1/11/2007
L3-H4-08	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.5" W 088 06'11.5"	1/11/2007
L3-H4-09	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.5" W 088 06'11.5"	1/11/2007
L3-H4-10	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.5" W 088 06'11.5"	1/11/2007
L3-H4-11	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.5" W 088 06'11.5"	1/11/2007

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Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-H4-12	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.5" W 088 06'11.5"	1/11/2007
L3-H4-13	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.5" W 088 06'11.5"	1/11/2007
L3-H4-14	1/8/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.5" W 088 06'11.5"	1/11/2007
L3-H4-15	1/9/2007	Ctg to 40mm	45	N	H	Y	N	N 41 21'39.8" W 088 06'11.9"	1/11/2007
L3-H4-15	1/9/2007	40mm projo	1	N	H	Y	N	N 41 21'40.0" W 088 06'11.7"	1/11/2007
L3-H4-17	1/9/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.3" W 088 06'12.1"	1/11/2007
L3-H4-18	1/9/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.3" W 088 06'12.1"	1/11/2007
L3-H4-19	1/9/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.3" W 088 06'12.1"	1/11/2007
L3-H4-20	1/9/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.3" W 088 06'12.1"	1/11/2007
L3-H4-21	1/9/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.3" W 088 06'12.1"	1/11/2007
L3-D7-04	1/9/2007	Booster	1	N	H	Y	N	N 41 21'42.2" W 088 06'17.5"	1/11/2007
L3-D7-05	1/9/2007	Frag Ball to 40mm	1	N	H	Y	N	N 41 21'43.1" W 088 06'16.1"	1/11/2007
L3-D7-06	1/9/2007	Frag Ball to 40mm	1	N	H	Y	N	N 41 21'43.1" W 088 06'16.1"	1/11/2007
L3-D7-07	1/9/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'43.1" W 088 06'16.1"	1/11/2007
L3-D7-08	1/9/2007	30mm Projo Fuzed	1	N	H	Y	Y	N 41 21'43.3" W 088 06'16.6"	1/11/2007
L3-G7-69	1/9/2007	Fuze PD M48	1	N	H	Y	N	N 41 21'43.1" W 088 06'11.1"	1/11/2007
L3-G7-70	1/9/2007	Fuze BD M60	1	N	H	Y	N	N 41 21'43.1" W 088 06'11.1"	1/11/2007
L3-G7-71	1/9/2007	Booster	1	N	H	Y	N	N 41 21'43.1" W 088 06'11.1"	1/11/2007
L3-G7-72	1/9/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'43.1" W 088 06'11.1"	1/11/2007
L3-G7-73	1/9/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'43.1" W 088 06'11.1"	1/11/2007
L3-G7-74	1/9/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'43.1" W 088 06'11.1"	1/11/2007
L3-G7-75	1/9/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'43.1" W 088 06'11.1"	1/11/2007
L3-G7-76	1/9/2007	Booster	1	N	H	Y	N	N 41 21'43.4" W 088 06'12.1"	1/11/2007
L3-G7-77	1/9/2007	Booster	1	N	H	Y	N	N 41 21'43.4" W 088 06'12.1"	1/11/2007
L3-G7-78	1/9/2007	Fuze BD M66A1	1	N	H	Y	Y	N 41 21'43.4" W 088 06'12.1"	1/11/2007
L3-G7-79	1/9/2007	Fuze PD T83	18	N	H	Y	N	N 41 21'43.4" W 088 06'12.1"	1/11/2007
L3-G7-80	1/10/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'44.1" W 088 06'13.0"	1/11/2007
L3-G7-81	1/10/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'44.1" W 088 06'13.0"	1/11/2007
L3-G7-82	1/10/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'44.1" W 088 06'13.0"	1/11/2007
L3-G7-83	1/10/2007	Suppl Charge	1	N	H	Y	Y	N 41 21'43.6" W 088 06'11.8"	1/11/2007
L3-G7-84	1/10/2007	Booster	1	N	H	Y	N	N 41 21'43.6" W 088 06'11.8"	1/11/2007
L3-G7-85	1/10/2007	Booster	1	N	H	Y	N	N 41 21'43.6" W 088 06'11.8"	1/11/2007
L3-G7-86	1/10/2007	75mm Projo	1	N	H	Y	Y	N 41 21'43.6" W 088 06'11.8"	1/11/2007
L3-G7-87	1/10/2007	75mm Projo (Base only)	1	N	H	Y	N	N 41 21'43.6" W 088 06'11.8"	1/11/2007
L3-G7-88	1/10/2007	Fuze PD T83	27	N	H	Y	N	N 41 21'43.6" W 088 06'11.8"	1/11/2007

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Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-F4-01	1/10/2007	Flash Tube	1	N	H	Y	Y	N 41 21'40.0" W 088 06'12.8"	1/11/2007
L3-F4-02	1/10/2007	Booster	1	N	H	Y	N	N 41 21'40.5" W 088 06'13.9"	1/11/2007
L3-F4-03	1/10/2007	Booster	1	N	H	Y	N	N 41 21'40.5" W 088 06'13.9"	1/11/2007
L3-F4-04	1/10/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'39.8" W 088 06'14.0"	1/11/2007
L3-F4-05	1/10/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'39.4" W 088 06'13.8"	1/11/2007
L3-F4-06	1/10/2007	Flash Tube	1	N	H	Y	N	N 41 21'39.4" W 088 06'13.8"	1/11/2007
L3-D7-09	1/10/2007	Frag Ball to 40mm	1	N	H	Y	N	N 41 21'43.6" W 088 06'16.2"	1/11/2007
L3-D7-10	1/10/2007	20mm Projo	1	N	H	Y	Y	N 41 21'43.6" W 088 06'16.2"	1/11/2007
L3-D7-11	1/10/2007	Fuze M218 (To Submunition)	1	N	H	Y	Y	N 41 21'43.6' W 088 06'16.2"	1/11/2007
L3-D7-12	1/10/2007	Fuze VT	1	N	H	Y	N	N 41 21'43.6" W 088 06'16.5"	1/11/2007
L3-D7-13	1/10/2007	Fuze VT	1	N	H	Y	N	N 41 21'43.6" W 088 06'16.5"	1/11/2007
L3-H5-01	1/10/2007	57mm projo Fuzed Unfired	1	N	H	Y	Y	N 41 21'40.8" W 088 06'11.8"	1/11/2007
L3-H5-02	1/10/2007	57mm Projo	1	N	H	Y	N	N 41 21'40.8" W 088 06'11.8"	1/11/2007
L3-H5-03	1/10/2007	57mm Projo	1	N	H	Y	N	N 41 21'40.8" W 088 06'11.8"	1/11/2007
L3-H5-04	1/10/2007	75mm Projo	1	N	H	Y	N	N 41 21'40.8" W 088 06'11.8"	1/11/2007
L3-H5-05	1/11/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'41.1" W 088 06'11.7"	1/11/2007
L3-H5-06	1/11/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'41.1" W 088 06'11.7"	1/11/2007
L3-H5-07	1/11/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'41.1" W 088 06'11.7"	1/11/2007
L3-H5-08	1/11/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'41.1" W 088 06'11.7"	1/11/2007
L3-H5-09	1/11/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'41.1" W 088 06'11.7"	1/11/2007
L3-H5-10	1/11/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'41.1" W 088 06'11.7"	1/11/2007
L3-H5-11	1/11/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'41.1" W 088 06'11.7"	1/11/2007
L3-H5-12	1/11/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'42.6" W 088 06'11.4"	1/11/2007
L3-H5-13	1/11/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'42.6" W 088 06'11.4"	1/11/2007
L3-h5-14	1/11/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'41.8" W 088 06'10.9"	1/11/2007
L3-H5-15	1/11/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'41.8" W 088 06'10.9"	1/11/2007
L3-H5-16	1/11/2007	Fuze BD M60	1	N	H	Y	N	N 41 21'40.7" W 088 06'11.0"	1/11/2007
L3-G5-01	1/15/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'40.6" W 088 06'13.0"	1/18/2007
L3-G5-02	1/15/2007	Fuze Misc	1	N	H	Y	N	N 41 21'40.6" W 088 06'13.0"	1/18/2007
L3-G10-01	1/15/2007	Booster	1	N	H	Y	N	N 41 21'45.7" W 088 06'13.3"	1/18/2007
L3-G10-02	1/15/2007	Frag Ball to 40mm	1	N	H	Y	N	N 41 21'46.7" W 088 06'13.7"	1/18/2007
L3-F5-01	1/16/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'41.1" W 088 06'13.7"	1/18/2007
L3-G13-01	1/16/2007	57mm Projo HEAT	1	N	H	Y	N	N 41 21'49.4" W 088 06'13.2"	1/18/2007
L3-G13-02	1/17/2007	Booster	1	N	H	Y	N	N 41 21'49.3" W 088 06'13.0"	1/18/2007
L3-G13-03	1/17/2007	Booster	1	N	H	Y	N	N 41 21'49.3" W 088 06'13.0"	1/18/2007

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SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L3-G13-04	1/17/2007	Booster	1	N	H	Y	N	N 41 21'49.3" W 088 06'13.0"	1/18/2007
L3-G13-05	1/17/2007	Booster	29	N	H	Y	N	N 41 21'49.5" W 088 06'12.9"	1/18/2007
L3-G13-06	1/17/2007	Booster	1	N	H	Y	N	N 41 21'49.0" W 088 06'12.8"	1/18/2007
L3-G13-07	1/17/2007	Booster	1	N	H	Y	N	N 41 21'49.2" W 088 06'12.8"	1/18/2007
L3-G13-08	1/17/2007	Booster	13	N	H	Y	N	N 41 21'48.3" W 088 06'12.7"	1/18/2007
L3-G10-03	1/17/2007	Booster	1	N	H	Y	N	N 41 21'45.8" W 088 06'13.2"	1/18/2007
L3-G10-04	1/17/2007	Fuze Misc	1	N	H	Y	N	N 41 21'46.1" W 088 06'12.6"	1/18/2007
L3-F6-01	1/17/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'42.3" W 088 06'13.9"	1/18/2007
L3-F6-02	1/17/2007	Fuze PD T83	1	N	H	Y	N	N 41 21'42.4" W 088 06'14.1"	1/18/2007
L3-F6-03	1/18/2007	6 Inch Projo	10	N	H	Y	N	N 41 21'42.5" W 088 06'13.1"	1/18/2007
L3-F6-04	1/18/2007	4.5 Inch Rocket W/H	1	N	H	Y	N	N 41 21'42.5" W 088 06'13.1"	1/18/2007
L3-G10-05	1/18/2007	Fuze BD M60	1	N	H	Y	N	N 41 21'46.1" W 088 06'12.0"	1/18/2007
L3-G13-09	1/22/2007	Boosters	216	N	H	Y	N	N 41 21'49.2" W 088 06'13.4"	1/31/2007
L3-G13-10	1/22/2007	Boosters	67	N	H	Y	N	N 41 21'48.4" W 088 06'10.3"	1/31/2007
L3-G13-11	1/22/2007	Boosters	160	N	H	Y	N	N 41 21'49.3" W 088 06'12.4"	1/31/2007
L3-G13-12	1/22/2007	Boosters	56	N	H	Y	N	N 41 21'48.8" W 088 06'13.3"	1/31/2007
L3-G13-13	1/22/2007	Flash Tube	1	N	H	Y	N	N 41 21'48.8" W 088 06'13.3"	1/31/2007
L3-F10-01	1/22/2007	SupplChg	1	N	H	Y	N	N 41 21'46.6" W 088 06'13.7"	1/31/2007
L3-F10-02	1/23/2007	Fuze PFDM48	1	N	H	Y	N	N 41 21'46.8" W 088 06'13.2"	1/31/2007
L3-F10-03	1/23/2007	Ctg to 40mm	1	N	H	Y	N	N 41 21'46.8" W 088 06'13.2"	1/31/2007
L3-G13-14	1/23/2007	Boosters	40	N	H	Y	N	N 41 21'48.4" W 088 06'12.7"	1/31/2007
L3-G13-15	1/24/2007	Boosters	1	N	H	Y	N	N 41 21'48.6" W 088 06'12.7"	1/31/2007
L3-G13-16	1/24/2007	SupplChg	1	N	H	Y	N	N 41 21'48.6" W 088 06'12.7"	1/31/2006
L3-G13-17	1/29/2007	Fuze PD M48	1	N	H	Y	N	N 41 21'48.4" W 088 06'13.0"	1/31/2007
L2-L8-39	12-19 06	Fuze BD M68	1	N	H	Y	Y	N 41 22'01.9" W 088 05'51.7"	1/5/2007
L2-N4-01	12- 12 06	Booster	1	N	H	Y	N	N 41 22'04.9" W 088 05'55.7"	12/14/2006
L2-N4-02	12- 12 06	Booster	1	N	H	Y	N	N 41 22'04.9" W 088 05'55.7"	12/14/2006
L2-N4-03	12- 12 06	Booster	1	N	H	Y	N	N 41 22'05.9" W 088 05'55.5"	12/14/2006
L2-N4-04	12- 12 06	Fuze BD M68	1	N	H	Y	Y	N 41 22'04.4" W 088 05'56.0"	12/14/2006
L2-N4-05	12- 12 06	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'55.7"	12/14/2006
L2-N4-06	12- 12 06	Booster	1	N	H	Y	N	N 41 22'05.4" W 088 05'55.7"	12/14/2006
L2-N4-07	12- 12 06	Booster	1	N	H	Y	N	N 41 22'05.8" W 088 05'55.9"	12/14/2006
L2-N4-08	12- 12 06	Booster	1	N	H	Y	N	N 41 22'05.5" w 088 05'56.3"	12/14/2006
L2-N4-09	12- 12 06	Booster	1	N	H	Y	N	N 41 22'05.5" W 088 05'56.3"	12/14/2006
L2-N4-10	12- 12 06	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'56.5"	12/14/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-N4-11	12- 12 06	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'56.5"	12/14/2006
L2-N4-12	12- 12 06	Booster	1	N	H	Y	N	N 41 22'05.6" W 088 05'56.7"	12/14/2006
L2-N4-13	12- 12 06	Booster	1	N	H	Y	N	N 41 22'05.2" W 088 05'56.7"	12/14/2006
L2-N4-14	12- 12 06	Booster	1	N	H	Y	N	N 41 22'05.2" W 088 05'56.7"	12/14/2006
L2-N4-15	12- 12 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'04.9" W 088 05'56.8"	12/14/2006
L2-N4-16	12- 12 06	Booster	1	N	H	Y	N	N 41 22'04.9" W 088 05'56.4"	12/14/2006
L2-N4-17	12- 12 06	Booster	1	N	H	Y	N	N 41 22'04.9" W 088 05'56.4"	12/14/2006
L2-N4-18	12- 12 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.2" W 088 05'56.4"	12/14/2006
L2-M4-15	12/12/2006	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'56.0"	12/14/2006
L2-N4-19	12- 13 06	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'56.8"	12/14/2006
L2-N4-20	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.1" W 088 05'57.0"	12/14/2006
L2-O4-01	12- 13 06	Booster	1	N	H	Y	N	N 41 22'07.5" W 088 05'57.2"	12/14/2006
L2-O4-02	12- 13 06	Booster	1	N	H	Y	N	N 41 22'07.5" W 088 05'56.2"	12/14/2006
L2-O4-03	12- 13 06	Booster	1	N	H	Y	N	N 41 22'07.5" W 088 05'56.2"	12/14/2006
L2-O4-04	12- 13 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.5" W 088 05'56.2"	12/14/2006
L2-O4-05	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.3" W 088 05'55.6"	12/14/2006
L2-O4-06	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.3" W 088 05'55.6"	12/14/2006
L2-O4-07	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.3" W 088 05'55.6"	12/14/2006
L2-O4-08	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.8" W 088 05'55.9"	12/14/2006
L2-O4-09	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.8" W 088 05'55.9"	12/14/2006
L2-O4-10	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.3" W 088 05'55.7"	12/14/2006
L2-O4-11	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.0" W 088 05'56.1"	12/14/2006
L2-O4-12	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.0" W 088 05'56.1"	12/14/2006
L2-O4-13	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.0" W 088 05'56.1"	12/14/2006
L2-O4-14	12- 13 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.6" W 088 05'556.3"	12/14/2006
L2-O4-15	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.3" W 088 05'55.9"	12/14/2006
L2-O4-16	12- 13 06	Booster	1	N	H	Y	N	N 4122'06.3" W 088 05'55.9"	12/14/2006
L2-O4-17	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.3" W 088 05'55.9"	12/14/2006
L2-O5-01	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.6" W 088 05'54.9"	12/14/2006
L2-O5-02	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.6" W 088 05'54.9"	12/14/2006
L2-O5-03	12- 13 06	Booster	1	N	H	Y	N	N 41 22'06.6" W 088 05'54.9"	12/14/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-O5-04	12- 14 06	Booster	1	N	H	Y	N	N 41 22'05.7" W 088 05'54.3"	1/5/2007
L2-O5-05	12- 14 06	Booster	1	N	H	Y	N	N 41 22'06.4" W 088 05'54.2"	1/5/2007
L2-O5-06	12- 14 06	Booster	1	N	H	Y	N	N 41 22'06.4" W 088 05'54.2"	1/5/2007
L2-O5-07	12- 14 06	Booster	1	N	H	Y	N	N 41 22'06.4" W 088 05'54.2"	1/5/2007
L2-O5-08	12- 14 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.4" W 088 05'54.2"	1/5/2007
L2-O5-09	12- 14 06	Booster	1	N	H	Y	N	N 41 22'06.2" W 088 05'54.2"	1/5/2007
L2-O5-10	12- 14 06	Booster	1	N	H	Y	N	N 41 22'06.5" w 088 05'54.5"	1/5/2007
L2-O5-11	12- 14 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.6" W 088 05'54.5"	1/5/2007
L2-O5-12	12- 14 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.9" W 088 05'55.1"	1/5/2007
L2-O5-13	12- 14 06	Booster	1	N	H	Y	N	N 41 22'05.9" W 088 05'55.1"	1/5/2007
L2-O5-14	12- 14 06	Booster	1	N	H	Y	N	N 41 22'05.9" W 088 05'55.1"	1/5/2007
L2-O5-15	12- 14 06	Booster	1	N	H	Y	N	N 41 22'05.9" W 088 05'55.1"	1/5/2007
L2-O5-16	12- 14 06	Booster	1	N	H	Y	N	N 41 22'05.9" W 088 05'55.1"	1/5/2007
L2-O5-17	12- 14 06	Booster	1	N	H	Y	N	N 41 22'05.9" W 088 05'55.1"	1/5/2007
L2-O5-18	12- 14 06	Booster	1	N	H	Y	N	N 41 22'05.9" W 088 05'55.1"	1/5/2007
L2-O5-19	12- 14 06	Booster	1	N	H	Y	N	N 41 22'06.6" W 088 05'55.6"	1/5/2007
L2-O3-57	12- 18 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.4" W 088 05'57.5"	1/5/2007
L2-O3-58	12- 18 06	Booster	1	N	H	Y	N	N 41 22'07.4" W 088 05'57.5"	1/5/2007
L2-O3-59	12- 18 06	Booster	1	N	H	Y	N	N 41 22'07.4" W 088 05'57.5"	1/5/2007
L2-O3-60	12- 18 06	Fuze MT M43	1	N	H	Y	Y	N 41 22'06.4" W 088 05'58.1"	1/5/2007
L2-O3-61	12- 18 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.4" W 088 05'58.1"	1/5/2007
L2-O3-62	12- 18 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.4" W 088 05'58.1"	1/5/2007
L2-O3-63	12- 18 06	Booster	1	N	H	Y	N	N 41 22'06.4" W 088 05'58.1"	1/5/2007
L2-O3-64	12- 18 06	Booster	1	N	H	Y	N	N 41 22'06.4" W 088 05'58.1"	1/5/2007
L2-O3-65	12- 18 06	Booster	1	N	H	Y	N	N 41 22'06.4" W 088 05'58.1"	1/5/2007
L2-M3-01	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-02	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-03	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-04	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-05	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-06	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-07	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-08	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-09	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)	Disposal Date
L2-M3-10	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-11	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-12	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-13	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-14	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-15	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-16	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-17	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-18	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-19	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-20	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-21	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-22	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-23	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-24	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M3-25	12- 18 06	Booster	1	N	H	Y	N	N 41 22'04.5" W 088 05'58.5"	1/5/2007
L2-M7-16	12- 19 06	Booster	1	N	H	Y	N	N 41 22'03.8" W 088 05'53.0"	1/5/2007
L2-M7-17	12- 19 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'03.8" W 088 05'53.0"	1/5/2007
L2-L8-38	12- 19 06	Booster	1	N	H	Y	N	N 41 22'02.4" W 088 05'51.9"	1/5/2007
L2-O2-10	11- 28 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.0" W 088 05'57.9"	11/29/2006
L2-O2-11	11- 28 06	Fuze PD M48	1	N	H	Y	Y	N 41 22'06.0" W 088 05'57.9"	11/29/2006
L2-O2-12	11- 28 06	Fuze PD M48	1	N	H	Y	Y	N 41 22' 06.6" W 088 05'57.9"	11/29/2006
L2-O2-13	11- 28 06	Fuze PD M48	1	N	H	Y	Y	N 41 22'06.6" W 088 05'57.9"	11/29/2006
L2-O2-14	11- 28 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'06.6" W 088 05'57.9"	11/29/2006
L2-N6-12	11- 28 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.2" W 088 05'54.1"	11/29/2006
L2-N6-13	11- 28 06	Booster	1	N	H	Y	N	N 41 22'05.1" W 088 05'53.9"	11/29/2006
L2-N6-14	11- 28 06	Booster	1	N	H	Y	N	N 41 22'04.9" W 088 05'53.9"	11/29/2006
L2-N6-15	11- 28 06	Booster	1	N	H	Y	N	N 41 22'04.8" W 088 05'53.9"	11/29/2006
L2-N6-16	11- 28 06	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'53.8"	11/29/2006
L2-N6-17	11- 28 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.1" W 088 05'53.9"	11/29/2006
L2-N6-18	11- 28 06	Booster	1	N	H	Y	N	N 41 22'05.1" W 088 05'53.9"	11/29/2006
L2-N6-19	11- 28 06	Booster	1	N	H	Y	N	N 41 22'04.8" W 088 05'53.8"	11/29/2006
L2-N6-20	11- 28 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'04.7" W 088 05'53.9"	11/29/2006
L2-N6-21	11- 28 06	Booster	1	N	H	Y	N	N 41 22 04.6" W 088 05'54.0"	11/29/2006
L2-N6-22	11- 28 06	Booster	1	N	H	Y	N	N 41 22'05.3" W 088 05'54.1"	11/29/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-N6-23	11- 28 06	Booster	1	N	H	Y	N	N 41 22'05.5"	W 088 05'53.8"	11/29/2006
L2-N6-24	11- 28 06	Booster	1	N	H	Y	N	N 41 22'05.5"	W 088 05'53.8"	11/29/2006
L2-N6-25	11- 28 06	Booster	1	N	H	Y	N	N 41 22'05.8"	W 088 05'53.7"	11/29/2006
L2-N6-26	11- 28 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'05.8"	W 088 05'53.8"	11/29/2006
L2-N6-27	11- 28 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.8"	W 088 05'53.8"	11/29/2006
L2-N6-28	11- 28 06	Booster	1	N	H	Y	N	N 41 22'04.0"	W 088 05'54.4"	11/29/2006
L2-N6-29	11- 28 06	Booster	1	N	H	Y	N	N 41 22'04.3"	W 088 05'53.0"	11/29/2006
L2-K3-01	11- 28 06	Booster	1	N	H	Y	N	N 41 22'02.4"	W 088 05'58.2"	11/29/2006
L2-K3-02	11- 28 06	Fuze BD M68	1	N	H	Y	Y	N 41 22'02.4"	W 088 05'58.2"	11/29/2006
L2-K3-03	11- 28 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.4"	W 088 05'58.2"	11/29/2006
L2-K3-04	11- 28 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.4"	W 088 05'58.2"	11/29/2006
L2-K3-05	11- 28 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'02.4"	W 088 05'58.2"	11/29/2006
L2-K3-06	11- 28 06	HE Chunks (10 EA)	1	N	H	Y	N	N 41 22'02.4"	W 088 05'58.2"	11/29/2006
L2-K3-07	11- 28 06	Booster	1	N	H	Y	N	N 41 22'03.6"	W 088 05'58.1"	11/29/2006
L2-N5-01	11- 28 06	Booster	1	N	H	Y	N	N 41 22'05.6"	W 088 05'54.8"	11/29/2006
L2-N5-02	11- 28 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'05.6"	W 088 05'54.8"	11/29/2006
L2-P2-01	11- 29 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.5"	W 088 05'58.6"	12/14/2006
L2-J5-01	11- 30 06	Booster	1	N	H	Y	N	N 41 22'01.5"	W 088 05'56.3"	12/14/2006
L2-J5-02	11- 30 06	Fuze PD M48	1	N	H	Y	Y	N 41 22'01.4"	W 088 05'5.9"	12/14/2006
L2-J5-03	11- 30 06	Fuze MT M43	1	N	H	Y	Y	N 41 22'01.7"	W 088 05'57.8"	12/14/2006
L2-B2-01	11- 30 06	Booster	1	N	H	Y	N	N 41 21'54.9"	W 088 06'01.7"	12/14/2006
L2-B2-02	11- 30 06	Fuze MT M43	1	N	H	Y	Y	N 41 21'54.9"	w 088 06'01.7"	12/14/2006
L2-B2-03	11- 30 06	Fuze MT M43	1	N	H	Y	Y	N 41 21'54.9"	W 088 06'01.7"	12/14/2006
L2-B2-04	11- 30 06	Booster	1	N	H	Y	N	N 41 21'54.8"	W 088 06'01.8"	12/14/2006
L2-B2-05	11- 30 06	Booster	1	N	H	Y	N	N 41 21'54.8"	W 088 06'01.8"	12/14/2006
L2-B2-06	11- 30 06	Booster	1	N	H	Y	N	N 41 21'54.8"	W 088 06'01.8"	12/14/2006
L2-B2-07	11- 30 06	Booster	1	N	H	Y	N	N 41 21'54.8"	W 088 06'01.8"	12/14/2006
L2-B2-09	11- 30 06	Booster	1	N	H	Y	N	N 41 21'54.8"	W 088 06'01.8"	12/14/2006
L2-B2-10	11- 30 06	Booster	1	N	H	Y	N	N 41 21'54.8"	W 088 06'01.8"	12/14/2006
L2-B2-11	11- 30 06	Booster	1	N	H	Y	N	N 41 21'54.7"	W 088 06'01.8"	12/14/2006
L2-P3-01	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.4"	W 088 05'58.1"	12/14/2006
L2-P3-02	11- 30 06	Fuze PD M48	1	N	H	Y	Y	N 41 22'07.5"	W 088 05'57.4"	12/14/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-P3-03	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.5"	W 088 05'58.1"	12/14/2006
L2-P3-04	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.5"	W 088 05'58.1"	12/14/2006
L2-P3-05	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'57.6"	12/14/2006
L2-P3-06	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'57.6"	12/14/2006
L2-P3-07	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'57.6"	12/14/2006
L2-p3-08	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'57.4"	12/14/2006
L2-P3-09	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.2"	W 088 05'57.4"	12/14/2006
L2-P3-10	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'57.4"	12/14/2006
L2-P3-11	11- 30 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.2"	W 088 05'57.4"	12/14/2006
L2-P3-12	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.2"	W 088 05'57.4"	12/14/2006
L2-P3-13	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.4"	W 088 05'57.4"	12/14/2006
L2-P3-14	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.4"	W 088 05'57.4"	12/14/2006
L2-P3-15	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.4"	W 088 05'57.4"	12/14/2006
L2-P3-16	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.6"	W 088 05'57.3"	12/14/2006
L2-P3-17	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.6"	W 088 05'57.3"	12/14/2006
L2-P3-18	11- 30 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.6"	W 088 05'57.3"	12/14/2006
L2-P3-19	11- 30 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.3"	W 088 05'58.4"	12/14/2006
L2-P3-20	11- 30 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'06.3"	W 088 05'58.4"	12/14/2006
L2-P3-21	11- 30 06	Fuze BD M66A1	1	N	H	Y	Y	N 41 22'07.4"	W 088 05'57.7"	12/14/2006
L2-P3-22	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'57.9"	12/14/2006
L2-P3-23	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.3"	W 088 05'57.8"	12/14/2006
L2-P3-24	11- 30 06	Fuze PD M48	1	N	H	Y	Y	N 41 22'07.2"	W 088 05'57.8"	12/14/2006
L2-P3-25	11- 30 06	Fuze MT M43	1	N	H	Y	Y	N 41 22'07.8"	W 088 05'57.7"	12/14/2006
L2-P3-26	11- 30 06	Fuze MT M43	1	N	H	Y	Y	N 41 22'07.9"	W 088 05'57.9"	12/14/2006
L2-P3-27	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.7"	W 088 05'57.1"	12/14/2006
L2-P3-28	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.7"	W 088 05'57.1"	12/14/2006
L2-P3-29	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.7"	W 088 05'57.1"	12/14/2006
L2-P3-30	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.7"	W 088 05'57.1"	12/14/2006
L2-P3-31	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.9"	W 088 05'57.3"	12/14/2006
L2-P3-32	11- 30 06	Fuze MT M43	1	N	H	Y	Y	N 41 22'07.9"	W 088 05'57.3"	12/14/2006
L2-P3-33	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.8"	W 088 05'57.2"	12/14/2006
L2-P3-34	11- 30 06	Fuze MT M43	1	N	H	Y	Y	N 41 22'07.8"	W 088 05'57.2"	12/14/2006
L2-P3-35	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.8"	W 088 05'57.2"	12/14/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-P3-36	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.7"	W 088 05'57.2"	12/14/2006
L2-P3-37	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.7"	W 088 05'57.2"	12/14/2006
L2-P3-38	11- 30 06	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'57.3"	12/14/2006
L2-P3-39	11- 30 06	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'57.3"	12/14/2006
L2-P3-40	11- 30 06	Fuze MT M43	1	N	H	Y	Y	N 41 22'07.7"	W 088 05'57.2"	12/14/2006
L2-P3-41	11- 30 06	Fuze MT M43	1	N	H	Y	Y	N 41 22'07.5"	W 088 05'57.0"	12/14/2006
L2-P3-42	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.9"	W 088 05'57.0"	12/14/2006
L2-P3-43	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'07.9"	W 088 05'57.0"	12/14/2006
L2-P3-44	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.9"	W 088 05'57.0"	12/14/2006
L2-P3-45	11- 30 06	Fuze MT M43	1	N	H	Y	Y	N 41 22'07.9"	W 088 05'57.0"	12/14/2006
L2-P3-46	11- 30 06	Fuze PD M48	1	N	H	Y	Y	N 41 22'07.9"	W 088 05'56.8"	12/14/2006
L2-P3-47	11- 30 06	Fuze PD M48	1	N	H	Y	Y	N 41 22'07.9"	W 088 05'56.8"	12/14/2006
L2-P3-48	11- 30 06	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'57.0"	12/14/2006
L2-P3-49	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 22'08.0"	W 088 05'57.0"	12/14/2006
L2-P3-50	11- 30 06	Booster	1	N	H	Y	N	N 41 22'08.0"	W 088 05'56.9"	12/14/2006
L2-P3-51	11- 30 06	Fuze MT M43	1	N	H	Y	Y	N 41 22'08.0"	W 088 05'56.9"	12/14/2006
L2-P3-52	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.4"	W 088 05'56.9"	12/14/2006
L2-P3-53	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.4"	W 088 05'56.9"	12/14/2006
L2-P3-54	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.6"	W 088 05'56.9"	12/14/2006
L2-P3-55	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.4"	W 088 05'56.3"	12/14/2006
L2-P3-56	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.6"	W 088 05'56.7"	12/14/2006
L2-P3-57	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.6"	W 088 05'56.9"	12/14/2006
L2-P3-58	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.6"	W 088 05'56.9"	12/14/2006
L2-P3-59	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.6"	W 088 05'56.9"	12/14/2006
L2-P3-60	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.9"	W 088 05'57.3"	12/14/2006
L2-P3-61	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.8"	W 088 05'57.3"	12/14/2006
L2-P3-62	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.7"	W 088 05'57.3"	12/14/2006
L2-P3-63	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.7"	W 088 05'57.3"	12/14/2006
L2-P3-64	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.6"	W 088 05'57.2"	12/14/2006
L2-P3-65	11- 30 06	Booster	1	N	H	Y	N	N 41 22'08.4"	W 088 05'56.8"	12/14/2006
L2-P3-66	11- 30 06	Booster	1	N	H	Y	N	N 41 22'08.4"	W 088 05'56.8"	12/14/2006
L2-P3-67	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006
L2-P3-68	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006
L2-P3-69	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006
L2-P3-70	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006

USA Environmental, Inc.
MEC/UXO ACCOUNTABILITY RECORD

SITE: Joilet Army Ammunition Plant, Joilet, IL

Grid	Date	Identification	QNTY	Fired (Y/N)	Filler (Note 1)	Rusted (Y/N)	Intact (Y/N)	Location (L/L)		Disposal Date
L2-P3-71	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006
L2-P3-72	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006
L2-P3-73	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006
L2-P3-74	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006
L2-P3-75	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006
L2-P3-76	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006
L2-P3-77	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006
L2-P3-78	11- 30 06	Booster	1	N	H	Y	N	N 41 22'07.3"	W 088 05'56.4"	12/14/2006
L3-M14-01	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.2"	W 088 06'05.5"	12/14/2006
L3-L15-01	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N41 21'51.1"	W 088 06'07.0"	12/14/2006
L3-L15-02	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 21'51.1"	W 088 06'07.0"	12/14/2006
L3-L15-03	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 21'51.2"	W 088 06'07.0"	12/14/2006
L3-L14-01	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.4"	W 088 06'06.4"	12/14/2006
L3-L14-02	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.2"	W 088 06'06.0"	12/14/2006
L3-L14-03	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.2"	W 088 06'06.0"	12/14/2006
L3-L14-04	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.4"	W 088 06'06.3"	12/14/2006
L3-L14-05	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.8"	W 088 06'05.9"	12/14/2006
L3-L14-06	11- 30 06	Fuze PD T83	1	N	H	Y	Y	N 41 21'50.4"	W 088 05'05.9"	12/14/2006
L2-B2-08	11-30 06	Booster	1	N	H	Y	N	N 41 21'54.8"	W 088 06'01.8"	12/14/2006
		TOTAL	3,681							

Note 1: HE, Smoke, TNT, WP, Illum. Candle, etc. Use all
Note 2: Rusted through, Low order detonation, impact, etc.
Note 3: Sandy, loam, clay, other (specify)
Note 4: WWI, WWII, Korea, Viet Nam, Gulf, present, other

MEC/MPPEH Log

SITE: Joliet, IL CONTRACT: 2023 TASK ORDER: 105

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L5	20-Jun-07	M43 Fuze	1	4582870	407502	MPPEH	N	20-Jul-07	L5-01
L3	26-Jun-07	T83 Fuze	1	4579516	407646	MEC	N	20-Jul-07	L3-01
L3	26-Jun-07	M5 Landmine	1	4579522	407633	MEC	N	20-Jul-07	L3-02
L3	27-Jun-07	155mm MK1 shrapnel	1	4579514	407639	MEC	N	20-Jul-07	L3-03
L3	27-Jun-07	BLU 26	1	4579525	407614	MPPEH	N	20-Jul-07	L3-04
L3	27-Jun-07	T83 Fuze	1	4579528	407617	MEC	N	20-Jul-07	L3-05
L3	28-Jun-07	106mm unknown	1	4579524	407622	MPPEH	N	20-Jul-07	L3-06
L3	28-Jun-07	90mm w/M51 fuze	1	4579523	407623	MPPEH	N	20-Jul-07	L3-07
L3	28-Jun-07	90mm w/M51 fuze	1	4579523	407625	MPPEH	N	20-Jul-07	L3-08
L3	28-Jun-07	4.5" rocket warhead	1	4579523	407626	MPPEH	N	20-Jul-07	L3-09
L3	28-Jun-07	4.5" rocket warhead	1	4579524	407626	MPPEH	N	20-Jul-07	L3-10
L3	28-Jun-07	90mm w/M51 fuze	1	4579524	407627	MPPEH	N	20-Jul-07	L3-11
L3	28-Jun-07	90mm w/M51 fuze	1	4579525	407628	MPPEH	N	20-Jul-07	L3-12
L3	28-Jun-07	BLU 26 half shell	1	4579525	407630	MPPEH	N	20-Jul-07	L3-13
L3	28-Jun-07	Nose of 75mm HE	1	4579518	407649	MPPEH	N	20-Jul-07	L3-14
L3	28-Jun-07	4.5" rocket warhead	1	4579521	407646	MPPEH	N	20-Jul-07	L3-15
L3	4-Jul-07	T83 Fuze	1	4579780	407739	MEC	N	20-Jul-07	L3-16
L3	4-Jul-07	57mm HEAT	1	4579508	407638	MPPEH	N	20-Jul-07	L3-17
L3	4-Jul-07	T83 Fuze	1	4579504	407639	MEC	N	20-Jul-07	L3-18
L3	4-Jul-07	Nose of 75mm HE	1	4579504	407644	MPPEH	N	20-Jul-07	L3-19
L3	4-Jul-07	T83 Fuze	1	4579762	407738	MEC	N	20-Jul-07	L3-20
L3	10-Jul-07	90mm HE projectile	1	4579497	407621	MEC	N	20-Jul-07	L3-21
L3	18-Jul-07	40mm HE projectile	1	4579504	407686	MPPEH	N	20-Jul-07	L3-22
L3	24-Jul-07	75mm shrapnel rd	1	4579513	407706	MPPEH	N	30-Jul-07	L3-23
L3	24-Jul-07	T83 Fuze	1	4579514	407707	MEC	N	30-Jul-07	L3-24

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	24-Jul-07	T83 Fuze	1	4579513	407707	MEC	N	30-Jul-07	L3-25
L3	24-Jul-07	T83 Fuze	1	4579514	407705	MEC	N	30-Jul-07	L3-26
L3	24-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-27
L3	24-Jul-07	T83 Fuze	1	4579516	407705	MEC	N	30-Jul-07	L3-28
L3	24-Jul-07	T83 Fuze	1	4579528	407713	MEC	N	30-Jul-07	L3-29
L3	24-Jul-07	T83 Fuze	1	4579524	407709	MEC	N	30-Jul-07	L3-30
L3	24-Jul-07	M66 Fuze	1	4579524	407710	MEC	N	30-Jul-07	L3-31
L3	24-Jul-07	T83 Fuze	1	4579524	407711	MEC	N	30-Jul-07	L3-32
L3	24-Jul-07	T83 Fuze	1	4579524	407712	MEC	N	30-Jul-07	L3-33
L3	24-Jul-07	75mm shrapnel rd	1	4579525	407707	MEC	N	30-Jul-07	L3-34
L3	24-Jul-07	75mm shrapnel rd	1	4579524	407709	MEC	N	30-Jul-07	L3-35
L3	24-Jul-07	75mm shrapnel rd	1	4579522	407709	MEC	N	30-Jul-07	L3-36
L3	24-Jul-07	75mm shrapnel rd	1	4579521	407710	MEC	N	30-Jul-07	L3-37
L3	24-Jul-07	75mm HE projectile	1	4579521	407711	MEC	N	30-Jul-07	L3-38
L3	24-Jul-07	90mm HE projectile	1	4579521	407711	MEC	N	30-Jul-07	L3-39
L3	24-Jul-07	90mm HE projectile	1	4579522	407712	MEC	N	30-Jul-07	L3-40
L3	24-Jul-07	Base of 75mm HE	1	4579522	407712	MPPEH	N	30-Jul-07	L3-41
L3	24-Jul-07	Base of 90mm HE	1	4579522	407712	MPPEH	N	30-Jul-07	L3-42
L3	24-Jul-07	T83 Fuze	1	4579523	407713	MEC	N	30-Jul-07	L3-43
L3	24-Jul-07	T83 Fuze	1	4579522	407714	MEC	N	30-Jul-07	L3-44
L3	24-Jul-07	T83 Fuze	1	4579521	407713	MEC	N	30-Jul-07	L3-45
L3	24-Jul-07	T83 Fuze	1	4579520	407712	MEC	N	30-Jul-07	L3-46
L3	24-Jul-07	T83 Fuze	1	4579519	407712	MEC	N	30-Jul-07	L3-47
L3	24-Jul-07	T83 Fuze	1	4579518	407711	MEC	N	30-Jul-07	L3-48
L3	24-Jul-07	T83 Fuze	1	4579518	407711	MEC	N	30-Jul-07	L3-49
L3	24-Jul-07	T83 Fuze	1	4579517	407710	MEC	N	30-Jul-07	L3-50
L3	24-Jul-07	T83 Fuze	1	4579517	407711	MEC	N	30-Jul-07	L3-51
L3	24-Jul-07	T83 Fuze	1	4579518	407711	MEC	N	30-Jul-07	L3-52

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	24-Jul-07	T83 Fuze	1	4579518	407713	MEC	N	30-Jul-07	L3-53
L3	24-Jul-07	T83 Fuze	1	4579518	407714	MEC	N	30-Jul-07	L3-54
L3	24-Jul-07	T83 Fuze	1	4579519	407714	MEC	N	30-Jul-07	L3-55
L3	24-Jul-07	T83 Fuze	1	4579520	407714	MEC	N	30-Jul-07	L3-56
L3	24-Jul-07	T83 Fuze	1	4579521	407714	MEC	N	30-Jul-07	L3-57
L3	24-Jul-07	T83 Fuze	1	4579522	407713	MEC	N	30-Jul-07	L3-58
L3	24-Jul-07	T83 Fuze	1	4579517	407710	MEC	N	30-Jul-07	L3-59
L3	24-Jul-07	T83 Fuze	1	4579516	407710	MEC	N	30-Jul-07	L3-60
L3	24-Jul-07	T83 Fuze	1	4579516	407709	MEC	N	30-Jul-07	L3-61
L3	24-Jul-07	T83 Fuze	1	4579517	407708	MEC	N	30-Jul-07	L3-62
L3	24-Jul-07	T83 Fuze	1	4579516	407708	MEC	N	30-Jul-07	L3-63
L3	24-Jul-07	T83 Fuze	1	4579516	407707	MEC	N	30-Jul-07	L3-64
L3	24-Jul-07	T83 Fuze	1	4579516	407706	MEC	N	30-Jul-07	L3-65
L3	24-Jul-07	Booster for 75mm HE	1	4579517	407706	MPPEH	N	30-Jul-07	L3-66
L3	24-Jul-07	T83 Fuze	1	4579648	407619	MEC	N	30-Jul-07	L3-67
L3	24-Jul-07	T83 Fuze	1	4579649	407619	MEC	N	30-Jul-07	L3-68
L3	24-Jul-07	T83 Fuze	1	4579651	407620	MEC	N	30-Jul-07	L3-69
L3	24-Jul-07	T83 Fuze	1	4579651	407624	MEC	N	30-Jul-07	L3-70
L3	24-Jul-07	T83 Fuze	1	4579650	407625	MEC	N	30-Jul-07	L3-71
L3	24-Jul-07	T83 Fuze	1	4579650	407623	MEC	N	30-Jul-07	L3-72
L3	24-Jul-07	T83 Fuze	1	4579650	407625	MEC	N	30-Jul-07	L3-73
L3	24-Jul-07	T83 Fuze	1	4579652	407625	MEC	N	30-Jul-07	L3-74
L3	24-Jul-07	T83 Fuze	1	4579653	407631	MEC	N	30-Jul-07	L3-75
L3	24-Jul-07	M66 Fuze	1	4579654	407630	MEC	N	30-Jul-07	L3-76
L3	24-Jul-07	M66 Fuze	1	4579654	407631	MEC	N	30-Jul-07	L3-77
L3	24-Jul-07	T83 Fuze	1	4579516	407711	MEC	N	30-Jul-07	L3-78
L3	24-Jul-07	T83 Fuze	1	4579517	407711	MEC	N	30-Jul-07	L3-79
L3	24-Jul-07	T83 Fuze	1	4579518	407710	MEC	N	30-Jul-07	L3-80

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	24-Jul-07	T83 Fuze	1	4579519	407711	MEC	N	30-Jul-07	L3-81
L3	24-Jul-07	T83 Fuze	1	4579520	407710	MEC	N	30-Jul-07	L3-82
L3	24-Jul-07	T83 Fuze	1	4579520	407711	MEC	N	30-Jul-07	L3-83
L3	24-Jul-07	T83 Fuze	1	4579522	407711	MEC	N	30-Jul-07	L3-84
L3	24-Jul-07	Booster for 75mm HE	1	4579523	407711	MPPEH	N	30-Jul-07	L3-85
L3	25-Jul-07	90mm HE projectile	1	4579649	407627	MPPEH	N	30-Jul-07	L3-86
L3	25-Jul-07	Base of 90mm HE	1	4579645	407626	MPPEH	N	30-Jul-07	L3-87
L3	25-Jul-07	75mm shrapnel rd	1	4579644	407629	MPPEH	N	30-Jul-07	L3-89
L3	25-Jul-07	T83 Fuze	1	4579647	407628	MEC	N	30-Jul-07	L3-90
L3	25-Jul-07	T83 Fuze	1	4579643	407629	MEC	N	30-Jul-07	L3-91
L3	25-Jul-07	T83 Fuze	1	4579641	407626	MEC	N	30-Jul-07	L3-92
L3	25-Jul-07	T83 Fuze	1	4579643	407621	MEC	N	30-Jul-07	L3-93
L3	25-Jul-07	T83 Fuze	1	4579643	407618	MEC	N	30-Jul-07	L3-94
L3	25-Jul-07	M66 Fuze	1	4579640	407611	MEC	N	30-Jul-07	L3-95
L3	25-Jul-07	M66 Fuze	1	4579640	407608	MEC	N	30-Jul-07	L3-96
L3	25-Jul-07	M66 Fuze	1	4579643	407605	MEC	N	30-Jul-07	L3-97
L3	25-Jul-07	M60 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-98
L3	25-Jul-07	Base 75mm shrapnel	1	4579517	407707	MEC	N	30-Jul-07	L3-99
L3	25-Jul-07	M66 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-100
L3	25-Jul-07	M66 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-101
L3	25-Jul-07	M66 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-102
L3	25-Jul-07	M66 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-103
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-104
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-105
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-106
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-107
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-108
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-109

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-110
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-111
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-112
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-113
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-114
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-115
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-116
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-117
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-118
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-119
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-120
L3	25-Jul-07	T83 Fuze	1	4579517	407707	MEC	N	30-Jul-07	L3-121
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-122
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-123
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-124
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-125
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-126
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-127
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-128
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-129
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-130
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-131
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-132
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-133
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-134
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-135
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-136
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-137

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-138
L3	25-Jul-07	75mm shrapnel rd	1	4579517	407707	MEC	N	30-Jul-07	L3-139
L3	25-Jul-07	90mm HE projectile	1	4579517	407707	MPPEH	N	30-Jul-07	L3-140
L3	25-Jul-07	90mm HE projectile	1	4579517	407707	MPPEH	N	30-Jul-07	L3-141
L3	25-Jul-07	90mm HE projectile	1	4579517	407707	MPPEH	N	30-Jul-07	L3-142
L3	25-Jul-07	90mm HE projectile	1	4579517	407707	MPPEH	N	30-Jul-07	L3-143
L3	25-Jul-07	90mm HE projectile	1	4579517	407707	MPPEH	N	30-Jul-07	L3-144
L3	25-Jul-07	75mm HE projectile	1	4579517	407707	MPPEH	N	30-Jul-07	L3-145
L3	25-Jul-07	75mm HE projectile	1	4579517	407707	MPPEH	N	30-Jul-07	L3-146
L3	25-Jul-07	57mm HE projectile	1	4579517	407707	MPPEH	N	30-Jul-07	L3-147
L3	25-Jul-07	76mm APHE	1	4579517	407707	MPPEH	N	30-Jul-07	L3-148
L3	25-Jul-07	76mm APHE	1	4579517	407707	MPPEH	N	30-Jul-07	L3-149
L3	25-Jul-07	155mm MK1 shrapnel	1	4579517	407707	MEC	N	30-Jul-07	L3-150
L3	25-Jul-07	T83 Fuze	38	4579516	407706	MEC	N	30-Jul-07	L3-151
L3	25-Jul-07	M66 Fuze	3	4579516	407706	MEC	N	30-Jul-07	L3-152
L3	25-Jul-07	Booster for 75mm HE	9	4579516	407706	MPPEH	N	30-Jul-07	L3-153
L3	25-Jul-07	75mm HE projectile	2	4579516	407706	MPPEH	N	30-Jul-07	L3-154
L3	25-Jul-07	90mm HE projectile	2	4579516	407706	MPPEH	N	30-Jul-07	L3-156
L3	25-Jul-07	75mm shrapnel rd	11	4579516	407706	MEC	N	30-Jul-07	L3-157
L3	25-Jul-07	BLU 26 half shell	1	4579516	407706	MPPEH	N	30-Jul-07	L3-158
L3	25-Jul-07	T83 Fuze	28	4579635	407606	MEC	N	30-Jul-07	L3-159
L3	25-Jul-07	Booster for 75mm HE	2	4579635	407606	MPPEH	N	30-Jul-07	L3-162
L3	25-Jul-07	T83 Fuze	32	4579655	407511	MEC	N	30-Jul-07	L3-163
L3	25-Jul-07	Booster for 75mm HE	1	4579655	407511	MPPEH	N	30-Jul-07	L3-164
L3	25-Jul-07	155mm MK1 shrapnel	1	4579655	407511	MEC	N	30-Jul-07	L3-166
L3	25-Jul-07	Base 75mm shrapnel	2	4579655	407511	MEC	N	30-Jul-07	L3-168
L3	25-Jul-07	T83 Fuze	54	4579637	407608	MEC	N	30-Jul-07	L3-169
L3	25-Jul-07	Booster for 75mm HE	2	4579637	407608	MPPEH	N	30-Jul-07	L3-170

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	25-Jul-07	76mm APHE	1	4579637	407608	MPPEH	N	30-Jul-07	L3-173
L3	25-Jul-07	Base of 75mm HE	1	4579637	407608	MPPEH	N	30-Jul-07	L3-175
L3	25-Jul-07	Base 75mm shrapnel	1	4579637	407608	MEC	N	30-Jul-07	L3-176
L3	25-Jul-07	T83 Fuze	12	4579514	407705	MEC	N	30-Jul-07	L3-177
L3	25-Jul-07	M66 Fuze	3	4579637	407608	MEC	N	30-Jul-07	L3-179
L3	25-Jul-07	Base of 90mm HE	1	4579644	407627	MPPEH	N	8-Aug-07	L3-88
L3	25-Jul-07	Broken 90mm HE	3	4579516	407706	MPPEH	N	8-Aug-07	L3-155
L3	25-Jul-07	90mm HE projectile	1	4579635	407606	MPPEH	N	8-Aug-07	L3-160
L3	25-Jul-07	75mm shrapnel rd	4	4579635	407606	MEC	N	8-Aug-07	L3-161
L3	25-Jul-07	76mm APHE	1	4579655	407511	MPPEH	N	8-Aug-07	L3-165
L3	25-Jul-07	75mm shrapnel rd	4	4579655	407511	MEC	N	8-Aug-07	L3-167
L3	25-Jul-07	90mm HE projectile	1	4579637	407608	MPPEH	N	8-Aug-07	L3-171
L3	25-Jul-07	155mm MK1 shrapnel	1	4579637	407608	MEC	N	8-Aug-07	L3-172
L3	25-Jul-07	75mm shrapnel rd	8	4579637	407608	MEC	N	8-Aug-07	L3-174
L3	25-Jul-07	75mm shrapnel rd	1	4579514	407705	MEC	N	8-Aug-07	L3-178
L3	26-Jul-07	T83 Fuze	23	4579514	407706	MEC	N	30-Jul-07	L3-180
L3	26-Jul-07	75mm shrapnel rd	5	4579514	407706	MEC	N	8-Aug-07	L3-181
L3	30-Jul-07	T83 Fuze	13	4579515	407708	MEC	N	8-Aug-07	L3-182
L3	30-Jul-07	Booster for 75mm HE	2	4579648	407626	MPPEH	N	8-Aug-07	L3-183
L3	30-Jul-07	76mm APHE	1	4579648	407626	MPPEH	N	8-Aug-07	L3-184
L3	30-Jul-07	T83 Fuze	50	4579648	407626	MEC	N	8-Aug-07	L3-185
L3	31-Jul-07	Booster	34	4579469	407627	MPPEH	N	8-Aug-07	L3-186
L3	31-Jul-07	M60 Fuze	1	4579469	407627	MEC	N	8-Aug-07	L3-187
L3	31-Jul-07	75mm HE projectile	2	4579569	407622	MPPEH	N	8-Aug-07	L3-188
L3	31-Jul-07	75mm HE projectile	1	4579571	407602	MPPEH	N	8-Aug-07	L3-189
L3	1-Aug-07	M48 Fuze	1	4579735	407731	MPPEH	N	8-Aug-07	L3-190
L3	2-Aug-07	T83 Fuze	3	4579516	407703	MEC	N	8-Aug-07	L3-191
L3	2-Aug-07	T83 Fuze	37	4579512	407698	MEC	N	8-Aug-07	L3-192

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	2-Aug-07	T83 Fuze	15	4579512	407698	MEC	N	8-Aug-07	L3-193
L3	2-Aug-07	Booster for 75mm HE	1	4579512	407698	MPPEH	N	8-Aug-07	L3-194
L3	2-Aug-07	75mm HE projectile	2	4579512	407698	MPPEH	N	8-Aug-07	L3-195
L3	2-Aug-07	75mm shrapnel rd	3	4579512	407698	MPPEH	N	8-Aug-07	L3-196
L3	2-Aug-07	T83 Fuze	2	4579539	407684	MEC	N	8-Aug-07	L3-197
L3	2-Aug-07	Booster for M66 fuze	1	4579539	407684	MEC	N	8-Aug-07	L3-198
L3	3-Aug-07	T83 Fuze	8	4579511	407704	MEC	N	8-Aug-07	L3-199
L3	3-Aug-07	T83 Fuze	21	4579535	407671	MEC	N	8-Aug-07	L3-200
L3	3-Aug-07	M66 Fuze	3	4579535	407671	MEC	N	8-Aug-07	L3-201
L3	3-Aug-07	75mm shrapnel rd	1	4579535	407671	MEC	N	8-Aug-07	L3-202
L3	3-Aug-07	T83 Fuze	46	4579505	407706	MEC	N	8-Aug-07	L3-203
L3	3-Aug-07	57mm HE projectile	1	4579505	407706	MPPEH	N	8-Aug-07	L3-204
L3	3-Aug-07	Booster for 75mm HE	2	4579505	407706	MPPEH	N	8-Aug-07	L3-205
L3	3-Aug-07	76mm APHE	1	4579530	407672	MPPEH	N	8-Aug-07	L3-206
L3	6-Aug-07	T83 Fuze	79	4579501	407697	MEC	N	8-Aug-07	L3-207
L3	6-Aug-07	M66 Fuze	1	4579501	407697	MPPEH	N	8-Aug-07	L3-208
L3	6-Aug-07	75mm shrapnel rd	1	4579501	407697	MEC	N	8-Aug-07	L3-209
L3	6-Aug-07	T83 Fuze	3	4579502	407704	MEC	N	8-Aug-07	L3-210
L3	6-Aug-07	Booster for M66 fuze	1	4579502	407704	MPPEH	N	8-Aug-07	L3-211
L3	6-Aug-07	Booster for 75mm HE	1	4579502	407704	MPPEH	N	8-Aug-07	L3-212
L3	6-Aug-07	155mm MK1 shrapnel	1	4579502	407704	MEC	N	8-Aug-07	L3-213
L3	6-Aug-07	Nose of 75mm HE	1	4579502	407704	MEC	N	8-Aug-07	L3-214
L3	6-Aug-07	T83 Fuze	3	4579701	407677	MEC	N	8-Aug-07	L3-215
L3	6-Aug-07	75mm shrapnel rd	2	4579701	407677	MEC	N	8-Aug-07	L3-216
L3	6-Aug-07	Base 75mm shrapnel	1	4579701	407677	MEC	N	8-Aug-07	L3-217
L3	6-Aug-07	Base of 90mm HE	1	4579701	407677	MEC	N	8-Aug-07	L3-218
L3	6-Aug-07	Base of 90mm HE	1	4579545	407658	MEC	N	8-Aug-07	L3-219
L3	7-Aug-07	T83 Fuze	7	4579503	407710	MEC	N	8-Aug-07	L3-220

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	7-Aug-07	T83 Fuze	13	4579506	407706	MEC	N	8-Aug-07	L3-221
L3	7-Aug-07	76mm APHE	1	4579506	407706	MPPEH	N	8-Aug-07	L3-222
L3	7-Aug-07	Booster for M66 fuze	2	4579506	407706	MPPEH	N	8-Aug-07	L3-223
L3	7-Aug-07	Booster for 75mm HE	2	4579506	407706	MPPEH	N	8-Aug-07	L3-224
L3	7-Aug-07	Nose of 75mm HE	2	4579506	407706	MEC	N	8-Aug-07	L3-225
L3	7-Aug-07	155mm MK1 shrapnel	2	4579506	407706	MEC	N	8-Aug-07	L3-226
L3	7-Aug-07	75mm shrapnel rd	9	4579501	407693	MEC	N	8-Aug-07	L3-227
L3	7-Aug-07	Base of 75mm HE	1	4579501	407693	MEC	N	8-Aug-07	L3-228
L3	7-Aug-07	155mm MK1 shrapnel	1	4579501	407693	MEC	N	8-Aug-07	L3-229
L3	9-Aug-07	Booster	2	4579504	407702	MPPEH	N	15-Aug-07	L3-230
L3	9-Aug-07	90mm HE projectile	3	4579504	407702	MEC	N	15-Aug-07	L3-231
L3	9-Aug-07	T83 Fuze	14	4579510	407702	MEC	N	15-Aug-07	L3-232
L3	9-Aug-07	Nose of 75mm HE	1	4579510	407702	MEC	N	15-Aug-07	L3-233
L3	9-Aug-07	Booster for 75mm HE	1	4579510	407702	MPPEH	N	15-Aug-07	L3-234
L3	9-Aug-07	57mm HE projectile	1	4579510	407702	MEC	N	15-Aug-07	L3-235
L3	9-Aug-07	Supplementary charge	1	4579510	407702	MEC	N	15-Aug-07	L3-236
L3	10-Aug-07	T83 Fuze	67	4579508	407680	MEC	N	15-Aug-07	L3-237
L3	10-Aug-07	90mm HE projectile	6	4579508	407680	MEC	N	15-Aug-07	L3-238
L3	10-Aug-07	Broken 90mm HE	1	4579508	407680	MEC	N	15-Aug-07	L3-239
L3	10-Aug-07	76mm APHE	1	4579508	407680	MEC	N	15-Aug-07	L3-240
L3	10-Aug-07	75mm HE projectile	1	4579508	407680	MPPEH	N	15-Aug-07	L3-241
L3	10-Aug-07	75mm shrapnel rd	14	4579508	407680	MEC	N	15-Aug-07	L3-242
L3	10-Aug-07	Booster for 75mm HE	4	4579503	407667	MPPEH	N	15-Aug-07	L3-243
L3	10-Aug-07	Base 75mm shrapnel	1	4579503	407667	MEC	N	15-Aug-07	L3-244
L3	10-Aug-07	Base of 90mm HE	1	4579503	407667	MPPEH	N	15-Aug-07	L3-245
L3	10-Aug-07	75mm shrapnel rd	2	4579503	407667	MEC	N	15-Aug-07	L3-246
L3	10-Aug-07	T83 Fuze	12	4579508	407704	MEC	N	15-Aug-07	L3-247
L3	10-Aug-07	Booster for 75mm HE	1	4579508	407704	MPPEH	N	15-Aug-07	L3-248

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	10-Aug-07	T83 Fuze	33	4579506	407691	MEC	N	15-Aug-07	L3-249
L3	10-Aug-07	M60 Fuze	1	4579506	407691	MEC	N	15-Aug-07	L3-250
L3	10-Aug-07	Booster for 75mm HE	1	4579504	407690	MPPEH	N	15-Aug-07	L3-251
L3	10-Aug-07	75mm shrapnel rd	2	4579504	407690	MEC	N	15-Aug-07	L3-252
L3	10-Aug-07	T83 Fuze	28	4579504	407690	MEC	N	15-Aug-07	L3-253
L3	10-Aug-07	T83 Fuze	5	4579505	407705	MEC	N	15-Aug-07	L3-254
L3	13-Aug-07	T83 Fuze	3	4579507	407688	MEC	N	15-Aug-07	L3-255
L3	13-Aug-07	T83 Fuze	17	4579505	407677	MEC	N	15-Aug-07	L3-256
L3	13-Aug-07	T83 Fuze	9	4579507	407699	MEC	N	15-Aug-07	L3-257
L3	13-Aug-07	Nose of 75mm HE	1	4579524	407645	MEC	N	15-Aug-07	L3-258
L3	13-Aug-07	75mm shrapnel rd	1	4579524	407645	MEC	N	15-Aug-07	L3-259
L3	13-Aug-07	155mm MK1 shrapnel	1	4579524	407645	MEC	N	15-Aug-07	L3-260
L3	13-Aug-07	T83 Fuze	23	4579524	407645	MEC	N	15-Aug-07	L3-261
L3	14-Aug-07	T83 Fuze	4	4579505	407699	MEC	N	15-Aug-07	L3-262
L3	14-Aug-07	Booster for 75mm HE	1	4579505	407699	MEC	N	15-Aug-07	L3-263
L3	14-Aug-07	Base 75mm shrapnel	1	4579505	407699	MEC	N	15-Aug-07	L3-264
L3	14-Aug-07	Nose of 75mm HE	2	4579505	407699	MEC	N	15-Aug-07	L3-265
L3	16-Aug-07	T83 Fuze	9	4579497	407700	MEC	N	29-Aug-07	L3-266
L3	16-Aug-07	76mm APHE	1	4579492	407686	MPPEH	N	29-Aug-07	L3-267
L3	16-Aug-07	Nose of 75mm HE	1	4579492	407686	MEC	N	29-Aug-07	L3-268
L3	16-Aug-07	T83 Fuze	4	4579492	407686	MEC	N	29-Aug-07	L3-269
L3	17-Aug-07	Booster for 75mm HE	3	4579512	407709	MPPEH	N	29-Aug-07	L3-270
L3	17-Aug-07	T83 Fuze	9	4579512	407709	MEC	N	29-Aug-07	L3-271
L3	17-Aug-07	75mm HE projectile	1	4579513	407670	MPPEH	N	29-Aug-07	L3-272
L3	17-Aug-07	T83 Fuze	2	4579515	407701	MEC	N	29-Aug-07	L3-273
L3	21-Aug-07	Nose of 75mm HE	1	4579520	407707	MPPEH	N	29-Aug-07	L3-274
L5	21-Aug-07	M61 Fuze	1	4582869	407501	MPPEH	N	29-Aug-07	L5-02
L3	22-Aug-07	T83 Fuze	6	4579510	407706	MEC	N	29-Aug-07	L3-275

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	22-Aug-07	Booster for 75mm HE	3	4579510	407706	MPPEH	N	29-Aug-07	L3-276
L3	22-Aug-07	T83 Fuze	15	4579512	407709	MEC	N	29-Aug-07	L3-277
L3	22-Aug-07	Booster for 75mm HE	1	4579512	407709	MPPEH	N	29-Aug-07	L3-278
L3	22-Aug-07	75mm HE projectile	1	4579512	407709	MEC	N	29-Aug-07	L3-279
G4	23-Aug-07	Base of M48 fuze	1	4579414	407716	MPPEH	N	29-Aug-07	G4-1
G4	23-Aug-07	Base of M48 fuze	1	4579455	407707	MPPEH	N	29-Aug-07	G4-2
G4	24-Aug-07	Unknown Booster	1	4579449	407695	MPPEH	N	29-Aug-07	G4-3
H7	24-Aug-07	T83 Fuze	1	4579511	407727	MEC	N	29-Aug-07	H7-1
H7	24-Aug-07	Booster for M66 fuze	1	4579512	407721	MPPEH	N	29-Aug-07	H7-2
F4	27-Aug-07	Booster for M66 fuze	1	4576535	404739	MPPEH	N	29-Aug-07	F4-1
F4	27-Aug-07	M48 Fuze	1	4579451	407679	MPPEH	N	29-Aug-07	F4-2
H7	27-Aug-07	Booster for M66 fuze	1	4579519	407723	MPPEH	N	29-Aug-07	H7-3
H7	27-Aug-07	M60 Fuze	1	4579525	407726	MEC	N	29-Aug-07	H7-5
H7	27-Aug-07	Booster for M66 fuze	2	4579525	407706	MPPEH	N	29-Aug-07	H7-6
H7	27-Aug-07	T83 Fuze	1	4579536	407705	MEC	N	29-Aug-07	H7-7
H7	27-Aug-07	T83 Fuze	1	4579548	407719	MEC	N	29-Aug-07	H7-8
H7	27-Aug-07	Booster for M66 fuze	1	4579548	407719	MPPEH	N	29-Aug-07	H7-8
H7	27-Aug-07	Booster for M66 fuze	1	4579548	407721	MPPEH	N	29-Aug-07	H7-9
H7	27-Aug-07	Booster for M66 fuze	2	4579549	407723	MPPEH	N	29-Aug-07	H7-10
H7	27-Aug-07	Booster for M48 fuze	1	4579540	407730	MPPEH	N	29-Aug-07	H7-11
H7	27-Aug-07	T83 Fuze	1	4579536	407726	MEC	N	29-Aug-07	H7-12
H7	27-Aug-07	T83 Fuze	1	4579535	407722	MEC	N	29-Aug-07	H7-13
F4	27-Aug-07	Booster for M66 fuze	1	4579442	407655	MPPEH	N	29-Aug-07	F4-3
H7	27-Aug-07	T83 Fuze	1	4579533	407725	MEC	N	29-Aug-07	H7-14
H7	27-Aug-07	Booster for M66 fuze	1	4579533	407720	MPPEH	N	29-Aug-07	H7-15
H7	27-Aug-07	90mm HE projectile	1	4579525	407726	MEC	N	12-Sep-07	H7-4
H8	28-Aug-07	Booster for 75mm HE	1	4579552	407714	MPPEH	N	29-Aug-07	H8-1
H8	28-Aug-07	T83 Fuze	1	4579547	407714	MEC	N	29-Aug-07	H8-2

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
H8	28-Aug-07	Booster for M66 fuze	1	4579550	407716	MPPEH	N	29-Aug-07	H8-3
H8	28-Aug-07	T83 Fuze	1	4579561	407725	MEC	N	29-Aug-07	H8-4
H8	28-Aug-07	75mm HE projectile	1	4579541	407748	MEC	N	29-Aug-07	H8-5
H8	28-Aug-07	T83 Fuze	1	4579553	407718	MEC	N	29-Aug-07	H8-6
H8	28-Aug-07	Booster for M66 fuze	1	4579553	407718	MEC	N	29-Aug-07	H8-6
H8	28-Aug-07	Small piece of HE	1	4579565	407718	MEC	N	29-Aug-07	H8-7
H8	28-Aug-07	Unknown Booster	1	4579570	407716	MPPEH	N	29-Aug-07	H8-8
H4	29-Aug-07	T83 Fuze	2	4579451	407716	MEC	N	29-Aug-07	H4-1
H4	29-Aug-07	Unknown Booster	1	4579451	407715	MPPEH	N	29-Aug-07	H4-2
H4	29-Aug-07	Booster for 75mm HE	1	4579451	407715	MPPEH	N	29-Aug-07	H4-2
H5	30-Aug-07	T83 Fuze	1	4579475	407738	MEC	N	12-Sep-07	H5-1
H5	30-Aug-07	T83 Fuze	1	4579477	407733	MEC	N	12-Sep-07	H5-2
H5	30-Aug-07	Booster for M66 fuze	1	4579474	407717	MPPEH	N	12-Sep-07	H5-3
H5	30-Aug-07	T83 Fuze	1	4579474	407717	MPPEH	N	12-Sep-07	H5-3
H5	30-Aug-07	Booster for 75mm HE	1	4579474	407717	MPPEH	N	12-Sep-07	H5-3
L3	30-Aug-07	75mm HE projectile	1	4579520	407650	MEC	N	12-Sep-07	L3-280
L3	30-Aug-07	57mm HEAT	1	4579520	407650	MEC	N	12-Sep-07	L3-280
L3	30-Aug-07	M43 Fuze	1	4579520	407650	MPPEH	N	12-Sep-07	L3-280
L3	30-Aug-07	Nose of 75mm HE	1	4579520	407650	MEC	N	12-Sep-07	L3-280
L3	30-Aug-07	57mm HEAT	3	4579520	407650	MEC	N	12-Sep-07	L3-281
H14	30-Aug-07	Booster for 75mm HE	1	4579739	407725	MPPEH	N	12-Sep-07	H14-1
L3	31-Aug-07	Booster for 75mm HE	2	4579525	407663	MPPEH	N	12-Sep-07	L3-282
L3	31-Aug-07	T83 Fuze	3	4579525	407663	MEC	N	12-Sep-07	L3-283
L3	31-Aug-07	Nose of 75mm HE	4	4579525	407663	MEC	N	12-Sep-07	L3-284
L3	31-Aug-07	75mm shrapnel rd	2	4579525	407663	MEC	N	12-Sep-07	L3-285
L3	31-Aug-07	Base of 90mm HE	1	4579525	407663	MEC	N	12-Sep-07	L3-286
L3	31-Aug-07	T83 Fuze	151	4579528	407677	MEC	N	12-Sep-07	L3-287
L3	31-Aug-07	Base 75mm shrapnel	1	4579528	407677	MEC	N	12-Sep-07	L3-288

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	31-Aug-07	Nose of 75mm HE	3	4579528	407677	MEC	N	12-Sep-07	L3-289
L3	31-Aug-07	75mm HE projectile	1	4579528	407677	MPPEH	N	12-Sep-07	L3-290
L3	31-Aug-07	75mm shrapnel rd	7	4579528	407677	MEC	N	12-Sep-07	L3-291
L3	31-Aug-07	Booster for 75mm HE	19	4579528	407677	MPPEH	N	12-Sep-07	L3-292
L3	31-Aug-07	Supplementary charge	2	4579528	407677	MEC	N	12-Sep-07	L3-293
L3	31-Aug-07	T83 Fuze	10	4579528	407677	MEC	N	12-Sep-07	L3-294
L3	31-Aug-07	Booster for 75mm HE	2	4579528	407677	MPPEH	N	12-Sep-07	L3-295
G5	4-Sep-07	Booster for M66 fuze	1	4579483	407704	MPPEH	N	12-Sep-07	G5-1
F5	4-Sep-07	4" piece of Det Cord	1	4579500	407673	MEC	N	12-Sep-07	F5-1
F5	4-Sep-07	Unknown Booster	1	4579491	407653	MPPEH	N	12-Sep-07	F5-2
F5	4-Sep-07	T83 Fuze	1	4579490	407666	MEC	N	12-Sep-07	F5-3
F5	4-Sep-07	Unknown Booster	1	4579490	407666	MPPEH	N	12-Sep-07	F5-3
F5	4-Sep-07	Unknown Booster	1	4579473	407652	MPPEH	N	12-Sep-07	F5-4
F5	5-Sep-07	T83 Fuze	1	4579469	407653	MEC	N	12-Sep-07	F5-5
F5	5-Sep-07	T83 Fuze	1	4579473	407674	MEC	N	12-Sep-07	F5-6
F5	5-Sep-07	Unknown Booster	1	4579464	407674	MPPEH	N	12-Sep-07	F5-7
F5	5-Sep-07	Booster for 75mm HE	1	4579463	407672	MPPEH	N	12-Sep-07	F5-8
F5	5-Sep-07	T83 Fuze	1	4579520	407730	MEC	N	12-Sep-07	F5-9
H6	5-Sep-07	M60 Fuze	1	4579507	407719	MEC	N	12-Sep-07	H6-1
H6	5-Sep-07	Nose of 75mm HE	1	4579512	407720	MEC	N	12-Sep-07	H6-2
H6	5-Sep-07	Booster for M66 fuze	1	4579510	407719	MPPEH	N	12-Sep-07	H6-3
H6	5-Sep-07	Booster for M66 fuze	2	4579506	407714	MPPEH	N	12-Sep-07	H6-4
H6	5-Sep-07	Unknown Primer	1	4579506	407714	MPPEH	N	12-Sep-07	H6-4
G12	5-Sep-07	Frag Ball from M39	1	4579676	407707	MPPEH	N	12-Sep-07	G12-1
G12	5-Sep-07	4" long pipe w/HE	1	4579676	407707	MPPEH	N	12-Sep-07	G12-1
G12	5-Sep-07	Booster for M66 fuze	1	4579676	407707	MPPEH	N	12-Sep-07	G12-1
H6	6-Sep-07	T83 Fuze	1	4579507	407720	MEC	N	12-Sep-07	H6-5
H6	6-Sep-07	Booster for M66 fuze	1	4579505	407722	MPPEH	N	12-Sep-07	H6-6

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
H6	6-Sep-07	Booster for M66 fuze	1	4579505	407723	MPPEH	N	12-Sep-07	H6-7
H6	6-Sep-07	M66 Fuze	1	4579506	407723	MPPEH	N	12-Sep-07	H6-8
H6	6-Sep-07	Booster for M66 fuze	1	4579505	407711	MPPEH	N	12-Sep-07	H6-9
G15	6-Sep-07	40mm Frag Ball	1	4579783	407697	MEC	N	12-Sep-07	G15-1
L3	6-Sep-07	75mm shrapnel rd	1	4579455	407629	MEC	N	12-Sep-07	L3-296
L3	6-Sep-07	T83 Fuze	34	4579525	407702	MEC	N	12-Sep-07	L3-297
L3	6-Sep-07	75mm shrapnel rd	1	4579525	407702	MEC	N	12-Sep-07	L3-298
C8	7-Sep-07	Booster for M66 fuze	1	4579552	407585	MPPEH	N	12-Sep-07	C8-1
C8	7-Sep-07	Booster for M66 fuze	1	4579525	407584	MPPEH	N	12-Sep-07	C8-2
C8	7-Sep-07	T83 Fuze	1	4579536	407627	MEC	N	12-Sep-07	C8-3
C8	7-Sep-07	Unknown Booster	1	4579559	407579	MPPEH	N	12-Sep-07	C8-4
C8	7-Sep-07	Booster for M66 fuze	1	4579559	407579	MPPEH	N	12-Sep-07	C8-5
C8	7-Sep-07	T83 Fuze	1	4579559	407578	MEC	N	12-Sep-07	C8-6
L3	7-Sep-07	Base of 75mm HE	1	4579538	407651	MEC	N	12-Sep-07	L3-299
C8	7-Sep-07	T83 Fuze	1	4579545	407568	MEC	N	12-Sep-07	C8-7
C8	7-Sep-07	M66 Fuze	1	4579545	407568	MPPEH	N	12-Sep-07	C8-7
F11	10-Sep-07	75mm HE projectile	1	4579650	407674	MEC	N	12-Sep-07	F11-1
F11	10-Sep-07	M60 Fuze	1	4579624	407681	MEC	N	12-Sep-07	F11-2
F11	10-Sep-07	Booster for M66 fuze	1	4579641	407667	MPPEH	N	12-Sep-07	F11-3
F11	10-Sep-07	Booster for M66 fuze	1	4579646	407667	MPPEH	N	12-Sep-07	F11-4
F11	10-Sep-07	Booster for M66 fuze	1	4579648	407676	MPPEH	N	12-Sep-07	F11-5
B8	10-Sep-07	T83 Fuze	1	4579541	407528	MEC	N	12-Sep-07	B8-1
B8	10-Sep-07	T83 Fuze	1	4579544	407551	MEC	N	12-Sep-07	B8-2
L3	10-Sep-07	T83 Fuze	24	4579533	407709	MEC	N	12-Sep-07	L3-300
L3	10-Sep-07	75mm shrapnel rd	2	4579533	407709	MEC	N	12-Sep-07	L3-301
L3	11-Sep-07	T83 Fuze	6	4579510	407697	MEC	N	12-Sep-07	L3-302
F10	11-Sep-07	T83 Fuze	1	4579630	407679	MEC	N	12-Sep-07	F10-1
F8	12-Sep-07	M60 Fuze	1	4579553	407520	MEC	N	12-Sep-07	F8-1

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	12-Sep-07	90mm HE projectile	1	4579523	407709	MEC	N	19-Sep-07	L3-303
L3	12-Sep-07	Booster for 75mm HE	1	4579523	407709	MPPEH	N	19-Sep-07	L3-304
L3	13-Sep-07	75mm shrapnel rd	1	4579489	407738	MEC	N	19-Sep-07	L3-305
L3	13-Sep-07	T83 Fuze	1	4579489	407738	MEC	N	19-Sep-07	L3-305
L3	13-Sep-07	Unknown Booster	1	4579489	407738	MPPEH	N	19-Sep-07	L3-305
L3	13-Sep-07	Booster for 75mm HE	1	4579489	407738	MPPEH	N	19-Sep-07	L3-305
H6	13-Sep-07	T83 Fuze	1	4579487	407738	MEC	N	19-Sep-07	H6-10
H6	13-Sep-07	T83 Fuze	1	4579489	407732	MEC	N	19-Sep-07	H6-11
H6	13-Sep-07	Booster for 75mm HE	1	4579490	407721	MPPEH	N	19-Sep-07	H6-12
H6	13-Sep-07	Booster for M66 fuze	1	4579490	407720	MPPEH	N	19-Sep-07	H6-13
H6	13-Sep-07	Booster for M66 fuze	1	4579490	407725	MPPEH	N	19-Sep-07	H6-14
D6	13-Sep-07	T83 Fuze	1	4579465	407610	MEC	N	19-Sep-07	D6-1
D6	13-Sep-07	M66 Fuze	1	4579586	407691	MPPEH	N	19-Sep-07	D6-2
D6	13-Sep-07	M66 Fuze	1	4579515	407637	MPPEH	N	19-Sep-07	D6-3
D6	13-Sep-07	40mm Frag Ball	1	4579515	407608	MPPEH	N	19-Sep-07	D6-4
G6	13-Sep-07	T83 Fuze	1	4579503	407690	MEC	N	19-Sep-07	G6-1
G6	13-Sep-07	T83 Fuze	1	4579501	407681	MEC	N	19-Sep-07	G6-2
G6	13-Sep-07	Booster for 75mm HE	1	4579499	407687	MPPEH	N	19-Sep-07	G6-3
G6	13-Sep-07	75mm shrapnel rd	1	4579503	407636	MEC	N	19-Sep-07	G6-4
G6	13-Sep-07	75mm shrapnel rd	1	4579503	407636	MEC	N	19-Sep-07	G6-4
G6	13-Sep-07	Booster for M66 fuze	1	4579488	407711	MPPEH	N	19-Sep-07	G6-5
G6	13-Sep-07	Booster for M66 fuze	1	4579489	407705	MPPEH	N	19-Sep-07	G6-6
G6	13-Sep-07	T83 Fuze	1	4579501	407705	MEC	N	19-Sep-07	G6-7
G6	13-Sep-07	Booster for M66 fuze	1	4579499	407703	MPPEH	N	19-Sep-07	G6-8
L3	13-Sep-07	Unknown Booster	1	4579601	407714	MPPEH	N	19-Sep-07	L3-306
D6	14-Sep-07	Broken 90mm HE	1	4579478	407630	MEC	N	19-Sep-07	D6-5
D6	14-Sep-07	T83 Fuze	1	4579474	407619	MEC	N	19-Sep-07	D6-6
G6	14-Sep-07	T83 Fuze	205	4579502	407684	MEC	N	19-Sep-07	G6-9

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
G6	14-Sep-07	Booster for 75mm HE	9	4579502	407684	MPPEH	N	19-Sep-07	G6-10
G6	14-Sep-07	57mm HEAT	1	4579502	407684	MEC	N	19-Sep-07	G6-11
G6	14-Sep-07	Supplementary charge	1	4579502	407684	MEC	N	19-Sep-07	G6-12
G6	14-Sep-07	76mm APHE	1	4579502	407684	MEC	N	19-Sep-07	G6-13
G6	14-Sep-07	Booster for M66 fuze	1	4579502	407684	MPPEH	N	19-Sep-07	G6-14
D8	14-Sep-07	M60 Fuze	1	4579549	407600	MEC	N	19-Sep-07	D8-1
D8	14-Sep-07	T83 Fuze	1	4579556	407594	MEC	N	19-Sep-07	D8-2
G6	14-Sep-07	T83 Fuze	11	4579505	407692	MEC	N	19-Sep-07	G6-15
G6	14-Sep-07	T83 Fuze	5	4579501	407680	MEC	N	19-Sep-07	G6-17
G6	14-Sep-07	Base 75mm shrapnel	2	4579501	407680	MEC	N	19-Sep-07	G6-18
G6	14-Sep-07	Booster for 75mm HE	1	4579501	407680	MPPEH	N	19-Sep-07	G6-19
G6	14-Sep-07	T83 Fuze	3	4579504	407686	MEC	N	19-Sep-07	G6-20
G6	14-Sep-07	155mm MK1 shrapnel	1	4579504	407686	MEC	N	19-Sep-07	G6-20
G6	14-Sep-07	75mm shrapnel rd	1	4579499	407680	MEC	N	19-Sep-07	G6-21
G6	14-Sep-07	Base of 75mm HE	1	4579499	407680	MEC	N	19-Sep-07	G6-22
G6	14-Sep-07	T83 Fuze	17	4579499	407680	MEC	N	19-Sep-07	G6-23
D8	17-Sep-07	Booster for M66 fuze	1	4579561	407602	MPPEH	N	19-Sep-07	D8-3
G6	17-Sep-07	57mm HE Projectile	2	4579502	407693	MPPEH	N	19-Sep-07	G6-24
G6	17-Sep-07	T83 Fuze	3	4579502	407693	MEC	N	19-Sep-07	G6-24
G6	17-Sep-07	T83 Fuze	1	4579499	407631	MEC	N	19-Sep-07	G6-25
G6	17-Sep-07	Booster for 75mm HE	1	4579498	407666	MPPEH	N	19-Sep-07	G6-26
G6	17-Sep-07	Broken 90mm HE	1	4579498	407666	MEC	N	19-Sep-07	G6-27
G6	17-Sep-07	T83 Fuze	30	4579498	407666	MEC	N	19-Sep-07	G6-28
G6	17-Sep-07	75mm shrapnel rd	1	4579501	407680	MEC	N	19-Sep-07	G6-29
G6	17-Sep-07	57mm HEAT	1	4579501	407680	MEC	N	19-Sep-07	G6-30
G6	17-Sep-07	Booster for 75mm HE	4	4579501	407680	MPPEH	N	19-Sep-07	G6-31
G6	17-Sep-07	T83 Fuze	14	4579501	407680	MEC	N	19-Sep-07	G6-32
G6	17-Sep-07	Booster for M66 fuze	1	4579500	407688	MPPEH	N	19-Sep-07	G6-33

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
D8	17-Sep-07	75mm shrapnel rd	1	4579577	407609	MEC	N	19-Sep-07	D8-4
D8	17-Sep-07	M48 Fuze	1	4579545	407608	MPPEH	N	19-Sep-07	D8-5
G6	17-Sep-07	T83 Fuze	4	4579501	407692	MEC	N	19-Sep-07	G6-34
G6	17-Sep-07	T83 Fuze	1	4579504	407700	MEC	N	19-Sep-07	G6-35
H10	18-Sep-07	T83 Fuze	1	4579587	407730	MEC	N	19-Sep-07	H10-1
L3	18-Sep-07	T83 Fuze	1	4579555	407657	MEC	N	19-Sep-07	L3-307
G6	18-Sep-07	T83 Fuze	1	4579509	407691	MEC	N	19-Sep-07	G6-36
G6	18-Sep-07	T83 Fuze	3	4579509	407692	MEC	N	19-Sep-07	G6-37
G6	18-Sep-07	75mm shrapnel rd	1	4579508	4579508	MEC	N	19-Sep-07	G6-38
G6	18-Sep-07	75mm shrapnel rd	1	4579516	407711	MEC	N	19-Sep-07	G6-39
G6	18-Sep-07	T83 Fuze	2	4579516	407711	MEC	N	19-Sep-07	G6-39
G6	18-Sep-07	Booster for 75mm HE	1	4579516	407711	MPPEH	N	19-Sep-07	G6-39
G6	18-Sep-07	75mm shrapnel rd	1	4579518	407707	MEC	N	19-Sep-07	G6-40
G6	18-Sep-07	90mm HE projectile	1	4579518	407707	MEC	N	19-Sep-07	G6-40
G6	18-Sep-07	Base of 90mm HE	1	4579518	407707	MEC	N	19-Sep-07	G6-40
G6	18-Sep-07	Booster for 75mm HE	1	4579519	407697	MPPEH	N	19-Sep-07	G6-41
G6	18-Sep-07	T83 Fuze	11	4579519	407697	MEC	N	19-Sep-07	G6-41
G6	18-Sep-07	T83 Fuze	1	4579516	407695	MEC	N	19-Sep-07	G6-42
G6	18-Sep-07	T83 Fuze	3	4579517	407697	MEC	N	19-Sep-07	G6-43
G6	18-Sep-07	T83 Fuze	2	4579515	407693	MEC	N	19-Sep-07	G6-44
G6	18-Sep-07	T83 Fuze	1	4579510	407696	MEC	N	19-Sep-07	G6-45
E6	19-Sep-07	Booster for M66 fuze	1	4579494	407639	MPPEH	N	25-Sep-07	E6-1
E6	19-Sep-07	Booster for 75mm HE	1	4579504	407647	MPPEH	N	25-Sep-07	E6-2
L3	19-Sep-07	T83 Fuze	1	4579550	407652	MEC	N	25-Sep-07	L3-308
E10	19-Sep-07	M48 Fuze	1	4579608	407650	MEC	N	25-Sep-07	E10-1
L3	19-Sep-07	75mm shrapnel rd	7	4579534	407666	MEC	N	25-Sep-07	L3-309
L3	19-Sep-07	76mm APHE	1	4579534	407666	MEC	N	25-Sep-07	L3-310
L3	19-Sep-07	Booster for 75mm HE	1	4579534	407666	MPPEH	N	25-Sep-07	L3-311

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	19-Sep-07	T83 Fuze	8	4579534	407666	MEC	N	25-Sep-07	L3-312
E10	20-Sep-07	M60 Fuze	1	4579597	407599	MEC	N	25-Sep-07	E10-2
E10	20-Sep-07	Booster for M66 fuze	1	4579613	407625	MPPEH	N	25-Sep-07	E10-3
E6	20-Sep-07	Booster for M66 fuze	23	4579490	407624	MPPEH	N	25-Sep-07	E6-3
E6	20-Sep-07	Booster for 75mm HE	1	4579492	407619	MPPEH	N	25-Sep-07	E6-4
L3	20-Sep-07	75mm shrapnel rd	10	4579538	407679	MEC	N	25-Sep-07	L3-313
L3	20-Sep-07	T83 Fuze	40	4579538	407679	MEC	N	25-Sep-07	L3-314
L3	20-Sep-07	Nose of 75mm HE	1	4579538	407679	MEC	N	25-Sep-07	L3-315
L3	20-Sep-07	Booster for 75mm HE	1	4579538	407679	MPPEH	N	25-Sep-07	L3-316
L3	20-Sep-07	Base of 90mm HE	2	4579538	407679	MEC	N	25-Sep-07	L3-317
L3	20-Sep-07	90mm HE projectile	1	4579537	407687	MEC	N	25-Sep-07	L3-318
L3	20-Sep-07	75mm shrapnel rd	4	4579537	407687	MEC	N	25-Sep-07	L3-319
L3	20-Sep-07	Base 75mm shrapnel	1	4579537	407687	MEC	N	25-Sep-07	L3-320
L3	20-Sep-07	T83 Fuze	79	4579537	407687	MEC	N	25-Sep-07	L3-321
L3	20-Sep-07	Base of M43 fuze	7	4579537	407687	MPPEH	N	25-Sep-07	L3-322
L3	20-Sep-07	155mm MK1 shrapnel	1	4579537	407687	MEC	N	25-Sep-07	L3-323
L3	20-Sep-07	Broken 90mm HE	4	4579537	407693	MEC	N	25-Sep-07	L3-324
L3	20-Sep-07	Nose of 75mm HE	1	4579537	407693	MEC	N	25-Sep-07	L3-325
L3	20-Sep-07	76mm APHE	1	4579537	407693	MEC	N	25-Sep-07	L3-326
L3	20-Sep-07	75mm shrapnel rd	11	4579537	407693	MEC	N	25-Sep-07	L3-327
L3	20-Sep-07	90mm HE projectile	1	4579537	407693	MEC	N	25-Sep-07	L3-328
L3	20-Sep-07	75mm HE projectile	1	4579537	407693	MEC	N	25-Sep-07	L3-329
L3	20-Sep-07	Base of M43 fuze	2	4579537	407693	MPPEH	N	25-Sep-07	L3-330
L3	20-Sep-07	Broken 75mm HE	3	4579537	407693	MEC	N	25-Sep-07	L3-331
L3	20-Sep-07	M66 Fuze	1	4579537	407693	MEC	N	25-Sep-07	L3-332
L3	20-Sep-07	Booster for 75mm HE	4	4579537	407693	MPPEH	N	25-Sep-07	L3-333
L3	20-Sep-07	T83 Fuze	169	4579537	407693	MEC	N	25-Sep-07	L3-335
L3	20-Sep-07	Base 75mm shrapnel	1	4579537	407693	MEC	N	25-Sep-07	L3-336

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L3	20-Sep-07	155mm MK1 shrapnel	1	4579537	407693	MEC	N	9-Oct-07	L3-334
L3	21-Sep-07	75mm shrapnel rd	8	4579534	407696	MEC	N	25-Sep-07	L3-337
L3	21-Sep-07	90mm HE projectile	1	4579534	407696	MEC	N	25-Sep-07	L3-338
L3	21-Sep-07	Broken 90mm HE	4	4579534	407696	MEC	N	25-Sep-07	L3-339
L3	21-Sep-07	Supplementary charge	1	4579534	407696	MEC	N	25-Sep-07	L3-340
L3	21-Sep-07	Base of M43 fuze	2	4579534	407696	MPPEH	N	25-Sep-07	L3-341
L3	21-Sep-07	Booster for 75mm HE	2	4579534	407696	MPPEH	N	25-Sep-07	L3-342
L3	21-Sep-07	M51 Fuze	1	4579534	407696	MEC	N	25-Sep-07	L3-343
L3	21-Sep-07	Booster for M66 fuze	1	4579534	407696	MPPEH	N	25-Sep-07	L3-344
L3	21-Sep-07	T83 Fuze	93	4579534	407696	MEC	N	25-Sep-07	L3-345
L3	21-Sep-07	Booster for 75mm HE	5	4579537	407693	MPPEH	N	25-Sep-07	L3-346
L3	21-Sep-07	75mm shrapnel rd	1	4579537	407693	MEC	N	25-Sep-07	L3-347
L3	21-Sep-07	Booster for M66 fuze	1	4579537	407693	MPPEH	N	25-Sep-07	L3-348
L3	21-Sep-07	T83 Fuze	22	4579537	407693	MEC	N	25-Sep-07	L3-349
L3	21-Sep-07	T83 Fuze	16	4579537	407697	MEC	N	25-Sep-07	L3-350
L3	21-Sep-07	Booster for 75mm HE	1	4579537	407697	MPPEH	N	25-Sep-07	L3-351
L3	21-Sep-07	75mm HE projectile	1	4579537	407697	MEC	N	25-Sep-07	L3-352
L3	21-Sep-07	75mm shrapnel rd	1	4579537	407697	MEC	N	25-Sep-07	L3-353
L3	21-Sep-07	Nose of 75mm HE	1	4579537	407697	MEC	N	25-Sep-07	L3-354
L3	21-Sep-07	Base of M43 fuze	1	4579537	407697	MPPEH	N	25-Sep-07	L3-355
D7	21-Sep-07	75mm HE projectile	1	4579492	407617	MEC	N	25-Sep-07	D7-1
D7	21-Sep-07	40mm Frag Ball	1	4579538	407617	MPPEH	N	25-Sep-07	D7-2
D7	21-Sep-07	20mm HE Projectile	1	4579538	407617	MPPEH	N	25-Sep-07	D7-2
D7	21-Sep-07	40mm Frag Ball	7	4579535	407610	MPPEH	N	25-Sep-07	D7-3
D7	21-Sep-07	20mm HE Projectile	1	4579535	407610	MPPEH	N	25-Sep-07	D7-3
L3	21-Sep-07	T83 Fuze	1	4579495	407660	MEC	N	25-Sep-07	L3-356
L3	21-Sep-07	Booster for M66 fuze	1	4579495	407660	MPPEH	N	25-Sep-07	L3-356
L3	21-Sep-07	57mm HEAT	1	4579495	407660	MEC	N	25-Sep-07	L3-357

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
D7	24-Sep-07	75mm shrapnel rd	2	4579545	407614	MEC	N	25-Sep-07	D7-4
D7	24-Sep-07	T83 Fuze	1	4579545	407614	MEC	N	25-Sep-07	D7-5
D7	24-Sep-07	Base of 90mm HE	1	4579545	407614	MEC	N	25-Sep-07	D7-6
D7	24-Sep-07	40mm Frag Ball	13	4579545	407614	MPPEH	N	25-Sep-07	D7-7
D7	24-Sep-07	20mm HE Projectile	6	4579545	407614	MPPEH	N	25-Sep-07	D7-7
F9	24-Sep-07	30mm HE Projectile	1	4579597	407666	MPPEH	N	25-Sep-07	F9-1
F9	24-Sep-07	20mm HE Projectile	2	4579597	407666	MPPEH	N	25-Sep-07	F9-1
F9	24-Sep-07	Base of M43 fuze	1	4579597	407663	MPPEH	N	25-Sep-07	F9-2
F9	24-Sep-07	T83 Fuze	1	4579574	407681	MEC	N	25-Sep-07	F9-3
L3	24-Sep-07	T83 Fuze	107	4579538	407688	MEC	N	25-Sep-07	L3-358
L3	24-Sep-07	Booster for 75mm HE	17	4579538	407688	MPPEH	N	25-Sep-07	L3-359
L3	24-Sep-07	75mm HE projectile	1	4579538	407688	MEC	N	25-Sep-07	L3-360
L3	24-Sep-07	75mm shrapnel rd	28	4579538	407688	MEC	N	25-Sep-07	L3-361
L3	24-Sep-07	Broken 90mm HE	4	4579538	407688	MEC	N	25-Sep-07	L3-362
L3	24-Sep-07	Broken 75mm HE	2	4579538	407688	MEC	N	25-Sep-07	L3-363
L3	24-Sep-07	57mm HE Projectile	2	4579538	407688	MEC	N	25-Sep-07	L3-365
L3	24-Sep-07	90mm HE projectile	2	4579538	407688	MEC	N	25-Sep-07	L3-366
L3	24-Sep-07	Base of M43 fuze	1	4579538	407688	MPPEH	N	25-Sep-07	L3-368
L3	24-Sep-07	Base 75mm shrapnel	2	4579538	407688	MEC	N	9-Oct-07	L3-364
L3	24-Sep-07	155mm MK1 shrapnel	1	4579538	407688	MEC	N	9-Oct-07	L3-367
D8	26-Sep-07	T83 Fuze	1	4579551	407613	MEC	N	9-Oct-07	D8-6
F6	26-Sep-07	Nose of 75mm HE	1	4579496	407653	MEC	N	9-Oct-07	F6-1
F6	26-Sep-07	57mm HEAT	1	4579496	407653	MEC	N	9-Oct-07	F6-1
F6	26-Sep-07	Booster for M66 fuze	1	4579496	407653	MPPEH	N	9-Oct-07	F6-1
F6	26-Sep-07	T83 Fuze	1	4579477	407673	MEC	N	9-Oct-07	F6-2
F6	26-Sep-07	Booster for M66 fuze	1	4579502	407663	MPPEH	N	9-Oct-07	F6-3
F6	26-Sep-07	T83 Fuze	3	4579493	407644	MEC	N	9-Oct-07	F6-4
F6	26-Sep-07	Base of M43 fuze	1	4579493	407644	MPPEH	N	9-Oct-07	F6-4

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
F6	26-Sep-07	Booster for M66 fuze	3	4579493	407644	MPPEH	N	9-Oct-07	F6-4
D8	26-Sep-07	40mm Frag Ball	1	4579569	407616	MPPEH	N	9-Oct-07	D8-7
D8	26-Sep-07	Booster for M66 fuze	1	4579569	407616	MPPEH	N	9-Oct-07	D8-7
G7	26-Sep-07	T83 Fuze	3	4579536	407685	MEC	N	9-Oct-07	G7-1
L3	26-Sep-07	T83 Fuze	1	4579582	407547	MEC	N	9-Oct-07	L3-369
E8	26-Sep-07	Booster for M66 fuze	1	4579563	407643	MPPEH	N	9-Oct-07	E8-1
E8	26-Sep-07	T83 Fuze	3	4579572	407649	MEC	N	9-Oct-07	E8-2
G7	27-Sep-07	T83 Fuze	7	4579545	407693	MEC	N	9-Oct-07	G7-2
G7	27-Sep-07	75mm shrapnel rd	2	4579544	407694	MEC	N	9-Oct-07	G7-3
G7	27-Sep-07	T83 Fuze	1	4579538	407695	MEC	N	9-Oct-07	G7-4
G7	27-Sep-07	Booster for 75mm HE	1	4579532	407693	MEC	N	9-Oct-07	G7-5
G7	27-Sep-07	155mm MK1 shrapnel	1	4579533	407702	MEC	N	9-Oct-07	G7-6
G7	27-Sep-07	T83 Fuze	17	4579536	407690	MEC	N	9-Oct-07	G7-7
G7	27-Sep-07	155mm MK1 shrapnel	1	4579533	407684	MEC	N	9-Oct-07	G7-8
G7	27-Sep-07	M60 Fuze	1	4579533	407684	MEC	N	9-Oct-07	G7-9
G7	27-Sep-07	Booster for M66 fuze	1	4579533	407684	MPPEH	N	9-Oct-07	G7-10
G7	27-Sep-07	T83 Fuze	14	4579533	407684	MEC	N	9-Oct-07	G7-11
G7	27-Sep-07	Broken 90mm HE	1	4579544	407696	MEC	N	9-Oct-07	G7-12
G7	27-Sep-07	Base of 75mm HE	1	4579544	407696	MEC	N	9-Oct-07	G7-12
G7	27-Sep-07	M43 Fuze	1	4579544	407696	MPPEH	N	9-Oct-07	G7-12
G7	27-Sep-07	Booster for 75mm HE	1	4579544	407696	MPPEH	N	9-Oct-07	G7-12
G7	27-Sep-07	Booster for M66 fuze	3	4579544	407696	MPPEH	N	9-Oct-07	G7-12
D8	27-Sep-07	Booster for 75mm HE	1	4579547	407614	MPPEH	N	9-Oct-07	D8-8
D8	27-Sep-07	30mm HE Projectile	1	4579547	407614	MPPEH	N	9-Oct-07	D8-8
D8	27-Sep-07	40mm Frag Ball	1	4579547	407614	MPPEH	N	9-Oct-07	D8-8
E8	27-Sep-07	Booster for 75mm HE	1	4579564	407634	MPPEH	N	9-Oct-07	E8-3
E8	27-Sep-07	T83 Fuze	1	4579565	407633	MEC	N	9-Oct-07	E8-4
D8	27-Sep-07	40mm Frag Ball		4579547	407593	MPPEH	N	9-Oct-07	D8-9

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
D8	27-Sep-07	40mm HE Grenade	1	4579555	407605	MPPEH	N	9-Oct-07	D8-10
D8	27-Sep-07	40mm Frag Ball	3	4579555	407605	MPPEH	N	9-Oct-07	D8-10
G7	27-Sep-07	T83 Fuze	1	4579545	407706	MEC	N	9-Oct-07	G7-13
G7	27-Sep-07	T83 Fuze	3	4579536	407701	MEC	N	9-Oct-07	G7-14
G7	27-Sep-07	76mm APHE	1	4579536	407701	MEC	N	9-Oct-07	G7-14
G7	27-Sep-07	75mm HCHE	1	4579538	407696	MEC	N	9-Oct-07	G7-15
G7	27-Sep-07	T83 Fuze	2	4579515	407699	MEC	N	9-Oct-07	G7-16
G7	27-Sep-07	T83 Fuze	7	4579515	407705	MEC	N	9-Oct-07	G7-17
G7	27-Sep-07	T83 Fuze	3	4579519	407704	MEC	N	9-Oct-07	G7-18
G7	27-Sep-07	Unknown Booster	2	4579519	407704	MPPEH	N	9-Oct-07	G7-18
G7	27-Sep-07	T83 Fuze	11	4579519	407705	MEC	N	9-Oct-07	G7-19
G7	27-Sep-07	T83 Fuze	1	4579539	407708	MEC	N	9-Oct-07	G7-20
G7	27-Sep-07	Booster for M66 fuze	1	4579542	407711	MPPEH	N	9-Oct-07	G7-21
G7	27-Sep-07	Base 75mm shrapnel	1	4579541	407709	MEC	N	9-Oct-07	G7-22
G7	27-Sep-07	T83 Fuze	4	4579516	407710	MEC	N	9-Oct-07	G7-23
G7	27-Sep-07	T83 Fuze	1	4579529	407702	MEC	N	9-Oct-07	G7-24
E8	27-Sep-07	Bomb nose fuze	1	4579554	407625	MPPEH	N	9-Oct-07	E8-5
G7	27-Sep-07	75mm shrapnel rd	2	4579519	407712	MEC	N	9-Oct-07	G7-25
G7	27-Sep-07	T83 Fuze	3	4579519	407712	MEC	N	9-Oct-07	G7-25
G7	27-Sep-07	Booster for 75mm HE	1	4579519	407712	MPPEH	N	9-Oct-07	G7-25
G7	27-Sep-07	57mm HE Projectile	1	4579519	407712	MEC	N	9-Oct-07	G7-25
G7	27-Sep-07	T83 Fuze	1	4579524	407709	MEC	N	9-Oct-07	G7-26
G7	27-Sep-07	75mm shrapnel rd	1	4579524	407709	MEC	N	9-Oct-07	G7-26
G7	27-Sep-07	Booster for M66 fuze	13	4579536	407690	MPPEH	N	9-Oct-07	G7-27
E8	28-Sep-07	Booster for M66 fuze	1	4579554	407623	MPPEH	N	9-Oct-07	E8-6
F7	28-Sep-07	T83 Fuze	1	4579516	407678	MEC	N	9-Oct-07	F7-1
E8	28-Sep-07	Booster for M66 fuze	1	4579559	407615	MPPEH	N	9-Oct-07	E8-7
F8	28-Sep-07	Booster for M66 fuze	1	4579545	407657	MPPEH	N	9-Oct-07	F8-2

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
F8	28-Sep-07	Booster for 75mm HE	1	4579557	407681	MPPEH	N	9-Oct-07	F8-3
F8	28-Sep-07	Booster for M66 fuze	1	4579557	407681	MPPEH	N	9-Oct-07	F8-3
F7	28-Sep-07	T83 Fuze	5	4579537	407675	MEC	N	9-Oct-07	F7-2
F7	28-Sep-07	T83 Fuze	55	4579534	407680	MEC	N	9-Oct-07	F7-3
F7	28-Sep-07	75mm shrapnel rd	2	4579534	407680	MEC	N	9-Oct-07	F7-4
F7	28-Sep-07	Booster for 75mm HE	2	4579534	407680	MPPEH	N	9-Oct-07	F7-5
F7	28-Sep-07	Base of M43 fuze	1	4579534	407680	MPPEH	N	9-Oct-07	F7-6
F7	28-Sep-07	M60 Fuze	1	4579534	407680	MEC	N	9-Oct-07	F7-7
F7	1-Oct-07	Nose of 75mm HE	1	4579532	407654	MEC	N	9-Oct-07	F7-8
F7	1-Oct-07	Booster for M66 fuze	4	4579531	407665	MPPEH	N	9-Oct-07	F7-9
F7	1-Oct-07	Booster for 75mm HE	1	4579531	407665	MPPEH	N	9-Oct-07	F7-9
F7	1-Oct-07	Booster for M66 fuze	1	4579531	407665	MPPEH	N	9-Oct-07	F7-10
G7	1-Oct-07	57mm HEAT	1	4579530	407714	MEC	N	9-Oct-07	G7-29
G7	1-Oct-07	T83 Fuze	1	4579513	407718	MEC	N	9-Oct-07	G7-30
G7	1-Oct-07	90mm HE projectile	1	4579532	407691	MEC	N	9-Oct-07	G7-31
G7	1-Oct-07	M60 Fuze	1	4579532	407691	MEC	N	9-Oct-07	G7-31
G7	1-Oct-07	Base 75mm shrapnel	1	4579532	407691	MEC	N	9-Oct-07	G7-31
G7	1-Oct-07	T83 Fuze	11	4579532	407691	MEC	N	9-Oct-07	G7-31
G7	1-Oct-07	Booster for M66 fuze	2	4579532	407691	MPPEH	N	9-Oct-07	G7-31
G7	1-Oct-07	T83 Fuze	18	4579530	407711	MEC	N	9-Oct-07	G7-32
L3	1-Oct-07	T83 Fuze	1	4579697	407694	MEC	N	9-Oct-07	L3-370
L3	1-Oct-07	T83 Fuze	1	4579408	407663	MEC	N	9-Oct-07	L3-371
G7	2-Oct-07	Base of M43 fuze	1	4579519	407706	MPPEH	N	9-Oct-07	G7-38
G7	2-Oct-07	75mm shrapnel rd	3	4579490	407705	MEC	N	9-Oct-07	G7-33
G7	2-Oct-07	90mm HE projectile	1	4579490	407705	MEC	N	9-Oct-07	G7-34
G7	2-Oct-07	T83 Fuze	15	4579490	407705	MEC	N	9-Oct-07	G7-35
G7	2-Oct-07	Booster for 75mm HE	6	4579490	407705	MPPEH	N	9-Oct-07	G7-36
G7	2-Oct-07	T83 Fuze	9	4579519	407706	MEC	N	9-Oct-07	G7-37

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
G7	2-Oct-07	T83 Fuze	14	4579511	407706	MEC	N	9-Oct-07	G7-39
G7	2-Oct-07	76mm APHE	1	4579511	407706	MEC	N	9-Oct-07	G7-40
G7	2-Oct-07	75mm shrapnel rd	4	4579511	407706	MEC	N	9-Oct-07	G7-41
G7	2-Oct-07	T83 Fuze	2	4579501	407755	MEC	N	9-Oct-07	G7-42
G7	2-Oct-07	T83 Fuze	6	4579514	407701	MEC	N	9-Oct-07	G7-43
G7	2-Oct-07	90mm HE projectile		4579505	407705	MEC	N	9-Oct-07	G7-44
G7	2-Oct-07	75mm shrapnel rd	2	4579505	407705	MEC	N	9-Oct-07	G7-45
G7	2-Oct-07	HE from M5 mine	1	4579505	407705	MEC	N	9-Oct-07	G7-46
G7	2-Oct-07	T83 Fuze	33	4579505	407705	MEC	N	9-Oct-07	G7-47
G7	2-Oct-07	Nose of 75mm HE	1	4579505	407705	MEC	N	9-Oct-07	G7-48
G7	2-Oct-07	Booster for M66 fuze	1	4579508	407694	MPPEH	N	9-Oct-07	G7-49
G7	2-Oct-07	T83 Fuze	5	4579508	407694	MEC	N	9-Oct-07	G7-50
E9	2-Oct-07	T83 Fuze	1	4579594	407629	MEC	N	9-Oct-07	E9-1
E9	2-Oct-07	Booster for M66 fuze	1	4579594	407629	MPPEH	N	9-Oct-07	E9-1
E7	3-Oct-07	75mm shrapnel rd	1	4579549	407648	MEC	N	9-Oct-07	E7-1
G8	4-Oct-07	Booster for 75mm HE	1	4579541	407702	MPPEH	N	9-Oct-07	G8-1
G8	4-Oct-07	Booster for M66 fuze	20	4579544	407686	MPPEH	N	9-Oct-07	G8-2
G8	4-Oct-07	Booster for M66 fuze	2	4579546	407711	MPPEH	N	9-Oct-07	G8-3
G8	4-Oct-07	Booster for 75mm HE	1	4579546	407711	MPPEH	N	9-Oct-07	G8-3
G8	4-Oct-07	T83 Fuze	1	4579553	407687	MEC	N	9-Oct-07	G8-4
G8	4-Oct-07	Booster for M66 fuze	1	4579549	407703	MPPEH	N	9-Oct-07	G8-5
G8	4-Oct-07	Booster for 75mm HE	1	4579559	407700	MPPEH	N	9-Oct-07	G8-6
L3	4-Oct-07	T83 Fuze	1	4579686	407740	MEC	N	9-Oct-07	L3-372
E7	4-Oct-07	20mm HE Projectile	2	4579541	407647	MPPEH	N	9-Oct-07	E7-2
E7	4-Oct-07	T83 Fuze	1	4579541	407647	MEC	N	9-Oct-07	E7-2
E7	5-Oct-07	T83 Fuze	1	4579537	407633	MEC	N	9-Oct-07	E7-3
E7	5-Oct-07	Booster for M66 fuze	3	4579537	407633	MPPEH	N	9-Oct-07	E7-3
E7	5-Oct-07	40mm HE Grenade	1	4579525	407621	MPPEH	N	9-Oct-07	E7-4

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
E7	5-Oct-07	Booster for M66 fuze	3	4579549	407637	MPPEH	N	9-Oct-07	E7-5
E7	5-Oct-07	Booster for M66 fuze	4	4579543	407629	MPPEH	N	9-Oct-07	E7-6
E7	5-Oct-07	30mm HE Projectile	1	4579535	407632	MPPEH	N	9-Oct-07	E7-7
E7	5-Oct-07	20mm HE Projectile	1	4579535	407632	MPPEH	N	9-Oct-07	E7-7
E7	5-Oct-07	Booster for M66 fuze	1	4579529	407629	MPPEH	N	9-Oct-07	E7-8
G8	5-Oct-07	T83 Fuze	1	4579535	407720	MEC	N	9-Oct-07	G8-7
G8	5-Oct-07	M66 Fuze	1	4579553	407690	MEC	N	9-Oct-07	G8-8
G8	5-Oct-07	T83 Fuze	1	4579556	407686	MEC	N	9-Oct-07	G8-9
G8	5-Oct-07	T83 Fuze	1	4579545	407683	MEC	N	9-Oct-07	G8-10
L3	5-Oct-07	T83 Fuze	3	4579692	407784	MEC	N	9-Oct-07	L3-373
G8	8-Oct-07	T83 Fuze	1	4579540	407721	MEC	N	9-Oct-07	G8-11
G8	8-Oct-07	Booster for M66 fuze	1	4579535	407721	MPPEH	N	9-Oct-07	G8-12
G7	8-Oct-07	Booster for 75mm HE	2	4579488	407710	MPPEH	N	9-Oct-07	G7-51
G7	8-Oct-07	Broken 90mm HE	1	4579524	407707	MEC	N	9-Oct-07	G7-52
G7	8-Oct-07	Booster for M66 fuze	3	4579526	407688	MPPEH	N	9-Oct-07	G7-53
G7	8-Oct-07	Booster for 75mm HE	1	4579526	407688	MPPEH	N	9-Oct-07	G7-53
L3	8-Oct-07	T83 Fuze	1	4579755	407715	MEC	N	9-Oct-07	L3-374
L3	8-Oct-07	T83 Fuze	1	4579740	407727	MEC	N	9-Oct-07	L3-375
L3	8-Oct-07	T83 Fuze	2	4579655	407663	MEC	N	9-Oct-07	L3-376
L3	8-Oct-07	T83 Fuze	1	4579751	407696	MEC	N	9-Oct-07	L3-377
G7	8-Oct-07	Booster for M66 fuze	1	4579526	407713	MPPEH	N	9-Oct-07	G7-54
G8	8-Oct-07	T83 Fuze	1	4579576	407691	MEC	N	9-Oct-07	G8-13
L3	15-Oct-07	T83 Fuze	6	4579593	407567	MEC	N	26-Oct-07	L3-378
L3	17-Oct-07	T83 Fuze	1	4579458	407628	MEC	N	26-Oct-07	L3-379
L3	22-Oct-07	T83 Fuze	1	4579683	407730	MEC	N	26-Oct-07	L3-380
L3	25-Oct-07	75mm shrapnel rd	1	4579431	407633	MEC	N	26-Oct-07	L3-381
L3	25-Oct-07	75mm HE projectile	1	4579431	407633	MEC	N	26-Oct-07	L3-381
		Construction Support							

Grid	Date	Identification	Quantity	Northing	Easting	Type	Fired (Y/N)	Disposition (Date)	Remarks Photo #
L2	31-Oct-07	M43 Fuze	14	4580069	407973	MEC	N	12/12/2007	NA
L2	31-Oct-07	20mm HE Projectile	1	4579531	407604	MEC	N	12/12/2007	NA
L2	9-Nov-07	M43 Fuze	11	4580067	408008	MEC	N	12/12/2007	NA
L3	15-Nov-07	T83 Fuze	1	4580070	408003	MEC	N	12/12/2007	NA
L3	29-Nov-07	T83 Fuze	1	4579746	407798	MEC	N	12/12/2007	NA
		TOTAL MEC/MPPEH	**3,126**						

Joliet AAP	Area L2

As of	12/28/2006

Number of Grids Completed	155
Number of Grids Pending	0
Pounds of MD	13,689.50
Total Number of Anomalies Excavated	63,305.00
Total Pounds of Range Residue	4,948.60
Total Number of MEC/MPPEH Items	2,143.00
Total Number of Grids	155
Percent Completed by Mag/Flag and Dig	100%

Grids	Grid Number	Number of Anomalies	Pounds of MD	Pounds of Range Residue	Number of UXO	Number of MEC MPPEH	Percent Completed	Date Sweep Completed	Date QC'ed	Date QA'ed	Date Reswept Completed	Date ReQc'ed	Complete	Remarks
	Magazine Area	117	17	15		5	100	8/21/2006						
1	L2-A2	15	2	1		0	100	11/19/2006	11/20/2006	11/20/2006			1	
1	L2-A3	30	1	3		0	100	11/19/2006	11/20/2006	11/20/2006			1	
1	L2-B2	879	100	66		11	100	11/30/2006	11/30/2006	11/30/2006			1	
1	L2-B3	498	36	26		6	100	11/19/2006	11/20/2006	11/20/2006			1	
1	L2-B4	267	11	13		1	100	11/20/2006	11/20/2006	11/20/2006			1	
1	L2-B5	30	0.5	0.5		0	100	11/20/2006	11/20/2006	11/20/2006			1	
1	L2-C1	68	8	1		0	100	12/4/2006	12/5/2006	12/5/2006			1	
1	L2-C2	472	90	40		2	60	12/21/2006	1/30/1906	12/28/2006	5/18/1903		1	
1	L2-C3	1056	76	42		1	95	12/21/2006	12/28/2006	12/28/2006			1	
1	L2-C4	1952	58	250		1	100	11/2/2006	11/2/2006	11/2/2006			1	
1	L2-C5	1372	22	110		0	100	11/28/2006	11/28/2006	11/28/2006			1	
1	L2-C6	184	2	5		0	100	11/29/2006	11/28/2006	11/28/2006			1	
1	L2-D1	1049	130	40		3	100	11/9/2006	11/13/2006	11/13/2006	1/30/1906		1	
1	L2-D2	361	90	2		1	40	12/21/2006	12/28/2006	12/28/2006			1	
1	L2-D3	1017	360	40		0	95	12/21/2006	12/28/2006	12/28/2006	9/27/1933		1	
1	L2-D4	435	80	50		4	100	11/6/2006	11/7/2006	11/7/2006			1	
1	L2-D5	175	25	15		5	100	10/31/2006	10/31/2006	10/31/2006			1	
1	L2-D6	39	2	2		0	100	10/30/2006	10/31/2006	10/31/2006			1	
1	L2-E1	385	31	7		1	100	11/8/2006	11/8/2006	11/8/2006			1	
1	L2-E2	590	85	30		0	100	11/7/2006	11/7/2006	11/7/2006			1	
1	L2-E3	105	90	45		4	100	9/7/2006	9/7/2006	9/7/2006			1	
1	L2-E4	130	110	28		4	100	9/6/2006	9/14/2006	9/14/2006			1	
1	L2-E5	105	25	40		4	100	9/5/2006	9/14/2006	9/14/2006			1	
1	L2-E6	25	5	2		0	100	9/5/2006	9/14/2006	9/14/2006			1	
1	L2-F1	180	20	13		0	100	10/11/2006	10/12/2006	10/12/2006			1	
1	L2-F2	103	23	7		1	100	8/28/2006	9/7/2006	9/7/2006			1	
1	L2-F3	80	20	4		1	100	8/29/2006	9/6/2006	9/6/2006			1	
1	L2-F4	98	31	24		3	100	8/29/2006	9/6/2006	9/6/2006			1	
1	L2-F5	125	27	19		2	100	8/30/2006	9/6/2006	9/6/2006			1	
1	L2-F6	15	2	0		0	100	8/30/2006	9/6/2006	9/6/2006			1	
1	L2-G1	145	20	9		2	100	8/30/2006	Failed	9/14/2006	9/7/2006	9/14/2006	1	
1	L2-G2	150	10	15		1	100	8/23/2006	9/6/2006	9/6/2006			1	
1	L2-G3	930	75	103		0	100	10/11/2006	10/12/2006	10/12/2006			1	
1	L2-G4	360	20	65		0	100	9/12/2006	9/14/2006	9/14/2006			1	
1	L2-G5	425	20	45		3	100	9/13/2006	9/14/2006	9/14/2006			1	
1	L2-G6	75	5	4		0	100	8/31/2006	9/14/2006	9/14/2006			1	
1	L2-G7	107	7	7		2	100	8/31/2006	9/20/2006	9/20/2006			1	
1	L2-G8	325	110	71		2	100	10/10/2006	10/10/2006	10/10/2006			1	
1	L2-G9	80	15	11		1	100	8/30/2006	9/14/2006	9/14/2006			1	
1	L2-G10	35	6	1		0	100	8/30/2006	9/14/2006	9/14/2006			1	
1	L2-H1	443	120	8		0	100	12/6/2006	12/7/2006	12/7/2006			1	
1	L2-H2	550	190	85		2	100	10/18/2006	10/25/2006	10/25/2006			1	
1	L2-H3	400	90	60		0	100	10/17/2006	10/18/2006	10/18/2006			1	
1	L2-H4	360	80	5		0	100	10/12/2006	10/12/2006	10/12/2006			1	
1	L2-H5	150	20	0		0	100	10/11/2006	10/12/2006	10/12/2006			1	
1	L2-H6	100	10	30		0	100	10/9/2006	10/10/2006	10/10/2006			1	
1	L2-H7	200	80	40		1	100	10/9/2006	10/10/2006	10/10/2006			1	
1	L2-H8	920	220	200		2	100	11/1/2006	11/1/2006	11/1/2006			1	
1	L2-H9	260	75	10		7	100	10/30/2006	10/30/2006	10/30/2006			1	
1	L2-H10	275	98	10		22	100	9/13/2006	9/19/2006	9/19/2006			1	

Joliet AAP	Area L2

As of	12/28/2006

Number of Grids Completed	155
Number of Grids Pending	0
Pounds of MD	13,689.50
Total Number of Anomalies Excavated	63,305.00
Total Pounds of Range Residue	4,948.60
Total Number of MEC/MPPEH Items	2,143.00
Total Number of Grids	155
Percent Completed by Mag/Flag and Dig	100%

Grids	Grid Number	Number of Anomalies	Pounds of MD	Pounds of Range Residue	Number of UXO	Number of MEC MPPEH	Percent Completed	Date Sweep Completed	Date QC'ed	Date QA'ed	Date Reswept Completed	Date ReQc'ed	Complete	Remarks
1	L2-H11	85	12	3		8	100	9/14/2006	9/19/2006	9/19/2006			1	
1	L2-I0	20	1	0		1	100	10/24/2006	10/25/2006	10/25/2006			1	
1	L2-I1	190	60	1		1	100	10/25/2006	10/30/2006	10/30/2006			1	
1	L2-I2	750	475	20		6	100	12/6/2006	12/6/2006	12/6/2006			1	
1	L2-I3	500	140	5		2	100	10/24/2006	10/25/2006	10/25/2006			1	
1	L2-I4	400	140	5		1	100	10/3/2006	10/4/2006	10/4/2006			1	
1	L2-I5	300	80	5		0	100	10/4/2006	10/4/2006	10/4/2006			1	
1	L2-I6	150	30	30		1	100	10/5/2006	10/5/2006	10/5/2006			1	
1	L2-I7	200	30	35		2	100	10/5/2006	10/5/2006	10/5/2006			1	
1	L2-I8	320	55	10		10	100	11/2/2006	11/2/2006	11/2/2006			1	
1	L2-I9	965	320	35		15	100	10/30/2006	10/30/2006	10/30/2006			1	
1	L2-I10	365	110	30		37	100	9/15/2006	9/19/2006	9/19/2006			1	
1	L2-I11	290	65	10		16	100	9/14/2006	9/19/2006	9/19/2006			1	
1	L2-I12	50	5	0		2	100	9/18/2006	9/19/2006	9/19/2006			1	
1	L2-J0	35	5	0		0	100	10/26/2006	10/30/2006	10/30/2006			1	
1	L2-J1	180	31	0		0	100	10/30/2006	10/30/2006	10/30/2006			1	
1	L2-J2	360	70	2		0	100	11/6/2006	11/7/2006	11/7/2006			1	
1	L2-J3	870	95	13		0	100	11/21/2006	11/30/2006	11/30/2006			1	
1	L2-J4	1145	198	77		0	100	11/20/2006	11/20/2006	11/20/2006			1	
1	L2-J5	720	195	31		3	100	11/30/2006	12/4/2006	12/4/2006			1	
1	L2-J6	380	60	10		8	100	11/16/2006	11/20/2006	11/20/2006			1	
1	L2-J7	280	60	10		13	100	11/7/2006	11/7/2006	11/7/2006			1	
1	L2-J8	870	485	15		20	100	11/7/2006	11/7/2006	11/7/2006			1	
1	L2-J9	1335	675	60		43	100	10/24/2006	10/25/2006	10/25/2006			1	
1	L2-J10	225	20	10		17	100	9/19/2006	9/20/2006	9/20/2006			1	
1	L2-J11	250	55	15		20	100	9/14/2006	9/19/2006	9/19/2006			1	
1	L2-J12	150	10	5		6	100	9/18/2006	9/19/2006	9/19/2006			1	
1	L2-J13	50	2	1		1	100	9/18/2006	9/19/2006	9/19/2006			1	
1	L2-K0	78	10	0		0	100	10/31/2006	10/31/2006	10/31/2006			1	
1	L2-K1	180	25	1		0	100	10/30/2006	10/30/2006	10/30/2006			1	
1	L2-K2	330	35	1		0	100	11/7/2006	11/8/2006	11/8/2006			1	
1	L2-K3	390	80	35		7	100	11/28/2006	11/30/2006	11/30/2006			1	
1	L2-K4	535	80	8		0	100	11/29/2006	11/30/2006	11/30/2006			1	
1	L2-K5	1500	270	35		3	100	10/2/2006	10/4/2006	10/4/2006			1	
1	L2-K6	320	50	20		3	100	11/15/2006	11/20/2006	11/20/2006			1	
1	L2-K7	380	90	13		13	100	11/8/2006	11/8/2006	11/8/2006			1	
1	L2-K8	2255	525	44		74	100	10/18/2006	10/18/2006	10/18/2006			1	
1	L2-K9	420	59	9		30	100	10/10/2006	10/10/2006	10/10/2006			1	
1	L2-K10	150	2	20		0	100	9/19/2006	9/19/2006	9/19/2006			1	
1	L2-K11	190	18	11		6	100	9/19/2006	9/19/2006	9/19/2006			1	
1	L2-K12	65	10	1		3	100	9/18/2006	9/19/2006	9/19/2006			1	
1	L2-L0	6	1	0		0	100	10/30/2006	10/30/2006	10/30/2006			1	
1	L2-L1	270	30	1		2	100	11/2/2006	11/2/2006	11/2/2006			1	
1	L2-L2	559	82	5		2	100	11/9/2006	11/9/2006	11/9/2006			1	
1	L2-L3	375	35	45		3	100	12/4/2006	12/5/2006	12/5/2006			1	
1	L2-L4	345	37	15		3	100	12/5/2006	12/6/2006	12/6/2006			1	
1	L2-L5	400	75	30		1	100	9/26/2006	9/26/2006	9/26/2006			1	
1	L2-L6	470	55	53		1	100	11/15/2006	11/15/2006	11/15/2006			1	
1	L2-L7	645	215	25		28	100	11/9/2006	11/13/2006	11/13/2006			1	
1	L2-L8	710	158	183		39	100	12/19/2006	12/19/2006	12/19/2006			1	
1	L2-L9	150	6	8		0	100	10/5/2006	10/5/2006	10/5/2006			1	

Joliet AAP	Area L2

As of	12/28/2006

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Total Number of MEC/MPPEH Items	2,143.00
Total Number of Grids	155
Percent Completed by Mag/Flag and Dig	100%

Grids	Grid Number	Number of Anomalies	Pounds of MD	Pounds of Range Residue	Number of UXO	Number of MEC MPPEH	Percent Completed	Date Sweep Completed	Date QC'ed	Date QA'ed	Date Reswept Completed	Date ReQc'ed	Complete	Remarks
1	L2-L10	200	10	15		6	100	9/19/2006	9/20/2006	9/20/2006			1	
1	L2-L11	225	20	65		4	100	9/18/2006	9/20/2006	9/20/2006			1	
1	L2-L12	25	2	5		1	100	9/18/2006	9/19/2006	9/19/2006			1	
1	L2-M1	390	65	1		7	100	11/9/2006	11/13/2006	11/13/2006			1	
1	L2-M2	1781	196	2		18	100	11/15/2006	11/15/2006	11/15/2006			1	
1	L2-M3	668	100	195		53	100	12/18/2006	12/19/2006	12/19/2006			1	
1	L2-M4	501	45	45		15	100	12/12/2006	12/13/2006	12/13/2006			1	
1	L2-M5	500	22	37		1	100	9/26/2006	9/26/2006	9/26/2006			1	
1	L2-M6	490	90	10		16	100	11/13/2006	11/13/2006	11/13/2006			1	
1	L2-M7	528	169	218		17	100	12/19/2006	12/19/2006	12/19/2006			1	
1	L2-M8	450	40	143		15	100	12/19/2006	12/19/2006	12/19/2006			1	
1	L2-M9	230	27	8.5		31	100	9/27/2006	9/28/2006	9/28/2006			1	
1	L2-M10	220	32	5		7	100	9/20/2006	9/21/2006	9/21/2006			1	
1	L2-M11	50	3	1		0	100	9/20/2006	9/21/2006	9/21/2006			1	
1	L2-N1	260	40	1		7	100	11/20/2006	11/20/2006	11/20/2006			1	
1	L2-N2	1665	223	4		24	100	11/20/2006	11/20/2006	11/20/2006			1	
1	L2-N3	600	160	42		52	100	12/7/2006	12/11/2006	12/11/2006			1	
1	L2-N4	531	83	120		20	100	12/13/2006	12/13/2006	12/13/2006			1	
1	L2-N5	566	55	27		2	100	11/29/2006	11/30/2006	11/30/2006			1	
1	L2-N6	490	93	35		29	100	11/28/2006	11/28/2006	11/28/2006			1	
1	L2-N7	300	97	70		10	100	12/18/2006	12/19/2006	12/19/2006			1	
1	L2-N8	615	126	10		46	100	9/26/2006	9/26/2006	9/26/2006			1	
1	L2-N9	275	65	5		16	100	9/26/2006	9/28/2006	9/28/2006			1	
1	L2-N10	150	20	7		8	100	9/20/2006	9/21/2006	9/21/2006			1	
1	L2-N11	25	7	2		0	100	9/20/2006	9/21/2006	9/21/2006			1	
1	L2-O1	50	5	115		4	100	11/20/2006	11/20/2006	11/20/2006			1	
1	L2-O2	1630	422	45		14	100	11/28/2006	11/30/2006	11/30/2006			1	
1	L2-O3	1415	975	355		65	100	12/18/2006	12/19/2006	12/19/2006			1	
1	L2-O4	310	20	15		17	100	12/13/2006	12/13/2006	12/13/2006			1	
1	L2-O5	434	100	75		16	100	12/14/2006	12/14/2006	12/14/2006			1	
1	L2-O6	463	70	20		34	100	11/21/2006	11/28/2006	11/28/2006			1	
1	L2-O7	445	100	18		9	100	11/2/2006	11/2/2006	11/2/2006			1	
1	L2-O8	670	111	9		41	100	9/25/2006	Failed QC	9/28/2006	9/28/2006	9/28/2006	1	Resweep started 9/27/06
1	L2-O9	230	35	3		12	100	9/21/2006	9/21/2006	9/21/2006			1	
1	L2-O10	25	3	1		0	100	9/20/2006	9/21/2006	9/21/2006			1	
1	L2-P2	130	45	50		1	100	11/29/2006	11/30/2006	11/30/2006			1	
1	L2-P3	498	210	25		78	100	11/30/2006	12/4/2006	12/4/2006			1	
1	L2-P4	304	30	3		2	100	12/4/2006	12/4/2006	12/4/2006			1	
1	L2-P5	921	530	82		663	100	11/20/2006	11/21/2006	11/21/2006			1	
1	L2-P6	436	90	30		36	100	12/18/2006	12/19/2006	12/19/2006			1	
1	L2-P7	428	160	10		32	100	11/1/2006	11/2/2006	11/2/2006			1	
1	L2-P8	210	75	5		17	100	9/21/2006	9/26/2006	9/26/2006			1	
1	L2-P9	25	1	0.5		0	100	9/21/2006	9/21/2006	9/21/2006			1	
1	L2-Q2	44	25	2		8	100	11/15/2006	11/15/2006	11/15/2006			1	
1	L2-Q3	551	75	33		38	100	11/15/2006	11/15/2006	11/15/2006			1	
1	L2-Q4	652	148	20		42	100	11/13/2006	11/13/2006	11/13/2006			1	
1	L2-Q5	616	235	90		19	100	11/13/2006	11/13/2006	11/13/2006			1	
1	L2-Q6	261	75	65		18	100	11/9/2006	11/9/2006	11/9/2006			1	
1	L2-Q7	246	35	64.5		3	100	10/31/2006	10/31/2006	10/31/2006			1	
1	L2-Q8	30	12	0.5		0	100	9/21/2006	9/26/2006	9/26/2006			1	
1	L2-R4	18	5	1		2	100	11/13/2006	11/13/2006	11/13/2006			1	

Joliet AAP	Area L2

As of	12/28/2006

Number of Grids Completed	155
Number of Grids Pending	0
Pounds of MD	13,689.50
Total Number of Anomalies Excavated	63,305.00
Total Pounds of Range Residue	4,948.60
Total Number of MEC/MPPEH Items	2,143.00
Total Number of Grids	155
Percent Completed by Mag/Flag and Dig	100%

Grids	Grid Number	Number of Anomalies	Pounds of MD	Pounds of Range Residue	Number of UXO	Number of MEC MPPEH	Percent Completed	Date Sweep Completed	Date QC'ed	Date QA'ed	Date Reswept Completed	Date ReQc'ed	Complete	Remarks
1	L2-R5	44	10	12		3	100	11/9/2006	11/13/2006	11/13/2006			1	
1	L2-R6	46	13	5		6	100	11/8/2006	11/8/2006	11/8/2006			1	
1	L2-R7	33	2	0.1		2	100	10/31/2006	10/31/2006	10/31/2006			1	
155		63305	13689.5	4948.6	0	2143							155	

Joliet AAP	Area L3

As of	11/30/2007

Number of Grids Completed	92
Grids Under Landfill	12
Pounds of MD	15,727
Total Number of Anomalies Excavated	83,860
Total Pounds of Range Residue	45,120
Total Number of MEC Items	3,681
Total Number of Grids	104
Percent Completed by Mag/Flag and Dig	88%

Grids	Grid Number	Number of Anomalies	Pounds of MD	Pounds of Range Residue	Number of MEC	Percent Completed	Date Sweep Completed	Date QC'ed	Date QA'ed	Date Reswept Completed	Date ReQc'ed	Complete	Partial	Remarks
1	L3-A7	5	0	10	0	100	1/8/2007	1/8/2007	1/8/2007			1		
1	L3-A8	80	2	120	0	100	9/12/2007	9/14/2007	9/14/2007			1		
1	L3-B7	350	40	380	10	100	1/8/2007	1/8/2007	1/8/2007			1		
1	L3-B8	520	26	430	2	100	9/12/2007	9/14/2007	9/14/2007			1		
1	L3-B9	230	0	75	0	100	9/18/2007	9/19/2007	9/19/2007			1		
1	L3-C5	150	10	5	4	100	12/28/2006	12/28/2006	12/28/2006			1		
1	L3-C6	250	25	100	15	100	1/3/2007	1/4/2007	1/4/2007			1		
1	L3-C7	800	170	790	30	100	1/5/2007	1/8/2007	1/8/2007			1		
1	L3-C8	1324	95	355	8	100	9/7/2007	9/11/2007	9/11/2007			1		
1	L3-C9	186	0	68	0	100	10/19/2007	10/26/2007	10/26/2007			1		
1	L3-C10												1	Under Landfill
1	L3-D4	147	20	31	7	100	12/27/2006	12/28/2006	12/28/2006			1		
1	L3-D5	600	200	100	18	100	12/30/2006	1/2/2007	1/2/2007			1		
1	L3-D6	1221	225	309	14	100	9/18/2007	9/19/2007	9/19/2007			1		
1	L3-D7	1685	563	902	47	100	9/25/2007	9/27/2007	9/27/2007			1		
1	L3-D8	3316	335	1370	16	100	10/3/2007	10/3/2007	10/9/2007			1		
1	L3-D9	2375	480	365	17	100	10/8/2007	10/26/2007	10/26/2007			1		
1	L3-D10												1	Under Landfill
1	L3-D11												1	Under Landfill
1	L3-D12	3550	671	3300	15	70							1	Under Landfill
1	L3-E2	10	1	1	0	100	1/2/2007	1/2/2007	1/2/2007			1		
1	L3-E3	280	45	23	5	100	1/4/2007	1/4/2007	1/4/2007			1		
1	L3-E4	160	20	62	14	100	12/21/2006	12/28/2006	12/28/2006			1		
1	L3-E5	708	210	193	10	100	12/27/2006	12/28/2006	12/28/2006			1		
1	L3-E6	545	780	315	26	100	9/20/2007	9/28/2007	9/28/2007			1		
1	L3-E7	4850	180	595	19	100	10/5/2007	10/8/2007	10/9/2007			1		
1	L3-E8	2104	180	620	9	100	9/28/2007	9/28/2007	9/28/2007			1		
1	L3-E9	2442	85	1240	2	100	10/2/2007	10/3/2007	10/9/2007			1		
1	L3-E10	1358	30	610	3	100	9/20/2007	9/27/2007	9/27/2007			1		
1	L3-E11												1	Under Landfill
1	L3-E12												1	Under Landfill
1	L3-E13												1	Under Landfill
1	L3-E14												1	Under Landfill
1	L3-F1	247	28	68	10	100	12/28/2006	12/29/2006	12/29/2006			1		
1	L3-F2	119	33	15	35	100	1/2/2007	1/2/2007	1/2/2007			1		
1	L3-F3	242	21	76	6	100	1/4/2007	1/4/2007	1/4/2007			1		
1	L3-F4	434	35	100	6	100	1/10/2007	1/10/2007	1/10/2007			1		
	L3-F4	769	270		3	100	8/27/2007	8/29/2007	8/29/2007					Resweep due to soil removal
1	L3-F5	357	70	55	1	100	1/16/2007	1/16/2007	1/16/2007			1		
	L3-F5	1076	150	200	10	100	9/5/2007	9/11/2007	9/11/2007					Resweep due to soil removal
1	L3-F6	772	76	5238	14	100	9/26/2007	9/27/2007	9/27/2007			1		

Joliet AAP	Area L3

As of	11/30/2007

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Total Pounds of Range Residue	45,120
Total Number of MEC Items	3,681
Total Number of Grids	104
Percent Completed by Mag/Flag and Dig	88%

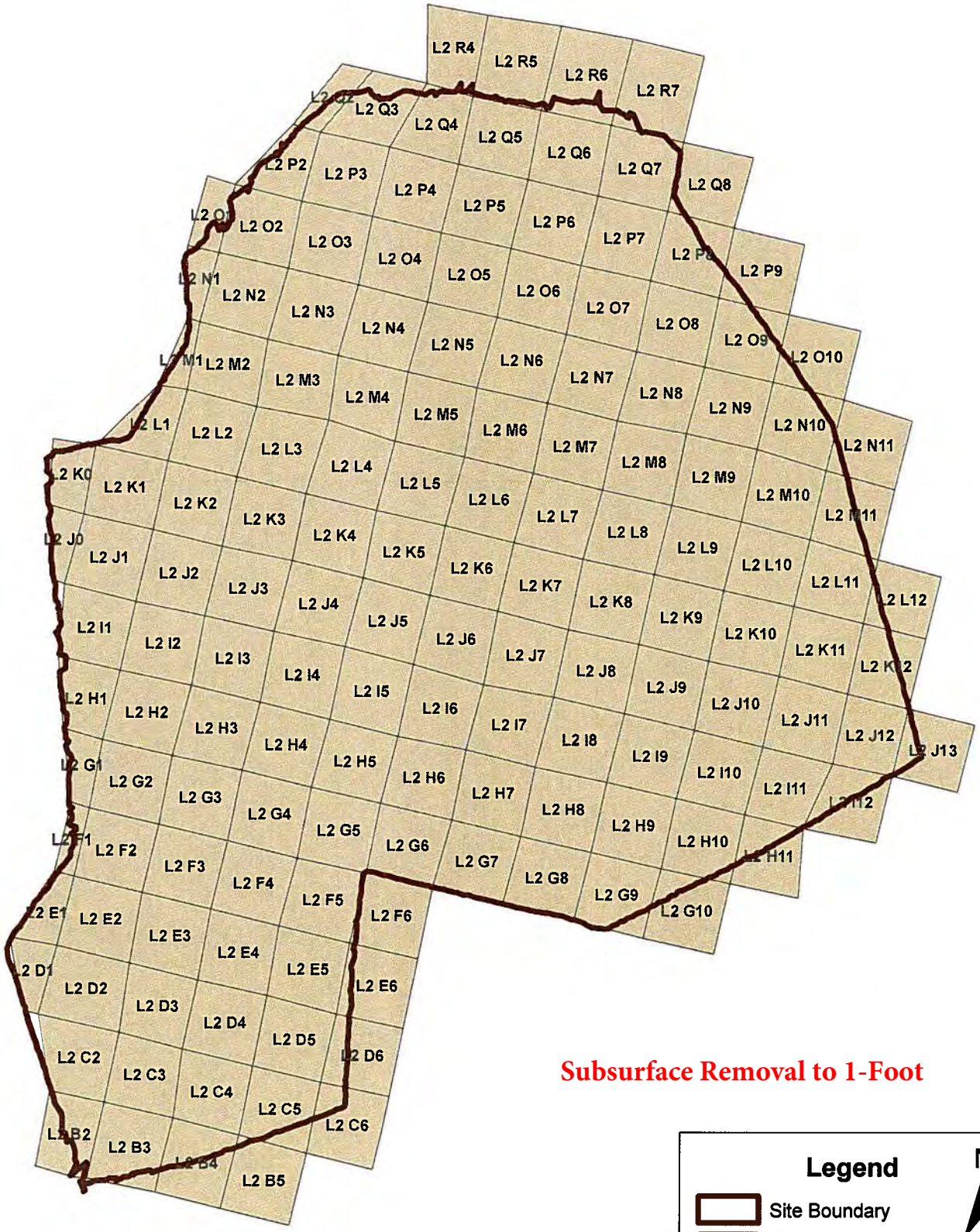
Grids	Grid Number	Number of Anomalies	Pounds of MD	Pounds of Range Residue	Number of MEC	Percent Completed	Date Sweep Completed	Date QC'ed	Date QA'ed	Date Reswept Completed	Date ReQc'ed	Complete	Partial	Remarks
1	L3-F7	560	151	142	74	100	10/1/2007	10/3/2007	10/9/2007			1		
1	L3-F8	530	50	140	4	100	9/28/2007	10/3/2007	10/9/2007			1		
1	L3-F9	2906	71	1303	5	100	9/24/2007	9/27/2007	9/27/2007			1		
1	L3-F10	4783	122	3365	4	100	9/18/2007	9/19/2007	9/19/2007			1		
1	L3-F11	825	65	155	5	100	9/10/2007	9/11/2007	9/11/2007			1		
1	L3-F12	75	3	25	0	100	9/21/2007	9/27/2007	9/27/2007			1		
1	L3-F13												1	**Under Landfill**
1	L3-F14												1	**Under Landfill**
1	L3-F15												1	**Under Landfill**
1	L3-G1	345	35	45	7	100	12/20/2006	12/29/2006	12/29/2006	12/28/2006		1		Reswept at QC request
1	L3-G2	162	45	10	96	100	12/30/2006	1/2/2007	1/2/2007			1		
1	L3-G3	135	15	30	8	100	1/3/2007	1/4/2007	1/4/2007			1		
1	L3-G4	420	38	135	8	100	1/8/2007	1/8/2007	1/8/2007			1		
	L3-G4	936	160		3	100	8/24/2007	8/29/2007	8/29/2007					Reswept due to soil removal
1	L3-G5	882	70	300	2	100	1/15/2007	1/16/2007	1/16/2007			1		
	L3-G5	750	145	140	1	100	9/4/2007	9/11/2007	9/11/2007					Reswept due to soil removal
1	L3-G6	675	1550	305	363	100	9/18/2007	9/19/2007	9/19/2007			1		
1	L3-G7	4218	3490	1155	500	100	10/8/2007	10/8/2007	10/9/2007			1		
1	L3-G8	1392	191	758	34	100	10/8/2007	10/8/2007	10/9/2007			1		
1	L3-G9	768	40	338	0	100	10/4/2007	10/8/2007	10/9/2007			1		
1	L3-G10	1833	70	1460	4	99	10/3/2007	10/3/2007	10/9/2007			1		
1	L3-G11	1269	43	1146	0	100	9/7/2007	9/11/2007	9/11/2007			1		
1	L3-G12	4087	50	2208	3	100	9/5/2007	9/11/2007	9/11/2007			1		
1	L3-G13	5105	1532	7800	531	100	10/25/2007	10/26/2007	10/26/2007			1		
1	L3-G14												1	**Under Landfill**
1	L3-G15	368	4	35	1	100	9/6/2007	9/11/2007	9/11/2007			1		
1	L3-G16	310	2	40	0	100	9/6/2007	9/11/2007	9/11/2007			1		
1	L3-H1	194	32	3	36	100	12/20/2006	12/29/2006	12/29/2006	12/29/2006		1		Reswept at QC request
1	L3-H2	355	59	40	44	100	12/20/2006	1/2/2007	1/2/2007	12/29/2006		1		Reswept at QC request
1	L3-H3	300	40	10	98	100	1/3/2007	1/4/2007	1/4/2007			1		
1	L3-H4	409	35	155	65	100	1/9/2007	1/10/2007	1/10/2007			1		
	L3-H4	208	60		4	100	8/29/2007	8/29/2007	8/29/2007					Resweep due to soil removal
1	L3-H5	678	12	310	16	100	1/11/2007	1/16/2007	1/16/2007			1		
	L3-H5	624	210		5	100	8/30/2007	9/11/2007	9/11/2007					Resweep due to soil removal
1	L3-H6	420	120	350	3	100	12/30/2006	1/4/2007	1/4/2007			1		
	L3-H6	485	66	140	16	100	9/13/2007	9/14/2007	9/14/2007					Resweep due to soil removal
1	L3-H7	360	90	150	13	100	1/2/2007	1/4/2007	1/4/2007			1		
	L3-H7	875	170		18	100	8/27/2007	8/29/2007	8/29/2007					Resweep due to soil removal
1	L3-H8	205	110	55	0	100	1/11/2007	1/16/2007	1/16/2007			1		
	L3-H8	875	200	50	9	100	8/28/2007	8/29/2007	8/29/2007					Resweep due to soil removal
1	L3-H9	1340	120	245	5	100	12/13/2006	12/14/2006	12/14/2006			1		

Joliet AAP	Area L3

As of	11/30/2007

Number of Grids Completed	92
Grids Under Landfill	12
Pounds of MD	15,727
Total Number of Anomalies Excavated	83,860
Total Pounds of Range Residue	45,120
Total Number of MEC Items	3,681
Total Number of Grids	104
Percent Completed by Mag/Flag and Dig	88%

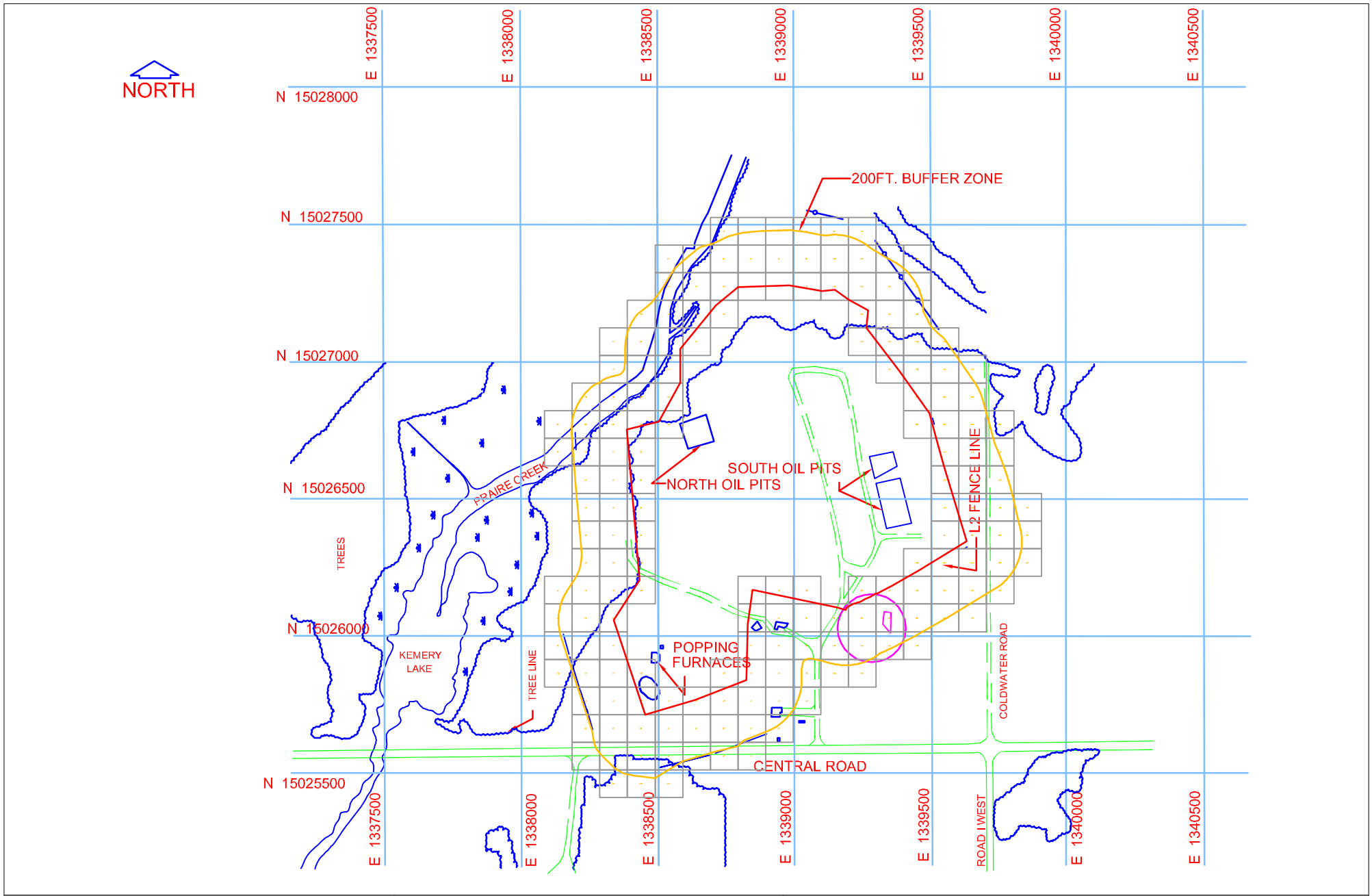
Grids	Grid Number	Number of Anomalies	Pounds of MD	Pounds of Range Residue	Number of MEC	Percent Completed	Date Sweep Completed	Date QC'ed	Date QA'ed	Date Reswept Completed	Date ReQc'ed	Complete	Partial	Remarks
	L3-H9	320	20	110	0	100	10/3/2007	10/3/2007	10/9/2007					Resweep due to soil removal
1	L3-H10	260	5	75	1	100	9/18/2007	9/19/2007	9/19/2007			1		
1	L3-H11	504	18		0	100	8/31/2007	9/11/2007	9/11/2007			1		
1	L3-H12	442	32	100	0	100	9/4/2007	9/11/2007	9/11/2007			1		
1	L3-H13	890	6	1215	0	100	1/16/2007	1/16/2007	1/16/2007			1		
1	L3-H13	270	15	110	0	100	9/4/2007	9/11/2007	9/11/2007			1		Resweep due to soil removal
1	L3-H14	558	15	80	1	100	8/31/2007	9/11/2007	9/11/2007			1		
1	L3-H15	1550	665	1365	0	100	7/18/2007	8/29/2007	8/29/2007			1		
1	L3-H16	40	5	0	0	100	7/4/2007	8/29/2007	8/29/2007			1		small partial grid
1	L3-I12	875	15	300	1	100	12/14/2006	12/19/2006	12/19/2006			1		
1	L3-I13	1400	180	170	1	100	12/20/2006	12/29/2006	12/29/2006			1		
1	L3-I14	760	150	790	7	100	12/28/2006	12/29/2006	12/29/2006			1		
1	L3-I15	180	25	22	3	100	12/28/2006	12/29/2006	12/29/2006			1		
1	L3-J11	10	0	1	0	100	12/11/2006	12/11/2006	12/11/2006			1		
1	L3-J12	360	21	57	2	100	12/11/2006	12/11/2006	12/11/2006			1		
1	L3-J13	195	46	20	7	100	12/7/2006	12/11/2006	12/11/2006			1		
1	L3-J14	90	10	1	5	100	12/6/2006	12/7/2006	12/7/2006			1		
1	L3-J15	45	5	1	0	100	12/6/2006	12/6/2006	12/6/2006			1		
1	L3-K11	45	1	0	0	100	12/4/2006	12/5/2006	12/5/2006			1		
1	L3-K12	240	36	3	12	100	12/5/2006	12/6/2006	12/6/2006			1		
1	L3-K13	120	45	2	2	100	12/5/2006	12/6/2006	12/6/2006			1		
1	L3-K14	120	16	6	12	100	12/6/2006	12/6/2006	12/6/2006			1		
1	L3-K15	45	2	0	0	100	12/6/2006	12/6/2006	12/6/2006			1		
1	L3-L11	2	1	0	0	100	12/4/2006	12/4/2006	12/4/2006			1		
1	L3-L12	135	30	2	5	100	12/4/2006	12/4/2006	12/4/2006			1		
1	L3-L13	115	15	21	5	100	12/4/2006	12/4/2006	12/4/2006			1		
1	L3-L14	150	1	1	6	100	11/30/2006	11/30/2006	11/30/2006			1		
1	L3-L15	45	1	1	3	100	11/30/2006	11/30/2006	11/30/2006			1		
1	L3-M12	30	1	0	0	100	12/4/2006	12/5/2006	12/5/2006			1		
1	L3-M13	45	1	1	0	100	11/30/2006	11/30/2006	11/30/2006			1		
1	L3-M14	60	1	1	1	100	11/30/2006	11/30/2006	11/30/2006			1		
1	L3-M15	35	1	1	0	100	11/30/2006	11/30/2006	11/30/2006			1		
	L3/L5-construction support				1246									
104		**83860**	**15727**	**45120**	**3681**							**92**	**12**	



SITE L2
Remedial Design/Remedial Action Workplan - Phase 2
Soils Operable Unit
Joliet Army Ammunition Plant
Wilmington, Illinois

Site-Specific Final Report,
Joliet Army Ammunition Plant

MKM. 2009.



MKM Engineers, Inc.
4153 Blubonnet Drive
Stafford, TX 77477

Legend:
- Stream
- Roads
- Site Boundary
- 200 ft Buffer Zone

FIGURE 1-3: MRS L2 Site Boundaries

JOLIET ARMY AMMUNITION PLANT

DATE DRAWN: 03/24/08	SCALE: AS SHOWN
DRAWN BY: QX	APPROVED BY: AG

Appendix A. Data were gathered and documented on the SUXOS Site Daily Reports (Appendix D) and QC report (Appendix C). All field MEC data were recorded in the grid data field log, which can be located within Appendix A, and the Grid and Ordnance Tracking Log (Appendix F).

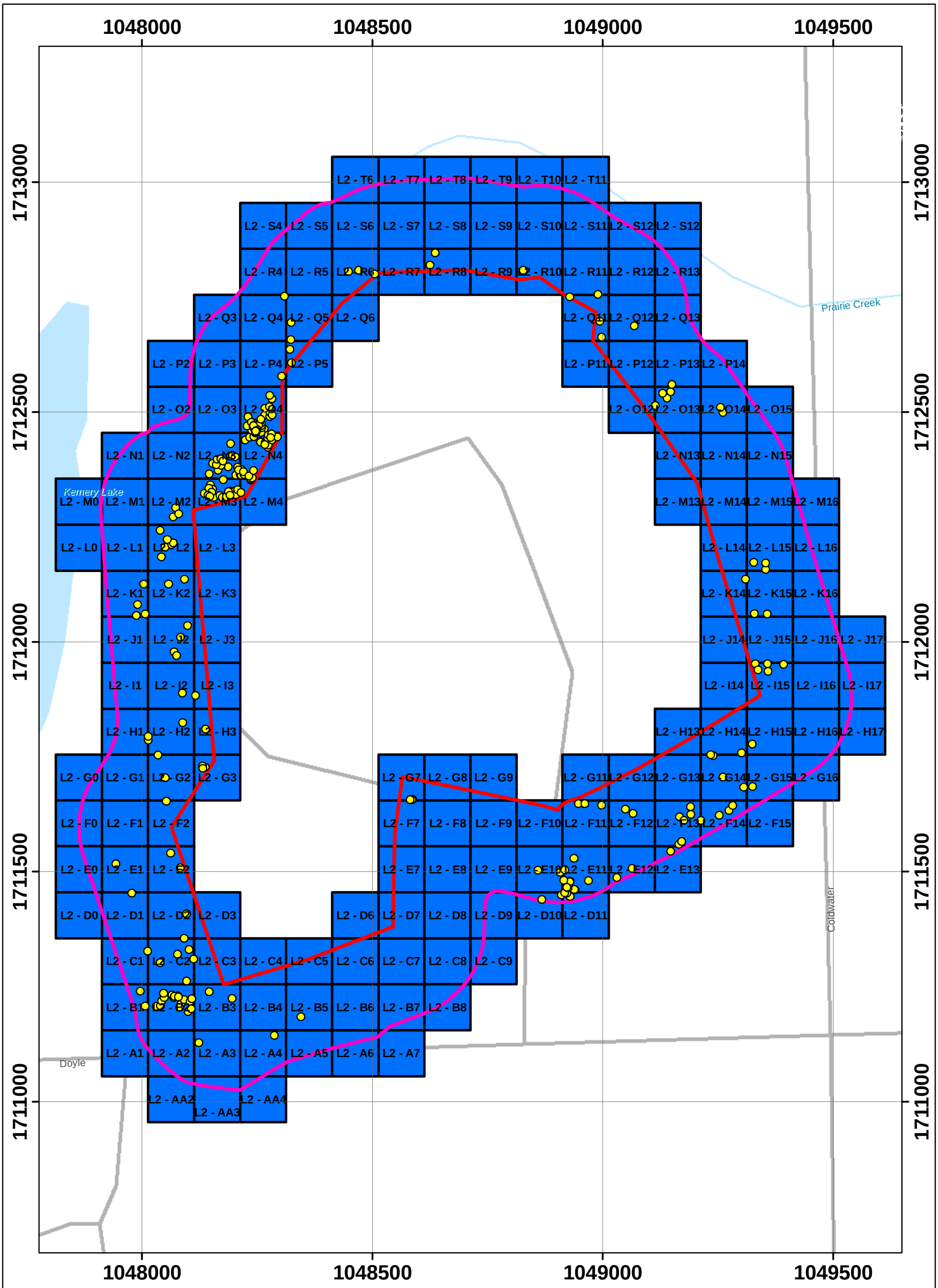
Table 2-1
MEC Item Summary

Item	Nomenclature	Nose/Tail	Type by Function	Quantity
Fuze	M256	Nose	PD	1
Fuze	M43	Nose	MT	7
Fuze	M503	Nose	PD	1
Fuze	M54	Nose	TSQ	8
Fuze	M564	Nose	MT	2
Fuze	M66	Tail	Impact/Inertia	30
Fuze	M90	Nose	PD	11
Fuze	T83	Nose	PD	65
Fuze	Unknown	Nose	PD	2
Booster	Mk3	N/A	Booster Charge	141
Booster	M66	N/A	Booster Charge	17
Bulk	N/A	N/A	Bare Cast Explosives	1
TOTAL				**286**

NOTE:
MT = mechanical time
PD = point detonating
TSQ = time super quick

2.2.3 MEC Destruction

MKM was responsible for the disposal of all MEC encountered during site activities. Demolition operations for items found within the boundaries of the MRS L2 and L3 buffer zones were conducted on May 16, June 6, June 28, August 8, and August 29, 2007. The SUXOS conducted all demolition operations in accordance with the procedures outlined in *EP 385-1-95a Basic Safety Concepts and Considerations for Munitions and Explosives of Concern Response Action Operations* (USACE, 2004), and "MEC Demolition Standard Operating Procedure" (included in Appendix D of the Final Remedial Action Work Plan for Military Munitions Response Program (MMRP) Sites L3, L2, and L34, Joliet Army Ammunition Plant [MKM, 2006]) for all demolition operations. The SUXOS coordinated site demolition operations with other contractors and the USACE OESS. Explosive materials used for the demolition operations were obtained from Owen Oil Tools and Austin Powder. Explosive expenditures for the disposal operations are shown in Table 2-2. The Explosive Accountability Records are included in Appendix B.



Subsurface Removal to 1-Foot

Legend

- MEC
- L2 200ft Buffer Zone
- L2 Fence Line
- QA/QC Complete
- Local Road
- Perennial Stream
- Perennial lake or pond

Note - Grids intersecting the fence line and 200ft buffer zone have been cleared only to the extent within the buffer zone area as required by the SOW.

N W E S

0 50 100 200 300 400 Feet

PIKA International, Inc.
12723 Capricorn Dr. Ste#500
Stafford, TX 77477

MKM

Figure 2-1
Site L2 - MEC Recovered
Joliet Army Ammunition Plant
Wilmington, Illinois

Drawn By: QX Reviewed By: AG

Grid and Ordnance Tracking Log

Grid #	Date Recovered	Item Description	N Coordinate (deg,min,sec)	E Coordinate (deg,min,sec)	Move / BIP	Disposition/ Destroyed	Date Disposed/Destroyed
L2-K1-1	5/6/2007	Fuze, Nose, PD, T83	41.22.038	088.06.064	Move	Destroyed	28-Jun-07
L2-K1-2	5/6/2007	Fuze, Nose, TSQ, M54	41.22.027	088.06.064	Move	Destroyed	28-Jun-07
L2-K1-3	5/6/2007	Fuze, Nose, TSQ, M54	41.22.026	088.06.068	Move	Destroyed	28-Jun-07
L2-K1-4	5/6/2007	Fuze, Nose, TSQ, M54	41.22.030	088.06.067	Move	Destroyed	28-Jun-07
L2-K2-1	5/6/2007	Booster, MK3	41.22.023	088.06.044	Move	Destroyed	28-Jun-07
L2-K2-2	5/6/2007	Booster, MK3	41.22.039	088.06.045	Move	Destroyed	28-Jun-07
L2-K2-3	5/6/2007	Booster, MK3	41.22.038	088.06.053	Move	Destroyed	28-Jun-07
L2-J2-1	5/7/2007	Fuze, Nose, MT, M43	41.22.013	088.06.050	Move	Destroyed	28-Jun-07
L2-J2-2	5/7/2007	Booster, MK3	41.22.012	088.06.049	Move	Destroyed	28-Jun-07
L2-J2-3	5/7/2007	Fuze, Nose, MT, M43	41.22.019	088.06.047	Move	Destroyed	28-Jun-07
L2-J3-1	5/7/2007	Fuze, Nose, MT, M43	41.22.015	088.06.035	Move	Destroyed	28-Jun-07
L2-G14-1	5/14/2007	Booster, MK3	41.21.950	088.05.785	Move	Destroyed	6-Jun-07
L2-G14-2	5/14/2007	Booster, MK3	41.21.977	088.05.781	Move	Destroyed	6-Jun-07
L2-J15-1	5/21/2007	Fuze, Nose, PD, T83	41.222.008	088.05.761	Move	Destroyed	6-Jun-07
L2-F13-1	5/23/2007	Booster, MK3	41.21.942	088.05.815	Move	Destroyed	6-Jun-07
L2-F13-2	5/23/2007	Booster, MK3	41.21.944	088.05.811	Move	Destroyed	6-Jun-07
L2-F13-3	5/23/2007	Booster, M66	41.21.945	088.05.809	Move	Destroyed	6-Jun-07
L2-F13-4	5/23/2007	Booster, MK3	41.21.953	088.05.800	Move	Destroyed	6-Jun-07
L2-F13-5	5/23/2007	CAST EXPLOSIVE	41.21.954	088.05.810	Move	Destroyed	6-Jun-07
L2-F13-6	5/23/2007	Booster, M66	41.21.953	088.05.809	Move	Destroyed	6-Jun-07
L2-F13-7	5/23/2007	Booster, MK3	41.21.955	088.05.805	Move	Destroyed	6-Jun-07
L2-F13-8	5/23/2007	Booster, MK3	41.21.857	088.05.805	Move	Destroyed	6-Jun-07
L2-F14-1	5/23/2007	Booster, MK3	41.21.954	088.05.792	Move	Destroyed	6-Jun-07
L2-F14-2	5/23/2007	Booster, MK3	41.21.954	088.05.792	Move	Destroyed	6-Jun-07
L2-G15-1	5/24/2007	Booster, MK3	41.21.964	088.05.780	Move	Destroyed	6-Jun-07
L2-G15-2	5/24/2007	Booster, MK3	41.21.955	088.05.776	Move	Destroyed	6-Jun-07
L2-H14-1	5/24/2007	Booster, MK3	41.21.976	088.05.794	Move	Destroyed	6-Jun-07
L2-H14-2	5/24/2007	Booster, M66	41.21.976	088.05.796	Move	Destroyed	6-Jun-07
L2-H15-1	5/24/2007	Booster, MK3	41.21.980	088.05.776	Move	Destroyed	6-Jun-07
L2-O12-1	5/30/2007	Booster, MK3	41.22.101	088.05.821	Move	Destroyed	6-Jun-07
L2-O12-2	5/30/2007	Booster, M66	41.22.096	088.05.825	Move	Destroyed	6-Jun-07
L2-O14-1	5/31/2007	Booster, MK3	41.22.099	088.05.789	Move	Destroyed	6-Jun-07
L2-O14-2	5/31/2007	Booster, MK3	41.22.101	088.05.791	Move	Destroyed	6-Jun-07
L2-O14-3	5/31/2007	Booster, M66	41.22.104	088.05.791	Move	Destroyed	6-Jun-07

Grid and Ordnance Tracking Log

Grid #	Date Recovered	Item Description	N Coordinate (deg,min,sec)	E Coordinate (deg,min,sec)	Move / BIP	Disposition/ Destroyed	Date Disposed/Destroyed
L2-O13-1	6/1/2007	Booster, MK3	41.22.106	088.05.818	Move	Destroyed	6-Jun-07
L2-O13-2	6/1/2007	Booster, M66	41.22.106	088.05.814	Move	Destroyed	6-Jun-07
L2-O13-3	6/1/2007	Booster, MK3	41.22.109	088.05.814	Move	Destroyed	6-Jun-07
L2-O13-4	6/1/2007	Booster, M66	41.22.104	088.05.816	Move	Destroyed	6-Jun-07
L2-I2-1	6/11/2007	Fuze, Nose, MT, M43	41.21.998	088.06.040	Move	Destroyed	28-Jun-07
L2I2-2	6/11/2007	Fuze, Nose, PD, T83	41.21.999	088.06.046	Move	Destroyed	28-Jun-07
L2-L2-1	6/13/2007	Fuze, Nose, PD, T83	41.22.048	088.06.056	Move	Destroyed	28-Jun-07
L2-L2-2	6/13/2007	Fuze, Nose, PD, T83	41.22.051	088.06.054	Move	Destroyed	28-Jun-07
L2-L2-3	6/13/2007	Fuze, Nose, PD, T83	41.22.052	088.06.051	Move	Destroyed	28-Jun-07
L2-L2-4	6/13/2007	Booster, MK3	41.22.053	088.06.051	Move	Destroyed	28-Jun-07
L2-L2-5	6/13/2007	Fuze, Nose, PD, T83	41.22.054	088.06.053	Move	Destroyed	28-Jun-07
L2-L2-6	6/13/2007	Fuze, Nose, PD, T83	41.22.057	088.06.057	Move	Destroyed	28-Jun-07
L2-L2-7	6/13/2007	Fuze, Nose, PD, T83	41.22.057	088.06.061	Move	Destroyed	28-Jun-07
L2-M2-1	6/13/2007	Fuze, Nose, PD, T83	41.22.062	088.06.050	Move	Destroyed	28-Jun-07
L2-M2-2	6/13/2007	Fuze, Nose, PD, T83	41.22.065	088.06.049	Move	Destroyed	28-Jun-07
L2-M2-3	6/13/2007	Booster, MK3	41.22.063	088.06.048	Move	Destroyed	28-Jun-07
L2-M3-1	6/19/2007	Booster, MK3	41.22.070	088.06.036	Move	Destroyed	28-Jun-07
L2-M3-10	6/19/2007	Fuze, Nose, PD, T83	41.22.071	088.06.023	Move	Destroyed	28-Jun-07
L2-M3-11	6/19/2007	Booster, MK3	41.22.071	088.06.022	Move	Destroyed	28-Jun-07
L2-M3-12	6/19/2007	Booster, MK3	41.22.071	088.06.021	Move	Destroyed	28-Jun-07
L2-M3-13	6/19/2007	Fuze, Nose, TSQ, M54	41.22.070	088.06.021	Move	Destroyed	28-Jun-07
L2-M3-14	6/19/2007	Fuze, Nose, PD, T83	41.22.071	088.06.020	Move	Destroyed	28-Jun-07
L2-M3-15	6/19/2007	Booster, MK3	41.22.070	088.06.018	Move	Destroyed	28-Jun-07
L2-M3-16	6/19/2007	Booster, MK3	41.22.068	088.06.018	Move	Destroyed	28-Jun-07
L2-M3-17	6/19/2007	Booster, MK3	41.22.069	088.06.031	Move	Destroyed	28-Jun-07
L2-M3-18	6/19/2007	Fuze, Nose, PD, T83	41.22.073	088.06.033	Move	Destroyed	28-Jun-07
L2-M3-19	6/19/2007	Booster, MK3	41.22.072	088.06.032	Move	Destroyed	28-Jun-07
L2-M3-2	6/19/2007	Booster, MK3	41.22.072	088.06.033	Move	Destroyed	28-Jun-07
L2-M3-20	6/19/2007	Fuze, Nose, PD, T83	41.22.071	088.06.032	Move	Destroyed	28-Jun-07
L2-M3-21	6/19/2007	Booster, MK3	41.22.069	088.06.034	Move	Destroyed	28-Jun-07
L2-M3-22	6/19/2007	Booster, MK3	41.22.066	088.06.030	Move	Destroyed	28-Jun-07
L2-M3-3	6/19/2007	Fuze, Nose, TSQ, M54	41.22.069	088.06.033	Move	Destroyed	28-Jun-07
L2-M3-4	6/19/2007	Fuze, Nose, PD, T83	41.22.069	088.06.028	Move	Destroyed	28-Jun-07
L2-M3-5	6/19/2007	Booster, MK3	41.22.069	088.06.027	Move	Destroyed	28-Jun-07

Grid and Ordnance Tracking Log

Grid #	Date Recovered	Item Description	N Coordinate (deg,min,sec)	E Coordinate (deg,min,sec)	Move / BIP	Disposition/ Destroyed	Date Disposed/Destroyed
L2-M3-6	6/19/2007	Fuze, Nose, PD, T83	41.22.066	088.06.026	Move	Destroyed	28-Jun-07
L2-M3-7	6/19/2007	Booster, MK3	41.22.069	088.06.025	Move	Destroyed	28-Jun-07
L2-M3-8	6/19/2007	Fuze, Nose, PD, T83	41.22.071	088.06.024	Move	Destroyed	28-Jun-07
L2-M3-9	6/19/2007	Fuze, Nose, TSQ, M54	41.22.069	088.06.023	Move	Destroyed	28-Jun-07
L2-M4-1	6/19/2007	Fuze, Nose, PD, T83	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-10	6/19/2007	Fuze, Nose, PD, T83	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-11	6/19/2007	Fuze, Nose, PD, T83	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-12	6/19/2007	Booster, MK3	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-13	6/19/2007	Booster, MK3	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-14	6/19/2007	Booster, MK3	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-2	6/19/2007	Fuze, Nose, PD, T83	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-3	6/19/2007	Fuze, Nose, PD, T83	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-4	6/19/2007	Fuze, Nose, PD, T83	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-5	6/19/2007	Fuze, Nose, PD, T83	41.21.649	088.06.255	Move	Destroyed	28-Jun-07
L2-M4-6	6/19/2007	Fuze, Nose, PD, T83	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-7	6/19/2007	Fuze, Nose, PD, T83	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-8	6/19/2007	Fuze, Nose, PD, T83	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-M4-9	6/19/2007	Fuze, Nose, PD, T83	41.22.074	088.06.012	Move	Destroyed	28-Jun-07
L2-G3-1	6/21/2007	Fuze, Nose, PD, M90	41.22.961	088.06.033	Move	Destroyed	28-Jun-07
L2-G3-2	6/21/2007	Fuze, Nose, PD, M90	41.22.972	088.06.036	Move	Destroyed	28-Jun-07
L2-G3-3	6/21/2007	Fuze, Nose, PD, M90	41.22.972	088.06.037	Move	Destroyed	28-Jun-07
L2-G3-4	6/21/2007	Fuze, Nose, PD, M90	41.22.972	088.06.037	Move	Destroyed	28-Jun-07
L2-H3-1	6/21/2007	Fuze, Nose, PD, M90	41.21.955	088.06.024	Move	Destroyed	28-Jun-07
L2-H3-2	6/21/2007	Booster, MK3	41.21.985	088.06.031	Move	Destroyed	28-Jun-07
L2-H3-3	6/21/2007	Fuze, Nose, PD, M90	41.21.986	088.06.035	Move	Destroyed	28-Jun-07
L2-A3-1	6/27/2007	Booster, MK3	41.21.885	088.06.044	Move	Destroyed	28-Jun-07
L2-A3-2	6/27/2007	Booster, MK3	41.21.873	088.06.039	Move	Destroyed	28-Jun-07
L2-F12-1	6/28/2007	Fuze, Nose, PD, T83	41.21.576	088.05.506	Move	Destroyed	28-Jun-07
L2-F12-2	6/28/2007	Fuze, Nose, PD, T83	41.21.574	088.05.502	Move	Destroyed	28-Jun-07
L2-F12-3	6/28/2007	Fuze, Nose, PD, T83	41.21.573	088.05.500	Move	Destroyed	28-Jun-07
L2-B1-1	7/2/2007	Fuze, Nose, PD, T83	41.21.887	088.06.064	Move	Destroyed	8-Aug-07
L2-B1-2	7/2/2007	Fuze, Nose, PD, T83	41.21.892	088.06.067	Move	Destroyed	8-Aug-07
L2-B2-1	7/2/2007	Booster, MK3	41.21.886	088.06.059	Move	Destroyed	8-Aug-07
L2-B2-10	7/2/2007	Booster, MK3	41.21.890	088.06.049	Move	Destroyed	8-Aug-07

Grid and Ordnance Tracking Log

Grid #	Date Recovered	Item Description	N Coordinate (deg,min,sec)	E Coordinate (deg,min,sec)	Move / BIP	Disposition/ Destroyed	Date Disposed/Destroyed
L2-B2-11	7/2/2007	Booster, MK3	41.21.887	088.06.048	Move	Destroyed	8-Aug-07
L2-B2-12	7/2/2007	Booster, MK3	41.21.886	088.06.048	Move	Destroyed	8-Aug-07
L2-B2-13	7/2/2007	Booster, MK3	41.21.889	088.06.046	Move	Destroyed	8-Aug-07
L2-B2-14	7/2/2007	Booster, MK3	41.21.888	088.06.043	Move	Destroyed	8-Aug-07
L2-B2-15	7/2/2007	Booster, MK3	41.21.889	088.06.042	Move	Destroyed	8-Aug-07
L2-B2-16	7/2/2007	Fuze, Nose, PD, T83	41.21.885	088.06.042	Move	Destroyed	8-Aug-07
L2-B2-2	7/2/2007	Fuze, Nose, PD, T83	41.21.887	088.06.057	Move	Destroyed	8-Aug-07
L2-B2-3	7/2/2007	Fuze, Base, Inpact/Inertia, M66	41.21.888	088.06.056	Move	Destroyed	8-Aug-07
L2-B2-4	7/2/2007	Booster, MK3	41.21.890	088.06.055	Move	Destroyed	8-Aug-07
L2-B2-5	7/2/2007	Booster, MK3	41.21.891	088.06.056	Move	Destroyed	8-Aug-07
L2-B2-6	7/2/2007	Booster, MK3	41.21.890	088.06.052	Move	Destroyed	8-Aug-07
L2-B2-7	7/2/2007	Booster, MK3	41.21.890	088.06.051	Move	Destroyed	8-Aug-07
L2-B2-8	7/2/2007	Booster, MK3	41.21.890	088.06.050	Move	Destroyed	8-Aug-07
L2-B2-9	7/2/2007	Booster, MK3	41.21.890	088.06.049	Move	Destroyed	8-Aug-07
L2-C2-1	7/3/2007	Fuze, Nose, PD, T83	41.21.906	088.06.063	Move	Destroyed	8-Aug-07
L2-C2-2	7/3/2007	Fuze, Nose, PD, T83	41.21.902	088.06.057	Move	Destroyed	8-Aug-07
L2-C2-3	7/3/2007	Booster, MK3	41.21.905	088.06.049	Move	Destroyed	8-Aug-07
L2-C2-4	7/3/2007	Fuze, Nose, MT, M43	41.21.911	088.06.046	Move	Destroyed	8-Aug-07
L2-F11-1	7/3/2007	Fuze, Base, Inpact/Inertia, M66	41.21.575	088.05.508	Move	Destroyed	8-Aug-07
L2-F11-2	7/3/2007	Fuze, Base, Inpact/Inertia, M66	41.21.575	088.05.514	Move	Destroyed	8-Aug-07
L2-F11-3	7/3/2007	Fuze, Base, Inpact/Inertia, M66	41.21.575	088.05.515	Move	Destroyed	8-Aug-07
L2-F11-4	7/3/2007	Fuze, Base, Inpact/Inertia, M66	41.21.575	088.05.513	Move	Destroyed	8-Aug-07
L2-C3-1	7/4/2007	Booster, MK3	41.21.544	088.06.026	Move	Destroyed	8-Aug-07
L2-C3-2	7/4/2007	Fuze, Nose, PD, T83	41.21.542	088.06.025	Move	Destroyed	8-Aug-07
L2-C3-3	7/4/2007	Fuze, Nose, MT, M564	41.21.537	088.06.537	Move	Destroyed	8-Aug-07
L2-C3-4	7/4/2007	Fuze, Nose, MT, M564	41.21.535	088.06.020	Move	Destroyed	8-Aug-07
L2-D2-1	7/9/2007	Fuze, Nose, PD, T83	41.21.920	088.06.045	Move	Destroyed	8-Aug-07
L2-Q11-1	7/9/2007	Fuze, Base, Inpact/Inertia, M66	41.22.105	088.05.502	Move	Destroyed	8-Aug-07
L2-Q11-2	7/9/2007	Fuze, Base, Inpact/Inertia, M66	41.22.089	088.05.517	Move	Destroyed	8-Aug-07
L2-Q12-1	7/9/2007	Fuze, Base, Inpact/Inertia, M66	41.22.078	088.05.499	Move	Destroyed	8-Aug-07
L2-Q12-2	7/9/2007	Fuze, Base, Inpact/Inertia, M66	41.22.085	088.05.509	Move	Destroyed	8-Aug-07
L2-S12-1	7/11/2007	Fuze, Nose, PD, M256	41.22.079	088.05.509	Move	Destroyed	8-Aug-07
L2-E1-1	7/12/2007	Booster, MK3	41.21.927	088.06.070	Move	Destroyed	8-Aug-07
L2-E1-2	7/12/2007	Booster, MK3	41.21.938	088.06.078	Move	Destroyed	8-Aug-07

Grid and Ordnance Tracking Log

Grid #	Date Recovered	Item Description	N Coordinate (deg,min,sec)	E Coordinate (deg,min,sec)	Move / BIP	Disposition/ Destroyed	Date Disposed/Destroyed
L2-R10-1	7/12/2007	Fuze, Base, Inpact/Inertia, M66	41.22.091	088.05.557	Move	Destroyed	8-Aug-07
L2-R10-2	7/12/2007	Fuze, Base, Inpact/Inertia, M66	41.22.103	088.05.504	Move	Destroyed	8-Aug-07
L2-R10-3	7/12/2007	Fuze, Base, Inpact/Inertia, M66	41.22.086	088.06.524	Move	Destroyed	8-Aug-07
L2-R10-4	7/12/2007	Fuze, Base, Inpact/Inertia, M66	41.22.090	088.05.530	Move	Destroyed	8-Aug-07
L2-R10-5	7/12/2007	Fuze, Base, Inpact/Inertia, M66	41.22.085	088.05.521	Move	Destroyed	8-Aug-07
L2-R10-6	7/12/2007	Fuze, Base, Inpact/Inertia, M66	41.22.086	088.05.524	Move	Destroyed	8-Aug-07
L2-E2-1	7/18/2007	Fuze, Nose, PD, T83	41.21.936	088.06.048	Move	Destroyed	8-Aug-07
L2-E2-2	7/18/2007	Booster, MK3	41.21.941	088.06.052	Move	Destroyed	8-Aug-07
L2-S7-1	7/18/2007	Fuze, Nose, PD, T83	41.22.094	088.05.555	Move	Destroyed	8-Aug-07
L2-R7-1	7/19/2007	Fuze, Nose, PD, T83	41.21.088	088.05.571	Move	Destroyed	8-Aug-07
L2-C6-1	7/23/2007	Fuze, Nose, PD, T83	41.21.546	088.05.580	Move	Destroyed	8-Aug-07
L2-G7-1	7/25/2007	Fuze, Base, Inpact/Inertia, M66	41.21.576	088.05.563	Move	Destroyed	8-Aug-07
L2-H2-1	7/26/2007	Fuze, Nose, PD, M90	41.21.977	088.06.058	Move	Destroyed	8-Aug-07
L2-H2-2	7/26/2007	Fuze, Nose, PD, M90	41.21.982	088.06.063	Move	Destroyed	8-Aug-07
L2-H2-3	7/26/2007	Fuze, Nose, PD, M90	41.21.983	088.06.063	Move	Destroyed	8-Aug-07
L2-H2-4	7/26/2007	Fuze, Nose, PD, M90	41.21.988	088.06.046	Move	Destroyed	8-Aug-07
L2-G2-1	7/31/2007	Booster, MK3	41.21.968	088.06.054	Move	Destroyed	8-Aug-07
L2-G2-2	7/31/2007	Fuze, Nose, PD, M90	41.21.960	088.06.054	Move	Destroyed	8-Aug-07
L2-D11-1	8/10/2007	Booster, MK3	41.21.926	088.05.863	Move	Destroyed	29-Aug-07
L2-N3-1	8/10/2007	Fuze, Nose, PD, T83	41.22.075	088.06.026	Move	Destroyed	29-Aug-07
L2-N3-10	8/10/2007	Fuze, Nose, MT, M43	41.22.083.	088.06.023	Move	Destroyed	29-Aug-07
L2-N3-11	8/10/2007	Fuze, Base, Inpact/Inertia, M66	41.21.084	088.06.022	Move	Destroyed	29-Aug-07
L2-N3-12	8/10/2007	Fuze, Nose, PD, T83	41.22.080	088.06.024	Move	Destroyed	29-Aug-07
L2-N3-13	8/10/2007	Fuze, Base, Inpact/Inertia, M66	41.22.080	088.06.020	Move	Destroyed	29-Aug-07
L2-N3-14	8/10/2007	Fuze, Nose, PD, T83	41.22.077	088.06.021	Move	Destroyed	29-Aug-07
L2-N3-15	8/10/2007	Fuze, Nose, PD, T83	41.22.077	088.06.019	Move	Destroyed	29-Aug-07
L2-N3-16	8/10/2007	Booster, MK3	41.22.077	088.06.018	Move	Destroyed	29-Aug-07
L2-N3-17	8/10/2007	Fuze, Nose, PD, T83	41.22.077	088.06.017	Move	Destroyed	29-Aug-07
L2-N3-18	8/10/2007	Fuze, Nose, PD, T83	41.22.079	088.06.018	Move	Destroyed	29-Aug-07
L2-N3-19	8/10/2007	Fuze, Nose, PD, T83	41.22.078	088.06.020	Move	Destroyed	29-Aug-07
L2-N3-2	8/10/2007	Booster, MK3	41.22.077	088.06.033	Move	Destroyed	29-Aug-07
L2-N3-20	8/10/2007	Booster, MK3	41.22.083	088.06.021	Move	Destroyed	29-Aug-07
L2-N3-21	8/10/2007	Fuze, Nose, MT, M43	41.22.088	088.06.023	Move	Destroyed	29-Aug-07
L2-N3-22	8/10/2007	Fuze, Nose, PD, T83	41.22.089	088.06.016	Move	Destroyed	29-Aug-07

Grid and Ordnance Tracking Log

Grid #	Date Recovered	Item Description	N Coordinate (deg,min,sec)	E Coordinate (deg,min,sec)	Move / BIP	Disposition/ Destroyed	Date Disposed/Destroyed
L2-N3-3	8/10/2007	Booster, MK3	41.22.078	088.06.029	Move	Destroyed	29-Aug-07
L2-N3-4	8/10/2007	Booster, MK3	41.22.080	088.06.028	Move	Destroyed	29-Aug-07
L2-N3-5	8/10/2007	Fuze, Base, Inpact/Inertia, M66	41.22.081	088.06.031	Move	Destroyed	29-Aug-07
L2-N3-6	8/10/2007	Booster, MK3	41.22.080	088.06.030	Move	Destroyed	29-Aug-07
L2-N3-7	8/10/2007	Booster, MK3	41.22.082	088.06.030	Move	Destroyed	29-Aug-07
L2-N3-8	8/10/2007	Booster, MK3	41.22.083	088.06.028	Move	Destroyed	29-Aug-07
L2-N3-9	8/10/2007	Fuze, Nose, PD, T83	41.22.082	088.06.027	Move	Destroyed	29-Aug-07
L2-P5-1	8/10/2007	Booster, MK3	41.22.131	088.05.994	Move	Destroyed	29-Aug-07
L2-P5-2	8/10/2007	Fuze, Nose, PD, T83	41.22.117	088.05.994	Move	Destroyed	29-Aug-07
L2-Q5-1	8/10/2007	Booster, MK3	41.22.123	088.05.975	Move	Destroyed	29-Aug-07
L2-Q6-1	8/10/2007	Fuze, Nose, PD, T83	41.22.141	088.05.997	Move	Destroyed	29-Aug-07
L2-R6-1	8/10/2007	Fuze, Nose, PD, T83	41.22.149	088.05.955	Move	Destroyed	29-Aug-07
L2-R6-2	8/10/2007	Fuze, Nose, PD, T83	41.22.150	088.05.962	Move	Destroyed	29-Aug-07
L2-R6-3	8/10/2007	Fuze, Nose, PD, T83	41.22.150	088.05.967	Move	Destroyed	29-Aug-07
L2-E12-1	8/14/2007	Fuze, Base, Inpact/Inertia, M66	41.21.932	088.05.841	Move	Destroyed	29-Aug-07
L2-E12-2	8/14/2007	Fuze, Base, Inpact/Inertia, M66	41.21.935	088.05.833	Move	Destroyed	29-Aug-07
L2-B4-1	8/15/2007	Booster, MK3	41.21.53	088.06.01	Move	Destroyed	29-Aug-07
L2-O4-1	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-10	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-11	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-12	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-13	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-14	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-15	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-16	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-17	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-18	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-19	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-2	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-20	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-21	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-22	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-23	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-24	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07

Grid and Ordnance Tracking Log

Grid #	Date Recovered	Item Description	N Coordinate (deg,min,sec)	E Coordinate (deg,min,sec)	Move / BIP	Disposition/ Destroyed	Date Disposed/Destroyed
L2-O4-25	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-26	8/15/2007	Fuze, Base, Inpact/Inertia, M66	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-27	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-28	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-29	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-3	8/15/2007	Fuze, Nose, TSQ, M54	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-30	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-31	8/15/2007	Fuze, Nose, PD, T83	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-32	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-33	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-34	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-35	8/15/2007	Fuze, Nose, PD, T83	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-36	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-37	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-38	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-39	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-4	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-40	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-41	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-42	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-43	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-44	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-45	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-46	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-47	8/15/2007	Fuze, Nose, PD, T83	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-48	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-49	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-5	8/15/2007	Fuze, Nose, TSQ, M54	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-50	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-51	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-52	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-53	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-54	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-55	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07

Grid and Ordnance Tracking Log

Grid #	Date Recovered	Item Description	N Coordinate (deg,min,sec)	E Coordinate (deg,min,sec)	Move / BIP	Disposition/ Destroyed	Date Disposed/Destroyed
L2-O4-56	8/15/2007	Booster, M66	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-57	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-6	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-7	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-8	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-O4-9	8/15/2007	Booster, MK3	42.22.05	088.06.00	Move	Destroyed	29-Aug-07
L2-P4-1	8/15/2007	Fuze, Nose, PD, T83	41.22.06	088.05.059	Move	Destroyed	29-Aug-07
L2-P4-2	8/15/2007	Fuze, Nose, PD, T83	41.22.07	088.05.059	Move	Destroyed	29-Aug-07
L2-P4-3	8/15/2007	Booster, M66	41.22.07	088.05.059	Move	Destroyed	29-Aug-07
L2-D10-1	8/16/2007	Fuze, Base, Inpact/Inertia, M66	41.21.924	088.05.876	Move	Destroyed	29-Aug-07
L2-D10-2	8/16/2007	Fuze, Base, Inpact/Inertia, M66	41.21.924	088.05.876	Move	Destroyed	29-Aug-07
L2-D10-3	8/16/2007	Fuze, Base, Inpact/Inertia, M66	41.21.924	088.05.876	Move	Destroyed	29-Aug-07
L2-D10-4	8/16/2007	Fuze, Base, Inpact/Inertia, M66	41.21.924	088.05.876	Move	Destroyed	29-Aug-07
L2-D10-5	8/16/2007	Booster, MK3	41.21.924	088.05.876	Move	Destroyed	29-Aug-07
L2-D10-6	8/16/2007	Booster, MK3	41.21.924	088.05.876	Move	Destroyed	29-Aug-07
L2-D10-7	8/16/2007	Booster, MK3	41.21.924	088.05.876	Move	Destroyed	29-Aug-07
L2-E10-1	8/16/2007	Fuze, Base, Inpact/Inertia, M66	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-10	8/16/2007	Booster, MK3	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-11	8/16/2007	Booster, MK3	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-12	8/16/2007	Fuze, Nose, PD, Unknown	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-13	8/16/2007	Fuze, Nose, PD, Unknown	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-2	8/16/2007	Fuze, Base, Inpact/Inertia, M66	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-3	8/16/2007	Fuze, Base, Inpact/Inertia, M66	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-4	8/16/2007	Fuze, Base, Inpact/Inertia, M66	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-5	8/16/2007	Booster, MK3	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-6	8/16/2007	Booster, MK3	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-7	8/16/2007	Booster, MK3	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-8	8/16/2007	Booster, MK3	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E10-9	8/16/2007	Booster, MK3	41.21.935	088.05.878	Move	Destroyed	29-Aug-07
L2-E11-1	8/16/2007	Booster, M66	41.21.927	088.05.864	Move	Destroyed	29-Aug-07
L2-E11-10	8/16/2007	Booster, M66	41.21.931	088.06.863	Move	Destroyed	29-Aug-07
L2-E11-11	8/16/2007	Fuze, Nose, PD, T83	41.21.928	088.06.863	Move	Destroyed	29-Aug-07
L2-E11-12	8/16/2007	Fuze, Nose, PD, T83	41.21.929	088.05.864	Move	Destroyed	29-Aug-07
L2-E11-13	8/16/2007	Booster, MK3	41.21.931	088.05.865	Move	Destroyed	29-Aug-07

Grid and Ordnance Tracking Log

Grid #	Date Recovered	Item Description	N Coordinate (deg,min,sec)	E Coordinate (deg,min,sec)	Move / BIP	Disposition/ Destroyed	Date Disposed/Destroyed
L2-E11-14	8/16/2007	Booster, MK3	41.21.934	088.05.867	Move	Destroyed	29-Aug-07
L2-E11-15	8/16/2007	Booster, M66	41.21.934	088.05.867	Move	Destroyed	29-Aug-07
L2-E11-16	8/16/2007	Booster, M66	41.21.935	088.05.865	Move	Destroyed	29-Aug-07
L2-E11-17	8/16/2007	Booster, MK3	41.21.939	088.05.861	Move	Destroyed	29-Aug-07
L2-E11-2	8/16/2007	Booster, M66	41.21.927	088.05.864	Move	Destroyed	29-Aug-07
L2-E11-3	8/16/2007	Booster, MK3	41.21.928	088.05.860	Move	Destroyed	29-Aug-07
L2-E11-4	8/16/2007	Booster, M66	41.21.928	088.05.861	Move	Destroyed	29-Aug-07
L2-E11-5	8/16/2007	Booster, M66	41.21.926	088.05.867	Move	Destroyed	29-Aug-07
L2-E11-6	8/16/2007	Booster, M66	41.21.927	088.05.865	Move	Destroyed	29-Aug-07
L2-E11-7	8/16/2007	Booster, MK3	41.21.931	088.05.854	Move	Destroyed	29-Aug-07
L2-E11-8	8/16/2007	Booster, MK3	41.21.930	088.06.863	Move	Destroyed	29-Aug-07
L2-E11-9	8/16/2007	Booster, MK3	41.21.931	088.06.863	Move	Destroyed	29-Aug-07
L2-A5-1	8/21/2007	Fuze, Nose, PD, M503	41.21.526	088.05.879	Move	Destroyed	29-Aug-07
L2-B5-1	8/21/2007	Booster, MK3	41.21.529	088.05.594	Move	Destroyed	29-Aug-07

Biological / Ecological Site Visit

Contract: W912DY-09-D-0061, Delivery Order CY02

Project: Joliet Army Ammunition Plant (JOAAP) Time Critical Removal Action (TCRA) and Munition Response Services

Subject: Biological/Ecological Site Visit

By: Cheryl Nash, AECOM

Date: 10 August 2015

On July 30, 2015, a site visit was conducted at four Munitions Response Sites (MRS) at the JOAAP for the purpose of evaluating the potential for threatened and endangered species habitat at the proposed restoration locations:

- JAAP-001-R-01, L3 MRS, the location of a planned Remedial Investigation (RI)
- JAAP-002-R-01, L2 MRS, the location of a planned RI
- JAAP-004-R-01, L34 MRS, the location of a planned RI
- JAAP-001-R-03, L3 Capped Area MRS, the location of a planned Time Critical Removal Action (TCRA)

The L3 Capped Area MRS lies within the boundary of the L3 MRS so these two MRSs are discussed jointly in this Tech Memo. L2, L3, and L34 were all traversed in their entirety and habitat noted. For plant species, the areas were also assessed for known associates.

Additionally, per the recommendation of Mr. Wade Spang (USDA Forest Service), the author of this memo contacted Mr. William Glass of Midewin National Tallgrass Prairie. Per Mr. Glass, there are no records of protected species within the four planned work areas. Additionally, Mr. Glass met with URS Group, Inc (URS) on August 11, 2015 to discuss concerns that Midewin National Tallgrass Prairie may have regarding protected species within the work areas. Mr. Glass reiterated that he has no concerns for any protected species within the proposed work areas, with the exception of the northern long-eared bat. Mr. Glass advised that Midewin has no records of the bat's presence, but no surveys have been conducted for them. URS advised that the project will not be removing any trees (3 inches or greater in diameter, at breast height) prior to October 15. Based on this protocol, Mr. Glass confirmed that Midewin has no concerns about potential impacts to any protected species.

Based on the site visit, species requirements, and discussions with Mr. William Glass, it has been determined that there is no suitable habitat for any of the potential species within the vicinity of the JOAAP at the proposed work areas. At L3, trees and shrubs will be removed to allow access to the area. At this location three trees were noted, one having the potential for roosting habitat for the northern long-eared bat; these three trees will not be removed until after October 15.

Below is a summary of the habitat noted and the potential for the presence of protected species at each of the four planned work areas. Attached is a summary of the potential for the presence of each of the protected species at each location. Additionally, a photographic log of the habitat present during the July 30, 2015 site visit is also attached.

L2:

The site visit revealed that L2 is an ecologically disturbed area dominated by *Cirsium altissimum* (tall thistle), *Dipsacus* species (teasel), *Lactuca biennis* (wild lettuce), *Trifolium* species (clover), *Solidago* species (goldenrod), *Coronilla varia* (crown vetch), *Daucus carota* (Queen Anne's lace), unknown

grasses (not in flower), and *Elaegnus angustifolia* (Russian olive). The area has been historically disturbed and currently contains a road through the center of the area, with adjacent ditches. Aerial photographs from 2008 indicate grading was occurring at that time within this area. Prairie Creek is located within this work area, but at this location its banks are steep and it possesses a gravel and rock shoreline; therefore, no Blanding's turtle habitat is present at the creek in this work area. It was determined by the author of this memorandum that no native vegetative communities are intact at this location, and there is no habitat present for protected species.

L3:

L3 is an ecologically disturbed area dominated by the same species noted in L2. The area has been historically disturbed and currently contains a landfill with vegetative cap, an asphalt road, and abandoned structures. Aerial photographs from 2008 indicate that grading was occurring within this entire area at that time. Prairie Creek is located within this work area. Prairie Creek's banks are less steep at this location than in L2 but they are dominated by *Phalaris arundiacea* (reed canary grass) or have a gravel and rock shoreline; therefore, no Blanding's turtle habitat is present at the creek in this work area. There is suitable Blanding's turtle habitat upstream of a small spillway, but this habitat is upstream of the proposed work area. It was determined by the author of this memorandum that no native vegetative communities are intact at this location, and there is no habitat present for protected species.

Clearing will occur along the existing eastern fenceline within L3 for the purpose of providing access for equipment. Equipment storage and contractor vehicles will be stored within the area that currently contains abandoned structures. The majority of the proposed cleared area is composed of a scrub/shrub layer dominated by invasive woody species [Russian olive, *Populus deltoides* saplings (eastern cottonwood), and *Rhamnu*s species (buckthorn)]. Three trees are located along this fenceline, including one that possesses peeling bark. This area will be cleared prior to October 15, but the three trees will not be removed. Therefore, impacts to northern long-eared bats that may possibly be present will be avoided.

L34:

The site visit revealed that L34 is an ecologically disturbed area dominated by the same non-woody species as noted in L2; there is no shrub/scrub vegetation located in this work area. Prairie Creek is located adjacent to this work area. Prairie Creek's banks are steep at this location, are dominated by reed canary grass, or possess a gravel and rock shoreline; there are no shallow wetlands or sandy soils associated with the creek at this location. It was determined that no Blanding's turtle habitat is present at the creek in this work area. There is suitable Blanding's turtle habitat upstream of the work area, associated with a small sandbar located within the creek, but this habitat is upstream of the proposed work area. It was determined by the author of this memorandum that no native vegetative communities are intact at this location, and there is no habitat present for protected species.

Attachments:

Table: Threatened and Endangered Species Possibly Occurring within the JOAAP Proposed Work Area
Photographic log of the habitat present during the July 30, 2015 site visit.

Table: Threatened and Endangered Species Potentially Occurring within the JOAAP Proposed Work Areas

Common Name	Latin Name	status	Habitat Requirement/Known Associates	Habitat Suitability/Presence
leafy prairie clover	*Dalea foliosa*	Federally Endangered	Dolomite prairies with thin soils over limestone substrate, flowers mid to late summer. Associates: asters, *Cirsium discolor*, *Fragaria virginiana*, *Rudbeckia hirta*, *Solidago* species	L2: no dolomite prairie present L3: no dolomite prairie present L34: no dolomite prairie present
northern long-eared bat	*Myotis septentrionalis*	Federally threatened	Roosts and forages in upland forests and woods. Roosts underneath bark, in cavities or crevices of live trees or snags.	L2: no trees to be cleared L3: woody vegetation dominated by shrubs, three trees located within scrub/shrub area will not be removed prior to October 15. L34: no trees to be cleared
slender sandwort	*Minuartia patula*	State threatened	Found in limestone outcrops, rocky barens, glades; flowers spring to early summer. Associates*: Asclepias verticillata, Eleochsris compressa, Geranium carolinianum, Scutellaria parvuka, Verbena simplex*	L2: associates not found L3: : associates not found L34: : associates not found
glade quillwort	*Isoetse butleri*	State endangered	Found in limestone glades and dolomite prairie. Disappears by July – an ephemeral Associates: *Allium* species, Aster, *Eleocharis compressa, Heliantus rigidus, Verbena simplex*	L2: associates not found L3: : associates not found L34: : associates not found
eared false foxglove	*Tomanthera auriculata*	State threatened	Found in moist prairies, ½ - 1 ½; tall, unbranched snapdragon. Flowers late summer. Associates: *Andropogon gerardii, Asclepias sullivantii,* asters, *Elymus candensis, Helianthus species, Phlox* species, *Silphium* species, *Solidago* species, *Zizia aurea*.	L2: except for *Solidago* species, associates not found L3: except for *Solidago* species, associates not found L34: except for *Solidago* species, associates not found
red-veined leafhopper	*Aflexia rubranura*	State threatened	Obligate to host plant, prairie dropseed (blooms August, September)	L2: host plant not found L3: host plant not found L34: host plant not found
rattlesnake root borer	*Papaipema eryngii*	State endangered	Obligate to host plant, rattlesnake master (blooms July through September)	L2: host plant not found L3: host plant not found L34: host plant not found

Table: Threatened and Endangered Species Potentially Occurring within the JOAAP Proposed Work Areas

Blanding's turtle	*Emydoidea blandingii*	State endangered	Wetland complexes with adjacent sand soils. Calm, shallow waters, including wetlands associated with rivers and streams	L2: no appropriate habitat present, Prairie Creek banks too steep at this location, gravel and rock shoreline L3: no appropriate habitat present, Prairie Creek banks dominated by *Phalaris arundinacea* or composed of gravel and rock. L34: no appropriate habitat present, no shallow wetlands or sandy soils associated with Prairie Creek. Steep banks dominated by *Phalaris arundinacea*.
least bittern	*Ixobrychus exilis*	State threatened	Fresh marshes, reedy ponds, in areas with tall, dense vegetation standing in water. Climbs reeds rather than wading.	L2: no habitat present L3: no habitat present L34: no habitat present
American bittern	*Botaurus lentiginosus*	State endangered	Stocky, well-camouflaged heron of dense reed beds. Can be found with least bitterns, but also in less densely vegetated and shallower wetlands.	L2: no habitat present L3: no habitat present L34: no habitat present
king rail	*Rallus elegans*	State endangered	Chicken-like marsh bird, long, slightly down-curved bill. Marshes with dense cover, including cattails, bulrushes, or willows.	L2: no habitat present L3: no habitat present L34: no habitat present
upland sandpiper	*Bartramia longicauda*	State endangered	Found in grasslands, not marshes. Inhabits native prairie and other grassy areas.	L2: no habitat present L3: no habitat present L34: no habitat present
short-eared owl	*Asio flammeus*	State endangered	Open grasslands	L2: no habitat present L3: no habitat present L34: no habitat present
northern harrier	*Circus cyaneus*	State endangered	Marshes and grasslands	Degraded habitat is present within Areas L2, L3, and L34. The work will begin in Fall 2015, after any young potentially present have fledged. The activities will continue through winter into spring; any birds present will avoid these areas due to the noise/activity that will be ongoing. Therefore, no impacts to this species are anticipated.

Table: Threatened and Endangered Species Potentially Occurring within the JOAAP Proposed Work Areas

loggerhead shrike	*Lanius ludovicianus*	State endangered	Grasslands and other open habitats, with utility poles, fence posts, or other conspicuous perches. Thorns or barbed wire important. A loggerhead shrike was noted on the fence line associated with the new bison pen, but not within the proposed work areas.	L2: no habitat present L3: no habitat present L34: no habitat present
common moorhen	*Gallinula chloropus*	State endangered	Well-vegetated marshes, ponds, canals, or wetlands	L2: no habitat present L3: no habitat present L34: no habitat present

URS

PHOTOGRAPHIC LOG

Project: Joliet AAP, Joliet, IL	Site Location: Planned Geophysical Area L2	Project No. 60419079

Photo No.	Date:
1	7/30/15

Direction Photo Taken:

north

Description:

Planned Geophysical Area L2

Russian olive shrubs dominate portions of the area.

Photo No.	Date:
2	7/30/15

Direction Photo Taken:

south

Description:

Planned Geophysical Area L2

Dominated by invasive species, including teasel.

URS

PHOTOGRAPHIC LOG

Project: Joliet AAP, Joliet, IL	Site Location: Planned Geophysical Area L3	Project No. 60419079

Photo No.	Date:
3	7/30/15

Direction Photo Taken:

northwest

Description:

Planned Geophysical Area L3

Dominated by invasive species, including Queen Anne's lace.

Photo No.	Date:
4	7/30/15

Direction Photo Taken:

southwest

Description:

Planned Geophysical Area L3

Prairie Creek, no Blanding's turtle habitat; shoreline dominated by *Phalaris arundinacea* or composed of gravel.

URS

PHOTOGRAPHIC LOG

Project: Joliet AAP, Joliet, IL	Site Location: Planned Geophysical Area L3	Project No. 60419079

Photo No.	Date:
5	7/30/15

Direction Photo Taken:

north

Description:

Planned Geophysical Area L3

Prairie Creek, potential Blanding's turtle habitat upstream of spillway, upstream of proposed work area.

Photo No.	Date:
6	7/30/15

Direction Photo Taken:

north

Description:

Planned Geophysical Area L34
Dominated by invasive species, including Queen Anne's lace and Solidago species.

URS

PHOTOGRAPHIC LOG

Project: Joliet AAP, Joliet, IL	Site Location: Planned Geophysical Area L34	Project No. 60419079

Photo No. 7

Date: 7/30/15

Direction Photo Taken:

northeast

Description:

Planned Geophysical Area L34

Dominated by invasive species, including Queen Anne's lace and *Solidago* species.

Photo No. 8

Date: 7/30/15

Direction Photo Taken:

east

Description:

Prairie Creek, no Blanding's turtle habitat; shoreline dominated by *Phalaris arundinacea* or possesses banks too steep.

URS

PHOTOGRAPHIC LOG

Project: Joliet AAP, Joliet, IL	Site Location: Planned Geophysical Area L34	Project No. 60419079

Photo No.	Date:
9	7/30/15

Direction Photo Taken:

northwest

Description:

Prairie Creek, no Blanding's turtle habitat; possesses gravel shoreline

TPP Meeting Minutes

Meeting Date: April 16, 2015

Time: 0900 - 1630

Location: Joliet AAP Farmhouse

Contract: W912DY-09-D-0061, Delivery Order CY02

Project: Joliet Army Ammunition Plant (JOAAP) Time Critical Removal Action (TCRA) and Munition Response Services

Meeting Subject: Technical Project Planning (TPP 1)

Meeting Objective: Review and gain stakeholder concurrence of data quality objectives and technical approaches in advance of work plan documents

Attendees:
Art Holz, Joliet AAP
Tom Barounis, USEPA Region 5
Michael Higgit, IEPA
Wade Spang, USDA-FS Midewin
Bob Hommes, USDA-FS Midewin
Jeff Martina, USDA-FS Midewin
Glen Beckham, USACE Louisville District
Don Peterson, USACE Louisville District
Nick Stolte, USACE Huntsville District
Travis McCoun, USACE Baltimore District
Paul Greene, USACE Baltimore District
Craig Johnson, URS
Andreas Kothleitner, URS
John Heinicke, URS

Telephone Attendees:
Robin Paul, AEC
Debbie McKinley, USACE Baltimore District
Thomas Colozza, USACE Baltimore District
Darrell Hall, URS

Notes by: John Heinicke, URS, 21 April 2015

Following is the meeting agenda:

- 0900-0930: Introductions/Roles
- 0930-1200: Remedial Investigations (RI) at L2, L3, and L34
- 1330-1400: L3 Capped Area TCRA
- 1400-1430: Wrap-up

During the meeting, the attached TPP slides (55 slides in total) were reviewed and discussed on a slide by slide basis. Following are the most significant discussion items and action items.

Slides 11 and 13. Travis provided an overview of the Installation Restoration Program (IRP) sites versus Military Munitions Response Program (MMRP) sites and how the JOAAP facility has progressed to the current situation where IRP sites are closed and some areas are being re-opened as MMRP sites. The sites that are the subject of this project are those shown on Slide 13. Art noted that the Army was undergoing some administrative work to formalize the "new" sites. At this time, URS is calling the sites the L2 site, the L3 site, the L34 site, and the L3 Capped Area.

Slide 13. Robin indicated that the RI Work Plan could combine all three sites, but the RI Reports must be separated by site. This fits URS' plan for submittals.

Slides 17 and 18. For the RI Conceptual Site Models (CSM), the RI Work Plan should explain why residential exposure is not an exposure pathway. Art noted that text from the 2004 ROD would be useful in determining how the residential pathway was eliminated during the IRP work.

Slide 19. Wade indicated that future public use might include farming (soy, wheat), cattle, and bison, and could include tilling to a depth of 1 foot. After considerable discussion, this activity will need to be considered during the development of Remedial Action Objectives (RAOs), which is done during the Feasibility Study (FS), after the RI. Further, URS will make sure that sufficient information is collected during the RI to help establish the RAOs. Art noted that he was going to review previous documents for future land use text.

Slide 19. Debbie noted that the RI Work Plan should state that the RI objectives are to complete the RI, complete a risk assessment, and to have sufficient data to complete an FS.

Slide 20. Debbie indicated the RI Work Plan should include the rationale for using discrete sampling.

Slide 21. The group discussed the use of UXO Estimator to "provide a 95% confidence level and a MEC density for minor public use (i.e., ≤1.0 MEC item/acre)." At the conclusion, this criteria was accepted for use in the RI Work Plan.

Slide 22. The Digital Geophysical Mapping (DGM) transects shown are regular across the site and not random. Randomness is an assumption for the use of the UXO Estimator statistics. The current plan has more DGM coverage than necessary to meet the criteria and a random subset of the transects along with randomly located grids will be used for UXO Estimator statistics; therefore, the approach is acceptable.

Slide 27. Drums containing a white powdery ash were identified during Verfication Study at L3. Similar material was characterized as a non-hazardaous material during the previous remedial action and disposed of at the Prairie View Recycling and Disposal Facility. URS will review the L3 Capped Area Closure Report for the analyses that were completed during the previous characterization, and the RI Work Plan will include the same or similar sampling and analysis.

Slide 28. Debbie noted the RI Work Plan should indicate why the proposed compounds for this investigation were selected for analysis.

Slide 29. The L3 RI Report should include a brief discussion of the TCRA and the TCRA results. The RI Report should include a figure of the Digital Geophysics Mapping transects or grids with a note explain why there are no transects or grids within the L3 Capped Area removal.

Slides 33 and 34. Debbie noted that the MC CSM for L34 is not the same as L2. The L34 MC CSM will be revised to indicate that MC only includes explosives compounds because metals were eliminated as a Chemical of Concern during the IRP and because components disposed at L34 were ceramic or glass. The RI Work Plan should indicate that MC contamination was previously addressed during the IRP investigation.

Slide 40. The TCRA activities will result in a ROD modification. Options for the modification include a memorandum to file, Explanation of Significant Differences (ESD), or ROD Amendment. JOAAP has previously modified the decision at another site using an ESD. Art indicated that an ESD would be the preferred type of modification for this project, pending legal and regulatory acceptance. EPA believes an ESD may work but Tom intends to have his management review and weigh in. The process (either an

ESD or ROD Amendment) does not need to be decided yet as it can not be done until after the TCRA field work.

Slide 41. USACE indicated that the Layer 1 probability to encounter MEC/MPPEH should be changed from "neglibible" to "low". URS plans to have a UXO escort on site during Layer 1 intrusive work to implement MEC avoidance. It was agreed that Layer 1 could be used anywhere on site and does not have to be processed through the sift plant and undergo MPPEH inspection. Debbie also noted that URS should explain why there is no MC at the bedrock. Upon further discussion, it was noted that MC may be all the way down to the bedrock surface, and if that is the case, the excavation will continue to the bedrock surface as long as the groundwater table is not present.

Slide 48. Site restoration at L3 Capped Area following the TCRA needs to be coordinated with the USDA-FS. URS noted that the project scope includes removal of approximately 30,000 cy (Layer 3) and backfilling with approximately 20,000 cy (from Layer 1). This will leave a slight deficit of material from the topographic contours that existed before the landfill cap was installed in 2007. Don suggested that URS submit a Restoration Plan that can be reviewed by USDA-FS so they can have input to the final site restoration plan. Travis believes that Baltimore has the topographic files from 2006 (before the capped area remedial action) and will send them to URS. Travis requested that URS send him a reminder of this. URS will use the 2006 topographic map to create a conceptual final grading plan.

Slide 50. The haul route shown will not be feasible because the USDA-FS is developing property west of the site into a Bison range. This development will entail placing fences across Central Road and South 208th Avenue. URS will need to get the fence location plan from USDA-FS and then determine a new route. Several new routes were suggested during the meeting.

Slides 52 – 54. URS handed out a hand-drawn, single page schedule that is easier to follow than the slides. During review of the schedule, Paul noted that the Explosive Safety Submittal is expected to be finalized on or before August so that should not impact the TCRA field schedule. Paul also noted that DDESB approval has slowed down, but we should be able to begin the TCRA field work and RI field work as planned. URS will get a copy of the current RI Explosive Site Plan from Baltimore District and mark-it up for the new RIs.

Other. Glen requested that URS update the hand-drawn timeline monthly (or similar depiction) and include notes about critical path items that need to be addressed to stay on schedule. URS agreed to include this information as part of the Monthly Progress Report. Also, the Monthly Progress Reports should include the number of MEC items identified, how they were disposed of, and the number of MPPEH items that were inspected.

Other. Art requested a short summary of URS' plans to handle environmental protection. The JOAAP area has 14 Threatened and Endangered (T&E) species. URS plans to have a biologist walk the sites to identify whether or not any of the T&E species and/or associated habitat are present. If found to be present, mitigation will need to be planned. URS' biologist will also train field staff to identify and avoid potential T&E. Art noted that the L3 Capped Area Remedial Design and Closure Report may be useful to determine what was done at that time. Wade suggested that we contact the US and State Fish and Wildlife Services to determine additional requirements for take and mitigation. It was also mentioned that the project could have exceptions. For example, the USDA-FS can help with mitigation as they have done this several times. URS will further discuss contacting FWS with Art and Glen prior to making this contact.

Other. URS wants to abandon the two wells at the L3 Capped Area before excavation and then replace them following excavation. This activity would eliminate these wells from the LTM sampling program

for 6 months to 1 year. Art will contact the current Long Term Monitoring (LTM) contractor and determine the current status of the wells.

Other. Art will provide Cook County bomb squad contact information to URS.

Other. The Draft Verification Study Report being done by Baltimore District is about ready. Travis will send a copy of this report to URS.

Other. The MPPEH inspection and MDAS terminology use will be revised as discussed with Paul. Paul will provide the contact information for the contractor that picked up the MDAS during the Verification Study done by the Baltimore District.

Technical Project Planning (TPP) Meeting Sign-In Sheet
April 16, 2015
9 a.m. – 4:30 p.m.

Name	Organization	Email	Phone
John Heinicke	URS	john-heinicke@aecom.com	402.952.2543
Craig Johnson	URS	craig.johnson@aecom.com	402.952.2524
Andreas Kothleitner	URS	andreas.kothleitner@aecom.com	619.607.1426
Don Peterson	USACE	DONALD.D.PETERSON@USACE.ARMY.MIL	cell 563-650-1221
Nick Stolte	USACE	nicholas.j.stolte@usace.army.mil	502.315.6668
Glen Beckham	USACE	glen.beckham@usace.army.mil	502-315-6779
Michael Haggitt	Illinois EPA	michael.haggitt@illinois.gov	217.558-1989
Art Hall	Joliet AAP	ARTHUR.M.HALL.CIV@MAIL.MIL	815.423.7820
Paul Greene	USACE	PAUL.E.GREENE@USACE.ARMY.MIL	410 962-6741
JEFF MARTINA	USDA FOREST SERVICE	JMartina@fs.fed.us	815-423-6376
BOB HOMMES	USDA FS-MIDEWIN	RHOMMES@FS.FED.US	815-423-6370
Travis McCoun	USACE NAB	travis.mccoun@usace.com	410-962-6728
Tom Barounis	USEPA-R5	barounis.thomas@epa.gov	312-353-5577
WADE SPANG	USDA FS- Midewin	WSpang@fs.fed.us	815-423-6370

Time Critical Removal Action and Munitions Response Services
Joliet Army Ammunition Plant (JOAAP), Illinois

Technical Project Planning Meeting 1

16 April 2015

US Army Corps of Engineers
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Agenda

- Introductions and Terminology
- Background
- RI at L2 (Explosive Burning Ground 1)
- RI at L3 (Demolition Area)
- RI at L34 (Former Burning Ground)
- TCRA at L3 Capped Area
- Deliverables and Schedule

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Introductions

- JOAAP
  - Art Holz
- U.S. Army Environmental Command
  - Robin Paul
- U.S Army Corps of Engineers
  - Glen Beckham, PM
  - Don Peterson, COR
  - Travis McCoun, Technical Lead
  - Paul Greene, Safety
  - Tom Colozza, Geophysicist
  - Debbie McKinley, Environmental Engineer
  - Nick Stolte, ITR
- U.S. Environmental Protection Agency, Region 5
  - Thomas Barounis
- Illinois Environmental Protection Agency
  - Michael Haggitt
- URS
  - John Heinicke, PM
  - Craig Johnson, RI Lead
  - Andreas Kothleitner, Quality
  - Mac Reed, Safety
  - Darrell Hall, Geophysics
  - Scott McClelland, Review

Technical Project Planning (TPP)

- TPP Meeting 1 covers pre-work plan activities for each of the three RIs and the TCRA:
  - Review previous investigations and actions.
  - Prepare current conceptual site models (CSMs).
  - Develop data quality objectives (DQOs) using seven step process.
  - Establish field activities.
- TPP Meeting 2 will finalize the RI Work Plan (all three RIs will be combined into a single Work Plan) and the TCRA Work Plan.
- TPP Meeting 3 will discuss the Draft Final RI Reports (L34 and L2).
- TPP Meeting 4 will discuss the Draft Final L3 Capped Area TCRA Report and L34 PP/ROD.

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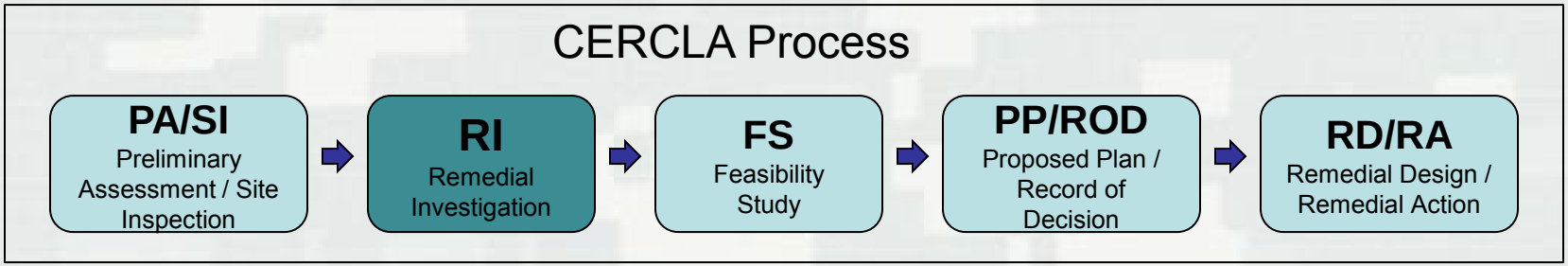
CERCLA Terminology

- CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
  - Federal law enacted in 1980 (amended in 1986 by the Superfund Amendments and Reauthorization Act) that addresses funding for and remediation of abandoned and uncontrolled hazardous waste sites. Establishes criteria for the PA/SI, RI, FS, PP/ROD, and RD/RA.



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CERCLA Terminology

- **RI – Remedial Investigation**
  - An exploratory inspection conducted at a site to define the nature and extent of contamination and assess hazards/risks.
- **FS – Feasibility Study**
  - An evaluation of possible remedies using information generated during an RI, typically becomes the basis for selection of a remedy that eliminates the threat posed by site contaminants.
- **PP – Proposed Plan**
  - A plan that identifies the preferred remedial alternative for a site, and made available to the public for review and comment.
- **ROD – Record of Decision**
  - Decision document that records the selected remedy and reasoning used to arrive at the selected remedy, demonstrating that all CERCLA requirements were adhered to.
- **TCRA – Time Critical Removal Action**
  - Remedial action that must be completed on fast track basis because of potential imminent threat.

MMRP Terminology

- *Military Response Terminology Memorandum*, Department of Army, Office of the Assistant Secretary Installations and Environment (April 21, 2009)
- **MMRP – Military Munitions Response Program**
  - Directs environmental cleanup at locations where MEC and MC are known or suspected
- **MEC – Munitions and Explosives of Concern**
  - Distinguishes specific categories of military munitions that may pose unique explosive safety risks:
    - UXO – Unexploded Ordnance. Military munitions that (A) have been primed, fuzed, armed, or otherwise prepared for action; (B) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and (C) remain unexploded whether by malfunction, design, or an other cause. [10 U.S.C. 101e(5)]
    - DMM – Discarded Military Munitions. Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. [10 U.S.C. 2710(e)(2)]
    - MC – Munitions Constituents (e.g., TNT, RDX), as defined by 10 U.S.C. 2710(e)(3), present in high enough concentrations to pose explosive hazard.
- **MC – Munitions Constituents**
  - Any material originating from UXO, DMM, or other military munitions, including explosive and non-explosive material, and emissions, degradation, or breakdown elements of ordnance or munitions. [10 U.S.C. 2710(e)(3)]

MMRP Terminology

- **MPPEH – Material Potentially Presenting an Explosive Hazard**
  - Material potentially containing explosives or munitions (e.g., munitions containers and packaging; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris), or material potentially containing a high enough concentration of explosives such that the material presents explosive hazard.
- **MDAS – Material Documented as Safe**
  - MPPEH that has been assessed and documented by appropriate UXO-qualified personnel as not presenting an explosive hazard.
- **MD – Munitions Debris**
  - Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins,) remaining after munitions use, demilitarization, or disposal.
- **MDEH – Material Documented as an Explosive Hazard**
  - MPPEH that cannot be documented as MDAS, that has been assessed and documented as to the maximum explosive hazards the material is known or suspected to present, and for which the chain of custody has been established and maintained. This material is no longer considered to be MPPEH.

Background

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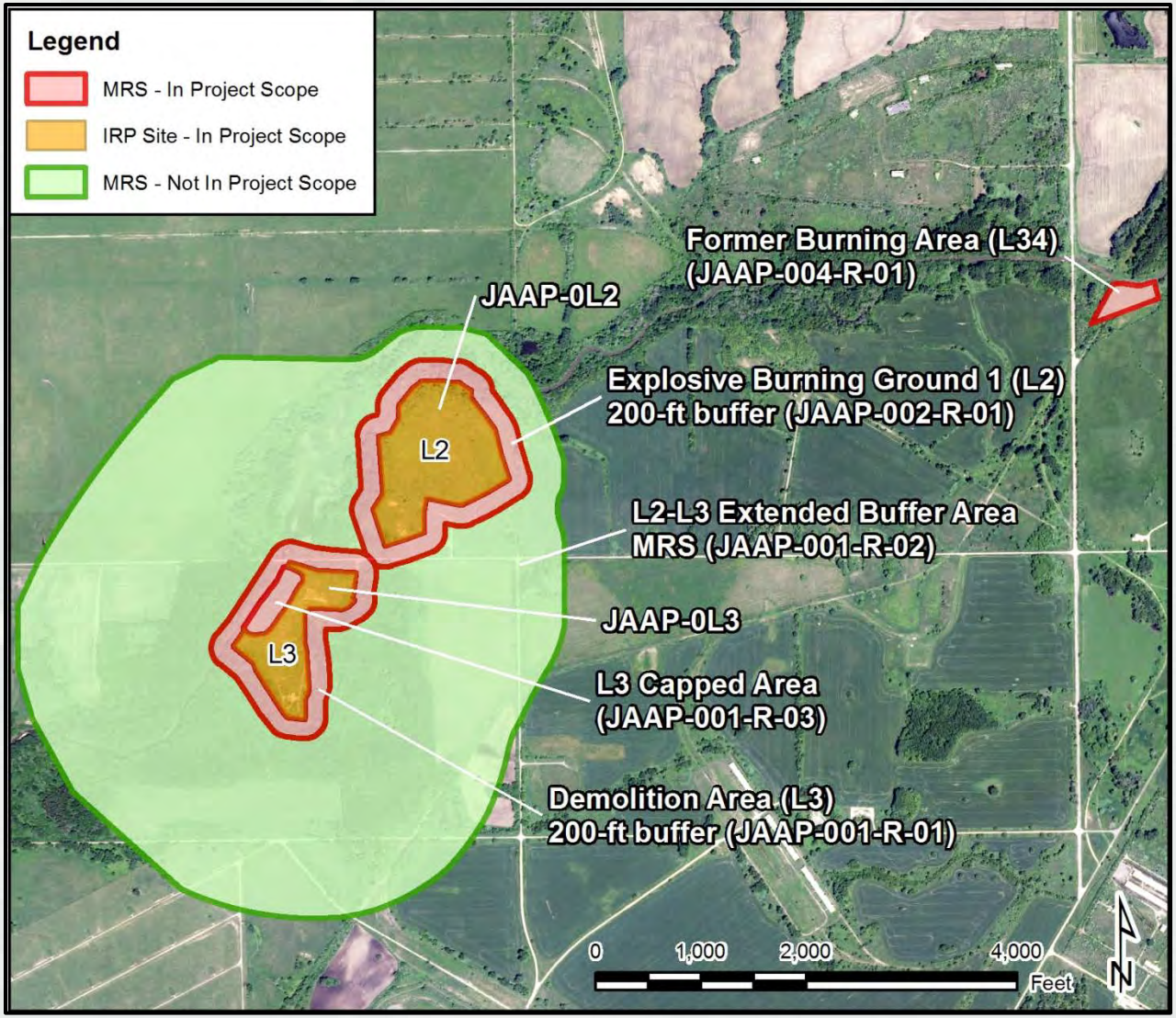
JOAAP Overview

- Former Army munitions production facility in Will County, IL.
- Constructed during WWII and operated until 1977.
- Two main functional areas that were added to NPL in 1987 and 1989:
  - Manufacturing (MFG) Area
  - Load-Assembly-Package (LAP) Area
- Public Law 104-106 (FY 1996) legislated terms for conveyance of property to various entities (USDA, VA, Will County, State of IL).

- The properties for sites in this project are currently undeveloped and owned by the Army. These properties will be transferred to USDA for use as native prairie habitat.

IRP & MMRP Sites in Project Vicinity



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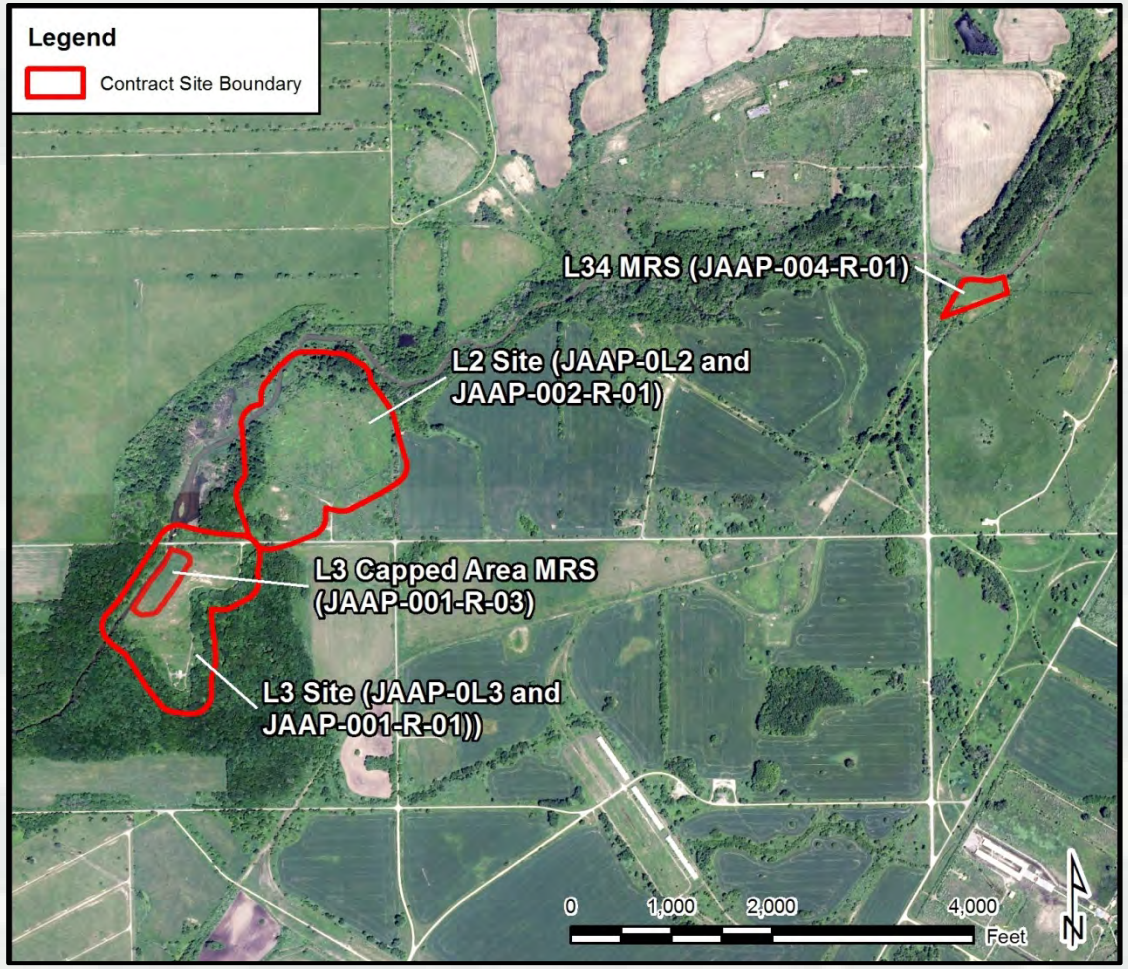
Previous Work at Project Sites

IRP	MMRP
▪ Following RI/FS, two RODs (1998 and 2004) have been signed. ▪ The RODs identified the chemicals of concern (COCs) and established upper and lower cleanup values. ▪ Selected remedies at L2 and L3 have been implemented and these sites have approved Closure Reports. ▪ Currently, L2 and L3 have LUCs and a long-term groundwater monitoring program. ▪ No further action for soil and groundwater operable units was selected for L34 in 1998 ROD.	▪ Based on an EE/CA, range inventory, records review, and SI, several new MRSs were established: ▸ JAAP-002-R-01 (200-ft buffer around L2) ▸ JAAP-001-R-01 (200-ft buffer around L3) ▸ JAAP-004-R-01 (L34) ▸ JAAP-001-R-02 (Extended Buffer) ▪ MRSs underwent MEC removal to 1 ft depth except for the Extended Buffer, which is undergoing an RI under a different project. ▪ Verification study is underway at L2 and L3 to confirm previous MEC removal.

Scope of This Project



- **RI at L2 Site, Explosive Burning Ground**. Site includes IRP Site JAAP-0L2 and MRS JAAP-002-R-01(L2 200-ft buffer).
- **RI At L3 Site, Demolition Area.** Site includes IRP Site JAAP-0L3 and MRS JAAP-001-R-01 (L3 200-ft buffer).
- **RI/FS and PP/ROD at L34 Former Burning Area.** MRS JAAP-004-R-01.
- **TCRA and ROD Modification at L3 Capped Area**. MRS JAAP-001-R-03.

Remedial Investigation at L2 (Explosive Burning Ground)

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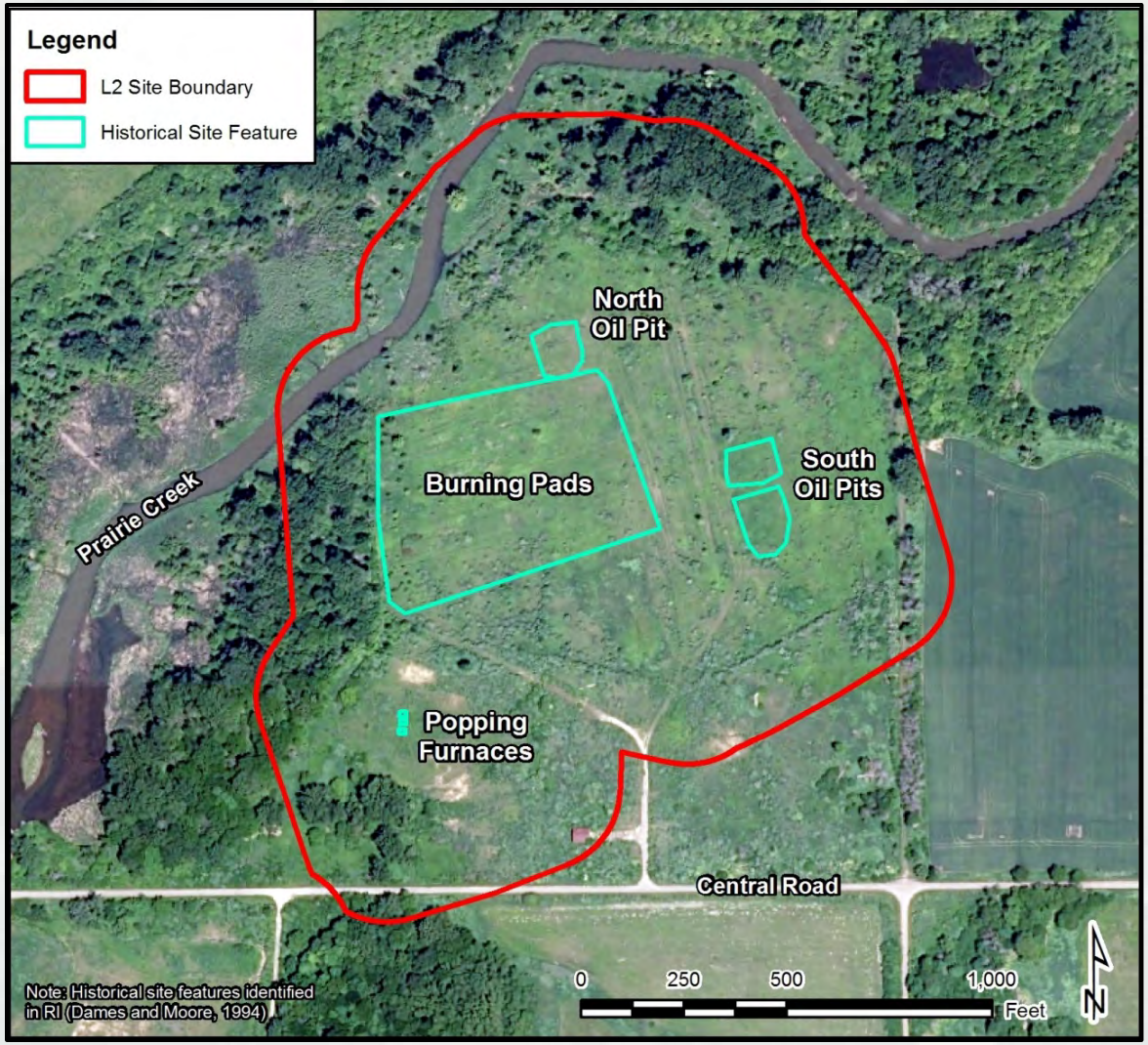
L2 Site Map (52 acres)



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Previous IRP/MMRP Work at L2

IRP		
Report Title	**Author**	**Date**
Phase I RI Report, LAP Area	Dames and Moore	1993
Phase II RI Report, LAP Area	Dames and Moore	1994
ROD, Soil and GW Operable Units on MFG and LAP NPL Sites	AEC	1998
ROD, Soil Operable Unit Interim Sites	AEC	2004
Phase II RA/Closure Report	MWH	2009
MMRP		
EE/CA, Sites L2, L3, L11, L16, L21, and L34	USAESCH	1999
Final CTT Range Inventory	e^2M	2002
HRR for Other Than Operational Ranges at JOAAP	USACE-St. Louis	2005
Final SI Report	e^2M	2005
Final AAR of Sites L2 and L3	USA Environmental, Inc.	2007
Final SSFR MMRP Site L2	MKM	2010
Verification Study of Site L2	USACE-Baltimore	On-going

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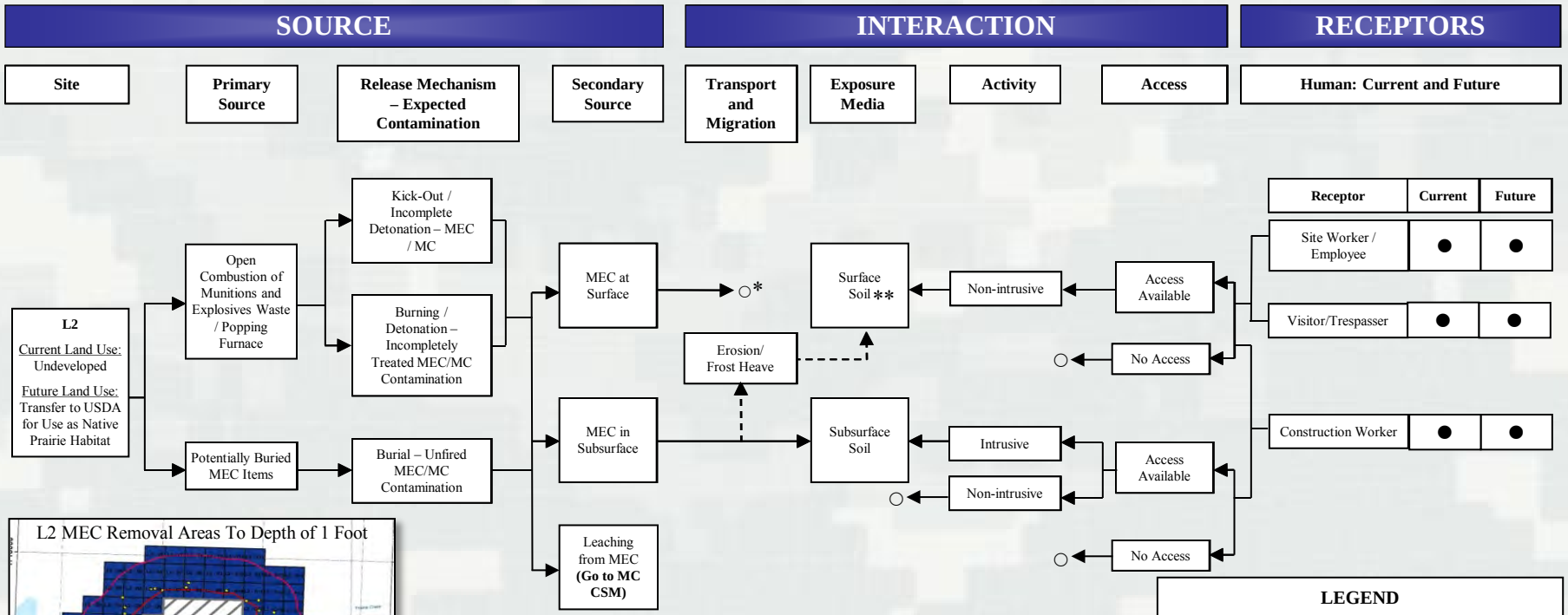
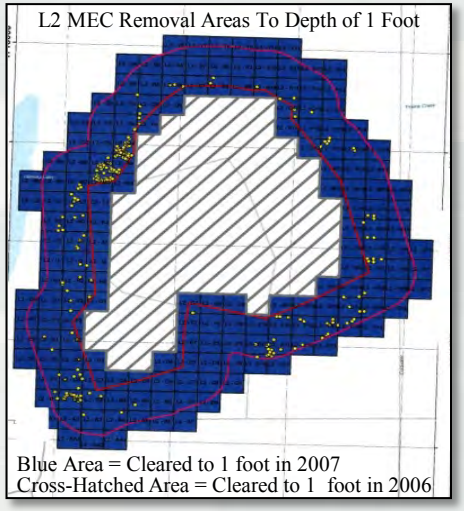
L2 - MEC Conceptual Site Model





POTENTIAL EXPOSURE ROUTES

Receptor	Potential Exposure Activity	Typical Intrusion Depth	Hazard
Site Worker/Employee/ Construction Worker	Planting, weeding, maintaining and constructing trails and infrastructures, burns, tilling	0 – 1' bgs	Detonation
Visitor/Trespasser	Field trips, camping, trail activities	0 – 1' bgs	Detonation

LEGEND

- ← Flow-chart continues
- ◄- - Partial/Possible Flow
- ● Potentially Complete Pathway
- ○ Incomplete Pathway
- * MEC Removal to 1 ft bgs
- ** Surface MEC is considered to be at least partially exposed at the ground surface

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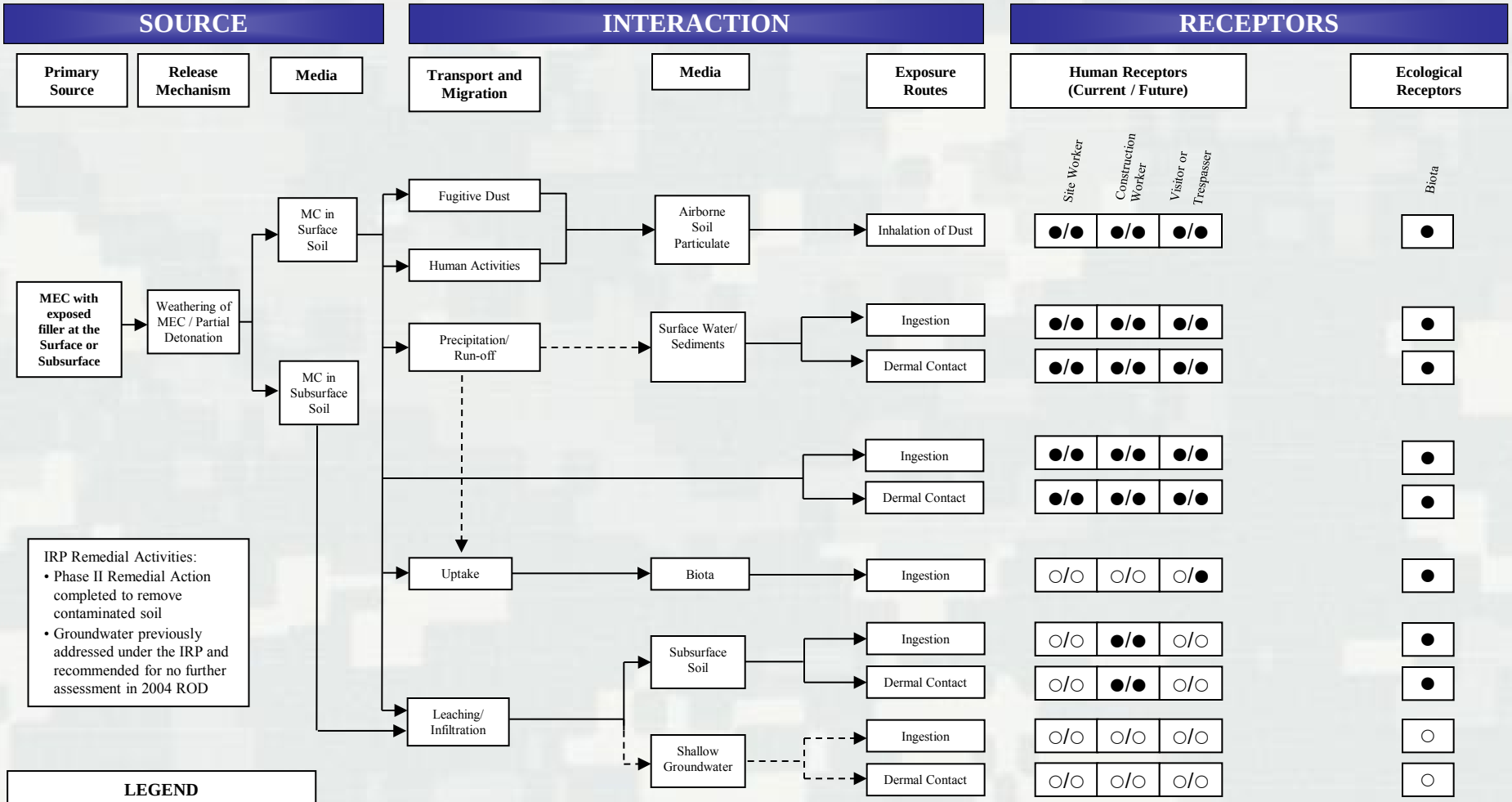
L2 - MC Conceptual Site Model



IRP Remedial Activities:
- Phase II Remedial Action completed to remove contaminated soil
- Groundwater previously addressed under the IRP and recommended for no further assessment in 2004 ROD

LEGEND

- ← Flow-chart continues
- ←- - Partial/Possible Flow
- ● Potentially Complete Pathway
- ○ Incomplete Pathway

POTENTIAL EXPOSURE ROUTES

Receptor	Potential Exposure Activity	Typical Intrusion Depth	Hazard
Site Worker/ Employee/ Construction Worker	Planting, weeding, maintaining and constructing trails and infrastructures, burns, tilling	0 – 1' bgs	MC
Visitor/Trespasser	Field trips, camping, trail activities	0 – 1' bgs	MC

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RI Data Quality Objectives

L2 Site – 52 acres

1. **State the problem**
   - MEC and associated MC contamination are potential risks to current and future site workers, construction workers, visitors/trespassers, and ecological receptors.
2. **Identify the Goal of the Study**
   - Determine if further munitions response action is needed or if an NFA recommendation for L2 is appropriate.
3. **Identify Information Inputs**
   - Historical use of site and most reasonably anticipated future land use.
   - Previous aerial photo analysis, investigations, and removal/remedial actions.
   - New geophysical survey, intrusive investigation, and MC samples – part of this RI.
4. **Define the Boundaries of the Study**
   - IRP L2 Site and 200-ft buffer MRS (JAAP-002-R-01) - 52 acres to depth of instrument detection.
   - Target analytes will be the COCs established in the 2004 ROD.

RI Data Quality Objectives

L2 Site – 52 acres

5. Develop the Analytic Approach

- If an anomaly detected during DGM survey (EM61) meets anomaly selection criteria (i.e., above background threshold determined by IVS and based on professional judgment), then intrusively investigate the anomaly.
- If site conditions prevent collection of DGM data, then analog survey will be completed and all detected anomalies will be intrusively investigated.
- If DGM transect results identify high density areas, then 100% coverage grids will be completed. The definition of low and high density areas (e.g., ≥50 items/acre above background) will be determined by the project team using VSP statistical tools with data from the transect survey.
- If MEC items with exposed filler or high anomaly density areas are discovered, then collect discrete MC soil samples.
- If MC soil result exceeds a lower cleanup value (2004 ROD), then collect additional MC soil sample(s) to delineate contamination.
- If MC surface soil (upper 6 inches) result exceeds a lower cleanup value (2004 ROD), then collect surface soil sample(s) in down gradient direction to evaluate potential migration to Prairie Creek.

RI Data Quality Objectives

L2 Site – 52 acres

6. Specify Performance or Acceptance Criteria

- UXO Estimator inputs to provide 95% confidence level and a MEC density for minor public use (i.e., ≤1.0 MEC item/acre).
- DGM data meet geophysical system verification (GSV) requirements presented in the UFP-QAPP.
- MC sample results meet the PARCCS parameters criteria listed in the UFP-QAPP for data to be used for decision making purposes.

7. Develop the Detailed Plan for Obtaining Data

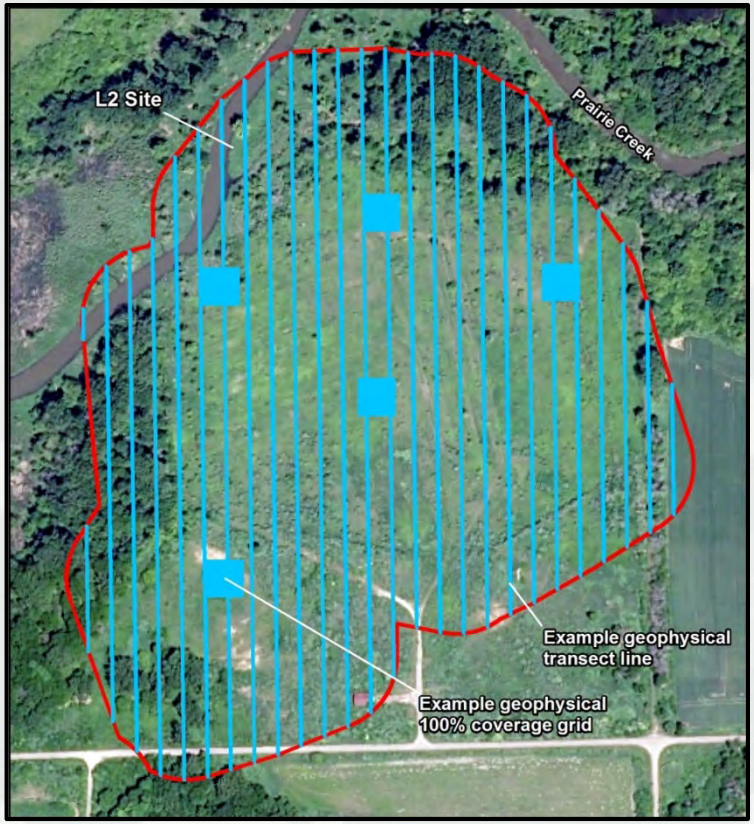
- Complete surface clearance and vegetation removal, and install instrument verification strip.
- Design geophysical data collection using UXO Estimator and VSP to determine placement/number of transects, grids, and intrusive investigations.
  - Collect an estimated 41,000 linear ft of transect data. Transect width will be 3 ft and transects will be spaced 60 ft apart.
  - Investigate grids (e.g., 50 ft x 50 ft) as necessary to satisfy acreage requirements of UXO Estimator and define MEC impacts in high density areas.
  - Intrusively investigate anomalies on transects and grids. The numbers of anomalies investigated will vary according to the anomaly density detected in the area.

RI Data Quality Objectives

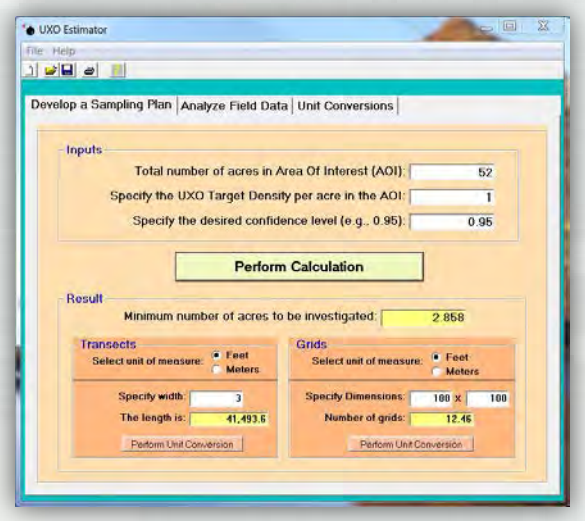
L2 Site – 52 acres

7. Develop the Detailed Plan for Obtaining Data (Continued)

- Collect MC soil samples at locations where MEC items with exposed filler are found (i.e., release source) or high anomaly density areas.
- Determine the number and location of MC samples based on the results of intrusive investigations.



Geophysical Survey Approach



- DGM system comprised of EM61-MK2 paired with real-time kinematic (RTK) GPS, either cart or litter mounted.
- Analog transects using handheld detectors (e.g., Schonstedt) and differential GPS in steep terrain and/or heavy vegetation.
- UXO Estimator and VSP will be used for designing geophysical data collection plans and analysis, and intrusive investigations.
- Geophysical activities will achieve applicable quality objectives as stated in the Geophysical Investigation Plan of the UFP-QAPP.

Remedial Investigation at L3 (Demolition Area)

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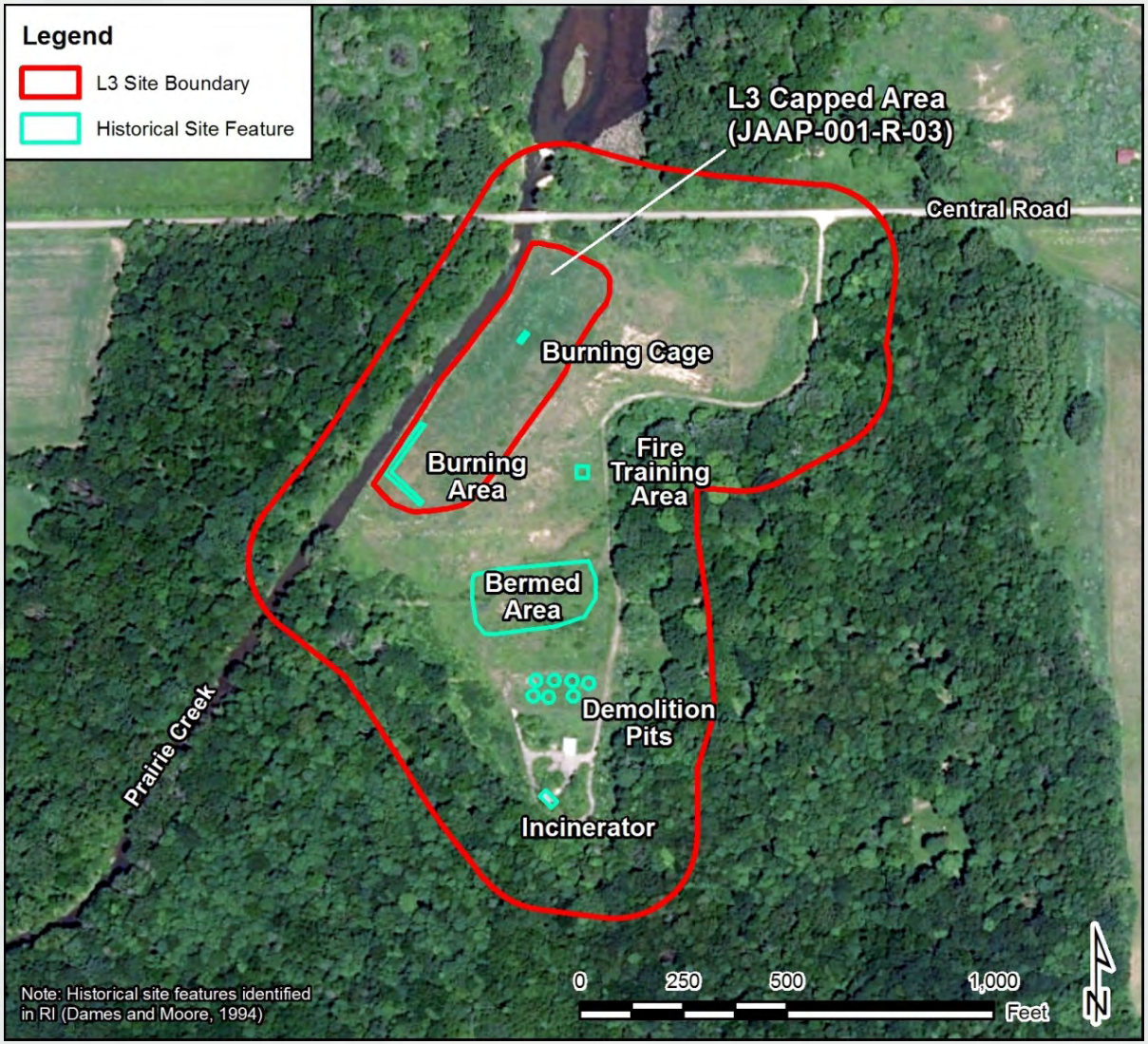
L3 Site Map (43 acres)



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Previous IRP/MMRP Work at L3

IRP		
Report Title	**Author**	**Date**
Phase I RI Report, LAP Area	Dames and Moore	1993
Phase II RI Report, LAP Area	Dames and Moore	1994
ROD, Soil and GW Operable Units on the MFG and LAP NPL Sites	AEC	1998
ROD, Soil Operable Unit Interim Sites	AEC	2004
Phase II RA/Closure Report	MWH	2010
MMRP		
EE/CA, Sites L2, L3, L11, L16, L21, and L34	USAESCH	1999
Final CTT Range Inventory	e^2M	2002
HRR for Other Than Operational Ranges at JOAAP	USACE-St. Louis	2005
Final SI Report	e^2M	2005
Final AAR of Sites L2 and L3	USA Environmental, Inc.	2007
Final SSFR MMRP Site L3	MKM	2010
Verification Study of Site L3	USACE-Baltimore	On-going

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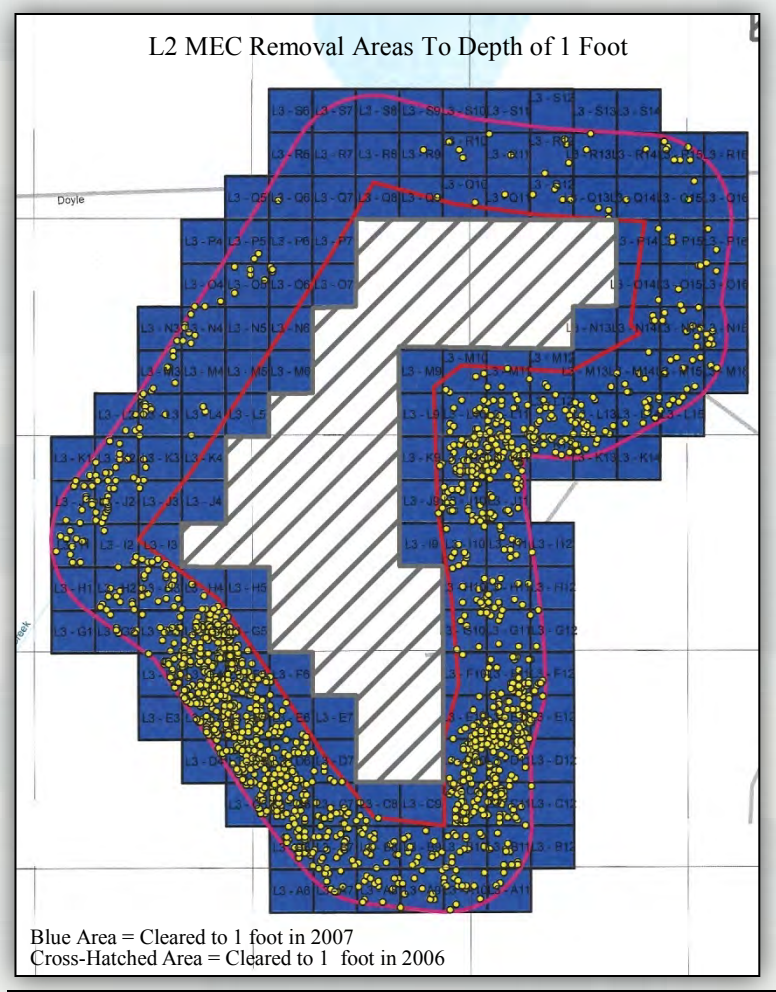
L3 - MEC and MC Conceptual Site Models



- MEC CSM for L3 is the same as L2 with the following exception:
  - L3 Primary Sources:
    - Open burning of combustible refuse and munitions crates.
    - Demolition pits.
    - Mass buried munitions items.
- MC CSM for L3 is the same as L2.

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RI Data Quality Objectives

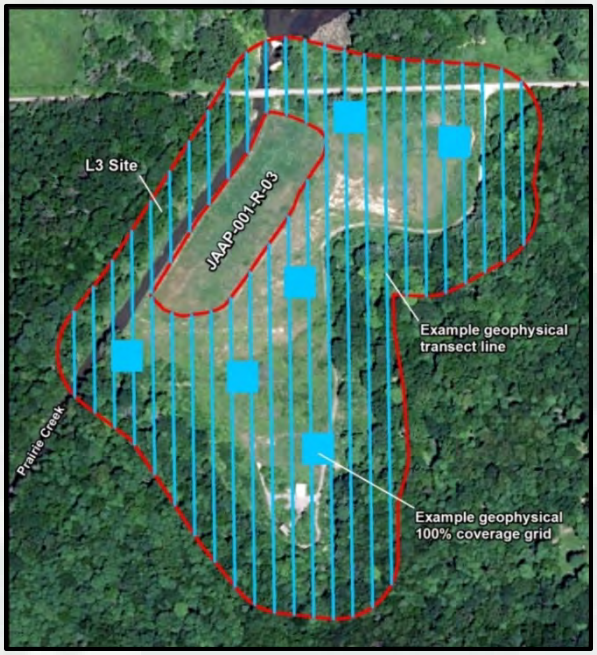
L3 Site – 43 acres

1. **State the Problem.** Same as L2.
2. **Identify the Goals of the Study.** Same as L2.
3. **Identify Information Inputs.** Same as L2.
4. **Define the Boundaries of the Study**
   - IRP L3 Site and 200-ft buffer MRS (JAAP-001-R-01) - 43 acres to depth of instrument detection.
   - Target analytes will be the COCs established in the 2004 ROD.
5. **Develop the Analytic Approach.** Same as L2.
6. **Specify Performance or Acceptance Criteria.** Same as L2.

RI Data Quality Objectives

L3 Site – 43 acres

7. Develop the Detailed Plan for Obtaining Data



- Complete surface clearance and vegetation removal, and install instrument verification strip.
- Design geophysical data collection using UXO Estimator and VSP to determine placement and number of transects, grids, and intrusive investigations.
  - Collect an estimated 25,000 linear ft of transect data. Transect width will be 3 ft and transects will be spaced 60 ft apart.
  - Investigate grids (e.g., 50 ft x 50 ft) as necessary to satisfy acreage requirements of UXO Estimator and define MEC impacts in high density areas.
  - Intrusively investigate anomalies on transects and grids.
- Collect MC soil samples at locations where MEC items with exposed filler are found (i.e., release source) or high anomaly density areas.
- Determine the number and location of MC samples based on the results of intrusive investigations.

Remedial Investigation at L34 (Former Burning Area)

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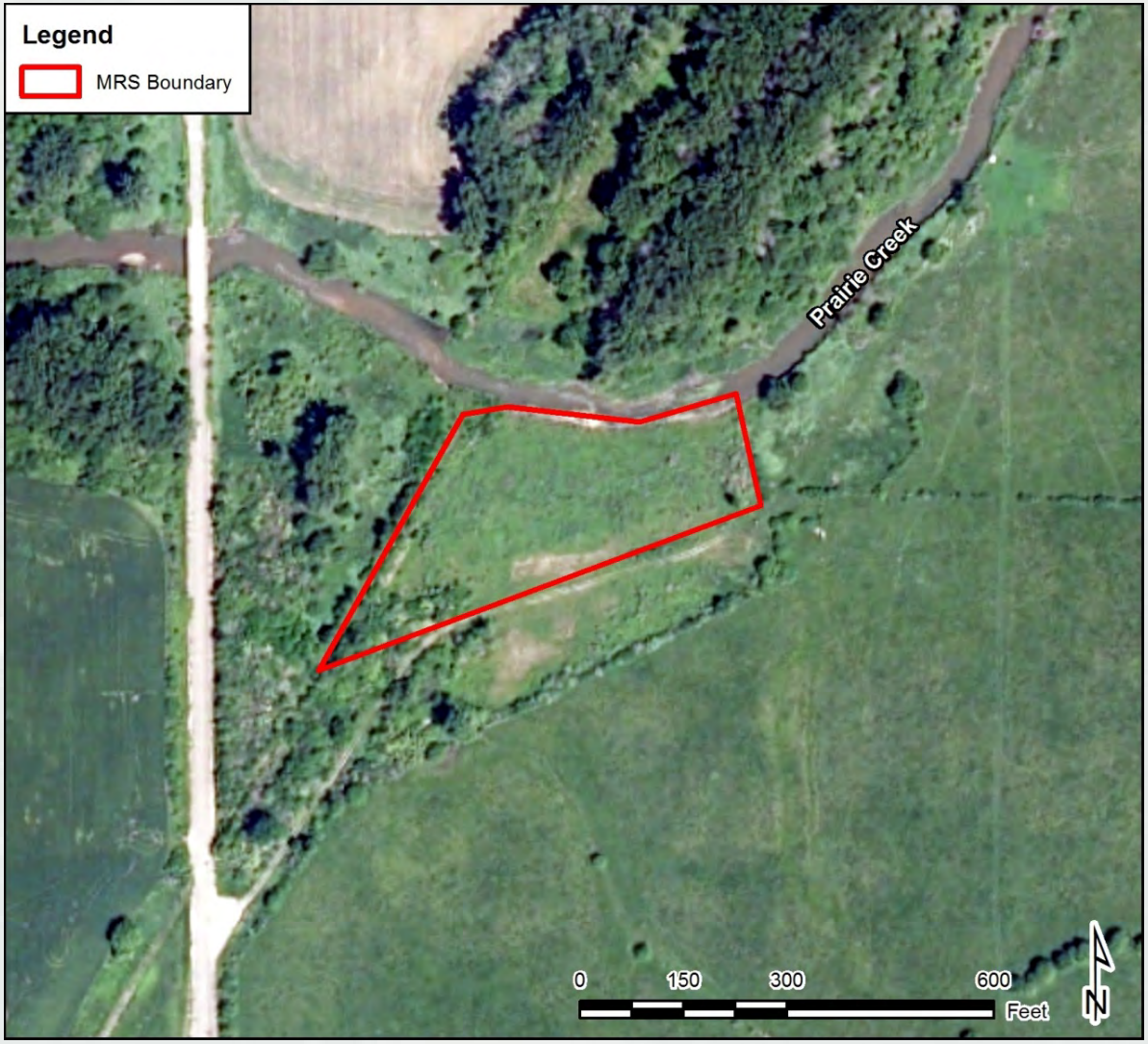
L34 Site Map (3.5 acres)



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Previous IRP/MMRP Work at L34

IRP		
Report Title	**Author**	**Date**
Phase I RI Report, LAP Area	Dames and Moore	1993
Phase II RI Report, LAP Area	Dames and Moore	1994
ROD for Soil and GW Operable Units on the MFG and LAP NPL Sites	AEC	1998
MMRP		
EE/CA, Sites L2, L3, L11, L16, L21, and L34	USAESCH	1999
Final CTT Range Inventory	e^2M	2002
HRR for Other Than Operational Ranges at JOAAP	USACE-St. Louis	2005
Final SI Report	e^2M	2005
Final SSFR MMRP Site L34	MKM	2010

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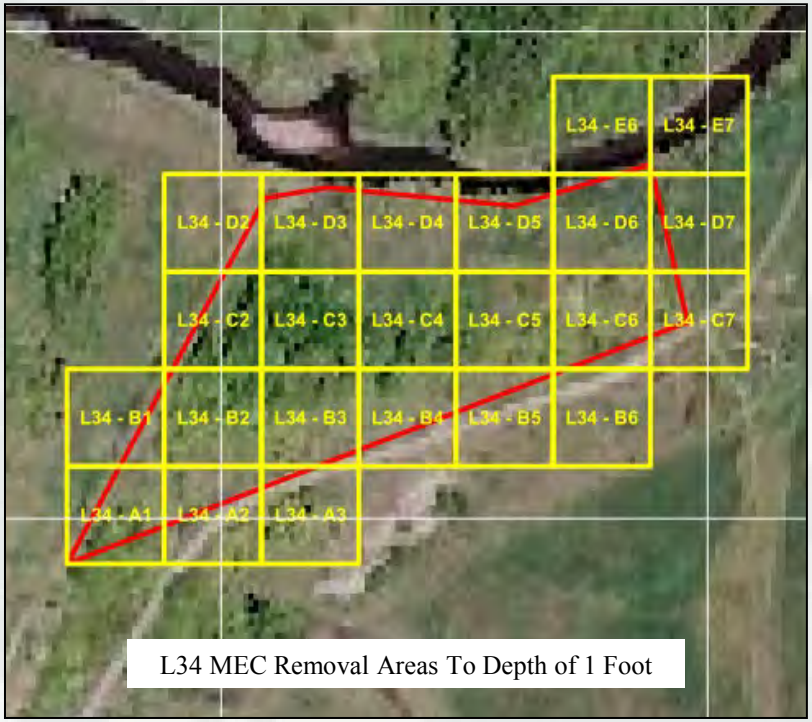
L34 - MEC and MC Conceptual Site Models

- MEC CSM for L34 is the same as L2 with the following exception:
  - L34 Primary Source:
    - Disposal area for demilitarized ceramic mines
    - Dig and sift MEC removal action was completed to 1 ft bgs (0 MEC items, 2500 lbs of MD recovered)
- MC CSM for L34 is the same as L2.



L34 MEC Removal Areas To Depth of 1 Foot

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RI Data Quality Objectives

L34 Site – 3.5 acres

1. **State the Problem.** Same as L2.
2. **Identify the Goals of the Study.** Same as L2.
3. **Identify Information Inputs.** Same as L2.
4. **Define the Boundaries of the Study**
   - L34 (JAAP-004-R-01) – 3.5 acres to depth of instrument detection.
   - Target analytes will be the COCs established in the 2004 ROD.
5. **Develop the Analytic Approach**
   - Complete DGM survey (EM61) of the entire site.
   - If DGM survey is completed to instrument depth of detection and intrusive investigations do not discover MEC, then recommend L34 for No Further Action.
6. **Specify Performance or Acceptance Criteria.** Same as L2.

RI Data Quality Objectives

L34 Site – 3.5 acres

7. Develop the Detailed Plan for Obtaining Data

- Complete surface clearance and vegetation removal, and install instrument verification strip.
- Complete DGM survey of the entire site.
- Intrusively investigate selected anomalies.
- Collect MC soil samples at locations where MEC items with exposed filler are found (i.e., release source) or high anomaly density areas.
- Determine the number and location of MC samples based on the results of intrusive investigations.

Post-RI Activities

L34 Site – 3.5 acres

- Prepare Community Relations Plan.
- Prepare FS to evaluate alternatives.
- Prepare PP to present the preferred alternative.
- Public review/public meeting.
- Prepare ROD to authorize selected remedy.

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TCRA at L3 Capped Area

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L3 Capped Area Site Map (3.3 acres)

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Previous Remedial Action

L3 Capped Area JAAP-001-R-03 (3.3 acres)

- **1998 ROD:**
  - Selected RCRA Subtitle C landfill cap to address MEC and contaminated soil.
  - Selected interim remedies that were further defined in the 2004 ROD.
- **2004 ROD:**
  - Selected final remedies and cleanup goals for soils, which included L3 soils with metals (SRU2) and for L3 soils with explosives and metals (SRU3).
  - ROD Attachment A, *Management Team Agreement on Cleanup Approach and Goals,* established requirements for excavation, confirmatory sampling, and cleanup goals.
- **L3 Capped Area Remedial Action (2006-2008):**
  - Addressed final remedy requirements for the RCRA Subtitle C landfill cap (per the1998 ROD) and for contaminated soils (per the 2004 ROD).
  - 30,000 cy of soil (with MC and some construction debris) was consolidated over existing debris fill and 3.3 acre RCRA Subtitle C cap was installed.
  - This remedial action left potential MEC in place under the cap.

Action Memorandum

L3 Capped Area JAAP-001-R-03 (3.3 acres)

- During Spring 2011 storms, some of the rip rap placed along Prairie Creek to armor the landfill cap washed away, flood water height was 12 feet above Prairie Creek, and certain MEC and MD were later found downstream.
- L3 Landfill poses a threat to human health and environment:
  - Future storm events could cause release and/or migration of MEC and MC.
  - Potential explosive hazards could result in serious injury or death.
- TCRA will mitigate potential hazards and risks from MEC and MC.
- TCRA activities will result in modification to current ROD(s).

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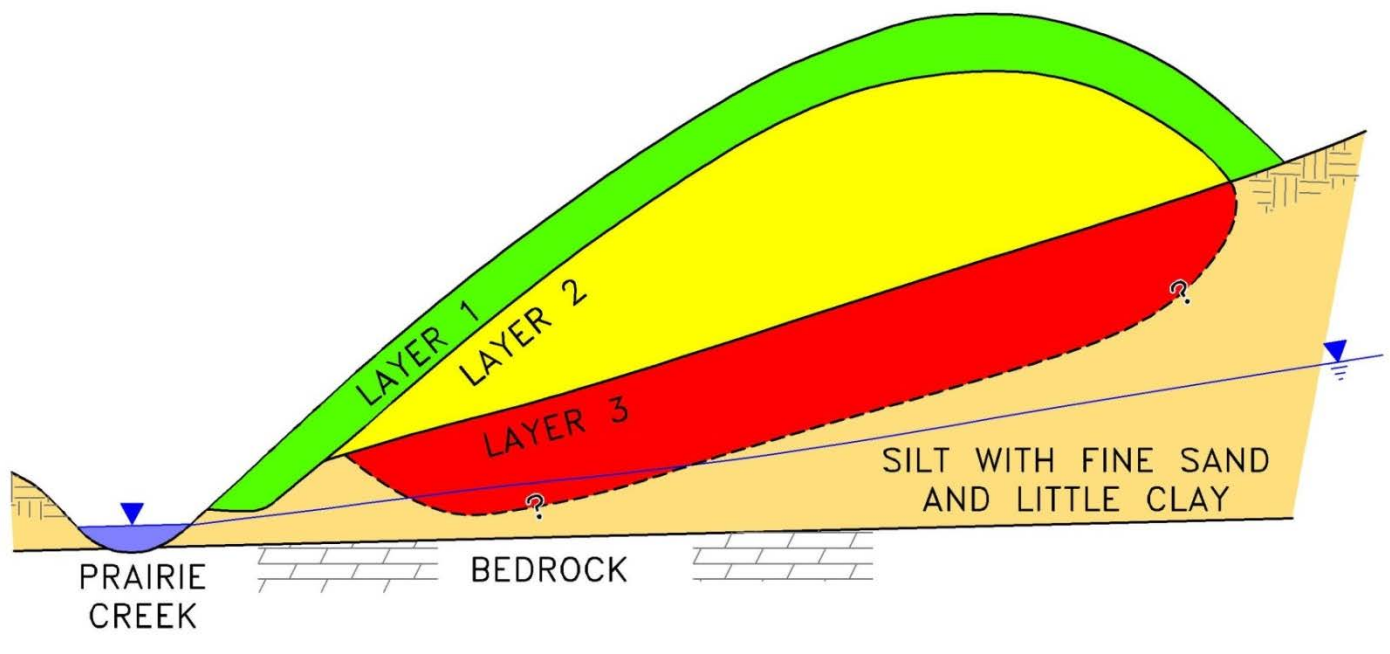
Conceptual Site Model

L3 Capped Area JAAP-001-R-03 (3.3 acres)



Layer 1: 22,000 cy, clean topsoil and impermeable liner, negligible probability of MEC/MPPEH.

Layer 2: 30,000 cy, L2 popping furnace material and L3 berms, low probability of MEC/MPPEH.

Layer 3: 31,000 cy, waste left in place, MC-contaminated soil and CD with potential ACM, medium to high probability of MEC/MPPEH.

TCRA Data Quality Objectives

L3 Capped Area JAAP-001-R-03 (3.3 acres)

1. State the problem

- L3 Capped Area poses a threat to human health and environment because of potential for fire or explosion, and because weather conditions may cause MEC, MC, and/or ACM to be released and/or migrate from the landfill.

2. Identify the goals of the removal

- Remove, characterize, and properly dispose of all potential MEC/MPPEH to eliminate potential explosives hazard.
- Remove, characterize, and properly dispose of all soil contaminated above the ROD cleanup levels to eliminate potential health and environmental risks.

TCRA Data Quality Objectives

L3 Capped Area JAAP-001-R-03 (3.3 acres)

3. Identify information inputs

- Historical use of L3.
- Previous investigation data, remedial action, and munitions responses, including construction records from L3 cap construction.
- Data collected during the TCRA, to include survey of excavation areas and volumes, types of materials removed, waste characterization sampling data and disposal records, geophysics data, MC confirmatory sampling data, and site restoration.

4. Define the boundaries of the removal

- Areal extent of L3 Capped Area is 3.3 acres.
- Vertical extent of TCRA excavation is to bottom of Layer 3 waste but may be limited to depth to groundwater.
- Target analytes are the COCs established in the 2004 ROD.

TCRA Data Quality Objectives

L3 Capped Area JAAP-001-R-03 (3.3 acres)

5. Develop approach for removal

- If excavation encounters groundwater, then stop excavating deeper. Else, continue excavating if debris and/or stained soil are visible.
- If excavation bottom is visibly free of debris and stained soil, then stop excavating and inspect to verify native soil. Else, continue excavating.
- If excavation bottom is verified to be native soil, then collect analog geophysics to verify that metal anomalies have been removed. Else, continue removal to resolve all anomalies.
- If excavation bottom is verified to be free of anomalies, then collect confirmatory soil samples to verify that COCs are below the ROD's lower cleanup values. Else, continue removal of soil until COCs are below lower cleanup values.
- If waste characterization sampling verifies soil and debris are a non-hazardous special waste or ACM, then dispose of waste at Prairie View RDF. Else, if sampling indicates waste is characteristically hazardous, dispose at Peoria Landfill.

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TCRA Data Quality Objectives

L3 Capped Area JAAP-001-R-03 (3.3 acres)

6. Specify performance or acceptance criteria

- To verify MEC removal, perform 100% visual inspection and 100% analog geophysics. Resolve all detected anomalies.
- To verify MC-contaminated soils have been removed, collect and evaluate confirmatory soil samples using the frequency, list of COCs, and evaluation procedures in the 2004 ROD.

COC	Lower Cleanup Value (mg/kg)	Upper Cleanup Value (mg/kg)
1,3,5-TNB	17	386
2,4,6-TNT	200	459
2,6-DNT	20	20
RDX	107	125
Arsenic	21	84
Copper	190	925
Lead	500	500

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TCRA Data Quality Objectives

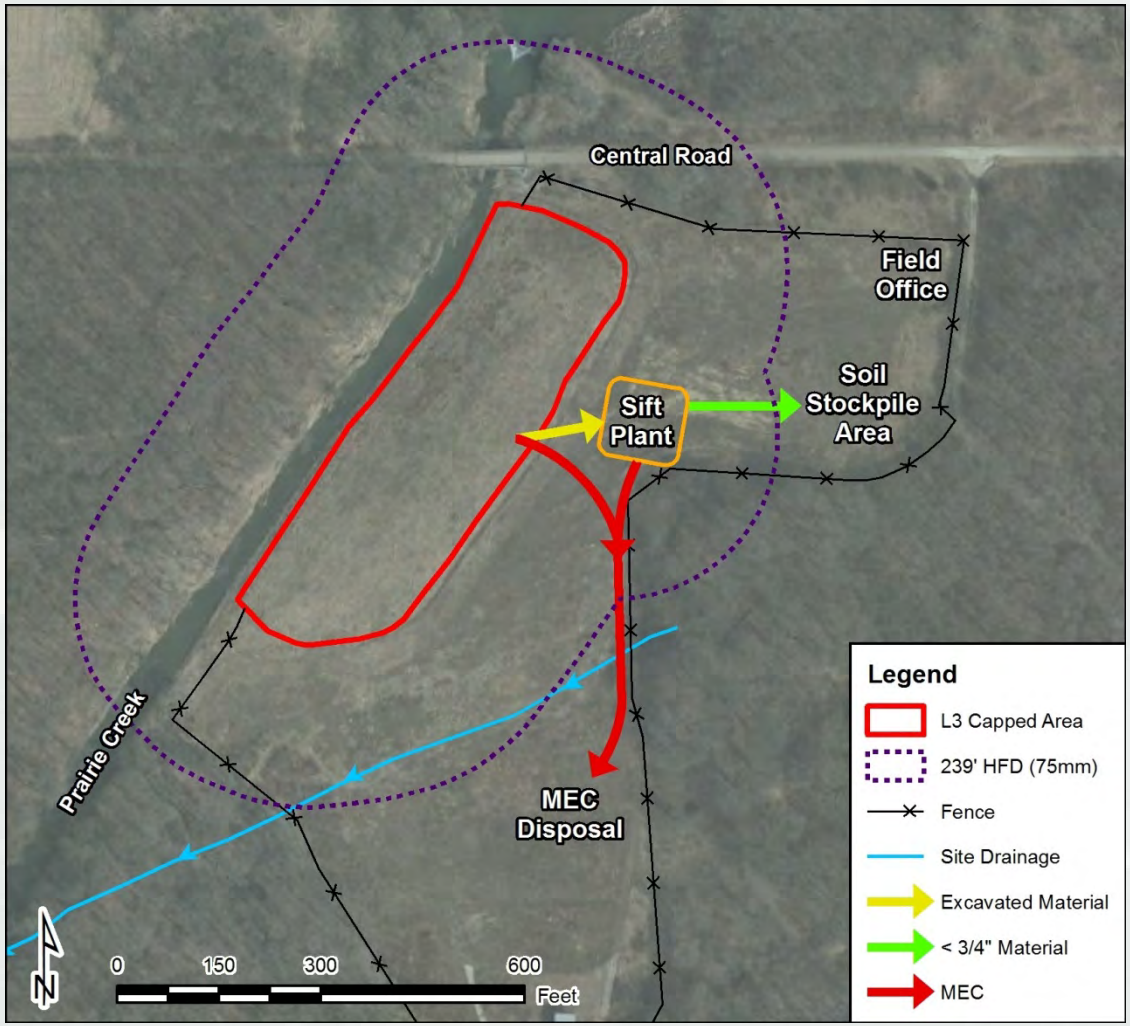
L3 Capped Area JAAP-001-R-03 (3.3 acres)

7. Develop detailed plan

- Install erosion controls before earth-disturbing activity and maintain erosion controls until site is restored.
- Establish and maintain MSDs and procedures using the 75mm (HE) and coordinate road closures with stakeholders.
- Remove Layer 1 and re-use it for final backfill. Some of Layer 1 needed to level out sift plant area. Remove and dispose of impermeable liner materials at Prairie View RDF.
- Remove, sort, and characterize Layer 2 and 3. Excavate and sort oversize and possible asbestos materials at excavation area, convey 6-inch minus material to sift plant, sort through sift plant, complete MPPEH inspection, and stockpile/characterize/dispose soil.
- Restore site by placing clean soil from Layer 1 and seeding.

TCRA Activities - Locations

L3 Capped Area JAAP-001-R-03 (3.3 acres)



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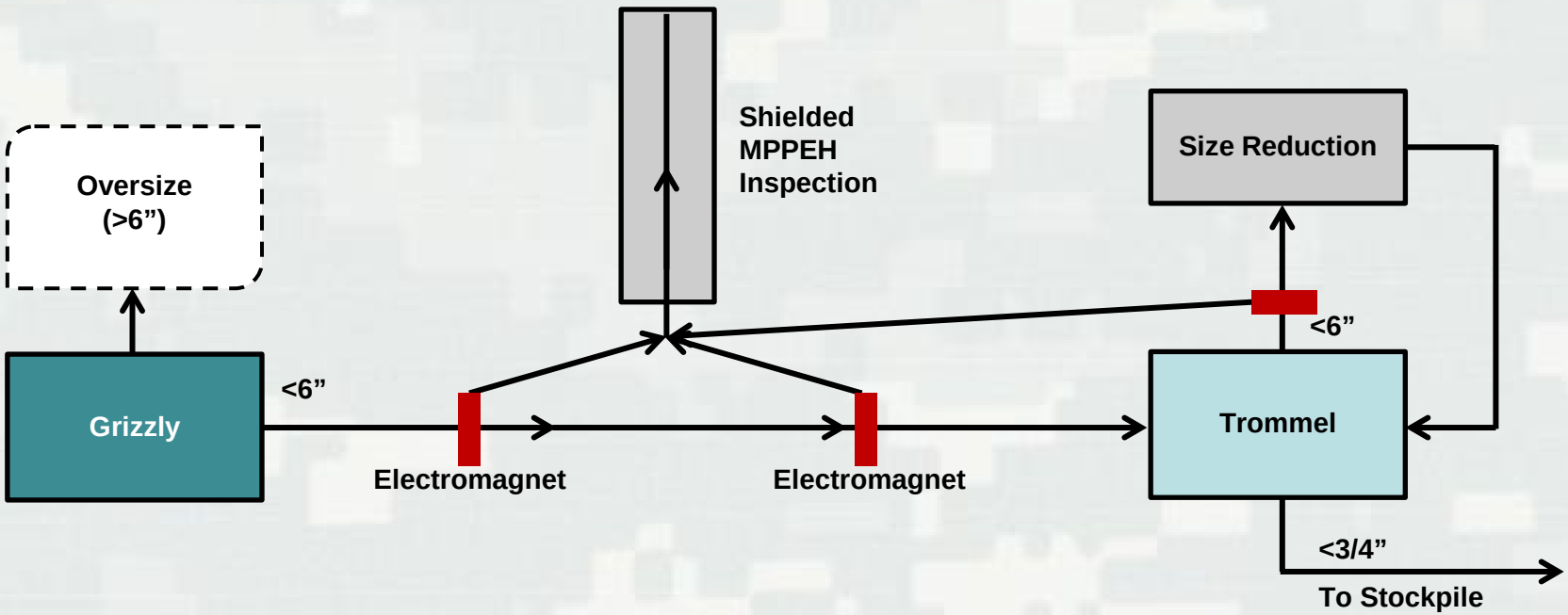
TCRA Activities - Sorting

L3 Capped Area JAAP-001-R-03 (3.3 acres)



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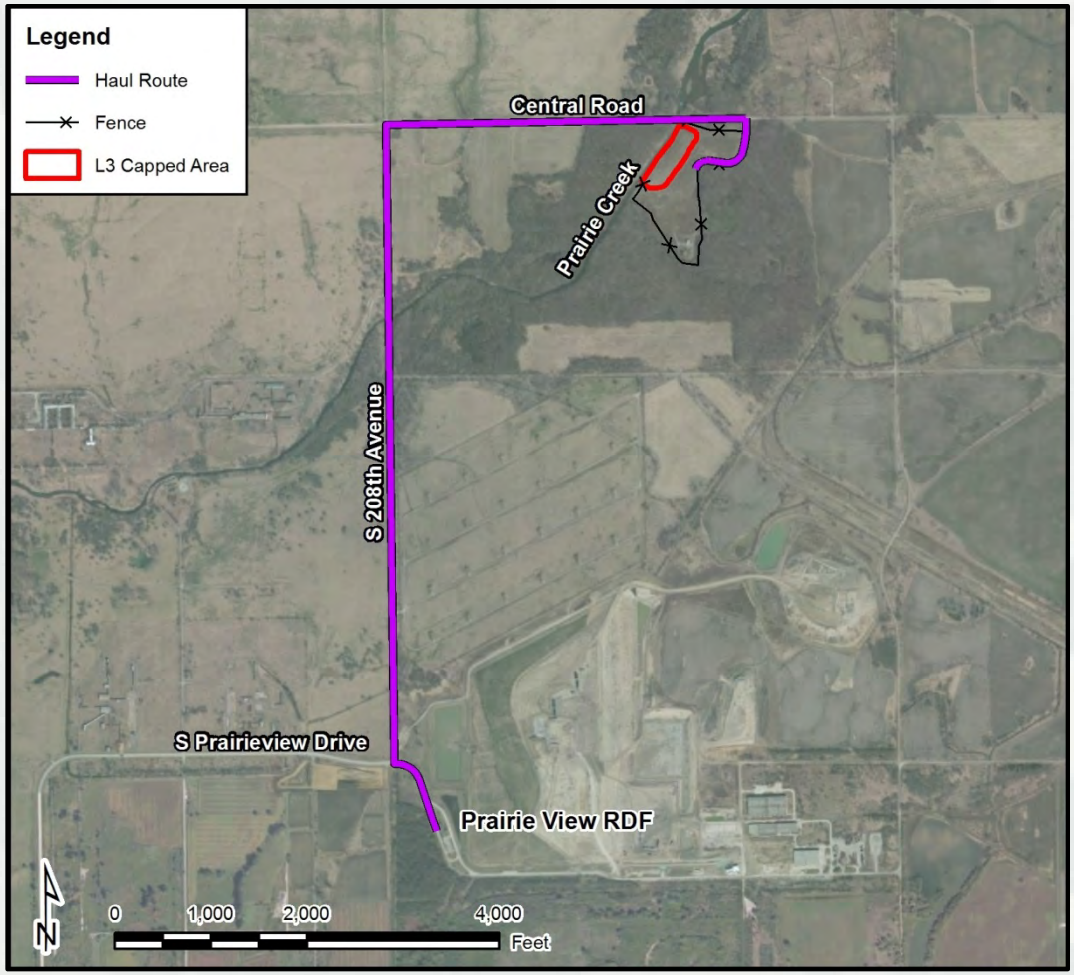
Characterization and Disposal

L3 Capped Area JAAP-001-R-03 (3.3 acres)

- Establish waste profile for Layers 2 and 3 prior to excavation.
- Perform MPPEH and ACM inspection on oversize materials and construction debris at the excavation and/or grizzly (>6 inches).
- Perform MPPEH inspection on material that passes the grizzly (<6 inches).
- Remove MEC for on-site disposal, haul MDAS categorized as MD to off-site smelter, haul MDAS categorized as other debris to Prairie View RDF.
- Containerize ACM and dispose at Prairie View RDF.
- Sample soil stockpiles (<3/4 inch) and analyze for MC.
- Dispose of non-hazardous soil and materials at Prairie View RDF.
- Dispose of non-explosive hazardous soil and materials (if any) at Peoria Landfill.

Route to Prairie View RDF

L3 Capped Area JAAP-001-R-03 (3.3 acres)



- Haul route shown was used during previous remedial action. Alternate route is possible going east from site and then south.
- Bridge capacities along haul route will be verified for expected loads and frequencies.

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Deliverables and Schedule

Deliverables and Schedule

- RI Work Plan (L2, L3, and L34)
  - TPP1 — April 2015
  - Draft RI Work Plan to Army — April 2015
  - Draft Final RI Work Plan to USEPA/IEPA — June 2015
  - TPP2 — July 2015
  - Final RI Work Plan — August 2015
- RI at L2
  - Field Effort — Sep – Nov 2015
  - Draft RI Report to Army — January 2016
  - Draft Final RI Report to USEPA/IEPA — March 2016
  - TPP3 — April 2016
  - Final RI Report — May 2016

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Deliverables and Schedule

- RI, CRP, FS, PP, ROD, and LUCIP at LF34

▸ RI Field Effort	Sep - Nov 2015
▸ Draft RI Report to Army	January 2016
▸ Draft Final RI Report to USEPA/IEPA	February 2016
▸ TPP3	April 2016
▸ Final RI Report	May 2016
▸ Draft CRP to Army	June 2016
▸ Final CRP	August 2016
▸ Draft FS Report to Army	June 2016
▸ Draft Final FS Report to USEPA/IEPA	August 2016
▸ Final FS Report	October 2016
▸ Draft Proposed Plan to Army	November 2016
▸ Draft Final Proposed Plan to USEPA/IEPA	January 2017
▸ Public Review	Mar - Apr 2016
▸ Final Proposed Plan	April 2016

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Deliverables and Schedule

- RI, CRP, FS, PP, ROD, and LUCIP at LF34 (Continued)
  - Draft ROD to Army — May 2017
  - Draft Final ROD to USEPA/IEPA — July 2017
  - Final ROD — October 2017
  - Draft LUCIP to Army — September 2017
  - Draft Final LUCIP to USEPA/IEPA — November 2017
  - Final LUCIP — December 2017
- RI at L3
  - Field Effort — Apr – Jun 2017
  - Draft RI Report to Army — July 2017
  - Draft Final RI Report to USEPA/IEPA — September 2017
  - Final RI Report — November 2017

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Deliverables and Schedule

- <u>TCRA and ROD Modification at L3 Capped Area</u>

▸ TPP1	April 2015
▸ Draft TCRA Work Plan to Army	April 2015
▸ Draft Final TCRA Work Plan to USEPA/IEPA	June 2015
▸ TPP2	July 2015
▸ Final TCRA Work Plan	August 2015
▸ TCRA Field Effort	Aug 2015 – Sep 2016
▸ Draft TCRA Report to Army	November 2016
▸ Draft Final TCRA Report to USEPA/IEPA	January 2017
▸ TPP4	February 2017
▸ Final TCRA Report	March 2017
▸ Draft ROD Modification to Army	March 2017
▸ Draft Final ROD Modification to USEPA/IEPA	June 2017
▸ Final ROD Modification	September 2017

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Meeting Date: July 28, 2015

Time: 0900 - 1200

Location: Joliet AAP Farmhouse

Contract: W912DY-09-D-0061, Delivery Order CY02

Project: Joliet Army Ammunition Plant (JOAAP) Time Critical Removal Action (TCRA) and Munition Response Services

Meeting Subject: Technical Project Planning (TPP 2)

Meeting Objective: Review and gain stakeholder concurrence of data quality objectives and technical approaches presented in the work plan documents

Attendees:
Art Holz, Joliet AAP
Tom Barounis, USEPA Region 5
Michael Haggitt, IEPA
Wade Spang, USDA-FS Midewin
Bob Hommes, USDA-FS Midewin
Jeff Martina, USDA-FS Midewin
Glen Beckham, USACE Louisville District
Don Peterson, USACE Louisville District
Laura Ruf, USACE Louisville District
Travis McCoun, USACE Baltimore District
Garrick Marcoux, URS
Zac Tannehill, URS
John Heinicke, URS

Telephone Attendees:
Robin Paul, AEC
Mac Reed, URS
Andreas Kothleitner, URS

Notes by: Zac Tannehill, URS, 28 July 2015

Following is the meeting agenda:

- 0900-0915: Introductions/Roles/Opening Comments
- 0915-1030: L3 Capped Area TCRA
- 1030-1145: Remedial Investigations (RI) at L2, L3, and L34
- 1145-1200: Wrap-up

During the meeting, the attached TPP slides (35 slides in total) were reviewed and discussed on a slide-by-slide basis. Following are the most significant discussion items and action items.

Slide 3. John Heinicke indicated that during TPP 1 there were discussions regarding the type of decision document that would be completed for L3 Capped Area (e.g., Explanation of Significant Differences [ESD] or ROD Amendment). Tom Barounis indicated that it will need to be a ROD Amendment because the landfill removal is a fundamental change to the original remedy. Travis McCoun suggested that the ROD Modification may need to be completed concurrently to the upcoming work.

Slide 3. Travis McCoun provided an overview of the Installation Restoration Program (IRP) sites versus Military Munitions Response Program (MMRP) sites and how the JOAAP facility has progressed to the current situation where IRP sites are closed and some areas are being re-opened as MMRP sites. The historical IRP sites are co-located with the MMRP sites. Moving forward in the project, the IRP sites will

not be used to describe the MMRP sites. The MRSs will be identified using their AEDB-R numbers (i.e., JAAP-001-R-03 = L3 Capped Area; JAAP-002-R-01 = L2 MRS; JAAP-001-R-01 = L3 MRS; JAAP-004-R-01 = L34 MRS). URS will make the necessary changes to the work plans and future reports.

Slide 5. Tom Barounis asked if there is a recipient facility that can handle all types of waste generated during the project. John Heinicke explained that Prairie View Recycling and Disposal Facility (RDF) will take the asbestos-containing material (ACM), special waste soil, and construction debris. MEC items will be detonated on-site and remaining material documented as safe (MDAS) will be sent to a separate facility for demilitarization.

Slide 8. Tom Barounis asked the procedure for characterizing/identifying the top soil at the L3 Capped Area so that Layer 2 material is not mistakenly used as backfill material. John Heinicke indicated that there is a liner in place separating Layer 1 and Layer 2.

Slide 8. Wade Spang asked about the procedure that would be completed if metal debris was present below the water table. John Heinicke indicated the current plan does not include excavation below the water table. Travis added that URS is likely to encounter bedrock before the water table.

Slide 8. Tom Barounis asked if there is any available data to indicate that groundwater may be encountered before bedrock. John Heinicke indicated that based on recent groundwater monitoring reports, groundwater elevations fluctuate seasonally and could be higher than bedrock elevations. Recent monitoring well data at the L3 Capped Area does not show signs of contamination.

Slide 9. Tom Barounis asked if there is sufficient material in Layer 1 to adequately grade the site following excavation activities. Art Holz indicated there should be enough material, but it will depend on the final depth of excavation into Layer 3.

Slide 9. Tom Barounis asked how close to pre-landfill conditions will the final grade be at the site, and will bank erosion still be a problem. Art Holz indicated that we will want a more natural slope than what existed prior to the landfill design. Wade Spang indicated that a natural sloping on the east side of Prairie Creek should allow high water flows to spread out, which will reduce flow velocity of the creek near the L3 Capped Area and should limit erosion.

Slide 9. Art Holz asked for any further comments on the DQOs before moving on. No other comments or questions were raised.

Slide 10. Glen Beckham asked if there would be any impacts to roads because of the safety arcs required during fieldwork. John Heinicke indicated that the safety arcs would overlap the road when work was taking place on the northern end of the landfill; however, Central Road cannot be accessed from the west because of the new bison range and signs will be placed to the east to restrict access.

Slide 10. Art Holz asked where the Layer 1 material will be stockpiled. John Heinicke indicated that Layer 1 will either be stockpiled to the southeast of the landfill or placed on top of the landfill, but this still needs to be confirmed with the excavation subcontractor. Art requested the work plan figure be revised to show the Layer 1 stockpile location.

Slide 10. Tom Barounis asked if the haul route has been determined. John Heinicke indicated that the haul route will be presented and discussed on a later slide.

Slide 11. Art Holz asked if the excavation subcontractor is setting up a mock sift plant prior to mobilization so that problems encountered in the field can be reduced. John Heinicke indicated that the sift plant will be constructed and tested in Cedar Rapids, Iowa prior to mobilization.

Slide 11. Don Peterson asked if the video in the trailer will be real-time. John Heinicke indicated that it would be.

Slide 11. Wade Spang asked for additional information regarding the magnets shown as part of the sift plant. The team provided some additional information and indicated that goal of the process is to remove all metal (MEC, MPPEH, or other metallic debris).

Slide 12. Wade Spang and Bob Hommes provided supplemental information regarding the current haul route. There is a steel plate covering a culvert on South Coldwater Road that may not be sufficient for truck traffic. Also, trees along the haul route have overgrown the roads considerably and may need to be limbed. Recently, vegetation removal restrictions have been impletemented to protect the Northern Long Eared Bat. Per the U.S. Forest Service, removal of trees larger than 3 inches in diameter is prohibited during a certain time period; however, limbing of trees can be completed. URS will evaluate the haul route and let the U.S. Forest Service know what needs to be done to open up the roads for truck traffic.

Slides 12. Wade Spang asked how many trucks would be used during the removal. John Heinicke indicated that approximately five trucks would be used to haul approximately 60 loads per day.

Slide 12. Wade Spang indicated that the U.S. Forest Service will help to coordinate with staff and permitees during the fieldwork to limit the amount of traffic along the haul route.

Slide 16. Tom Barounis asked what the detection capabilities of the geophysical instruments would be. Garrick Marcoux indicated that typically the depth of detection is 11 times the diameter of the subsurface item. Travis McCoun added that the approach is sufficient based on the conceptual site model and L2 has been walked by the Baltimore District with minimal subsurface anomalies detected.

Slide 18. Garrick Marcoux provided an overview of the geophysics, including the geophysical systems verification process. Art Holz indicated that the subsurface at L2 varies significantly across the site and there is the potential for hot rocks.

Slide 20. Travis McCoun indicated the scope of the RI at L3 is 43 acres, no data will be collected within the L3 Capped Area boundary. Art Holz indicated the L3 RI Report needs to include information as to why no data was collected within the previous landfill boundary because of the TCRA.

Slides 21 and 26. John Heinicke indicated the most significant difference in the conceptual site model at L3 is the presence of recently identified 55-gallon drums containing a white chalky solid material. Tom Barounis request the location of the buried 55-gallon drums. The Team pointed out the approximate location of the drums on slide 26. The location of the drums will be added to the RI work plan figures as needed.

Slides 31 and 33. Art Holz asked if ground penetrating radar was still a potential detection technology for the ceramic and glass mines at L34. Garrick Marcoux indicated that it would not be a reliable option based on the anticipated depth (greater than 1 foot below ground surface). URS has proposed to complete investigative trenching to characterize the site, which will provide a better opportunity to identify non-metallic munitions.

Slide 33. Bob Hommes asked if the work at L34 would require any road closures because the MRS is very close to Chicago Road. Travis McCoun indicated that no road closures would be required because L34 is considered a low probability area.

Slide 35. The U.S. Forest Service indicated that Cheryl Nash (URS Biologist) should contact Bill Glass (U.S. Forest Service Biologist) regarding the biological assessment. He will be able to provide additional information regarding local species.

Slide 35. The excavation subcontractor will be able to draw water from Prairie Creek for use on site (dust suppression). Tom Barounis indicated that a water sample would need to be collected at the beginning of the project or URS could use MWH sampling data to characterize the stream. Don Peterson indicated that URS should collect the water sample and not use existing data exclusively.

Slide 35. The bison will be on-site in mid-October or November.

Other. Glen Beckham asked if there were any requirements to hold a public meeting for the TCRA and indicated the public meeting should be added to the schedule if necessary. John Heinicke indicated that a public meeting is typically required after 6 months of fieldwork during a TCRA, but URS will confirm the requirements.

Other. Art Holz indicated that URS will need to schedule with the U.S. Forest Service on the first day of fieldwork to coordinate schedule, obtain keys, passes, etc.

Other. Glen Beckham requested a copy of the URS personnel staffing plan. John Heinicke will provide the plan following the meeting.

Other. Don Peterson indicated that weekly coordination meetings will need to be scheduled while TCRA work is being completed. The team held some discussion of when the meetings should be held. URS will check with the field staff to determine an appropriate time, Monday and Friday meetings will be avoided. Glen Beckham indicated a preference for Tuesday morning.

Other. The team indicated that the U.S. Forest Service should be included in the weekly meetings held during fieldwork. URS will also add the USEPA and IEPA to the monthly status report distribution.

Other. Travis McCoun indicated that URS should keep a running tally of MEC items, MPPEH items, MDAS, and man hours for the duration of the field effort.

Technical Project Planning (TPP) Meeting Sign-In Sheet
Tuesday, July 28, 2015
0900 – 1200 CDT

Name	Organization	Email	Phone
John Heinicke	URS	john.heinicke@aecom.com	402.952.2543
Travis McCown	NAB/USACE	travis.mccown@USACE.army.mil	410 962 6728
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Art Holz	Joliet AAP	ARTHUR.M.HOLZ.CIV@MAIL.MIL	815.423.2870
Garrick Marcoux	URS	garrick.marcoux@aecom.com	865-566-1013
Glen Beckham	USACE	glen.beckham@usace.army.mil	502-315-6199
Laura Ruf	USACE	laura.b.ruf@usace.army.mil	815-391-0705
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DON PETERSON	USACE	Donald.D.Peterson@USACE.ARMY.MIL	309-794-5304
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Michael Haggitt	IEPA	michael.haggitt@illinois.gov	217 558 1989
JEFF MARTINA	USDA FOREST SERVICE	JMartina@fs.fed.us	815-423-6370
Call-In			
Robin Paul	AEC		
Mac Reed	URS		
Andreas Kothleitner	URS		

Time Critical Removal Action and Munitions Response Services
Joliet Army Ammunition Plant (JOAAP), Illinois

Technical Project Planning Meeting 2

July 28, 2015

US Army Corps of Engineers
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Objective and Agenda

- Objective: Achieve consensus on the TCRA and RI Work Plans
- Agenda
  - Review the DQOs, planned work, and schedule
  - Discuss stakeholder comments on Work Plans
  - Proposed revisions from Draft-Final Work Plan are shown in this presentation using "➡"

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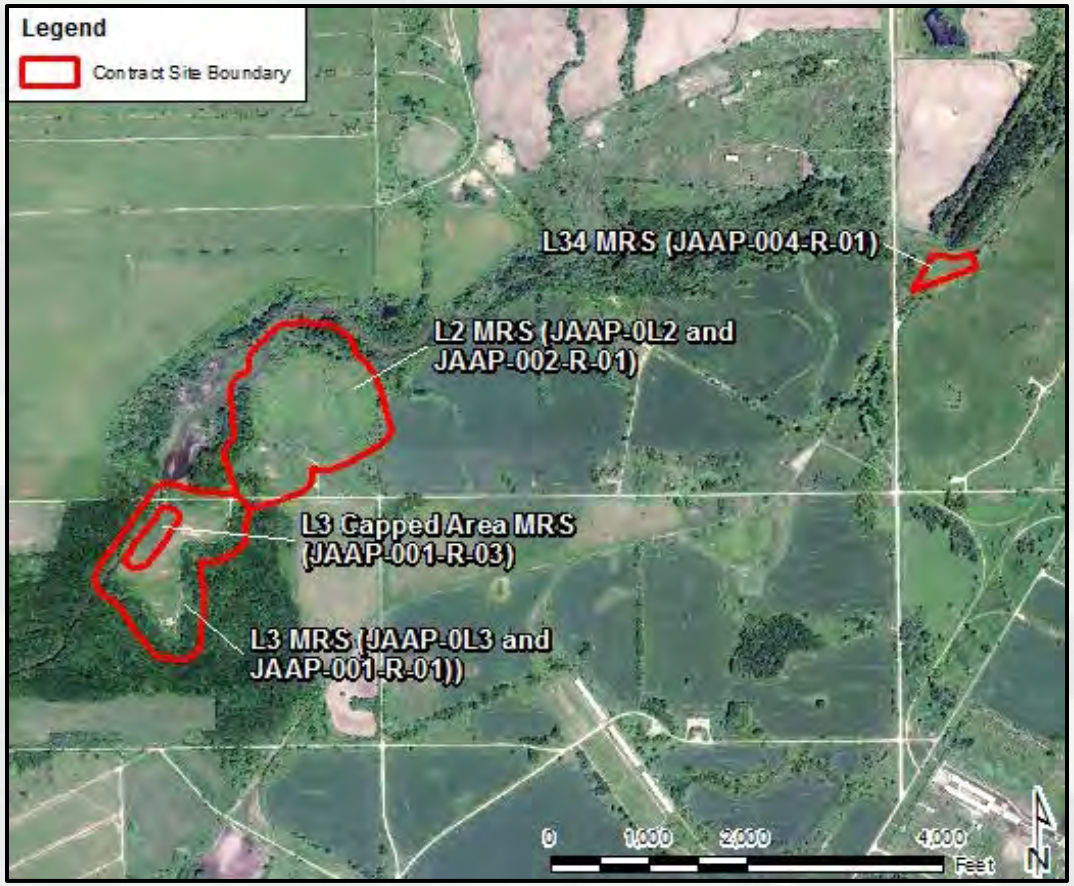
Scope of Project



- **TCRA and ROD Modification at L3 Capped Area**. MRS JAAP-001-R-03.
- **RI at L2 MRS, Explosive Burning Ground**. MRS includes IRP Site JAAP-0L2 and MRS JAAP-002-R-01(L2 200-ft buffer).
- **RI At L3 MRS, Demolition Area.** MRS includes IRP Site JAAP-0L3 and MRS JAAP-001-R-01 (L3 200-ft buffer).
- **RI/FS and PP/ROD at L34 MRS Former Burning Area.** MRS JAAP-004-R-01.

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L3 Capped Area Site Map (3.3 acres)

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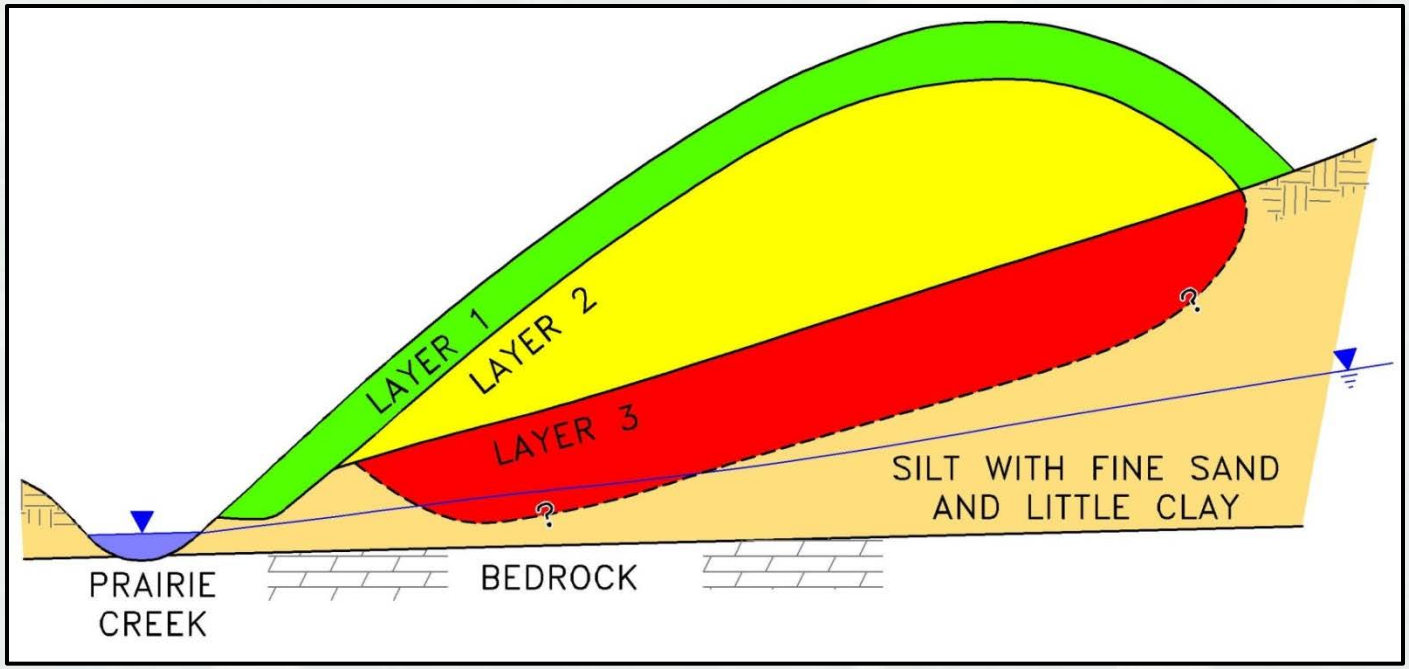
Conceptual Site Model

L3 Capped Area JAAP-001-R-03 (3.3 acres)



Layer 1: 22,000 cy, clean topsoil and impermeable liner.

Layer 2: 30,000 cy, L2 popping furnace material and L3 berms, low probability of MEC/MPPEH.

Layer 3: 31,000 cy, waste left in place, MC-contaminated soil and CD with potential ACM, medium to high probability of MEC/MPPEH.

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TCRA Data Quality Objectives

L3 Capped Area JAAP-001-R-03 (3.3 acres)

DQO	Project Specific Action
1. Statement of the Problem	▪ L3 Capped Area poses a threat to human health and environment because of potential for fire or explosion, and because weather conditions may cause MEC, MC, and/or ACM to be released and/or migrate from the landfill.
2. Identify the Goal of the Removal	▪ Remove, characterize, and properly dispose of all potential MEC/MPPEH to eliminate potential explosives hazard. ▪ Remove, characterize, and properly dispose of all soil contaminated above the ROD cleanup levels to remove potential unacceptable human health and environmental risks.

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TCRA Data Quality Objectives

L3 Capped Area JAAP-001-R-03 (3.3 acres)

DQO	Project Specific Action
3. Identify Information Inputs	▪ Historical use of L3. ▪ Previous investigation data, remedial action, and munitions responses, including construction records from L3 cap construction. ▪ The COCs, remediation goals, and confirmatory sampling procedures established in the 2004 ROD. ▪ Decisions made during the TPP. ▪ Data collected during the TCRA, to include survey of excavation areas and volumes, types of materials removed, waste characterization sampling data and disposal records, geophysics data, MC confirmatory sampling data, and site restoration.
4. Define the Boundaries of the Study	▪ Areal extent of L3 Capped Area is 3.3 acres. ▪ Vertical extent of TCRA excavation is to bottom of Layer 3 waste but may be limited to depth to groundwater.

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TCRA Data Quality Objectives

L3 Capped Area JAAP-001-R-03 (3.3 acres)

DQO	Project Specific Action
5. Develop the Analytical Approach	▪ If excavation bottom is visibly free of debris and stained soil, then stop excavating and inspect to verify native soil. Else, continue excavating. ▪ If excavation bottom is verified to be native soil, then collect analog geophysics to verify that metal anomalies have been removed. Else, continue removal to resolve all anomalies. ▪ If excavation bottom is verified to be free of anomalies, then collect confirmatory soil samples to verify that COCs are below the lower cleanup values (2004 ROD). Else, continue removal of soil until COCs are below lower cleanup values. ▪ If excavation encounters groundwater, then stop excavating deeper. Else, continue excavating if debris and/or stained soil are visible. ▪ If waste characterization sampling verifies soil and debris are a non-hazardous special waste or ACM, then dispose of waste at Prairie View RDF. Else, if sampling indicates waste is characteristically hazardous, dispose at Peoria Landfill.

TCRA Data Quality Objectives

L3 Capped Area JAAP-001-R-03 (3.3 acres)

DQO	Project Specific Action
6. Specify Performance or Objective Criteria	▪ To verify MEC removal, perform 100% visual inspection and 100% analog geophysics. Resolve all detected anomalies. ▪ To verify MC-contaminated soils have been removed, collect and evaluate confirmatory soil samples using the frequency, list of COCs, and evaluation procedures in the 2004 ROD.
7. Develop the Detailed Plan for Obtaining the Data	▪ Install erosion controls before earth-disturbing activity and maintain erosion controls until site is restored. ▪ Establish and maintain MSDs and procedures using the 75mm (HE) and coordinate road closures with stakeholders. ▪ Remove Layer 1 and re-use it for final backfill. Some of Layer 1 needed to level out sift plant area. Remove and dispose of impermeable liner materials at Prairie View RDF. ▪ Remove, sort, and characterize Layer 2 and 3. Excavate and sort oversize and possible asbestos materials at excavation area, convey 6-inch minus material to sift plant, sort through sift plant, complete MPPEH inspection, and stockpile/characterize/dispose soil. ▪ Restore site by placing clean soil from Layer 1 and seeding.

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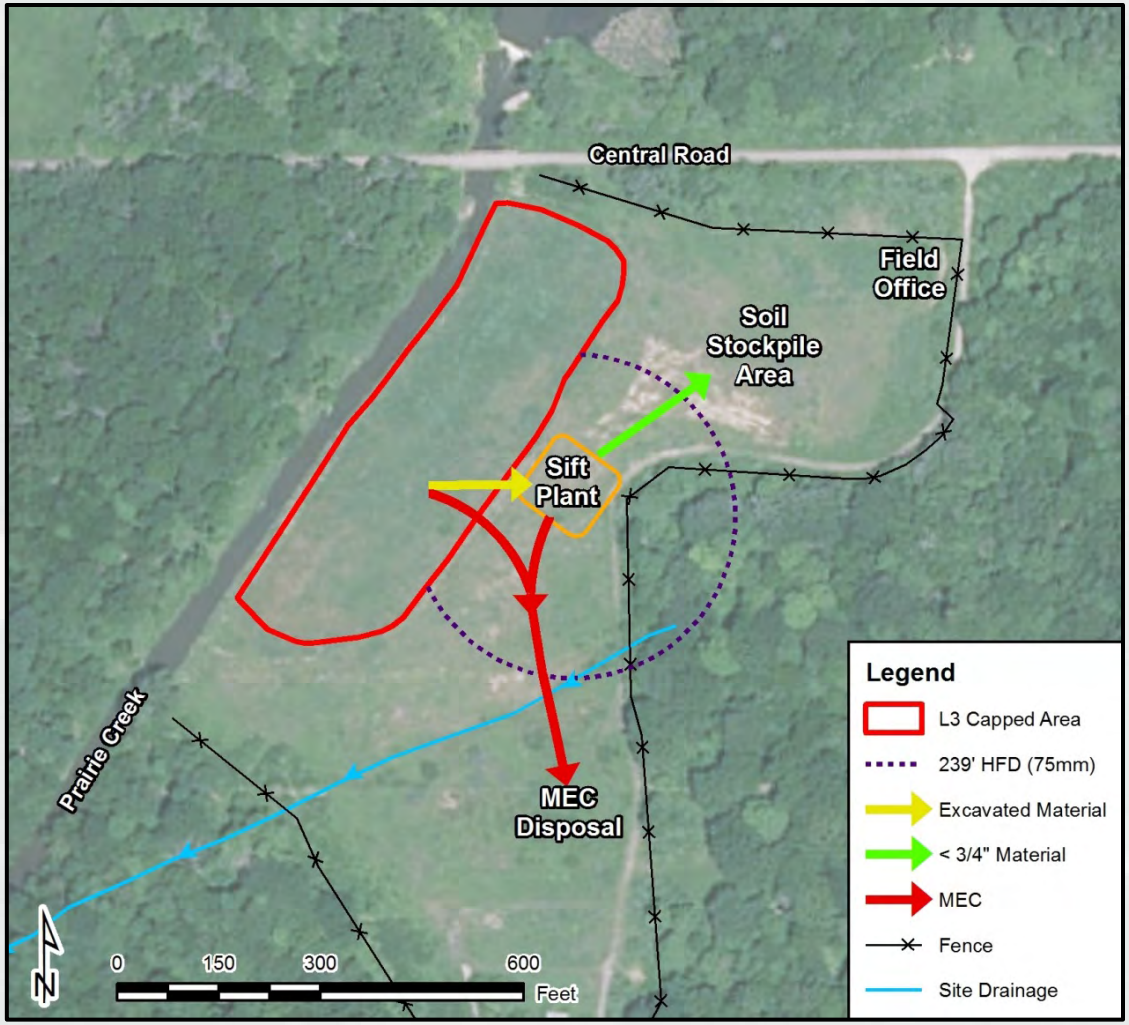
TCRA Activities - Locations

L3 Capped Area JAAP-001-R-03 (3.3 acres)



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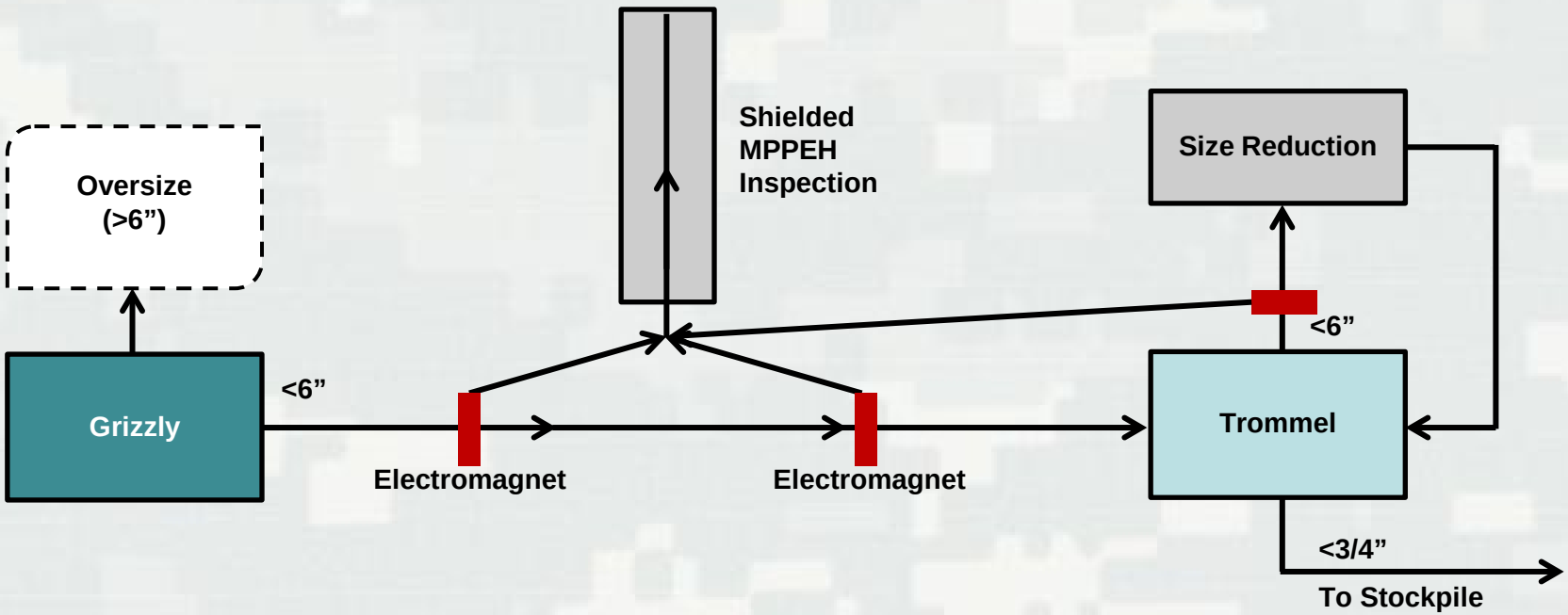
TCRA Activities - Sorting

L3 Capped Area JAAP-001-R-03 (3.3 acres)



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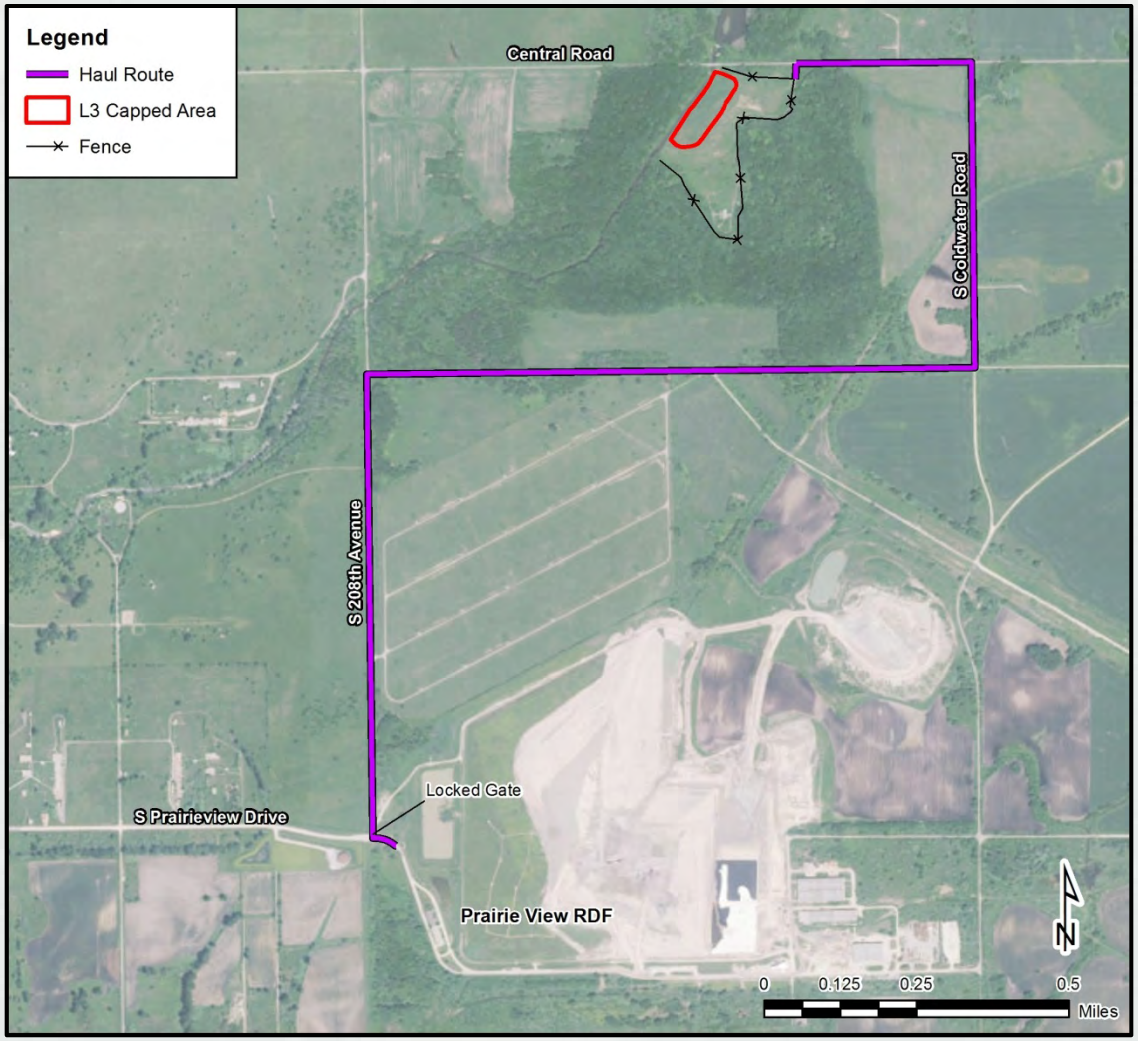
Route to Prairie View RDF

L3 Capped Area JAAP-001-R-03 (3.3 acres)



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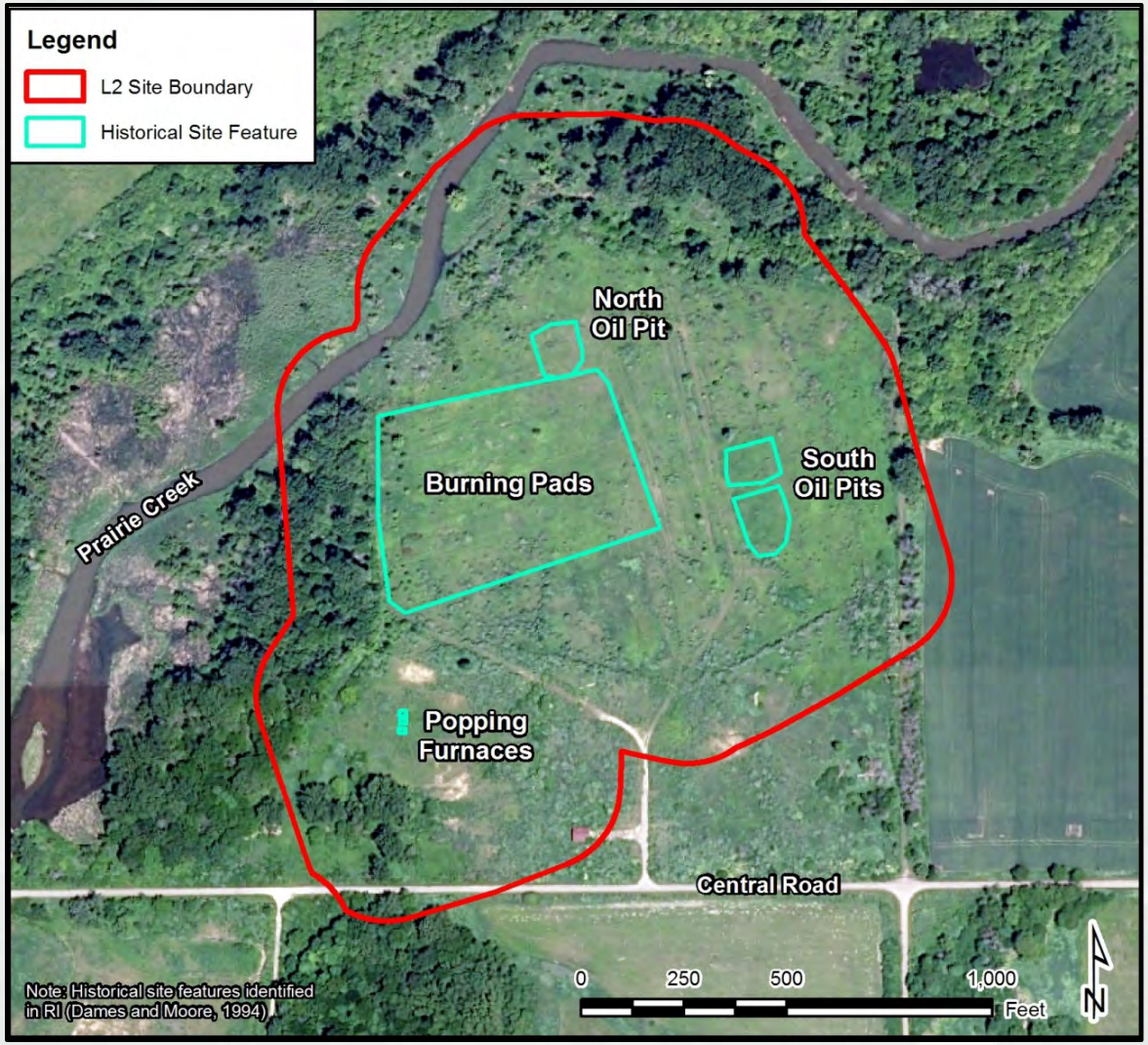
L2 MRS Map (52 acres)



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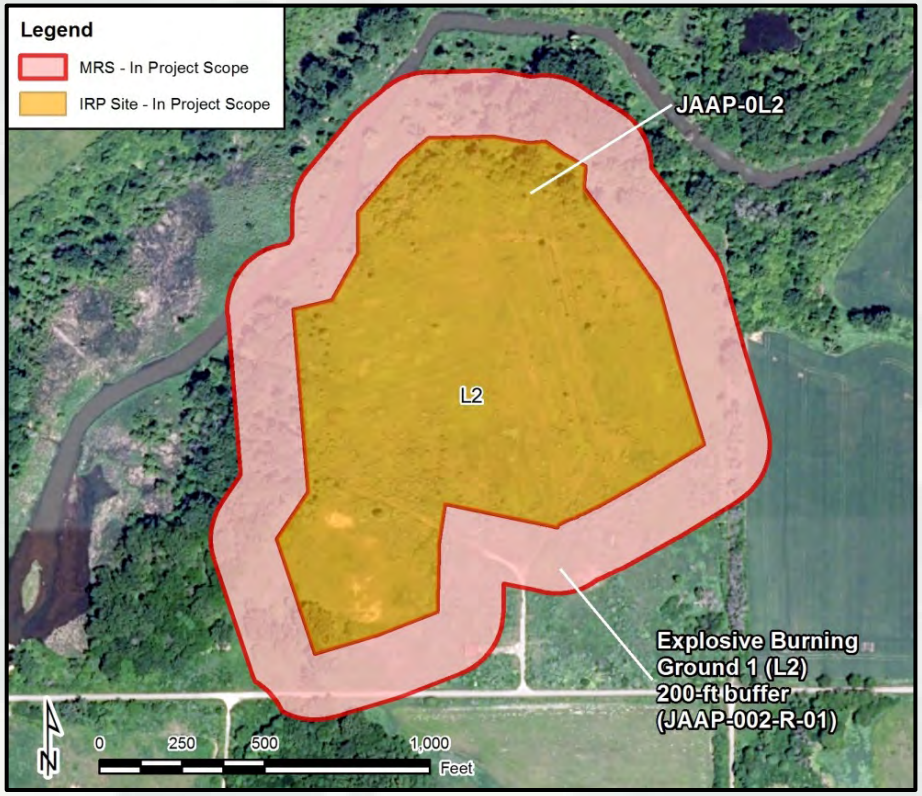
Conceptual Site Model

L2 MRS – 52 acres

- MRS formerly used for open burning of explosives and explosive wastes.
- MRS included six burning pads, three popping furnaces, a bermed area, and several oil pits.
- Historical features were removed during previous IRP remedial action.
- MEC removal action was completed over entire MRS (52 acres shaded yellow and pink).
- MC-contaminated soil remediation completed throughout IRP site (shaded yellow) in accordance with 2004 ROD and documented by Closure Report.
- MEC and associated MC may be present at the MRS.
- Potentially complete MEC and MC pathways for site worker, construction worker, employee, visitor/trespasser, and ecological receptor.



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RI Data Quality Objectives

L2 MRS – 52 acres

DQO	Project Specific Action
1. Statement of the Problem	▪ MEC remaining within the MRS poses an acute hazard of unintentional detonation to receptors. It is also possible that surface and subsurface MEC remaining at the MRS have been partially detonated or deteriorated over time, and may have contaminated soil.
2. Identify the Goal of the Study	Complete an RI that answers the following questions: ▪ Is MEC present at the MRS in surface and subsurface soil? ▪ What is the nature and extent of MEC? ▪ Has a release of MC occurred (i.e., concentrations above the 2004 ROD lower cleanup values)? ▪ If a release has occurred, what is the nature and extent of the MC release? ▪ Does remaining MEC/MC pose a potential hazard/risk to current and future receptors?

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RI Data Quality Objectives

L2 MRS – 52 acres

DQO	Project Specific Action
3. Identify Information Inputs	▪ Historical information and reports from previously completed investigations and remedial/removal actions. ▪ The COCs and remediation goals established in the 2004 ROD. ▪ Decisions made during TPP meetings. ▪ Most reasonably anticipated future land use is recreational (i.e., Midewin National Tallgrass Prairie). ▪ DGM and analog transect and grid surveys and intrusive investigations of anomalies. ▪ Discrete MC samples (metals and explosives).
4. Define the Boundaries of the Study	▪ Spatial boundaries of the investigation will include the entire MRS (IRP L2 site and plus the 200-ft Buffer MRS [JAAP-002-R-01] = 52 acres). ▪ The vertical boundaries of the study will be from the ground surface to the maximum depth of detection of the geophysical instrument in use.

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RI Data Quality Objectives

L2 MRS – 52 acres

DQO	Project Specific Action
5. Develop the Analytical Approach	▪ If an anomaly detected during DGM survey meets anomaly selection criteria, then intrusively investigate the anomaly. ▪ If site conditions prevent collection of DGM data, then complete analog survey and intrusively investigate all anomalies. ▪ If DGM transect identifies high anomaly density areas or evidence of a pit, then 100 percent coverage grids or additional transects to delineate. ▪ If MEC items with exposed filler are discovered, then collect discrete MC soil samples directly below the item. ▪ If sample results exceed the lower cleanup value (2004 ROD), collect additional samples vertically (at 2-ft intervals) and horizontally (at 10-ft step-outs). ▪ If MC surface soil (0 to 0.5 ft bgs) result exceeds the lower cleanup goal (2004 ROD), then collect surface soil sample(s) in downgradient direction to evaluate potential migration to Prairie Creek. ▪ If downgradient surface soil samples exceed a lower cleanup value (2004 ROD) and potential migration is apparent, then collect surface water and sediment samples. ▪ If MEC is found during the RI, then complete the MEC Hazard Assessment.

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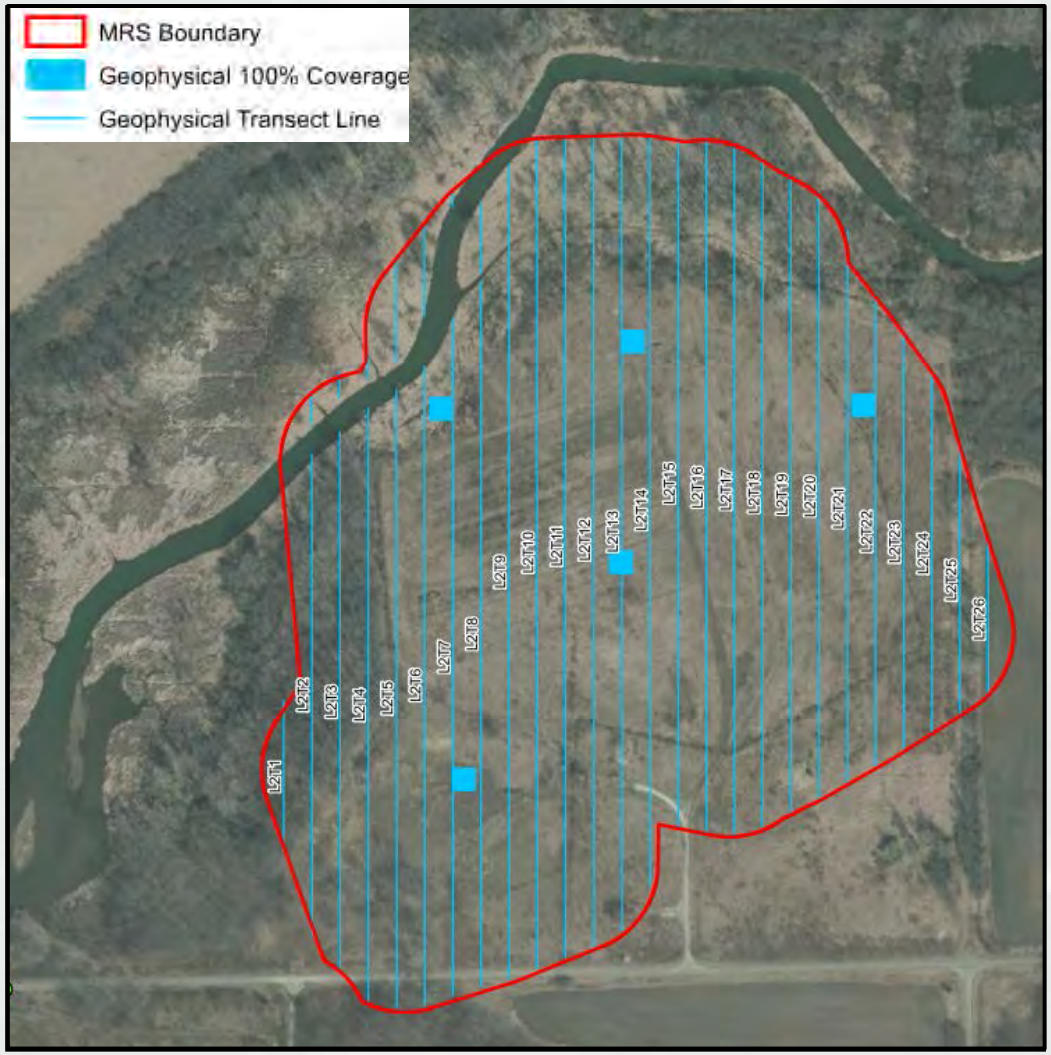
RI Data Quality Objectives

L2 MRS – 52 acres

DQO	Project Specific Action
6. Specify Performance or Acceptance Criteria	▪ Geophysical activities will achieve applicable quality objectives as stated in the GIP which will be confirmed by the GSV process. ▪ Data usability assessment, in combination with professional judgment, will evaluate the usability of analytical data for decision making. ▪ Analytical method reporting and/or detection limits will be sufficiently low to meet the lower cleanup values (2004 ROD) for each constituent. ▪ MC sample results used for decision making purposes will meet the Precision, Accuracy, Representativeness, Completeness, Comparability, and Sensitivity (PARCCS) parameters criteria. ▪ Replicate incremental samples will provide a measure of total sampling error. Replicate data will be used to calculate an RSD, which will be considered acceptable if less than 30%.
7. Develop the Detailed Plan for Obtaining the Data	▪ Collect approximately 37,000 linear ft of 3-ft wide transects, 60-ft spacing, DGM (EM-61) and analog transect survey to provide a 95 percent confidence that there is no more than 1.0 MEC item/acre at L2. ▪ Intrusively investigate anomalies that meet the anomaly selection criteria. ▪ Collect additional 100 percent coverage grids in high anomaly density areas that are identified by the VSP output. ▪ Collect MC soil samples at intrusive investigation locations where MEC with exposed explosive filler is identified. ▪ Collect incremental surface soil samples after MEC demolition operations to determine if explosives in soil exceed the lower cleanup values (2004 ROD).

Planned RI Activities

L2 MRS – 52 acres



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L3 MRS Map (43 acres)

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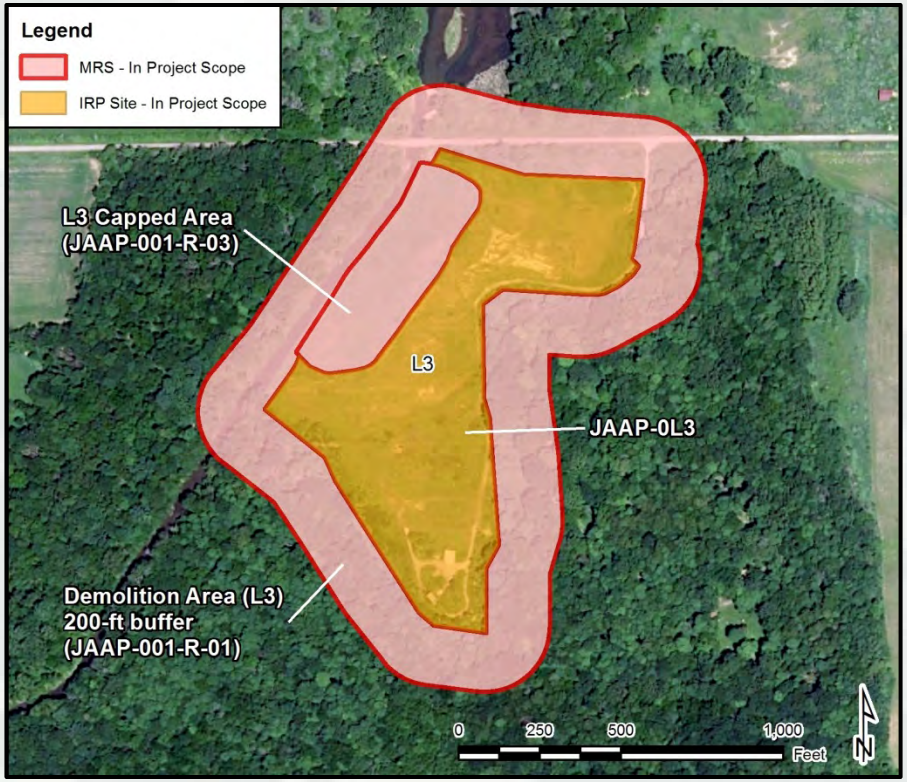
Conceptual Site Model

L3 MRS – 43 acres

- MRS formerly used for open burning of explosives and explosive wastes.
- Most historical features were removed during previous IRP remedial action.
- IRP remedial action included construction of a landfill cap over 3.3 acres (L3 Capped area); this area is the subject of the TCRA.
- MEC removal action was completed over 40 acres (shaded yellow and pink except L3 Capped Area) to 1.0 ft bgs.
- MC-contaminated soil remediation completed at IRP site (shaded yellow) in accordance with 2004 ROD and documented by Closure Report.
- Buried drums containing a white chalky solid were identified during Verification Inspection. The drums were noted to be deteriorating.
- MEC and associated MC may be present at the MRS.
- Potentially complete MEC and MC pathways for site worker, construction worker, employee, visitor/trespasser, and ecological receptor.



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RI Data Quality Objectives

L3 MRS – 43 acres

DQO	Project Specific Action
1. Statement of the Problem	▪ MEC remaining within the MRS poses an acute hazard of unintentional detonation to receptors. It is also possible that surface and subsurface MEC remaining at the MRS have been partially detonated or deteriorated over time, and may have contaminated soil.
2. Identify the Goal of the Study	Complete an RI that answers the following questions: ▪ Is MEC present at the MRS in surface and subsurface soil? ▪ What is the nature and extent of MEC? ▪ Has a release of MC occurred (i.e., concentrations above the 2004 ROD lower cleanup values)? ▪ If a release has occurred, what is the nature and extent of the MC release? ▪ Does remaining MEC/MC pose a potential hazard/risk to current and future receptors? ▪ What is the number and lateral/vertical extent of the drums? ▪ What is the extent of the release of the white chalky solid from the drums?

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RI Data Quality Objectives

L3 MRS – 43 acres

DQO	Project Specific Action
3. Identify Information Inputs	▪ Historical information and reports from previously completed investigations and remedial/removal actions. ▪ The COCs and remediation goals established in the 2004 ROD. ▪ Decisions made during TPP meetings. ▪ Most reasonably anticipated future land use is recreational (i.e., Midewin National Tallgrass Prairie). ▪ DGM and analog transect and grid surveys and intrusive investigations of anomalies. ▪ Discrete MC samples (metals and explosives).
4. Define the Boundaries of the Study	▪ Spatial boundaries of the investigation will include the entire MRS (IRP L3 site and plus the 200-ft Buffer MRS [JAAP-001-R-01] = 43 acres). ▪ The vertical boundaries of the study will be from the ground surface to the maximum depth of detection of the geophysical instrument in use.

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RI Data Quality Objectives

L3 MRS – 43 acres

DQO	Project Specific Action
5. Develop the Analytical Approach	▪ If an anomaly detected during DGM survey meets anomaly selection criteria, then intrusively investigate the anomaly. ▪ If site conditions prevent collection of DGM data, then complete analog survey and intrusively investigate all anomalies. ▪ If DGM transect identifies high anomaly density areas or evidence of a pit, then complete 100 percent coverage grids or additional transects to delineate. ▪ If MEC items with exposed filler are discovered, then collect discrete MC soil samples directly below the item. ▪ If sample results exceed the lower cleanup value (2004 ROD), collect additional samples vertically (at 2-ft intervals) and horizontally (at 10-ft step-outs). ▪ If MC surface soil (0 to 0.5 ft bgs) result exceeds the lower cleanup goal (2004 ROD), then collect surface soil sample(s) in downgradient direction to evaluate potential migration to Prairie Creek. ▪ If downgradient surface soil samples exceed a lower cleanup value (2004 ROD) and potential migration is apparent, then collect surface water and sediment samples. ▪ If MEC is found during the RI, then complete the MEC Hazard Assessment. ▪ If drums are found and the contents do not appear to be the same material recovered during previous investigations (i.e., white chalky solid), report information to the project team and evaluate a new sampling approach.

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RI Data Quality Objectives

L3 MRS – 43 acres

DQO	Project Specific Action
6. Specify Performance or Acceptance Criteria	▪ Geophysical activities will achieve applicable quality objectives as stated in the GIP which will be confirmed by the GSV process. ▪ Data usability assessment, in combination with professional judgment, will evaluate the usability of analytical data for decision making. ▪ Analytical method reporting and/or detection limits will be sufficiently low to meet the lower cleanup values (2004 ROD) for each constituent. ▪ MC sample results used for decision making purposes will meet the Precision, Accuracy, Representativeness, Completeness, Comparability, and Sensitivity (PARCCS) parameters criteria. ▪ Replicate incremental samples will provide a measure of total sampling error. Replicate data will be used to calculate an RSD, which will be considered acceptable if less than 30%.
7. Develop the Detailed Plan for Obtaining the Data	▪ Collect approximately 25,000 linear ft of 3-ft wide transects, 60-ft spacing, DGM (EM-61) and analog transect survey to provide a 95 percent confidence that there is no more than 1.0 MEC item/acre at L3. ▪ Intrusively investigate anomalies that meet the anomaly selection criteria. ▪ Collect additional 100 percent coverage grids in high anomaly density areas that are identified by the VSP output. ▪ Collect MC soil samples at intrusive investigation locations where MEC with exposed explosive filler is identified. ▪ Collect incremental surface soil samples after MEC demolition operations to determine if explosives in soil exceed the lower cleanup values (2004 ROD).

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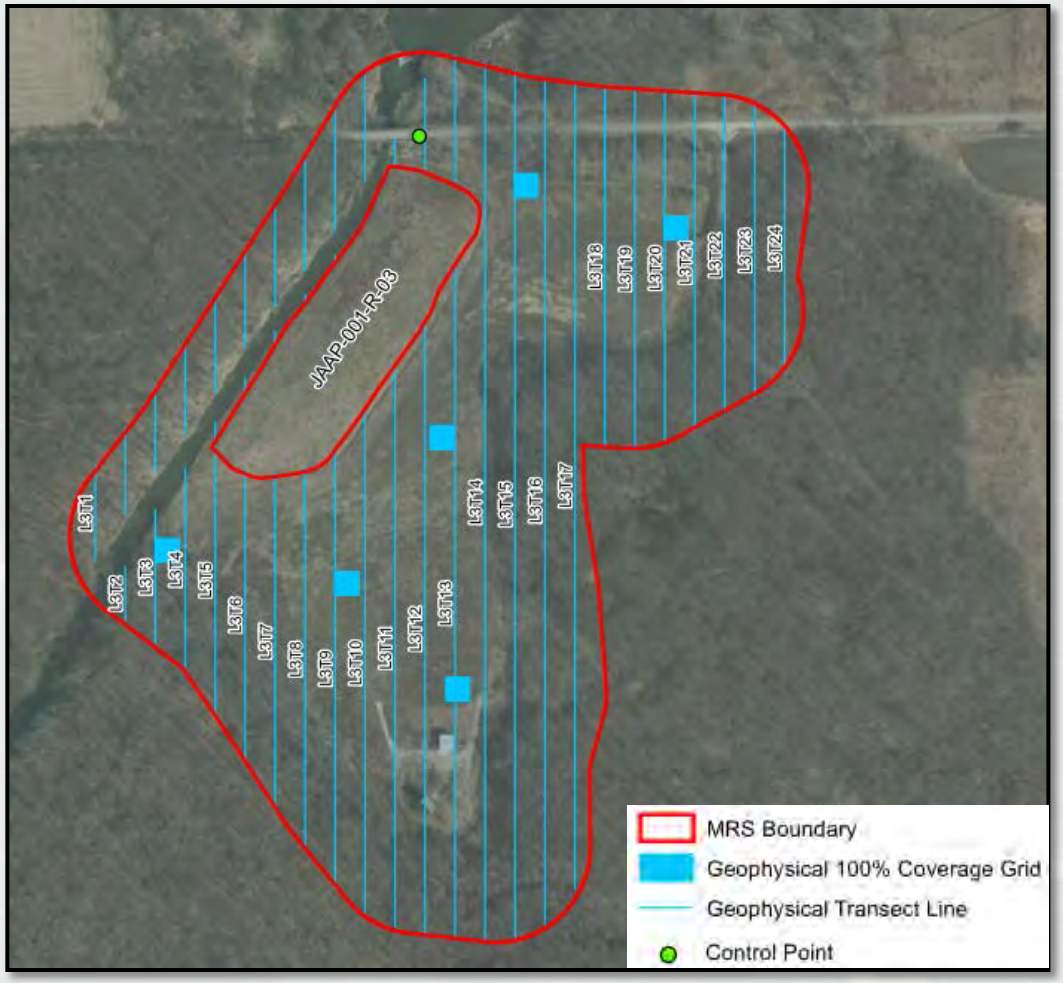
Planned RI Activities

L3 MRS – 43 acres



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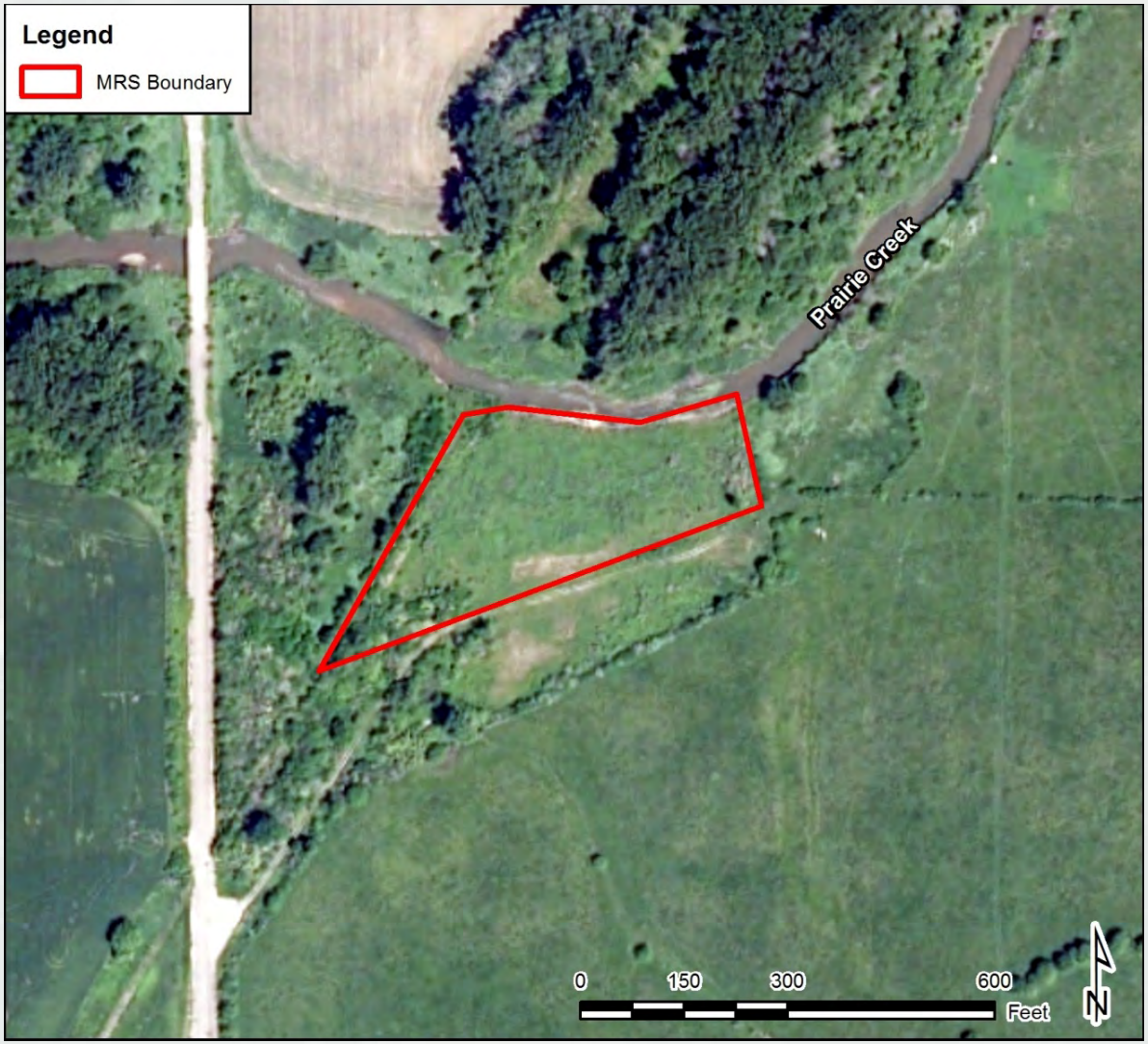
L34 MRS Map (3.5 acres)



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Conceptual Site Model

L34 MRS – 3.5 acres

- Former burning area used as disposal area for demilitarized ceramic mines.
- Historical soil results for metals, explosives, VOCs, SVOCs, PCBs, and pesticides below ROD PRGs, so site was listed as NFA in 1998 ROD (IRP).
- MEC removal action was completed over entire MRS to 1.0 ft bgs:
  - 5,696 cubic yards were excavated and sifted to 1 inch, metal and burn debris removed, and remainder of soil placed back on site.
  - No MEC was found.
  - 2,531 lbs of MD and 2,583 lbs of cultural debris were shipped to smelter.
  - 1,247 lbs of soil and rock with burn debris waste from “60 ft of burn pit” disposed at Prairie View RDF. Debris waste profile indicates it contained 1 – 2% ceramic/glass.
  - Upper 1.0 ft of soil was placed back on site after sifting.
- Non-metallic MEC/MPPEH (ceramic mines) and MC including burn residuals may be present.
- Potentially complete MEC and MC pathways for site worker, construction worker, employee, visitor/trespasser, and ecological receptor.

BUILDING STRONG®

RI Data Quality Objectives

L34 MRS – 3.5 acres

DQO	Project Specific Action
1. Statement of the Problem	▪ Remaining MEC poses an acute hazard of unintentional detonation to receptors. It is also possible that surface and subsurface MEC remaining at the MRS have been partially detonated or deteriorated over time, and may have contaminated soil.
2. Identify the Goal of the Study	Complete an RI that answers the following questions: ▪ Is MEC (non-metallic mines or other) present at the MRS in surface and subsurface soil? ▪ What is the nature and extent of MEC? ▪ Is burn residual present below the upper 1.0 ft of soil that was replaced? ▪ Has a release of MC occurred (i.e., concentrations above 2004 ROD lower cleanup values)? ▪ If a release has occurred, what is the nature and extent of MC release? ▪ Does remaining MEC/MC pose a potential hazard/risk to current and future receptors?

RI Data Quality Objectives

L34 MRS – 3.5 acres

DQO	Project Specific Action
3. Identify Information Inputs	▪ Historical information and reports from previously completed investigations and remedial/removal actions. ▪ The COCs and remediation goals established in the 2004 ROD. ▪ Decisions made during TPP meetings. ▪ Most reasonably anticipated future land use is recreational (i.e., Midewin National Tallgrass Prairie). ▪ Investigative trenching and visual inspection results. ▪ Discrete MC sample results from below MEC items with exposed filler and burning areas if identified.
4. Define the Boundaries of the Study	▪ Spatial boundaries of the investigation will be the L34 MRS (JAAP-004-R-01), approximately 3.5 acres. ▪ The vertical boundaries of the study will be from the ground surface to a minimum depth of 2 ft, to be extended vertically downward (no deeper than water table) if MPPEH is observed or an MC release has occurred.

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RI Data Quality Objectives

L34 MRS – 3.5 acres

DQO	Project Specific Action
5. Develop the Analytical Approach	➡ ▪ If investigative trenching identifies subsurface disposal or burning activity, then extend trenching vertically and horizontally to delineate the volume of material. ▪ If MEC items with exposed filler are discovered, then collect discrete MC soil samples directly below the item. ➡ ▪ If burned material is identified, then collect discrete MC soil samples to determine nature and extent. ▪ If discrete sample results exceed the lower cleanup value (2004 ROD), collect additional samples vertically (at 2-ft intervals) and horizontally (at 10-ft step-outs). ▪ If discrete surface soil (0 to 0.5 ft bgs) result exceeds the lower cleanup value (2004 ROD), then collect discrete surface soil sample(s) in downgradient direction to evaluate potential migration to Prairie Creek. ▪ If the downgradient surface soil samples exceed a lower cleanup value (2004 ROD) and potential migration is apparent, then collect surface water and sediment samples. ▪ If MEC is found during the RI, then complete the MEC Hazard Assessment.

➡ = change from Draft Final WP

BUILDING STRONG®

RI Data Quality Objectives

L34 MRS – 3.5 acres

DQO	Project Specific Action
6. Specify Performance or Objective Criteria	▪ Trenches will be 100% visually inspected, logged, and site-related activities (e.g., ceramic mine disposal, burn residuals) will be photographed and recorded using GPS. ▪ Data usability assessment, in combination with professional judgment, will evaluate the usability of analytical data for decision making. ▪ Analytical method reporting and/or detection limits will be sufficiently low to meet lower cleanup values (2004 ROD) for each constituent. ▪ MC sample results used for decision making purposes will meet the Precision, Accuracy, Representativeness, Completeness, Comparability, and Sensitivity (PARCCS) parameters criteria. ▪ Replicate incremental samples will provide a measure of total sampling error. Replicate data will be used to calculate an RSD, which will be considered acceptable if less than 30%.
7. Develop the Detailed Plan for Obtaining the Data	▪ Complete 4,128 linear ft of investigative trenches (2-ft deep by 30-ft on center) across entire MRS. ▪ Collect discrete MC soil samples at locations where MEC with exposed explosive filler or burned material is identified. ▪ Collect incremental surface soil samples after MEC demolition operations to determine if explosives in soil exceed the lower cleanup values (2004 ROD).

BUILDING STRONG®

Planned RI Activities

L34 MRS – 3.5 acres

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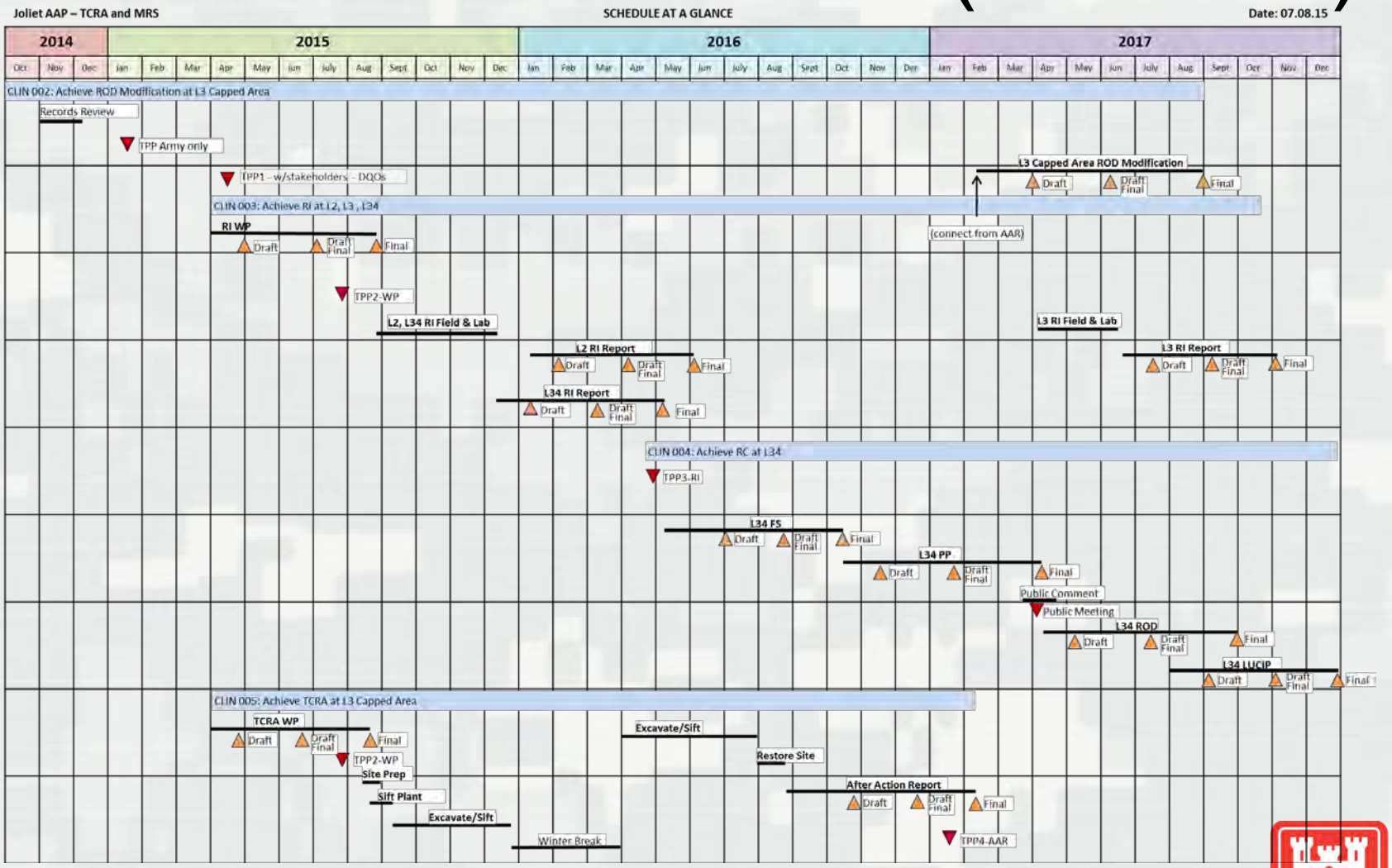
Schedule at a Glance (handout)



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Logistics / Additional Issues

- Prior to intrusive activity, biologist will evaluate MRSs for ecological receptors and critical habitat.
- Access roads, haul route, and entry gate.
- Location of nearest emergency shelter.
- Source of water.
- Unexpected finds during TCRA or RI.
- Coordination with USEPA, IEPA, and USFS during work.
- Status of Bison range.

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Photographic Log

PHOTOGRAPHIC LOG

Remedial Investigation at the L2 MRS Joliet Army Ammunition Plant, Illinois	USACE – Louisville District	Contract No. W912DY-09-D-0061

Photograph No. 1

Description:

Vegetation removal at the L2 MRS.

Photograph No. 2

Description:

Vegetation was cut to support effective DGM collection.

PHOTOGRAPHIC LOG

Remedial Investigation at the L2 MRS Joliet Army Ammunition Plant, Illinois	USACE – Louisville District	Contract No. W912DY-09-D-0061

Photograph No. 3

Description:

Transects at the L2 MRS.

Photograph No. 4

Description:

Analog survey conducted at the L2 MRS.

PHOTOGRAPHIC LOG

Remedial Investigation at the L2 MRS Joliet Army Ammunition Plant, Illinois	USACE – Louisville District	Contract No. W912DY-09-D-0061

Photograph No. 5

Description:

DGM was completed using an EM61-MK2 paired with real-time kinematic GPS.

Photograph No. 6

Description:

Intrusive investigation at the L2 MRS.

PHOTOGRAPHIC LOG

Remedial Investigation at the L2 MRS Joliet Army Ammunition Plant, Illinois	USACE – Louisville District	Contract No. W912DY-09-D-0061

Photograph No. 7

Description:

Intrusive investigation at the L2 MRS.

Photograph No. 8

Description:

Example of munitions-related MDAS and other debris removed during RI field activities at L2.

PHOTOGRAPHIC LOG

Remedial Investigation at the L2 MRS Joliet Army Ammunition Plant, Illinois	USACE – Louisville District	Contract No. W912DY-09-D-0061

Photograph No. 9

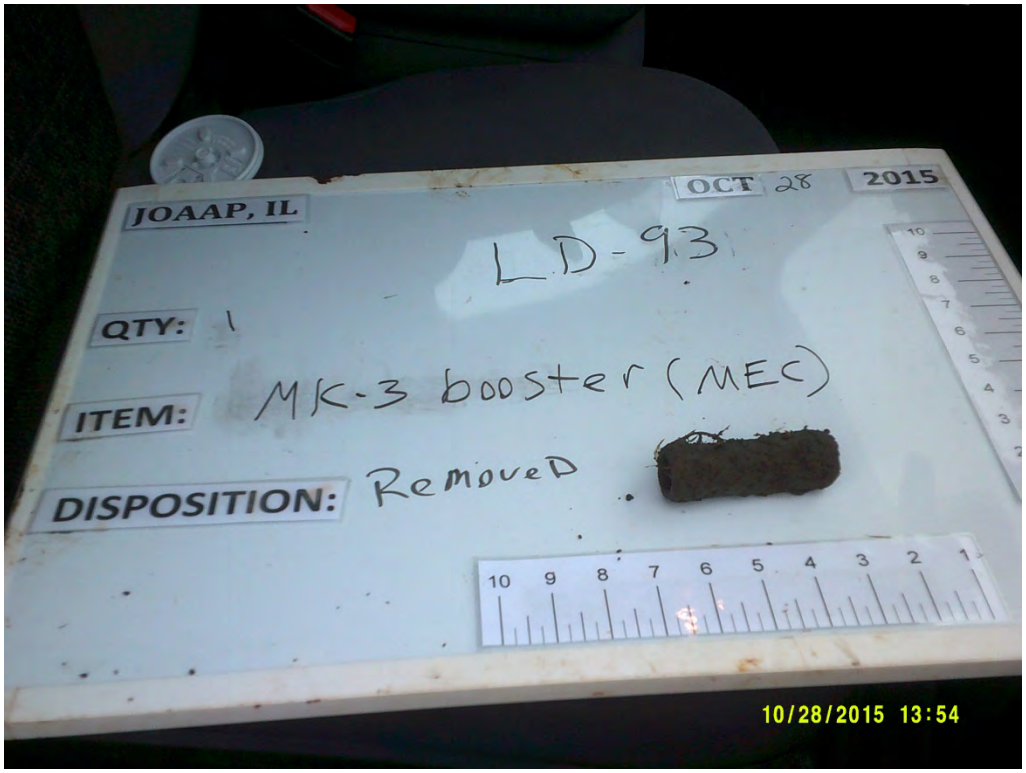
Description:

Example of munitions-related MDAS (fuze components) and other debris removed during RI field activities at L2.

Photograph No. 10

Description:

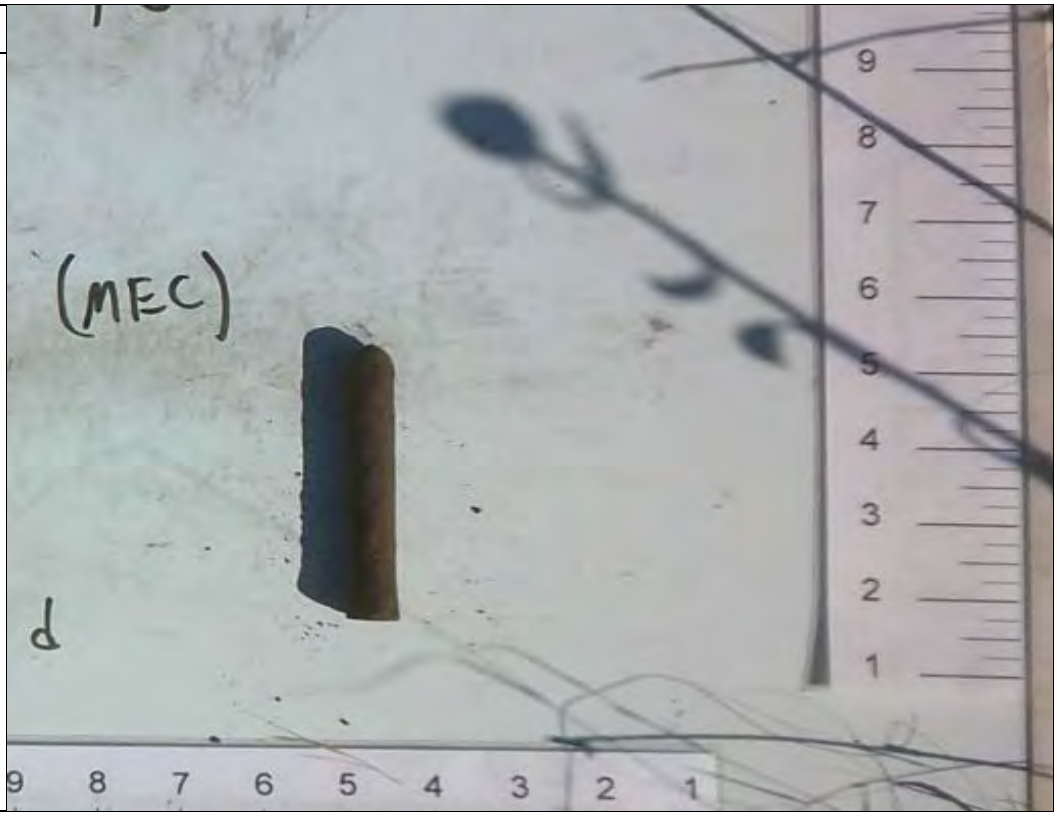
One of two Mk-III boosters (MEC) removed during RI field activities at L2.



Photograph No. 11

Description:

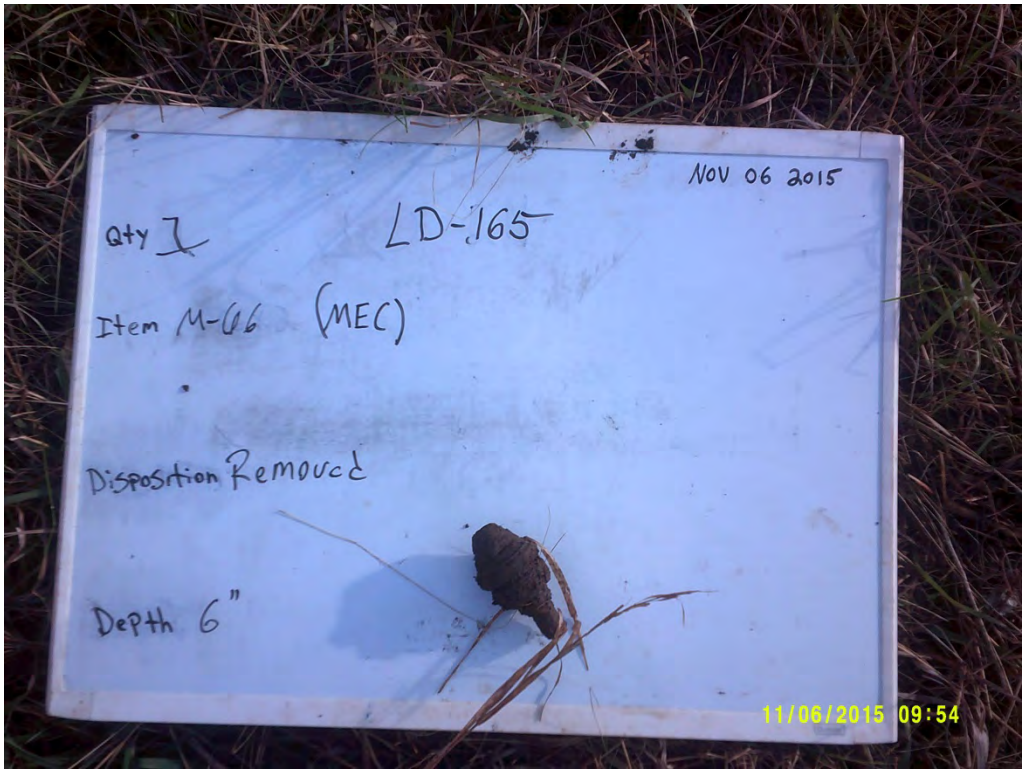
MEC (Igniter) removed during RI field activities at L2.



Photograph No. 12

Description:

One of 15 M66 BD fuzes (MEC) removed during RI field activities at L2.



PHOTOGRAPHIC LOG

Remedial Investigation at the L2 MRS Joliet Army Ammunition Plant, Illinois	USACE – Louisville District	Contract No. W912DY-09-D-0061

Photograph No. 13

Description:

Incremental sampling grid at consolidated shot location.

DGM Survey Data and IVS Memorandum

Appendix E contains the native files and is included as a separate folder on the enclosed CD.

MEC Accountability Log

MEC ACCOUNTABILITY LOG

Item ID	Location	Y Coordinate (IL State Plane, ft)	X Coordinate (IL State Plane, ft)	Date Found	Date Destroyed
M66 BD Fuze	Analog T16	1048859.503	1712662.654	10/21/2015	10/21/2015
M66 BD Fuze	Analog T16	1048854.934	1712670.805	10/21/2015	10/21/2015
M66 BD Fuze	Analog T16	1048846.199	1712716.090	10/22/2015	10/22/2015
M66 Fuze (6 each)	HD-7	1048528.189	1712520.980	10/27/2015	10/27/2015
Mk-III Booster	LD-93	1711649.629	1049230.508	10/28/2015	10/28/2015
M66 BD Fuze	LD-88	1711546.006	1049120.660	10/28/2015	10/28/2015
Mk-III Booster	LD-103	1711231.431	1048093.402	11/3/2015	11/3/2015
Igniter	LD-163	1711585.008	1048387.765	11/3/2015	11/3/2015
M66 BD Fuze	LD-223	1712407.773	1048986.193	11/6/2015	11/6/2015
M66 BD Fuze	LD-181	1712655.925	1048603.756	11/6/2015	11/6/2015
M66 BD Fuze	LD-211	1712583.204	1048928.155	11/6/2015	11/6/2015
M66 BD Fuze	LD-211	1712583.204	1048928.155	11/6/2015	11/6/2015
M66 BD Fuze	LD-165	1711498.858	1048469.730	11/6/2015	11/6/2015

APPENDIX G

Daily Field Management Reports
(provided on CD)

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 001 Date: 09-29-2015

DAILY SITE REPORT

Site Operating Hours: 1300-1400

Work Performed: Flagged perimeter of L34 for vegetation removal using handheld GeoXT. Several inaccessible areas due to heavy vegetation were noted at the berm and in the southwest corner.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Zachary Tannehill

Zac Tannehill
Site Manager
09-29-2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 001 Date: 09-29-2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Deputy PM: Zac Tannehill – 1	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea (off site)	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington (off site)	**USACE OESS:**
URS Project Geo: Darrell Hall (off site)	
URS Geo QC: Garrick Marcoux (off site)	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech II	Trevor Brown	1	Escort

Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 002 Date: 09-30-2015

DAILY SITE REPORT

Site Operating Hours: 0900-1530

Work Performed: Flagged transects at L2. Marked transects T2 through T12, many inaccessible areas throughout site. Encountered drainages, berms, and swampy areas at various areas around the site. T1 was inaccessible.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Zachary Tannehill

Zac Tannehill
Site Manager
09-30-2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 002 Date: 09-30-2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Deputy PM: Zac Tannehill – 5	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea (off site)	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington (off site)	**USACE OESS:**
URS Project Geo: Darrell Hall (off site)	
URS Geo QC: Garrick Marcoux (off site)	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech II	Trevor Brown	5	Escort

Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 003 Date: 10-01-2015

DAILY SITE REPORT

Site Operating Hours: 0900-1600

Work Performed: Flagged transects at L2. Marked transects T3 through T23 within the L2 IRP site boundary, mostly accessible, some heavy vegetation around fence. Marked transects outside L2 IRP site boundary.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Zachary Tannehill

Zac Tannehill
Site Manager
10-01-2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 003 Date: 10-01-2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Deputy PM: Zac Tannehill – 6	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea (off site)	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington (off site)	**USACE OESS:**
URS Project Geo: Darrell Hall (off site)	
URS Geo QC: Garrick Marcoux (off site)	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech II	Trevor Brown	6	Escort

Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 004 Date: 10-02-2015

DAILY SITE REPORT

Site Operating Hours: 0700-0800

Work Performed: Conducted site visit with Western Contracting to present the vegetation removal areas.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Zachary Tannehill

Zac Tannehill
Site Manager
10-02-2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 004 Date: 10-02-2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Deputy PM: Zac Tannehill – 1	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea (off site)	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington (off site)	**USACE OESS:**
URS Project Geo: Darrell Hall (off site)	
URS Geo QC: Garrick Marcoux (off site)	

Field Staff

Technician Level	Name	Hours Worked	Role

Subcontractors

Name	Company	Hours Worked	Role
Western	Robin Rowland	1	General Contractor
Western	Neal Everist	1	General Contractor

Visitors

Name	Company		

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 005 Date: 10-06-2015

DAILY SITE REPORT

Site Operating Hours: 0800 - 1630

Work Performed: Schonstedt assisted escort for land vegetation removal in L34 and the IVS. Used handheld GeoXT to ensure boundary accuracy.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Matt Legg
UXO Tech II
10-06-2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 005 Date: 10-06-2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Deputy PM: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington	**USACE OESS:**
URS Project Geo: Darrell Hall	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech II	Matthew Legg	8	Escort

Subcontractors

Name	Company	Hours Worked	Role
Robin Rowland	Western Contractors	8	Veg removal

Visitors

Name	Company		

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 006 Date: 10-07-2015

DAILY SITE REPORT

Site Operating Hours: 0630 - 1630

Work Performed: Escort and guidance (assisted by the handheld GeoXT) for land vegetation removal for transect areas. Schonstedt assisted.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Matt Legg
UXO Tech II
10-07-2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 006 Date: 10-07-2015

Project Personnel

URS Project Manager : John Heinicke	**URS MR Safety Program Manager:** Mac Reed
URS Deputy PM: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea (off site)	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington (off site)	**USACE OESS:**
URS Project Geo: Darrell Hall (off site)	
URS Geo QC: Garrick Marcoux (off site)	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech II	Matthew Legg	10	Escort

Subcontractors

Name	Company	Hours Worked	Role
Robin Rowland	Western Contractors	10	Veg removal

Visitors

Name	Company		

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 007 Date: 10-08-2015

DAILY SITE REPORT

Site Operating Hours: 0630 - 1700

Work Performed: Morning safety brief. Escort and guidance (assisted by the Schonstedt and handheld GeoXT) for land vegetation removal in L2/transect areas. Completed heavy vegetation removal in L34, that area is now complete.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Matt Legg
UXO Tech II
10-08-2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 007 Date: 10-08-2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Deputy PM: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington	**USACE OESS:**
URS Project Geo: Darrell Hall	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech 2	Matthew Legg	10	Escort

Subcontractors

Name	Company	Hours Worked	Role
Robin Rowland	Western Contractors	10	Vegetation Removal

Visitors

Name	Company		

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 008 Date: 10-09-2015

DAILY SITE REPORT

Site Operating Hours: 0630 - 1700

Work Performed: Escort and guidance (assisted by the Schonstedt and handheld GeoXT) for land vegetation removal in L2/transect areas. Completed central fenced in area. Began second pass outside the fenced in area of L2 to widen the lanes.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Matt Legg
UXO Tech II
10-09-2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 008 Date: 10-09-2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Deputy PM: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington	**USACE OESS:**
URS Project Geo: Darrell Hall	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech 2	Matthew Legg	10	Escort

Subcontractors

Name	Company	Hours Worked	Role
Robin Rowland	Western	5	Operator

Visitors

Name	Company		

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 009 Date: 10-10-2015

DAILY SITE REPORT

Site Operating Hours: 0630 - 1700

Work Performed: Team safety brief. Escort and guidance (assisted by the Schonstedt and handheld GeoXT) for land vegetation removal in L2/transect areas. Completed L2 transects.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Matt Legg
UXO Tech II
10-10-2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 009 Date: 10-10-2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Deputy PM: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington	**USACE OESS:**
URS Project Geo: Darrell Hall	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech 2	Matthew Legg	8	Escort

Subcontractors

Name	Company	Hours Worked	Role
Robin Rowland	Western Contractors	3	Operator

Visitors

Name	Company		

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L3, and L34 Project Location: Joliet AAP, Illinois Report No: 010 Date: 10-13-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1730

Work Performed: Initial site familiarization, work plan review, and equipment and supply checks. GEO team completed equipment check.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10-13-15

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, L3, and L34 Project Location: Joliet AAP, Illinois Report No: 010 Date: 10-13-2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill (on site)	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea -10	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington -10	**USACE OESS:** Paul Greene
URS Project Geo: Darrell Hall -10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Tech II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	GEO

Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 011 Date: 10-14-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1730

Work Performed: Began trenching operations in L34. Completed trenches #12 through #15 and began trench #11. Located metal scrap (non-ordnance related). GEO installed IVS and GEO Team member assisted QC in placing seeds in L2.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: Ceramic and glass fragments from mine bodies, classified as MDAS.

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10-14-2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 011 Date: 10-14-2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill -10	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea -10	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington -10	**USACE OESS:** Paul Greene
URS Project Geo: Darrell Hall -10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Tech II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	DGM

Subcontractors

Name	Company	Hours Worked	Role
Robin Rowland	Western Contractors	10	Operator

Visitors

Name	Company		

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 012 Date: 10-15-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: Continued trenching operations in L34. Completed trenches 2, 3, and 11. Began trenches 4 and 5. Investigated where the rail road rock begins on transects 2-5. GEO has collected approximately 75% of the required data in L2.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/14/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 012 Date: 10/15/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill-10	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Paul Greene
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Tech II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	DGM

Subcontractors

Name	Company	Hours Worked	Role
Robin Rollins	Western	10	Heavy Equipment Operator

Visitors

Name	Company		

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 013 Date: 10-16-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: Continued trenching operations in L34, completed trenches 4, 5, and 6. GEO finished collecting data for area L2.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: We are still finding small fragments of the ceramic mine bodies.

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/14/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 013 Date: 10/16/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Mngr: Zac Tannehill (on site)-10	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Paul Greene
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	DGM

Subcontractors

Name	Company	Hours Worked	Role
Robin Rollins	Western	10	Heavy Equipment Operator

Visitors

Name	Company		

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 014 Date: 10-19-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: Continued trenching in L34. Completed all remaining trenches in L34 with the exception of trench 1. DGM collected beginning and ending points of the trenches.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/19/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 014 Date: 10/19/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Paul Greene
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	DGM

Subcontractors

Name	Company	Hours Worked	Role
Robin Rollins	Western	10	Heavy Equipment Operator

Visitors

Name	Company		

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 015 Date: 10-20-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: Back filled all trenches in L34, pulling the plastic and disposing.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/20/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 015 Date: 10/20/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Paul Greene
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	DGM

Subcontractors

Name	Company	Hours Worked	Role
Robin Rollins	Western	10	Heavy Equipment Operator

Visitors

Name	Company		

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 016 Date: 10-21-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: Restoration complete in L34. Began analog transects in L2. Completed most or all of the analog portions of transects 1 through 7 and 11 through 20 (4 and 16 partial)

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: 2-M66 Fuzes

Disposition of MEC Items Encountered: Two (2) M66 bases fuzes, were destroyed by open detonation within L2 MRS. Demo shot fired at 1710.

Munitions Debris (MD) Encountered: 2lb, expended M66 and other unidentifiable fuze parts

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts Encountered: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/21/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 016 Date: 10/21/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:**
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

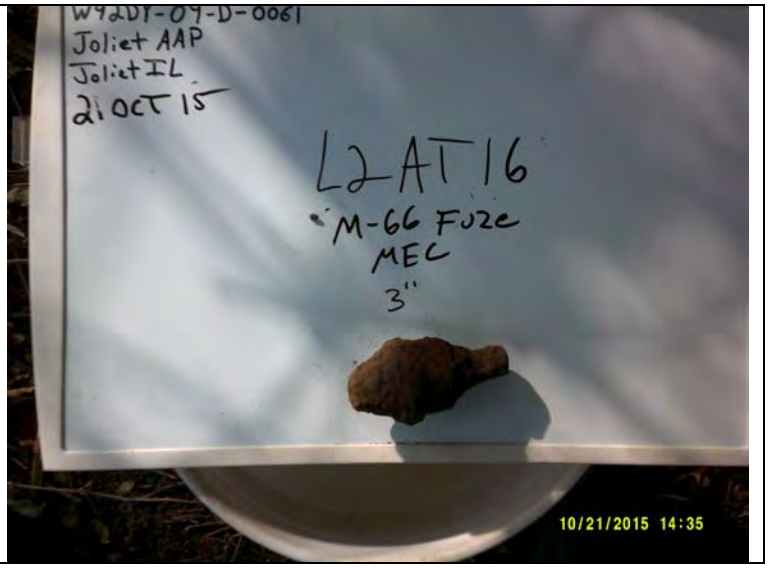
Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	DGM

Subcontractors

Name	Company	Hours Worked	Role
Robin Rollins	Western	5	Heavy Equipment Operator

Visitors

Name	Company		



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URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 017 Date: 10-22-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: Completed analog transects in L2 to include across the river. Team found another M66 on T16. Staking, brush cutting, and surface sweep completed on the seven 50'x50' grids in L2.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: 1-M66 fuze

Disposition of MEC Items Encountered: Demo performed by TCRA SUXOS and Demo Team. One (1) M66 base fuze was destroyed by open detonation within L2 MRS.

Munitions Debris (MD) Encountered: Expended M66 fuzes on T16 and 1lb MDAS

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/22/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 017 Date: 10/22/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

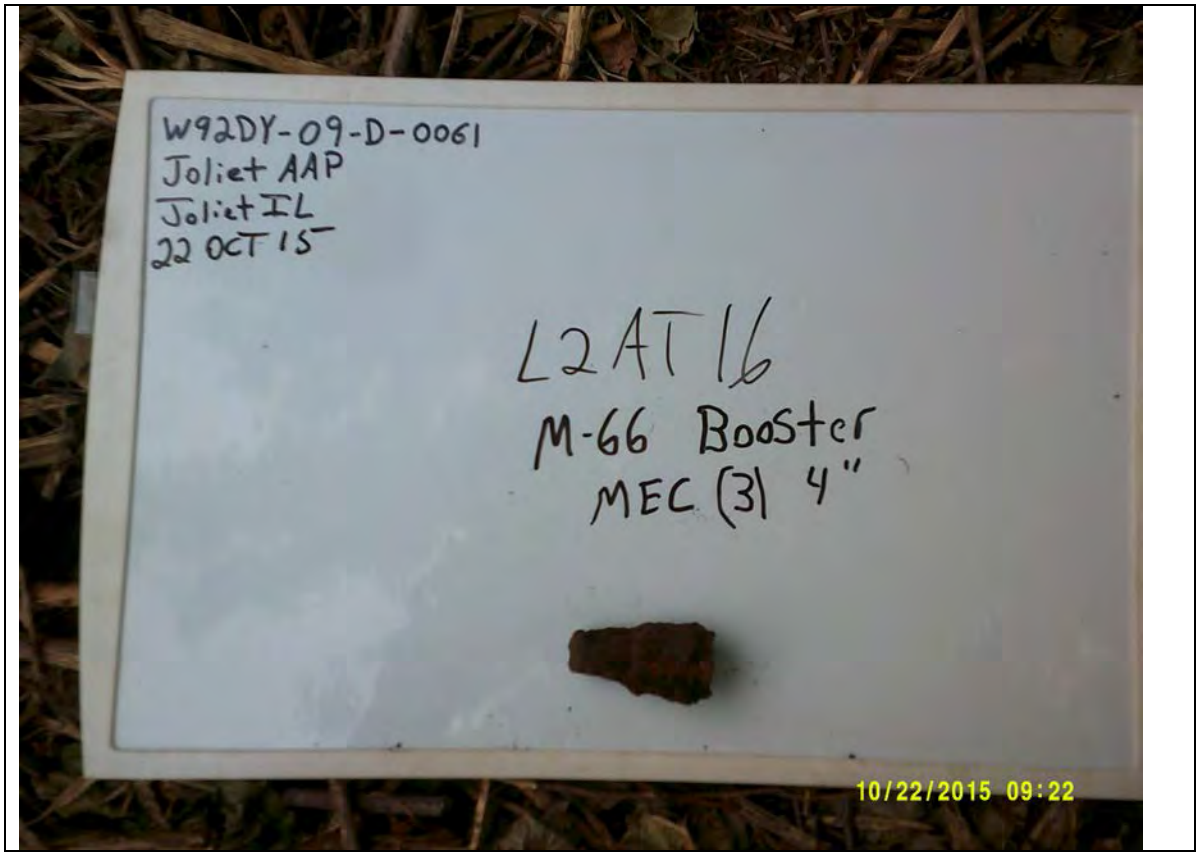
Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
DGM	Eric Celebreeze	10	DGM

Subcontractors

Name	Company	Hours Worked	Role
Robin Rollins	Western	3	Heavy Equipment Operator

Visitors

Name	Company		



URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 018 Date: 10-23-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: Intrusive investigation at L2. Investigated contacts HD-12, 13, 14, 15, 16, 18, and 19. A mix of non-munitions related debris and RRD and some small amounts of munition debris. QC placed seeds in the grid areas in preparation for data collection.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: Fuze components, frag

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts GEO had minor vehicle damage issue. Safety took care of the required reports.

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/23/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 018 Date: 10/23/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	DGM

Subcontractors

Name	Company	Hours Worked	Role
Robin Rollins	Western	3	Heavy Equipment Operator

Visitors

Name	Company		

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 019 Date: 10-26-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: Investigated contacts HD-1, 2, 6, 9, 10, 11, 18, 20, 21, 22, and 23. No MEC or MPPEH found. GEO collected data in six of the seven grids in the high density area. Started reacquire of the flags for the low density area.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: Fuze components, frag

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/26/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 019 Date: 10/26/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	DGM

Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 020 Date: 10-27-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: Investigated contacts HD-3, 4, 5, 7, and 8.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: Six M66 fuzes found in HD 7

Disposition of MEC Items Encountered: Six (6) M66 base fuzes were destroyed by open detonation within L2 MRS.

Munitions Debris (MD) Encountered: Fuze components, frag

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/27/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 020 Date: 10/27/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	DGM

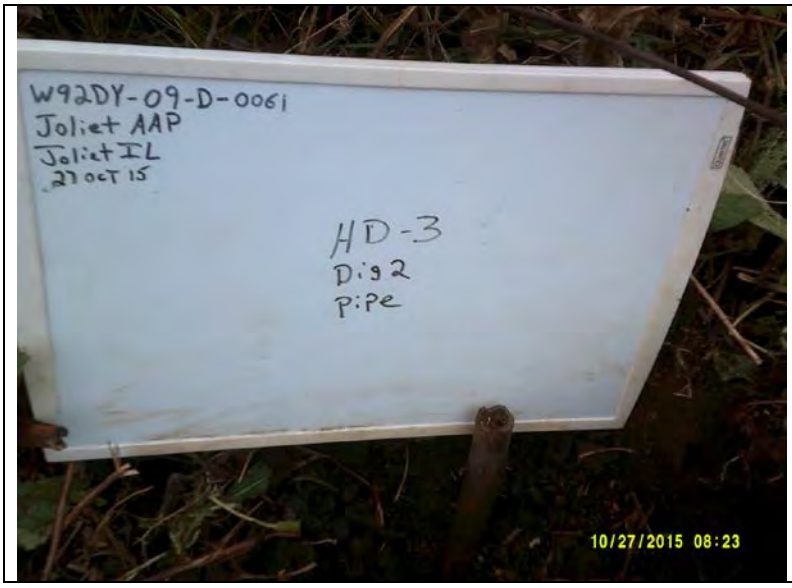
Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

Site Photographs


W92DY-09-D-0061
Joliet AAP
Joliet IL
27 OCT 15
HD-3
Dig 2
Pipe
10/27/2015 08:23

10/27/2015 10:07

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 021 Date: 10-28-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: Investigated 26 of 101 low density targets. Geo completed reacquire of low density targets.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: One (1) M66 fuze in LD88 and one (1) MK III Booster in LD93

Disposition of MEC Items Encountered: One (1) M66 fuze and one (1) MK III booster were destroyed by open detonation

Munitions Debris (MD) Encountered: Fuze components, frag

Material Documented as Safe (MDAS) Shipping Information: Approximately 20 lbs. of MDAS turned over to the TCRA team.

Changed Conditions/Delays/Conflicts: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/28/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 021 Date: 10/28/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	DGM

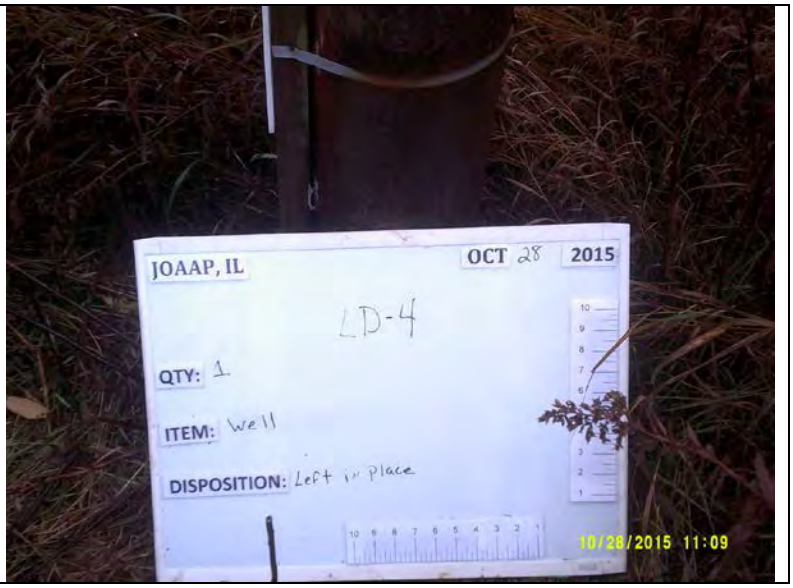
Subcontractors

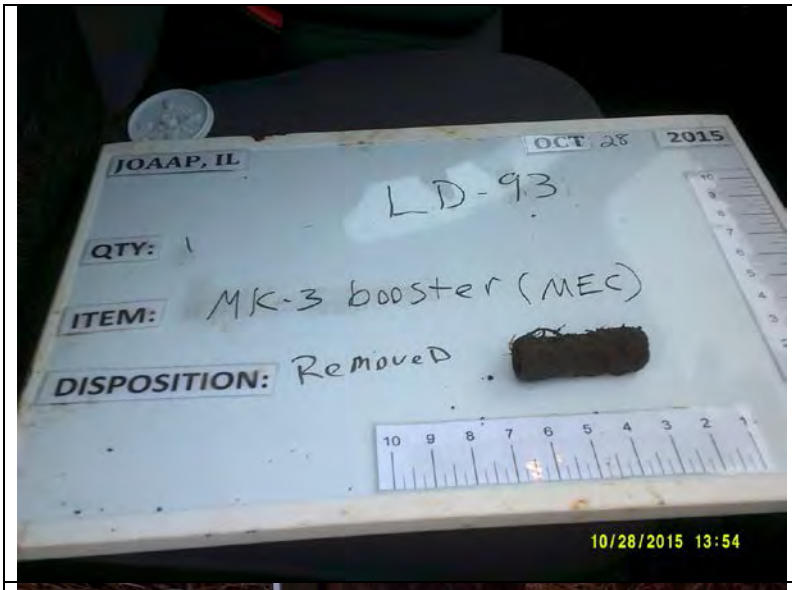
Name	Company	Hours Worked	Role

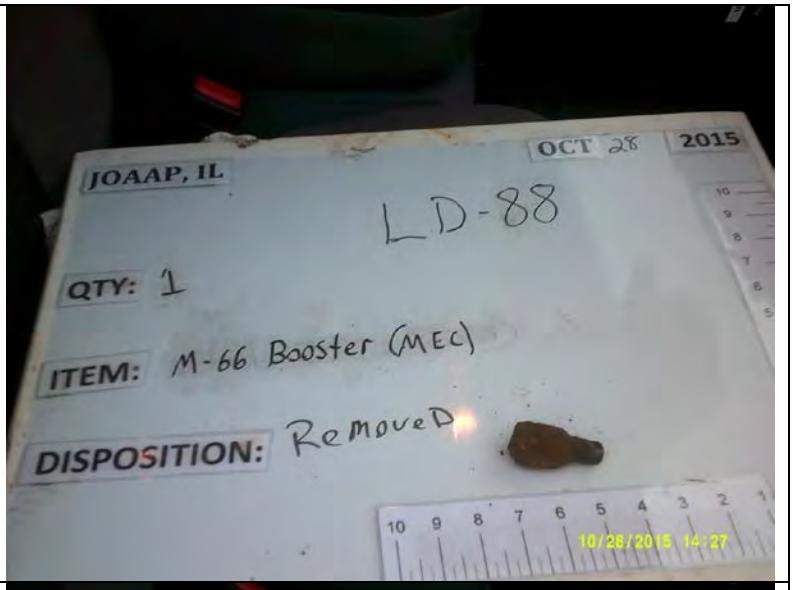
Visitors

Name	Company		

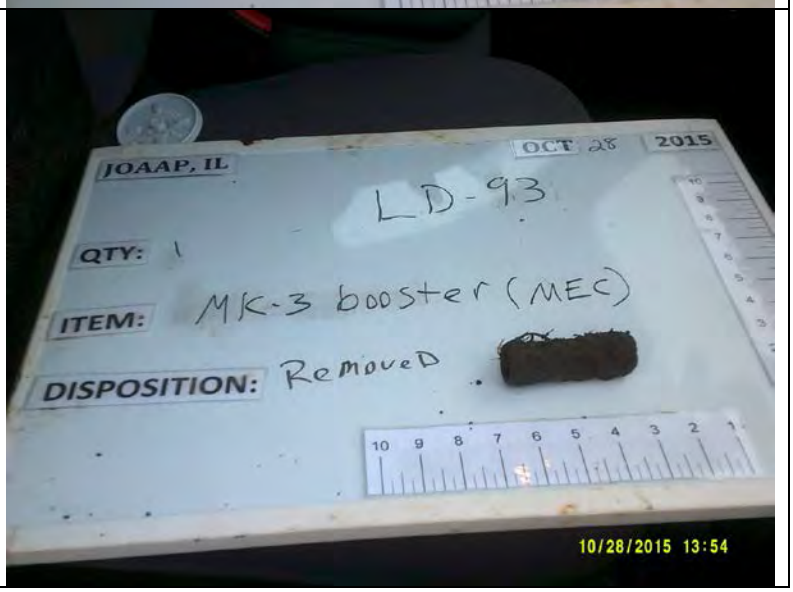
Site Photographs

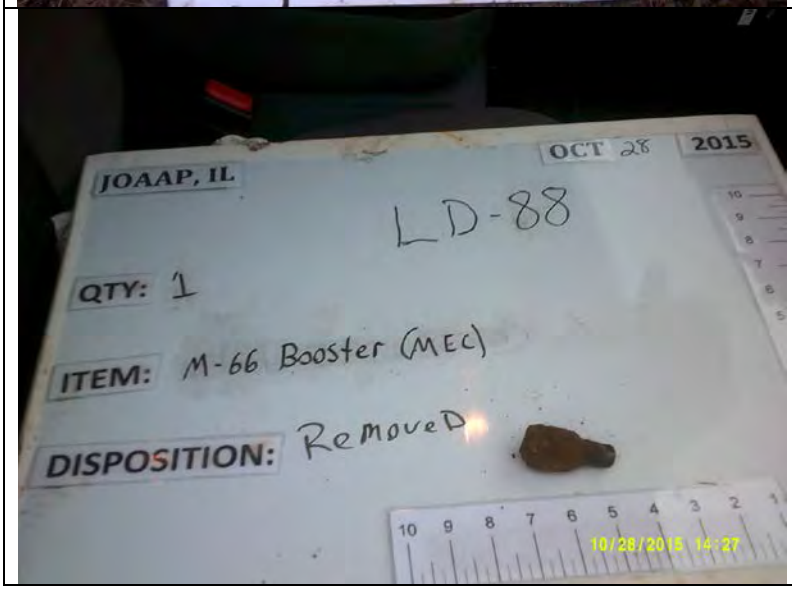



JOAAP, IL
OCT 28 2015
LD-93
QTY: 1
ITEM: MK-3 booster (MEC)
DISPOSITION: Removed
10/28/2015 13:54


JOAAP, IL
OCT 28 2015
LD-88
QTY: 1
ITEM: M-66 Booster (MEC)
DISPOSITION: Removed
10/28/2015 14:27

JOAAP, IL
OCT 28 2015
LD-4
QTY: 1
ITEM: Well
DISPOSITION: Left in Place
10/28/2015 11:09


JOAAP, IL
OCT 28 2015
LD-93
QTY: 1
ITEM: MK-3 booster (MEC)
DISPOSITION: Removed
10/28/2015 13:54


JOAAP, IL
OCT 28 2015
LD-88
QTY: 1
ITEM: M-66 Booster (MEC)
DISPOSITION: Removed
10/28/2015 14:27

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 022 Date: 10-29-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: Investigated 61 of 101 low-density targets. Geo finished reacquire of data for Grid A. Collected final mV of high-density targets. Started collecting mV for low-density targets.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: Fuze components, frag

Material Documented as Safe (MDAS) Shipping Information: Approximately 10lb of MDAS turned over to the TCRA team.

Changed Conditions/Delays/Conflicts: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/29/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 022 Date: 10/29/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Eric Celebreeze	10	DGM

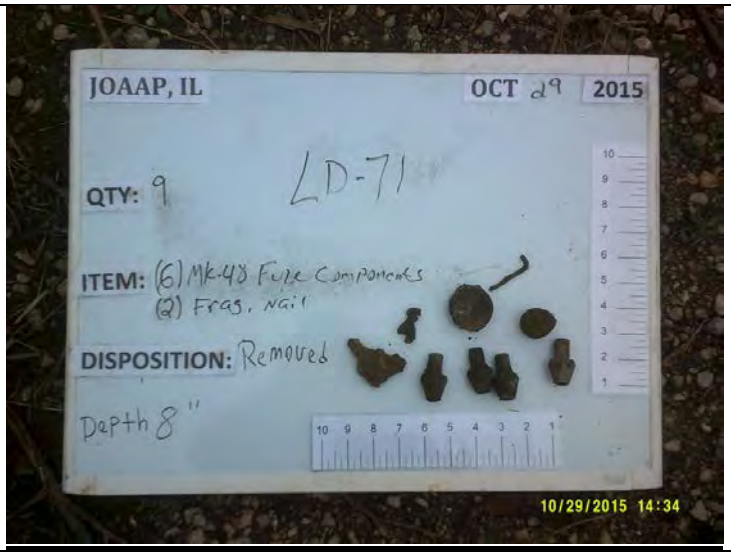
Subcontractors

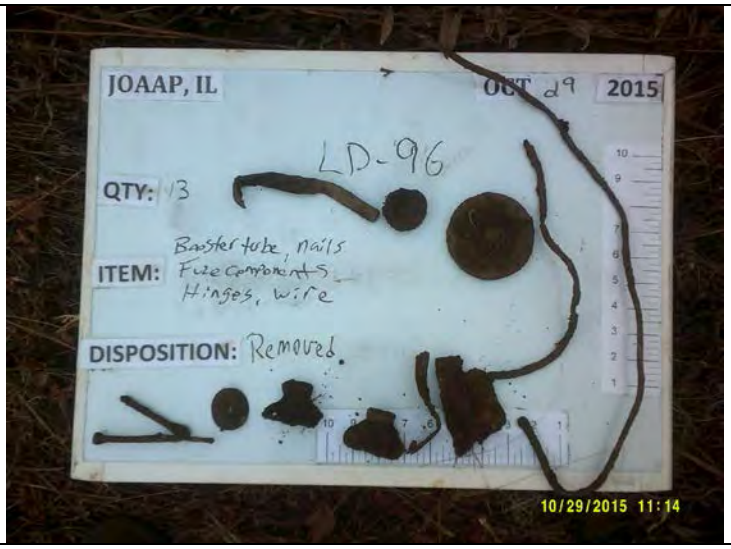
Name	Company	Hours Worked	Role

Visitors

Name	Company		

Site Photographs




JOAAP, IL
OCT 29
2015
LD-96
QTY: 13
ITEM: Booster tube, nails
Fuze components
Hinges, wire
DISPOSITION: Removed
10/29/2015 11:14

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 023 Date: 10-30-2015

DAILY SITE REPORT

Site Operating Hours: 0730-1800

Work Performed: EM61 checked all previous low-density targets. Cleared approximately 50low-density targets.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: N/A

Munitions Debris (MD) Encountered: Fuze components, frag

Material Documented as Safe (MDAS) Shipping Information: Approximately 3 lbs. MDAS turned over to the TCRA team.

Changed Conditions/Delays/Conflicts: LD 79 was dug to 4 ft. with hand tools; however, target is still deeper. Left target in place as current work plant does not include mechanical digging.

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
10/30/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 023 Date: 10/30/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member
DGM	Erick Celebreeze	10	DGM

Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 024 Date: 11-02-2015

DAILY SITE REPORT

Site Operating Hours: 0630-1700

Work Performed: Completed the 101 original low-density targets, 33 digs, and an additional 10 of the extra 138 low-density targets.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: Fuze components, frag

Material Documented as Safe (MDAS) Shipping Information: Approximately 5 lbs. of MDAS turned over to the TCRA team.

Changed Conditions/Delays/Conflicts: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
11/02/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 024 Date: 11/02/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member

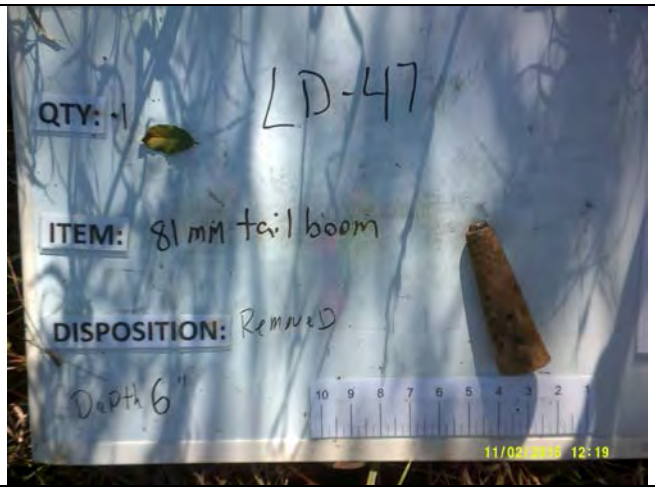
Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

Site Photographs


QTY: 1
LD-47
ITEM: 81 mM tail boom
DISPOSITION: Removed
Depth 6"
11/02/2015 12:19

JOAAP, IL
2015
QTY: 3
LD-115
ITEM: Piping assembly, Wire
DISPOSITION: Removed
Depth 30"
11/02/2015 17:32

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 025 Date: 11-03-2015

DAILY SITE REPORT

Site Operating Hours: 0630-1700

Work Performed: Cleared 32 low-density flags. Collected data for the 6 missing high-density areas. GEO has reacquired 83 flags of the 138 low-density flags.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: 1-MkIII Booster and 1- igniter Mk

Disposition of MEC Items Encountered: One (1) ignitor and one (1) MK III booster were destroyed by open detonation within L2 MRS. Demo performed by TCRA team.

Munitions Debris (MD) Encountered: Fuze components, frag, igniters

Material Documented as Safe (MDAS) Shipping Information: Approximately 20 lbs. of MDAS turned over to the TCRA team.

Changed Conditions/Delays/Conflicts: Encountered some deeper (24"+) anomalies.

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
11/03/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 025 Date: 11/03/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member

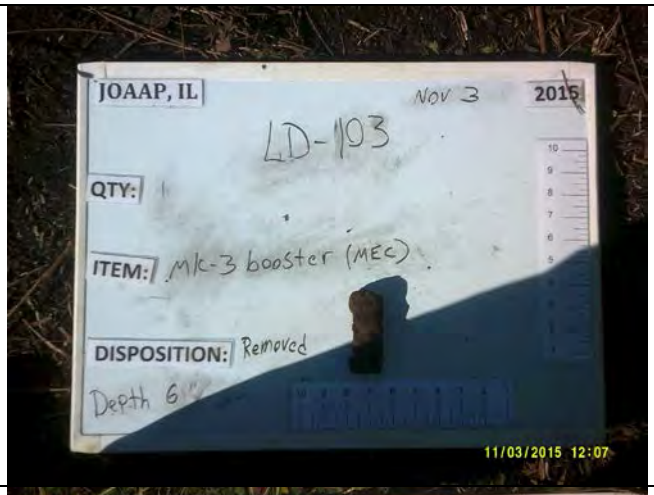
Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

Site Photographs


JOAAP, IL
Nov 3
2015
LD-103
QTY: 1
ITEM: Mk-3 booster (MEC)
DISPOSITION: Removed
Depth 6"
11/03/2015 12:07

OAAP, IL
Nov 3
2015
LD-133
TY: 3
TEM: 2 metal
Hinge
ISPOSITION: Removed
Depth 16"
11/03/2015 12:28

JOAAP, IL
Nov 3
2015
LD-163
QTY: 1
ITEM: Igniter tube (MEC)
DISPOSITION: Removed
Depth 8"
11/03/2015 14:06

JOAAP, IL
Nov 3
2015
LD-151
QTY: 1
ITEM: M-66 (MD)
DISPOSITION: Removed
Depth 6"
11/03/2015 14:08

JOAAP, IL
Nov 03
2015
QTY: 1
LD-206
ITEM: Bar Stock
DISPOSITION: Left in Place
Depth
11/03/2015 15:52

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 026 Date: 11-04-2015

DAILY SITE REPORT

Site Operating Hours: 0630-1700

Work Performed: Dug and cleared 45 low-density flags.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: Fuze components, frag, igniters

Material Documented as Safe (MDAS) Shipping Information: Approximately 15 lbs. of MDAS turned over to the TCRA team.

Changed Conditions/Delays/Conflicts: Still hitting a few burn pit areas that slow the process down, some clear with the EM61 others do not and are noted as not cleared and checked by QC

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
11/04/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 026 Date: 11-04-2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member

Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 027 Date: 11-05-2015

DAILY SITE REPORT

Site Operating Hours: 0630-1600

Work Performed: Cleared the 41 selected high-density targets in the grids L2A, L2B, L2C, L2D, L2E, L2F, and L2G. Reacquired all remaining low-density targets.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: NA

Disposition of MEC Items Encountered: NA

Munitions Debris (MD) Encountered: Fuze components, frag, igniters

Material Documented as Safe (MDAS) Shipping Information: Approximately 20 lbs. of MDAS was turned over to the TCRA team.

Changed Conditions/Delays/Conflicts: None

Other comments or additional information: All 41 high-density targets investigated to clean bottom; they are in very saturated areas. We may have a few isolated low-density flags to reacquire or find through the site.

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
11/05/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 027 Date: 11/05/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member

Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 028 Date: 11-06-2015

DAILY SITE REPORT

Site Operating Hours: 0630-1700

Work Performed: Cleared 38 low-density targets.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: 5 each M66 Fuze

Disposition of MEC Items Encountered: Five (5) M66 fuzes were destroyed by open detonation within L2 MRS. Demo performed by TCRA Demo Team

Munitions Debris (MD) Encountered: Fuze components, frag, igniters

Material Documented as Safe (MDAS) Shipping Information: Approximately 12 lbs. of MDAS was turned over to the TCRA team.

Changed Conditions/Delays/Conflicts: Another deep dig slowed team down; flag 219 was excavated to 48" and left in place.

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
11/056/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 028 Date: 11/06/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-11	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-11	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Jim Ficke	10	Team Leader
UXO Tech II	Shane Edwards	10	Team Member
UXO Teck II	Jack Connor	10	Team Member
UXO Tech II	Matt Legg	10	Team Member

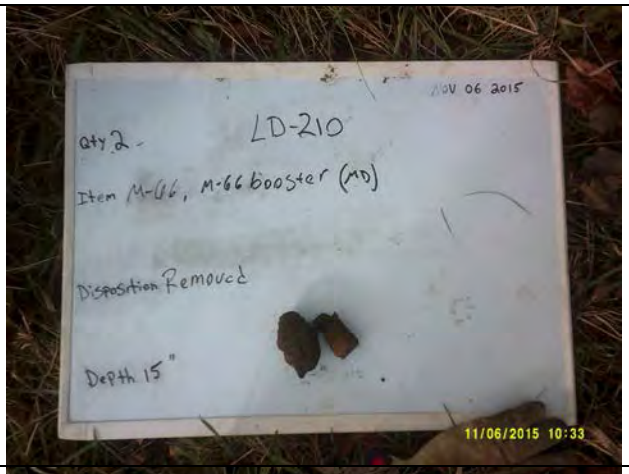
Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

Site Photographs

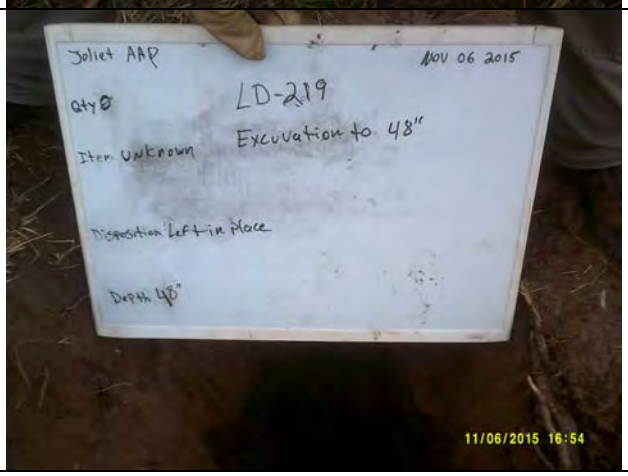

NOV 06 2015
Qty 2
LD-210
Item M-66, M-66 booster (MD)
Disposition Removed
Depth 15"
11/06/2015 10:33

NOV 06 2015
Qty 1
LD-223
Item M-66 booster (MEC)
Disposition Removed
Depth 6"
11/06/2015 11:35

Joliet AAP
NOV 06 2015
Qty 1
LD-181
Item M-66 Booster MEC
Disposition Removed
Depth 10"
11/06/2015 11:54

Joliet AAP
NOV 06 2015
Qty 4
LD-178
Item Brackets X2 (MDAS)
Fuze components X2 (MD)
Disposition Removed
Depth 4"
11/06/2015 11:56

Joliet AAP
NOV 06 2015
Qty
LD-235
Item Wire (MDAS) X2
Aluminum Stag (MD) X2
Coupling (MDAS)
Disposition Removed
Depth "
11/06/2015 13:51


Joliet AAP
NOV 06 2015
Qty
LD-219
Item Unknown
Excavation to 48"
Disposition Left in place
Depth 48"
11/06/2015 16:54

11/06/2015 16:54

URS

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 029 Date: 11-09-2015

DAILY SITE REPORT

Site Operating Hours: 0630-1700

Work Performed: Cleared remaining 16 low-density targets.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: Fuze components, frag, igniters

Material Documented as Safe (MDAS) Shipping Information: Approximately 5 lbs. of MDAS was turned over to the TCRA team.

Changed Conditions/Delays/Conflicts: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
11/09/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 029 Date: 11/09/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-10	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-10.5	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall-10	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Shane Edwards	10	Team Leader
UXO Tech II	Jack Connor	10	Team Member
UXO Teck II	Matt Legg	10	Team Member

Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

URS Group Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 030 Date: 11-10-2015

DAILY SITE REPORT

Site Operating Hours: 0630-1600

Work Performed: prepared equipment for demobilization from site.

Munitions and Explosives of Concern (MEC)/Material Potentially Presenting an Explosive Hazard (MPPEH) Encountered: None

Disposition of MEC Items Encountered: None

Munitions Debris (MD) Encountered: None

Material Documented as Safe (MDAS) Shipping Information: None

Changed Conditions/Delays/Conflicts: None

Other comments or additional information: None

Contractor's Verification: On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Pat Gildea

Pat Gildea
Senior UXO Supervisor
11/10/2015

URS Group, Inc. 12120 Shamrock Plaza Suite 100 Omaha, NE 68154 Contract#: W912DY-09-D-0061-CY02	Project Name: RI at L2, and L34 Project Location: Joliet AAP, Illinois Report No: 030 Date: 11/10/2015

Project Personnel

URS Project Manager : John Heinicke	**URS Munitions Response (MR) Safety Program Manager:** Mac Reed
URS Site Manager: Zac Tannehill	**URS MR Quality Program Manager:** Andreas Kothleitner
URS SUXOS : Pat Gildea-9.5	**USACE Project Manager:** Glen Beckham
URS UXOSO/QCS: Randy Burrington-9.5	**USACE OESS:** Elbert Caraballo
URS Project Geo: Darrell Hall	
URS Geo QC: Garrick Marcoux	

Field Staff

Technician Level	Name	Hours Worked	Role
UXO Tech III	Shane Edwards	9.5	Team Leader
UXO Tech II	Jack Connor	9.5	Team Member
UXO Teck II	Matt Legg	9.5	Team Member

Subcontractors

Name	Company	Hours Worked	Role

Visitors

Name	Company		

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 001	**DATE:** 13 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		SPECIFIC INSPECTIONS PERFORMED
Follow-Up		SPECIFIC INSPECTIONS PERFORMED

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Six UXO and two geophysical personnel mobilized to the project site on 12 Oct. 2015.
- UXOQCS / UXOSO and SUXOS conducted site-specific orientation and training.
- No field operations were performed. Field crew began equipment preparation and procured supplies as required.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-13-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 002	**DATE:** 14 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory	Completed Preparatory Phase Inspection for Intrusive Trenching and MPPEH Inspection definable features of work. See remarks below.	
Initial	Intrusive Trenching: Operations began intrusive trenching operations in MRS L34 (trenches 11 through 15). All operations were performed in accordance with applicable WP requirements. See remarks below. MPPEH Inspection and Processing: UXO Team began MPPEH inspection process concurrently with intrusive trenching operations in L34. All operations were performed in accordance with applicable WP requirements. See remarks below.	**SPECIFIC INSPECTIONS PERFORMED** Initial phase inspection for intrusive trenching and MPPEH inspection. See remarks below.
Follow-Up		**SPECIFIC INSPECTIONS PERFORMED**

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Preparatory Phase Inspection. In accordance with RI WP Table 4-1, UXOQCS conducted preparatory phase inspection for Intrusive Trenching and MPPEH Inspection definable features of work. The following elements of WP paragraph 4.7.1 were reviewed and verified:
  - All appropriate plans, documents, and procedures were reviewed.
  - Site-specific training for personnel was completed and training certifications were verified.
  - Preliminary work and site coordination were completed.
  - Equipment and materials were procured and prepared for work.
  - Required safety equipment was issued and emergency procedures were reviewed, briefed, and verified.
  - Verified all procedural and site controls were in place.
  - No administrative, procedural discrepancies, or equipment shortfalls were noted.
- Initial Phase Inspection for Intrusive Trenching Operations: In accordance with RI WP Table 4-1, UXOQCS conducted initial phase inspection for intrusive trenching operations.
  - All personnel had proper PPE.
  - Observed excavation of trenches 11 through 15. Verified excavation process was IAW WP requirements.
  - No discrepancies were noted. QC acceptance inspection will be completed on 10/15/2015.
- Initial Phase Inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted initial phase

inspection for MPPEH inspection concurrently during intrusive trenching operations. Excavated MD (ceramic pieces of M5 landmine) were inspected and re-categorized as MDAS. No discrepancies were noted. No MEC reported. • UXOQCS seeded MRS L2 in accordance with RI WP. • UXOQCS assisted Geo Team with IVS installation (ensured ISO seed locations were clear).	
On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.	Randy Burrington Date: 10-14-2015 UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 003	**DATE:** 15 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		SPECIFIC INSPECTIONS PERFORMED
Follow-Up	Intrusive Trenching: Intrusive trenching operations continued in MRS L34 (trenches 2, 3, 4, 5, and 11). All operations were performed in accordance with applicable WP requirements. See remarks below. MPPEH Inspection and Processing: UXO Team continued MPPEH inspection process today concurrently with intrusive trenching operations in L34. All operations were performed in accordance with applicable WP requirements. See remarks below.	SPECIFIC INSPECTIONS PERFORMED Initial phase inspection for intrusive trenching and MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection for Intrusive Trenching Operations: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for intrusive trenching operations.
  - Observed excavation of the southwest ends of trenches 4 and 5 that extend through an existing railroad spur. These approximate 35' sections were excavated and checked by the UXO Team. UXOQCS conducted visual inspection with no discrepancies noted, and these sections were backfilled. These short sections were done to facilitate excavation of trench 2 and trench 3.
  - Trench 2 was moved approximately 5' to the southeast along its entire length to prevent disturbing an existing man-made drainage ditch which lies on the northwest side of the MRS. Trench 2 was excavated and checked by UXO team. UXOQCS conducted final inspection of trench 2 and the excavated spoils. No discrepancies noted. Trench 2 was then backfilled.
  - In accordance with RI WP Table 4-1, UXOQCS completed final acceptance inspection of trenches 3, 12, 13, 14, and 15. No MD or MEC was noted during inspection. No discrepancies noted. Trenches will be backfilled and restored to grade by Operations.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection concurrently during intrusive trenching operations. Excavated MD (ceramic pieces of M5 landmine) were inspected and re-categorized as MDAS. No discrepancies were noted. No MEC reported.
- Geophysical data collection: UXOQCS observed DGM data collection in L2 and end of day IVS tests. No discrepancies noted.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-15-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 004	**DATE:** 16 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Intrusive Trenching: Intrusive trenching operations continued in MRS L34 (trenches 4, 5, and 6). All operations were performed in accordance with applicable WP requirements. See remarks below. MPPEH Inspection and Processing: UXO Team continued MPPEH inspection process concurrently with intrusive trenching operations in L34. All operations were performed in accordance with applicable WP requirements. See remarks below.	**SPECIFIC INSPECTIONS PERFORMED** Initial phase inspection for intrusive trenching and MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection for Intrusive Trenching Operations: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for intrusive trenching operations.
  - Observed excavation of the remaining sections of 4, 5, and 6.
  - In accordance with RI WP Table 4-1, UXOQCS completed final acceptance inspection of trenches 4, 5, 6, and 11. No MD or MEC was noted during inspection. No discrepancies noted. Trenches will be backfilled and restored to grade by operations.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection concurrently during intrusive trenching operations. Excavated MD (ceramic pieces of M5 landmine) were inspected and re-categorized as MDAS. No discrepancies were noted. No MEC reported.
- Geophysical data collection: UXOQCS observed beginning of day IVS tests. No discrepancies noted. Geo team completed data collection in L2.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-16-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 005	**DATE:** 19 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Intrusive Trenching: Intrusive trenching operations continued in MRS L34 (trenches 7, 8, 9, and 10). All operations were performed in accordance with applicable WP requirements. See remarks below. MPPEH Inspection and Processing: UXO Team continued MPPEH inspection process concurrently with intrusive trenching operations in L34. All operations were performed in accordance with applicable WP requirements. See remarks below.	**SPECIFIC INSPECTIONS PERFORMED** Initial phase inspection for intrusive trenching and MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection for Intrusive Trenching Operations: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for intrusive trenching operations.
  - Observed excavation of trenches 7, 8, 9, and 10.
  - In accordance with RI WP Table 4-1, UXOQCS completed final acceptance inspection of trenches 7, 8, 9, and 10. No MD or MEC was noted during inspection. No discrepancies noted. Trenches will be backfilled and restored to grade by operations.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection concurrently during intrusive trenching operations. Excavated MD (ceramic pieces of M5 landmine) were inspected and re-categorized as MDAS. No discrepancies were noted. No MEC reported.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-19-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 006	**DATE:** 20 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Intrusive Trenching: Intrusive trenching operations were completed in MRS L34 (trench 1). All operations were performed in accordance with applicable WP requirements. See remarks below. MPPEH Inspection and Processing: UXO Team completed MPPEH inspection process concurrently with intrusive trenching operations in L34. All operations were performed in accordance with applicable WP requirements. See remarks below.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for intrusive trenching and MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection for Intrusive Trenching Operations: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for intrusive trenching operations.
  - Observed hand excavation of the trench 1. Hand excavated down to rail road spur ballast (rock).
  - In accordance with RI WP Table 4-1, UXOQCS completed final acceptance inspection of trench 1. No MD or MEC was noted during inspection. No discrepancies noted.
  - Site restoration (back-filling trenches and plastic removal) began and is expected to be complete on 10/22/2015.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection concurrently during intrusive trenching operations. No discrepancies were noted.
- No MEC was reported during the remedial investigation of the fifteen trenches or spoils in JOAAP MRS L34. Additionally, no evidence of stained soils, burn/burial pits, ash, or landfill related debris were noted during any portion of the intrusive investigation of the trenches.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-20-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 007	**DATE:** 21 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory	Completed preparatory phase inspection for MEC Disposal Operations. See remarks below.	
Initial	MEC disposal operations conducted in L2. See remarks below	**SPECIFIC INSPECTIONS PERFORMED** Initial phase inspection for MEC disposal operations. See remarks below.
Follow-Up	MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with analog transect survey operations in L2. All operations were performed in accordance with applicable WP requirements. See remarks below.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Analog transect survey (mag-dig operations) in L2: Operations began analog survey (mag-dig) of L2 transects in the identified sections which are unsuitable for DGM data collection due to vegetation canopy.
  - UXOQCS observed intrusive mag-dig operations and conducted in-progress checks of procedures. No discrepancies noted. Observed detection, excavation, and identification of MEC in transect L2AT16.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection concurrently during analog transect survey (mag-dig operations) in L2. Inspected all recovered MD reclassified as MDAS. Verified reported MEC as two M66 base fuzes. No discrepancies were noted.
- Completed preparatory phase inspection for MEC disposal operations. Verified WP, SOP, and all equipment on hand. No equipment shortages or discrepancies noted.
- Completed initial phase inspection for MEC disposal operations in L2. Two (2) M66 bases fuzes, were destroyed by open detonation within L2 MRS.
  - Attended demolition safety briefing, verified exclusion zone and all personnel accounted for. Observed shot preparation by TCRA demolition team. SUXOS and UOXSO/UXOQCs conducted post-shot clearance. No discrepancies noted.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-21-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 008	**DATE:** 22 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with analog transect survey operations in L2. All operations were performed in accordance with applicable WP requirements. See remarks below. MEC disposal operations conducted in L2. See remarks below	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for MPPEH inspection and MEC disposal operations. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Analog transect survey (mag-dig operations) in were completed in L2:
  - UXOQCS observed intrusive mag-dig operations and conducted in-progress checks of procedures. No discrepancies noted. Observed detection, excavation, and identification of MDAS in transect L2AT4.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection concurrently during analog transect survey (mag-dig operations) in L2. Inspected all recovered MD reclassified as MDAS. Verified reported MEC as one M66 base fuze. No discrepancies were noted.
- Completed follow-up phase inspection for MEC disposal operations in L2. One (1) M66 base fuze was destroyed by open detonation within L2 MRS.
  - Verified exclusion zone and all personnel accounted for. Observed shot preparation by TCRA demolition team. SUXOS and UOXSO/UXOQCs conducted post-shot clearance. No discrepancies noted.
- Site/Grid delineation: In preparation for DGM data collection in L2, grids L2A, L2B, L2C, L2D, L2E, L2F, and L2G were flagged for brush removal. UXOSO and GEOQCS will verify grid locations once corners are remarked by operations.
- Mechanical brush removal and surface clearance: Operations completed mechanical brush removal and surface clearance in grids L2A, L2B, L2C, L2D, L2E, L2F, and L2G.
  - UXOQCS observed all operations. No discrepancies noted.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-22-2015
UXOQCS

URS	DAILY QUALITY CONTROL REPORT	

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 009	**DATE:** 23 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory	Preparatory phase inspection for intrusive investigation of high density anomalies located in L2 transects. See remarks below.	
Initial	Operations began intrusive investigation of high density anomalies in transects located in L2.	**SPECIFIC INSPECTIONS PERFORMED** Initial phase inspection. See remarks below.
Follow-Up	MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2. All operations were performed in accordance with applicable WP requirements. See remarks below.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Preparatory Phase Inspection. In accordance with RI WP Table 4-1, UXOQCS conducted preparatory phase inspection for intrusive investigation definable features of work. The following elements of WP paragraph 4.7.1 were reviewed and verified:
  - All appropriate plans, documents, and procedures were reviewed.
  - Site-specific training for personnel was completed and training certifications were verified.
  - Preliminary work and site coordination were completed.
  - Equipment and materials were procured and prepared for work.
  - Required safety equipment was issued and emergency procedures were reviewed, briefed, and verified.
  - Verified all procedural and site controls were in place.
  - No administrative, procedural discrepancies, or equipment shortfalls were noted.
- Initial phase inspection completed for intrusive investigation of high density anomalies located in L2 transects:
  - UXOQCS observed intrusive investigation operations in L2. No discrepancies noted. Observed detection, excavation, and identification of MDAS.
  - No final QC inspections completed, no transect targets are ready for final QC acceptance inspection.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection concurrently during analog transect survey (mag-dig operations) in L2. Inspection all recovered MD reclassified as MDAS. No discrepancies were noted. No MEC reported.
- Observed Geo Team staking-out and reacquiring transect DGM targets. No discrepancies noted.
- UXOQCS seeded six grids in L2. One grid remains to be seeded.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-23-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 010	**DATE:** 26 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Operations began continued investigation of high density anomalies in transects located in L2. MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2. All operations were performed in accordance with applicable WP requirements. See remarks below.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for intrusive operations and MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection completed for intrusive investigation of high density anomalies located in L2 transects:
  - UXOQCS observed intrusive investigation operations in L2. Observed detection, excavation, and characterization of target anomaly locations. No discrepancies noted.
  - Final QC acceptance inspections pending EM-61 mV response verification and characterization by operations.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection process concurrently during intrusive operations in L2. Conducted inspection of all recovered material. No discrepancies noted. No MEC reported.
- Observed Geo Team collect DGM data in IVS and L2 grids. No discrepancies noted.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-26-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 011	**DATE:** 27 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Operations continued investigation of low density transect anomalies in L2. MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2. MEC disposal operations conducted within L2. See remarks below.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for intrusive operations, MPPEH inspection, and MEC disposal operations. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection completed for intrusive investigation of low density anomalies located in L2 transects:
  - UXOQCS observed intrusive investigation operations in L2. Observed detection, excavation, and characterization of target anomaly locations including MEC items. No discrepancies noted.
  - Final QC acceptance inspections pending EM-61 mV response verification and characterization by operations.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection process concurrently during intrusive operations in L2. Conducted inspection of all recovered material. No discrepancies noted. MEC: Six (6) M66 fuzes were recovered during intrusive operations.
- Completed follow-up phase inspection for MEC disposal operations in L2. Six (6) M66 base fuzes were destroyed by open detonation within L2 MRS.
  - Verified exclusion zone and all personnel accounted for. Attended safety briefing, observed shot preparation by TCRA demolition team. SUXOS and UOXSO/UXOQCs conducted post-shot clearance. No discrepancies noted.
- Observed Geo Team collect DGM data in IVS.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-27-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 012	**DATE:** 28 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Operations continued investigation of low density transect anomalies in L2. MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2. MEC disposal operations conducted within L2. See remarks below.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for intrusive operations, MPPEH inspection, and MEC disposal operations. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection completed for intrusive investigation of low density anomalies located in L2 transects:
  - UXOQCS observed intrusive investigation operations in L2. Observed detection, excavation, and characterization of target anomaly locations including MEC items. No discrepancies noted.
  - Final QC acceptance inspections pending EM-61 mV response verification and characterization by Operations.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection process concurrently during intrusive operations in L2. Conducted inspection of all recovered material. No discrepancies noted. MEC: One (1) M66 fuze and one (1) MK III booster were recovered during intrusive operations.
- Completed follow-up phase inspection for MEC disposal operations in L2. One (1) M66 fuze and one (1) MK III booster were destroyed by open detonation within L2 MRS.
  - Verified exclusion zone and all personnel accounted for. Attended safety briefing, observed shot preparation by TCRA demolition team. SUXOS and UOXSO/UXOQCs conducted post-shot clearance. No discrepancies noted.
- Observed Geo Team IVS checks and performing anomaly reacquisition in L2.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-28-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 013	**DATE:** 29 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Operations continued investigation of low density transect anomalies in L2. MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for intrusive operations and MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection completed for intrusive investigation of low density anomalies located in L2 transects:
  - UXOQCS observed intrusive investigation operations in L2. Observed detection, excavation, and characterization of target anomaly locations. No discrepancies noted.
  - Operations completed final mV response verification of all twenty-three (23) L2 high-density transect anomalies and began final mV response verification of low-density targets in L2. UXOQCS and USACE OESS observed the verification process.
  - UXOQCS and USACE OESS conducted concurrent QC/QA verification of the final mV response results for the following 23 high-density anomalies: HD-1-185, HD-2-276, HD-3-369, HD-4-394, HD-5-456, HD-6-473, HD-7-556, HD-8-677, HD-9-712, HD-10-832, HD-11-839, HD-12-851, HD-13-862, HD-14-921, HD-15-936, HD-16-943, HD-17-954, HD-18-1018, HD-19-1020, HD-20-1086, HD-21-1111, HD-22-1121, and HD-23-1137. No discrepancies noted. USACE will issue CENAB Form 948 documenting final QA acceptance of the findings for these grids.
  - UXOQCS and USACE OESS conducted concurrent QC/QA acceptance sampling of the following sixteen (16) L2 low-density DGM anomalies: LD-2-1267, LD-3-1268, LD-4-1269, LD-5-1270, LD-6-1271, LD-7-1274, LD-24-1273, LD-25-1275, LD-26-1276, LD-27-1277, LD-28-1278, LD-74-1145, LD-76-1170, LD-89-1239, LD-93-1253, and LD-99-1262. No discrepancies noted.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection process concurrently during intrusive operations in L2. Conducted inspection of all recovered material. No discrepancies were noted. No MEC reported.
- Observed Geo Team IVS checks and performing mV verification in L2.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-29-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 014	**DATE:** 30 Oct. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Operations continued investigation of low-density transect anomalies in L2. MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for intrusive operations and MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Received USACE Form 948 for final QA acceptance of the following twenty-three (23) L2 high-density DGM anomalies: HD-1-185, HD-2-276, HD-3-369, HD-4-394, HD-5-456, HD-6-473, HD-7-556, HD-8-677, HD-9-712, HD-10-832, HD-11-839, HD-12-851, HD-13-862, HD-14-921, HD-15-936, HD-16-943, HD-17-954, HD-18-1018, HD-19-1020, HD-20-1086, HD-21-1111, HD-22-1121, and HD-23-1137.
- In accordance with WP Table 4-1, GIS Manager verified the grid stake accuracy of L2 grids L2A, L2B, L2C, L2D, L2E, L2F, and L2G. No discrepancies were noted.
- Follow-up phase inspection completed for intrusive investigation of low-density anomalies located in L2 transects:
  - UXOQCS observed intrusive investigation operations in L2. Observed detection, excavation, and characterization of target anomaly locations. Observed Geo Team IVS checks and performing mV verification in L2. No discrepancies noted.
  - UXOQCS conducted concurrent QC acceptance sampling of the following eleven (11) L2 low-density DGM anomalies: LD-12-1167, LD-13-1168, LD-78-1174, LD-79-1175, LD-80-1176, LD-82-1184, LD-84-1201, LD-87-1235, LD-88-1238, LD-90-1243, LD-100-1263, and LD-101-1266. No discrepancies noted.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection process concurrently during intrusive operations in L2. Conducted inspection of all recovered material. No discrepancies were noted. No MEC reported.
- Project conference call held from 1000-1030 with PM, Site Mgr., Program QCM, SUXOS, Geo Ops, Geo QCM, and UXOSO/UXOQCS in attendance.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 10-30-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 015	**DATE:** 2 Nov. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Operations continued investigation of low-density anomalies in L2. MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for intrusive operations and MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection completed for intrusive investigation of low-density anomalies located in L2 transects:
  - UXOQCS observed intrusive investigation and anomaly reacquisition operations in L2. Observed detection, excavation, and characterization of target anomaly locations. Observed EM-61 mV verification in L2. No discrepancies noted.
  - UXOQCS conducted QC acceptance sampling of the following fourteen (14) L2 low-density DGM anomalies: LD-55-504, LD-57-511, LD-59-515, LD-31-10, LD-33-12, LD-50-345, LD-51-402, LD-102-5, LD-105-54, LD-108-57, LD-114-64, LD-115-65, LD-120-72, and LD-124-85. No discrepancies noted.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection process concurrently during intrusive operations in L2. Conducted inspection of all recovered material. No discrepancies were noted. No MEC reported.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 11-2-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 016	**DATE:** 3 Nov. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Operations continued investigation of low-density anomalies in L2. MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2. MEC disposal operations conducted in L2.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for intrusive operations, MPPEH inspection, and MEC disposal operations. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection completed for intrusive investigation of low-density anomalies located in L2 transects:
  - UXOQCS observed intrusive investigation and anomaly reacquisition operations in L2. Observed detection, excavation, and characterization of target anomaly locations. Observed EM-61 mV verification in L2. No discrepancies noted.
  - UXOQCS conducted QC acceptance sampling of the following six (6) L2 low-density DGM anomalies: LD-143-186, LD-144-216, LD-152-294, LD-153-296, LD-154-297, and LD-160-325. No discrepancies noted.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection process concurrently during intrusive operations in L2. Conducted inspection of all recovered material. No discrepancies were noted. MEC: one (1) Mk III booster and one (1) ignitor were reported.
- Completed follow-up phase inspection for MEC disposal operations in L2. One (1) ignitor and one (1) MK III booster were destroyed by open detonation within L2 MRS.
  - Verified exclusion zone and all personnel accounted for. Attended safety briefing and observed shot preparation by TCRA demolition team. SUXOS and UOXSO/UXOQCs conducted post-shot clearance. No discrepancies noted.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 11-3-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 017	**DATE:** 4 Nov. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Operations continued investigation of low-density anomalies in L2. MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for intrusive operations and MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection completed for intrusive investigation of low-density anomalies located in L2 transects:
  - UXOQCS observed intrusive investigation and anomaly reacquisition operations in L2. Observed detection, excavation, and characterization of target anomaly locations. Observed EM-61 mV verification in L2. No discrepancies noted.
  - UXOQCS conducted QC acceptance sampling of the following sixteen (16) L2 low-density DGM anomalies: LD-106-55, LD-113-63, LD-117-68, LD-118-69, LD-121-75, LD-122-78, LD-148-270, LD-149-271, LD-150-273, LD-159-319, LD-161-337, LD-168-499, LD-169-503, LD-170-505, LD-173-596, and LD-176-602. No discrepancies noted.
  - Verified anomaly #LD-118-69 as a false positive (no find) with Geo T/L.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection process concurrently during intrusive operations in L2. Conducted inspection of all recovered material. No discrepancies were noted.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 11-4-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 018	**DATE:** 5 Nov. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Operations investigated anomalies in L2 high-density grids L2A, L2B, L2C, L2D, L2E, L2F, and L2G. MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for intrusive operations and MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection completed for intrusive investigation of high-density anomalies located in L2 transects:
  - UXOQCS observed intrusive investigation of forty-one (41) anomalies selected for investigation / characterization in L2 grids L2A, L2B, L2C, L2D, L2E, L2F, and L2G. Observed detection, excavation, and characterization of target anomaly locations. No discrepancies noted.
  - In accordance with WP Table 4-1, UXOQCS conducted QC acceptance sampling of the following seventeen (17) L2 high-density grid anomalies:

    Grid L2A: GridA_05, GridA_26, GridA_33, GridA_46, GridA_51.

    Grid L2B: GridB_07, GridB_08, GridB_13, GridB_18, GridB_27, GridB_32.

    Grid L2G: GridG_05, GridG_07, GridG_08, GridC_17, GridG_22, GridG_34.

    No discrepancies noted.
  - The following six (6) Q/C seeds were recovered during intrusive investigation / characterization of grids L2B through L2G:

SEED #	Anomaly #	SEED #	Anomaly #	SEED #	Anomaly #
L2B-2	GridB_13	L2C-3	GridC_03	L2D-4	GridD_12
L2E-5	GridE_02	L2F-6	GridF_18	L2G-7	GridG_08

- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection process concurrently during intrusive operations in L2. Conducted inspection of all recovered material. No discrepancies were noted. No MEC was reported.
- Project conference call from 1000-1030 (local time) with PM, Site Mgr., Program Safety Mgr., Program QC Mgr., SUXOS, GEOQCS, GEO Ops Mgr., and UXOSO/UXOQCS in attendance. Discussed remaining work to be completed.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.	 Randy Burrington Date: 11-5-2015 UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 019	**DATE:** 6 Nov. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		**SPECIFIC INSPECTIONS PERFORMED**
Follow-Up	Operations continued investigation of low-density anomalies in L2. MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2. MEC disposal operations conducted within L2.	**SPECIFIC INSPECTIONS PERFORMED** Follow-up inspection for intrusive operations, MPPEH inspection, and MEC disposal operations. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Follow-up phase inspection continued for intrusive investigation of low-density anomalies located in L2 transects:
  - UXOQCS observed intrusive investigation of L2 low-density transect anomalies. Observed detection, excavation, and characterization of target anomaly locations. No discrepancies noted.
  - UXOQCS conducted QC acceptance sampling of the following ten (10) L2 low-density DGM anomalies:
    LD-128-108, LD-223-1153, LD-227-1180, LD-229-1196, LD-234-1222, LD-235-1230, LD-236-1231, LD-237-1237, LD-238-1248, and LD-239-1251. No discrepancies noted.
  - In accordance with WP Table 4-1, UXOQCS conducted QC acceptance sampling of the following twenty-four (24) L2 high-density grid anomalies:
    Grid L2C: GridC_03, GridC_13, GridC_17, GridC_27, GridC_30, GridC_41.
    Grid L2D: GridD_03, GridD_08, GridD_12, GridD_19, GridD_24, GridD_37.
    Grid L2E: GridE_02, GridE_03, GridE_07, GridE_10, GridE_16, GridE_20.
    Grid L2F: GridF_02, GridF_08, GridF_11, GridF_17, GridF_18, GridF_26.
    No discrepancies noted.
  - Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection process concurrently during intrusive operations in L2. Conducted inspection of all recovered material. No discrepancies were noted.
  - MEC: Five (5) M66 fuzes were reported.
- Completed follow-up phase inspection for MEC disposal operations in L2. Five (5) M66 fuzes were destroyed by open detonation within L2 MRS.
  - Verified exclusion zone and all personnel accounted for. Attended safety briefing, observed shot preparation by TCRA demolition team. SUXOS and UOXSO/UXOQCs conducted post-shot clearance. No discrepancies noted.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.	 Randy Burrington Date: 11-6-2015 UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 020	**DATE:** 9 Nov. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		SPECIFIC INSPECTIONS PERFORMED
Follow-Up	Operations completed investigation of low-density anomalies in L2. MPPEH Inspection and Processing: UXO Team conducted MPPEH inspection process concurrently with intrusive investigation in L2.	SPECIFIC INSPECTIONS PERFORMED Follow-up inspection for intrusive operations and MPPEH inspection. See remarks below.

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- Received USACE CENAB Form 948 for final QA acceptance of the following seventeen (17) L2 low-density DGM anomalies: LD-1-1244, LD-2-1267, LD-3-1268, LD-4-1269, LD-5-1270, LD-6-1271, LD-7-1274, LD-24-1273, LD-25-1275, LD-26-1276, LD-27-1277, LD-28-1278, LD-74-1145, LD-76-1170, LD-89-1239, LD-93-1253, and LD-99-1262.
- Follow-up phase inspection continued for intrusive investigation of low-density anomalies located in L2 transects:
  - Operations completed intrusive investigation operations in L2.
  - UXOQCS observed intrusive investigation of L2 low-density transect anomalies. Observed detection, excavation, and characterization of target anomaly locations. No discrepancies noted.
  - UXOQCS conducted QC acceptance sampling of the following ten (10) L2 low-density DGM anomalies: LD-182-636, LD-183-645, LD-185-653, LD-186-656, LD-190-60, LD-192-669, LD-194-703, LD-197-733, LD-199-741, and LD-202-745. No discrepancies noted.
  - QC seed # L2-002 was recovered from anomaly LD-218-1147 on 6 Nov. 2015.
- Follow-up phase inspection for MPPEH Inspection: In accordance with RI WP Table 4-1, UXOQCS conducted follow-up phase inspection for MPPEH inspection process concurrently during intrusive operations in L2. Conducted inspection of all recovered material. No discrepancies were noted. No MEC reported.
- Database Review: UXOQCS conducted a review of the database. A couple of minor edits were noted for correction. Verified MEC log, no discrepancies noted.
- UXOQCS removed three QC seeds from field locations within L2 MRS. The following seeds were removed: L2-001, L2-003, and L2-004. Updated seed log forwarded it to Geo QCS.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 11-9-2015
UXOQCS

DAILY QUALITY CONTROL REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Will County, IL
REPORT #: 021	**DATE:** 10 Nov. 2015

PHASE	LIST DEFINABLE FEATURES OF WORK, LOCATION, AND INSPECTION COMMENTS	
Preparatory		
Initial		SPECIFIC INSPECTIONS PERFORMED
Follow-Up		SPECIFIC INSPECTIONS PERFORMED
		None

NON-COMPLIANT ITEMS IDENTIFIED TODAY	NON-COMPLIANT ITEMS CORRECTED TODAY
NONE	NONE

Additional Remarks:

- No field operations conducted. Personnel cleaned equipment for shipment and prepared for demobilization.

On behalf of the contractor, I certify that this report is complete and correct and the equipment and material used and work performed during this reporting period is in compliance with the work plan specifications to the best of my knowledge unless otherwise noted in this report.

Randy Burrington Date: 11-10-2015
UXOQCS

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 001	**DATE:** 13 Oct. 2015	**OPERATING HOURS:** 0730-1730

WEATHER CONDITIONS: PARTLY CLOUDY	**HIGH:** 64	**LOW:** 41	**HUMIDITY:** 50%	**UV: 3 OF 10**
WINDS:	**SUNRISE:** 0701	**SUNSET:** 1816	**RAIN/SNOW:** NO	**LIGHTNING:** NO

TAILGATE SAFETY BRIEFING:

- See remarks below.

OPERATIONS:

- No field operations conducted.

REMARKS:

- Six UXO personnel and 2 geophysical personnel mobilized to the project site on 12 Oct. 2015.
- UXOSO and SUXOS conducted site-specific training and orientation. Reviewed WP, APP, SSHP, and all personnel verified local hospital route.
- Conducted initial vehicle inspection for four rental vehicles.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-13-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 002	**DATE:** 14 Oct. 2015	**OPERATING HOURS:** 0730-1730

WEATHER CONDITIONS: PARTLY CLOUDY	HIGH: 64	LOW: 45	HUMIDITY: 45%	UV: 1 OF 10
WINDS: N 7 MPH	SUNRISE: 0702	SUNSET: 1815	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, excavation safety, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: MEC Operations.
- Training Topic: NA

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- Geo team established IVS.
- Intrusive trenching operations began in L34.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Obtained and reviewed personnel training and medical certifications. No discrepancies noted.
- Observed initial intrusive trenching operations in L34.
- Observed Geo Team in IVS.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-14-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 003	**DATE:** 15 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: PARTLY CLOUDY	HIGH: 68	LOW: 41	HUMIDITY: 32%	UV: 2 OF 10
WINDS: NW 9 MPH	SUNRISE: 0703	SUNSET: 1813	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, excavation safety, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: NA
- Training Topic: (1) Operational Security Plan JOAAP and (2) M5 landmine.

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- Geo team collected DGM data in IVS and L2.
- Intrusive Trenching operations continued in L34.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed intrusive trenching operations in L34.
- Observed Geo Team in IVS.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-15-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 004	**DATE:** 16 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: SUNNY	HIGH: 56	LOW: 32	HUMIDITY: 85%	UV: 0 OF 10
WINDS: E 2 MPH	SUNRISE: 0705	SUNSET: 1810	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, excavation safety, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: Death on our highways.
- Training Topic: N/A

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- Geo team collected DGM data in IVS and L2.
- Intrusive trenching operations and MPPEH inspection continued in L34.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed intrusive trenching operations in L34. No MEC reported.
- Observed Geo Team in IVS.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-16-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 005	**DATE:** 19 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: SUNNY	HIGH: 73	LOW: 52	HUMIDITY: 47%	UV: 0 OF 10
WINDS: S 14 MPH	SUNRISE: 0708	SUNSET: 1805	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, excavation safety, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: N/A
- Training Topic: N/A

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily and weekly vehicle/equipment safety inspections.
- Intrusive Trenching operations and MPPEH inspection continued in L34.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed intrusive trenching operations in L34. No MEC reported.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-19-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 006	**DATE:** 20 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: PARTLY CLOUDY	HIGH: 77	LOW: 54	HUMIDITY: 52%	UV: 0 OF 10
WINDS: S 8 MPH	SUNRISE: 0709	SUNSET: 1804	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, excavation safety, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: N/A
- Training Topic: N/A

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily and weekly vehicle/equipment safety inspections.
- Intrusive trenching operations in L34.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed intrusive trenching operations in L34. Operations completed trenching operations and began backfilling trenches and site restoration. No MEC reported.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-20-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 007	**DATE:** 21 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: PARTLY CLOUDY	HIGH: 81	LOW: 54	HUMIDITY: 74%	UV: 0 OF 10
WINDS: S 8 MPH	SUNRISE: 0710	SUNSET: 1802	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, excavation safety, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: Hand & Power Tools
- Training Topic: N/A

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- Completed site restoration in L34.
- Operations began analog survey (mag-dig) in sections of L2 transects unsuitable for DGM data collection.
- MPPEH Inspection: performed concurrently with analog transect survey in L2.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed analog transect survey (mag-dig operations) and MPPEH inspection process in L34.
- MEC: Two (2) M66 base fuzes were excavated in L2 transect #16. SUXOS and UXOSO determined the fuzes were acceptable to move and were consolidated in L2 for disposal.
- MEC Disposal operations: Two base fuzes were destroyed by open detonation in L2. TCRA personnel provided donor explosives and conducted disposal operations. Operation conducted safely and in accordance with WP.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-21-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 008	**DATE:** 22 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: PARTLY CLOUDY	HIGH: 68	LOW: 48	HUMIDITY: 77%	UV: 0 OF 10
WINDS: S 5 MPH	SUNRISE: 0712	SUNSET: 1802	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, excavation safety, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic:
- Training Topic: M66 base fuze

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- Operations completed analog survey (mag-dig) in sections of L2 transects unsuitable for DGM data collection.
- MPPEH Inspection: performed concurrently with analog transect survey in L2.
- Delineated seven DGM grids in L2. Mechanical vegetation-brush cutting completed in the seven grids. UXO team completed visual surface clearance of the seven grids in preparation for DGM data collection.
- Began stakeout-target reacquisition of 23 targets in L2.
- MPPEH inspection conducted concurrently with analog transect survey (mag-dig operations) in L2.
- MEC: 1 M66 base fuze reported and destroyed by open detonation within L2 MRS.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed analog transect survey (mag-dig operations) and MPPEH inspection process in L2. Observed mechanical brush cutting-mowing and surface clearance in L2 grids L2A, L2B, L2C, L2D, L2E, L3F, and L2G.
- MEC: One (1) M66 base fuze was excavated in L2 transect #16. SUXOS and UXOSO determined the fuze was determined to be acceptable to move and consolidated it in L2 for disposal.
- MEC Disposal operations: One M66 base fuze was destroyed by open detonation in L2. TCRA personnel provided donor explosives and conducted disposal operations. Operation conducted safely and in accordance with WP.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-22-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 009	**DATE:** 23 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: PARTLY CLOUDY	HIGH: 70	LOW: 61	HUMIDITY: 48%	UV: 2 OF 10
WINDS: ENE 8 MPH	SUNRISE: 0713	SUNSET: 1802	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, excavation safety, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic:
- Training Topic:

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- Operations completed collecting track logs of the analog survey (mag-dig) sections of L2 transects.
- Geo Team continued anomaly reacquisition of high density transect anomalies in L2.
- UXO Team began intrusive investigation of high density transect anomalies in L2.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed reacquisition and intrusive operations in L2. All work performed safely and in accordance with procedures.
- MEC: No MEC reported.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-23-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 010	**DATE:** 26 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: SUNNY	HIGH: 64	LOW: 46	HUMIDITY: 76%	UV: 2 OF 10
WINDS: ENE 3 MPH	SUNRISE: 0716	SUNSET: 1854	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, excavation safety, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic:
- Training Topic: Mk III Booster

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily and weekly vehicle/equipment safety inspections.
- Geo Team collected DGM data in L2 grids L2B through L2G.
- UXO Team continued intrusive investigation of high density transect anomalies in L2.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed DGM data collection in IVS and L2 grids.
- Observed intrusive operations and MPPEH inspection in L2. All work performed safely and in accordance with procedures.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-26-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 011	**DATE:** 27 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: CLOUDY - RAIN	HIGH: 57	LOW: 50	HUMIDITY: 66%	UV: 1 OF 10
WINDS: E 16 MPH	SUNRISE: 0718	SUNSET: 1756	RAIN/SNOW: YES	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, safe work practices, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic:
- Training Topic:

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- UXO Team continued intrusive investigation of high density transect anomalies in L2.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
- MEC Disposal operations: Six (6) M66 base fuzes were destroyed by open detonation.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed Geo IVS checks.
- Observed intrusive operations and MPPEH inspection in L2. All work performed safely and in accordance with procedures. Present for detection, excavation, and identification of MEC.
- Observed MEC disposal operations. Attended demolition safety brief, observed shot preparation, and conducted post-shot inspection with SUXOS.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-27-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 012	**DATE:** 28 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: CLOUDY - RAIN	HIGH: 56	LOW: 36	HUMIDITY: 89%	UV: 1 OF 10
WINDS: SW 21 MPH	SUNRISE: 0720	SUNSET: 1754	RAIN/SNOW: YES	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, safe work practices, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: Poison Ivy: Identification, exposure, decontamination.
- Training Topic:

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- UXO Team continued intrusive investigation of transect anomalies in L2. Geo team continued anomaly reacquisition.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
- MEC Disposal operations: One (1) M66 and one (1) MK III booster were destroyed by open detonation.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed Geo team reacquiring anomalies. Observed intrusive operations and MPPEH inspection in L2. All work performed safely and in accordance with procedures. Present for detection, excavation, and identification of MEC.
- Observed MEC disposal operations. Attended demolition safety brief, observed shot preparation, and conducted post-shot inspection with SUXOS.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-28-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 013	**DATE:** 29 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: CLOUDY	HIGH: 59	LOW: 35	HUMIDITY: 49%	UV: 1 OF 10
WINDS: SW 11 MPH	SUNRISE: 0721	SUNSET: 1753	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, safe work practices, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic:
- Training Topic: Work place violence and respect.

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- UXO Team continued intrusive investigation of transect anomalies in L2. Geo team collected DGM data in grid L2A.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed Geo team conducting final mV response verification of low-density DGM anomalies. Observed intrusive operations and MPPEH inspection in L2. All work performed safely and in accordance with procedures.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-29-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 014	**DATE:** 30 Oct. 2015	**OPERATING HOURS:** 0730-1800

WEATHER CONDITIONS: CLOUDY	HIGH: 58	LOW: 45	HUMIDITY: 76%	UV: 3 OF 10
WINDS: SW 6 MPH	SUNRISE: 0722	SUNSET: 1752	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, safe work practices, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: Driving in fog.
- Training Topic:

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- UXO Team continued intrusive investigation of transect anomalies in L2.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed intrusive operations and MPPEH inspection in L2. All work performed safely and in accordance with procedures. No MEC reported.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 10-30-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 015	**DATE:** 2 Nov. 2015	**OPERATING HOURS:** 0630-1700

WEATHER CONDITIONS: SUNNY	HIGH: 72	LOW: 45	HUMIDITY: 76%	UV: 3 OF 10
WINDS: SSW 10 MPH	SUNRISE: 0626	SUNSET: 1648	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, safe work practices, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic:
- Training Topic: Respect in the workplace

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted weekly vehicle/equipment safety inspections.
- UXO Team continued intrusive investigation of transect anomalies in L2.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed intrusive operations, anomaly reacquisition, and MPPEH inspection in L2. All work performed safely and in accordance with procedures. No MEC reported.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 11-2-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 016	**DATE:** 3 Nov. 2015	**OPERATING HOURS:** 0630-1700

WEATHER CONDITIONS: SUNNY	HIGH: 71	LOW: 50	HUMIDITY: 76%	UV: 3 OF 10
WINDS: SSE 7 MPH	SUNRISE: 0627	SUNSET: 1647	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, safe work practices, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic:
- Training Topic:

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted weekly vehicle/equipment safety inspections.
- UXO Team continued intrusive investigation of transect anomalies in L2.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
- MEC disposal operations. (1) Mk III booster and (1) igniter were destroyed by open detonation within L2.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed intrusive operations, anomaly reacquisition, and MPPEH inspection in L2. All work performed safely and in accordance with procedures.
- Observed MEC disposal operations. All operations were performed safely and in accordance with all requirements:

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 11-3-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 017	**DATE:** 4 Nov. 2015	**OPERATING HOURS:** 0630-1700

WEATHER CONDITIONS: SUNNY	HIGH: 73	LOW: 56	HUMIDITY: 76%	UV: 3 OF 10
WINDS: S 11 MPH	SUNRISE: 0628	SUNSET: 1645	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, safe work practices, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: Equipment Storage
- Training Topic:

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- UXO Team continued intrusive investigation of transect anomalies in L2.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed intrusive operations, anomaly reacquisition, and MPPEH inspection in L2. All work performed safely and in accordance with procedures.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 11-4-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 018	**DATE:** 5 Nov. 2015	**OPERATING HOURS:** 0630-1600

WEATHER CONDITIONS: MOSTLY SUNNY	HIGH: 71	LOW: 50	HUMIDITY: 63%	UV: 3 OF 10
WINDS: S 20 MPH	SUNRISE: 0629	SUNSET: 1644	RAIN/SNOW: YES	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, safe work practices, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: Situational Awareness
- Training Topic:

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- UXO Team conducted intrusive investigation of grids L2A, L2B, L2C, L2D, L2E, L2F, and L2G.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low.
- Observed intrusive operations, anomaly reacquisition, and MPPEH inspection in L2. All work performed safely and in accordance with procedures.
- Rain started late afternoon.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 11-5-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 019	**DATE:** 6 Nov. 2015	**OPERATING HOURS:** 0630-1700

WEATHER CONDITIONS: MOSTLY SUNNY	HIGH: 55	LOW: 36	HUMIDITY: 63%	UV: 3 OF 10
WINDS: WNW 8 MPH	SUNRISE: 0631	SUNSET: 1643	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, safe work practices, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: Injury reporting.
- Training Topic:

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted daily vehicle/equipment safety inspections.
- UXO Team continued intrusive investigation of low-density targets in L2.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
  - MEC: (5) M66 fuzes were reported and destroyed by open detonation in L2.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low.
- Observed intrusive operations, MPPEH inspection, and MEC disposal operations. All work performed safely and in accordance with procedures.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 11-6-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 020	**DATE:** 9 Nov. 2015	**OPERATING HOURS:** 0630-1700

WEATHER CONDITIONS: MOSTLY SUNNY	HIGH: 55	LOW: 32	HUMIDITY: 80%	UV: 2 OF 10
WINDS: ENE 3 MPH	SUNRISE: 0634	SUNSET: 160	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- MEC operations, slips/trips/falls, biological hazards, hydration, cold stress, wind precautions, PPE, vehicle safety inspection, driving safety, safe work practices, directions to hospital, rally points, emergency procedures, on-site accident response.
- Safety Topic: 3-Points of Contact
- Training Topic:

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- Site personnel conducted weekly vehicle/equipment safety inspections.
- UXO Team completed intrusive investigation of low-density targets in L2.
- MPPEH Inspection: performed concurrently with intrusive investigation of anomalies in L2.
  - No MEC reported.
- Site personnel were observed wearing proper PPE and working in accordance with the Remedial Investigation Work Plan (URS 2015) and applicable directives.

REMARKS:

- Fire condition: Low
- Observed intrusive operations and MPPEH inspection. All work performed safely and in accordance with procedures.

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 11-9-2015

DAILY HEALTH & SAFETY REPORT

CONTRACT: W912DY-09-D-0061	**PROJECT MANAGER:** John Heinicke
DELIVERY ORDER: CY02	**PROJECT:** RI at L2, L3, and L34
PROJECT #: 16170871	**LOCATION:** Joliet AAP, Illinois

REPORT #: 021	**DATE:** 10 Nov. 2015	**OPERATING HOURS:** 0630-1600

WEATHER CONDITIONS: MOSTLY SUNNY	HIGH: 56	LOW: 32	HUMIDITY: 80%	UV: 2 OF 10
WINDS: ESE 4 MPH	SUNRISE: 0635	SUNSET: 1649	RAIN/SNOW: NO	LIGHTNING: NO

TAILGATE SAFETY BRIEFING:

- Slips/trips/falls, driving safety.
- Safety Topic: Driving Safety & Demobilization
- Training Topic:

OPERATIONS:

- UXOSO/UXOQCS and SUXOS conducted daily operations/safety brief.
- No field operations. Personnel prepared equipment for demobilization.

REMARKS:

- Fire condition: Low

URS PERSONNEL ONSITE: (see DSR)

SUBCONTRACTOR PERSONNEL ONSITE: (see DSR)

VISITORS ONSITE: (see DSR)

Randy Burrington
UXOSO
Date: 11-10-2015

Target Excavation Data
(provided on CD)

TABLE H-1
Low Density Target Results
L2 MRS, Joliet Army Ammunition Plant

Anomaly ID	Date	Anomaly Type	Description	Notes	Depth (Inches)	Quantity	Weight (Pounds)	Fuzed	Disposition	Resolved
LD-93-1253	10/28/2015 13:52	MEC	Booster	M3 booster	4	1	0.5	No	Removed	Yes
LD-88-1238	10/28/2015 14:27	MEC	Fuze	M66 fuze	13	1	0.5	No	Removed	Yes
LD-103-33	11/3/2015 11:07	MEC	Booster	M3 booster	6	1	0.5	No	Removed	Yes
LD-163-342	11/3/2015 13:10	MEC	Other	Igniter tube	6	1	0.5	No	Removed	Yes
LD-211-1126	11/6/2015 9:31	MEC	Fuze	2x M66 fuzes	6	2	1	No	Removed	Yes
LD-165-422	11/6/2015 10:00	MEC	Fuze	M66 fuze	7	1	0.5	No	Removed	Yes
LD-223-1153	11/6/2015 10:35	MEC	Fuze	M66 fuze	6	1	0.4	No	Removed	Yes
LD-181-619	11/6/2015 10:51	MEC	Fuze	M66 fuze	10	1	0.5	No	Removed	Yes
LD-6-1271	10/28/2015 10:13	MDAS	Booster	M3 booster	6	1	0.5	No	Removed	Yes
LD-2-1267	10/28/2015 10:57	MDAS	Indeterminate frag	Indeterminate frag	5	1	1	No	Removed	Yes
LD-89-1239	10/28/2015 14:02	MDAS	Fuze	M66	8	1	0.5	No	Removed	Yes
LD-84-1201	10/28/2015 16:55	MDAS	Other	Booster cup	6	1	0.1	No	Removed	Yes
LD-81-1182	10/29/2015 9:00	MDAS	Fuze	M66 expended	11	1	0.5	No	Removed	Yes
LD-83-1198	10/29/2015 9:37	MDAS	Other	Shipping plug	8	1	1	No	Removed	Yes
LD-75-1169	10/29/2015 9:39	MDAS	Other	M66 booster tube, frag	13	2	1	No	Removed	Yes
LD-91-1249	10/29/2015 10:25	MDAS	Indeterminate frag	Frag	7	1	0.2	No	Removed	Yes
LD-92-1252	10/29/2015 11:02	MDAS	Fuze	M66	14	1	1	No	Removed	Yes
LD-96-1257	10/29/2015 11:04	MDAS	Other	Fuze components, booster tube, nails, banding	18	4	1	No	Removed	Yes
LD-94-1254	10/29/2015 11:43	MDAS	Fuze	Fuze components, nails	6	2	0.2	No	Removed	Yes
LD-16-1181	10/29/2015 13:30	MDAS	Booster	Booster, frag, nails, wire	10	3	0.5	No	Removed	Yes
LD-15-1173	10/29/2015 13:33	MDAS	Other	2x M66 expended, nails, wire	4	3	1	No	Removed	Yes
LD-18-1188	10/29/2015 13:41	MDAS	Indeterminate frag	Frag	6	2	0.5	No	Removed	Yes
LD-73-1133	10/29/2015 13:49	MDAS	Indeterminate frag	Frag	8	1	0.1	No	Removed	Yes
LD-71-604	10/29/2015 14:32	MDAS	Other	6x M48 fuze components, 2x frag, nails	26	9	1	No	Removed	Yes
LD-72-615	10/29/2015 14:38	MDAS	Fuze	Fuze component, washer	6	2	0.5	No	Removed	Yes
LD-12-1167	10/29/2015 15:26	MDAS	Indeterminate frag	Frag, hinge	10	2	0.5	No	Removed	Yes
LD-13-1168	10/29/2015 15:32	MDAS	Other	M3 booster, M66 booster	10	2	1	No	Removed	Yes
LD-17-1185	10/29/2015 15:35	MDAS	Booster	M3 booster, fuze component	5	2	0.5	No	Removed	Yes
LD-1-1244	10/29/2015 15:40	MDAS	Other	M3 booster, frag	10	2	0.5	No	Removed	Yes
LD-54-429	10/29/2015 16:05	MDAS	Indeterminate frag	Frag	10	1	0.1	No	Removed	Yes
LD-53-421	10/29/2015 16:06	MDAS	Indeterminate frag	Frag	4	2	0.1	No	Removed	Yes
LD-48-343	10/29/2015 16:18	MDAS	Indeterminate frag	Frag	4	1	0.1	No	Removed	Yes
LD-49-344	10/29/2015 16:18	MDAS	Indeterminate frag	Frag, wire	8	2	0.1	No	Removed	Yes
LD-40-131	10/29/2015 16:33	MDAS	Indeterminate frag	Frag, metal plate, nails	12	4	1	No	Removed	Yes
LD-41-143	10/29/2015 16:44	MDAS	Indeterminate frag	5x frag, hinge	6	6	0.5	No	Removed	Yes
LD-35-24	10/29/2015 16:57	MDAS	Indeterminate frag	Frag	3	2	0.1	No	Removed	Yes
LD-62-519	10/30/2015 17:20	MDAS	Other	Booster tube, hinge, nail	6	1	0.2	No	Removed	Yes
LD-61-518	11/2/2015 9:05	MDAS	Indeterminate frag	Frag, hinge, nails	10	2	0.5	No	Removed	Yes
LD-30-2	11/2/2015 9:56	MDAS	Booster	Booster, hinge	9	2	0.1	No	Removed	Yes
LD-38-97	11/2/2015 10:42	MDAS	Other	M66 expended	6	1	0.5	No	Removed	Yes
LD-43-149	11/2/2015 11:00	MDAS	Booster	M3 booster	8	1	0.5	No	Removed	Yes
LD-44-150	11/2/2015 11:08	MDAS	Other	Fuze components	8	1	0.1	No	Removed	Yes
LD-47-308	11/2/2015 11:19	MDAS	81mm	Tail boom	5	1	1	No	Removed	Yes
LD-52-418	11/2/2015 11:35	MDAS	Other	Fuze components	8	2	0.1	No	Removed	Yes
LD-50-345	11/2/2015 11:38	MDAS	Booster	M3 booster	4	1	0.1	No	Removed	Yes
LD-55-504	11/2/2015 11:46	MDAS	Other	Fuze components	8	2	0.1	No	Removed	Yes
LD-67-595	11/2/2015 12:57	MDAS	Other	Fuze components	6	1	0.5	No	Removed	Yes
LD-68-598	11/2/2015 12:58	MDAS	Other	Fuze components	6	1	0.5	No	Removed	Yes
LD-69-600	11/2/2015 13:00	MDAS	Other	Fuze components	6	1	0.5	No	Removed	Yes

TABLE H-1
Low Density Target Results
L2 MRS, Joliet Army Ammunition Plant

Anomaly ID	Date	Anomaly Type	Description	Notes	Depth (Inches)	Quantity	Weight (Pounds)	Fuzed	Disposition	Resolved
LD-70-603	11/2/2015 13:03	MDAS	Booster	M3 booster	6	1	0.5	No	Removed	Yes
LD-124-85	11/3/2015 9:23	MDAS	Indeterminate frag	Frag	6	1	0.5	No	Removed	Yes
LD-139-153	11/3/2015 9:26	MDAS	Booster	M3 booster	6	1	0.5	No	Removed	Yes
LD-140-163	11/3/2015 9:26	MDAS	Booster	M3 booster	6	1	0.5	No	Removed	Yes
LD-104-53	11/3/2015 10:59	MDAS	Booster	M3 booster	3	1	0.5	No	Removed	Yes
LD-154-297	11/3/2015 13:06	MDAS	Other	Fuze components	6	1	0.1	No	Removed	Yes
LD-151-289	11/3/2015 13:07	MDAS	Other	M66 expended	6	1	0.5	No	Removed	Yes
LD-196-727	11/3/2015 16:05	MDAS	Other	Fuze components	3	1	0.2	No	Removed	Yes
LD-209-835	11/4/2015 7:28	MDAS	Indeterminate frag	Frag	6	1	0.1	No	Removed	Yes
LD-172-593	11/4/2015 9:08	MDAS	Other	Igniter, l bracket, nails	20	7	0.5	No	Removed	Yes
LD-175-601	11/4/2015 9:10	MDAS	Other	.50 cal bullet	6	1	0.1	No	Removed	Yes
LD-170-505	11/4/2015 10:16	MDAS	Indeterminate frag	Frag	1	1	0.1	No	Removed	Yes
LD-169-503	11/4/2015 10:19	MDAS	Indeterminate frag	Frag	6	1	1	No	Removed	Yes
LD-149-271	11/4/2015 11:05	MDAS	Other	Fuze components, nail	6	2	0.2	No	Removed	Yes
LD-150-273	11/4/2015 11:06	MDAS	Other	Fuze components, nail	8	2	0.1	No	Removed	Yes
LD-148-270	11/4/2015 11:12	MDAS	Other	Fuze components, nails, burn pit	14	4	0.4	No	Removed	Yes
LD-156-303	11/4/2015 11:17	MDAS	Other	Fuze components, nails, burn pit	12	6	0.5	No	Removed	Yes
LD-155-302	11/4/2015 12:19	MDAS	Other	Fuze components, nails, burn pit	11	3	0.1	No	Removed	Yes
LD-142-179	11/4/2015 12:57	MDAS	Other	M3 booster, nail	13	2	0.5	No	Removed	Yes
LD-127-101	11/4/2015 13:24	MDAS	Other	Fuze components, unidentified MD	5	2	0.5	No	Removed	Yes
LD-126-100	11/4/2015 13:25	MDAS	Other	Unknown MD	6	2	0.5	Yes	Removed	Yes
LD-135-140	11/4/2015 13:37	MDAS	Other	Unknown fuze, hinge	24	2	0.5	No	Removed	Yes
LD-131-127	11/4/2015 13:44	MDAS	Other	Frag, fuze components	8	2	0.1	No	Removed	Yes
LD-113-63	11/4/2015 14:20	MDAS	Other	M66 expended, nails	12	3	1	No	Removed	Yes
LD-110-60	11/4/2015 14:50	MDAS	Other	Slag, nail	4	2	0.1	No	Removed	Yes
LD-162-341	11/4/2015 15:03	MDAS	Other	M66 expended	7	1	0.5	No	Removed	Yes
LD-166-423	11/4/2015 15:51	MDAS	Other	Metal debris, fuze components, nail	12	3	1	No	Removed	Yes
LD-210-1118	11/6/2015 9:32	MDAS	Other	M66 booster, M66 expended	15	2	0.5	No	Removed	Yes
LD-212-1127	11/6/2015 9:34	MDAS	Other	M66 expended	4	1	0.5	No	Removed	Yes
LD-213-1128	11/6/2015 9:36	MDAS	Other	M3 booster	4	1	0.5	No	Removed	Yes
LD-214-1129	11/6/2015 9:45	MDAS	Fuze	Unknown fuze, nail	14	2	1	No	Removed	Yes
LD-215-1132	11/6/2015 9:59	MDAS	Other	M66 expended	12	1	0.5	No	Removed	Yes
LD-216-1134	11/6/2015 10:16	MDAS	Other	Frag	8	2	0.5	No	Removed	Yes
LD-221-1150	11/6/2015 10:30	MDAS	Other	Fuze components	12	1	0.5	No	Removed	Yes
LD-224-1154	11/6/2015 10:32	MDAS	Other	M66 expended	14	1	0.5	No	Removed	Yes
LD-220-1149	11/6/2015 10:40	MDAS	Other	Frag	20	1	0.1	No	Removed	Yes
LD-179-610	11/6/2015 10:50	MDAS	Other	M66 expended	6	1	0.5	No	Removed	Yes
LD-177-605	11/6/2015 11:02	MDAS	Other	M3 booster, wire, bracket	15	3	0.5	No	Removed	Yes
LD-238-1248	11/6/2015 12:55	MDAS	Indeterminate frag	Frag	10	1	1	No	Removed	Yes
LD-237-1237	11/6/2015 13:12	MDAS	Indeterminate frag	Frag	20	1	0.1	No	Removed	Yes
LD-227-1180	11/6/2015 13:15	MDAS	Other	M66 expended	6	1	0.1	No	Removed	Yes
LD-229-1196	11/6/2015 13:21	MDAS	Other	2x M66 expended, frag	10	3	0.5	No	Removed	Yes
LD-228-1186	11/6/2015 13:26	MDAS	Indeterminate frag	Frag	11	1	2	No	Removed	Yes
LD-226-1164	11/6/2015 13:50	MDAS	Other	Fuze components ,frag	4	2	0.5	No	Removed	Yes
LD-225-1155	11/6/2015 14:42	MDAS	Other	M66 expended, fuze components	4	2	1	No	Removed	Yes
LD-146-223	11/9/2015 8:10	MDAS	Other	M66 expended, fuze components	6	2	0.5	No	Removed	Yes
LD-190-660	11/9/2015 10:42	MDAS	Other	Fuze components, wrench	6	2	0.5	No	Removed	Yes
LD-185-653	11/9/2015 12:05	MDAS	Other	Fuze components, nails, burn pit	14	3	0.5	No	Removed	Yes

TABLE H-1
Low Density Target Results
L2 MRS, Joliet Army Ammunition Plant

Anomaly ID	Date	Anomaly Type	Description	Notes	Depth (Inches)	Quantity	Weight (Pounds)	Fuzed	Disposition	Resolved
LD-182-636	11/9/2015 12:47	MDAS	Other	Fuze components, nails, bracket, burn pit	15	4	0.5	No	Removed	Yes
LD-183-645	11/9/2015 12:58	MDAS	Other	Fuze components, nails, wire, burn pit	14	3	0.5	No	Removed	Yes
LD-184-647	11/9/2015 13:11	MDAS	Other	Fuze components, nails, bracket, slag, burn pit, 184 connected 186	14	4	0.5	No	Removed	Yes
LD-186-656	11/9/2015 13:12	MDAS	Other	Fuze components, nails, bracket, slag, burn pit, 184 connected 186	14	5	0.5	No	Removed	Yes
LD-26-1276	10/28/2015 9:26	Other	Other	Metal debris	8	3	0.5	No	Removed	Yes
LD-25-1275	10/28/2015 9:48	Other	Other	Metal debris	12	1	1	No	Removed	Yes
LD-27-1277	10/28/2015 10:02	Other	Other	Metal debris	12	1	1	No	Removed	Yes
LD-28-1278	10/28/2015 10:07	Other	Other	Bolt	4	1	0.5	Yes	Removed	Yes
LD-3-1268	10/28/2015 10:25	Other	Other	Bolt	8	1	1	No	Removed	Yes
LD-23-1272	10/28/2015 10:49	Other	Other	Nail	6	1	0.1	No	Removed	Yes
LD-5-1270	10/28/2015 10:54	Other	Other	Wire	3	1	0.5	No	Removed	Yes
LD-99-1262	10/28/2015 13:29	Other	Other	Bolt	8	1	0.5	No	Removed	Yes
LD-100-1263	10/28/2015 13:30	Other	Other	Nails	10	1	0.1	No	Removed	Yes
LD-101-1266	10/28/2015 13:45	Other	Other	2 foot metal debris	12	1	10	No	Removed	Yes
LD-90-1243	10/28/2015 14:07	Other	Other	Nail	6	1	0.1	No	Removed	Yes
LD-87-1235	10/28/2015 14:12	Other	Other	Nail	6	1	0.1	No	Removed	Yes
LD-24-1273	10/28/2015 15:56	Other	Other	Hinge	5	1	0.5	No	Removed	Yes
LD-76-1170	10/28/2015 16:23	Other	Other	Metal bar	10	1	1	No	Removed	Yes
LD-78-1174	10/28/2015 16:44	Other	Other	Rebar	30	1	1	No	LIP	Yes
LD-74-1145	10/29/2015 8:40	Other	Other	Can	12	1	0.1	No	Removed	Yes
LD-77-1171	10/29/2015 9:29	Other	Other	Nail, wire	20	2	0.1	No	Removed	Yes
LD-20-1236	10/29/2015 9:48	Other	Other	Nails	5	2	0.1	No	Removed	Yes
LD-19-1234	10/29/2015 9:49	Other	Other	Nails	4	2	0.1	No	Removed	Yes
LD-95-1256	10/29/2015 10:29	Other	Other	Pliers	9	1	1	No	Removed	Yes
LD-97-1258	10/29/2015 11:27	Other	Other	Wire, latch	9	2	0.1	No	Removed	Yes
LD-22-1264	10/29/2015 11:47	Other	Other	Nail	3	1	0.1	No	Removed	Yes
LD-85-1224	10/29/2015 12:45	Other	Other	Nail	6	1	0.1	No	Removed	Yes
LD-86-1232	10/29/2015 12:54	Other	Other	Hinge	6	1	0.5	No	Removed	Yes
LD-14-1172	10/29/2015 13:35	Other	Other	Nail	4	1	0.1	No	Removed	Yes
LD-46-256	10/29/2015 16:23	Other	Other	Nail	5	1	0.1	No	Removed	Yes
LD-37-37	10/29/2015 16:56	Other	Other	Metal plate, metal rod, wire	4	3	0.5	No	Removed	Yes
LD-21-1261	10/30/2015 16:03	Other	Other	Latch, bolt	18	2	0.2	No	Removed	Yes
LD-32-11	10/30/2015 16:39	Other	Other	Nails, bolt	6	2	0.3	No	Removed	Yes
LD-36-34	10/30/2015 16:46	Other	Other	Pipe	5	1	0.5	No	Removed	Yes
LD-63-520	10/30/2015 17:14	Other	Other	Hinge	6	1	0.1	No	Removed	Yes
LD-60-517	11/2/2015 9:04	Other	Other	Hinge, nails	8	2	0.5	No	Removed	Yes
LD-58-512	11/2/2015 9:06	Other	Other	Hinges, nails	8	2	0.2	No	Removed	Yes
LD-29-1	11/2/2015 9:58	Other	Other	Hinge	10	1	0.1	No	Removed	Yes
LD-33-12	11/2/2015 10:08	Other	Other	Nail	8	1	0.1	No	Removed	Yes
LD-31-10	11/2/2015 10:17	Other	Other	Nails	10	1	0.1	No	Removed	Yes
LD-34-14	11/2/2015 10:19	Other	Other	Nail	8	1	0.1	No	Removed	Yes
LD-39-98	11/2/2015 10:43	Other	Other	Bolt, nails	8	2	0.2	No	Removed	Yes
LD-42-146	11/2/2015 11:00	Other	Other	Wire	10	3	0.1	No	Removed	Yes
LD-45-231	11/2/2015 11:21	Other	Other	Nails, burn pit	6	1	0.1	No	Removed	Yes
LD-8-419	11/2/2015 11:34	Other	Other	Nail	5	1	0.1	No	Removed	Yes
LD-51-402	11/2/2015 11:38	Other	Other	Nail	24	1	0.1	No	Removed	Yes

TABLE H-1
Low Density Target Results
L2 MRS, Joliet Army Ammunition Plant

Anomaly ID	Date	Anomaly Type	Description	Notes	Depth (Inches)	Quantity	Weight (Pounds)	Fuzed	Disposition	Resolved
LD-56-508	11/2/2015 11:56	Other	Other	Trash pit, cleared	16	1	0.5	No	Removed	Yes
LD-57-511	11/2/2015 11:57	Other	Other	Bolt	6	1	0.1	No	Removed	Yes
LD-59-515	11/2/2015 11:58	Other	Other	Bolt	8	1	0.1	No	Removed	Yes
LD-64-588	11/2/2015 13:06	Other	Other	Nail	4	1	0.1	No	Removed	Yes
LD-66-590	11/2/2015 13:10	Other	Other	Rod, nail	8	2	0.2	No	Removed	Yes
LD-10-592	11/2/2015 13:15	Other	Other	Fence	1	1	1	No	Removed	Yes
LD-11-599	11/2/2015 13:17	Other	Other	Nails	6	2	0.2	No	Removed	Yes
LD-65-589	11/2/2015 13:25	Other	Other	Reinforced concrete	2	1	1	No	LIP	Yes
LD-9-480	11/2/2015 13:29	Other	Other	Spike	4	1	1	No	Removed	Yes
LD-98-1260	11/2/2015 14:06	Other	Other	Burn pit	1	1	1	No	LIP	Yes
LD-102-5	11/3/2015 9:16	Other	Other	Nail	16	1	0.1	No	Removed	Yes
LD-105-54	11/3/2015 9:18	Other	Other	Nail	6	1	0.1	No	Removed	Yes
LD-115-65	11/3/2015 9:19	Other	Other	Pipe	30	1	2	No	Removed	Yes
LD-120-72	11/3/2015 9:20	Other	Other	Track link tractor part	30	1	3	No	Removed	Yes
LD-108-57	11/3/2015 9:21	Other	Other	Fence post	8	1	1	No	Removed	Yes
LD-114-64	11/3/2015 9:22	Other	Other	Pipe	8	1	1	No	Removed	Yes
LD-152-294	11/3/2015 10:34	Other	Other	Bolt	7	1	0.1	No	Removed	Yes
LD-160-325	11/3/2015 10:41	Other	Other	Nail	10	1	0.1	No	Removed	Yes
LD-144-216	11/3/2015 10:43	Other	Other	Metal banding	5	1	0.1	No	Removed	Yes
LD-143-186	11/3/2015 10:44	Other	Other	Aluminum piece	6	1	0.1	No	Removed	Yes
LD-132-128	11/3/2015 10:51	Other	Other	Nail	3	1	0.1	No	Removed	Yes
LD-129-117	11/3/2015 10:52	Other	Other	Hinge	8	1	0.1	No	Removed	Yes
LD-119-71	11/3/2015 10:53	Other	Other	Wire	7	1	0.1	No	Removed	Yes
LD-116-66	11/3/2015 10:56	Other	Other	Pipe	10	1	1	No	Removed	Yes
LD-111-61	11/3/2015 11:03	Other	Other	Nail	4	1	0.1	No	Removed	Yes
LD-130-120	11/3/2015 11:15	Other	Other	Nails, spike	14	3	0.1	No	Removed	Yes
LD-133-137	11/3/2015 11:23	Other	Other	Rods, hinge	16	2	0.3	No	Removed	Yes
LD-134-139	11/3/2015 12:29	Other	Other	Car part	6	1	0.5	No	Removed	Yes
LD-153-296	11/3/2015 13:04	Other	Other	Hinge	8	1	0.1	No	Removed	Yes
LD-195-706	11/3/2015 15:00	Other	Other	Metal rod	26	1	0.5	No	Removed	Yes
LD-191-661	11/3/2015 15:02	Other	Other	Tie down strap	0	1	0.5	No	Removed	Yes
LD-193-672	11/3/2015 15:04	Other	Other	Nail	3	1	0.1	No	Removed	Yes
LD-203-746	11/3/2015 15:08	Other	Other	Rebar, aluminum piece	8	2	0.5	No	Removed	Yes
LD-201-744	11/3/2015 15:10	Other	Other	Hinge	6	1	0.5	No	Removed	Yes
LD-200-742	11/3/2015 15:13	Other	Other	Nails	6	6	0.2	No	Removed	Yes
LD-206-750	11/3/2015 15:16	Other	Other	Bar/round stock	1	1	1	No	LIP	Yes
LD-198-736	11/3/2015 16:03	Other	Other	Nail	11	1	0.1	No	Removed	Yes
LD-208-825	11/4/2015 7:30	Other	Other	Wire, nails	12	2	0.1	No	Removed	Yes
LD-207-820	11/4/2015 7:35	Other	Other	Reinforced concrete	2	1	1	No	LIP	Yes
LD-189-659	11/4/2015 7:52	Other	Other	Wire	3	1	0.1	No	Removed	Yes
LD-204-747	11/4/2015 8:02	Other	Other	Nails	18	5	0.2	No	Removed	Yes
LD-174-597	11/4/2015 8:49	Other	Other	Nails	20	4	0.2	No	Removed	Yes
LD-176-602	11/4/2015 9:50	Other	Other	Nail pit	12	16	0.2	No	LIP	Yes
LD-173-596	11/4/2015 9:51	Other	Other	Nail pit	24	27	0.1	No	LIP	Yes
LD-171-507	11/4/2015 10:15	Other	Other	Nail	3	1	0.1	No	Removed	Yes
LD-168-499	11/4/2015 10:17	Other	Other	Nail	2	1	0.1	No	Removed	Yes
LD-161-337	11/4/2015 10:43	Other	Other	Nail	3	1	0.1	No	Removed	Yes
LD-158-317	11/4/2015 11:14	Other	Other	Reinforced concrete	1	1	0.1	No	Removed	Yes
LD-138-151	11/4/2015 12:55	Other	Other	Bracket	6	1	0.1	No	Removed	Yes
LD-123-81	11/4/2015 13:50	Other	Other	Fence piece	0	1	1	No	Removed	Yes

TABLE H-1
Low Density Target Results
L2 MRS, Joliet Army Ammunition Plant

Anomaly ID	Date	Anomaly Type	Description	Notes	Depth (Inches)	Quantity	Weight (Pounds)	Fuzed	Disposition	Resolved
LD-122-78	11/4/2015 13:51	Other	Other	Barb wire	3	1	0.1	No	Removed	Yes
LD-121-75	11/4/2015 14:01	Other	Other	Hinge	6	1	0.1	No	Removed	Yes
LD-117-68	11/4/2015 14:11	Other	Other	File	14	1	1	No	Removed	Yes
LD-106-55	11/4/2015 14:21	Other	Other	Nail	5	1	0.1	No	Removed	Yes
LD-107-56	11/4/2015 14:51	Other	Other	Washer	4	1	0.1	No	Removed	Yes
LD-112-62	11/4/2015 14:52	Other	Other	Fence piece	0	1	1	No	Removed	Yes
LD-217-1135	11/6/2015 9:57	Other	Other	Metal rod	8	1	0.3	No	Removed	Yes
LD-222-1152	11/6/2015 10:38	Other	Other	Bracket	15	1	0.1	No	Removed	Yes
LD-178-606	11/6/2015 10:56	Other	Other	Bracket	4	1	0.1	No	Removed	Yes
LD-180-611	11/6/2015 11:01	Other	Other	Bracket	20	1	0.5	No	Removed	Yes
LD-233-1221	11/6/2015 11:12	Other	Other	Wire	9	2	0.2	No	Removed	Yes
LD-236-1231	11/6/2015 11:21	Other	Other	Metal rod, wire	8	3	0.5	No	Removed	Yes
LD-232-1218	11/6/2015 12:12	Other	Other	Bolt, wire	8	2	0.3	No	Removed	Yes
LD-231-1217	11/6/2015 12:20	Other	Other	Wire	10	2	0.2	No	Removed	Yes
LD-230-1216	11/6/2015 12:23	Other	Other	Wire	12	1	0.1	No	Removed	Yes
LD-235-1230	11/6/2015 12:25	Other	Other	Aluminum slag, wire, pipe	8	4	0.2	No	Removed	Yes
LD-234-1222	11/6/2015 12:53	Other	Other	Wire	11	1	0.1	No	Removed	Yes
LD-239-1251	11/6/2015 12:56	Other	Other	Metal rod	4	1	0.1	No	Removed	Yes
LD-187-657	11/6/2015 16:12	Other	Other	Nail, close to large hit	10	1	0.1	No	Removed	Yes
LD-188-658	11/6/2015 16:14	Other	Other	Nail, close to large hit	8	1	0.1	No	Removed	Yes
LD-147-244	11/9/2015 7:59	Other	Other	Nail, fence nearby	4	1	0.1	No	Removed	Yes
LD-205-749	11/9/2015 8:47	Other	Other	Aluminum pipe, hinge, nail	0	1	0.5	No	Removed	Yes
LD-192-669	11/9/2015 10:37	Other	Other	Burn pit, nails, hinges	12	5	0.5	No	Removed	Yes
LD-194-703	11/9/2015 10:38	Other	Other	Burn pit, nails, hinges	18	4	0.5	No	Removed	Yes
LD-199-741	11/9/2015 10:45	Other	Other	Wire	5	1	0.4	No	Removed	Yes
LD-197-733	11/9/2015 10:46	Other	Other	Nail	4	1	0.1	No	Removed	Yes
LD-202-745	11/9/2015 10:47	Other	Other	Nail	4	1	0.1	No	Removed	Yes
LD-79-1175	10/28/2015 16:53	False positive	Other	No find	24	0	0	No	NA	Yes
LD-80-1176	10/28/2015 16:56	False positive	Other	No find	0	0	0	No	NA	Yes
LD-82-1184	10/28/2015 16:57	False positive	Other	No find	0	0	0	No	NA	Yes
LD-118-69	11/4/2015 14:19	False positive	Other	No find	0	0	0	No	NA	Yes
LD-167-432	11/4/2015 15:23	False positive	Other	No find	8	0	0.1	No	NA	Yes
LD-219-1148	11/6/2015 13:51	False positive	Other	Dug to 4 feet	0	0	0	No	NA	Yes
LD-128-108	11/4/2015 13:45	Hot Rock	Other	Hot geo	6	1	0.1	No	Removed	Yes
LD-7-1274	10/28/2015 9:09	Hot Rock	Other	Hot geo	2	1	0.1	No	Removed	Yes
LD-109-58	11/3/2015 10:54	Not investigated	Other	In the road	1	1	1	No	LIP	Yes
LD-125-86	11/3/2015 11:00	Not investigated	Other	In the road	1	1	1	No	LIP	Yes
LD-136-144	11/3/2015 11:01	Not investigated	Other	In the road	1	1	1	No	LIP	Yes
LD-137-148	11/3/2015 11:02	Not investigated	Other	In the road	1	1	1	No	LIP	Yes
LD-164-420	11/6/2015 16:19	Not investigated	Other	Road	1	1	0.1	No	LIP	Yes
LD-4-1269	10/28/2015 10:52	Other	Other	Monitoring well	1	1	1	No	LIP	Yes
LD-145-219	11/6/2015 16:20	Other	Other	Road	0	0	0	No	NA	No
LD-218-1147	11/6/2015 13:44	QC seed	QC seed	Seed	6	1	1	No	Removed	Yes

Notes:
ID = identification
LIP = left-in-place
MDAS = material documented as safe
MEC = munitions and explosive of concern
mV = millivolts
NA = not applicable
QC = quality control
UXOQCS = Unexploded Ordnance Quality Control Supervisor

TABLE H-2
High Density Target Results
L2 MRS, Joliet Army Ammunition Plant

Anomaly ID	Date	Anomaly Type	Description	Notes	Depth (Inches)	Quantity	Weight (Pounds)	Fuzed	Disposition	Resolved
HD-7-556-2	10/27/2015 14:10	MEC	Fuze	M66 fuzes	10	2	1	Yes	Removed	Yes
HD-7-556-5	10/27/2015 14:13	MEC	Fuze	M66 fuzes	18	4	2	Yes	Removed	Yes
HD-1-185	10/26/2015	MDAS	Fuze	Fuze, rebar	4	1	2	No	Removed	Yes
HD-11-839-2	10/27/2015 16:40	MDAS	Indeterminate frag	Unknown frag	18	1	1	No	Removed	Yes
HD-11-839-3	10/27/2015 16:37	MDAS	Fuze	Frag, fuze components	8	1	1	No	Removed	Yes
HD-11-839-4	10/27/2015 16:36	MDAS	Fuze	Fuze components	36	1	1	No	Removed	Yes
HD-11-839	10/27/2015 16:39	MDAS	Fuze	Fuze components	24	1	1	No	Removed	Yes
HD-12-851	10/27/2015 16:31	MDAS	Indeterminate frag	Unknown projectile frag	2	1	0.5	No	Removed	Yes
HD-12-851-2	10/27/2015 16:32	MDAS	Indeterminate frag	Frag	4	1	0.5	No	Removed	Yes
HD-13-862	10/27/2015 16:24	MDAS	Fuze	Fuze components	2	1	0.5	No	Removed	Yes
HD-13-862-2	10/27/2015 16:26	MDAS	Fuze	Fuze components	8	1	0.5	No	Removed	Yes
HD-15-936	10/23/2015 14:56	MDAS	Indeterminate frag	Frag, hinge	13	5	1	No	Removed	Yes
HD-18-1018-4	10/26/2015 14:04	MDAS	Fuze	M66 tail fuze	12	1	0.5	No	Removed	Yes
HD-19-1020	10/27/2015 15:56	MDAS	Indeterminate frag	Frag	4	1	1	No	Removed	Yes
HD-19-1020-2	10/27/2015 15:59	MDAS	Other	Ceramic mine	2	1	0.1	No	Removed	Yes
HD-20-1086-3	10/26/2015 13:42	MDAS	Other	Ceramic mine, hinges	6	1	0.5	No	Removed	Yes
HD-21-1111-3	10/26/2015 11:51	MDAS	Booster	Booster cup	8	1	0.5	No	Removed	Yes
HD-21-1111-4	10/26/2015 12:13	MDAS	Fuze	Fuze components	22	1	0.5	No	Removed	Yes
HD-23-1137	10/26/2015	MDAS	Booster	M3 booster adapter	12	1	0.5	No	Removed	Yes
HD-23-1137-5	10/26/2015 14:42	MDAS	Booster	M3 booster adapter	6	1	0.5	No	Removed	Yes
HD-5-456-3	10/27/2015 14:19	MDAS	Indeterminate frag	Unknown frag	4	1	0.5	No	Removed	Yes
HD-7-556	10/27/2015 14:08	MDAS	Fuze	M66 expended	10	2	1	No	Removed	Yes
HD-7-556-3	10/27/2015 14:11	MDAS	Indeterminate frag	Frag, hinge	6	1	0.5	No	Removed	Yes
HD-7-556-6	10/27/2015 14:15	MDAS	Fuze	M66	8	4	2	No	Removed	Yes
HD-14-921-b	11/3/2015 7:38	MDAS	Fuze	M66 expended	12	1	0.1	No	Removed	Yes
HD-14-921-d	11/3/2015 7:41	MDAS	Indeterminate frag	Frag, hinge	18	2	0.1	No	Removed	Yes
HD-16-943	11/3/2015 8:05	MDAS	Other	Ceramic mine parts, nails	8	2	0.1	No	Removed	Yes
HD-16-943-b	11/3/2015 8:07	MDAS	Other	Igniter tube	12	1	0.1	No	Removed	Yes
HD-16-943-c	11/3/2015 8:08	MDAS	Other	Igniter tube, barrel lid, nails	8	3	0.1	No	Removed	Yes
HD-15-936-a	11/3/2015 8:31	MDAS	Fuze	Fuze components	6	1	0.1	No	Removed	Yes
HD-15-936-b	11/3/2015 8:32	MDAS	Fuze	Frag, fuze	18	2	0.5	No	Removed	Yes
HD-15-936-d	11/3/2015 8:34	MDAS	Indeterminate frag	Frag, nails	8	2	0.2	No	Removed	Yes
GridA_05	11/5/2015 8:16	MDAS	Other	Igniter tube	6	1	0.5	No	Removed	Yes
GridA_51	11/5/2015 8:17	MDAS	Fuze	Fuze components	8	2	0.1	No	Removed	Yes
GridB_32	11/5/2015 9:04	MDAS	Fuze	Fuze components, nail	14	3	0.2	No	Removed	Yes
GridB_27	11/5/2015 9:08	MDAS	Fuze	Fuze components, nails	14	3	0.5	No	Removed	Yes
GridB_07	11/5/2015 9:14	MDAS	Indeterminate frag	Frag, nails, bolt	25	5	0.3	No	Removed	Yes
GridB_13	11/5/2015 9:18	QC seed	QC seed	Fuze component, seed	8	2	0.5	No	Removed	Yes
GridB_08	11/5/2015 9:19	MDAS	Indeterminate frag	Frag	10	1	0.5	No	Removed	Yes
GridC_27	11/5/2015 10:13	MDAS	Other	Unknown aluminum debris	10	1	0.2	No	Removed	Yes
GridC_13	11/5/2015 10:16	MDAS	Other	Unknown aluminum debris	10	1	0.2	No	Removed	Yes
GridC_41	11/5/2015 10:17	MDAS	Fuze	Fuze components	10	1	0.1	No	Removed	Yes
GridD_24	11/5/2015 10:51	MDAS	Booster	3x M3 booster, nails, bracket, unknown metal debris	30	9	2	No	Removed	Yes
GridD_03	11/5/2015 10:56	MDAS	Fuze	Fuze components, M3 booster, aluminum piece	24	7	1	No	Removed	Yes
GridD_19	11/5/2015 11:02	MDAS	Fuze	Fuze components	13	8	0.2	No	Removed	Yes

TABLE H-2
High Density Target Results
L2 MRS, Joliet Army Ammunition Plant

Anomaly ID	Date	Anomaly Type	Description	Notes	Depth (Inches)	Quantity	Weight (Pounds)	Fuzed	Disposition	Resolved
GridD_08	11/5/2015 12:01	MDAS	Fuze	M66 expended, hinge	20	2	0.5	No	Removed	Yes
GridD_37	11/5/2015 12:03	MDAS	Fuze	Fuze component	18	1	0.1	No	Removed	Yes
GridG_05	11/5/2015 12:25	MDAS	Fuze	Fuze components, ceramic mine, hinge, nails	36	27	1	No	Removed	Yes
GridG_22	11/5/2015 12:49	MDAS	Booster	Booster tube, wire, nail, hinge	20	4	1	No	Removed	Yes
GridF_11	11/5/2015 13:41	MDAS	Indeterminate frag	Frag	10	1	1	No	Removed	Yes
GridF_08	11/5/2015 13:44	MDAS	Booster	M3 booster, nails	18	4	0.5	No	Removed	Yes
GridF_17	11/5/2015 13:47	MDAS	Fuze	Fuze components, frag, nails	26	24	0.5	No	Removed	Yes
GridE_07	11/5/2015 14:40	MDAS	Other	Metal rod	1	1	0.5	No	Removed	Yes
GridE_10	11/5/2015 14:41	MDAS	Other	Metal rod	16	4	1	No	Removed	Yes
HD-1-185-2	10/26/2015 15:35	Other	Other	Concrete rebar	1	1	1	No	LIP	Yes
HD-1-185-3	10/26/2015 15:38	Other	Other	Metal plate	1	1	1	No	LIP	Yes
HD-12-851-3	10/27/2015 16:33	Other	Other	Pipe	4	1	1	No	Removed	Yes
HD-12-851-4	10/27/2015 16:33	Other	Other	Nails	3	2	0.5	No	Removed	Yes
HD-12-851-5	10/27/2015 16:34	Other	Other	Nails	2	4	0.5	No	Removed	Yes
HD-13-862-3	10/27/2015 16:27	Other	Other	Nails, hinges	8	2	0.1	No	Removed	Yes
HD-13-862-4	10/27/2015 16:28	Other	Other	Nails	5	1	0.1	No	Removed	Yes
HD-13-862-5	10/27/2015 16:28	Other	Other	Nails, hinges	2	2	0.1	No	Removed	Yes
HD-18-1018-3	10/26/2015 14:03	Other	Other	Rod, wire	4	1	0.5	No	Removed	Yes
HD-18-1018-5	10/26/2015 14:07	Other	Other	Wire	6	1	0.1	No	Removed	Yes
HD-19-1020-3	10/27/2015 16:00	Other	Other	Nails	6	5	0.5	No	Removed	Yes
HD-19-1020-4	10/27/2015 16:01	Other	Other	Nails , hinges	3	3	0.5	No	Removed	Yes
HD-19-1020-5	10/27/2015 16:02	Other	Other	Nails	6	2	0.2	No	Removed	Yes
HD-2-276-10	10/26/2015 16:49	Other	Other	Nails	6	3	0.1	No	Removed	Yes
HD-2-276-2	10/26/2015 16:12	Other	Other	Nails	10	2	0.5	No	Removed	Yes
HD-2-276-3	10/26/2015 16:13	Other	Other	Nails, hot rocks	7	1	1	No	Removed	Yes
HD-2-276-4	10/26/2015 16:15	Other	Other	Nails	9	2	0.1	No	Removed	Yes
HD-2-276-5	10/26/2015 16:17	Other	Other	Nails	10	1	0.1	No	Removed	Yes
HD-2-276-6	10/26/2015 16:46	Other	Other	Nails	8	18	0.5	No	Removed	Yes
HD-2-276-7	10/26/2015 16:47	Other	Other	Nails	4	7	0.2	No	Removed	Yes
HD-2-276-8	10/26/2015 16:48	Other	Other	Nails	7	5	0.3	No	Removed	Yes
HD-2-276-9	10/26/2015 16:49	Other	Other	Nails	6	7	0.3	No	Removed	Yes
HD-20-1086	10/26/2015	Other	Other	Hinges	15	5	0.5	No	Removed	Yes
HD-20-1086-2	10/26/2015 13:40	Other	Other	Hinges	7	3	0.5	No	Removed	Yes
HD-20-1086-4	10/26/2015 13:42	Other	Other	Hinges	10	8	0.5	No	Removed	Yes
HD-20-1086-5	10/26/2015 13:39	Other	Other	Wire	6	1	0.2	No	Removed	Yes
HD-21-1111	10/26/2015	Other	Other	Hinge	15	1	0.5	No	Removed	Yes
HD-21-1111-2	10/26/2015 11:49	Other	Other	Wire	8	1	0.5	No	Removed	Yes
HD-21-1111-5	10/26/2015 12:14	Other	Other	Nails	24	1	0.5	No	Removed	Yes
HD-22-1121	10/26/2015	Other	Other	Wire	6	1	0.5	No	Removed	Yes
HD-22-1121-2	10/26/2015 11:24	Other	Other	Wire	4	1	0.5	No	Removed	Yes
HD-22-1121-3	10/26/2015 11:25	Other	Other	Wire	6	1	0.5	No	Removed	Yes
HD-22-1121-4	10/26/2015 11:28	Other	Other	Wire	4	1	0.5	No	Removed	Yes
HD-22-1121-5	10/26/2015 11:30	Other	Other	Nail	6	1	0.1	No	Removed	Yes
HD-23-1137-2	10/26/2015 14:39	Other	Other	Wire	18	10	0.5	No	Removed	Yes
HD-23-1137-3	10/26/2015 14:39	Other	Other	Wire	8	1	0.5	No	Removed	Yes
HD-23-1137-4	10/26/2015 14:41	Other	Other	Wire	8	5	0.5	No	Removed	Yes

TABLE H-2
High Density Target Results
L2 MRS, Joliet Army Ammunition Plant

Anomaly ID	Date	Anomaly Type	Description	Notes	Depth (Inches)	Quantity	Weight (Pounds)	Fuzed	Disposition	Resolved
HD-23-1137-6	10/26/2015 14:43	Other	Other	Wire, nails	12	10	0.5	No	Removed	Yes
HD-3-369-2	10/27/2015 8:39	Other	Other	Pipe	1	1	1	No	LIP	Yes
HD-3-369-3	10/27/2015 8:40	Other	Other	Nails	1	1	1	No	Removed	Yes
HD-3-369-4	10/27/2015 8:41	Other	Other	Nails	8	3	0.1	No	Removed	Yes
HD-3-369-5	10/27/2015 8:46	Other	Other	Nails	12	2	0.1	No	Removed	Yes
HD-3-369-6	10/27/2015 8:46	Other	Other	Wire	18	1	0.1	No	Removed	Yes
HD-3-369	10/27/2015	Other	Other	Steel pipe for utility well	1	1	1	No	Removed	Yes
HD-4-394	10/27/2015	Other	Other	Nails, wire	3	3	0.1	No	Removed	Yes
HD-4-394-2	10/27/2015 8:56	Other	Other	Pin flag	4	1	0.1	No	Removed	Yes
HD-5-456-2	10/27/2015 14:18	Other	Other	Nails	3	1	0.1	No	Removed	Yes
HD-5-456-4	10/27/2015 14:20	Other	Other	Nails, latch	10	2	0.1	No	Removed	Yes
HD-5-456-5	10/27/2015 10:13	Other	Other	Nails	6	2	0.1	No	Removed	Yes
HD-5-456	10/27/2015 14:17	Other	Other	Hinge, nail	3	2	0.1	No	Removed	Yes
HD-7-556-4	10/27/2015 14:12	Other	Other	Hinge	7	1	0.1	No	Removed	Yes
HD-8-677	10/27/2015 14:05	Other	Other	Reinforced wire in gravel	1	5	1	No	LIP	Yes
HD-8-677-2	10/27/2015 14:02	Other	Other	Reinforced wire in gravel	1	4	1	No	LIP	Yes
HD-9-712-2	10/26/2015 11:02	Other	Other	Corrugated pipe	12	1	10	No	Removed	Yes
HD-9-712-3	10/26/2015 11:04	Other	Other	Angle iron	8	1	10	No	Removed	Yes
HD-9-712	10/26/2015	Other	Other	Corrugated pipe	24	1	1	No	LIP	Yes
HD-14-921	11/3/2015 7:36	Other	Other	Nails	10	2	0.1	No	Removed	Yes
HD-14-921-a	11/3/2015 7:37	Other	Other	Hinge, nails	16	2	0.1	No	Removed	Yes
HD-14-921-c	11/3/2015 7:40	Other	Other	Hinge, nails	14	2	0.2	No	Removed	Yes
HD-6-473	11/3/2015 7:45	Other	Other	Nails	6	2	0.1	No	Removed	Yes
HD-6-473-a	11/3/2015 7:47	Other	Other	Nails, hot rocks	6	2	0.1	No	Removed	Yes
HD-6-473-b	11/3/2015 7:48	Other	Other	Nails	10	2	0.1	No	Removed	Yes
HD-6-473-c	11/3/2015 7:49	Other	Other	Nails	6	2	0.1	No	Removed	Yes
HD-6-473-d	11/3/2015 7:50	Other	Other	Nails	5	2	0.1	No	Removed	Yes
HD-17-954	11/3/2015 7:58	Other	Other	Nails	24	6	0.2	No	Removed	Yes
HD-17-954-b	11/3/2015 8:01	Other	Other	Metal rod	4	1	0.5	No	Removed	Yes
HD-17-954-c	11/3/2015 8:02	Other	Other	Nails	8	3	0.1	No	Removed	Yes
HD-17-954-d	11/3/2015 8:02	Other	Other	Nails	8	2	0.1	No	Removed	Yes
HD-17-954-e	11/3/2015 8:03	Other	Other	Cable	8	1	0.1	No	Removed	Yes
HD-16-943-a	11/3/2015 8:06	Other	Other	Hinge, bolt, nails, screw	8	5	0.5	No	Removed	Yes
HD-16-943-d	11/3/2015 8:09	Other	Other	Nails, bolts, wire	6	3	0.5	No	Removed	Yes
HD-10-832	11/3/2015 8:14	Other	Other	Nails	12	3	0.1	No	Removed	Yes
HD-10-832-a	11/3/2015 8:15	Other	Other	Latch, nails	8	2	0.1	No	Removed	Yes
HD-10-832-b	11/3/2015 8:16	Other	Other	Nails	1	1	0.1	No	Removed	Yes
HD-10-832-c	11/3/2015 8:17	Other	Other	Nails	10	1	0.1	No	Removed	Yes
HD-10-832-d	11/3/2015 8:17	Other	Other	Nails	4	2	0.1	No	Removed	Yes
HD-15-936-c	11/3/2015 8:33	Other	Other	Nails	10	3	0.1	No	Removed	Yes
GridA_33	11/5/2015 8:14	Other	Other	Barrel ring lid	14	1	5	No	Removed	Yes
GridA_26	11/5/2015 8:15	Other	Other	Unknown metal debris	6	2	0.5	No	Removed	Yes
GridA_46	11/5/2015 8:17	Other	Other	2x spark plugs, nail, metal debris	6	4	1	No	Removed	Yes
GridB_18	11/5/2015 9:11	Other	Other	Nails	22	5	0.3	No	Removed	Yes
GridC_17	11/5/2015 10:09	Other	Other	Nails	17	27	1	No	Removed	Yes

TABLE H-2
High Density Target Results
L2 MRS, Joliet Army Ammunition Plant

Anomaly ID	Date	Anomaly Type	Description	Notes	Depth (Inches)	Quantity	Weight (Pounds)	Fuzed	Disposition	Resolved
GridC_30	11/5/2015 10:12	Other	Other	Nails	17	3	0.1	No	Removed	Yes
GridG_07	11/5/2015 12:51	Other	Other	Hinge, unknown metal debris	10	2	0.5	No	Removed	Yes
GridG_17	11/5/2015 12:53	Other	Other	Metal rod	3	1	1	No	Removed	Yes
GridG_34	11/5/2015 12:55	Other	Other	Metal rod	0	1	1	No	Removed	Yes
GridF_02	11/5/2015 13:42	Other	Other	Nails, wire	9	4	0.3	No	Removed	Yes
GridF_26	11/5/2015 13:56	Other	Other	Nails	8	4	0.1	No	Removed	Yes
GridE_16	11/5/2015 14:32	Other	Other	Hinges, nails, slag	36	7	0.5	No	Removed	Yes
GridE_20	11/5/2015 14:35	Other	Other	Hinge	15	1	0.5	No	Removed	Yes
GridE_03	11/5/2015 14:38	Other	Other	Wire	14	1	0.1	No	Removed	Yes
HD-17-954-a	11/3/2015 7:59	Hot Rock	Other	Hot rocks	1	1	1	No	Removed	Yes
GridC_03	11/5/2015 10:15	QC seed	QC seed	Seed	7	1	0.1	No	Removed	Yes
GridD_12	11/5/2015 10:58	QC seed	QC seed	Seed	8	1	1	No	Removed	Yes
GridG_08	11/5/2015 12:27	QC seed	QC seed	Seed	6	1	1	No	Removed	Yes
GridF_18	11/5/2015 13:45	QC seed	QC seed	Seed	8	1	0.5	No	Removed	Yes
GridE_02	11/5/2015 14:37	QC seed	QC seed	Seed	8	1	0.5	No	Removed	Yes

Notes:
ID = identification
mV = millivolts
LIP = left-in-place
QC = quality control
MDAS = material documented as safe
UXOQCS = Unexploded Ordnance Quality Control Supervisor
MEC = munitions and explosive of concern

TABLE H-3
Analog Target Results
L2 MRS, Joliet Army Ammunition Plant

Analog ID	Date	Item Type	Description	Notes	Depth (Inches)	Quantity	Weight (Pounds)	Fuzed	Disposition	Resolved
28	10/21/2015 14:27	MEC	Fuze	M66 fuze	2	1	0.2	No	Removed	Yes
31	10/21/2015 14:36	MEC	Fuze	M66 fuze	2	1	1	No	Removed	Yes
36	10/22/2015 9:20	MEC	Booster	M66 booster	3	1	0.5	No	Removed	Yes
1	10/21/2015 8:17	MDAS	Indeterminate frag	Unknown frag	1	1	0.1	No	Removed	Yes
3	10/21/2015 8:32	MDAS	Indeterminate frag	Unknown frag	1	1	0.1	No	Removed	Yes
12	10/21/2015 9:25	MDAS	Fuze	Unknown component	1	1	0.1	No	Removed	Yes
13	10/21/2015 9:34	MDAS	Other	Expended primer and nail	1	2	0.1	No	Removed	Yes
18	10/21/2015 10:46	MDAS	Fuze	M66 fuze	3	1	2.5	No	Removed	Yes
26	10/21/2015 14:18	MDAS	Fuze	M66 expended	6	1	0.5	No	Removed	Yes
27	10/21/2015 14:23	MDAS	Fuze	M66 expended	2	1	0.5	No	Removed	Yes
29	10/21/2015 14:33	MDAS	Indeterminate frag	Unknown frag	6	1	0.1	No	Removed	Yes
34	10/22/2015 9:11	MDAS	Fuze	M66 expended	2	1	1	No	Removed	Yes
35	10/22/2015 9:17	MDAS	Fuze	M66 expended	2	1	1	No	Removed	Yes
39	10/22/2015 9:42	MDAS	Indeterminate frag	Unknown frag	1	1	0.5	No	Removed	Yes
41	10/22/2015 11:22	MDAS	Indeterminate frag	Frag	2	1	0.2	No	Removed	Yes
2	10/21/2015 8:22	Other	Other	2 nails	1	2	0.1	No	Removed	Yes
4	10/21/2015 8:38	Other	Other	Nail	2	1	0.1	No	Removed	Yes
5	10/21/2015 9:00	Other	Other	3" cable	2	1	1	No	LIP	Yes
6	10/21/2015 9:05	Other	Other	Nail	1	1	0.1	No	Removed	Yes
7	10/21/2015 9:18	Other	Other	Barb wire 3"	1	1	0.1	No	Removed	Yes
8	10/21/2015 9:20	Other	Other	Welding rod	1	1	0.1	No	Removed	Yes
9	10/21/2015 9:21	Other	Other	Bucket handle	1	1	0.1	No	Removed	Yes
10	10/21/2015 9:22	Other	Other	Welding rod	1	1	0.1	No	Removed	Yes
11	10/21/2015 9:24	Other	Other	Misc metal	2	2	0.1	No	Removed	Yes
14	10/21/2015 9:40	Other	Other	Unknown metal	6	4	0.2	No	Removed	Yes
15	10/21/2015 9:41	Other	Other	Unknown metal	1	5	0.2	No	Removed	Yes
16	10/21/2015 9:52	Other	Other	18" nail	2	1	0.3	No	Removed	Yes
17	10/21/2015 10:33	Other	Other	2" wire	1	1	0.1	No	Removed	Yes
19	10/21/2015 11:12	Other	Other	Wire	6	1	0.1	No	Removed	Yes
20	10/21/2015 11:21	Other	Other	Construction debris	2	1	3	No	Removed	Yes
21	10/21/2015 11:23	Other	Other	Car frame	0	1	400	No	LIP	Yes
22	10/21/2015 11:30	Other	Other	J bolt	1	1	0.5	No	Removed	Yes
23	10/21/2015 11:43	Other	Other	Barb wire	1	1	0.1	No	Removed	Yes
24	10/21/2015 11:46	Other	Other	Downed pole with over 30' wire	0	1	5	No	LIP	Yes
25	10/21/2015 14:12	Other	Other	Barb wire	1	4	0.1	No	Removed	Yes
30	10/21/2015 14:34	Other	Other	Latch	6	1	0.2	No	Removed	Yes
32	10/21/2015 14:49	Other	Other	Barb wire	16	1	0.5	No	Removed	Yes
37	10/22/2015 9:22	Other	Other	14" wire	1	1	0.3	No	Removed	Yes

TABLE H-3
Analog Target Results
L2 MRS, Joliet Army Ammunition Plant

Analog ID	Date	Item Type	Description	Notes	Depth (Inches)	Quantity	Weight (Pounds)	Fuzed	Disposition	Resolved
38	10/22/2015 9:26	Other	Other	14" wire	6	1	1	No	Removed	Yes
40	10/22/2015 11:16	Other	Other	Screwdriver	1	1	1	No	Removed	Yes
42	10/22/2015 11:26	Other	Other	Can lid	3	1	0.1	No	Removed	Yes
43	10/22/2015 11:34	Other	Other	2 steel cables	16	1	10	No	LIP	Yes

Notes:
LIP = left-in-place
MDAS = material documented as safe
MEC = munitions and explosive of concern

Summary of Analytical Data
(provided on CD)

TABLE I-1
SUMMARY OF ANALYTICAL DATA
JOLIET ARMY AMMUNITION PLANT

FIELD IDENTIFICATION	JAAP-L2-IS01-0.5				JAAP-L2-IS101-0.5				JAAP-L2-IS201-0.5			
DATE COLLECTED	December 8, 2015				December 8, 2015				December 8, 2015			
	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual	Result	LOD	LOQ	Qual
Explosives by USEPA SW-846 8330B (mg/kg)												
1,3,5-Trinitrobenzene	<	0.2	0.5	U	<	0.2	0.5	U	<	0.2	0.5	U
2,4,6-Trinitrotoluene	<	0.2	0.5	U	<	0.2	0.5	U	<	0.2	0.5	U
2,4-Dinitrotoluene	<	0.2	0.5	U	<	0.2	0.5	U	<	0.2	0.5	U
2,6-Dinitrotoluene	<	0.2	0.5	U	<	0.2	0.5	U	<	0.2	0.5	U
HMX	<	0.2	0.5	U	<	0.2	0.5	U	<	0.2	0.5	U
RDX	<	0.2	0.5	U	<	0.2	0.5	U	<	0.2	0.5	U

Notes:

< = sample result is less than the LOD

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

LOD = limit of detection

LOQ = limit of quantitation

mg/kg = milligram per kilogram

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

U = nondetect

Data Review and Validation

(provided on CD)

1.0 SUMMARY OF ANALYTICAL RESULTS

One soil sample was analyzed for explosives as shown in the table below.

Parameter	Project Analytes List	Matrix	Analytical Method	Laboratory
Explosives	Method 8330B	Soil	8330B	APPL

APPL = Agriculture & Priority Pollutants Laboratories, Inc.

A summary of analytical results is presented in **Appendix I**.

2.0 DATA QUALITY REVIEW/VALIDATION PROCESS`

The analytical data generated by the laboratory were checked for accuracy, precision, representativeness, comparability, and completeness. The data review/validation process for this project consisted of data generation, reduction, and two levels of review.

2.1 LABORATORY DATA REDUCTION AND VALIDATION

The analytical laboratory completed the first level of chemical data review, which contained multiple sublevels. The laboratory had the initial responsibility for the correctness and completeness of the data. Worksheet #34 in the Remedial Investigation (RI) Work Plan (WP), Joliet Army Ammunition Plant (JOAAP) Uniform Federal Policy-Quality Assurance Project Plan (UFP-QAPP) (URS 2015) identifies the laboratory reduction and validation processes.

2.2 DATA REVIEW

The URS Project Chemist completed the second level of chemical data review. All chemical data was also subjected to review by Automated Data Review (ADR). ADR reports are presented in this appendix. The data review was completed following the procedures described below and utilizing quality assurance/quality control (QA/QC) criteria specified in the RI WP, JOAAP UFP-QAPP (URS 2015). The QC parameters included in the review of the laboratory analytical data packages included the following:

- Completeness of package
- Review of laboratory case narrative and cooler receipt form
- Compliance with required holding times and sample preservation requirements
- Presence or absence of compounds in method blanks
- Surrogate spike recovery in samples
- Laboratory control samples (LCS)

- Performance evaluation (PE) samples
- Field triplicate samples

2.3 TARGET ANALYTE CONFIRMATION DATA VALIDATION

The URS Project Chemist completed full validation on 10 percent of the analytical data as defined in the RI WP, JOAAP UFP-QAPP (URS 2015). The full validation of analytical data included the review of all parameters identified above and the additional parameters listed below:

- Initial calibration (ICAL)
- Initial calibration verification (ICV)
- Continuing calibration verification (CCV)
- Retention time windows
- Chromatogram review
- Sample preparation log review
- Standard preparation log review
- Run log review

3.0 DATA REVIEW/VALIDATION RESULTS

The data review/validation process was implemented to assess the quality of data generated by the field sampling program with respect to the QA/QC objectives established for the project. Data were assessed to evaluate whether the results were of adequate quality to support decision making. Data assessment involved a consideration of data use, the decision type, identification of data that were qualified or did not meet project QC requirements, and limitations on data use. The data review/validation was based on the laboratory data summary reports and raw data.

3.1 EXPLOSIVES

The following sections collectively summarize the review/validation of explosives data analyzed by APPL. The following sample delivery group (SDG) was included:

Sample Delivery Group
78144

The data review/verification processes are presented in the following subsections.

3.1.1 Data Package Completeness

The data package was reviewed to verify the SDG contained the data contractually required in the deliverable and that all samples listed on the chain of custody (COC) form were analyzed for the requested parameters. The review indicated that the data package was complete.

3.1.2 Laboratory Case Narrative

The laboratory case narrative indicated no problems or discrepancies were encountered.

3.1.3 Holding Times

Review of the sample collection and analysis dates involved comparing the COCs, the chemical results summary forms, and the raw data forms for accuracy, consistency, and holding time compliance. All samples were prepared and analyzed within the required holding time criteria.

3.1.4 Initial Calibration

Calibration criteria were established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for explosives analysis. The linearity of each calibration curve was established using a minimum of five standard concentrations. The percent relative standard deviations (RSD) for all target analytes was less than or equal to 15 percent. A minimum of 50 percent of the ICAL recoveries were recalculated and compared to the raw data for explosives. No calculation or transcription errors were noted, and no qualification of data was required based on initial calibration data.

3.1.5 Retention Time Windows

Retention time windows are used for the identification of target compounds in chromatographic analyses. The explosives retention time windows were confirmed as part of the review/verification process. USEPA SW-846 Method 8000C (USEPA 2008) specifies the retention time windows as plus or minus three standard deviations of the mean absolute retention time. Chromatograms were reviewed to verify the major peaks were identified and the retention times were within the established window as determined by the above criteria. No qualification of the data was required.

3.1.6 Calibration Verification

The laboratory performed a second source ICV immediately after the ICAL and CCVs once for every 10 field samples analyzed, as required by the DoD QSM. Review of ICV and CCV summary forms indicated all target compounds had percent differences (percent Ds) within the evaluation criteria of less than or equal to 20 percent. A minimum of 50 percent of the ICV and CCV recoveries were recalculated and compared to the raw data. No calculation or transcription errors were noted, and no qualification of data was required based on calibration verification.

3.1.7 Blank Samples

The purpose of method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. A method blank sample was analyzed as part of the analytical batch. All target analytes were reported as nondetect for the method blank sample. The chromatogram was reviewed and no peaks other than the surrogate were present. No qualification of data was required based on method blank data.

3.1.8 Surrogate Compounds

The surrogate compound 1,2-dinitrobenzene was used to evaluate the laboratories overall sample preparation efficiency on a per-sample basis. All surrogate recoveries were within the evaluation criteria of 65 to 135 percent. All surrogate recoveries were recalculated and compared to the raw data. No transcription or calculation errors were noted, and no qualification of data was required based on surrogate recoveries.

3.1.9 Laboratory Control Samples

A laboratory control sample (LCS) was analyzed to assess the accuracy of the analytical batch. Review of the LCS summary form indicated all explosive recoveries were within laboratory established evaluation criteria. A minimum of 50 percent of the LCS recoveries were recalculated and compared to the raw data. No transcription or calculation errors were noted, and no qualification of data was required based on LCS recoveries.

3.1.10 Performance Evaluation Samples

PE recovery limits were established to assess the accuracy of the analytical method and demonstrate laboratory performance on an analytical batch-specific basis. All PE recoveries were within the evaluation criteria for explosives. A minimum of 50 percent of the PE recoveries were recalculated and compared to the raw data. No transcription or calculation errors were noted, and no qualification of data was required based on PE recoveries.

3.1.11 Field Triplicate Samples

A field triplicate sample set was collected to assess both field and laboratory precision. One field triplicate sample set, identified in the table below, was collected and submitted to the analytical laboratory.

Field Triplicate Sample Sets / Analytical Parameters			
Original Sample ID	**Duplicate Sample ID**	**Triplicate Sample ID**	**Parameters Triplicated**
JAAP-L2-IS01-0.5	JAAP-L2-IS101-0.5	JAAP-L2-IS201-0.5	Incremental Explosives

Evaluation criteria for field triplicate sample set results is less than 20 percent RSD for detections greater than the limit of quantitation (LOQ) in incremental explosive samples. All six explosive analyte triplicate sets had detections less than the LOQ; therefore, RSD was not evaluated, and no qualification of data was required based on field triplicate RSDs. Analytical results for the field triplicate sample sets are presented in **Table J-1**.

3.1.12 Precision, Accuracy, Representativeness, Comparability and Completeness Parameters

Precision and Accuracy

The agreement between duplicate and triplicate analyses within control limits indicates satisfactory precision in a measurement system. The recovery of a predetermined amount of a spike within control limits indicates satisfactory accuracy with respect to the method on the individual sample and general matrix. For explosives, 100 percent of the indicators reviewed for precision (MS/MSD RPDs and field triplicate RSDs) were within evaluation criteria. For explosives, 100 percent of the indicators reviewed for accuracy (LCS, PE, MS/MSD, and surrogate spike recoveries) were within evaluation criteria.

The overall accuracy and precision of the sample data reported for the JOAAP sampling event was concluded to be satisfactory for explosives.

Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represent the characteristics of a population. Representativeness is a qualitative parameter that is addressed by the proper design of the sampling program, such that the sampling locations selected will provide representative data for decisions at JOAAP. Representativeness was assessed by evaluating whether detections of target analytes were significantly above corresponding blank contamination levels. One field triplicate set was collected at JOAAP to assess the effect of sample collection on results. For explosives, 100 percent of the analytes in the field triplicate sets met RSD evaluation criteria and 100 percent of sample analyses were unaffected by method blanks; therefore, it was concluded that overall representativeness was satisfactory.

Comparability

Comparability expresses the confidence with which one data set can be compared to another. In accordance with the UFP-QAPP, data are comparable when collection techniques, measurement methods, and reporting procedures are equivalent for the samples within a sample set. Throughout this investigation, appropriate procedures for sampling, analysis, and shipping were implemented as specified in the RI WP, JOAAP UFP-QAPP (URS 2015) and it was concluded that results were comparable to one another.

Completeness

Completeness is defined as the percentage of the total number of analytical results requested which are judged to be usable, including estimated **J/UJ** values. In accordance with the RI WP, JOAAP UFP-QAPP (URS 2015) completeness was 100 percent for the explosives data.

4.0 REFERENCES

Department of Defense (DoD). 2013. Department of Defense Quality Systems Manual for Environmental Laboratories, Final Version 5.0. July.

URS Corporation (URS) 2015. Remedial Investigation Work Plan Joliet Army Ammunition Plant UFP-QAPP. September.

USEPA. 2008. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition of SW-846, Final Update IVB. January.

TABLE J-1
SUMMARY OF FIELD TRIPLICATE RESULTS
JOLIET ARMY AMMUNITION PLANT

FIELD IDENTIFICATION	JAAP-L2-IS01-0.5			JAAP-L2-IS101-0.5			JAAP-L2-IS201-0.5			
DATE COLLECTED	December 8, 2015			December 8, 2015			December 8, 2015			
	Result	LOQ	Qual	Result	LOQ	Qual	Result	LOQ	Qual	%RSD
Explosives by USEPA SW-846 8330B (mg/kg)										
1,3,5-Trinitrobenzene	<	0.5	U	<	0.5	U	<	0.5	U	N/A
2,4,6-Trinitrotoluene	<	0.5	U	<	0.5	U	<	0.5	U	N/A
2,4-Dinitrotoluene	<	0.5	U	<	0.5	U	<	0.5	U	N/A
2,6-Dinitrotoluene	<	0.5	U	<	0.5	U	<	0.5	U	N/A
HMX	<	0.5	U	<	0.5	U	<	0.5	U	N/A
RDX	<	0.5	U	<	0.5	U	<	0.5	U	N/A

Notes:

< = sample result is less than the LOD

HMX = octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

LOD = limit of detection

LOQ = limit of quantitation

mg/kg = milligram per kilogram

N/A = not applicable

Qual = qualifier

RDX = hexahydro-1,3,5-trinitro-1,3,5-triazine

RSD = relative standard deviation

U = nondetect

MEC HA Workbook

MEC HA Summary Information

Comments

Site ID: Explosive Burning Ground 1 (L2) MRS (JAAP-002-R-01)

Date: 1/6/2016

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:

L2 MRS (JAAP-002-R-01)

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	L2/L3 AAR, USA Environmental, Inc. 2007
2	L2 SSFR, MWH 2010
3	Final RI Work Plan, URS 2015
4	RI Report, URS 2016
5	
6	
7	
8	
9	
10	
11	
12	

B. Briefly describe the site:

1. Area (include units): 52 acres
2. Past munitions-related use:

OB/OD Area

3. Current land-use activities (list all that occur):

Farming and environmental monitoring.

4. Are changes to the future land-use planned? Yes
5. What is the basis for the site boundaries?

Site boundaries are based on the historical interpretation of the former L2 IRP site boundary, plus an additional 200-ft buffer.

6. How certain are the site boundaries?

The former L2 IRP site was bounded by a chainlink fence, which is mostly still intact. Extending 200 feet from the fence line provides an accurate representation of the MRS boundary.

Reference(s) for Part B:

L2/L3 AAR, 2007; L2 SSFR, 2010; and Final RI Work Plan, 2015

C. Historical Clearances

1. Have there been any historical clearances at the site? Yes, subsurface clearance

Entire MRS has been surface cleared and subsurface cleared to 1 foot bgs

2. If a clearance occurred:
   a. What year was the clearance performed? 2006; 2007

   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):

2006;2007: 52 acres cleared to a depth of 1 foot bgs, more than 2,400 MEC items removed, analog detection technology used

Reference(s) for Part C:

L2/L3 AAR, 2007; L2 SSFR, 2010

D. Attach maps of the site below (select 'Insert/Picture' on the menu bar.)

See Figures 1-1 through 1-3 in RI Report

Site ID: **Explosive Burning Ground 1 (L2) MRS (JAAP-002-R-01)**
Date: **1/6/2016**

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	Fuzes		Fuze (N/A)	M66	High Explosive	Yes	Impact	Unarmed	0.167	Subsurface Only	
2	Fuzes		Fuze (N/A)	MkIII	High Explosive	No	Impact	Unarmed	0.333	Subsurface Only	
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Reference(s) for table above:

RI Fieldwork completed in 2015

Bulk Explosive Information

Item	Explosive Type	Comment
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Reference(s) for table above:

Site ID: **Explosive Burning Ground 1 (L2) MRS (JAAP-002-R-01)**
Date: **1/6/2016**

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	Farming	2	8	**16**	1	(2) farmers per year x (8) hrs per year. Estimated, a very small portion of L2 is farmland.
2	Groundwater Long-Term Monitoring	2	20	**40**	0	(2) site workers x (2) 10-hr days per year for annual GW sampling of 12 wells
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
			Total Potential Contact Time (receptor hrs/yr):	**56**		
				Maximum intrusive depth at site (ft):	**1**	

Reference(s) for table above:
Final RI Work Plan, 2015

Activities Planned for the Future at the Site (If any are planned: see 'Summary Info' Worksheet, Question 4)

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	Farming	2	8	**16**	1	(2) farmers per year x (8) hrs per year. Estimated, a very small portion of L2 is farmland.
2	Groundwater Long-Term Monitoring	2	20	**40**	0	(2) site workers x (2) 10-hr days per year for annual GW sampling of 12 wells.
3	Recreation (hiking, hunting)	50	24	**1,200**	1	Assumes (50) hikers/hunters per year x (24) hours per person
4						
5						
6						
7						
8						
9						
10						
11						
12						
			Total Potential Contact Time (receptor hrs/yr):	**1,256**		
			Maximum intrusive depth at site (ft):		**1**	

Reference(s) for table above:

Final RI Work Plan, 2015

Site ID: **Explosive Burning Ground 1 (L2) MRS (JAAP-002-R-01)**

Date: **1/6/2016**

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? 1939 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.

Star Grove Cemetery is approximately 1,300 ft south of the MRS boundary.

MEC Item(s) used to calculate the ESQD for current use activities

90mm, M71 HE Projectile

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? No
6. Please describe the facility or feature.

Star Grove Cemetery is approximately 1,300 ft south of the MRS boundary.

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
Outside of the ESQD arc	0	0	0

7. Future use activities are 'Outside of the ESQD arc', based on Question 5.'

	Score
Baseline Conditions:	**0**
Surface Cleanup:	**0**
Subsurface Cleanup:	**0**

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:

L2/L3 AAR, 2007; L2 SSFR, 2010; and Final RI Work Plan, 2015

Response Alternative No. 1: None

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: **56** receptor hrs/yr
Based on the table above, this corresponds to a input factor score for baseline conditions of: **15** 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: **1,256** receptor hrs/yr
Based on the table above, this corresponds to a input factor score of: **15** Score

Response Alternative No. 1: None

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 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***

OB/OD Area

Baseline Conditions:	**180**
Surface Cleanup:	**110**
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: **0.167** ft
The deepest intrusive depth: **1** 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 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 overlaps with minimum MEC depth.' For 'Current Use Activities', only Baseline Conditions are considered. **150** ***Score***

Future Use Activities

Deepest intrusive depth: **1** ft

Because the shallowest minimum MEC depth is less than or equal to the deepest intrusive depth, the intrusive depth overlaps. 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 overlaps with minimum MEC depth.'. For 'Future Use Activities', only Baseline Conditions are considered. **150** ***Score***

Response Alternative No. 1: None

Expected minimum MEC depth (from the 'Planned Remedial or Removal Actions' Worksheet): **1** ft

Based on the 'Planned Remedial or Removal Actions' Worksheet, land use activities will not change if this alternative is implemented.

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? Yes

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).

Frost heave, erosion

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 'Possible.' *Score*

Baseline Conditions:	**30**
Surface Cleanup:	**30**
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 'OB/OD Area'.

Has a technical assessment shown that MEC in the OB/OD Area is DMM? Yes

M66 fuzes were encountered; however, review of Figure 4-3 and Table 4-15 of the MEC HA guidance indicate fuzes similar to those found during the RI do not fall under the the "special/sensitive" category.

Are any of the munitions listed in the 'Munitions, Bulk Explosive Info' Worksheet: No

- 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:

Fuzed DMM	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 'Fuzed DMM'.

	Score
Baseline Conditions:	**55**
Surface Cleanup:	**55**
Subsurface Cleanup:	**55**

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**

Site ID: **Explosive Burning Ground 1 (L2) MRS (JAAP-002-R-01)**
Date: **1/6/2016**

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	None			No		
2						
3						
4						
5						
6						

For those alternatives where you answered 'No' in Column E, are land-use activities to be assessed against current or future land uses?		

Reference(s) for table above:

Site ID: **Explosive Burning Ground 1 (L2) MRS (JAAP-002-R-01)**
Date: **1/6/2016**

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: None

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 #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:

Scoring Summary

Site ID:	Explosive Burning Ground 1 (L2) MRS (JAAP-002-R-01)	a. Scoring Summary for Current Use Activities	
Date:	1/6/2016	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		4. Current use activities are 'Outside of the ESQD arc', based on Question 2.'	0
III. Site Accessibility		Full Accessibility	80
IV. Potential Contact Hours		Very Few Hours	15
V. Amount of MEC		OB/OD 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.	150
VII. Migration Potential		Possible	30
VIII. MEC Classification		Fuzed DMM	55
IX. MEC Size		Small	40
		Total Score	650
		Hazard Level Category	3

Site ID:	Explosive Burning Ground 1 (L2) MRS (JAAP-002-R-01)	b. Scoring Summary for Future Use Activities	
Date:	1/6/2016	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		4. Current use activities are 'Outside of the ESQD arc', based on Question 2.'	0
III. Site Accessibility		Full Accessibility	80
IV. Potential Contact Hours		<10,000 receptor-hrs/yr	15
V. Amount of MEC		OB/OD Area	180
VI. Minimum MEC Depth Relative to Maximum Intrusive Depth		Baseline Condition: MEC located only subsurface. Baseline Condition or After Cleanup: Intrusive depth overlaps with minimum MEC depth.	150
VII. Migration Potential		Possible	30
VIII. MEC Classification		Fuzed DMM	55
IX. MEC Size		Small	40
		Total Score	650
		Hazard Level Category	3

MEC HA Hazard Level Determination		
Site ID: Explosive Burning Ground 1 (L2) MRS (JAAP-002-R-01) Date: 1/6/2016	Hazard Level Category	Score
a. Current Use Activities	3	650
b. Future Use Activities		
c. Response Alternative 1: None		
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

MRSPP Tables

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: Explosive Burning Ground 1 (L2) MRS (JAAP-002-R-01)

Component: United States Army

Installation/Property Name: Joliet Army Ammunition Plant

Location (City, County, State): Will County, Illinois

Site Name/Project Name (Project No.): 60419079.16170871

Date Information Entered/Updated: December 2, 2015

Point of Contact (Name/Phone): Zac Tannehill / 402-952-2656

Project Phase (check only one):

❑ PA	❑ SI	☒ RI	❑ FS	❑ R□
❑ RA-C	❑ □IP	❑ □A□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: 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 L2 MRS is located along Prairie Creek north of Central Road and approximately 1 mile west of Chicago Road. The L2 MRS was used from the 1940s to the 1970s for open burning of explosives and explosive wastes. The site included six burning pads (each approximately 650 feet long), three popping furnaces, a bermed area, and several oil pits. These historical site features, and associated contamination, have been addressed during previous remedial actions performed under the Installation Restoration Program (IRP). The entire MRS (within the former IRP boundary and within the 200-foot buffer) has undergone a removal action to 1 foot below ground surface (bgs). The MRS is approximately 52 acres.

Description of Pathways for Human and Ecological Receptors: There are no complete pathways for MC on the MRS. The exposure pathways for surface MEC were determined in the RI to be potentially complete. MEC was only observed in the subsurface, but may migrate to the surface due to physical factors. Subsurface MEC exposure pathways were determined in the RI to be complete.

Description of Receptors (Human and Ecological): Per EM 200-1-12, humans are considered the only receptors to MEC. Receptors include site workers (i.e., MNTP volunteers), site employees (i.e., MNTP employees), visitors/trespassers, and construction workers.

Supporting information is presented in Sections 5.1 and 5.2 of the RI Report

Table 1

EHE Module: Munitions Type Data Element Table

DIRECTIONS: Below are 11 classifications of munitions and their descriptions. Highlight 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 most 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 filler other than white phosphorus (e.g., flares, signals, simulators, smoke grenades). ◆ DMM containing a pyrotechnic filler other than white phosphorus (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, pyrotechnics, 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 filler (i.e., red phosphorus), other than white phosphorus 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).	**25**

Table 1

EHE Module: Munitions Type Data Element Table

DIRECTIONS: Below are 11 classifications of munitions and their descriptions. Highlight 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

DIRECTIONS: Document any MRS-specific data used in selecting the ***Munitions Type*** classifications in the space provided.

During an RI completed in 2015, 18 MEC items were removed consisting of M66 BD fuzes, Mk-III boosters, and igniters. See Sections 4.1.2 and 4.1.3 of the RI Report.

Table 2

EHE Module: Source of Hazard Data Element Table

DIRECTIONS: Below are 11 classifications describing sources of explosive hazards. Highlight 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).	**8**

DIRECTIONS: Document any MRS-specific data used in selecting the ***Source of Hazard*** classifications in the space provided.

The L2 MRS was used from the 1940s to the 1970s for open burning of explosives and explosive wastes. See Section 1.2.2 of the RI Report.

Table 3

EHE Module: Location of Munitions Data Element Table

DIRECTIONS: Below are eight classifications of munitions locations and their descriptions. Highlight 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 or DMM occurred) indicates there are UXO or DMM on the surface of the MRS.	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 as 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 an RI completed in 2015, 18 MEC items were removed from the subsurface consisting of M66 BD fuzes, Mk-III boosters, and igniters. See Sections 4.1.2 and 4.1.3 of the RI Report.

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. Highlight 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).	**8**

DIRECTIONS: Document any MRS-specific data used in selecting the ***Ease of Access*** classification in the space provided.

The former JOAAP installation is fenced along the perimeter, thereby limiting general public access. However, visitors (e.g., hikers, hunters) can access the installation using a walk-through gate at the Chicago Road access along the northern boundary. The L2 MRS is surrounded by Midewin National Tallgrass Prairie (MNTP) land that is not currently open to visitors with the exception of a small portion of the MRS north of Prairie Creek. Accessibility to the open portion of the MRS is limited due to dense vegetation and rough terrain. The MRS is not completely fenced and receptors could potentially access the MRS using paved roads. See Sections 5.1.1.2 and 6.1.2.1 of the RI Report.

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. Highlight 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. ◆ The MRS is at a location that is owned by DoD, but that DoD has leased to another entity and for which DoD does not control access 24 hours per day.	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).	**0**

DIRECTIONS: Document any MRS-specific data used in selecting the ***Status of Property*** classification in the space provided.

The MRS is currently owned by the U.S. military (RI Report Section 1.2.1 and Figure 1-2). The planned future use for this site is open space for the United States Department of Agriculture (USDA) MNTP; however, the timeframe for the transfer from U.S. Army to USDA is unknown.

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. Highlight 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*** classification in the space provided.

The highest population density within a 2-mile radius of the L2 MRS occurs at U.S. Census Bureau tract 8833.06 (144 persons per square mile) (http://www.census.gov/geo/maps-data/maps/2010tract.html).

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 highlight 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).	**3**

DIRECTIONS: Document any MRS-specific data used in selecting the ***Population Near Hazard*** classification in the space provided.

Based on current aerial photography, nine farm houses and three industrial buildings are located within 2 miles of this site.

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 within two miles of the MRS and highlight the scores that correspond with **all** the activities/structure 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.

Visitors (e.g., hikers, hunters) can access the installation using a walk-through gate at the Chicago Road access along the northern boundary. The L2 MRS is surrounded by MNTP land that is not currently open to visitors, but visitors can access MNTP property within 2 miles of this site and a small portion of the MRS (north of Prairie Creek) is open to prairie visitors. In addition, residential, agricultural, and industrial activities occur within 2 miles of the MRS boundary.

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 highlight 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 **<u>the single highest score</u>** from above in the box to the right (maximum score = 5).	**0**

DIRECTIONS: Document any MRS-specific data used in selecting the ***Ecological and/or Cultural Resources*** classification in the space provided.

<u>On July 30, 2015 a site visit was completed by a URS biologist. It was determined that no habitat utilized by potential threatened or endangered species is present, no native vegetative communities are intact, and no sensitive ecosystems are present at the MRS. Based on historical documentation, no cultural resources have been identified on the L2 MRS.</u>

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	25	33
Source of Hazard	Table 2	8	
Accessibility Factor Data Elements			
Location of Munitions	Table 3	20	28
Ease of Access	Table 4	8	
Status of Property	Table 5	0	
Receptor Factor Data Elements			
Population Density	Table 6	3	11
Population Near Hazard	Table 7	3	
Types of Activities/Structures	Table 8	5	
Ecological and/or Cultural Resources	Table 9	0	
EHE MODULE DRAFT TOTAL			**72**

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 DRAFT RATING	**C**

Table 11

CHE Module: CWM Configuration Data Element Table

DIRECTIONS: Below are seven classifications of CWM configuration and their descriptions. Highlight the scores that correspond with **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 are: ◆ 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 are: ◆ 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 are 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.

The historical use of the site did not include CWM. No CWM has been found during previous investigations and removal actions.

Tables 12 – 19 are intentionally omitted according to Army Guidance.

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		NA
Sources of CWM	Table 12		
Accessibility Factor Data Elements			
Location of CWM	Table 13		NA
Ease of Access	Table 14		
Status of Property	Table 15		
Receptor Factor Data Elements			
Population Density	Table 16		NA
Population Near Hazard	Table 17		
Types of Activities/Structures	Table 18		
Ecological and/or Cultural Resources	Table 19		
CHE MODULE DRAFT TOTAL			**NA**

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 DRAFT RATING	**No Known or Suspected CWM Hazard**

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 record 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.

Contaminant	Maximum Concentration (μg/L)	Comparison Value (μg/L)	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).		**N/A**

Migratory Pathway Factor

DIRECTIONS: Highlight 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 the 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).	**N/A**

Receptor Factor

DIRECTIONS: Highlight 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).	**N/A**

MRS use indicated no potential MC hazard, no sampling conducted.

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 with human endpoints present in the surface water, select the box at the bottom of the table.

Contaminant	Maximum Concentration (μg/L)	Comparison Value (μg/L)	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).		**N/A**

Migratory Pathway Factor

DIRECTIONS: Highlight 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 the 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).	**N/A**

Receptor Factor

DIRECTIONS: Highlight 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).	**N/A**

MRS use indicated no potential MC hazard, no sampling conducted.

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 (mg/kg)	Comparison Value (mg/kg)	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).		**N/A**

Migratory Pathway Factor

DIRECTIONS: Highlight 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 the 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).	**N/A**

Receptor Factor

DIRECTIONS: Highlight 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).	**N/A**

MRS use indicated no potential MC hazard, no sampling conducted.

Table 24

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 (μg/L)	Comparison Value (μg/L)	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).		**N/A**

Migratory Pathway Factor

DIRECTIONS: Highlight 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 the 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).	**N/A**

Receptor Factor

DIRECTIONS: Highlight 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).	**N/A**

MRS use indicated no potential MC hazard, no sampling conducted.

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 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 ecological endpoints present in the sediment, select the box at the bottom of the table.

.

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	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).		**N/A**

Migratory Pathway Factor

DIRECTIONS: Highlight 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 the 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).	**N/A**

Receptor Factor

DIRECTIONS: Highlight 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).	**N/A**

MRS use indicated no potential MC hazard, no sampling conducted.

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 (mg/kg)	Comparison Value (mg/kg)	Ratio
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).		**N/A**

Migratory Pathway Factor

DIRECTIONS: Highlight 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 the 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).	**N/A**

Receptor Factor

DIRECTIONS: Highlight 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).	**N/A**

MRS use indicated no potential MC hazard, no sampling conducted.

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 appropriate media-specific tables.

Note: Do not add ratios from different media.

Media	Contaminant	Maximum Concentration	Comparison Value	Ratio

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)	N/A	N/A	N/A		N/A		N/A
Surface Water/Human Endpoint (Table 22)	N/A	N/A	N/A		N/A		N/A
Sediment/Human Endpoint (Table 23)	N/A	N/A	N/A		N/A		N/A
Surface Water/Ecological Endpoint (Table 24)	N/A	N/A	N/A		N/A		N/A
Sediment/Ecological Endpoint (Table 25)	N/A	N/A	N/A		N/A		N/A
Surface Soil (Table 26)	N/A	N/A	N/A		N/A		N/A

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 DRAFT 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 Note: No analytes exceeded the screening values during the SI or RI fieldwork. Therefore, the MRS is recommended for No Further Action for MC.	Evaluation Pending No Longer Required No Known or Suspected MC Hazard

Table 29
MRS Draft Priority

DIRECTIONS: In the chart below, highlight the letter **rating** for each module recorded in Table 10 (EHE), Table 20 (CHE), and Table 28 (HHE). Highlight 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 Priority 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 Draft Rating	Draft Priority	CHE Draft Rating	Draft Priority	HHE Draft Rating	Draft 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 DRAFT PRIORITY or ALTERNATIVE MRS DRAFT RATING				**4**	

Responses to Comments

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:
SR-6J

August 26, 2016

Mr. Arthur Holz
Commander's Representative
Joliet Army Ammunition Plant
29401 South Route 53
Wilmington, IL 60481-9979

Subject: **USEPA Review of U.S. Army Responses to Comments on the Draft Final Remedial Investigation Report for L2, MMRP Site JAAP-02-R-01, Joliet Army Ammunition Plant, Illinois**

Dear Mr. Holz:

The U.S. Environmental Protection Agency (EPA) has reviewed the U.S. Army's responses to EPA comments (RTCs) on the Draft Final Remedial Investigation Report for L2, MMRP Site JAAP-02-R-01 (RI Report). EPA received the RTCs by e-mail on August 11.

Based upon EPA's review, the RTCs are acceptable. EPA has no additional comments on the RI Report. EPA recommends that the information provided in the RTCs be incorporated into the Report and that the Report be made final.

If you have any questions, or require additional information, please feel free to contact me by phone at (312) 353-5577 or by e-mail (barounis.thomas@epa.gov).

Sincerely,

Tom Barounis
Remedial Project Manager

cc: Michael Haggitt, IEPA
Travis McCoun, USACE
Zachary Tannehill, AECOM

Recycled/Recyclable • Printed with Vegetable Oil Based Inks on 100% Recycled Paper (100% Post-Consumer)

USEPA Comments of the Draft Final Remedial Investigation Report for L2, MMRP Site JAAP-02- R-01, Joliet Army Ammunition Plant, Illinois, June 2016

July 28, 2016

GENERAL COMMENTS

1. Not all acronyms in the DF RI Report for L2 MRS (such as "IVS" and "BSP") are defined on first use or included and defined in the list of Acronyms and Abbreviations. Review the DF RI Report for L2 MRS and ensure that acronyms are defined on first use and/or included and defined in the report list of acronyms and abbreviations.

   Response: Agree. The acronym "IVS" is defined at first use in Section 1.4. The acronym "BSP" is defined at first use in Section 3.2.3. The document will be reviewed to ensure that acronyms are defined at first use and/or included in the list of acronyms and abbreviations.

SPECIFIC COMMENTS

1. **Section 1.3.1, IRP Investigations and Remedial Actions, Page 1-3:** The fourth sentence states, "At the time the Phase I RI was completed, the L2 IRP site six 650- foot-long by 50-foot-wide gravel burning pads, three popping furnaces, and three oil disposal pits totaling approximately 5.5 acres." As written, this sentence is confusing and may be missing one or more words. Rewrite this sentence accordingly.

   Response: Agree. Section 1.3.1 will be revised as follows: "At the time the Phase I RI was completed, the L2 IRP site *comprised* six 650- foot-long by 50-foot-wide gravel burning pads, three popping furnaces, and three oil disposal pits totaling approximately 5.5 acres."

2. **Section 3.2, Remedial Investigation Activities, Page 3-2:** The first paragraph states that "Sampling and analysis to characterize MC was planned; however, no evidence of a MC release mechanism (e.g., MEC with exposed filler) was observed during the RI activities at L2. Therefore, MC soil sampling and analysis were not required to achieve the RI objectives. It is noted that MC contaminants were sampled for and evaluated during the IRP Phase I and II RIs, and that a remedial action to address these contaminants was completed in 2007." Nevertheless, Table 1-1, MEC Items Recovered During Previous Removal Actions, listed "15 High Explosive Chunks" that were recovered previously from the L2 MRS. This could suggest that other exposed high explosive (HE) filler could be present in the subsurface of L2 MRS. Add a discussion in this section and a footnote to Table 1-1 clarifying that munitions constituent (MC) sampling during IRP Phase I and II RIs near the location(s) of these HE chunks confirmed that there was no release of MC to the soil, and as such, no sampling and analysis was required in the RI.

   Response: Agree. Historical records were reviewed to confirm the locations of the HE chunks relative to the IRP Phase I, IRP Phase II, and remedial action sampling locations. The last paragraph of Section 3.2 will be revised as follows: "Sampling and analysis to characterize MC was planned; however, no evidence of a MC release mechanism (e.g., MEC with exposed filler) was observed during the RI activities at L2. ~~Therefore, MC soil sampling and analysis were not required to achieve the RI~~

~~objectives. It is noted that~~ MC contaminants were sampled for and evaluated during the IRP Phase I and II RIs.~~, and that~~ A remedial action to address these contaminants was completed in 2007. *Bulk HE chunks were previously identified and removed from the L2 MRS. Soil sampling completed near the locations of these HE chunks during the IRP Phase I, IRP Phase II, and remedial action confirmed that there was no release of MC to soil. Therefore, MC soil sampling and analysis were not required to achieve the RI objectives."* Since Table 1-1 documents previous MEC finds at the site, we do not believe the suggested footnote is appropriate or necessary.

3. Section 3.2.7, Quality Control for Geophysical Surveys, Page 3-9: The last paragraph of this section states that "A three-phase control process was implemented by the UXOQCS and QC Geophysicist covering the MEC-related definable features of work identified in the RI WP. Preparatory, initial and follow-up inspections were documented by the UXOQCS in the Daily Quality Control Reports in Appendix G." However, Appendix G is actually titled "Daily Field Management Reports." For clarity, revise this sentence to read: "...Daily Quality Control Reports contained in Appendix G, Daily Field Management Reports."

   Response: Agree. The last sentence of Section 3.2.7 will be revised as follows: "Preparatory, initial, and follow-up inspections were documented by the UXOQCS in the Daily Quality Control Reports in **Appendix G, *Daily Field Management Reports*.***"

4. **Section 3.2.8.3, Target Anomaly Investigation Procedures, Page 3-10:** This section states that "All target anomaly findings were subjected to the MPPEH inspection process." However, the section does not refer to or identify where the Material Potentially Presenting an Explosive Hazard (MPPEH) inspection process is described. Add a reference in Section 3.2.8.3 to the MPPEH inspection process discussed in Section 3.2.9.

   Response: Agree. The last sentence of Section 3.2.8.3 will be revised as follows: "All target anomaly findings were subjected to the MPPEH inspection process *as described in **Section 3.2.9**."*

5. **Section 3.2.10, MEC Disposal, Page 3-11:** The first paragraph of this section states that "The discovered MEC items were determined to be acceptable to move by the SUXOS and UXOQCS/SO, and relocated within the MRS to a collection point pending consolidation shot disposal at the end of the same day the MEC was discovered." For clarity, further define the term "consolidation shot disposal" and refer to the discussion of this process in Section 4.3.

   Response: Agree. Section 3.2.10 will be revised as follows: "The discovered MEC items were determined to be acceptable to move by the SUXOS and UXOQCS/SO, and relocated within the MRS to a collection point pending consolidation shot disposal *(i.e., multiple MEC items consolidated at a single disposal location)* at the end of the same day the MEC was discovered. *Additional MEC disposal details and soil sampling procedures are presented in **Section 4.3**."*

6. **Section 3.5, Quality Control, Page 3-12:** This section states that "Given the short duration and relatively low risk associated with the L2 MRS, no QC audit was scheduled. The UXOQCS conducted daily QC surveillance of project activities and documented them in the Daily QC Reports, which are included in Appendix E." Appendix E is actually titled

"DGM Survey Data and IVS Memorandum" and Appendix G is titled "Daily Field Management Reports." Correct this reference as appropriate.

Response: Agree. Section 3.5 will be revised as follows: "The UXOQCS conducted daily QC surveillance of project activities and documented them in the Daily QC Reports, which are included in **Appendix ~~E~~*G, Daily Field Management Reports*.**"

7. **Table 3-1, Data Quality Objectives, Page 1 of 2:** The following issues were noted:

   a) The second column of this table is titled "Project-Specific Actions." However, only one of the listed items in the column is an action. It is recommended that this column be retitled as "Project-Specific DQO Considerations."

      Response: Agree. The second column of Table 3-1 will be revised to read: "Project-Specific DQO Considerations."

   b) In DQO 5, the fourth bullet says that "If MEC items with exposed filler are discovered, then collect discrete MC soil samples directly below the item." However, Table 1-1 listed "15 High Explosive Chunks" that were recovered previously from the L2 MRS. This could suggest that other exposed HE filler could be present below the surface of the L2 MRS. It is recommended that this be added as a consideration to DQO 5.

      Response: For clarification, the Data Quality Objectives (DQOs) provided in Table 3-1 were developed during multiple Technical Project Planning meetings and presented in the approved Final Work Plan. No changes to the DQOs are recommended.

   Revise the cited sections of the table accordingly.

      Response: See above responses.

8. **Section 4.1.1, Geophysical Survey Results, Page 4-1:** The following issues were noted:

   a) Paragraph 1 indicates that "Based on discussions with the project team, it was determined that investigating all 1,244 anomalies was not the most efficient approach to achieving project objectives. Instead, seven 50-foot by 50-foot, 100 percent DGM coverage grids (0.4 acres) were placed in the highest anomaly density areas and were intrusively investigated to assess if burial pits were present." This was a deviation from the approved R1 work plan and should be stated as such with a reference to further discussion in Section 4.1.4.

      Response: Agree. Section 4.1.1 will be revised as follows: "Based on discussions with the project team, it was determined that investigating all 1,244 anomalies was not the most efficient approach to achieving project objectives. Instead, seven 50-foot by 50-foot, 100 percent DGM coverage grids (0.4 acres) were placed in the highest anomaly density areas and were intrusively investigated to assess if burial pits were present. *This was a deviation from the RI Work Plan, which is further discussed in* ***Section 4.1.4****."*

   b) Paragraph 1 also states that "Because the grids were placed in highly saturated

areas, the Project Delivery Team (PDT) developed a list of target anomalies within the grids that were most likely to represent a burial pit and these anomalies were selected for investigation." For clarity, add a discussion of the signatures used that most likely represented potential burial pits.

Response: Agree. Section 4.1.1 will be revised as follows: "Because the grids were placed in highly saturated areas, the Project Delivery Team (PDT) developed a list of target anomalies within the grids that were *representative of a range of target anomaly responses, including those* most likely to represent a burial pit, and these anomalies were selected for investigation. *Targets with high amplitude responses (i.e., greater than 50 millivolts) and a relatively large aerial footprint were selected to identify potential burial pits. Targets with lower amplitude responses (i.e., less than 50 millivolts) were chosen to provide a representative sample of targets within the grids.* ~~Individual discrete anomalies were not targeted for investigation.~~ That is, the grids were not 100 percent intrusively investigated due to high saturation of metallic debris (more than 800 anomalies per acre). In addition, a list of 23 DGM-targeted anomalies along transects within the high anomaly density area with signatures most likely to represent burial pits *(i.e., amplitude greater than 50 millivolts)* was developed."

Revise this section accordingly.

Response: See above responses.

9. **Section 5.2, Revised MC Conceptual Site Model, Page 5-4:** This section states that "The revised MC CSM identifies only incomplete pathways between MC sources and receptors at the MRS. The MC CSM for the L2 MRS was revised based on results from this RI. Only incomplete pathways exist because no source of MC (e.g., MEC with exposed filler) was identified at the L2 MRS during the RI." Nevertheless, Table 1-1 listed "15 High Explosive Chunks" that were recovered previously from the L2 MRS. This could suggest that other exposed HE filler could be present below the surface of the L2 MRS. It is recommended that a discussion be added in this section clarifying that MC sampling during IRP Phase I and II RIs near the location of these HE chunks confirmed that there was no release of MC to the soil, and no sampling and analysis was required in the RI.

   Response: Agree. Historical records were reviewed to confirm the locations of the HE chunks relative to the IRP Phase I, IRP Phase II, and remedial action sampling locations. Section 5.2 will be revised as follows: "The revised MC CSM identifies only incomplete pathways between MC sources and receptors at the MRS. The MC CSM for the L2 MRS was revised based on results from this RI. Only incomplete pathways exist because no source of MC (e.g., MEC with exposed filler) was identified at the L2 MRS during the RI. *Bulk HE chunks were previously identified and removed from the L2 MRS. Soil sampling completed near the locations of these HE chunks during the IRP Phase I, IRP Phase II, and remedial action confirmed that there was no release of MC to soil. Therefore, MC soil sampling and analysis were not required to achieve the RI objectives.* The revised MC CSM…"

10. **Section 6.1.2.4, Minimum MEC Depth Relative to Maximum Receptor Intrusive Depth, Page 6-3:** This section states that "This input factor category is determined based on the minimum depth of MEC encountered at the MRS relative to the maximum intrusive

depth of receptor activities. During the RI, MEC was found as shallow as 2 inches bgs, which overlaps with the anticipated intrusive depth of 12 inches for receptors. Because only subsurface MEC was observed during the RI, the second highest possible score is assigned for this input factor category." This is correct. However, the draft report refers to MEC being present in the subsurface of the L2 MRS, and various natural and manmade factors could bring to the surface and expose MEC in the future. Accordingly, it is recommended that a discussion be added to address any regular surface inspection and clearance that may be needed in the future.

Response: Comment noted. Section 7.3 (Summary and Conclusions) recommends the L2 MRS be carried forward to a Feasibility Study (FS) to address issues associated with MEC. An evaluation of future alternatives (e.g., regular surface inspection and clearance) will be completed during the FS process.