FINAL

REMOVAL ACTION REPORT FOR ENVIRONMENTAL REMEDIATION SERVICES AT RAVENNA ARMY AMMUNITION PLANT (RVAAP)

Ravenna Army Ammunition Plant (RVAAP)
Ravenna, Ohio

Contract No. W912QR-12-C-0060

Prepared for

U.S. Army Corps of Engineers, Louisville
600 Dr. Martin Luther King, Jr. Place
Louisville, KY 40202

Prepared by

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December 22, 2014

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14. ABSTRACT

This report describes the activities performed to complete the Environmental Remediation Services per the Performance Work Statement at the Ravenna Army Ammunition Plant (RVAAP) in Ravenna, Ohio. This report describes the procedures, operational sequence, and resources PIKA International, Inc. (PIKA) used to dispose of all "Rocket Ridge Material Potentially Presenting an Explosive Hazard items" staged in earth covered magazine (ECM) 7-C-2, off-site disposal of two (2) drums of PPE staged in ECM 7-C-2, dispose of all "Legacy MPPEH items" and "Rocket Ridge MPPEH" items staged in ECM 7-C-3, dispose of all "Legacy MPPEH items" and "Rocket Ridge MPPEH" staged in ECM 7-C-4; and reconstruction and stabilization of the stream banks at the Rocket Ridge Area (RRA) of Sand Creek; to include three (3) years of annual water and biotic testing for the stream restoration area.

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STATEMENT OF INDEPENDENT TECHNICAL REVIEW

PIKA International, Inc. (PIKA) has completed the Final Removal Action Report for Environmental Remediation Services at the Ravenna Army Ammunition Plant. Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project. During the independent technical review, compliance with established policy, principles and procedures, utilizing justified and valid assumptions, was verified. This included review of technical assumptions; methods, procedures and materials to be used; and whether the product meets customer's needs consistent with law and existing U.S. Army Corps of Engineers policy.

Reviewed/Approved by: _____ Date: December 22, 2014
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December 29, 2014

Re: **US Army Ravenna Ammunition Plt RVAAP**
Assessment
Remedial Response
Portage County
267000859

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Subject: Receipt of Submittal for the "Final Removal Action Report for Environmental Remediation Services for the Former Ravenna Army Ammunition Plant (RVAAP)," Dated December 22, 2014 (Work Activity No. 267-000859-022)

Dear Mr. Leeper:

The Ohio Environmental Protection Agency (Ohio EPA), Northeast District Office (NEDO), Division of Environmental Response and Revitalization (DERR) has received and reviewed the document entitled, "Final Removal Action Report for Environmental Remediation Services for the former Ravenna Army Ammunition Plant (RVAAP)," dated December 22, 2014. This document, received by Ohio EPA's NEDO on December 23, 2014, was prepared by PIKA International Inc. The draft was previously approved and this will be filed as the final version of this document.

If you have any questions or concerns, please do not hesitate to contact me at (330) 963-1235.

Sincerely,

Nicholas Roope
Site Coordinator
Division of Environmental Response and Revitalization

NCR/nvr

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Ravenna Army Ammunition Plant (RVAAP)
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Prepared for:

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December 22, 2014

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USACE Project Manager - Baltimore	1	1

ARNGD – Army National Guard Directorate

BRACD – United States Base Realignment and Closure Division

OHARNG – Ohio Army National Guard/Camp Ravenna

Ohio EPA/NEDO/DERR – Ohio Environmental Protection Agency Northeast District Office Division of Environmental Response and Revitalization

PIKA – PIKA International, Inc.

REIMS – Ravenna Environmental Information Management System

RVAAP – Ravenna Army Ammunition Plant

USAPHC – United States Army Public Health Command (Provisional)

USACE – United States Army Corps of Engineers

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LIST OF ACRONYMS

ADR	Automated Data Review
APP	Accident Prevention Plan
ARNG	Army National Guard
BD	Base Detonating
bgs	below ground surface
CELRL	USACE – Louisville District, Louisville, Kentucky
CGP	Construction General Permit
COC	Chain of Custody
DA	Department of Army
DDESB	Department of Defense Explosives Safety Board
DoD	Department of Defense
DoDI	Department of Defense Instruction
ECM	Earth Covered Magazine
EM	Engineering Manual
EPA	Environmental Protection Agency
ERS	Environmental Remediation Services
ESS	Explosives Safety Submission
GOCO	Government Owned, Contractor Operated
GP	General Purpose
HAZWOPER	Hazardous Waste Operations
HE	High Explosive
IAW	In Accordance With
IBI	Index of Biotic Integrity
IDW	Investigation Derived Waste
IRP	Installation Restoration Program
lb	Pound
LL	Load Line
MD	Munitions Debris
MDAS	Material Documented as Safe

MDEH	Material Documented as an Explosive Hazard
MEC	Munitions and Explosives of Concern
MI®	Multi-Increment
mm	millimeter
MPPEH	Material Potentially Presenting an Explosive Hazard
MRS	Munitions Response Site
MS/MSD	Matrix Spike/Matrix Spike Duplicate
OAC	Ohio Administrative Code
ODA2	Open Demolition Area 2
Ohio EPA	Ohio Environmental Protection Agency
OHARNG	Ohio Army National Guard
OSHA	Occupational Safety and Health Administration
PIBD	Point Initiating Base Detonating
PIKA	PIKA International, Inc.
PjM	Project Manager
POC	Point of Contact
PPE	Personal Protective Equipment
PWS	Performance Work Statement
QA	Quality Assurance
QC	Quality Control
QHEI	Qualitative Habitat Evaluation Index
RCRA	Resource Conservation and Recovery Act
RRA	Rocket Ridge Area
RVAAP	Ravenna Army Ammunition Plant
SOP	Standard Operating Procedure
SSHP	Site-Specific Safety and Health Plan
SUXOS	Senior Unexploded Ordnance Supervisor
TAL	Target Analyte List
TCRA	Time Critical Removal Action
TCS	Thermal Convection System
TFR	Temporary Flight Restriction
TM	Technical Manual

TP	Technical Paper
USACE	United States Army Corps of Engineers
USP&FO	United States Property and Fiscal Officer
UXO	Unexploded Ordnance
UXOQCS	Unexploded Ordnance Quality Control Specialist
UXOSO	Unexploded Ordnance Safety Officer
WP	Work Plan

EXECUTIVE SUMMARY

ES.1 Introduction and Scope

This report describes the activities performed to complete the Environmental Remediation Services (ERS) per the Performance Work Statement (PWS) at the Ravenna Army Ammunition Plant (RVAAP) in Ravenna, Ohio. A copy of the PWS is presented in Appendix A.

This report describes the procedures, operational sequence, and resources PIKA International, Inc. (PIKA) used for the following tasks:

- Disposal of all Rocket Ridge Material Potentially Presenting an Explosive Hazard (MPPEH) items staged in earth covered magazine (ECM) 7-C-2;
- Off-site disposal of two (2) fifty-five (55) gallon drums of personal protective equipment (PPE) staged in ECM 7-C-2;
- Disposal of all Legacy MPPEH items and Rocket Ridge MPPEH items staged in ECM 7-C-3;
- Disposal of all Legacy MPPEH items and Rocket Ridge MPPEH staged in ECM 7-C-4; and
- Reconstruction and stabilization of the stream banks at the Rocket Ridge Area (RRA) of Sand Creek; to include three (3) years of annual water and biotic testing for the stream restoration area.

Authorization for performance is contained in contract W912QR-12-C-0060 issued to PIKA by United States Army Corps of Engineers (USACE) – Louisville District, Louisville, Kentucky (CELRL). The work was performed on behalf of the CELRL.

ES.2 RRA Site Description

During the course of the Installation Restoration Program (IRP) at the RVAAP, various MPPEH and Munitions and Explosives of Concern (MEC) items were recovered, inspected, inventoried, and stored in ECMs 7-C-2, 7-C-3, and 7-C-4 for future disposal. The items were recovered by various contractors during previous

MEC clearance and removal operations and were identified as Legacy MPPEH items and Rocket Ridge MPPEH items. The Legacy MPPEH items include all the MPPEH items that were recovered from MEC clearance and removal operations that had taken place prior to the RRA 2011 Time Critical Removal Action (TCRA). These MPPEH items were inspected, certified, and staged in ECM 7-C-3 as Material Documented as an Explosive Hazard (MDEH) items requiring thermal flashing, or staged in 7-C-4 as MEC and MDEH items requiring explosive demolition. The Rocket Ridge MPPEH items include all the MPPEH items that were recovered during the 2011 Rocket Ridge TCRA and inspected and certified as either MDHEH requiring thermal flashing and staged in ECMs 7-C-2 and 7-C-3, or certified as MEC and MDEH requiring explosive demolition and staged in ECM 7-C-4, as per the TCRA PWS.

A description of all the RVAAP MDEH items that were staged in ECMs 7-C-2 and 7-C-3 and required thermal flashing in order to remove the potential explosive hazard for disposal is provided below:

1) One hundred nineteen (119) drums (fifty-five [55] gallons each) of M19 rifle grenade tail assemblies and water that were recovered and staged in ECM 7-C-2 during the 2011 Rocket Ridge white phosphorus contaminated material TCRA operations.

2) Ten (10) Gaylord boxes (one [1] cubic yard each) and one ammunition box of Legacy MPPEH items and nineteen (19) Gaylord boxes (one [1] cubic yard each) of Rocket Ridge MPPEH items.

Two (2) fifty-five (55) gallon drums of spent PPE were also staged in ECM 7-C-2. These drums were generated during the July 2011 Rocket Ridge TCRA white phosphorus removal operations. The PWS for the RVAAP ERS included waste characterization sampling, transportation, and disposal of the two (2) drums to an approved off-site disposal facility.

A description of all the RVAAP MEC and MDEH items that were stored in ECM 7-C-4 and required explosive demolition in order to remove the potential explosive hazard for disposal is provided below:

1) Six (6) ammunition storage boxes and one (1) cubic yard Gaylord Box containing Legacy MPPEH items.

2) Twenty-eight (28) ammunition storage boxes containing Rocket Ridge MPPEH items.

3) None of the items that were staged in ECM 7-C-4 were white phosphorus contaminated. As such, none of the explosive demolition operations associated with this project included white phosphorus contaminated items.

An itemized description of each the MDEH and MEC items that were stored in ECMs 7-C-2, 7-C-3, and 7-C-4 is provided in Section 2.4 Table 2-1 and Section 2.5 Table 2-2.

Additionally, during the 2011 Rocket Ridge TCRA, PIKA diverted the section of Sand Creek that flowed immediately adjacent to RRA (Figure 3, Appendix B) in order to prevent any contamination from entering Sand Creek during the MEC, Munitions Debris (MD), and white phosphorus removal operations. Upon completion of the TCRA, it was the preference of the Ohio Environmental Protection Agency (EPA) Division of Surface Water to keep the temporary stream diversion channel in-place and make it the primary stream route. The RVAAP ERS PWS provided for the reconstruction and stabilization of the Rocket Ridge Stream diversion channel to fully establish it as the primary stream route.

The objectives of this project were to dispose of all the Legacy MPPEH items and Rocket Ridge MPPEH items that were stored in RVAAP ECMs 7-C-2, 7-C-3 and 7-C-4; reconstruct and stabilize the stream banks at the RRA of Sand Creek making it the permanent stream route; and to perform three (3) years of annual water and biotic testing for the Sand Creek stream restoration. The biotic testing is required by the Ohio EPA for any in-stream habitat improvements and post construction riparian development. The testing consists of the Ohio EPA Index of Biotic Integrity (IBI) and the Ohio EPA Qualitative Habitat Evaluation Index (QHEI).

ES.3 Conclusions

The defined objectives were achieved through completion of the RVAAP ERS activities from May 2013 to September 2013. A summary of conclusions from the RVAAP ERS are provided below:

1. It was the preference of the Ohio EPA Division of Surface Water to keep the temporary RRA stream diversion channel in place and make it the primary stream route. Per the PWS, PIKA successfully deconstructed the temporary stream channel banks, removed the geotextile holding the temporary bank material, and reconstructed the stream banks fully establishing them as the primary stream route. Following reconstruction, trees, shrubs, and grasses were installed along the entire length of the stream banks. Included with this task, the top of the RRA was backfilled and re-graded, seeded, and mulched. All the restoration work was conducted from May 15, 2013 through May 24, 2013 in accordance with (IAW) the approved RRA and stream channel restoration work plan (WP). The final site walk and inspection of the restored stream channel and RRA was conducted by the RVAAP stakeholders on June 17, 2013.

2. The first of three post stream restoration bi-annual monitoring events was conducted on July 2, 2013 and August 13, 2013. The monitoring is required by the Ohio EPA Division of Surface Water to measure and evaluate the physical and biological characteristics within the reconstructed stream channel. The initial monitoring event indicated that the reconstructed stream channel is well within acceptable limits. Subsequent bi-annual testing and reporting will be carried out through 2015.

3. PIKA conducted explosive demolition of all the MEC and MDEH items that were staged in ECM 7-C-4 from July 29, 2013 through August 8, 2013. Prior to initiating the MEC demolition operations, PIKA submitted the Ohio EPA MEC Demolition/Disposal Notification and issued a Temporary Flight Restriction (TFR) with the Cleveland Air Route Traffic Control Center, Airspace and Procedures Office. Additionally, PIKA submitted an Informational Notice to inform the key project personnel and local emergency response agencies of the planned demolition operations. All the MEC items from ECM 7-C-4 were destroyed within the current Resource Conservation and Recovery Act (RCRA) permitted Open Demolition Area 2 (ODA2) Munitions Response Site (MRS) IAW the procedures outlined in Department of Army (DA) Technical Manual (TM) 60A-1-1-31, USACE Engineering Manual (EM) 385-1-97,

Explosives Safety and Heath Requirement Manual, and PIKA's MEC Demolition Standard Operating Procedure. After each detonation and at the end of each day's operations, the Unexploded Ordnance (UXO) team collected all visible fragments and debris for inspection and certification as Material Documented as Safe (MDAS) for disposal as scrap metal.

4. PIKA was tasked with the safe and effective disposal of all MPPEH/MDEH stored in RVAAP ECMs 7-C-2 and 7-C-3. These items were previously recovered, inspected, stored, and certified as MDEH items that require thermal flashing in order to remove the potential explosive hazard for disposal. Thermal flashing of these items was accomplished using the PIKA Thermal Convection System (TCS). The PIKA TCS thermally neutralizes trace explosives on the interior and exterior surfaces of MPPEH/MDEH. When used in conjunction with its Quality Assurance/Quality Control (QA/QC) confirmation checks and its Standard Operating Procedure (SOP), the TCS thermally flashes and removes the residual explosives contamination and renders the MPPEH/MDEH as MDAS so that those items can be disposed of per Department of Defense Instruction (DoDI) 4140.62 and USACE EM 1110-1-4009, Chapter 14 procedures. The RVAAP ERS TCS operations were carried out from August 12 through September 20, 2013.

5. During the performance of construction support for the Sand Creek bi-annual stream monitoring on August 13, various MEC and MPPEH items were noted within the RRA stream channel by the PIKA UXO personnel. It was apparent that the items were washed out of ODA2 and deposited within the stream channel as a result of the August 9, 2013 extreme flood event. Optional Line Item Tasks 11a-d of PIKA Contract W912QR-10-P-0033 were exercised to facilitate disposal of these additional items. A total of nineteen (19) additional MPPEH items from the RRA stream channel were identified and inspected by PIKA UXO personnel to facilitate disposal during the RVAAP ERS operations. Fourteen (14) of the items were inspected and certified as MDEH requiring thermal flashing in order to remove the potential explosive hazard for disposal. These items were processed and disposed of along with items from ECM 7-C-3 during the RVAAP ERS TCS operations. Five (5) of the items

were inspected and certified as MDEH which required explosive demolition in order to remove the potential explosive hazard for disposal. Demolition of these items was carried out at the conclusion of the RVAAP ERS operations on September 19, 2013.

6. During the RVAAP ERS MEC demolition and TCS operations, a total of 134,040 pounds (lbs) of resultant MDAS were transported to Belson Steel Center Scrap smelter facility located in Bourbonnais, IL for off-site recycling as scrap metal. Transfer and transport of all RVAAP ERS MDAS was performed under chain-of-custody (COC) control using MPPEH/Range Residue Inspection, COCs. Transportation of the RVAAP ERS MDAS to Belson Steel was provided by Wolford's Rolloff, Inc.

7. As part of the RVAAP ERS operations, PIKA characterized two (2) fifty-five (55) gallon drums of spent PPE that were staged in ECM 7-C-2 for off-site disposal at an approved facility. The drums were generated during the July 2011 Rocket Ridge white phosphorus removal operations. Based upon waste characterization analysis, the drums were disposed of (incinerated) as non-hazardous waste at Heritage – WTI, Inc. located in East Liverpool, Ohio. A returned signed copy of the manifest from the disposal facility was retained by the generator and PIKA for record keeping purposes and is presented along with a copy of the waste characterization sampling results and approved waste profile in Appendix R.

1.0 INTRODUCTION

This report describes the activities performed to conduct ERS at the RVAAP in Ravenna, Ohio. A copy of the PWS is presented in Appendix A.

This report describes the procedures, operational sequence, and resources PIKA used for the following tasks:

- Disposal of all Rocket Ridge MPPEH items staged in ECM 7-C-2;
- Off-site disposal of two (2) fifty-five (55) gallon drums of PPE staged in ECM 7-C-2;
- Disposal of all Legacy MPPEH items and Rocket Ridge MPPEH items staged in ECM 7-C-3;
- Disposal of all Legacy MPPEH items and Rocket Ridge MPPEH staged in ECM 7-C-4; and
- Reconstruction and stabilization of the stream banks at the RRA of Sand Creek; to include three (3) years of annual water and biotic testing for the stream restoration area

Authorization for performance is contained in contract W912QR-12-C-0060 issued to PIKA by USACE – CELRL, Louisville, Kentucky. The work was performed on behalf of the CELRL.

1.1 Objective

The objectives of this project were to dispose of all the Legacy MPPEH items and Rocket Ridge MPPEH items that were stored in RVAAP ECMs 7-C-2, 7-C-3 and 7-C-4; reconstruct and stabilize the stream banks at the RRA of Sand Creek making it the permanent stream route; and to perform three (3) years of annual water and biotic testing for the Sand Creek stream restoration.

1.2 RVAAP Location

When the RVAAP IRP began in 1989, the RVAAP was identified as a 21,419 acre installation. The property boundary was resurveyed by the Ohio Army National

Guard (OHARNG) over a two year period (2002 and 2003) and the actual total acreage of the property was found to be 21,683 acres.

The former RVAAP, now known as the Camp Ravenna Joint Military Training Center (Camp Ravenna), which is located in northeastern Ohio within Portage and Trumbull counties, is approximately 3 miles east-northeast of the City of Ravenna and approximately 1 mile north of the City of Newton Falls in Portage and Trumbull Counties, Ohio. The facility is approximately 11 miles long and 3.5 miles wide. The facility is bounded by State Route 5, the Michael J. Kirwan Reservoir, and the CSX System Railroad to the south; Garret, McCormick, and Berry Roads to the west; the Norfolk Southern Railroad to the north; and State Route 534 to the east. In addition, the facility is surrounded by the communities of Windham, Garrettsville, Newton Falls, Charlestown, and Wayland (Figure 1-1).

Administrative accountability for the 21,683-acre facility has been transferred to the United States Property and Fiscal Officer (USP&FO) for Ohio and subsequently licensed to the OHARNG for use as a military training site, Camp Ravenna. The restoration program involves cleanup of former production areas across the facility related to former operations under the RVAAP.

When RVAAP was operational, Camp Ravenna did not exist and the entire 21,683-acre parcel was a government-owned contractor operated (GOCO) industrial facility. The RVAAP IRP encompasses investigation and cleanup of past activities over the entire 21,683 acres of the former RVAAP, references to the RVAAP in this document are considered to be inclusive of the historical extent of RVAAP, unless otherwise specifically stated. A regional map indicating the General Location and Orientation of the RVAAP is presented in Appendix B as Figure 1. The location of the RRA within the RVAAP is presented in Appendix B as Figure 2.

1.3 RVAAP History

Production at the facility began in December 1941 with the primary missions of depot storage and ammunition loading. The installation was divided into two separate units, the Portage Ordnance Depot and the Ravenna Ordnance Plant. The Portage Ordnance Depot's primary mission was depot storage of munitions and

components, while the Ravenna Ordnance Plant's mission was to load and pack major caliber artillery ammunition and to assemble munitions initiating components that included fuzes, boosters, and percussion elements. In August 1943, the installation was re-designated the Ravenna Ordnance Center and again, in November 1945, as the Ravenna Arsenal.

The plant was placed in standby status in 1950 and operations were limited to renovation, demilitarization, and normal maintenance of equipment, along with storage of ammunition and components. The plant was reactivated during the Korean Conflict to load and pack major caliber shells and components. All production ended in August 1957, and in October 1957 the installation was again placed in a standby status. In October 1960, the ammonium nitrate line was renovated for demilitarization operations which involved melting explosives out of bomb casings for subsequent recycling. These operations commenced in January 1961. In July 1961, the plant was again deactivated. In November 1961, the installation was divided into the Ravenna Ordnance Plant and an industrial section, with the entire installation designated as the RVAAP. In May 1968, RVAAP began loading, assembling, and packing munitions on three (3) load lines (LLs) and two (2) component lines in support of the Southeast Asia Conflict. These facilities were deactivated in August 1972. The demilitarization of the M71A1 90 mm projectile extended from June 1973 until March 1974. Demilitarization of various munitions was conducted from October 1982 through 1992.

Until 1993, RVAAP maintained the capability to load, assemble, and pack military ammunition. As part of the RVAAP mission, the inactive facilities were maintained in a standby status by keeping equipment in a condition to permit resumption of production within prescribed limitations. In September 1993, RVAAP was placed in inactive caretaker status and subsequently changed to modified caretaker status. The LLs and associated real estate were determined to be excess to the U.S. Army.

A total of 20,423 acres of the former 21,683 acre RVAAP was transferred to the United States Property and Fiscal Officer (USP&FO) for Ohio in 1996, 1999, and 2010 for use by OHARNG as a military training site. The current RVAAP consists of 1,260 acres in several distinct parcels scattered throughout Camp Ravenna.

1.4 Project Description

During the course of the IRP at the RVAAP, various MPPEH and MEC items were recovered, inspected, inventoried, and stored in ECMs 7-C-2, 7-C-3, and 7-C-4 for future disposal. The items were recovered by various contractors during previous MEC clearance and removal operations and were identified as Legacy MPPEH items and Rocket Ridge MPPEH items. The Legacy MPPEH items include all the MPPEH items that were recovered from MEC clearance and removal operations that had taken place prior to the RRA 2011 TCRA. These MPPEH items were inspected, certified, and staged in ECM 7-C-3 as MDEH items requiring thermal flashing, or staged in 7-C-4 as MEC and MDEH items requiring explosive demolition. The Rocket Ridge MPPEH items include all the MPPEH items that were recovered during the 2011 Rocket Ridge TCRA and were inspected and certified as either MDEH requiring thermal flashing and staged in ECMs 7-C-2 and 7-C-3, or certified as MEC and MDEH requiring explosive demolition and staged in ECM 7-C-4, as per the TCRA PWS.

A description of all the RVAAP MDEH items that were staged in ECMs 7-C-2 and 7-C-3 and required thermal flashing in order to remove the potential explosive hazard for disposal is provided below:

1) One hundred nineteen (119) drums (fifty-five [55] gallons each) of M19 rifle grenade tail assemblies that were recovered and staged in ECM 7-C-2 during the 2011 Rocket Ridge white phosphorus contaminated material TCRA operations.

2) Ten (10) Gaylord boxes (one [1] cubic yard each) and one ammunition box of Legacy MPPEH items and nineteen (19) Gaylord boxes (one [1] cubic yard each) of Rocket Ridge MPPEH items.

Two (2) fifty-five (55) gallon drums of spent PPE were also staged in ECM 7-C-2. These drums were generated during the July 2011 Rocket Ridge TCRA white phosphorus removal operations. The PWS for the RVAAP ERS included waste characterization sampling, transportation, and disposal of the two (2) fifty-five (55) gallon drums to an approved off-site disposal facility.

A description of all the RVAAP MEC and MDEH items that were stored in ECM 7-C-4 and required explosive demolition in order to remove the potential explosive hazard for disposal is provided below:

1) Six (6) ammunition storage boxes and one (1) cubic yard Gaylord box containing Legacy MPPEH items.
2) Twenty-eight (28) ammunition storage boxes containing Rocket Ridge MPPEH items.
3) None of the items that were staged in ECM 7-C-4 were white phosphorus contaminated. As such, none of the explosive demolition operations associated with this project included white phosphorus contaminated items.

An itemized description of each of the MDEH and MEC items (i.e., Legacy MPPEH items and Rocket Ridge MPPEH items) that were stored in ECMs 7-C-2, 7-C-3, and 7-C-4 is provided in Section 2.4 Table 2-1 and Section 2.5 Table 2-2.

Additionally, during the 2011 Rocket Ridge TCRA, PIKA diverted the section of Sand Creek that flowed immediately adjacent to RRA in order to prevent any contamination from entering Sand Creek during the MEC, MD, and white phosphorus removal operations. Upon completion of the TCRA, it was the preference of the Ohio EPA Division of Surface Water to keep the temporary stream diversion channel in-place and make it the primary stream route. The RVAAP ERS PWS provided for the reconstruction and stabilization of the RRA stream diversion channel making it the permanent stream route; and to perform three (3) years of annual water and biotic testing for the Sand Creek stream restoration. The biotic testing is required by the Ohio EPA for any in-stream habitat improvements and post construction riparian development. The testing consists of the Ohio EPA IBI and the Ohio EPA QHEI.

2.0 RVAAP ERS ACTIVITIES

The following documents were prepared and approved prior to starting the RVAAP ERS field activities:

- March 22, 2013, "Final Project Work Plan for the Environmental Remediation Services at Ravenna Army Ammunition Plant (RVAAP)"
- March 22, 2013, "Final Project Work Plan for the Reconstruction and Stabilization of the Stream Banks at the Rocket Ridge Area, Ravenna Army Ammunition Plant, Ravenna, Ohio 44266."
- January 14, 2013, "Final Project Management Plan for Environmental Remediation Services at Ravenna Army Ammunition Plant (RVAAP)"
- March 22, 2013, "Final Accident Prevention Plan for Environmental Remediation Services at Ravenna Army Ammunition Plant (RVAAP)"
- March 22, 2013, "Final Site Safety and Health Plan for Environmental Remediation Services at Ravenna Army Ammunition Plant (RVAAP)"
- March 22, 2013, "Final Field Sampling Plan Addendum for Environmental Remediation Services at Ravenna Army Ammunition Plant (RVAAP)"
- March 22, 2013, "Final Field Quality Assurance Plan for Environmental Remediation Services at Ravenna Army Ammunition Plant (RVAAP)"
- May 7, 2010, "Final Quality Assurance Project Plan Addendum for the Time Critical Removal Action (TCRA) at the Rocket Ridge Area (RRA) within RVAAP-004-R-01 Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio"
- March 22, 2010 "Stormwater Pollution Prevention Plan for Environmental Remediation Services at Ravenna Army Ammunition Plant (RVAAP)"
- May, 2013, "Explosives Safety Submission (ESS), Munitions and Explosives of Concern (MEC) Non-Time Critical Removal Action, Disposal of Material Potentially Presenting an Explosive Hazard (MPPEH) and Munitions and

Explosives of Concern (MEC), Igloos 7-C-2 and 7-C-3 (MPPEH) and Igloo 7-C-4 (MEC) at the Ravenna Army Ammunition Plant, Ravenna, Ohio"

The sequence of operations for the TCRA at the RRA of ODA2 as approved in the WP was:

- May 15 through May 24, 2013 – Conducted reconstruction and stabilization of the RRA stream diversion channel;
- July 1 through July 2, 2013 – Installed the TCS pad;
- July 2, 2013 - Conducted the initial 2013 stream monitoring event;
- July 8 through July 26, 2013 – Mobilization of the TCS and MEC demolition personnel and equipment and completion of the setup of the TCS. Note: no site work was conducted July 15 through July 19, 2013 due to OHARNG Range firing operations;
- July 29 through August 8, 2013 - Conducted demolition of MEC and MDEH items that were stored in ECM 7-C-4;
- August 12 through September 20, 2013 – Conducted TCS operations for items that were stored in ECMs 7-C-2 and 7-C-3;
- August 13, 2013– Conducted the second of the 2013 biannual stream monitoring events; and
- September 23 through September 26, 2013 – Conducted repairs on ODA2 access road, site restoration, and demobilization of equipment and personnel.

Details pertaining to each of the TCRA operations at RRA are provided in the subsections that follow. Photographic documentation of the RVAAP ERS operations is provided in the Weekly Reports that are contained in Appendix C.

2.1 Mobilization and Site Preparation

2.1.1 Mobilization of Manpower

All PIKA personnel that were mobilized to the site met requirements for Occupational Safety and Health Administration (OSHA) hazardous waste operations (HAZWOPER) training and medical surveillance requirements as specified in the Accident Prevention Plan (APP)/ Site-Specific Safety and Health Plan (SSHP). Additionally, all the PIKA UXO personnel met or exceeded the requirements as specified in the Department of Defense (DoD) Explosives Safety Board (DDESB) approved "UXO Personnel Training and Experience Hierarchy" found in the DDESB Technical Paper (TP) Number 18 – *Minimum Qualifications for UXO Technicians and Personnel*, 2004. Site personnel were trained to perform the specific tasks to which they were assigned. At no time were site personnel tasked with performing an operation or duty for which they did not have appropriate training and experience. Mobilization was conducted from July 8, 2013 through July 26, 2013. No site work was conducted July 15 through July 19, 2013 due to OHARNG Range firing operations.

2.1.2 Preliminary Activities

During the initial mobilization, PIKA site management personnel engaged in the following preliminary activities:

- Coordinated with the designated RVAAP Point of Contact (POC) to finalize access requirements, location of any temporary facilities to be used, and communications requirements.
- Contacted and coordinated with the OHARNG Range Control in order to finalize and maintain established facility and ODA2 access requirements throughout the project.
- Contacted and coordinated with the RVAAP POC and local fire, medical, and other emergency services to ensure availability of services, and the appropriate response actions IAW the WP and APP.

- Contacted and coordinated with local vendors for accommodations as well as vendors/suppliers for routine purchases to ensure smooth project start up.
- Inspected each work area to identify possible environmental constraints, terrain limitations, and other interferences.

Additional preliminary activities that were required prior to initiating the RVAAP ERS site activities included the following:

- PIKA notified the client, OHARNG and the Ohio EPA of its intent to initiate onsite activities. The project kick-off meeting (teleconference) was conducted on May 13, 2013.
- IAW facility requirements, a roster of all project personnel, including subcontractors and vendors was provided for review and approval prior to initiating the field operations.
- PIKA obtained the Ohio EPA Construction General Permit (CGP) relative to the control of surface water discharges during the field operations. A copy of the approved CGP for the Rocket Ridge stream diversion area was provided as Attachment 2 in Appendix M of the March 22, 2013, "Final Project Work Plan for Environmental Remediation Services at Ravenna Army Ammunition Plant (RVAAP)".

2.1.3 Equipment

All equipment was inspected as it arrived to ensure it was in proper working order. All instruments and equipment that required routine maintenance and/or calibration were checked initially upon arrival and then checked again prior to its use each day. This system of checks ensured that the equipment was functioning properly. As part of the initial equipment set-up and testing, PIKA also installed and tested its communication equipment that included the following:

- Cellular phone service to maintain communication with RVAAP security personnel.

- Hand-held portable radios used to maintain communications between the PIKA office trailer, Project Manager (PjM)/Senior UXO Supervisor (SUXOS), and the field teams.

2.1.4 Site-Specific Training

As part of the mobilization process, PIKA performed site-specific training for all on-site personnel assigned to this project. The purpose of this training was to ensure that all on-site personnel fully understood the operational procedures and methods to be used by PIKA at RVAAP during the ERS site activities. Individual assigned responsibilities and safety and environmental concerns associated with site operations were also covered in the training. The SUXOS/UXO Safety Officer (UXOSO) conducted the training sessions which included the topics identified below:

- Field equipment operation, including the safety and health precautions, field inspection, and maintenance procedures that were to be used;
- Interpretation of relevant sections of the Final WP and APP/SSHP as they related to the tasks that were being performed;
- Personnel awareness of potential site and operational hazards associated with site-specific tasks and operations;
- Public relations to ensure that personnel did not make any public statements to the media without prior coordination with and approval from the USACE COR;
- Environmental concerns and sensitivity including endangered/threatened species and historic, archeological, and cultural issues;
- Additional USACE and/or RVAAP training as required; and
- Identification of features, hazards, and disposal methods of MEC that may be encountered.

2.1.5 Project Notifications

Prior to initiating the RVAAP ERS field operations, an official Informational Notice summarizing the project and anticipated schedule was sent to the key project personnel and local emergency response organizations. Additionally, prior to initiating the MEC demolition operations, PIKA submitted the Ohio EPA MEC Demolition/Disposal Notification and issued a TFR with the Cleveland Air Route Traffic Control Center, Airspace and Procedures Office. Copies of the Ohio EPA MEC Demolition/Disposal Notification and TFR for the RVAAP ERS operations are provided in Appendix D. A copy of the RVAAP ERS Public Notification is also provided in Appendix D.

2.2 Reconstruction and Stabilization of the Stream Banks at RRA

Based upon a site visit conducted by the Ohio EPA Division of Surface Water on September 26, 2011, it is their preference that the RRA "temporary" stream diversion channel remains in-place to function as the primary stream route at this location. As such, the reconstruction and stabilization of the temporary stream channel was included as a task under the RVAAP ERS PWS. A site map showing the RRA stream diversion channel is provided in Appendix B, Figure 3. The detailed WP/design for the reconstruction and stabilization of the RRA stream diversion channel was included as Appendix J in the March 22, 2013 "Final Project Work Plan for Environmental Remediation Services at Ravenna Army Ammunition Plant". The final site restoration of the top of the RRA was also included with this task and was conducted concurrently with the stream restoration operations. These restoration operations were carried out IAW the approved October 2011 RRA site restoration WP. A copy of this WP is contained in Appendix DD of the "July 31, 2012, Final Removal Action Report for the 2nd Time Critical Removal Action (TCRA), at the Rocket Ridge Area (RRA) within RVAAP-004-R-01 Open Demolition Area #2 MRS". The re-construction and stabilization of the stream banks and restoration of the top of the RRA were conducted from May 15, 2013 through May 24, 2013 and included the following tasks:

1. Deconstruction of the temporary stream channel banks, removal of the geotextile holding the temporary bank material, and reconstruction of the

stream banks. The stream banks were constructed at a lesser slope to create a flood plain as per Ohio EPA Division of Surface Water requirements.

2. Following reconstruction, plantings of trees, shrubs and grasses were installed along the entire length of the banks IAW the approved WP. Erosion control mats were also installed to facilitate vegetative growth and minimize the potential for erosion until bank stability is achieved.

3. Backfill of the top of the RRA using approved on site soils (i.e., stockpiled soils from the Sand Creek stream diversion installation operations), re-grading of the area to ensure positive drainage, and seeding and mulching using approved seed mixture.

An UXO technician provided MEC oversight/safety support during all the stream channel and site restoration field activities. Pictures of the stream bank reconstruction and stabilization and site restoration operations are provided in the weekly reports contained Appendix C. The site walk, inspection and approval of the stream bank and RRA reconstruction effort was conducted by the Army and Ohio EPA stakeholders on June 17, 2013. Copies of the e-mail correspondences pertaining to the approval of the reconstruction operations are provided in Appendix E. With the reconstruction complete, approval to begin the bi-annual monitoring (described below in Section 2.3) was provided on June 24, 2013 (Appendix E). The bi-annual monitoring will be conducted for a period of three years within the restored portion of Sand Creek to monitor the recovery of indigenous species and habitat to within acceptable limits.

2.3 Three (3) Years of Annual Water and Biotic Testing

This task includes the required annual monitoring of the portion of Sand Creek that was restored as part of the reconstruction and stabilization operations discussed in the previous subsection. This monitoring is to be conducted over a three (3) year period as defined in the PWS. All monitoring was/will be conducted by professional biologists that have received the Ohio EPA IBI and QHEI training. The testing consists of the following procedures:

- *Ohio EPA IBI* – The IBI measures the health of a stream based on multiple attributes of fish population (i.e, species/counts of fish collected). IBI field data is collected twice per growing season (i.e., May through September).

- *Ohio EPA QHEI* – The QHEI protocol provides a quantitative evaluation of the physical characteristics within a stream reach that are important to fish communities. The QHEI is conducted once annually in conjunction with the IBI field work.

- All data from the IBI and QHEI will be presented in a summary letter for submittal by PIKA to CELRL and OHARNG to the Ohio EPA by December of each monitoring year.

- Given the proximity of the ODA2 demolition area to where the Sand Creek biotic testing will be conducted (see Appendix B, Figure 4), a UXO technician will provide MEC oversight/safety support during all QHEI field work operations.

The initial bi-annual IBI and QHEI survey data was collected by Davey Resource Group biologists on July 2 and August 13, 2013 and indicated that the reconstructed stream channel at the RRA of RVAAP is well within acceptable limits. Pictures of the IBI and QHEI field operations are provided in the weekly reports contained in Appendix C. A copy of the letter report for the 2013 IBI and QHEI results that was provided to CELRL and OHARNG for submittal to the Ohio EPA 2013 is provided in Appendix F. Subsequent bi-annual testing and reporting will be carried out through 2015 as defined in the PWS.

2.4 Demolition of MEC and MDEH Stored in ECM 7-C-4

PIKA was tasked with the safe and effective disposal of all MEC and MDEH stored in ECM 7-C-4 (Figure 2, Appendix B) at the RVAAP (i.e., Legacy MPPEH and Rocket Ridge MPPEH). Demolition operations were carried out from July 29 through August 8, 2013. Copies of the ECM 7-C-4 Magazine Data Cards are provided in Appendix G. Photo documentation of the MEC demolition and disposal operations is provided in the weekly reports contained in Appendix C. Table 2-1 summarizes the MEC that

was stored in ECM 7-C-4, vented, certified as MDAS, and recycled off-site as scrap metal as per the PWS.

TABLE 2-1 - MEC and MDEH FOR DEMOLITION				
	Location	**Box #**	**Item Description**	**Quantity**
Rocket Ridge MPPEH	**7-C-4**	-	100 Series Bomb Fuze	3
		-	105 Projo High Explosive (HE) Unfuzed	1
		-	152 millimeter (mm) Base Detonating (BD) Fuze	14
		-	155 Base W/HE	1
		-	175mm BD Fuzes	3
		-	20 lb Frag Bomb	1
		-	20 lb Frag Bomb (Unfuzed)	1
		-	20mm HE Projo	5
		-	20mm Projo	643
		-	25mm Projo	25
		-	30mm Projo	51
		-	37mm	3
		-	37mm HE Unfuzed	1
		-	37mm Projo	42
		-	37mm Projo (tracer intact)	1
		-	37mm Projo HE	2
		-	37mm Projo pieces	6
		-	40mm Cart Base	1
		-	40mm Frag Ball	5
		-	40mm Frag Ball W/HE	1
		-	40mm Fuze	2
		-	40mm Grenade	3
		-	40mm Grenade Det	1
		-	40mm HE (bofurs)	1
		-	40mm HE projo	1
		-	40mm Projo (bofurs)	11
		-	5" Rocket Warhead	2
		-	5" Rocket WH w/moto	2
		-	60mm Flare	1
		-	60mm Illumination	1
		-	60mm Mortar	4
		-	60mm Mortar HE Unfuzed	3

TABLE 2-1 - MEC and MDEH FOR DEMOLITION				
	Location	**Box #**	**Item Description**	**Quantity**
Rocket Ridge MPPEH	**7-C-4**	-	60mm Projo	5
		-	60mm Projo HE	1
		-	75mm HE	1
		-	75mm Projo	1
		-	75mm Projo (no Fuze)	1
		-	75mm Projo base	1
		-	75mm Projo HE	2
		-	75mm Projo Shrapnel	5
		-	75mm Shrapnel	1
		-	81mm Mortar Unfuzed	1
		-	81mm Mortar HE Unfuzed	1
		-	81mm Projo	1
		-	90mm APHE Projo	1
		-	90mm Projo	18
		-	90mm Projo base	1
		-	90mm Projo HE	2
		-	90mm Projo Unfuzed	1
		-	90mm Unfuzed	1
		-	Auxillary Detonating Fuze	6
		-	BD Fuze	49
		-	Base Fuze Bottom	1
		-	Base Fuze W/Tracer	5
		-	Base of Fuze W/HE	2
		-	BD Fuze	32
		-	BD Fuze (37mm)	5
		-	BD Fuze Tracer Element	1
		-	Bomb Adapter Component	1
		-	Bomb Fuze	26
		-	Booster Cup	27
		-	Booster Cup Bottom	3
		-	Burster Tube	3
		-	Broken 90 mm W/HE	1
		-	Component	1
		-	Fuze Booster Cup	5
		-	Fuze Component	27
		-	Grenade Fuze	6

TABLE 2-1 - MEC and MDEH FOR DEMOLITION				
	Location	**Box #**	**Item Description**	**Quantity**
Rocket Ridge MPPEH	**7-C-4**	-	Half 40mm Cart Case	2
		-	Half MT Fuze	1
		-	Hand Grenade MK 11	2
		-	MECH Time Fuze	11
		-	MT Fuze	72
		-	Partial Bomb Fuze	1
		-	Partial Mortar Tail Boom W/primer	1
		-	PD Fuze	506
		-	PD Fuze (half)	1
		-	PD Fuze (M52)	48
		-	PD Fuze (Rocket)	3
		-	PD Fuze (TBAR)	38
		-	PD Fuze M52	3
		-	PD Fuze TBAR	1
		-	PD Fuze w/Tetryl	1
		-	Point Initiating Base Detonating (PIBD)	13
		-	PIBD Booster Cup	4
		-	PIBD Fuze	548
		-	PIBD Fuze Booster Cup	2
		-	Practice Bomb MK23	1
		-	PTT Fuze	2
		-	Rocket Venturi	1
		-	Slap Flare	8
		-	T-bar Fuze	2
		-	Top of PD Fuze	1
		-	VT Fuzes	67
Legacy MPPEH	**7-C-4**	-	105mm Cartridge Casings	50
		1	75mm APHE	2
		1	40mm HE Projectile	1
		1	37mm HE	1
		1	Bomb Fuzes	4
		1	BD Fuzes	2
		1	PD Fuzes	2
		1b	75mm HE Projectile	1

TABLE 2-1 - MEC and MDEH FOR DEMOLITION				
	Location	**Box #**	**Item Description**	**Quantity**
Legacy MPPEH	**7-C-4**	1b	90mm HE Projectile	1
		1b	75mm APHE Projectile	1
		1b	37mm HE Projectile	1
		1b	20mm Projectile	3
		2	PIBD Fuzes	76
		3	Bomb Fuzes	5
		3	PD Fuzes	4
		3	VT Fuzes	2
		3	PIBD Fuzes	7
		4	MK Base Fuze	2
		4	T-Bar Fuze	3
		4	VT Fuzes	4
		4	40mm Primers only	3
		4	Base Fuze MK 29	2
		4	MK 29 3"	6
		5	40mm Frag Ball	7
		5	Fuze Booster Cup	1
		5	Slap Flare	2
		5	Proj Booster Tube	1
		5	PD Fuzes	1

Details pertaining to the demolition of MEC items stored in ECM 7-C-4 are provided in the subsections that follow.

2.4.1 Site Preparation Operations

Prior to initiating the demolition operations, PIKA conducted surface clearance operations within the designated 100-foot by 100-foot ODA2 demolition area (Figure 4, Appendix B) to facilitate the brush clearing of the demolition area. The surface clearance operations were conducted using standard "Mag and Dig" techniques. No MEC or MPPEH items were encountered within the 100-foot by 100-foot ODA2 demolition area. Upon completion of the surface clearance operations, PIKA conducted mechanical brush clearing of the ODA2 demolition area using a tractor mounted brush hog to facilitate the MEC demolition operations.

2.4.2 MEC Demolition

Prior to initiating the demolition operations, PIKA submitted the Ohio EPA MEC Demolition/Disposal Notification and issued a TFR with the Cleveland Air Route Traffic Control Center, Airspace and Procedures Office. Additionally, PIKA submitted an official Informational Notice to inform the key project personnel and local emergency response agencies of the planned demolition operations at the RVAAP and anticipated schedule. Copies of the Ohio EPA MEC Demolition/Disposal Notification and TFR for the TCRA at RRA are provided in Appendix D. A copy of the Informational Notice for the MEC Demolition operations is also provided in Appendix D.

All the MEC and MDEH items from RVAAP ECM 7-C-4 were destroyed within the operational demolition area located within ODA2 by consolidated shot methods IAW the procedures outlined in DA TM 60A-1-1-31, USACE EM 385-1-97, Explosives Safety and Health Requirements Manual, and PIKA's MEC Demolition Standard Operating Procedure. PIKA used UXO qualified personnel for all the demolition operations.

After successful initiation of each explosive charge, the SUXOS and UXO Demolition Team Leader conducted an inspection of the disposal site and surrounding area to ensure complete destruction of the MEC items. After verifying no more detonations were required, an "all clear" notification was issued. All shots were successful and no fires or other incidents occurred during any of the MEC demolition operations. Copies of the MEC demolition shot logs are provided in Appendix H.

2.4.3 Inspection and Certification of MDAS and Scrap Metal

After each detonation and at the end of each day's operations, the UXO team collected all visible fragments and debris for inspection and certification as MDAS for disposal. These items were 100% inspected for absence of explosive materials, independently 100% re-inspected, and properly secured in a lockable container using the inspection/certification process described below:

- UXO Technician II performed a 100 percent (100%) inspection of each item to determine if the item contained explosives hazards.

- UXO Technician III performed a 100 percent (100%) re-inspection of all items to determine if free of explosives hazards.

- The UXOSO/Unexploded Ordnance Quality Control Specialist (UXOQCS) conducted daily audits of the above procedures used by UXO teams and individuals for MPPEH inspection/certification procedures. During these audits the UXOSO/UXOQCS performed random sampling of designated MDAS pieces to ensure items containing explosives hazards were not comingled with the inspected material as required for completion of the Requisition and Turn-In Document, DD Form 1348-1A.

- Inspected and certified MDAS was secured in a locked container until final disposition to prevent comingling of MDAS with material that was not inspected.

- Upon completion of inspection and certification, the SUXOS signed the DD Form 1348-1A as the certifier and the UXOQCS signed as the verifier. The form was properly annotated with the following declaration and accompanied the shipment:

"This certifies and verifies that the Materiel listed has either (1) been subjected to a 100% inspection and an independent 100% re-inspection, or (2) has been processed by a DDESB approved process with appropriate post-processing inspection. To the best of our knowledge and belief, the material listed is free of explosive hazards and is Material Documented as Safe (MDAS)."

Copies of the completed DD Form 1348-1A are provided in Appendix I.

2.4.4 Site Sampling

Surface Water Sampling

IAW the Ohio EPA MEC demolition requirements, PIKA collected surface water samples from the adjacent creek (Sand Creek) prior to the start of work and weekly thereafter for the duration of the RVAAP ERS MEC demolition field work. The

sampling was required to verify that the demolition operations did not re-contaminate and/or migrate contaminants off the ODA2 site. The surface water samples were collected from the previously approved upstream, adjacent and downstream locations that had been established for the ODA2 demolition operations (see Figure 5, Appendix B).

During the MEC demolition operations, a total of three (3) pre-demolition surface water samples, seven (7) weekly surface water samples (including one [1] duplicate) and three (3) post demolition surface water samples were collected from the specified locations. All surface water samples were analyzed for Explosives, Propellants, and Target Analyte List (TAL) Metals. Copies of the Field Sampling Reports, laboratory analytical results, COC Forms and Lab receipts for all the surface water samples are provided in Appendix J.

All surface water samples were collected using the hand-held bottle method IAW section 5.7.2.1.1 of the March 2013 Field Sampling Plan Addendum for Environmental Remediation Service at RVAAP. Following the sample collection and sample preparation activities, all sample containers were labeled, packaged in an ice filled cooler (sealed with a custody seal), and managed under COC procedures. All samples were shipped same day via laboratory courier service to Test America Laboratory in North Canton, OH.

The surface water sampling results indicate no elevated levels of TAL Metals, explosives, or propellants were observed in Sand Creek as a result of the RVAAP ERS MEC demolition operations at ODA2. Table 1 in Appendix J provides summaries of results for the pre-demolition surface water samples at the upstream, adjacent and downstream sample locations respectively compared to the results from the weekly surface water samples results.

Surface Soil Sampling

IAW the Ohio EPA MEC demolition requirements, PIKA collected four (4) Multi-Increment (MI®) soil samples prior to the demolition activities and four (4) MI® soil samples following the demolition activities (total of eight [8] MI® soil samples) from the selected 100-foot by 100-foot demolition site within ODA2 to check for any potential impact to surface soils as a result of site activities. Additionally, one (1)

duplicate soil sample and one (1) matrix spike/matrix spike duplicate (MS/MSD) soil sample was collected during the pre and post-demolition sampling operations for QA purposes. The soil samples consisted of one MI® sample from the surface (zero (0) to one (1) foot below ground surface [bgs]) of each quadrant of the 100-foot by 100-foot MEC demolition area as shown in Appendix B, Figure 6. All MI® soil samples were analyzed for Explosives, TAL metals, and propellants.

For each sampling location, a minimum of 30 systematically random aliquots were collected from zero (0) to one (1) foot bgs using a dedicated three-quarter (¾)-inch diameter stainless steel step probe, placed in a plastic lined container, and mixed in the field. The aliquot locations were selected by the sample technician walking over the entire area and randomly selecting aliquot locations. All of the aliquots collected from each quadrant were placed in a labeled container for transport to the laboratory. All samples were shipped same day via laboratory courier service to Test America Laboratory in North Canton, OH. Upon arrival to the laboratory, the samples were further homogenized using a process that incorporates drying and sieving the samples, grinding the samples to a uniform grain size, and then re-sieving to complete the MI® sampling protocol. Copies of the Field Sampling Reports, laboratory analytical results, COCs and Lab receipts for all RVAAP MEC Demolition MI surface soil samples are provided in Appendix K.

Table 2 in Appendix K provides a summary of the pre-demolition soil sample results compared to the post-demolition sample results. As shown in Table 2 the results for post-demolition MI® soil samples for each quadrant of the 100-foot by 100-foot MEC demolition site are within the initial baseline limits.

Data Verification

PIKA's project data verification approach followed direction provided in FWQAPP subsection 10.2.1 and as shown in Figure 10-1 of the FWQAPP. Protocol for analytical data verification can be found in the following references:

- DoD Quality Systems Manual (QSM) for Environmental Laboratories, Version 4.2 (DoD 2010);
- USACE, Louisville District's QSM Supplement (USACE 2007);

- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (USEPA 2008);
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (USEPA 2010).

All data was reviewed for completeness by PIKA according to the FWQAPP. Automated reviews against the project automated data review (ADR) library were performed in conjunction with manual review of the data packages for compliance with the established QC criteria based on the following categories:

- Holding times,
- Blanks,
- LCSs,
- Calibration,
- Surrogate recovery (organic methods),
- Internal standards (primarily organic methods),
- MS/MSD and duplicate results,
- Sample re-analysis,
- Secondary dilutions, and
- Laboratory case narrative.

These primary analytical data verification categories were evaluated for compliance with the DQOs listed in Tables 4-1 and 4-2 of the FWQAPP and qualified IAW Section 10.2.2 of the FWQAPP.

The sample analyses for this project are provided in six (6) laboratory data packages provided by Test America – North Canton. The data verification/completeness review determined that all of the sample results were useable and satisfy the DQOs for the project. No data was rejected. All holding times were met and all samples were properly preserved and arrived in good condition. Reporting Limits (RL) were adjusted for samples that required dilution and as such the resulting RLs typically were above the values presented in the project QAPP. When MS/MSD recoveries were outside of control limits due to matrix interferences or high constituent concentrations, the associated Laboratory Control Sample (LCS) met acceptance

criteria. All sample results were properly qualified in the data packages when required. Copies of the complete laboratory data packages, the ADR and third party data verification reports are provided in Appendix Q.

2.5 Thermal Flashing Verification Using TCS

PIKA was tasked with the safe and effective disposal of all MDEH items (i.e., Legacy MPPEH" and Rocket Ridge MPPEH) stored in RVAAP ECMs 7-C-2 and 7-C-3 (Figure 2, Appendix B). Thermal flashing of these items was accomplished using the PIKA TCS. The PIKA TCS is a site-specific DDESB approved process which thermally neutralizes trace explosives on the interior and exterior surfaces of MPPEH/MDEH. When used in conjunction with its QA/QC confirmation checks and its SOP, the TCS thermally flashes and removes the residual explosives contamination and render the MPPEH/MDEH as MDAS so that those items can be disposed of per DoDI 4140.62 and USACE EM 1110-1-4009, Chapter 14 procedures.

The TCS setup for the RVAAP ERS was configured with a car-bottom chamber to serve as the thermal verification chamber for flashing MPPEH contaminated with residual or trace levels of explosives contamination. The car-bottom chamber is constructed of 8-inch-thick insulated panels capable of withstanding more than the required target temperatures. In order to achieve MDAS certification, the TCS maintained the target temperature of 678 degrees Fahrenheit for a minimum of fifteen minutes for each load of MPPEH. A clean regulated liquid propane (LP) heat source was used in the car-bottom to achieve the required temperature.

The Akron Regional Air Quality Management District reviewed and concurred with PIKAs proposal to operate the TCS to complete the thermal verification of munitions scrap at the RVAAP as a "De Minimus" air contaminant source IAW the exemption provided in Ohio Administrative Code (OAC) rule 3745-15-05. As such, no permit was required and all operations of the TCS were documented to demonstrate that the actual emissions did not exceed 10 pounds per day of the contaminants specified in the OAC. Copies of the completed PIKA TCS Operations Record Keeping Forms are provided in Appendix L. Refer to Appendix M for a copy of the letter issued by the Akron Regional Air Quality Management District.

The RVAAP ERS TCS operations were carried out from August 12 through September 20, 2013. Copies of the ECM 7-C-2 and 7-C-3 Magazine Data Cards are

provided in Appendix G. Photo documentation of the TCS operations is provided in the weekly reports contained in Appendix C. Table 2-2 below summarizes the MPPEH that was stored in ECMs 7-C-2 and 7-C-3, thermally flashed, certified as MDAS, and recycled off-site as scrap metal per the PWS: All TCS operations were conducted IAW the approved WP; including the PIKA operational procedures, safety features, and standard guidelines for TCS installers, operators, technicians, and engineers. Details pertaining to the RVAAP ERS TCS operations are provided in the subsections that follow.

TABLE 2-2 - MDEH FOR FLASHING

	Location	Box #	Item Description	Quantity
Rocket Ridge MPPEH	**7-C-2**	-	M19 Tail Boom (55-gallon drums)	119
Rocket Ridge MPPEH	**7-C-3**	-	1 yd^3 Box MPPEH for Flashing	19
Legacy MPPEH	**7-C-3**	1	75mm HE (tracer)	4
		1	BD Fuzes	2
		1	20mm	1
		1	Fuze Booster Cups	2
		1	Cartridge Igniter	2
		1	PD Fuzes	7
		A	Tracer Element for 152mm Projectile	3000
		B	Tracer Element for 152mm Projectile	3000
		C	Tracer Element for 152mm Projectile	3000
		D	Tracer Element for 152mm Projectile	3000
		E	Tracer Element for 152mm Projectile	3000
		F	Tracer Element for 152mm Projectile	3000
		G	Tracer Element for 152mm Projectile	3000
		H	Tracer Element for 152mm Projectile	3000
		I	Tracer Element for 152mm Projectile	3000
		J	Tracer Element for 152mm Projectile	1296
		K	MK 29 Mod 2	16

TABLE 2-2 - MDEH FOR FLASHING				
	Location	**Box #**	**Item Description**	**Quantity**
Legacy MPPEH	**7-C-3**	K	MK 10 Base Fuze	63
		K	VT Fuzes	29
		K	Flash Tubes	139

2.5.1 TCS Pad Installation

To facilitate the RVAAP ERS MPPEH thermal flashing operations, a crushed limestone pad 60-feet long by 60-feet wide was installed along Rocket Ridge Road within ODA2 to accommodate the setup and safe operation of the PIKA TCS equipment. The location of the TCS pad is shown in Appendix B, Figure 4. The TCS pad installation operations were conducted from July 1 through July 2, 2013. A copy of the certification letter from the supplier of the crushed limestone verifying that the material is from a virgin area of the quarry is provided in Appendix P. Pictures of the TCS pad installation operations are provided in the weekly reports contained Appendix C.

As an alternative to excavating/removing and disposing of the gravel pad as waste material at the completion of the project, the TCS pad was left in-place for re-use by the government as a turnaround area for vehicles along Rocket Ridge Road, and/or vehicle parking and material/equipment staging. IAW the approved WP, two MI® surface soil samples were collected in the area where the pad was installed. One sample was collected prior to installation and one sample was collected following the completion of the TCS operations to ensure that the site soils were not impacted by site operations. The MI® surface samples were analyzed for TAL metals, explosives, propellants, total phosphorus, and white phosphorus. Copies of the field sampling reports, laboratory analytical results, COC, and lab receipts for the TCS pad surface soil samples are provided in Appendix O. Table 3 in Appendix O provides a summary of the pre and post TCS pad installation soil sample results. As shown in Table 3, the results for the post TCS pad installation soil samples are within the initial baseline limits (i.e., pre TCS pad installation soil samples). The discussion of the data verification completed on these samples is provided in Section 2.4.4. The complete laboratory data packages and ADR Data Verification Reports can be found in Appendix Q.

2.5.2 Thermal Flashing of MPPEH Items in ECM 7-C-2

The one hundred nineteen (119) drums (fifty-five [55] gallons each) containing the M19 Tail boom assemblies and water (stored in water due to potential residual white phosphorus) that were located in ECM 7-C-2 were loaded and transported to ODA2 from the C-Block Area in the same manner that the drums were loaded and transported from ODA2 during the 2011 Rocket Ridge TCRA operations. An extended boom forklift was used to retrieve and load the palletized drums from ECM 7-C-2 onto a flatbed trailer for transport to the TCS location within ODA2. Once loaded, the palletized drums were secured to the flatbed trailer using reinforced cargo straps. One 80-gallon emergency over pack spill kit was staged at ECM 7-C-2 throughout the loading operations for spill response/control. Additionally, one 80-gallon emergency over pack spill kit was secured to the trailer during all drum transport operations. It should be noted that no spills were encountered during the drum transport operations.

Upon arrival at the TCS location within ODA2, the drums were offloaded and staged at the daily run holding location within the TCS pad area using an extended boom forklift. To facilitate the thermal flashing process, the contents of the drums, including the water, were transferred from the drums into water tight, heavy gauge steel processing bins specifically designed for TCS applications. The contents of the drums were removed from the drums in the same manner that the drums were loaded during the 2011 Rocket Ridge TCRA operations using manual (hand loading into 5-gallon buckets) and/or by mechanical means (articulating drum grabber) IAW the *Flashing of MPPEH using the TCS AHA* provided in Attachment 2 of the APP. Transferring of the drum contents to the TCS processing bins was conducted within a specified area of the TCS pad that was appropriately bermed and lined for secondary containment.

The secondary containment area was approximately twelve (12) feet long by sixteen (16) feet wide and was constructed on top of the TCS pad. The berms were constructed using standard size rail road ties (eight [8] feet by nine [9] inches by seven [7] inches ea.) and the entire secondary containment area was covered/lined with a twenty [20] millimeter thick high-density polyethylene liner material. The total spill capacity of the twelve (12) foot by sixteen (16) foot by seven (7) inch bermed area was 837.28 gallons. At no time was there more than six (6) fifty-five (55)

gallon drums (i.e., three hundred thirty [330] gallons maximum) staged within the secondary containment area. Additionally, one 80-gallon emergency over pack spill kit was staged at the TCS location for spill response/control. It should be noted that no spills occurred during any of the drum handling and transfer operations.

Once the TCS processing bins were filled, (three [3] to six [6] bins maximum per TCS cycle) they were loaded into the TCS using an extended boom fork lift to undergo the thermal flashing process. Upon completion of each cycle, the bins were removed from the TCS using an extended boom forklift and staged within the TCS operation area for cooling. The TCS operations were managed in a manner to ensure that no drums delivered from ECM 7-C-2 for thermal flashing were staged at the TCS location overnight.

Once the bins cooled they were emptied into a lockable roll-off container for subsequent transport to the off-site scrap metal recycling facility as MDAS. At the completion of the TCS operations, all empty drums were inspected and certified as MDAS for off-site scrap recycling along with the other processed materials.

2.5.3 Thermal Flashing of MPPEH Items in ECM 7-C-3

The MDEH items requiring thermal flashing that were staged in ECM 7-C-3 were transferred (manually) directly into TCS processing bins at the C-Block area. Once the TCS processing bins were filled, they were loaded and secured onto a flatbed trailer for transport to the TCS operations area. Upon arrival, the bins (three [3] to six [6] bins maximum per TCS cycle) were loaded into the TCS using an extended boom fork lift to undergo the thermal flashing process. Upon completion of each cycle, the bins were removed from the TCS using an extended boom forklift and staged within the TCS operation area for cooling. The TCS operations were managed in a manner to ensure that all bins that were transported from ECM 7-C-3 to ODA2 were loaded directly into the TCS for thermal flashing.

Once the bins cooled they were emptied into a lockable roll-off container for subsequent transport to the off-site scrap metal recycling facility as MDAS.

2.6 Additional MEC and MPPEH Items

During the performance of construction support for the Sand Creek bi-annual IBI and QHEI on August 13, 2013 various MEC and MPPEH items were noted within the RRA stream channel by the PIKA UXO personnel. It was apparent that the items were washed out of ODA2 and deposited within the stream channel as a result of the August 9, 2013 extreme flood event. Upon discovery, the items were marked with pins flags and the PIKA SUXOS immediately notified the OESS, RVAAP FM, and CELRL of the findings. Optional Line Items Task 11a-d of PIKA Contract W912QR-10-P-0033 were immediately exercised to facilitate disposal of the additional items.

A total of nineteen (19) additional items from the RRA stream channel were identified and inspected by PIKA UXO personnel. Fourteen (14) of the items were inspected and certified as MDEH which required thermal flashing in order to remove the potential explosive hazard for disposal. These items were processed and disposed of along with items from ECM 7-C-3 during the TCS operations as described in Section 2.5.3. Five (5) of the items were inspected and certified as MDEH which required explosive demolition in order to remove the potential explosive hazard for disposal. Demolition of these items was carried out on September 19, 2013 in the same as described in Section 2.4.2. A table listing of all the additional MEC and MPPEH items is provided below in Table 2-3.

Table 2-3

Additional MEC and MPPEH Items

Item Description	Location Found	Quantity	Disposition
M19 White Phosphorus Tail Boom	RRA Stream Channel	1	Thermal Flashing
3-inch projectile	RRA Stream Channel	1	Thermal Flashing
152mm HE Frag	RRA Stream Channel	1	Thermal Flashing
Burster Tube (empty)	RRA Stream Channel	1	Thermal Flashing

Table 2-3

Additional MEC and MPPEH Items

Item Description	Location Found	Quantity	Disposition
Frag (miscellaneous)	RRA Stream Channel	1	Thermal Flashing
M52 Mortar Fuze	RRA Stream Channel	1	Thermal Flashing
M252 Mortar Fuze	RRA Stream Channel	1	Thermal Flashing
Aluminum Slag	RRA Stream Channel	1	Thermal Flashing
PIBD Fuze Component	RRA Stream Channel	1	Thermal Flashing
MT Fuze component	RRA Stream Channel	1	Thermal Flashing
3-inch Projectile (empty)	RRA Stream Channel	1	Thermal Flashing
5-inch Rocket War Head	RRA Stream Channel	1	Thermal Flashing
Detonator	RRA Stream Channel	1	Thermal Flashing
60mm Mortar	RRA Stream Channel	1	Explosive Demolition
M52 Mortar Fuze	RRA Stream Channel	1	Explosive Demolition
105mm HE with T-bar PD Fuze	RRA Stream Channel	1	Explosive Demolition
3-inch HE Projectiles	RRA Stream Channel	2	Explosive Demolition

2.7 Disposition of MDAS

During the RVAAP ERS MEC demolition and TCS operations, a total of 134,040 lbs of resultant MDAS were transported to Belson Steel Center Scrap smelter facility

located in Bourbonnais, IL for off-site recycling as scrap metal. Transfer and transport of all RVAAP ERS MDAS was performed under chain-of-custody control using MPPEH/Range Residue Inspection, Certification, and COCs. Transportation of the RVAAP ERS MDAS to Belson Steel was provided by Wolford's Rolloff, Inc. Copies of all the MPPEH/Range Residue Inspection, Certification, and COCs, including the completed DD Form 1348-1A, Bill of Lading and the letter from the Belson Steel certifying proper handling and destruction of the materials are included Appendix I.

2.8 PPE Drum Disposal

As part of the MPPEH and MEC disposal operations under this WP, PIKA characterized two (2) drums (fifty-five [5] gallons each) of spent PPE that were staged in ECM 7-C-2 for off-site disposal at an approved facility. The drums were generated during the July 2011 Rocket Ridge white phosphorus removal operations. Based upon waste characterization analysis the drums were transported off-site on January 30, 2014 for disposal (incinerated) as non-hazardous waste at Heritage – WTI, Inc. located in East Liverpool, Ohio. A returned signed copy of the manifest from the disposal facility was retained by the generator and PIKA for record keeping purposes and is presented along with a copy of the waste characterization sampling results and approved waste profile in Appendix R.

2.9 Site Restoration and Demobilization

Following completion of the RVAAP ERS field activities, all disturbed areas within ODA2 were restored to their original grading, seeded, and mulched. Additionally, the ODA2 access road, including the Rocket Ridge extension road was restored to its original condition from September 23 to September 26, 2013. A copy of the certification letter for the 304 gravel material used for the ODA2 road repair is provided in Appendix P.

Following completion of the site restoration operations, all heavy equipment, the site office trailer, and miscellaneous tools were demobilized from the site. During the demobilization operations, PIKA removed all materials and equipment acquired and used in support of the contract task order and was responsible for cleaning the site and removing all project generated wastes IAW the PWS. General trash was

removed for proper disposal and all project personnel were demobilized on September 26, 2013. Photo documentation of the site restoration and demobilization operations are provided in the weekly reports contained in Appendix C.

3.0 CONCLUSIONS

The objectives of the RVAAP ERS were to dispose of all the MDEH and MEC items (i.e., Legacy MPPEH and Rocket Ridge MPPEH items) that were stored in RVAAP ECMs 7-C-2, 7-C-3 and 7-C-4; reconstruct and stabilize the stream banks at the RRA of Sand Creek as the permanent stream route; and perform three (3) years of annual water and biotic testing for the Sand Creek stream restoration.

The defined objectives were achieved through completion of the RVAAP ERS field activities from May 2013 to September 2013 as described in Section 2.0. A summary of conclusions and findings from the TCRA at the RRA MRS are summarized below:

1. It was the preference of the Ohio EPA Division of Surface Water to keep the temporary RRA stream diversion channel in-place and make it the primary stream route. Per the PWS, PIKA successfully deconstructed the temporary stream channel banks, removed the geotextile holding the temporary bank material, and reconstructed the stream banks fully establishing them as the primary stream route. Following reconstruction, trees, shrubs, and grasses were installed along the entire length of the stream banks. Included with this task, the top of the RRA was backfilled and re-graded, seeded, and mulched. All the restoration work was conducted from May 15, 2013 through May 24, 2013 IAW the approved RRA and stream channel restoration WP. The final site walk and inspection of the restored stream channel and RRA was conducted by the RVAAP stakeholders on June 17, 2013.

2. The first of three post stream restoration bi-annual monitoring events was conducted on July 2, 2013 and August 13, 2013. The monitoring is required by the Ohio EPA Division of Surface Water to measure and evaluate the physical and biological characteristics within the reconstructed stream channel. The initial monitoring event indicated that the reconstructed stream channel is well within acceptable limits. Subsequent bi-annual testing and reporting will be carried out through 2015.

3. PIKA conducted explosive demolition of all the MEC and MDEH items that were staged in ECM 7-C-4 from July 29, 2013 through August 8, 2013. Prior to initiating the MEC demolition operations, PIKA submitted the Ohio EPA MEC Demolition/Disposal Notification and issued a TFR with the Cleveland Air Route Traffic Control Center, Airspace and Procedures Office. Additionally, PIKA submitted an Informational Notice to inform the key project personnel and local emergency response agencies of the planned demolition operations. All the MEC items from ECM 7-C-4 were destroyed within the current RCRA ODA2 MRS IAW the procedures outlined in DA TM 60A-1-1-31, USACE EM 385 1-97, Explosives Safety and Heath Requirement Manual, and PIKA's MEC Demolition Standard Operating Procedure. After each detonation and at the end of each day's operations, the UXO team collected all visible fragments and debris for inspection and certification as MDAS for disposal as scrap metal.

4. PIKA was tasked with the safe and effective disposal of all MPPEH/MDEH stored in RVAAP ECMs 7-C-2 and 7-C-3. These items were previously recovered, inspected, stored, and certified as MDEH items that require thermal flashing in order to remove the potential explosive hazard for disposal. Thermal flashing of these items was accomplished using the PIKA TCS. The PIKA TCS thermally neutralizes trace explosives on the interior and exterior surfaces of MPPEH/MDEH. When used in conjunction with its QA/QC confirmation checks and its SOP, the TCS thermally flashes and removes the residual explosives contamination and renders the MPPEH/MDEH as MDAS so that those items can be disposed of per DoDI 4140.62 and USACE EM 1110-1-4009, Chapter 14 procedures. The RVAAP ERS TCS operations were carried out from August 12 through September 20, 2013.

5. During the performance of construction support for the Sand Creek bi-annual stream monitoring on August 13, 2013 various MEC and MPPEH items were noted within the RRA stream channel by the PIKA UXO personnel. It was apparent that the items were washed out of ODA2 and deposited within the stream channel as a result of the August 9, 2013 extreme flood event. Optional Line Item Tasks 11a-d of PIKA Contract W912QR-10-P-0033 were

exercised to facilitate disposal of these additional items. A total of nineteen (19) additional MPPEH items from the RRA stream channel were identified and inspected by PIKA UXO personnel to facilitate disposal during the RVAAP ERS operations. Fourteen (14) of the items were inspected and certified as MDEH requiring thermal flashing in order to remove the potential explosive hazard for disposal. These items were processed and disposed of along with items from ECM 7-C-3 during the RVAAP ERS TCS operations. Five (5) of the items were inspected and certified as MDEH which required explosive demolition in order to remove the potential explosive hazard for disposal. Demolition of these items was carried out at the conclusion of the RVAAP ERS operations on September 19, 2013.

6. During the RVAAP ERS MEC demolition and TCS operations, a total of 134,040 lbs of resultant MDAS were transported to Belson Steel Center Scrap smelter facility located in Bourbonnais, IL for off-site recycling as scrap metal. Transfer and transport of all RVAAP ERS MDAS was performed under COC control using MPPEH/Range Residue Inspection, COCs. Transportation of the RVAAP ERS MDAS to Belson Steel was provided by Wolford's Rolloff, Inc.

7. As part of the RVAAP ERS operations, PIKA characterized two (2) fifty-five (55) gallon drums of spent PPE that were staged in ECM 7-C-2 for off-site disposal at an approved facility. The drums were generated during the July 2011 Rocket Ridge white phosphorus removal operations. Based upon waste characterization analysis, the drums were disposed of (incinerated) as non-hazardous waste at Heritage – WTI, Inc. located in East Liverpool, Ohio. A returned signed copy of the manifest from the disposal facility was retained by the generator and PIKA for record keeping purposes and is presented along with a copy of the waste characterization sampling results and approved waste profile in Appendix R.

Appendix A

Performance Work Statement

PERFORMANCE WORK STATEMENT
Date: June 13, 2012
REV: 0

1.0 Introduction and Background

This requirement is for environmental remediation services at Ravenna Army Ammunition Plant located at Ravenna, Ohio. Environmental remediation Services include Disposal of Rocket Ridge MPPEH in Igloo 7-C-2, Disposal of Rocket Ridge MPPEH in Igloo 7-C-3, Disposal of Rocket Ridge MEC in Igloo 7-C-4, Disposal of Legacy MPPEH in Igloo 7-C-3, Disposal of Legacy MEC in Igloo 7-C-4, and Construction at the Sand Creek Stream Diversion

The Department of Defense (DoD) established the MMRP under the Defense Environmental Restoration Program (DERP) to address unexploded ordnance (UXO), discarded military munitions (DMM), and munitions constituents (MC) located on current and former military installations.

RVAAP is located in northeastern Ohio within Portage and Trumbull Counties, approximately 4.8 kilometers (3 miles) east/northeast of the City of Ravenna and approximately 1.6 kilometers (1 mile) northwest of the Village of Newton Falls. RVAAP consists of 21,683.289 acres. As of February 2006, a total of 20,403 acres of the former 21,683-acre RVAAP have been transferred to the National Guard Bureau (NGB) via the United States Property and Fiscal Officer (USP&FO) for Ohio and subsequently licensed to the Ohio Army National Guard (OHARNG) for use as a training site (Camp Ravenna). Currently, RVAAP consists of 1,280 acres in several distinct parcels scattered throughout the confines of the OHARNG's Camp Ravenna perimeter fence.

Past DoD activities at the former RVAAP date back to 1940 and include the manufacturing, loading, handling, and storage of military explosives and ammunition. The RVAAP is a government-owned, contractor-operated (GOCO) facility controlled by the U.S. Army Base Realignment and Closure Division (BRACD).

2.0 Requirements

The Contractor shall be responsible for fully executing the Firm Fixed Price Remediation (FFPR) approach under a Performance-Based Acquisition (PBA), by: conducting required MEC Removal; addressing any and all unforeseen explosive safety and scheduling issues; and, assuming contractual liability and responsibility for the achievement of the performance objectives for the project site at RVAAP (the “Installation”) identified in this Performance Work Statement (PWS). Contractors should note that other environmental issues beyond MEC, such as the presence of MC that do not pose an explosive hazard or any other pollution/contaminants present on the site, are not included in this PWS.

The contractor must possess all the required expertise, knowledge, equipment and tools required to meet or exceed the government’s objectives identified in this PWS in accordance with established industry standards. The Contractor must have the capability and experience to perform, or provide, a wide range of investigative and remediation services required for MEC.

Under this contract, the contractor will perform munitions response actions for military munitions (MM) and munitions debris (MD). Activities may involve munitions and explosives of concern (MEC), which includes UXO, DMM, and MC if found in high enough concentrations to cause an explosive threat.

It is the Contractor's responsibility to comply with all applicable federal, state, and local laws and regulations and to fulfill the performance objectives of this PWS in a manner that is consistent with any applicable orders or permits, all existing and future cleanup agreements or guidance for the Installation, and relevant Department of Defense (DoD) and Army policy, for the duration of the contract.

The Contractor must perform all the necessary environmental remediation (to include munitions) work as required to meet the performance objectives of this PWS. Activities will be conducted pursuant to Comprehensive

Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), National Oil and Hazardous Substances Contingency Plan (NCP) requirements, and the Ohio EPA Director's Final Findings and Orders (DFFO) for RVAAP with regulatory coordination, as appropriate, with the Ohio EPA.

To perform munitions responses, the DoD primarily uses CERCLA. However, CERCLA has no special provisions for dealing with explosive safety. The DoD recently revised its Ammunition and Explosives Safety Standards (DoD 6055.09-M) (APR 2012) and this document must be adhered to in the investigation and remediation of sites with MEC.

3.0 Types of Services Required

This PWS includes only MEC/MPPEH Disposal and remedial study and incidental construction associated with environmental remediation activities.

4.0 Task Order Type

This is a firm fixed-price task order. This PWS includes MEC/MPPEH Disposal and remedial study and incidental construction associated with environmental remediation activities. The period of performance for this task order is as specified in **Table 1**.

5.0 Performance Objectives and Standards

The Contractor shall be required to furnish all plant, labor, materials and equipment necessary to meet the performance objectives and standards identified in Table 1 below.

Table 1: Performance Requirements Summary.

Performance Objective	*Performance Measure*
Approved Project Management Plan (PMP): Draft PMP and within 30 calendar days of Task Order award, Final PMP within 15 days calendar of receipt of COR comments on the drafts.	Army approval through the Contracting Officer's Representative (COR), and Ohio EPA approval per the Director's Final Findings and Orders (e.g., receipt of documentation stating document approval) of the PMP.
Achieve Final Explosive Safety Submittal within 45 days of NTP.	Army approval through the Contracting Officer's Representative (COR) or qualified representative. Department of Defense Explosives Safety Board (DDESB) approval of Contractor prepared Explosives Safety Submission (ESS) or Explosives Site Plan (ESP).

Achieve Disposal of Rocket Ridge MPPEH in Igloo 7-C-2 by 31 DEC 2012. Flashing or detonation, as appropriate, shall be conducted at Open Detonation Area 2 (ODA2).	Compliance with Ohio EPA Director's Final Findings and Order and associated schedules. Compliance with the DDESB approved, Explosives Safety Submission (ESS). Army approval through the COR, and Ohio EPA approval per the Director's Final Findings and Orders (e.g., receipt of documentation stating document approval) of the After Action Report.
Achieve Disposal of Rocket Ridge MPPEH in Igloo 7-C-3 by 31 DEC 2012. Flashing or detonation, as appropriate, shall be conducted at ODA2.	Compliance with Ohio EPA Director's Final Findings and Order and associated schedules. Compliance with the DDESB approved, Explosives Safety Submission (ESS). Army approval through the COR, and Ohio EPA approval per the Director's Final Findings and Orders (e.g., receipt of documentation stating document approval) of the After Action Report.
Achieve Disposal of Rocket Ridge MEC in Igloo 7-C-4 by 31 DEC 2012. Flashing or detonation, as appropriate, shall be conducted at ODA2.	Compliance with Ohio EPA Director's Final Findings and Order and associated schedules. Compliance with the DDESB approved, Explosives Safety Submission (ESS). Army approval through the COR, and Ohio EPA approval per the Director's Final Findings and Orders (e.g., receipt of documentation stating document approval) of the After Action Report.

Optional Objective: Achieve Disposal of Legacy MPPEH in Igloo 7-C-3 under same mobilization effort as base disposal tasks by 31 DEC 2012. Flashing or detonation, as appropriate, shall be conducted at ODA2.	Compliance with Ohio EPA Director's Final Findings and Order and associated schedules. Compliance with the DDESB approved, Explosives Safety Submission (ESS). Army approval through the COR, and Ohio EPA approval per the Director's Final Findings and Orders (e.g., receipt of documentation stating document approval) of the After Action Report.
Optional Objective: Achieve Disposal of Legacy MEC in Igloo 7-C-4 under same mobilization effort as base disposal tasks by 31 DEC 2012. Flashing or detonation, as appropriate, shall be conducted at ODA2.	Compliance with Ohio EPA Director's Final Findings and Order and associated schedules. Compliance with the DDESB approved, Explosives Safety Submission (ESS). Army approval through the COR, and Ohio EPA approval per the Director's Final Findings and Orders (e.g., receipt of documentation stating document approval) of the After Action Report.
Optional Objective: Achieve Disposal of Legacy MPPEH in Igloo 7-C-3 under a separate mobilization effort as base disposal tasks by 31 DEC 2012. Flashing or detonation, as appropriate, shall be conducted at ODA2.	Compliance with Ohio EPA Director's Final Findings and Order and associated schedules. Compliance with the DDESB approved, Explosives Safety Submission (ESS). Army approval through the COR, and Ohio EPA approval per the Director's Final Findings and Orders (e.g., receipt of documentation stating document approval) of the After Action Report.

Optional Objective: Achieve Disposal of Legacy MEC in Igloo 7-C-4 under a separate mobilization effort as base disposal tasks by 31 DEC 2012. Flashing or detonation, as appropriate, shall be conducted at ODA2.	Compliance with Ohio EPA Director's Final Findings and Order and associated schedules. Compliance with the DDESB approved, Explosives Safety Submission (ESS). Army approval through the COR, and Ohio EPA approval per the Director's Final Findings and Orders (e.g., receipt of documentation stating document approval) of the After Action Report.
Achieve reconstruction and stabilization of the stream banks at the Rocket Ridge Area of Sand Creek by 31 DEC 2013.	Compliance with Ohio EPA Director's Final Findings and Order and associated schedules. Army approval through the COR, and Ohio EPA approval per the Director's Final Findings and Orders (e.g., receipt of documentation stating document approval) of the After Action Report.
Complete three (3) years of annual water and biotic testing for Sand Creek stream restoration [Qualitative Habitat Evaluation Index (QHEI) and Index of Biotic Integrity (IBI)]	Compliance with Ohio EPA Director's Final Findings and Order and associated schedules. Army approval through the COR, and Ohio EPA approval per the Director's Final Findings and Orders (e.g., receipt of documentation stating document approval) of the Annual Report.

A summary of items for disposal is given in **Table 2** below.

Table 2: Summary of Items for Disposal

Table 2.1: Rocket Ridge MPPEH in Igloo 7-C-2

7-C-2	
Item Description	**Quantity**
PPE (BARRELS)	2
M19 TAIL BOOM (BARRELS)	119

Table 2.2: Rocket Ridge MPPEH in Igloo 7-C-3

7-C-3	
Item Description	**Quantity**
$1YD^3$ BOX MDEH FOR FLASHING	19

Table 2.3: Rocket Ridge MEC in Igloo 7-C-4

7-C-4

Item Description	Quantity
100 SERIE BOMB FUZE	3
105 PROJO HE UNFUZED	1
152MM BD FUZE	14
155 BASE W/HE	1
175MM BD FUZE	3
20 HB FRAG BOMB	1
20LB FRAG BOMB (UNFUZED)	1
20MM HE PROJO	5
20MM PROJO	643
25MM PROJO	25
30MM PROJO	51
37MM	3
37MM HE UNFUZED	1
37MM PROJO	42
37MM PROJO (TRACER INTACT)	1
37MM PROJO HE	2
37MM PROJO PIECES	6
40MM CART BASE	1
40MM FRAG BALL	5
40MM FRAG BALL w/ HE	1
40MM FUZE	2
40MM GRENADE	3
40MM GRENADE DET	1
40MM HE (BOFURS)	1
40MM HE PROJO	1
40MM PROJO (BOFURS)	11
5" ROCKET WARHEAD	2
5" ROCKET WH W/MOTO	2
60MM FLARE	1
60MM ILLUMINATION	1
60MM MORTOR	4
60MM MORTOR HE UNFUZED	3
60MM PROJO	5
60MM PROJO HE	1
75MM HE	1
75MM PROJO	1
75MM PROJO (NOFUZE)	1
75MM PROJO BASE	1
75MM PROJO HE	2
75MM PROJO SHRAPNEL	5
75MM SHRAPNEL	1
81MM MORTOR HE UNFUZED	1
81MM MORTOR UNFUZED	1
81MM PROJO	1
90MM APHE PROJO	1
90MM PROJO	18

90MM PROJO BASE	1
90MM PROJO HE	2
90MM PROJO UNFUZED	1
90MM UNFUZED	1
AUXILLARY DETONATING FUZE	6
BASE DETONTATING FUZE	49
BASE FUZE BOTTOM	1
BASE FUZE W/TRACER	5
BASE OF FUZE w/ HE	2
BD FUZE	32
BD FUZE (37MM)	5
BD FUZE TRACER ELEMENT	1
BOMB ADAPTOR COMPONET	1
BOMB FUZE	26
BOOSTER CUP	27
BOOSTER CUP BOTTOM	3
BOOSTER TUBE	3
BROKEN 90MM w/ HE	1
COMPONENT	1
FUZE BOOSTER CUP	5
FUZE COMPONENT	27
GRENADE FUZE	6
HALF 40MM CART CASE	2
HALF MT FUZE	1
HAND GRENADE MKII	2
MECH TIME FUZE	11
MT FUZE	72
PARITIAL BOMB FUZE	1
PARTIAL MORTOR TAIL BOOM W/ PRIMER	1
PD FUZE	506
PD FUZE (HALF)	1
PD FUZE (M52)	48
PD FUZE (ROCKET)	3
PD FUZE (TBAR)	38
PD FUZE M52	3
PD FUZE TBAR	1
PD FUZE w/ TETRYL	1
PIBD	13
PIBD BOOSTER CUP	4
PIBD FUZE	548
PIBD FUZE BOOSTER CUPS	2
PRACTICE BOMB MK23	1
PTT FUZE	2
ROCKET VENTURI	1
SLAP FLARE	8
T-BAR FUZE	2
TOP OF PD FUZE	1

VT FUZE	67

Table 2.4: Legacy MPPEH in Igloo 7-C-3

7-C-3		
Box #	**Item Description**	**Quantity**
1	75mm HE (tracer)	4
1	BD Fuzes	2
1	20mm TP	1
1	Fuze Booster Cups	2
1	Cartridge Igniter	2
1	PD Fuzes	7
A	Tracer Element for 152mm Projectile	3000
B	Tracer Element for 152mm Projectile	3000
C	Tracer Element for 152mm Projectile	3000
D	Tracer Element for 152mm Projectile	3000
E	Tracer Element for 152mm Projectile	3000
F	Tracer Element for 152mm Projectile	3000
G	Tracer Element for 152mm Projectile	3000
H	Tracer Element for 152mm Projectile	3000
I	Tracer Element for 152mm Projectile	3000
J	Tracer Element for 152mm Projectile	1296
K	MK 29 Mod 2	16
K	MK 10 Base Fuze	63
K	VT Fuzes	29
K	Flash Tubes	139

Table 2.5: Legacy MEC in Igloo 7-C-4

7-C-4		
Box #	**Item Description**	**Quantity**
-	105mm Cartridge Casings	50
1	75mm APHE	2
1	40mm HE Projectile	1
1	37mm HE	1
1	Bomb Fuzes	4
1	Base Dot Fuzes	2
1	PD Fuzes	2
1b	75mm HE Projectile	1
1b	90mm HE Projectile	1
1b	75mm APHE Projectile	1
1b	37mm HE Projectile	1
1b	20mm Projectile	3
2	PIBD Fuzes	76
3	Bomb Fuzes	5
3	PD Fuzes	4
3	VT Fuzes	2
3	PIBD Fuzes	7
4	MK Base Fuze	2
4	T-Bar Fuze	3

4	VT Fuzes	4
4	40mm Primers only	3
4	Base Fuze MK 29	2
4	MK 29 3"	6
5	40mm Frag Ball	7
5	Fuze Booster Cup	1
5	Slap Flare	2
5	Proj Booster Tube	1
5	PD Fuzes	1

6.0 Project Management

The PBA approach requires careful coordination of project activities to ensure that all stakeholders are kept informed of the project status, existing or potential problems, and any changes required to prudently manage the project and meet the needs of the Installation's project stakeholders and decision-makers. The Contractor shall be responsible for the following project management activities:

6.1 Project Management Plan and Schedule

The Contractor will develop and maintain a detailed Project Management Plan (PMP). The PMP, based on the schedule prepared as part of the Contractor proposal, will specify the schedule, technical approach, and resources required for the planning, execution, and completion of the performance objectives. The first draft of the PMP will be due within thirty (30) calendar days of contract award. The draft PMP and subsequent revisions will be subject to Army and Ohio EPA review and approval, through the Contracting Officer's Representative (COR). The final PMP will be due within fifteen (15) calendar days of comments received from the COR.

As part of the PMP, the Contractor will develop and maintain an activity-based schedule that fully supports the technical approach and outlines the due dates for all milestones and payable deliverables. A payment plan will be included with the schedule that may allow for partial payments to the Contractor based on successful completion of interim milestones proposed by the Contractor. It is the Army's intent to make all payments after verification of progress in accordance with this schedule. The Contractor will coordinate activities with the COR to ensure that the proposed project schedule does not conflict with other contractor activities on site, or interrupt Installation mission activities. The PMP schedule is subject to Ohio EPA approval per the Director's Final Findings and Orders.

As part of the PMP, the Contractor will identify and implement a means for providing project status reports to the COR. The PMP will address the frequency and content of status reports.

6.2 Monthly Status Reports and Project Schedule

The contractor will provide input to the project team in the form of monthly status reports, weekly contractor meetings, bi-weekly conference calls, and/or scheduling meetings as follows:

- The Contractor will provide monthly status report for inclusion in the overall monthly report provided to Ohio EPA for approval per the Director's Final Findings and Orders.

- The contractor will provide and maintain a coordinated schedule that integrates MMRP activities with the IRP schedule. The integrated schedule will be provided to Ohio EPA for approval per the Director's Final Findings and Orders.

- The Contractor will participate in weekly contractor meetings to coordinate MMRP issues when work is being conducted.

- The Contractor will participate in bi-weekly schedule conference calls.

6.3 Milestone Presentations

Milestone presentations shall be made to the COR at the completion of each milestone below to provide analysis and lessons learned, and to present approaches for completion of future milestones. At the COR's request, the Contractor may also make milestone presentations to the other project stakeholders, consistent with the applicable regulatory drivers listed in Section 2.0 of this PWS, to show achievement of the performance objectives.

The Contractor may propose a revision of the milestones below to reflect their PMP and provide for interim milestones. Interim milestones will only be accepted if they represent significant progress toward milestone completion, and completion of these interim steps can be measured and demonstrated. As noted in Section 3.0, payments will be tied to the successful completion of the following milestones or an interim milestone plan approved by the Army, through the COR. To that end, all proposed interim milestones should be associated with easily demonstrated metrics tied to performance measurements (e.g., final acceptance of a report rather than submission of a draft). All milestones must have a defined means for demonstrating completion in order to facilitate certification and approval (see Section 7.4, *Certification and Approval of Project Milestones and Deliverables*).

Major Milestones

- Approval of the Project Management Plan
- Approval of the ESS
- Approval of the contractor submitted Work Plan
- Completion of Disposal of Rocket Ridge MPPEH in Igloo 7-C-2
- Completion of Disposal of Rocket Ridge MPPEH in Igloo 7-C-2
- Completion of Disposal of Rocket Ridge MPPEH in Igloo 7-C-3
- Completion of Disposal of Rocket Ridge MEC in Igloo 7-C-4
- *Optional:* Completion of Disposal of Legacy MPPEH in Igloo 7-C-3
- *Optional:* Completion of Disposal of Legacy MEC in Igloo 7-C-4
- *Optional:* Completion of Disposal of Legacy MPPEH in Igloo 7-C-3 (separate mobilization)
- *Optional:* Completion of Disposal of Legacy MEC in Igloo 7-C-4 (separate mobilization)
- Completion of reconstruction and stabilization of the stream banks at the Rocket Ridge Area of Sand Creek
- Completion of three (3) years of annual water and biotic testing

6.4 Environmental Requirements

The Contractor shall identify: applicable federal, state and local laws and regulations; applicable Installation-specific orders, agreements, or rules; and perform its work in accordance with said authorities. The Contractor shall ensure that all activities performed by its personnel, subcontractors and suppliers are executed in accordance with said authorities. Any incident of noncompliance noted by the Contractor shall immediately be brought to the attention of the COR and Installation telephonically and then by written notice. Nothing in this contract shall relieve the Contractor of its responsibility to comply with applicable laws and regulations. The Contractor shall obtain all permits, licenses, approvals, and/or certificates required or necessary to accomplish the work. When the work to be performed requires facility clearances, such as digging or drilling permits, the Contractor shall obtain such clearances and/or permits, with the assistance of the installation point of contact, prior to any drilling or excavating operations. The Contractor shall coordinate all such work with Installation maintenance personnel prior to performing work. Contractors on environmental sites are required to perform their own utility checks based on Installation-supplied utility maps. The Contractor shall comply with all Installation- or site-specific time and procedural requirements (federal, state, and local) described in the permits obtained. The Army technical experts will also independently review Contractor work to ensure compliance with all applicable requirements.

The Contractor shall adhere to all applicable federal, DoD, and Army geospatial data standards for tasks and deliverables in this PWS. Spatial data shall conform to the Federal Geographic Data Committee (FGDC) National Standard for Spatial Data Accuracy (NSSDA). In addition, each Geographic Information System (GIS) data set shall

be accompanied by metadata conforming to FGDC's Content Standard for Digital Geospatial Metadata (CSDGM) and be provided in a geodatabase that is compliant with the Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE). The horizontal accuracy of any GIS data created by the contractor shall be tested in accordance with the NSSDA and the results shall be recorded in the metadata. All data shall be provided in the Universal Transverse Mercator (UTM) project in the appropriate zone, and shall have a datum of WGS84.

The Contractor shall review and fully understand "Executive Order 13423 -- Strengthening Federal Environmental, Energy, and Transportation Management", in particular those requirements pertaining to environmental management system (EMS). The Contractor shall also be required to review and adhere to the installation's environmental management system, including the environmental policy and significant aspects / impacts.

6.4.1 MEC Related Guidance

MEC related guidance includes, but may not be limited to, the following:

- MEC includes UXO, as defined in 10 U.S.C. 101(e)(5); DMM, as defined in 10 U.S.C. 2710(e)(2); or Munitions Constituents (MC), as defined in 10 U.S.C. 2710(e)(3) (Reference (ai)), present in high enough concentrations to pose an explosive hazard.
- MEC distinguishes specific categories of military munitions that may pose unique explosives safety risks. Because MEC being actively managed may be determined to be hazardous waste, 29 Code of Federal Regulations (CFR), Hazardous Waste Operations and Emergency Response, Section 1910.120 may apply.
- Per the guidelines set forth in DoDI 4140.62 and DDESB Technical Paper 18, UXO qualified personnel will be responsible for determining the explosive safety status of any material recovered that may pose an explosive hazard (i.e., material potentially presenting an explosive hazard (MPPEH)).
- Should MEC be encountered during this response, UXO-qualified personnel will evaluate the explosive hazard and remove it, including by open detonation in place. This response will be conducted per the CERCLA and the NCP, applicable state and federal regulation, and applicable DoD, U.S. Army policies and procedures.

6.5 Health and Safety Requirements

Prior to beginning any fieldwork, the Contractor shall develop a written Safety and Occupational Health (SOH) Program which includes an Accident Prevention Plan (APP) and Site Safety and Health Plan (SSHP). The SOH Program shall be compliant with EM 385-1-1, all applicable federal, state, and local laws and regulations, reviewed and be accepted by the Government Designated Authority (GDA)/COR. The APP shall be developed by qualified personnel. The Contractor shall ensure that its employees, subcontractors, suppliers and support personnel comply with the accepted APP and SSHP. The Army reserves the right to stop work under this contract for any violations of the APP/SSHP at no additional cost to the Army. Once the Army verifies through the COR that the violation has been corrected, the Contractor shall be able to continue work. The APP shall be developed in job specific detail and submitted by the Contractor in the format provided in Appendix A of EM 385-1-1 and shall address each of the elements/sub-elements in the order that they are provided in that appendix. If an item is not applicable because of the nature of the work to be performed, the Contractor shall state this exception and provide a justification. As a minimum, the SSHP shall contain the following elements: site description and contaminant characterization, safety and health hazard(s) assessment and risk analysis, safety and health staff organization and responsibilities, site specific training and medical surveillance parameters, personal protective equipment (PPE) and

decontamination facilities and procedures to be used, monitoring and sampling required, safety and health work precautions and procedures, site control measures, on-site first aid and emergency equipment, emergency response plans and contingency procedures (on-site and off-site), logs, reports, and record keeping. Where a specific element is not applicable in the SSHP, the element shall be listed along with a statement that the element is not applicable and a brief justification shall be provided explaining its omission. Training and medical screening per 29 CFR 1910.120(e) is required for the contract.

Additionally, the Contractor must adhere to all DoD and DA policies, procedures and regulations for munitions response. This includes but is not limited to DOD 6055.09-M, Ammunition and Explosives Safety Standards; Army Regulation 385-10, the Army Safety Program; Department of the Army Pamphlet 385-63, Range Safety; and Department of the Army Pamphlet 385-64, Ammunition and Explosives Safety Standards.

The site is not suspected to contain CWM; however, if suspect CWM is encountered during any phase of site activities the Contractor shall immediately halt operations and contact the COR for assistance and guidance.

All activities involving work in areas potentially containing MEC hazards shall be conducted in full compliance with Department of Army, state, and local requirements regarding personnel, equipment and procedures, and DoD Standard Operating Procedures and safety regulations.

6.5.1 Safety Documentation and Reporting

Engineer Manual (EM) 385-1-1, part 01.D "Accident Reporting and Recordkeeping" is required for the work identified in this PWS.

6.6 Quality Management

The Contractor must ensure that the quality of all work performed or produced under this contract meets Army and Ohio EPA approval. Quality control/assurance plans must be prepared and approved by the COR prior to performance of physical work. In addition, all Quality control/assurance plans will be provided to Ohio EPA for approval per the Director’s Final Findings and Orders.

Any input on the Draft QASP shall be submitted with the PMP deliverables within fourteen (14) calendar days of award. The Final QASP will be prepared by the Army.

The QASP should highlight key quality control activities or events that the COR will use to determine when Army (COR or Contracting Officer (KO)) inspections can be conducted to assess progress toward and/or completion of milestones. Activities identified in the QASP should be appropriately coded in the project schedule to allow for planning of QA inspections.

6.7 Quality Control Testing

Chemical Quality Control shall be provided whenever sampling or analysis for chemical constituents is required in order to achieve milestones. Quality control for traditional soils or geotechnical testing shall also be included. The laboratory (ies) to be used by the Contractor shall be National Environmental Laboratory Accreditation Program (NELAP) certified or equivalent. The Contractor may establish an on-site testing laboratory at the project site if determined necessary by the Contractor. However, on-site testing shall meet the requirements of USEPA, specific state regulator requirements, and all requirements of the most recently approved DoD Quality Systems Manual.

6.8 Project Repository and Administrative Record

The Contractor shall update at least monthly, a multimedia (i.e., both paper and electronic format) project repository of all project-related information to ensure that pertinent documentation and data are available for project reviews, and to provide a clear record of the PBA approach to support final decisions and remediation completion. This repository is the property of the Army and available to the Army upon request by the KO. A project repository is currently maintained at two locations as follows:

Reed Memorial Library
167 E. Main Street
Ravenna, OH 44266
330-296-2827

Newton Falls Public Library
204 South Canal Street,
Newton Falls, Ohio 44444-1694
Phone: 330-872-1282

"Project-related information" includes all previous environmental restoration documentation of a technical nature developed by the Army and previous Army contractors for the sites specified in this PWS, and all the documentation developed by the Contractor in order to achieve the performance objectives specified in this PWS. Documents generated prior to the PBA are not expected to be stored in electronic format; however, all documents generated by the Contractor shall be maintained in multi-media form.

The Contractor shall also update the repositories for the Administrative Record for CERCLA activities established by the BRAC Environmental Coordinator, as needed. The BRAC Environmental Office is located at

Ravenna Army Ammunition Plant
Building 1037
8451 State Route 5
Ravenna, OH 44266

The project repository and Administrative Record shall be updated by the Contractor, and made available to the public, for the duration of the contract. Final electronic document files must be in text-searchable PDF format and be accompanied by defined metadata for upload into the Army Repository of Environmental Documents (READ). The Army, through the KO, will provide the metadata field requirements for READ to the Contractor.

The RVAAP public web site is located at the following web address:
http://www.rvaap.org/RVAAPindex.asp.

6.9 Additional Site Plans

Prior to beginning any field work the Contractor shall prepare any additional plans or documents (e.g., sampling and analysis plans, quality assurance project plan, waste minimization plans, health and safety plans) consistent with the applicable regulatory drivers listed in Section 2.0 of this PWS, and any other agreements, orders, or regulations that apply to the Installation and sites. These plans and documents shall be subject to Army review and approval, through the COR.

6.10 Protection of Property

The Contractor shall be responsible for any damage caused to property of the United States (Federal property) by the activities of the Contractor under this contract and shall exercise due diligence in the protection of all property located on the premises against fire or damage from any and all other causes. Any property of the United States

damaged or destroyed by the Contractor incident to the exercise of the privileges herein granted shall be promptly repaired or replaced by the Contractor to a condition satisfactory to the COR or reimbursement is made by the Contractor sufficient to restore or replace the property to a condition satisfactory to the COR in accordance with FAR Clause 52.245-2.

6.11 Project Stakeholders

For the purposes of this PWS, project stakeholders will include but are not limited to:

- the Army;
- the Ohio Environmental Protection Agency (Ohio EPA);
- the U.S. Environmental Protection Agency (USEPA) Regional office (EPA Region V);
- the Ohio Army National Guard (OHARNG);
- Ravenna Restoration Advisory Board (RAB);

Specific Army stakeholders include the following: Installation BRACD facility manager, the BRACD office, Headquarters National Guard Bureau (NGB), Department of Defense Explosives Safety Board (DDESB), US Army Technical Center for Explosive Safety (USATCES), US Army Center for Health Promotion and Preventive Medicine, US Army Environmental Command, and US Army Corps of Engineers.

The Contractor will be responsible for obtaining comments with appropriate approval on project deliverables consistent with applicable regulatory drivers and agreements for each site.

It should be noted that the Ohio EPA is the lead regulator at RVAAP. While the USEPA Region V is listed as a Stakeholder, the agency has not been actively involved at RVAAP.

6.12 Ohio EPA Involvement

All regulatory coordination will be approved by the Army through the COR. The Contractor will provide the necessary support to initiate, schedule, and address all regulatory aspects of the project (e.g., organizing discussions with regulators concerning site recommendations, obtaining regulator comments on site documents and appropriately addressing them, and obtaining written documentation, as necessary, of Ohio EPA approval for all of the sites identified in this PWS). The COR, or other COR designee, will attend and represent the Army at all meetings with the Ohio EPA. With approval of the COR, the contractor may also informally discuss issues with Ohio EPA and provide an after-action report back to the COR. The Contractor may not contact Ohio EPA without prior approval of the COR. The Army will be the signature authority for all agreements and remediation documentation. For this PWS, Ohio EPA approval is tied to the performance objectives and standards, as defined in Section 5.0.

6.13 Public Involvement

All public participation coordination shall be approved by the Army through the COR. The Contractor shall provide the necessary support to initiate, schedule, and address all public participation aspects of the project (e.g., preparation of briefings, presentations, fact sheets, newsletters, and articles/public notices to news media). The Contractor shall be responsible for requesting and addressing all public comments consistent with the applicable regulatory drivers listed in Section 2.0 of this PWS. The COR, or designee, will attend and represent the Army at all meetings with the public.

6.13.1 Communications

All public participation coordination shall be approved by the Army through the COR. The Contractor shall provide the necessary support to initiate, schedule, and address all public participation aspects of the project (e.g., preparation of briefings, presentations, fact sheets, newsletters, and articles/public notices to news media). The Contractor shall be responsible for requesting and addressing all public comments consistent with the applicable regulatory drivers listed in **Section 2.0** of this PWS. The COR, or designee, will attend and represent the Army at all meetings with the public.

The Contractor shall not make available or publicly disclose any data or report generated under this contract unless specifically authorized by the KO. If any person or entity requests information from the Contractor about the subject of this scope of work or work being conducted hereunder, the Contractor shall refer them to the KO. All reports and other information generated under this scope of work shall become the property of the Government, and distribution to any other source by the Contractor is prohibited unless authorized by the KO.

6.14 Deliverable Requirements

All documents must be produced in preliminary-draft, draft, and final versions in both hard copy and electronic (PDF) format. All documents must comply with the latest version of the RVAAP Deliverable Document Format Guidelines available at http://www.rvaap.org/docs_date.html. The Contractor will provide a sufficient number of copies of each submittal as requested by the various project stakeholders. The COR will provide consolidated Army comments on preliminary draft documents to the Contractor within twenty (20) business days. Once comments on the preliminary-draft are addressed, the Contractor will provide draft submittals to stakeholders for review. The Installation POC will place one copy of draft and final Army-approved documents in both the project repositories and Administrative Record. In addition, draft and final documents will be submitted to the project repository. The administrative record is maintained at the Ravenna Army Ammunition Plant, Building 1037, 8451 State Route 5, Ravenna, OH 44266.

The Contractor will conform to US Army Corps of Engineers (USACE) requirements or a similar approach that addresses all subject matter areas prescribed in the USACE requirements, which can be found at: http://www.hnd.usace.army.mil/oew/CX_refdocs.aspx and http://140.194.76.129/publications/. Additionally, if versions of Engineer publications, Data Item Description (DID), etc. are updated, the substantive requirements of the most recently approved version will apply.

Additional RVAAP Format Guidelines available at http://www.rvaap.org/docs/pub/Formatting_Guidelines.pdf

7.0 Expertise and Necessary Personnel

The Contractor shall provide the necessary personnel and equipment to successfully execute this PWS. The Contractor is responsible for determining the requirements for licensed professionals and certifications. All contractor personnel working on-site must be US citizens.

The Contractor shall furnish all plant, labor, materials and equipment necessary to meet the performance objectives. The Contractor shall provide personnel trained as required by the Occupational Safety and Health Administration (OSHA) and all other applicable federal and state regulations. The Contractor shall provide all support activities necessary to ensure the safe and effective accomplishment of all work. For all work performed under this contract, the Contractor shall also develop and implement quality control measures consistent with all applicable federal and state regulatory requirements and standards.

7.1 Key Personnel

The Army requires that the following positions, at a minimum, be designated as “key personnel”, subject to the terms and conditions for such set forth in the basic contract.

POSITION	PERSONNEL
Project Manager	[TBD]

Senior UXO Supervisor	[TBD]
UXO Safety Officer	[TBD]
UXO Quality Control Specialist	[TBD]

The Contractor shall notify the COR of any changes in key personnel. The change of key personnel is subject to approval by the KO, although such approval will not be unreasonably withheld provided replacement personnel are of the same quality as originally proposed.

8.0 Performance

8.1 Place of Performance

Work will be performed at the Installation and off-site Contractor offices as agreed to by both parties for proper performance of this contract.

8.2 Period of Performance

The period of performance will be five years following NTP.

9.0 Additional Requirements

9.1 Resources

9.1.a Army Furnished Resources

The Army, through the COR, shall make available the following resources to the Contractor:

- Records, reports, data, analyses, and information, in their current format (e.g., paper copy, electronic, tape, disks, CDs), to facilitate development of an accurate assessment of current, former, and historical site activities and operations; waste generation and contaminant characteristics; parameters of interest; and site environmental conditions.
- Access to personnel to conduct interviews on Installation operations and activities.
- Access to DoD and Army policy and guidance documents.
- All Army owned property used for remediation purposes must be maintained by the Contractor in accordance with applicable maintenance requirements, and may not be replaced by the Army should new equipment be required.

9.1.b Contractor Furnished Resources

The Contractor must possess all the required expertise, knowledge, equipment and tools required to meet or exceed the Army's objectives identified in this PWS in accordance with established industry standards.

In addition, the Contractor shall be responsible for the following:

- Coordination with the Army/COR and the Installation for access to the Installation, to execute this PWS and comply with the procedures described during the Contractors' meeting at the Installation.
- Coordination with the Army/COR and the Installation in order to gain access to available infrastructure (e.g., buildings, roadways, waste management units, other Installation facilities) and utilities (e.g., electric power and telephone lines, natural gas and water supply distribution pipelines, and wastewater discharge conveyances), to execute this PWS.
- The provision and cost of the utilities associated with implementation of remedies, including installation of individual meters for necessary utilities.
- All waste generated under this contract shall be the responsibility of the Contractor.
- Any other necessary resources needed to achieve the performance objectives.

9.2 Certification and Approval of Project Milestones and Deliverables

The COR will be responsible for contract management, inspection, oversight, review, and approval activities. Certification and approval of project milestones by the COR is necessary before distribution of payments. Final acceptance of milestone completion shall include appropriate acceptance of site remediation documentation by regulators. For the duration of the contract, the Contractor shall remain responsible for correction of deficiencies noted during the Army's implementation of the Quality Assurance Surveillance Plan.

Certification by the Army is contingent upon the Contractor performing in accordance with the terms and conditions of the contract, this PWS, and all amendments/options.

Representatives of USACE, the installation, and the Contractor shall meet with the COR at a site and time designated by the COR after receipt of each status report to:

- Formally review the quantity and quality of services;
- Inspect work for compliance with this PWS, the associated Contractor's final proposal, and project documentation;
- Accept or reject milestones and deliverables completed since the previous review; and
- Prepare, approve and submit DD Form 250 "Material Inspection and Receiving Report" for milestone payments in accordance with milestone completions and approvals at the COR level.

9.3 Government Rights

The Army has unlimited rights to all documents/material produced under this contract. All documents and materials, to include the source codes of any software, produced under this contract shall be Army owned and are the property of the Army with all rights and privileges of ownership/copyright belonging exclusively to the Army. These documents and materials cannot be used or sold by the Contractor without written permission from the KO. All materials supplied to the Army shall be the sole property of the Army and cannot be used for any other purpose. This right does not abrogate any other Army rights under the applicable Data Rights clause(s).

9.4 Stop Work

The Contractor, authorized Installation personnel, and the COR and his designees have the responsibility to stop work immediately if the work is considered to be a serious threat to the safety or health of workers, other personnel, or to the environment. Authorized Installation personnel include Installation safety officers, Environmental Division personnel, and command personnel with responsibility for overall Installation operations. When work is stopped due to a hazard/threat to worker safety, health, or the environment, the situation and resolution must be documented and submitted to the KO. Work must be stopped whenever chemical and biological warfare agents are encountered.

9.5 Environmental Responsibility Considerations

- The Army will retain responsibility for any assessed natural resource damages that are attributed to historic releases of hazardous substances (prior to contract with the Contractor) and any injuries that are necessary and incidental to the reasonable implementation of a selected response or remedial action. The Contractor shall be responsible for any/all additional natural resource injuries and associated Natural Resource Damages claims brought as a result of its actions (e.g. release of hazardous substance or unreasonable disturbance of natural resources as a result of construction activities).
- The Army will retain all responsibility for third party liability for hazardous, CWM or radiological material that may be discovered during the course of remediation.
- Response cost claims, property damage and personal injury claims brought due to contamination and hazardous substance releases that have occurred historically (prior to contract with the Contractor) and are not due to

Contractor remediation activities are excluded from Contractor responsibility. The Contractor shall be responsible for and indemnify the Army for:

- Any response cost claims for any environmental remediation services which the Contractor has assumed responsibility for under this PWS;
- All costs associated with correction of a failure of any remedy implemented or operated and maintained by the Contractor to the extent such failure was caused by the willful or negligent acts or omissions of the Contractor in the course of performing the munitions services;
- All personal injury or property damage claims to the extent caused by the acts or omissions of the Contractor in the course of performing the munitions services;
- All natural resource damages pursuant to 42 U.S.C. Section 9607(a)(4)(C), to the extent that such damages were caused or contributed to by the actions of the Contractor or its successors in interest; and
- All costs associated with or arising from any negligent acts or omissions or willful misconduct of the Contractor in the course of performing the munitions services or implementing remedial actions.

9.6 Organizational Conflicts of Interest

9.6.1 Disclosure. The Contractor shall provide a disclosure statement with its proposal, which concisely describes all relevant facts concerning any past or present organizational conflicts of interest relating to the work in each PWS. In the same statement, the Contractor shall provide the information required in the following paragraph to assure the Government that the conflicts of interest have been mitigated and/or neutralized to the maximum extent possible. If a conflict of interest is discovered after contract award, the Contracting Officer will make a decision whether to terminate or rescind the PWS and/or contract at that time.

9.6.2 Potential Conflicts of Interest. This request for proposals is open to any offeror to compete as a prime contractor, subcontractor or in any teaming arrangement. In order to avoid any organizational conflicts of interest, or even the appearance of any organizational conflicts of interest, any contractor performing munitions services work at the follow-on installation(s) under each contract will need to avoid, neutralize and/or mitigate - prior to contract award - significant potential conflicts of interest that may prejudice effective competition. The KO has determined that at a minimum contractors currently performing work on the identified installation(s) under each contract must ensure that all data pertaining to contamination at the sites compiled by or in the possession of such contractors shall be made available to all potential contractors in a timely fashion to the maximum extent possible by providing such data in to a data depository.

9.7 Access and Security

In order to ensure the security and orderly running of the Installation, any contractor personnel who wish to gain access to the Installation shall follow procedures established by the Installation. The Contractor should account for potential delays due to DOD security requirements in its pricing.

The installation is surrounded by security fence and gates. Access will be granted by the installation security office to the contractor for period of performance.

9.8 Travel

Travel to/from the Installation and to other CONUS locations for such purposes as to attend meetings, briefings and/or presentations may be required incidental to this remedial action, the costs for which shall be included in the total price for the PWS.

Attachment A: Reference Documents

The Army believes that documentation provided with the solicitation represents the most recent and appropriate documentation available for the Installation and sites identified in this contract. However, if there is a conflict between this information and other site documentation (the existing reports), the Contractor is solely responsible for reviewing all available information and forming their independent, professional conclusions/interpretation of site conditions and requirements to meet the objectives of this contract. This information is not intended as a substitute for complete analysis of technical data available, nor is it intended to be a guide on how the Contractor should address achievement of the performance objectives/standards.

Specific documents may be made available following a request to the Contracting Officer, if the documentation can be distributed in a timely manner. Electronic format is not guaranteed.

Table A.1: Available Reference Documents.

Title	Author	Date
Sample QASP		
Directors Final Findings and Orders, Ravenna Army Ammunition Plant, dated June 10, 2004	Ohio EPA	June 2004
Additional documents on the RVAAP IRP and MMRP can be found at the following web site: http://www.rvaap.org		

Attachment B: List of Acronyms

AOC	Area of Concern
CAIS	Chemical Agent Identification Set
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COR	Contracting Officer's Representative
CTT	Closed, Transferred, and Transferring
CWM	Chemical Warfare Materiel
DDESB	Department of Defense Explosives Safety Board
DMM	Discarded Military Munitions
DOD	Department of Defense
DPW	Department of Public Works
DQO	Data Quality Objective
ERIS	Environmental Restoration Information System
ESP	Explosive Site Plans
ESS	Explosive Safety Submission
FAR	Federal Acquisition Regulation
GIS	Geographic Information System
HRR	Historical Records Review
IRA	Interim Removal Action
KO	Contracting Officer
LTM	Long-Term Management
MC	Munitions Constituents
MDE	Maryland Department of the Environment
MEC	Munitions and Explosives of Concern
MMRP	Military Munitions Response Program
MR	Munitions Response
NCP	National Oil and Hazardous Substances Contingency Plan
NELAP	National Environmental Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PBA	Performance-Based Acquisition
PMP	Project Management Plan
POC	Point of Contact
PPE	Personal Protective Equipment
PWS	Performance Work Statement
QA	Quality Assurance
QASP	Quality Assurance Surveillance Plan
QIPR	Quarterly In Progress Review
RAB	Restoration Advisory Board
RA(O)	Remedial Action (Operations)
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RIP	Remedy In Place
SARA	Superfund Amendments and Reauthorization Act
SC	Site Close out
SI	Site Inspection
SSHP	Site Safety and Health Plan
USACE	United States Army Corps of Engineers
USAEC	United States Army Environmental Center
USATCES	U.S. Army Technical Center for Explosives Safety
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
UXO	Unexploded Ordnance

Attachment C: Definitions

Activity-Based Schedule: Activities and milestones defined at the detail level and logically sequenced to support, and manage completion of the performance objectives.

Contractor's Project Costs: Costs incurred by the Contractor (including costs covered by insurance and the PMP) in executing the work required to achieve the performance objectives identified in the PWS for all sites identified in this contract/task order.

Chemical Warfare Materiel (CWM): An item configured as a munitions containing a chemical substance that is intended to kill, seriously injure, or incapacitate a person through its physiological effects. CWM also includes V- and G- services nerve agent, H-series blister agent, and lewisite in other than munitions configurations. Due to their hazards, prevalence, and military-unique application, Chemical Agent Identification Sets (CAIS) are also considered CWM. CWM does not include riot control agency, chemical herbicides, smoke and flame producing items, or soil, water, debris, or other media contaminated with chemical agent.

Deliverables: Documentation or data that support the completion of milestones or achievement of the performance objectives identified in this PWS.

Discarded Military Munitions (DMM) **–** 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. The term does not include unexploded ordnance, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental laws and regulations.

Explosive Ordnance Disposal (EOD) – The detection, identification, on-site evaluation, rendering safe, recovery, and final disposal of unexploded explosive ordnance. It may also include explosive ordnance that has become hazardous by damage or deterioration.

Milestones: Significant events or activities that occur in the course of the Contractor achieving the performance objectives identified in this PWS.

Military Munitions (MM) – All ammunition products and components produced or used by or for the DoD or the U.S. Armed Services for national defense and security, including MM under the control of the DoD, the U.S. Coast Guard, the U.S. Department of Energy, and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DoD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. MM do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include non-nuclear components of nuclear devices, managed under DOE's nuclear weapons program, after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.

Munitions Constituents (MC): Any materials originating from unexploded ordnance, DMM, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

Munitions Debris (MD) – Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.

Munitions and Explosives of Concern (MEC): This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks, means UXO, as defined in 10 .SC 101(e)(5)(A) through (C); DMM, as defined in 10 USC 2710(e)(2); or MC (e.g., TNT, RDX), as defined in 10 USC 2710(e)(3), present in high enough concentrations to pose an explosive hazard.

Munitions response – A response action, including investigation, removal actions, and remedial actions, to address the explosives safety, human health, and/or environmental risks presented by munitions and explosives of concern (MEC) and/or MC.

PMP Documents: The original PMP (including project schedule), revisions, and status reports.

Project Documents (CERCLA): Documentation and data required by CERCLA remediation and RA(O) and/or LTM activities. These documents include the additional site plans referenced in **Section 6.0** of this PWS.

Project Price: The approved proposed price for achieving completion of remediation services in accordance with the PWS, the payment of which will be tied to one or more project milestones. The Project Price does not include the cost of the PMP, insurance premiums or surplus line taxes, if applicable.

Project-related information: All previous environmental restoration documentation of a technical nature developed by the Army and previous Army contractors and subcontractors during their work at the sites specified in this PWS, and all the documentation developed by the Contractor in order to achieve the performance objectives specified in this PWS.

Site Close-Out: Site Close-Out signifies when the Army has completed active management and monitoring at an environmental cleanup site, no additional environmental cleanup funds will be expended at the site and the Army has obtained regulator concurrence. For practical purposes, Site Close-Out occurs when cleanup goals have been achieved that allow unrestricted use of the property (i.e., no further LTM, including institutional controls, is required). Site Close-Out may include, but not be limited to, the dismantling, removal, recycling, reclamation and/or disposal of all remedial activity systems and ancillary equipment above and underground to return the site to its natural state.

*Unexploded ordnance (UXO)**:*** Military munitions that have been primed, fuzed, armed, or otherwise prepared for action; have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and remain unexploded either by malfunction, design, or any other cause.

Attachment D: MINIMUM REQUIREMENTS FOR DATA LAYERS WITHOUT AN ESTABLISHED QUALITY ASSURANCE PLAN

- Installation geospatial data shall be provided in a personal geo-database compliant with the Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE), version 2.6

- If a geospatial data layer contains a discriminator per SDSFIE v2.6, the discriminator must be populated

- All features shall be attributed with the Installation Code from the Headquarters Installation Information System (HQIIS)

- Each data layer shall be accompanied by metadata conforming to the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM) and the Army Metadata Standard

- The FGDC National Standard for Spatial Data Accuracy (NSSDA) shall be used to evaluate and report the positional accuracy of all data layers submitted

- All data shall be provided with a defined projection and must have a datum of WGS84

- All data shall be topologically sound and geometrically correct. This includes no null or empty features, no non-simple features and no duplicate features.

- All data shall meet the basic topology rule set for installation geospatial data. Exceptions to the topology rules are possible. In case of an exception, a justification must be provided in the data layer documentation.

    - Point features
        - Must be located inside polygons of parent feature class
    - Line features
        - Must not self overlap
        - Must not self intersect
        - Must be single part
        - Must not have pseudo-nodes
        - Must not have dangles
    - Polygon features
        - Must not overlap
        - Must not have gaps

Appendix B

Figures

Figure 1 – General Location and Orientation of RVAAP

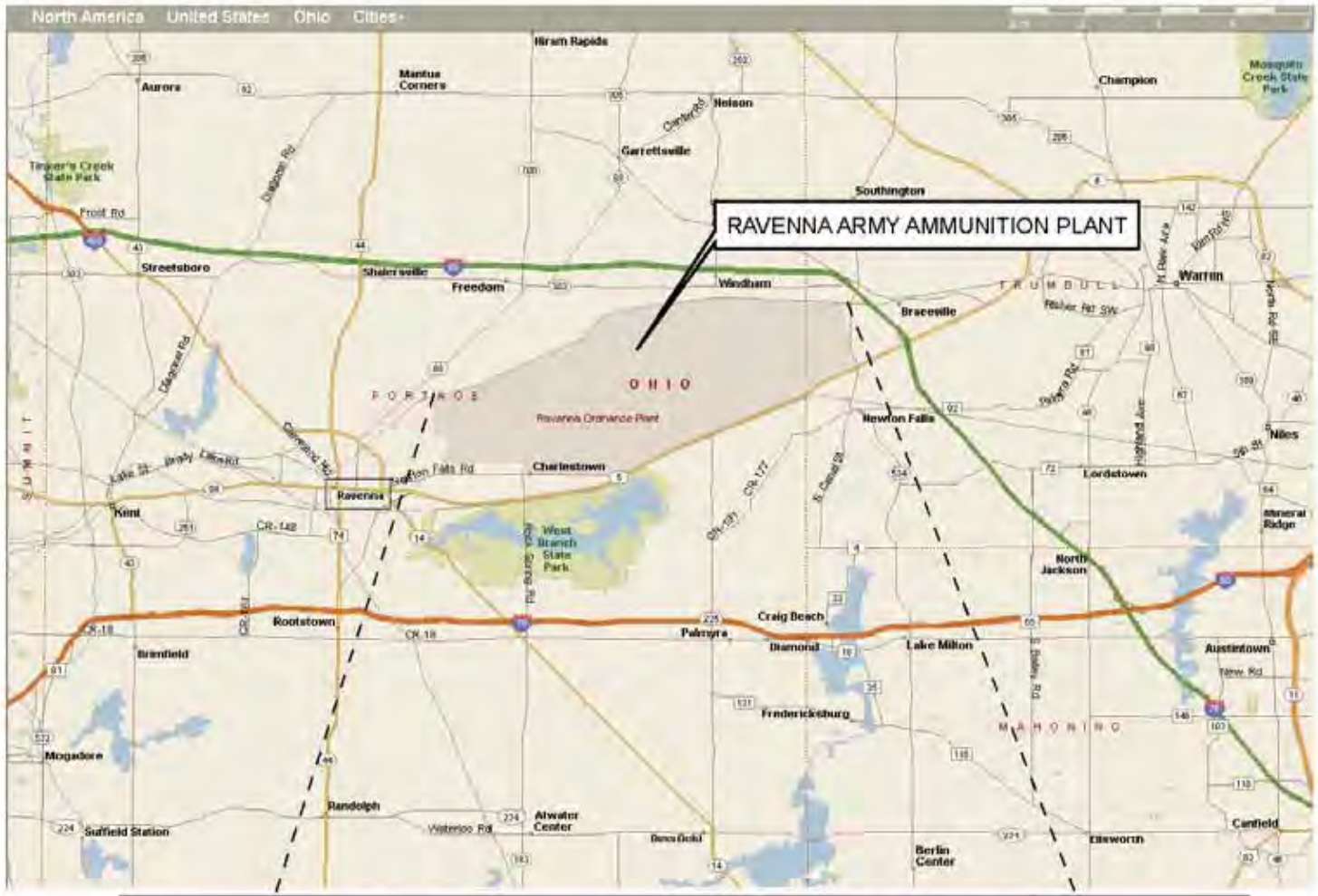
Figure 2 – Location of the RRA and ECMs 7-C-2, 7-C-3, and 7-C-4 within ODA2

Figure 3 – Site Map of the RRA Stream Diversion Channel

Figure 4 – Location of the ODA2 Demolition Area and TCS Pad

Figure 5 – MEC Demolition Surface Water Sample Locations

Figure 6 – MEC Demolition MI Soil Sample Locations



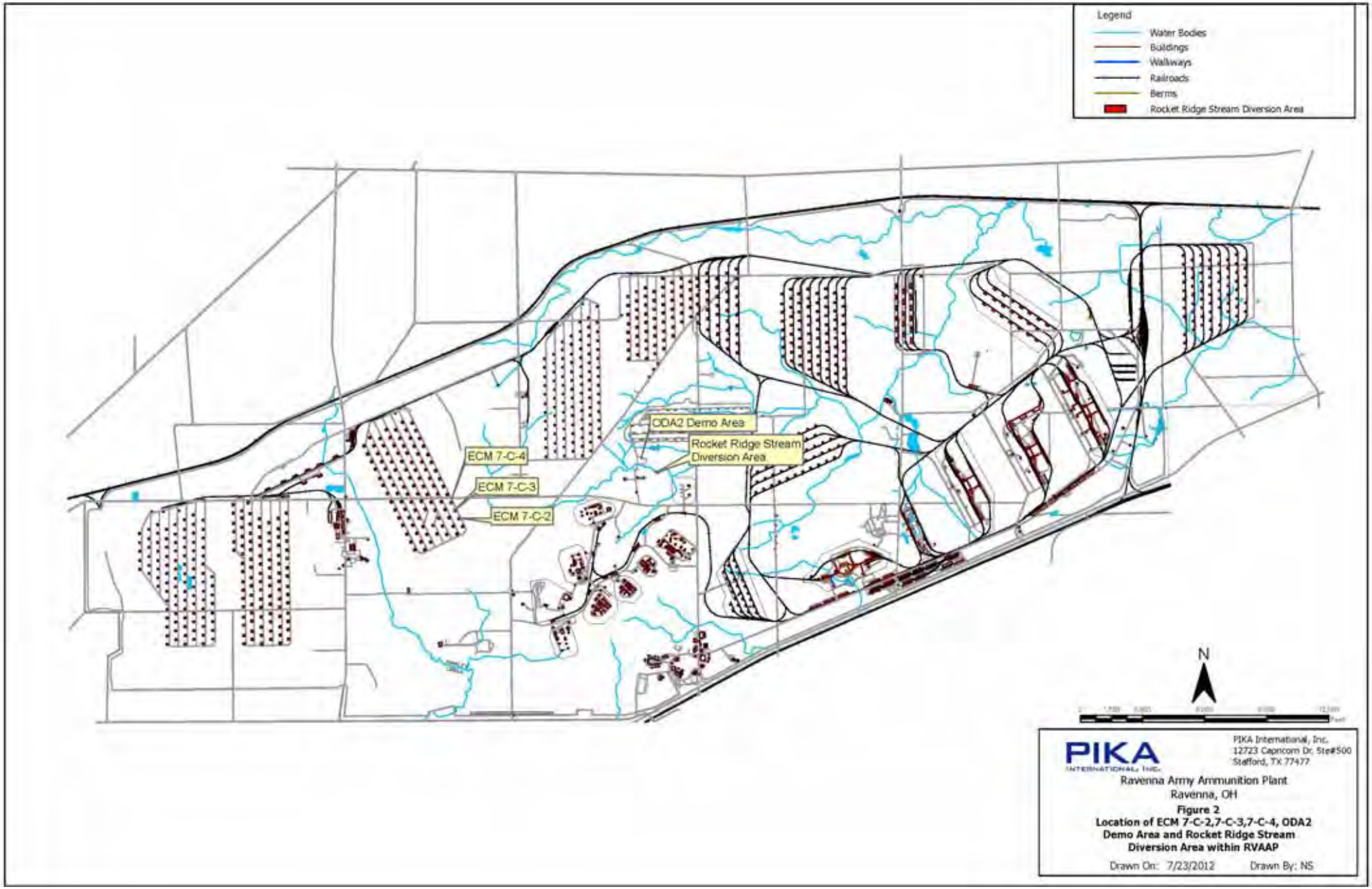
PIKA INTERNATIONAL, INC.

PIKA INTERNATIONAL, INC.
12723 CAPRICORN DR. STE #500
STAFFORD, TX 77477

Ravenna Army Ammunition Plant
Ravenna, OH

FIGURE 1 - GENERAL LOCATION AND ORIENTATION OF RVAAP

Drawn On: 10/30/2007 Drawn By: QX Reviewed By: SAK



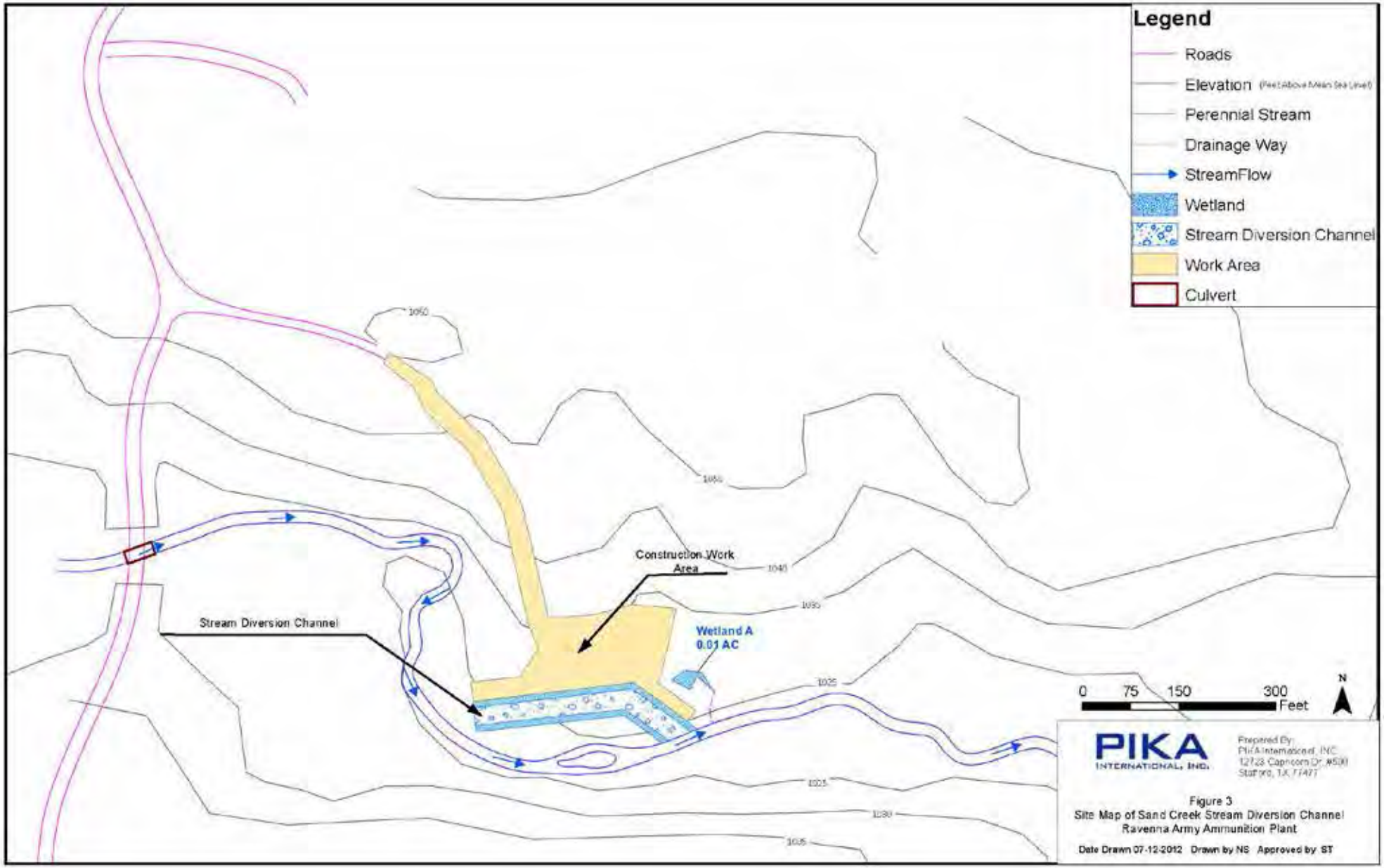
PIKA INTERNATIONAL, INC.

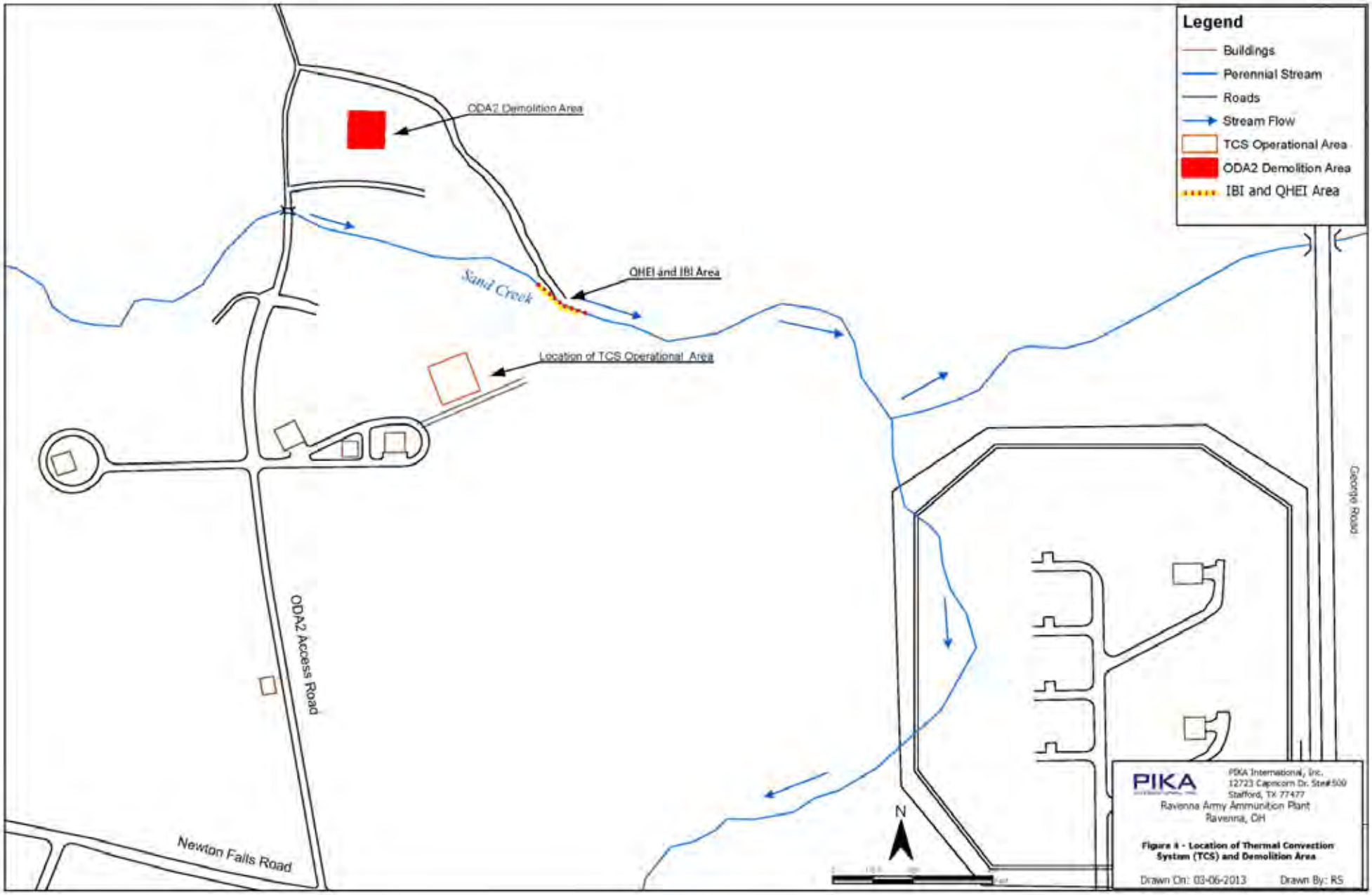
PIKA International, Inc.
12723 Capricorn Dr. Ste#500
Stafford, TX 77477

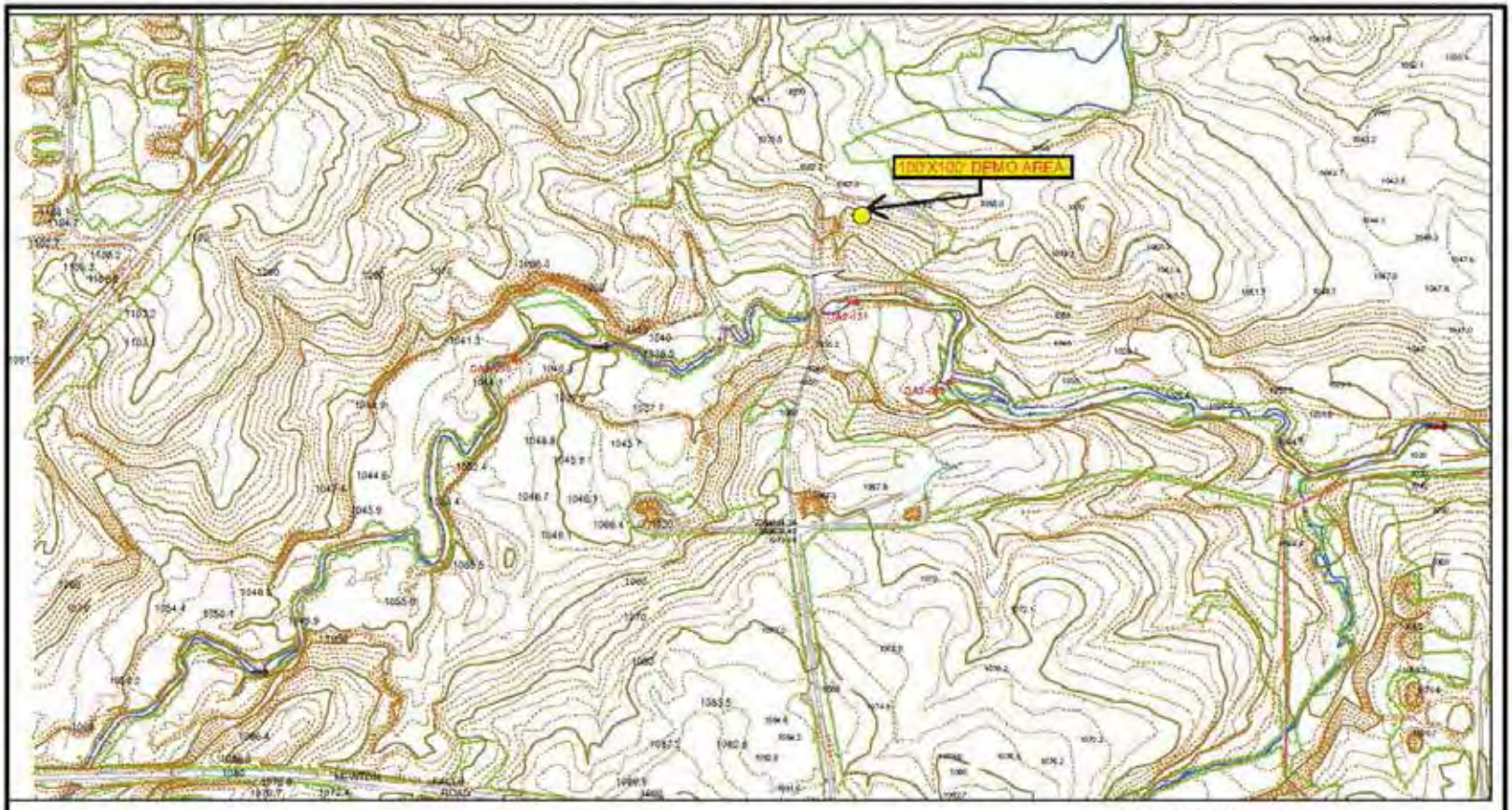
Ravenna Army Ammunition Plant
Ravenna, OH

Figure 2
Location of ECM 7-C-2,7-C-3,7-C-4, ODA2 Demo Area and Rocket Ridge Stream Diversion Area within RVAAP

Drawn On: 7/23/2012 Drawn By: NS

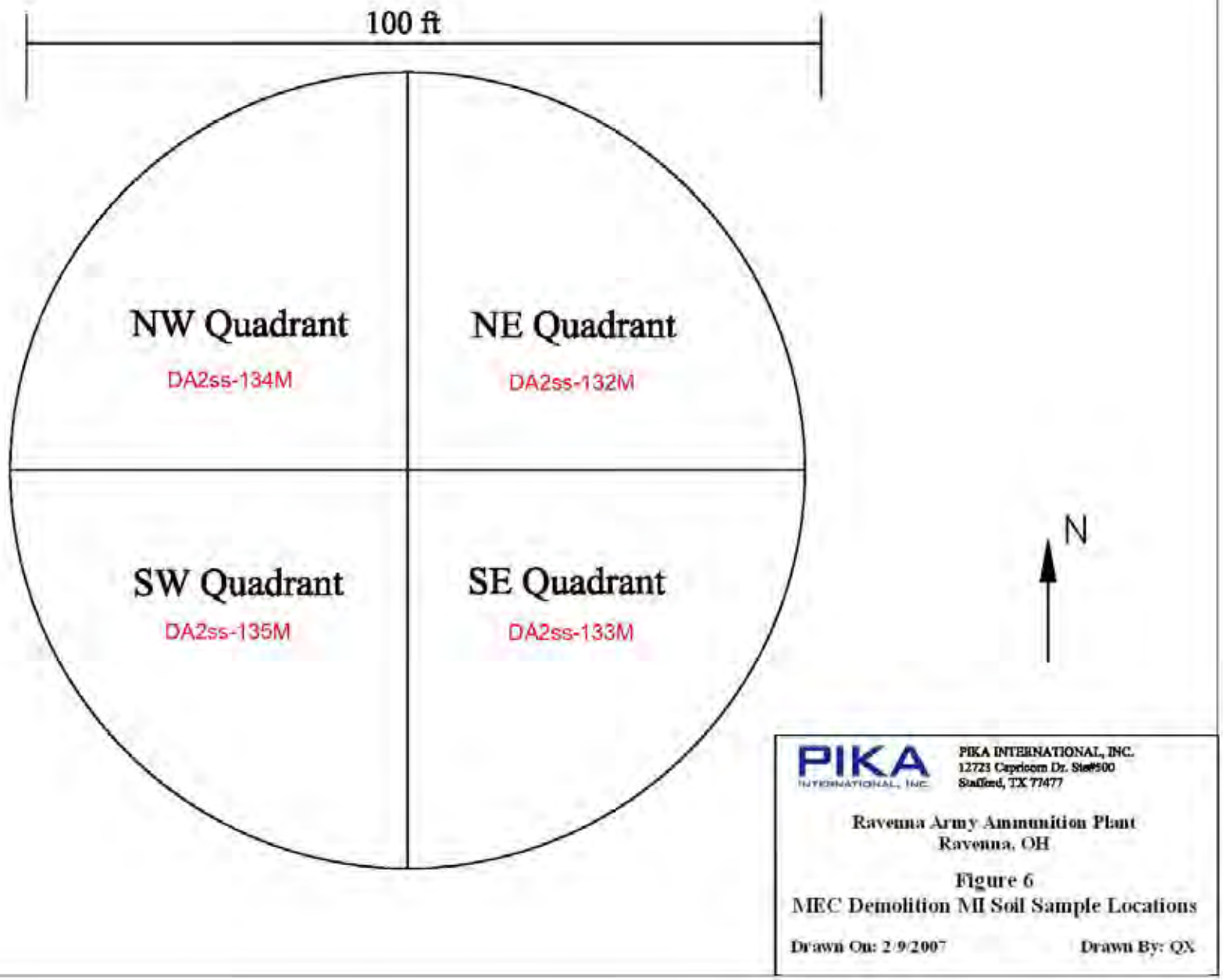

Legend
Roads
Elevation (Feet Above Mean Sea Level)
Perennial Stream
Drainage Way
StreamFlow
Wetland
Stream Diversion Channel
Work Area
Culvert
1050
1045
1040
1035
1030
1025
1020
1015
Construction Work Area
Stream Diversion Channel
Wetland A
0.01 AC
0 75 150 300
Feet
N
PIKA
INTERNATIONAL, INC.
Prepared By:
PIKA International, INC
12723 Capricorn Dr. #500
Stafford, TX 77477
Figure 3
Site Map of Sand Creek Stream Diversion Channel
Ravenna Army Ammunition Plant
Date Drawn 07-12-2012 Drawn by NS Approved by ST


Legend
Buildings
Perennial Stream
Roads
Stream Flow
TCS Operational Area
ODA2 Demolition Area
IBI and QHEI Area
ODA2 Demolition Area
QHEI and IBI Area
Location of TCS Operational Area
Sand Creek
ODA2 Access Road
Newton Falls Road
George Road
N
PIKA
PIKA International, Inc.
12723 Capricorn Dr. Ste#500
Stafford, TX 77477
Ravenna Army Ammunition Plant
Ravenna, OH
Figure 4 - Location of Thermal Convection System (TCS) and Demolition Area
Drawn On: 03-06-2013
Drawn By: RS



Surface Water Map

Figure 5 - Location of Surface Water Samples and 100' x 100' Demo Area



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Stafford, TX 77477

Ravenna Army Ammunition Plant
Ravenna, OH

Figure 6
MEC Demolition MI Soil Sample Locations

Drawn On: 2/9/2007 Drawn By: QX

Appendix C

Weekly Reports and Photo Documentation

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	1
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	5-13-13 to 5-16-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services (Stream Restoration Operations)			

Summary of Activities

- Mobilized equipment and personnel
- Conducted safety indoctrination with field teams
- Conducted kickoff meeting with stakeholders 13 May 2013
- Initiated and completed backfilling and re-grading the area at top of Rocket Ridge Slope
- Seeded and mulched top of slope area at Rocket Ridge.
- Initiated and completed reconstruction of the stream banks

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- USACE to coordinate site visit for Ohio EPA. Site visit needed to also confirm preferred schedule for the follow-on sampling.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	50%	50%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2	-	0%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	-	0%
Dispose of Rocket Ridge MPPEH in ECM 7-C-3	-	0%
Dispose of Rocket Ridge MEC in ECM 7-C-4	-	0%
Dispose of Legacy MPPEH in ECM 7-C-3	-	0%
Dispose of Legacy MEC in ECM 7-C-4	-	0%
Complete three (3) years of annual water and biotic testing for Sand Creek stream restoration	-	0%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].

If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
None	None	None	Not Applicable

Problems and Resolution:

Schedule for Next Week

- Initiate installation of erosion control matting and plantings along stream banks

Refer attached **Schedule** for percentage of work completed and projected completion dates.

UXO Technician III Construction Support and Site Safety Officer	Wayne Brazee
Project Manager	Brian Stockwell

PHOTO LOG





Pictures showing filling and regrading top of slope at Rocket Ridge Area (RRA). On-site fill obtained from stockpiled soil from stream diversion area as per approved RRA site restoration work plan.





Pictures showing final grading complete at top of slope.



Picture showing upstream dam relocated to facilitate reconstruction of stream banks at current diversion channel.



Initiating removal of geofabric along south bank.



Picture showing removal of geofabric along north bank.



Picture shows north and south banks prior to removal of geofabric.



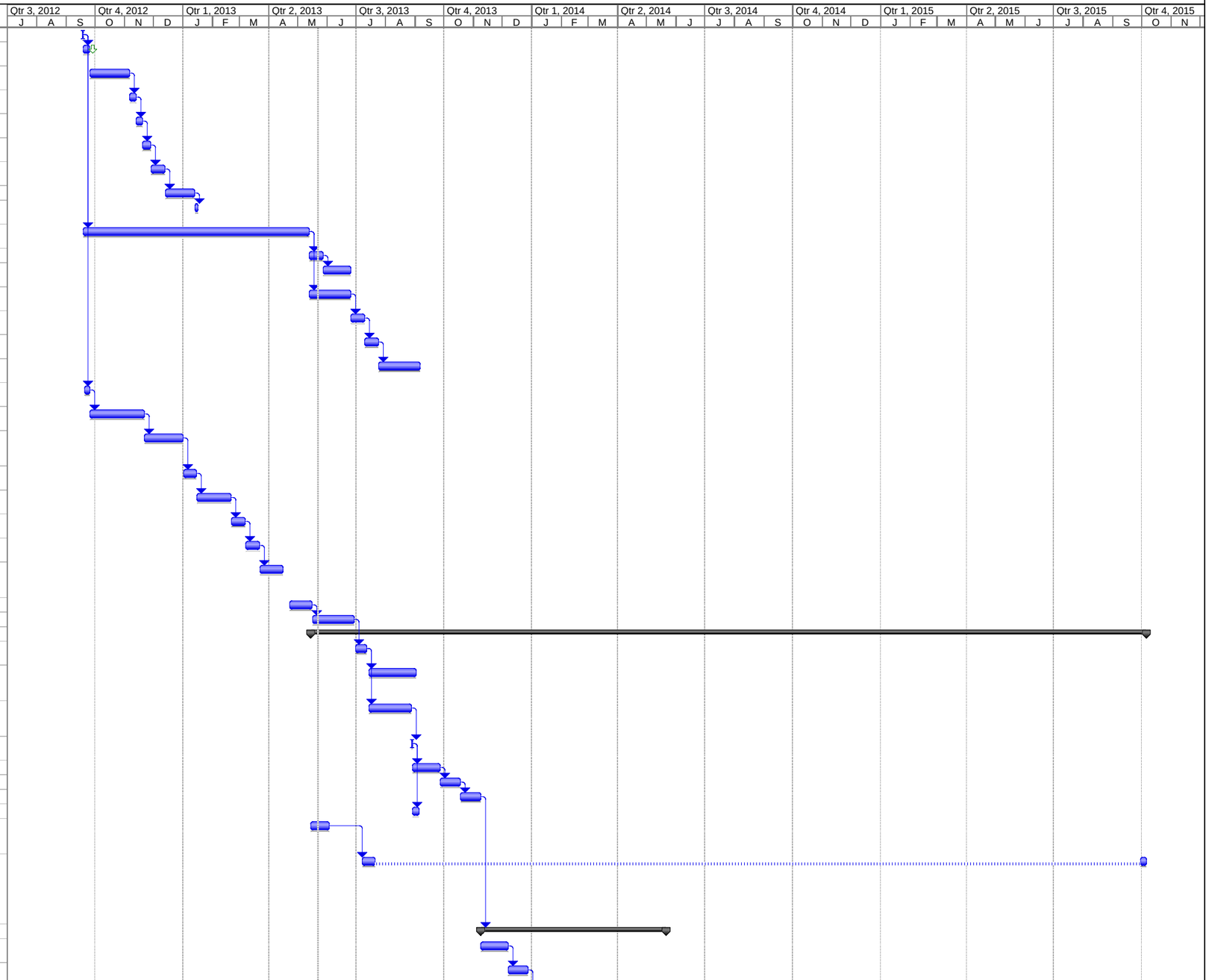


Pictures of north and south banks following removal of geofabric and bank reconstruction.

Schedule

Baseline Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	Contract Award	1 day	Tue 9/18/12	Tue 9/18/12		
2	Submit pre-draft PMP	7 days	Wed 9/19/12	Tue 9/25/12	1	
3	Army Review of pre- draft PMP	43 days	Wed 9/26/12	Tue 11/6/12		
4	Pre-Draft PMP comment response	7 days	Tue 11/6/12	Tue 11/13/12	3	
5	Develop Draft PMP	7 days	Tue 11/13/12	Mon 11/19/12	4	
6	Stakeholder review of Draft PMP	9 days	Tue 11/20/12	Wed 11/28/12	5	
7	Draft PMP comment response	15 days	Thu 11/29/12	Thu 12/13/12	6	
8	Develop Final PMP	32 days	Fri 12/14/12	Sun 1/13/13	7	
9	Stake holder review of Final PMP	3 days	Mon 1/14/13	Wed 1/16/13	8	
10	Prepare and submit Final ESS	245 days	Wed 9/19/12	Mon 5/13/13	1	
11	USATCES review	15 days	Mon 5/13/13	Mon 5/27/13	10	
12	DDESB Review and approval of ESS	30 days	Tue 5/28/13	Tue 6/25/13	11	
13	Stakeholder review of Draft ESS	45 days	Mon 5/13/13	Tue 6/25/13	10	
14	Draft comment clarification (if requied)	15 days	Wed 6/26/13	Wed 7/10/13	13	
15	Develop Final ESS (if required)	15 days	Wed 7/10/13	Wed 7/24/13	14	
16	Stakeholder review of Final ESS	45 days	Thu 7/25/13	Fri 9/6/13	15	
17	Submit Pre-draft WP, SSHP SAP, and QAAP	6 days	Thu 9/20/12	Tue 9/25/12	1	
18	Army review of Pre-draft WP, SSHP, SAP and QAPP	59 days	Wed 9/26/12	Wed 11/21/12	17	
19	Pre-draft WP, SSHP, SAP and QAPP comment response	42 days	Thu 11/22/12	Tue 1/1/13	18	
20	Develop Draft WP,SSHP, SAP, and QAPP	14 days	Wed 1/2/13	Tue 1/15/13	19	
21	Stakeholder review of Draft WP,SSHP, SAP, and QAPP	37 days	Wed 1/16/13	Wed 2/20/13	20	
22	DraftWP, SSHP, SAP, And QAPP comment reponse	15 days	Thu 2/21/13	Thu 3/7/13	21	
23	Develop Final WP, SSHP, SAP, and QAPP	15 days	Fri 3/8/13	Fri 3/22/13	22	
24	Stakeholder review of Final WP,SSHP, SAP, and QAPP	25 days	Sat 3/23/13	Mon 4/15/13	23	
25	Prepare Revised Final	24 days	Tue 4/23/13	Thu 5/16/13		
26	Revised Final Stakeholder revie	45 days	Fri 5/17/13	Sat 6/29/13	25	
27	**Begin Field Work**	**905.63 days**	**Wed 5/15/13**	**Tue 10/6/15**		
28	Mobilization for Site Investigation	12 days	Mon 7/1/13	Fri 7/12/13	26	
29	TCS operations for Rocket Ridge MDEH items (ECMs 7-C-2 and 7-C-)	51 days	Mon 7/15/13	Mon 9/2/13	28	
30	Explosvive venting of Rocket Ridge MDEH (ECM 7-C-4)	46 days	Mon 7/15/13	Wed 8/28/13	28	
31	Post demolition soil and water sampling sampling	1 day	Wed 8/28/13	Thu 8/29/13	30	
32	Laboratory analysis	30 days	Thu 8/29/13	Fri 9/27/13	31	
33	Data Valadation	22 days	Fri 9/27/13	Fri 10/18/13	32	
34	Disposal of IDW	22 days	Fri 10/18/13	Fri 11/8/13	33	
35	Site Restoration	7 days	Thu 8/29/13	Thu 9/5/13	31	
36	Reconstruction and Stabilization of Stream Banks	20 days	Wed 5/15/13	Mon 6/3/13		
37	Annual water and biotic testing to be conducted each June and August through 2015 (i.e., 3 years of annual monitoring)	20 days	Mon 7/8/13	Tue 10/6/15	36	
38	**Investigation Report**	**201 days**	**Sat 11/9/13**	**Wed 5/21/14**	**34**	
39	Prepare and Submit Predraft Report	30 days	Sat 11/9/13	Sat 12/7/13		
40	Army review of Pre-draft report	21 days	Sat 12/7/13	Sat 12/28/13	39	

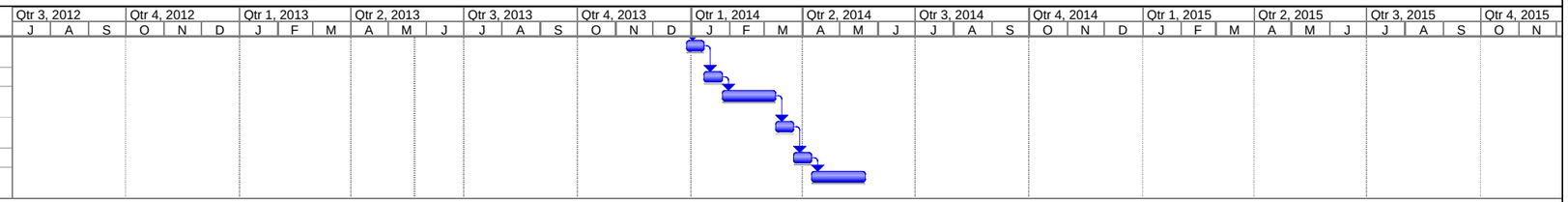


RVAAP Environ. Remed. Services
Date: Wed 5/22/13

Task — Progress — Summary — External Tasks — Deadline
Split — Milestone — Project Summary — External Milestone

Baseline Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
41	Pre-draft report comment response	15 days	Sat 12/28/13	Sat 1/11/14	40	
42	Develop Draft report	15 days	Sat 1/11/14	Sun 1/26/14	41	
43	Stakeholder review of Draft report	45 days	Sun 1/26/14	Mon 3/10/14	42	
44	Draft report comment response	15 days	Mon 3/10/14	Mon 3/24/14	43	
45	Develop Final Report	15 days	Tue 3/25/14	Tue 4/8/14	44	
46	Stakeholder review of Final Report	45 days	Tue 4/8/14	Wed 5/21/14	45	



RVAAP Environ. Remed. Services
Date: Wed 5/22/13

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	2
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	5-20-13 to 5-24-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services (Stream Restoration Operations)			

Summary of Activities

- Completed seeding and mulching top of slope area at Rocket Ridge.
- Initiated and completed installation of seed, jute matting, and plantings along stream banks.
- Removed up stream dam following seeding and planting operations to return stream flow through reconstructed channel.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

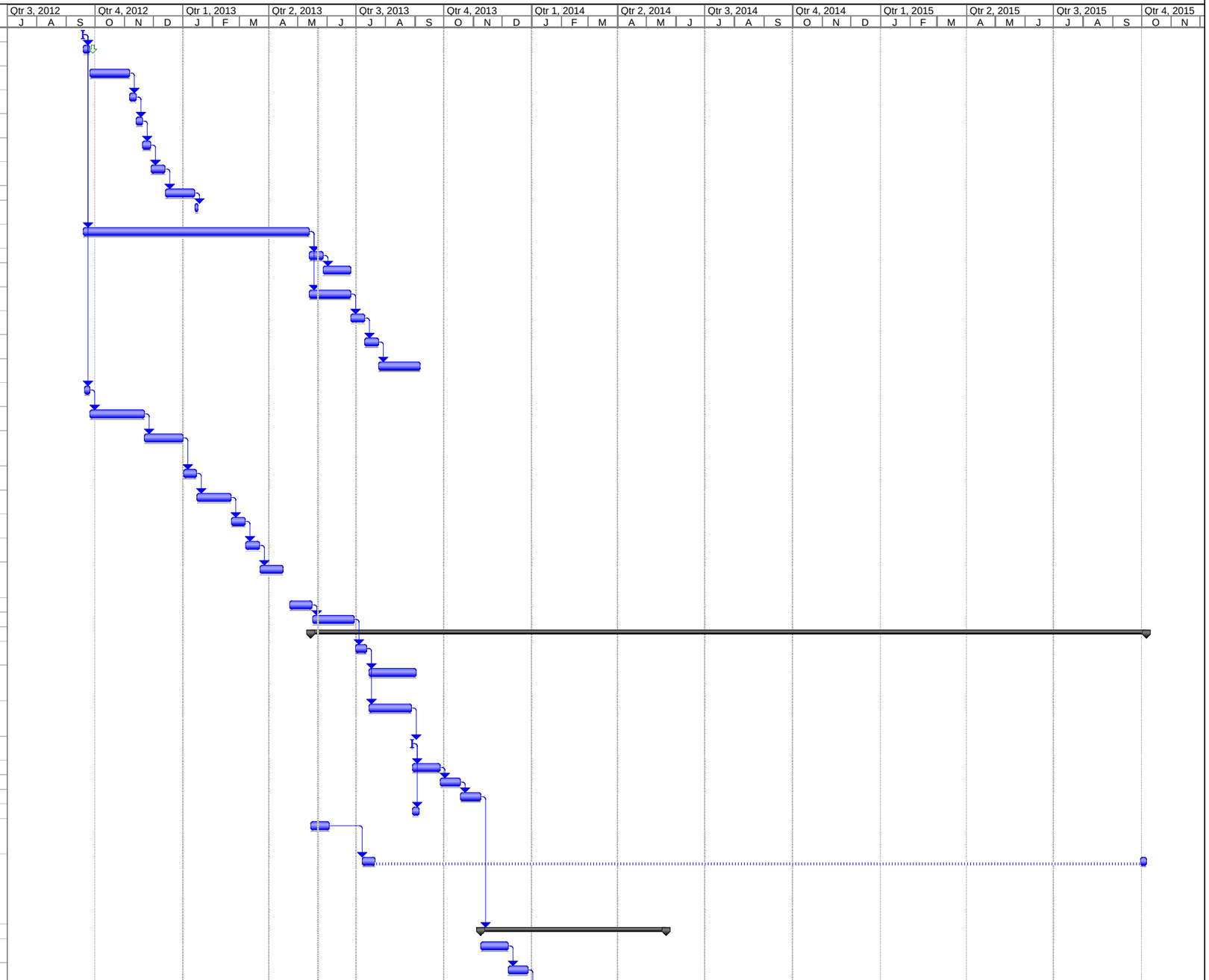
- Due to persistent lightning and thunder and resultant site shut downs, the Ohio EPA division of surface water cancelled the Thursday, May 23, 2013 site visit. Army to advise PIKA on when site visit will be re-scheduled.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	50%	100%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2	-	0%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	-	0%
Dispose of Rocket Ridge MPPEH in ECM 7-C-3	-	0%
Dispose of Rocket Ridge MEC in ECM 7-C-4	-	0%
Dispose of Legacy MPPEH in ECM 7-C-3	-	0%
Dispose of Legacy MEC in ECM 7-C-4	-	0%
Complete three (3) years of annual water and biotic testing for Sand Creek stream restoration	-	0%

Baseline Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	Contract Award	1 day	Tue 9/18/12	Tue 9/18/12		
2	Submit pre-draft PMP	7 days	Wed 9/19/12	Tue 9/25/12	1	
3	Army Review of pre- draft PMP	43 days	Wed 9/26/12	Tue 11/6/12		
4	Pre-Draft PMP comment response	7 days	Tue 11/6/12	Tue 11/13/12	3	
5	Develop Draft PMP	7 days	Tue 11/13/12	Mon 11/19/12	4	
6	Stakeholder review of Draft PMP	9 days	Tue 11/20/12	Wed 11/28/12	5	
7	Draft PMP comment response	15 days	Thu 11/29/12	Thu 12/13/12	6	
8	Develop Final PMP	32 days	Fri 12/14/12	Sun 1/13/13	7	
9	Stake holder review of Final PMP	3 days	Mon 1/14/13	Wed 1/16/13	8	
10	Prepare and submit Final ESS	245 days	Wed 9/19/12	Mon 5/13/13	1	
11	USATCES review	15 days	Mon 5/13/13	Mon 5/27/13	10	
12	DDESB Review and approval of ESS	30 days	Tue 5/28/13	Tue 6/25/13	11	
13	Stakeholder review of Draft ESS	45 days	Mon 5/13/13	Tue 6/25/13	10	
14	Draft comment clarification (if requied)	15 days	Wed 6/26/13	Wed 7/10/13	13	
15	Develop Final ESS (if required)	15 days	Wed 7/10/13	Wed 7/24/13	14	
16	Stakeholder review of Final ESS	45 days	Thu 7/25/13	Fri 9/6/13	15	
17	Submit Pre-draft WP, SSHP SAP, and QAAP	6 days	Thu 9/20/12	Tue 9/25/12	1	
18	Army review of Pre-draft WP, SSHP, SAP and QAPP	59 days	Wed 9/26/12	Wed 11/21/12	17	
19	Pre-draft WP, SSHP, SAP and QAPP comment response	42 days	Thu 11/22/12	Tue 1/1/13	18	
20	Develop Draft WP,SSHP, SAP, and QAPP	14 days	Wed 1/2/13	Tue 1/15/13	19	
21	Stakeholder review of Draft WP,SSHP, SAP, and QAPP	37 days	Wed 1/16/13	Wed 2/20/13	20	
22	DraftWP, SSHP, SAP, And QAPP comment reponse	15 days	Thu 2/21/13	Thu 3/7/13	21	
23	Develop Final WP, SSHP, SAP, and QAPP	15 days	Fri 3/8/13	Fri 3/22/13	22	
24	Stakeholder review of Final WP,SSHP, SAP, and QAPP	25 days	Sat 3/23/13	Mon 4/15/13	23	
25	Prepare Revised Final	24 days	Tue 4/23/13	Thu 5/16/13		
26	Revised Final Stakeholder revie	45 days	Fri 5/17/13	Sat 6/29/13	25	
27	**Begin Field Work**	**905.63 days**	**Wed 5/15/13**	**Tue 10/6/15**		
28	Mobilization for Site Investigation	12 days	Mon 7/1/13	Fri 7/12/13	26	
29	TCS operations for Rocket Ridge MDEH items (ECMs 7-C-2 and 7-C-)	51 days	Mon 7/15/13	Mon 9/2/13	28	
30	Explosvive venting of Rocket Ridge MDEH (ECM 7-C-4)	46 days	Mon 7/15/13	Wed 8/28/13	28	
31	Post demolition soil and water sampling sampling	1 day	Wed 8/28/13	Thu 8/29/13	30	
32	Laboratory analysis	30 days	Thu 8/29/13	Fri 9/27/13	31	
33	Data Valadation	22 days	Fri 9/27/13	Fri 10/18/13	32	
34	Disposal of IDW	22 days	Fri 10/18/13	Fri 11/8/13	33	
35	Site Restoration	7 days	Thu 8/29/13	Thu 9/5/13	31	
36	Reconstruction and Stabilization of Stream Banks	20 days	Wed 5/15/13	Mon 6/3/13		
37	Annual water and biotic testing to be conducted each June and August through 2015 (i.e., 3 years of annual monitoring)	20 days	Mon 7/8/13	Tue 10/6/15	36	
38	**Investigation Report**	**201 days**	**Sat 11/9/13**	**Wed 5/21/14**	**34**	
39	Prepare and Submit Predraft Report	30 days	Sat 11/9/13	Sat 12/7/13		
40	Army review of Pre-draft report	21 days	Sat 12/7/13	Sat 12/28/13	39	

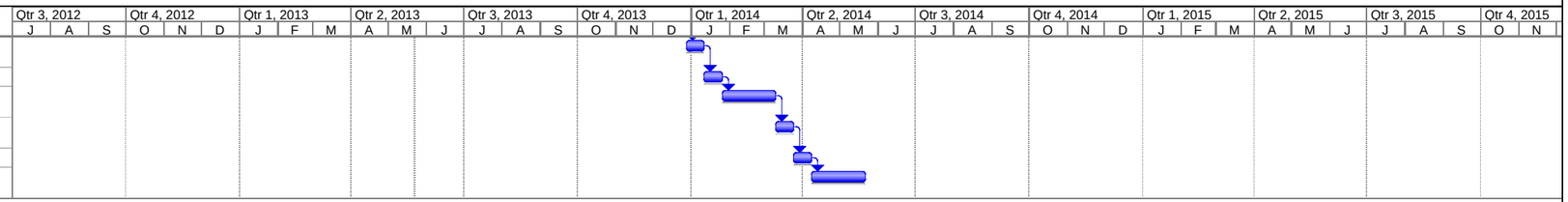


RVAAP Environ. Remed. Services
Date: Wed 5/22/13

Task — Progress — Summary — External Tasks — Deadline
Split — Milestone — Project Summary — External Milestone

Baseline Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
41	Pre-draft report comment response	15 days	Sat 12/28/13	Sat 1/11/14	40	
42	Develop Draft report	15 days	Sat 1/11/14	Sun 1/26/14	41	
43	Stakeholder review of Draft report	45 days	Sun 1/26/14	Mon 3/10/14	42	
44	Draft report comment response	15 days	Mon 3/10/14	Mon 3/24/14	43	
45	Develop Final Report	15 days	Tue 3/25/14	Tue 4/8/14	44	
46	Stakeholder review of Final Report	45 days	Tue 4/8/14	Wed 5/21/14	45	



RVAAP Environ. Remed. Services
Date: Wed 5/22/13

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].

If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:

See previous remarks above.

Schedule for Next Week

- Demobilize equipment.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

UXO Technician III Construction Support and Site Safety Officer	Wayne Brazee
Project Manager	Brian Stockwell

PHOTO LOG





Pictures showing top of slope at Rocket Ridge Area (RRA) following seeding and mulching operations.





Pictures of stream banks during planting operations.



Picture showing trees installed within floodplain area.



Picture showing upstream dam removed and flow directed back through new stream channel.



View looking west prior to bank reconstruction and installation of plantings and jute matting.



View looking west following bank reconstruction and installation of plantings and jute matting.



View looking east prior to bank reconstruction and installation of plantings and jute matting.



View looking east following bank reconstruction and installation of plantings and jute matting.





Pictures showing floodplain area following restoration operations.

Schedule

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	3
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	7-1-13 to 7-5-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services (Stream Restoration Operations)			

Summary of Activities

- Completed installation of TCS pad.
- Completed the initial water and biotic stream monitoring event for the reconstructed area of Sand Creek.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- The July 2013 stream monitoring results are within 5 points (acceptable range) of Ohio EPA Division of Surface Water initial 2010 Sand Creek area study results.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	100%	100%
Installation of TCS Pad.	100%	100%
Delivery and set up of TCS and site setup.	-	0%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	-	0%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	-	0%
Dispose of Rocket Ridge MPPEH in ECM 7-C-3	-	0%
Dispose of Rocket Ridge MEC in ECM 7-C-4	-	0%
Dispose of Legacy MPPEH in ECM 7-C-3	-	0%
Dispose of Legacy MEC in ECM 7-C-4	-	0%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].
If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:
None.

Schedule for Next Week

- Mobilize and set up the TCS unit.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

UXO Technician III Construction Support and Site Safety Officer	Mel Lau
Project Manager	Brian Stockwell

PHOTO LOG



Grading pad area to facilitate installation of geofabric and stone.



Installing geofabric over pad area.



Installing stone over pad area.



Grading stone over pad area.



Compacting stone over pad area.



Overview of completed pad.





Picture showing soil spoils re-graded, seeded, and mulched adjacent to pad area.





Pictures showing QHEI and IBI stream monitoring operations.

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors
1	Contract Award	1 day	Tue 9/18/12	Tue 9/18/12	
2	Submit pre-draft PMP	7 days	Wed 9/19/12	Tue 9/25/12	1
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4	Pre-Draft PMP comment response	7 days	Tue 11/6/12	Tue 11/13/12	3
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25	Prepare Revised Final	24 days	Tue 4/23/13	Thu 5/16/13	24
26	Revised Final Stakeholder revie	14 days	Fri 5/17/13	Thu 5/30/13	25
27	**Begin Field Work**	**899.38 days**	**Wed 5/15/13**	**Wed 9/30/15**	
28	Mobilization, Pad installation and TCS set up	12 days	Mon 7/1/13	Fri 7/12/13	12,26
29	TCS operations for Rocket Ridge MDEH items (ECMs 7-C-2 and 7-C-)	51 days	Mon 7/15/13	Mon 9/2/13	28
30	Explosvive venting of Rocket Ridge MDEH (ECM 7-C-4)	46 days	Mon 7/15/13	Wed 8/28/13	28
31	Post demolition soil and water sampling sampling	1 day	Wed 8/28/13	Thu 8/29/13	30
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45	Develop Final Report	15 days	Tue 3/25/14	Tue 4/8/14	44
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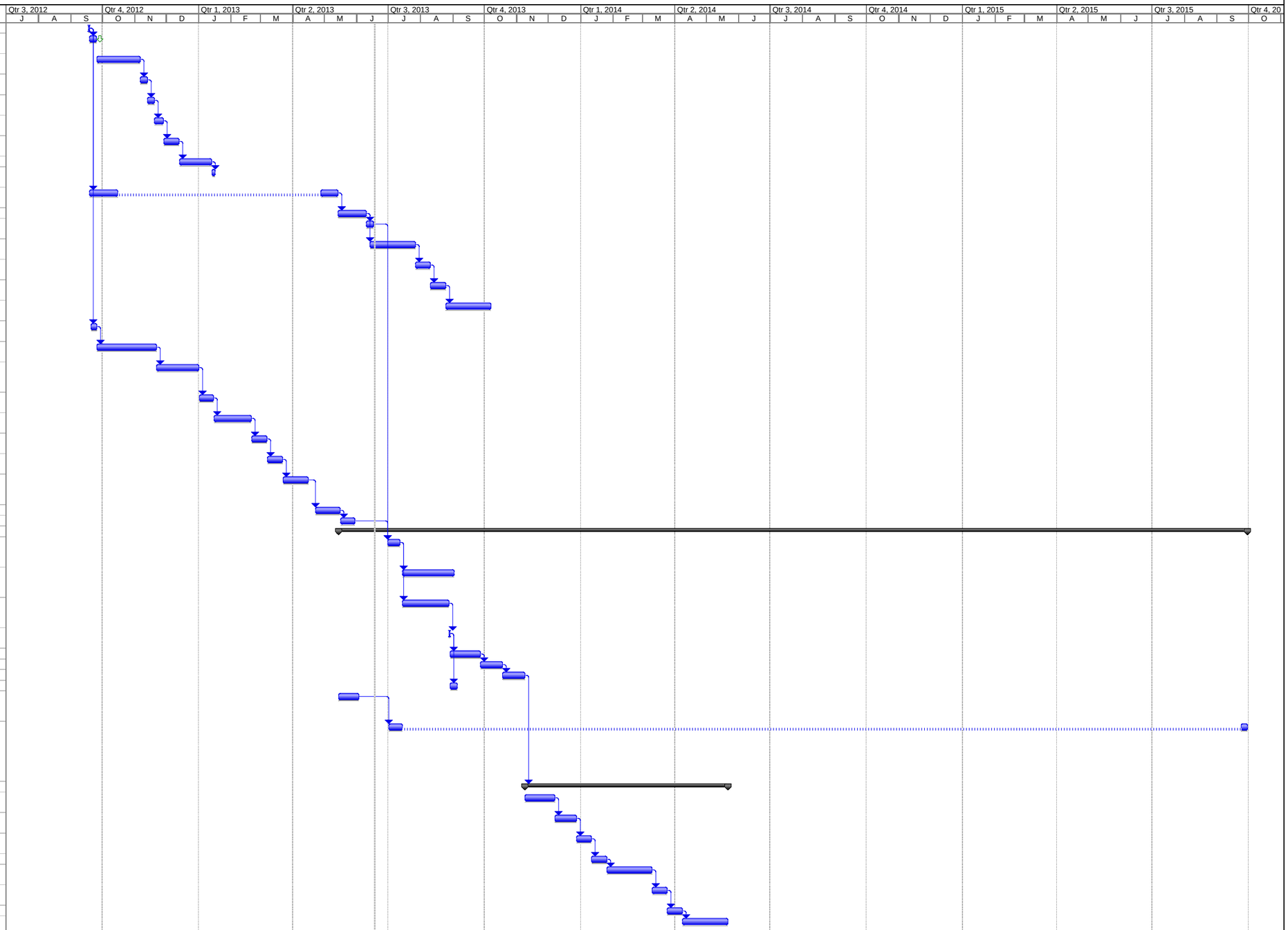

RVAAP Environ. Remed. Services
Date: Tue 6/18/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	4
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	7-8-13 to 7-12-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services (Stream Restoration Operations)			

Summary of Activities

- TCS unit delivered to the site.
- Assembled main components of TCS and prepared the unit for propane and electric hookups.
- Initiated brush clearing at work areas.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- none.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	85%	100%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	-	0%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	-	0%
Dispose of Rocket Ridge MPPEH in ECM 7-C-3	-	0%
Dispose of Rocket Ridge MEC in ECM 7-C-4	-	0%
Dispose of Legacy MPPEH in ECM 7-C-3	-	0%
Dispose of Legacy MEC in ECM 7-C-4	-	0%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].
If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:

Very heavy rain and severe flooding during the week resulted in some high water damage to a portion of the southern stream channel. Davey to be on site Monday, 22 July 2013 for evaluation.

Schedule for Next Week

- Complete propane and electric hookup for TCS.
- Complete brush clearing of work areas.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

UXO Technician III Construction Support and Site Safety Officer	Lew Kovarik
Project Manager	Brian Stockwell

PHOTO LOG



Delivery of TCS unit.



Unloading TCS components.





Assembly of TCS unit.



Brush clearing demolition area.



Stream channel looking west following heavy rain and extreme high water event.



Stream channel looking east following heavy rain and extreme high water event.



Picture showing high water damage along portion of southern bank.



View of high-water overflow area prior to extreme flood event.



View of high-water overflow area following extreme flood event.

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors
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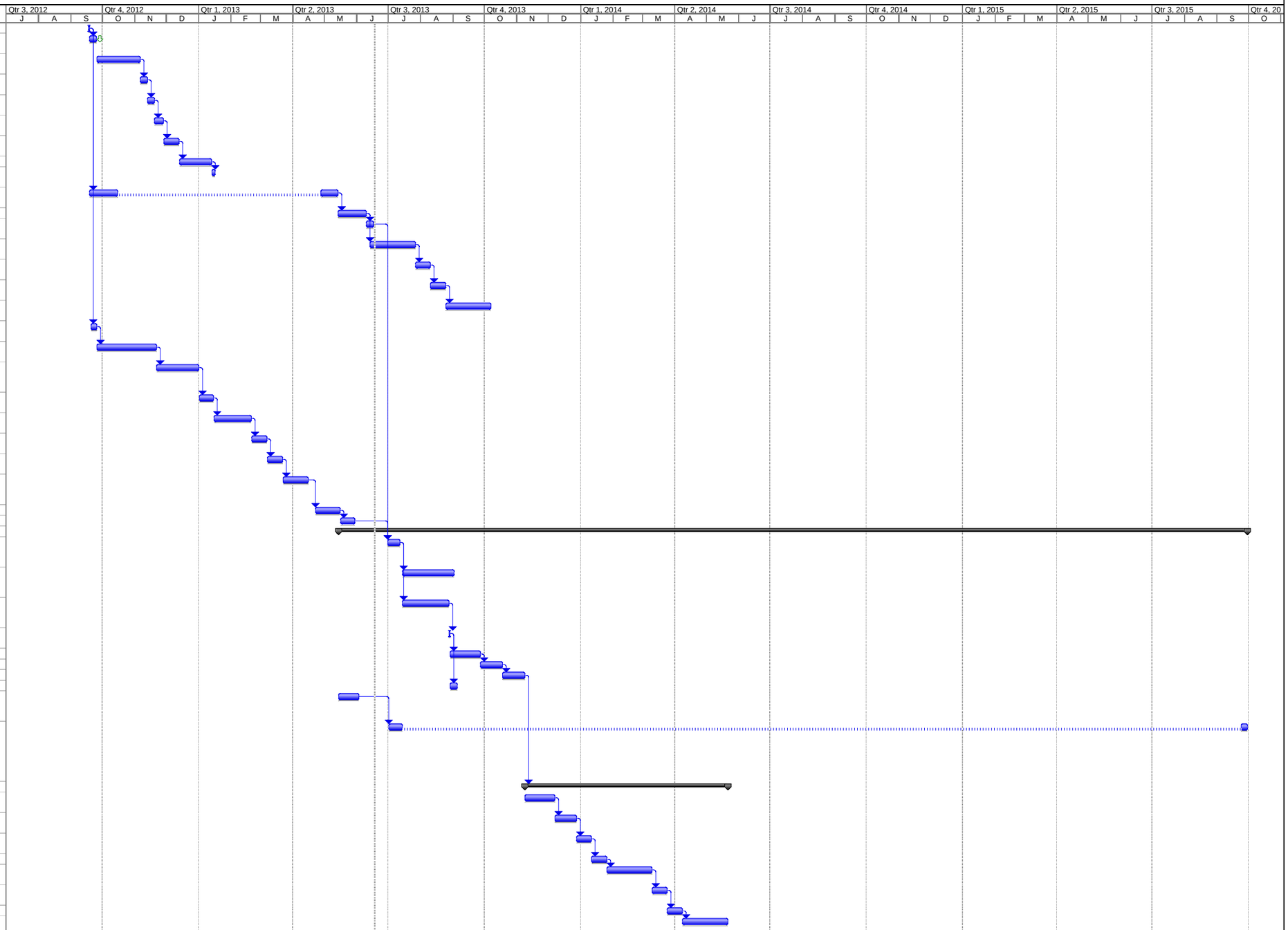
44	Draft report comment response	15 days	Mon 3/10/14	Mon 3/24/14	43
45	Develop Final Report	15 days	Tue 3/25/14	Tue 4/8/14	44
46	Stakeholder review of Final Report	45 days	Tue 4/8/14	Wed 5/21/14	45



RVAAP Environ. Remed. Services
Date: Tue 6/18/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	5
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	7-15-13 to 7-19-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services			

Summary of Activities

- Completed brush clearing.
- No field operations conducted Tues through Friday due to planned OHARNG fire operations.
- Continued mobilization of personnel, equipment and supplies off site.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- None.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	-	85%
Mobilization of personnel, Equipment, and supplies	30%	60%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	-	0%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	-	0%
Dispose of Rocket Ridge MPPEH in ECM 7-C-3	-	0%
Dispose of Rocket Ridge MEC in ECM 7-C-4	-	0%
Dispose of Legacy MPPEH in ECM 7-C-3	-	0%
Dispose of Legacy MEC in ECM 7-C-3	-	0%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].

If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:

Davey inspected high water damage along southern bank of new channel and will be on site 22 July 2013 for repair and installation of additional jute matting.

Schedule for Next Week

- Complete propane and electric hookup for TCS.
- Complete mobilization tasks.
- Initiate MEC Demolition Operations

Refer attached **Schedule** for percentage of work completed and projected completion dates.

UXO Technician III Construction Support and Site Safety Officer	Lew Kovarik
Project Manager	Brian Stockwell

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	Contract Award	1 day	Tue 9/18/12	Tue 9/18/12		
2	Submit pre-draft PMP	7 days	Wed 9/19/12	Tue 9/25/12	1	
3	Army Review of pre- draft PMP	43 days	Wed 9/26/12	Tue 11/6/12		
4	Pre-Draft PMP comment response	7 days	Tue 11/6/12	Tue 11/13/12	3	
5	Develop Draft PMP	7 days	Tue 11/13/12	Mon 11/19/12	4	
6	Stakeholder review of Draft PMP	9 days	Tue 11/20/12	Wed 11/28/12	5	
7	Draft PMP comment response	15 days	Thu 11/29/12	Thu 12/13/12	6	
8	Develop Final PMP	32 days	Fri 12/14/12	Sun 1/13/13	7	
9	Stake holder review of Final PMP	3 days	Mon 1/14/13	Wed 1/16/13	8	
10	Prepare and submit Final ESS	45 days	Wed 9/19/12	Tue 5/14/13	1	
11	USATCES review	28 days	Tue 5/14/13	Mon 6/10/13	10	
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18	Army review of Pre-draft WP, SSHP, SAP and QAPP	59 days	Wed 9/26/12	Wed 11/21/12	17	
19	Pre-draft WP, SSHP, SAP and QAPP comment response	42 days	Thu 11/22/12	Tue 1/1/13	18	
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21	Stakeholder review of Draft WP,SSHP, SAP, and QAPP	37 days	Wed 1/16/13	Wed 2/20/13	20	
22	DraftWP, SSHP, SAP, And QAPP comment reponse	15 days	Thu 2/21/13	Thu 3/7/13	21	
23	Develop Final WP, SSHP, SAP, and QAPP	15 days	Fri 3/8/13	Fri 3/22/13	22	
24	Stakeholder review of Final WP,SSHP, SAP, and QAPP	25 days	Sat 3/23/13	Mon 4/15/13	23	
25	Prepare Revised Final	24 days	Tue 4/23/13	Thu 5/16/13	24	
26	Revised Final Stakeholder revie	14 days	Fri 5/17/13	Thu 5/30/13	25	
27	**Begin Field Work**	**899.38 days**	**Wed 5/15/13**	**Wed 9/30/15**		
28	Mobilization, Pad installation and TCS set up	12 days	Mon 7/1/13	Fri 7/12/13	12,26	
29	TCS operations for Rocket Ridge MDEH items (ECMs 7-C-2 and 7-C-)	51 days	Mon 7/22/13	Mon 9/9/13	28	
30	Explosvive venting of Rocket Ridge MDEH (ECM 7-C-4)	46 days	Mon 7/22/13	Wed 9/4/13	28	
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37	Annual water and biotic testing to be conducted each June and August through 2015 (i.e., 3 years of annual monitoring)	20 days	Tue 7/2/13	Wed 9/30/15	36	
38	**Investigation Report**	**201 days**	**Sat 11/16/13**	**Wed 5/28/14**	**34**	
39	Prepare and Submit Predraft Report	30 days	Sat 11/16/13	Sat 12/14/13		
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41	Pre-draft report comment response	15 days	Sat 1/4/14	Sat 1/18/14	40	
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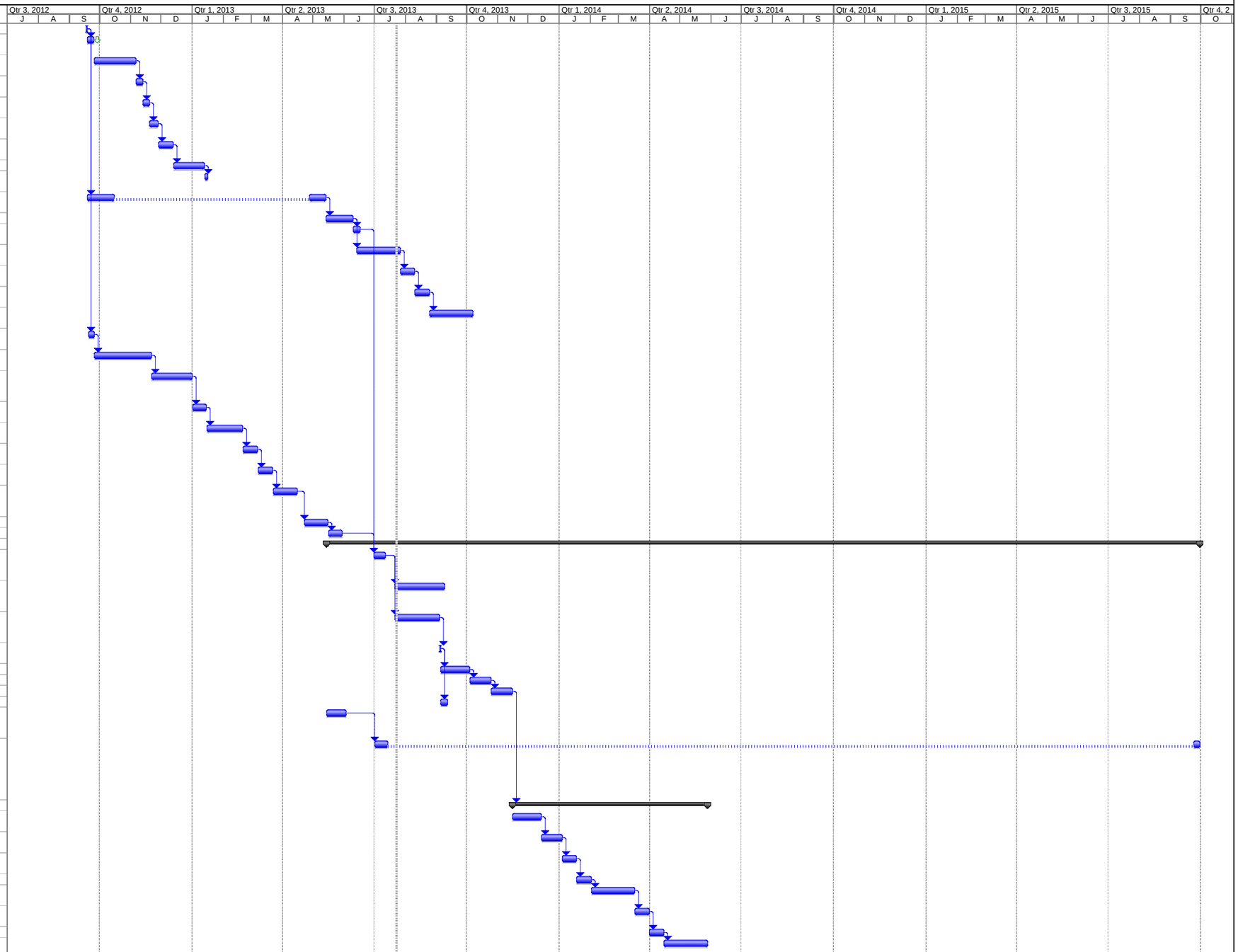
44	Draft report comment response	15 days	Mon 3/17/14	Mon 3/31/14	43	
45	Develop Final Report	15 days	Tue 4/1/14	Tue 4/15/14	44	
46	Stakeholder review of Final Report	45 days	Tue 4/15/14	Wed 5/28/14	45	



RVAAP Environ. Remed. Services
Date: Tue 7/23/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	6
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	7-22-13 to 7-26-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services			

Summary of Activities

- Completed TCS connections for propane and electric.
- Completed mobilization.
- Initiated and completed the transfer of inventory items in ECMs 7-C-2, 7-C-3, and 7-C-4 from RVAAP Facility Manager to PIKA.
- Initiated inspection of MEC items to facilitate the explosive demolition and TCS operations.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- none.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	15%	100%
Mobilization of personnel, Equipment, and supplies	40%	100%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	-	0%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	-	0%
Dispose of Rocket Ridge and Legacy MPPEH in ECM 7-C-3	-	0%
Dispose of Rocket Ridge and Legacy MEC in ECM 7-C-4	15%-	15%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].

If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:

Very heavy rain during the week resulted in soil slippage along the face of the Rocket Ridge slope. Inspection of the area and evaluation of required repairs to occur next week.

5 MEC items were identified and secured by PIKA UXO construction support personnel during the 22 July 2013 erosion and sedimentation control repair operations. These items were washed out of the ODA2 area and deposited within and adjacent to the new channel as a result of the 10 July 2013 extreme flooding and high water event. Details are provided in the MEC discovery report document submitted to USACE and RVAAP Facility Manager.

Schedule for Next Week

- Continue inspection of MEC items for processing.
- Initiate explosive demolition operations.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

SUXOS	Lew Kovarik	UXOSO/QC	Cameron Wenzel
Project Manager	Brian Stockwell		

PHOTO LOG





UXO Technicians conducting pre-inspection of Material Documented with an Explosives Hazard (MDEH) to facilitate the demolition and TCS operations.





TCS specialists conducting final adjustments on unit.



Picture showing soil slippage along Rocket Ridge slope following most recent heavy rain event. The soil slippage occurred along the bedrock and soil interface at the midpoint of the slope. A groundwater seep exits at this location as well.

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

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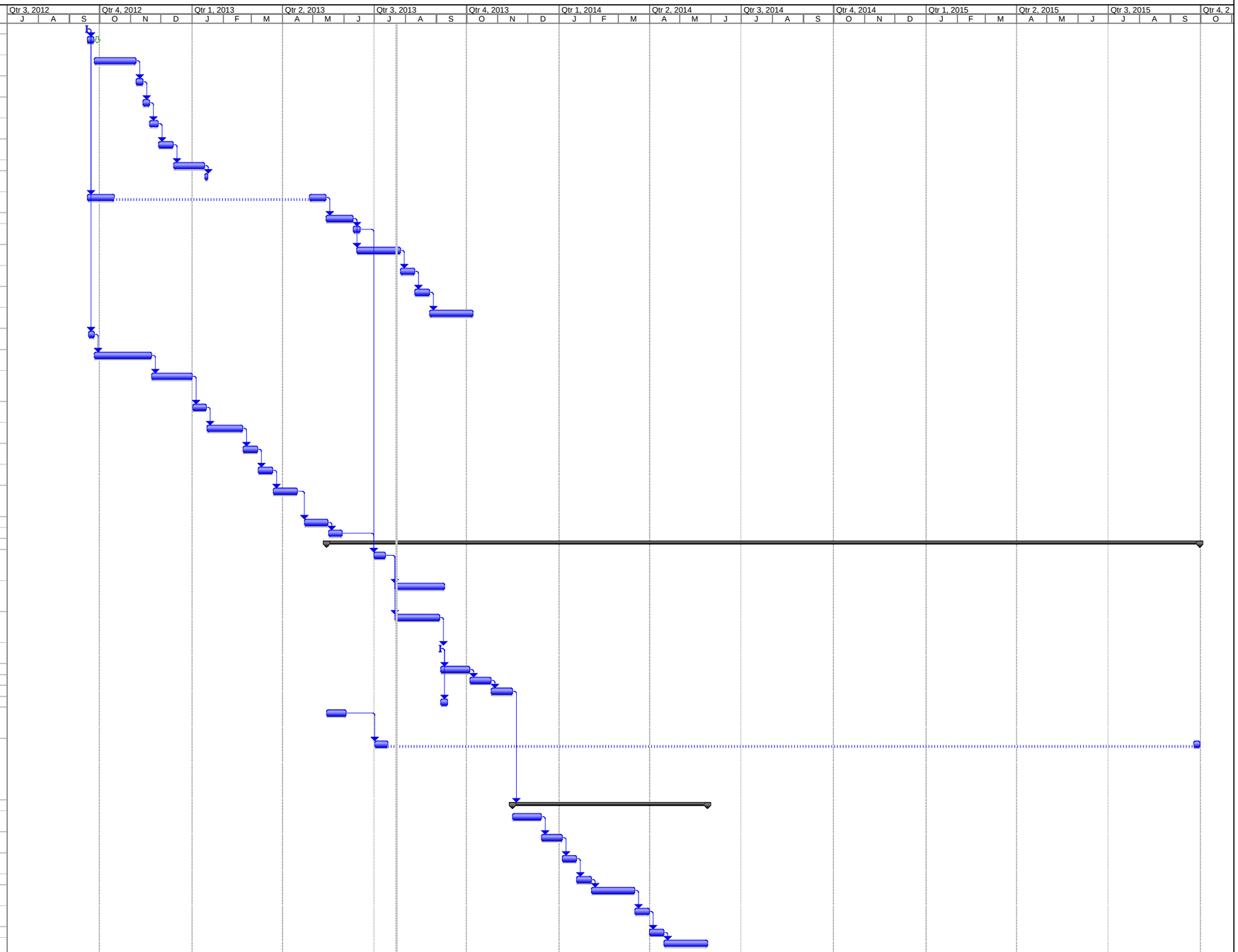

RVAAP Environ. Remed. Services
Date: Tue 7/23/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	7
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	7-29-13 to 8-2-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services			

Summary of Activities

- Continued inspection of MEC items for processing.
- Initiated explosive demolition operations.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- none.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	-	100%
Mobilization of personnel, Equipment, and supplies		100%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	-	0%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	-	0%
Dispose of Rocket Ridge and Legacy MPPEH in ECM 7-C-3	-	0%
Dispose of Rocket Ridge and Legacy MEC in ECM 7-C-4	65%	80%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].
If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:
As a result of all the rain we have had this summer (14-inches to date) and the 200 yr flood event that occurred on 10 July 2013, there is currently a moderate flow of ground water seeping from the weathered shale at the midpoint of the slope, which resulted in soil slippage. Given the current site conditions, repair of the slope will require some additional work. With the amount of groundwater flowing through the weathered shale, it is recommended that the affected soils be removed and that the shale be left exposed. Any soils that are removed can be added to the top of the RRA, graded, seeded and mulched. The upper portion of the slope would then be reshaped as needed, seeded and mulched.

Schedule for Next Week

- Continue inspection of MEC items for processing.
- Complete explosive demolition operations.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

SUXOS	Lew Kovarik	UXOSO/QC	Cameron Wenzel
Project Manager	Brian Stockwell		

PHOTO LOG





UXO Technicians conducting inspection of MDEH items for demolition.









Pictures showing setup for demolition of 20mm projectiles utilizing Buried Explosion Module (BEM) techniques as per the approved Work Plan. Following detonation the area is cleared of resultant fragments. Recovered fragments are inspected and certified as Material Documented as Safe (MDAS) for subsequent scrap recycling.



Post demolition inspection and recovery of resultant fragments.

Schedule

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Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

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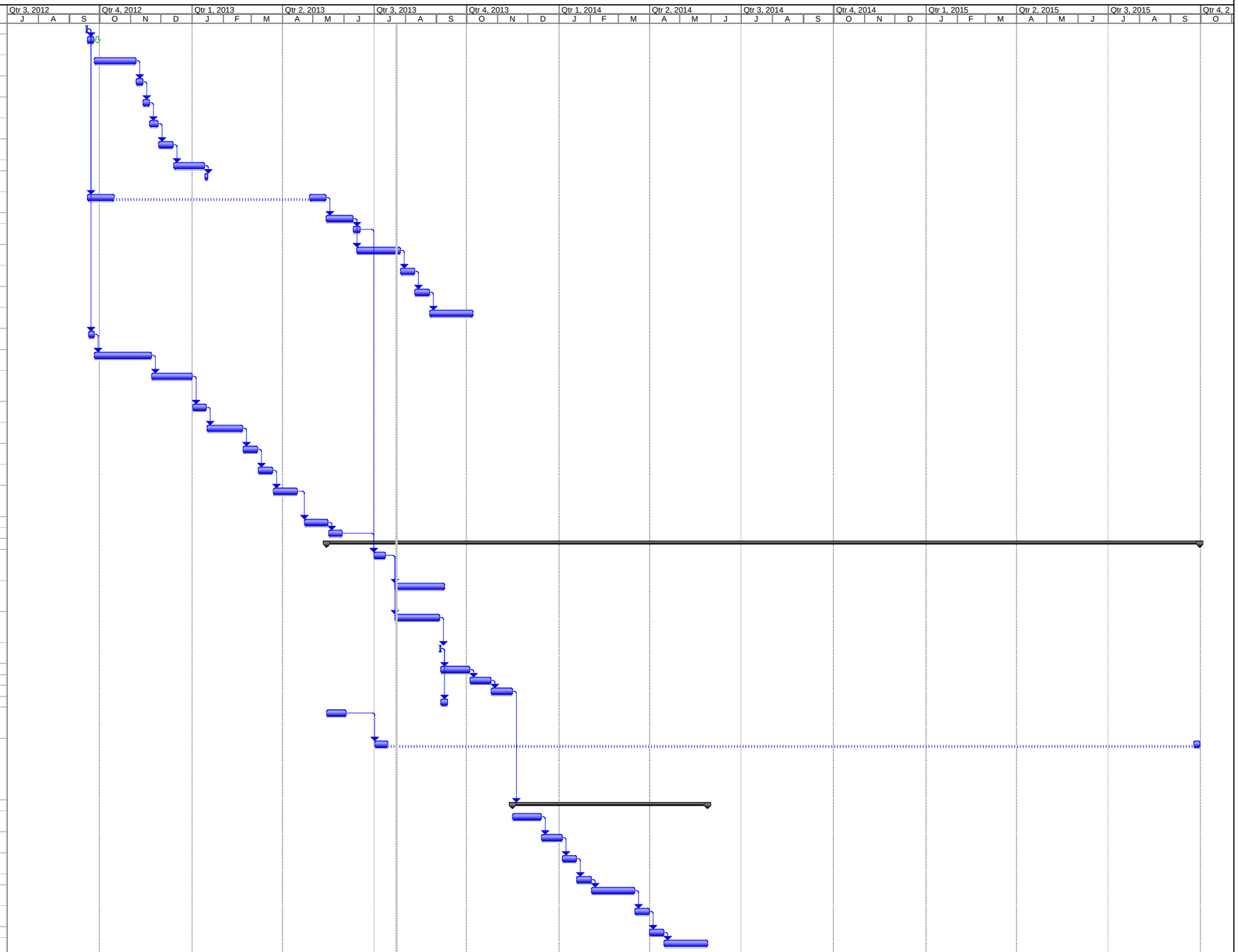

RVAAP Environ. Remed. Services
Date: Tue 7/23/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	8
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	8-5-13 to 8-8-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services			

Summary of Activities

- Continued inspection of MEC items for processing.
- Completed explosive demolition operations.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- none.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	-	100%
Mobilization of personnel, Equipment, and supplies		100%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	-	0%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	-	0%
Dispose of Rocket Ridge and Legacy MPPEH in ECM 7-C-3	-	0%
Dispose of Rocket Ridge and Legacy MEC in ECM 7-C-4	20%	100%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].
If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:
Flashflood event on Thursday 8-7-13 resulted in substantial wash out damage along ODA2 road and the stream channel. Details and photos provided to USACE Louisville and RVAPP FM under separate report.

Schedule for Next Week

- Continue inspection of MEC items for processing.
- Initiate TCS operations.
- Conduct the second bi-annual stream monitoring event.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

SUXOS	Lew Kovarik	UXOSO/QC	Cameron Wenzel
Project Manager	Brian Stockwell		

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

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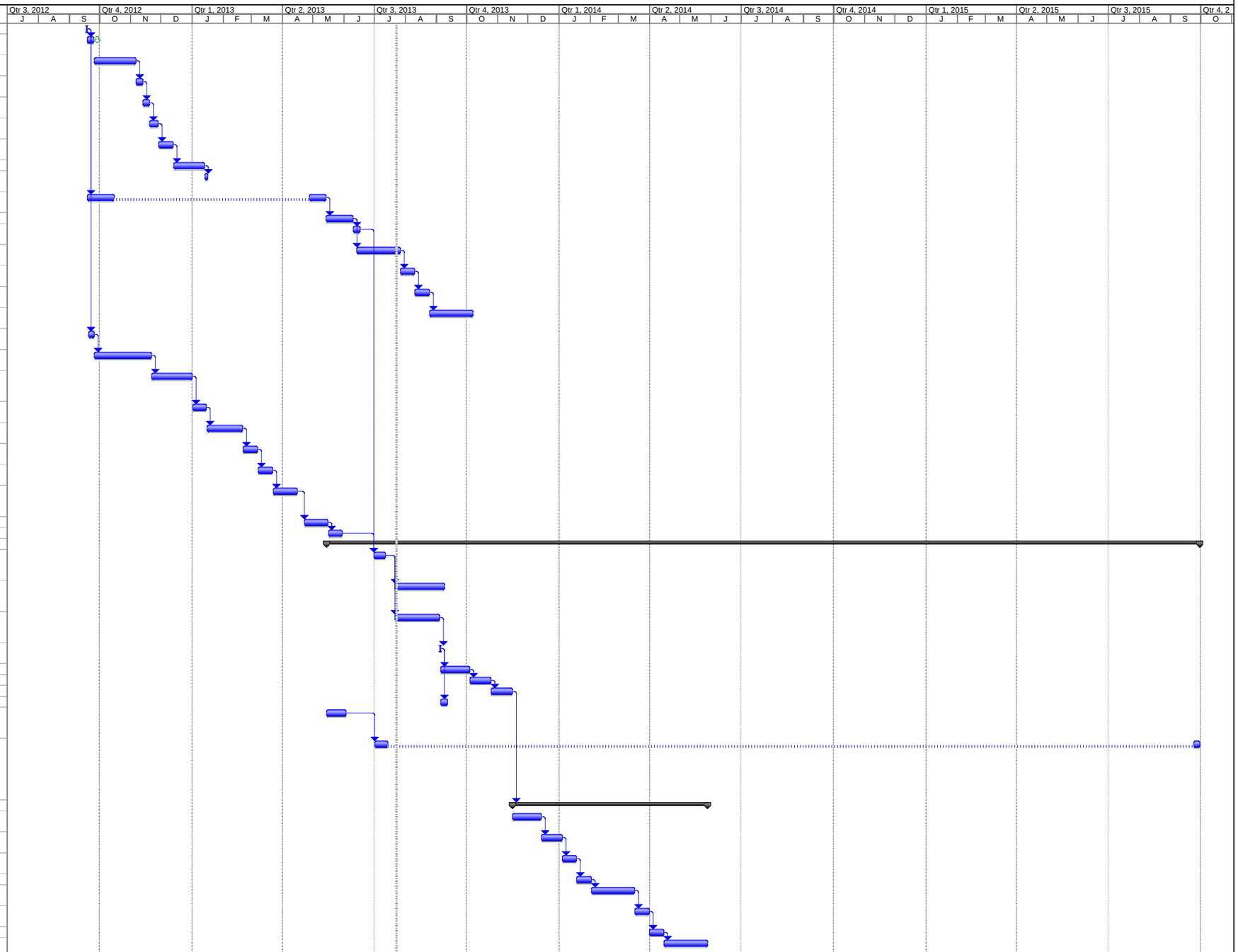
18	Army review of Pre-draft WP, SSHP, SAP and QAPP	59 days	Wed 9/26/12	Wed 11/21/12	17	
19	Pre-draft WP, SSHP, SAP and QAPP comment response	42 days	Thu 11/22/12	Tue 1/1/13	18	
20	Develop Draft WP,SSHP, SAP, and QAPP	14 days	Wed 1/2/13	Tue 1/15/13	19	
21	Stakeholder review of Draft WP,SSHP, SAP, and QAPP	37 days	Wed 1/16/13	Wed 2/20/13	20	
22	DraftWP, SSHP, SAP, And QAPP comment reponse	15 days	Thu 2/21/13	Thu 3/7/13	21	
23	Develop Final WP, SSHP, SAP, and QAPP	15 days	Fri 3/8/13	Fri 3/22/13	22	
24	Stakeholder review of Final WP,SSHP, SAP, and QAPP	25 days	Sat 3/23/13	Mon 4/15/13	23	
25	Prepare Revised Final	24 days	Tue 4/23/13	Thu 5/16/13	24	
26	Revised Final Stakeholder revie	14 days	Fri 5/17/13	Thu 5/30/13	25	
27	**Begin Field Work**	**899.38 days**	**Wed 5/15/13**	**Wed 9/30/15**		
28	Mobilization, Pad installation and TCS set up	12 days	Mon 7/1/13	Fri 7/12/13	12,26	
29	TCS operations for Rocket Ridge MDEH items (ECMs 7-C-2 and 7-C-)	51 days	Mon 7/22/13	Mon 9/9/13	28	
30	Explosvive venting of Rocket Ridge MDEH (ECM 7-C-4)	46 days	Mon 7/22/13	Wed 9/4/13	28	
31	Post demolition soil and water sampling sampling	1 day	Wed 9/4/13	Thu 9/5/13	30	
32	Laboratory analysis	30 days	Thu 9/5/13	Fri 10/4/13	31	
33	Data Valadation	22 days	Fri 10/4/13	Fri 10/25/13	32	
34	Disposal of IDW	22 days	Fri 10/25/13	Fri 11/15/13	33	
35	Site Restoration	7 days	Thu 9/5/13	Thu 9/12/13	31	
36	Reconstruction and Stabilization of Stream Banks	20 days	Wed 5/15/13	Mon 6/3/13		
37	Annual water and biotic testing to be conducted each June and August through 2015 (i.e., 3 years of annual monitoring)	20 days	Tue 7/2/13	Wed 9/30/15	36	
38	**Investigation Report**	**201 days**	**Sat 11/16/13**	**Wed 5/28/14**	**34**	
39	Prepare and Submit Predraft Report	30 days	Sat 11/16/13	Sat 12/14/13		
40	Army review of Pre-draft report	21 days	Sat 12/14/13	Sat 1/4/14	39	
41	Pre-draft report comment response	15 days	Sat 1/4/14	Sat 1/18/14	40	
42	Develop Draft report	15 days	Sat 1/18/14	Sun 2/2/14	41	
43	Stakeholder review of Draft report	45 days	Sun 2/2/14	Mon 3/17/14	42	
44	Draft report comment response	15 days	Mon 3/17/14	Mon 3/31/14	43	
45	Develop Final Report	15 days	Tue 4/1/14	Tue 4/15/14	44	
46	Stakeholder review of Final Report	45 days	Tue 4/15/14	Wed 5/28/14	45	



RVAAP Environ. Remed. Services
Date: Tue 7/23/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	9
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	8-12-13 to 8-15-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services			

Summary of Activities

- Continued inspection of MEC items for processing.
- Initiated TCS operations for items stored in ECM 7-C-3.
- Conducted the second of the bi-annual stream monitoring events.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- Path forward for post flood event repairs to the stream channel and slope being evaluated by USACE Louisville District.
- Path forward is also being evaluated for the most recent MD and MPPEH items that were discovered by PIKA UXO constructions support personnel during the stream monitoring operations.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Second of the Bi-annual IBI and QHEI stream monitoring events	100%	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	-	100%
Mobilization of personnel, Equipment, and supplies		100%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	-	0%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	-	0%
Dispose of Rocket Ridge and Legacy MPPEH in ECM 7-C-3	27%	27%%

Dispose of Rocket Ridge and Legacy MEC in ECM 7-C-4	-	100%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].
If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:
Additional MD and MPPEH items were deposited in and around the stream channel as a result of the 8-7-13 flashflood event. The items were noted during the second of the bi-annual stream monitoring events that was conducted 8-13-13. The items were identified by PIKA UXO construction support personnel and reported to the USACE Technical Manager and project OESS.

Schedule for Next Week

- Continue TCS operations.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

SUXOS	Lew Kovarik	UXOSO/QC	Cameron Wenzel
Project Manager	Brian Stockwell		

PHOTO LOG



Picture showing bin of items from ECM 7-C-3 prior to loading into the TCS for flashing.



Picture showing items being loaded into TCS.



Unloading bins of processed items certified as MDAS into lockable roll off for scrap recycling.



Pictures showing processed items inside lockable roll off container.



Picture showing fired 105mm M1 projectile with M51 fuze identified and marked prior to initiating the stream monitoring operations. The item is located along bank just downstream of the stream diversion channel.



Picture showing 2 three inch projectiles (HE), unfazed; one 60mm M49 HE with M52 fuze; and one M52 fuze with booster identified and marked prior to initiating the stream monitoring operations. The items are located in vicinity of the above mentioned item.



Picture showing MD scrap items identified and marked prior to initiating the stream monitoring operations. The items were located within and just upstream of the stream diversion channel.





Pictures showing biologists conducting the second of the bi-annual stream monitoring operations.

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors
1	Contract Award	1 day	Tue 9/18/12	Tue 9/18/12	
2	Submit pre-draft PMP	7 days	Wed 9/19/12	Tue 9/25/12	1
3	Army Review of pre- draft PMP	43 days	Wed 9/26/12	Tue 11/6/12	
4	Pre-Draft PMP comment response	7 days	Tue 11/6/12	Tue 11/13/12	3
5	Develop Draft PMP	7 days	Tue 11/13/12	Mon 11/19/12	4
6	Stakeholder review of Draft PMP	9 days	Tue 11/20/12	Wed 11/28/12	5
7	Draft PMP comment response	15 days	Thu 11/29/12	Thu 12/13/12	6
8	Develop Final PMP	32 days	Fri 12/14/12	Sun 1/13/13	7
9	Stake holder review of Final PMP	3 days	Mon 1/14/13	Wed 1/16/13	8
10	Prepare and submit Final ESS	45 days	Wed 9/19/12	Tue 5/14/13	1
11	USATCES review	28 days	Tue 5/14/13	Mon 6/10/13	10
12	DDESB Review and approval of ESS	7 days	Mon 6/10/13	Mon 6/17/13	11
13	Ohio EPA review of ESS	45 days	Fri 6/14/13	Sat 7/27/13	11
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28	Mobilization, Pad installation and TCS set up	12 days	Mon 7/1/13	Fri 7/12/13	12,26
29	TCS operations for Rocket Ridge MDEH items (ECMs 7-C-2 and 7-C-)	55 days	Mon 7/22/13	Fri 9/13/13	28
30	Explosvive venting of Rocket Ridge MDEH (ECM 7-C-4)	18 days	Mon 7/22/13	Thu 8/8/13	28
31	Post demolition soil and water sampling sampling	1 day	Thu 9/5/13	Thu 9/5/13	
32	Laboratory analysis	30 days	Fri 9/6/13	Fri 10/4/13	31
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45	Develop Final Report	15 days	Tue 2/18/14	Tue 3/4/14	44
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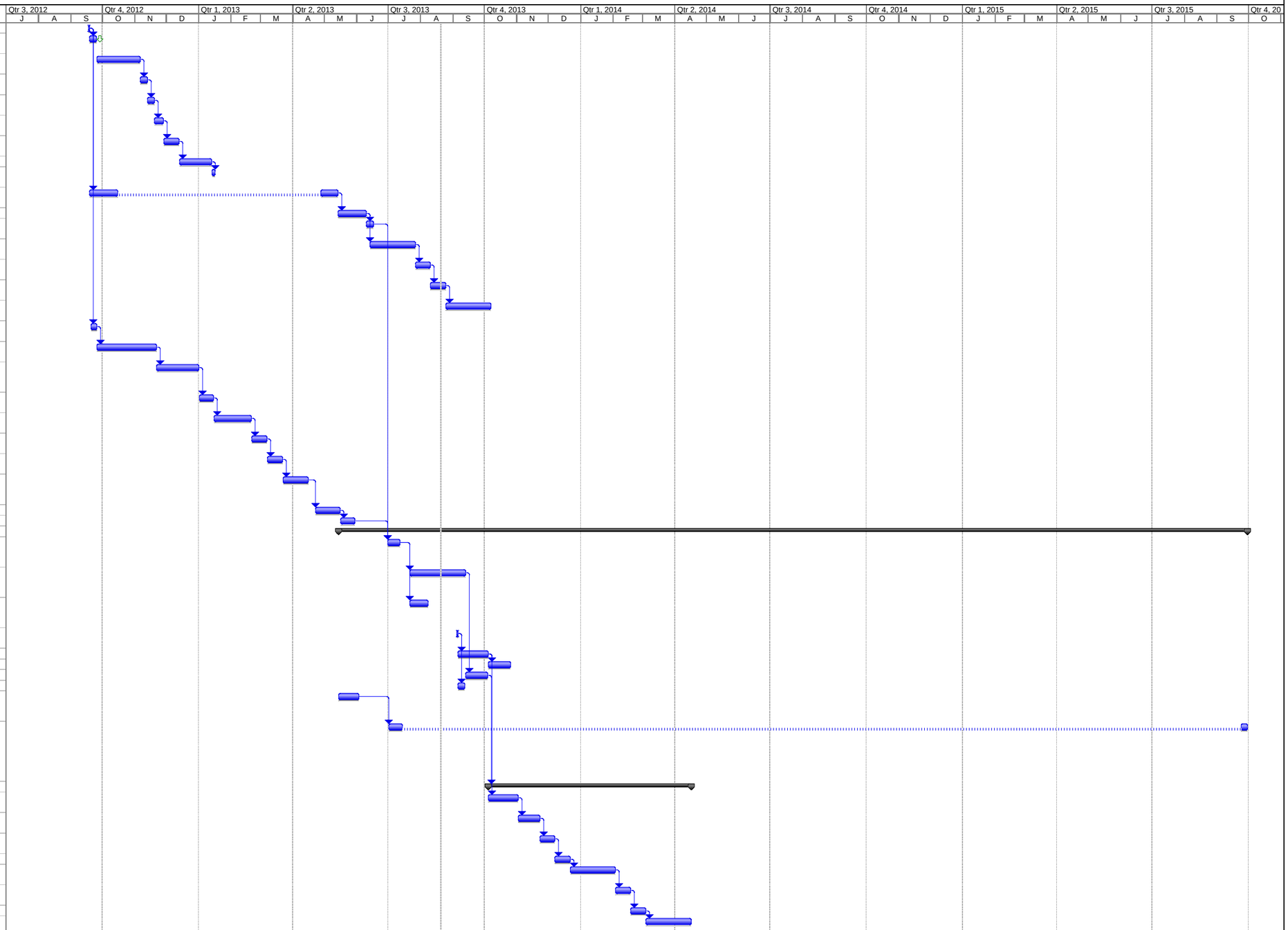

RVAAP Environ. Remed. Services
Date: Tue 8/20/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	10
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	8-19-13 to 8-22-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services			

Summary of Activities

- Continued inspection of MPPEH items for processing.
- Continued TCS operations for items stored in ECM 7-C-3 and 7-C-2.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- Path forward for post flood event repairs to the stream channel and slope being evaluated by USACE Louisville District.
- Path forward is also being evaluated for the most recent MD and MPPEH items that were discovered by PIKA UXO constructions support personnel during the stream monitoring operations.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Second of the Bi-annual IBI and QHEI stream monitoring events	-	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	-	100%
Mobilization of personnel, Equipment, and supplies		100%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	-	0%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	13%	13%
Dispose of Rocket Ridge and Legacy MPPEH in ECM 7-C-3	10%	37%

Dispose of Rocket Ridge and Legacy MEC in ECM 7-C-4	-	100%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].

If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:

A thin dirt layer on many of the items from 7-C-3 have resulted in need to extend run time for each batch in order to achieve target temperature. The loads of material to be processed will be spread across additional bins per each batch being run to enhance the heat transfer and reduce the run times.

Schedule for Next Week

- Continue TCS operations.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

SUXOS	Lew Kovarik	UXOSO/QC	Cameron Wenzel
Project Manager	Brian Stockwell		

PHOTO LOG



Off-loading drums from 7-C-2 for processing material through TCS.



Drums staged within secondary containment for transferring contents into the process bins.



Loading bins into TCS for processing.



Pictures showing completed load of material from 7-C-2 (i.e., M19 tail assemblies).



Picture showing completed load of fuzes from 7-C-3.



Picture showing completed load of primers from 7-C-3.



Pictures showing processed items (MDAS for scrap recycling) inside lockable roll off container.

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors
1	Contract Award	1 day	Tue 9/18/12	Tue 9/18/12	
2	Submit pre-draft PMP	7 days	Wed 9/19/12	Tue 9/25/12	1
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7	Draft PMP comment response	15 days	Thu 11/29/12	Thu 12/13/12	6
8	Develop Final PMP	32 days	Fri 12/14/12	Sun 1/13/13	7
9	Stake holder review of Final PMP	3 days	Mon 1/14/13	Wed 1/16/13	8
10	Prepare and submit Final ESS	45 days	Wed 9/19/12	Tue 5/14/13	1
11	USATCES review	28 days	Tue 5/14/13	Mon 6/10/13	10
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25	Prepare Revised Final	24 days	Tue 4/23/13	Thu 5/16/13	24
26	Revised Final Stakeholder revie	14 days	Fri 5/17/13	Thu 5/30/13	25
27	**Begin Field Work**	**899.38 days**	**Wed 5/15/13**	**Wed 9/30/15**	
28	Mobilization, Pad installation and TCS set up	12 days	Mon 7/1/13	Fri 7/12/13	12,26
29	TCS operations for Rocket Ridge MDEH items (ECMs 7-C-2 and 7-C-3)	55 days	Mon 7/22/13	Fri 9/13/13	28
30	Explosvive venting of Rocket Ridge MDEH (ECM 7-C-4)	18 days	Mon 7/22/13	Thu 8/8/13	28
31	Post demolition soil and water sampling sampling	1 day	Thu 9/5/13	Thu 9/5/13	
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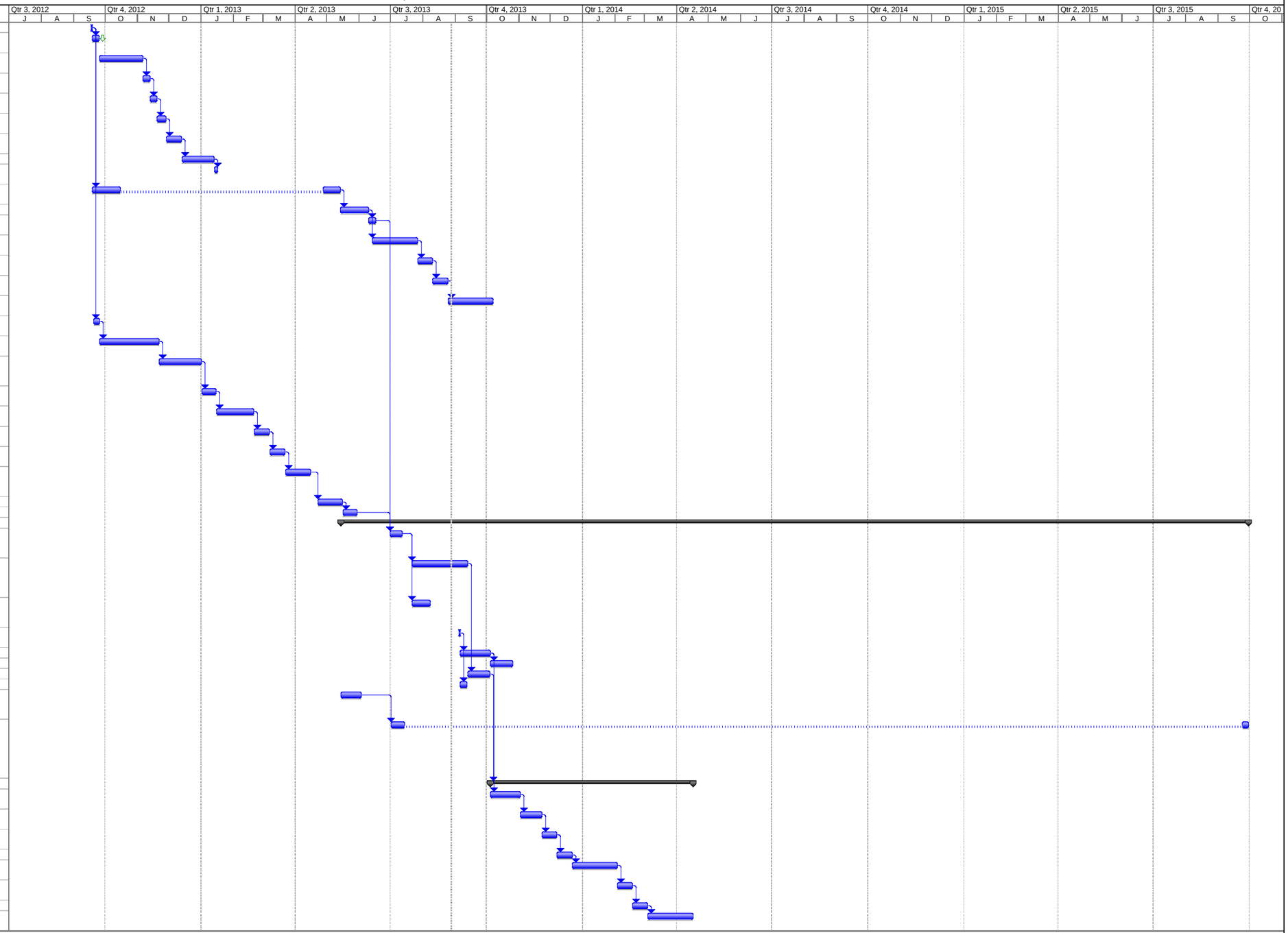
45	Develop Final Report	15 days	Tue 2/18/14	Tue 3/4/14	44
46	Stakeholder review of Final Report	45 days	Tue 3/4/14	Wed 4/16/14	45



RVAAP Environ. Remed. Services
Date: Wed 8/28/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	11
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	8-25-13 to 8-28-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services			

Summary of Activities

- Continued inspection of MPPEH items for processing.
- Continued TCS operations for items stored in ECM 7-C-3.
- Collected waste characterization sample for the 2 drums of PPE staged at 7-C-2.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- Path forward for post flood event repairs to the stream channel and slope being evaluated by USACE Louisville District.
- Path forward is also being evaluated for the most recent MD and MPPEH items that were discovered by PIKA UXO constructions support personnel during the stream monitoring operations.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Second of the Bi-annual IBI and QHEI stream monitoring events	-	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	-	100%
Mobilization of personnel, equipment, and supplies		100%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	-	13%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	10%	10%
Dispose of Rocket Ridge and Legacy MPPEH in ECM 7-C-3	50%	87%

Dispose of Rocket Ridge and Legacy MEC in ECM 7-C-4	-	100%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].

If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:
None

Schedule for Next Week

- Continue TCS operations.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

SUXOS	Lew Kovarik	UXOSO/QC	Cameron Wenzel
Project Manager	Brian Stockwell		

PHOTO LOG



Picture showing material from ECM 7-C-3 loaded into bin for processing.



Loading bin of material into TCS for processing.





Unloading processed material (MDAS for scrap recycling) into lockable roll off.

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors
1	Contract Award	1 day	Tue 9/18/12	Tue 9/18/12	
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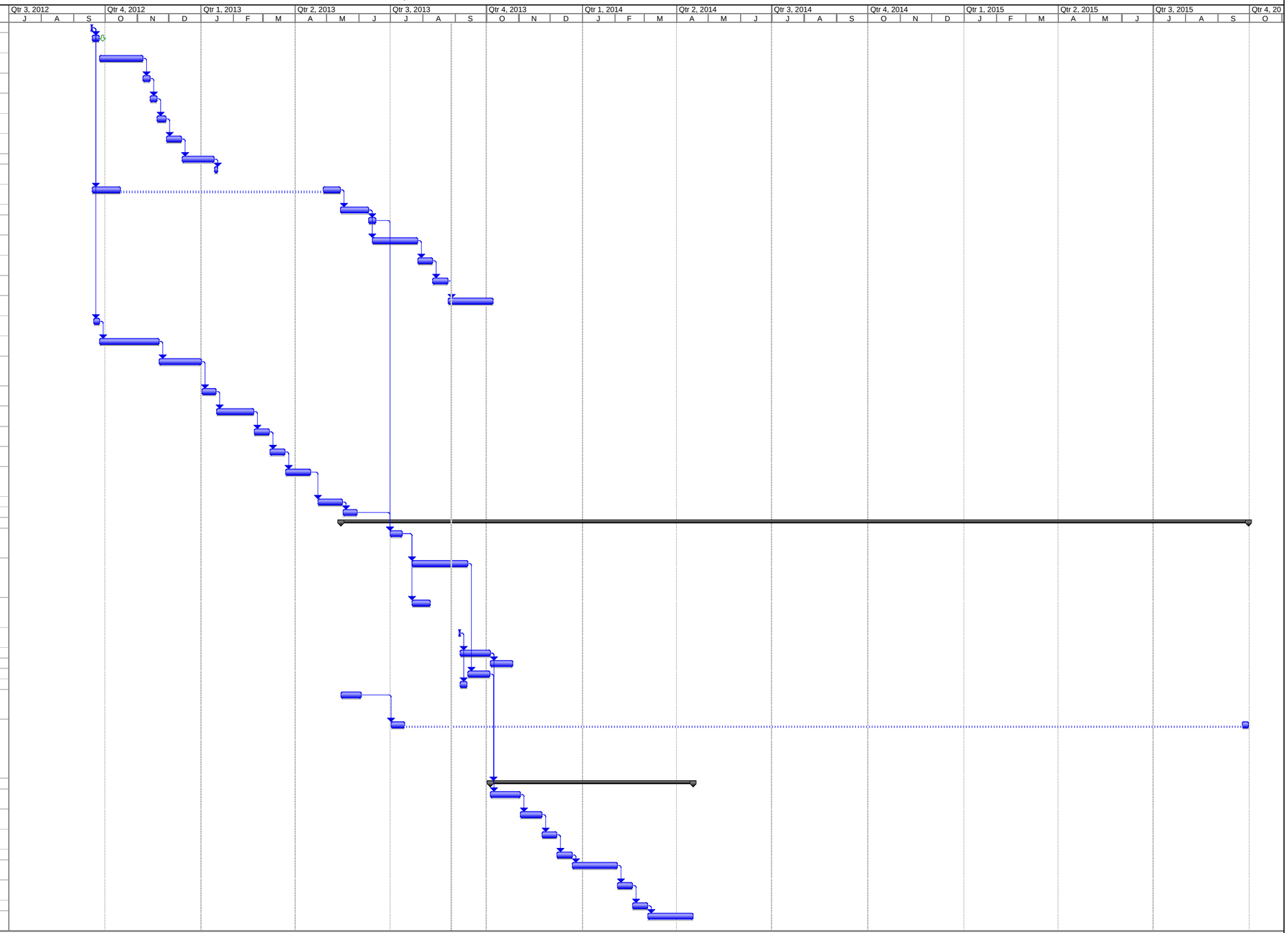
27	**Begin Field Work**	**899.38 days**	**Wed 5/15/13**	**Wed 9/30/15**	
28	Mobilization, Pad installation and TCS set up	12 days	Mon 7/1/13	Fri 7/12/13	12,26
29	TCS operations for Rocket Ridge MDEH items (ECMs 7-C-2 and 7-C-3)	55 days	Mon 7/22/13	Fri 9/13/13	28
30	Explosvive venting of Rocket Ridge MDEH (ECM 7-C-4)	18 days	Mon 7/22/13	Thu 8/8/13	28
31	Post demolition soil and water sampling sampling	1 day	Thu 9/5/13	Thu 9/5/13	
32	Laboratory analysis	30 days	Fri 9/6/13	Fri 10/4/13	31
33	Data Valadation	22 days	Sat 10/5/13	Sat 10/26/13	32
34	Disposal of IDW	22 days	Fri 9/13/13	Fri 10/4/13	29
35	Site Restoration	7 days	Fri 9/6/13	Thu 9/12/13	31
36	Reconstruction and Stabilization of Stream Banks	20 days	Wed 5/15/13	Mon 6/3/13	
37	Annual water and biotic testing to be conducted each June and August through 2015 (i.e., 3 years of annual monitoring)	20 days	Tue 7/2/13	Wed 9/30/15	36
38	**Investigation Report**	**201 days**	**Sat 10/5/13**	**Wed 4/16/14**	**34**
39	Prepare and Submit Predraft Report	30 days	Sat 10/5/13	Sat 11/2/13	32
40	Army review of Pre-draft report	21 days	Sat 11/2/13	Sat 11/23/13	39
41	Pre-draft report comment response	15 days	Sat 11/23/13	Sat 12/7/13	40
42	Develop Draft report	15 days	Sat 12/7/13	Sun 12/22/13	41
43	Stakeholder review of Draft report	45 days	Sun 12/22/13	Mon 2/3/14	42
44	Draft report comment response	15 days	Mon 2/3/14	Mon 2/17/14	43
45	Develop Final Report	15 days	Tue 2/18/14	Tue 3/4/14	44
46	Stakeholder review of Final Report	45 days	Tue 3/4/14	Wed 4/16/14	45



RVAAP Environ. Remed. Services
Date: Wed 8/28/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	12
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	9-4-13 to 9-6-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services			

Summary of Activities

- Continued inspection of MPPEH items for processing.
- Completed TCS operations for items stored in ECM 7-C-3.
- Continued TCS operations for items stored in ECM 7-C-2.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- Path forward for post flood event repairs to the stream channel and slope being evaluated by USACE Louisville District.
- Path forward is also being evaluated for the most recent MD and MPPEH items that were discovered by PIKA UXO constructions support personnel during the stream monitoring operations.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Second of the Bi-annual IBI and QHEI stream monitoring events	-	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	-	100%
Mobilization of personnel, equipment, and supplies		100%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	30%	33%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	-	10%
Dispose of Rocket Ridge and Legacy MPPEH in ECM 7-C-3	13%	100%

Dispose of Rocket Ridge and Legacy MEC in ECM 7-C-4	-	100%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].

If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:
None

Schedule for Next Week

- Continue TCS operations for items stored in ECM 7-C-2.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

SUXOS	Lew Kovarik	UXOSO/QC	Cameron Wenzel
Project Manager	Brian Stockwell		

PHOTO LOG





Pictures showing last bins of material from ECM 7-C-3 to be processed.



Loading bins of material into TCS for processing.





Transferring drum content (from ECM 7-C-2) into bins for processing.



Picture showing bin of material from 7-C-2 prior to processing.



Picture showing bin of material from 7-C-2 after being processed in TCS.



Picture showing processed material from ECMs 7-C-3 and 7-C-2 (MDAS for scrap recycling) secured in lockable roll off.

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors
1	Contract Award	1 day	Tue 9/18/12	Tue 9/18/12	
2	Submit pre-draft PMP	7 days	Wed 9/19/12	Tue 9/25/12	1
3	Army Review of pre- draft PMP	43 days	Wed 9/26/12	Tue 11/6/12	
4	Pre-Draft PMP comment response	7 days	Tue 11/6/12	Tue 11/13/12	3
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7	Draft PMP comment response	15 days	Thu 11/29/12	Thu 12/13/12	6
8	Develop Final PMP	32 days	Fri 12/14/12	Sun 1/13/13	7
9	Stake holder review of Final PMP	3 days	Mon 1/14/13	Wed 1/16/13	8
10	Prepare and submit Final ESS	45 days	Wed 9/19/12	Tue 5/14/13	1
11	USATCES review	28 days	Tue 5/14/13	Mon 6/10/13	10
12	DDESB Review and approval of ESS	7 days	Mon 6/10/13	Mon 6/17/13	11
13	Ohio EPA review of ESS	45 days	Fri 6/14/13	Sat 7/27/13	11
14	Draft comment clarification (if requied)	15 days	Sat 7/27/13	Sat 8/10/13	13
15	Develop revised ESS (if required)	15 days	Sat 8/10/13	Sun 8/25/13	14
16	Ohio EPA review of revised ESS	45 days	Sun 8/25/13	Mon 10/7/13	15
17	Submit Pre-draft WP, SSHP SAP, and QAAP	6 days	Thu 9/20/12	Tue 9/25/12	1
18	Army review of Pre-draft WP, SSHP, SAP and QAPP	59 days	Wed 9/26/12	Wed 11/21/12	17
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44	Draft report comment response	15 days	Sat 2/15/14	Sun 3/2/14	43
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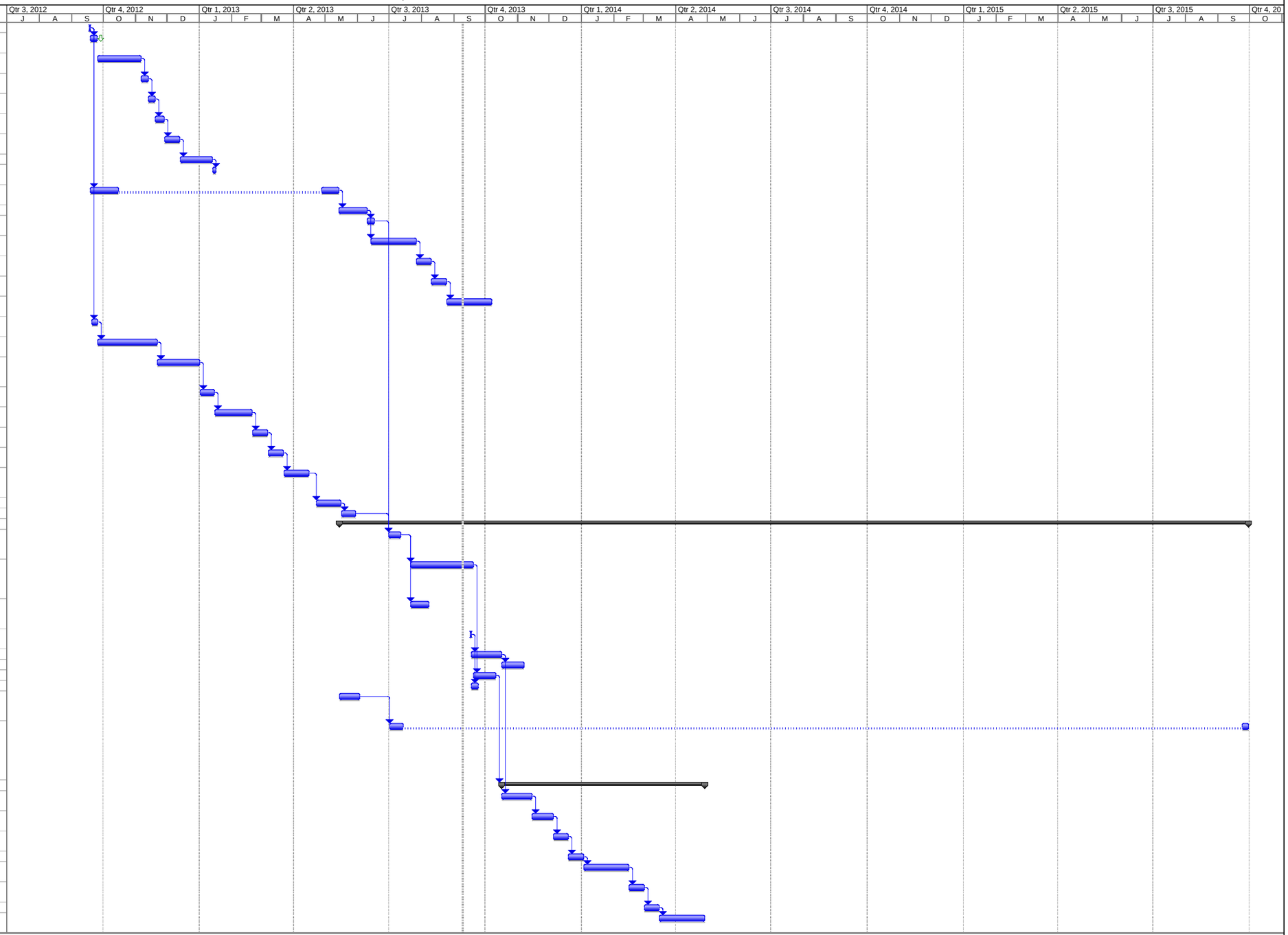

RVAAP Environ. Remed. Services
Date: Mon 9/9/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	13
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	9-9-13 to 9-12-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services			

Summary of Activities

- Continued inspection of MPPEH items for processing.
- Completed TCS operations for items stored in ECM 7-C-3.
- Continued TCS operations for items stored in ECM 7-C-2.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- Path forward for post flood event repairs to the stream channel and slope being evaluated by USACE Louisville District.
- Path forward is also being evaluated for the most recent MD and MPPEH items that were discovered by PIKA UXO constructions support personnel during the stream monitoring operations.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Second of the Bi-annual IBI and QHEI stream monitoring events	-	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	-	100%
Mobilization of personnel, equipment, and supplies		100%
Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	50%	73%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	10%	20%
Dispose of Rocket Ridge and Legacy MPPEH in ECM 7-C-3	-	100%

Dispose of Rocket Ridge and Legacy MEC in ECM 7-C-4	-	100%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].
If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:
None

Schedule for Next Week

- Complete TCS operations for items stored in ECM 7-C-2.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

SUXOS	Lew Kovarik	UXOSO/QC	Cameron Wenzel
Project Manager	Brian Stockwell		

PHOTO LOG





Unloading drummed material from ECM 7-C-2 into TCS processing bins.



Picture showing full bin of material from ECM 7-C-2.



Picture showing completed bin of material from ECM 7-C-2.



Emptying completed bin into lockable roll off for scrap recycling.



Picture showing processed material from 7-C-2 (MDAS for scrap recycling) secured in lockable roll off.

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

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25	Prepare Revised Final	24 days	Tue 4/23/13	Thu 5/16/13	24
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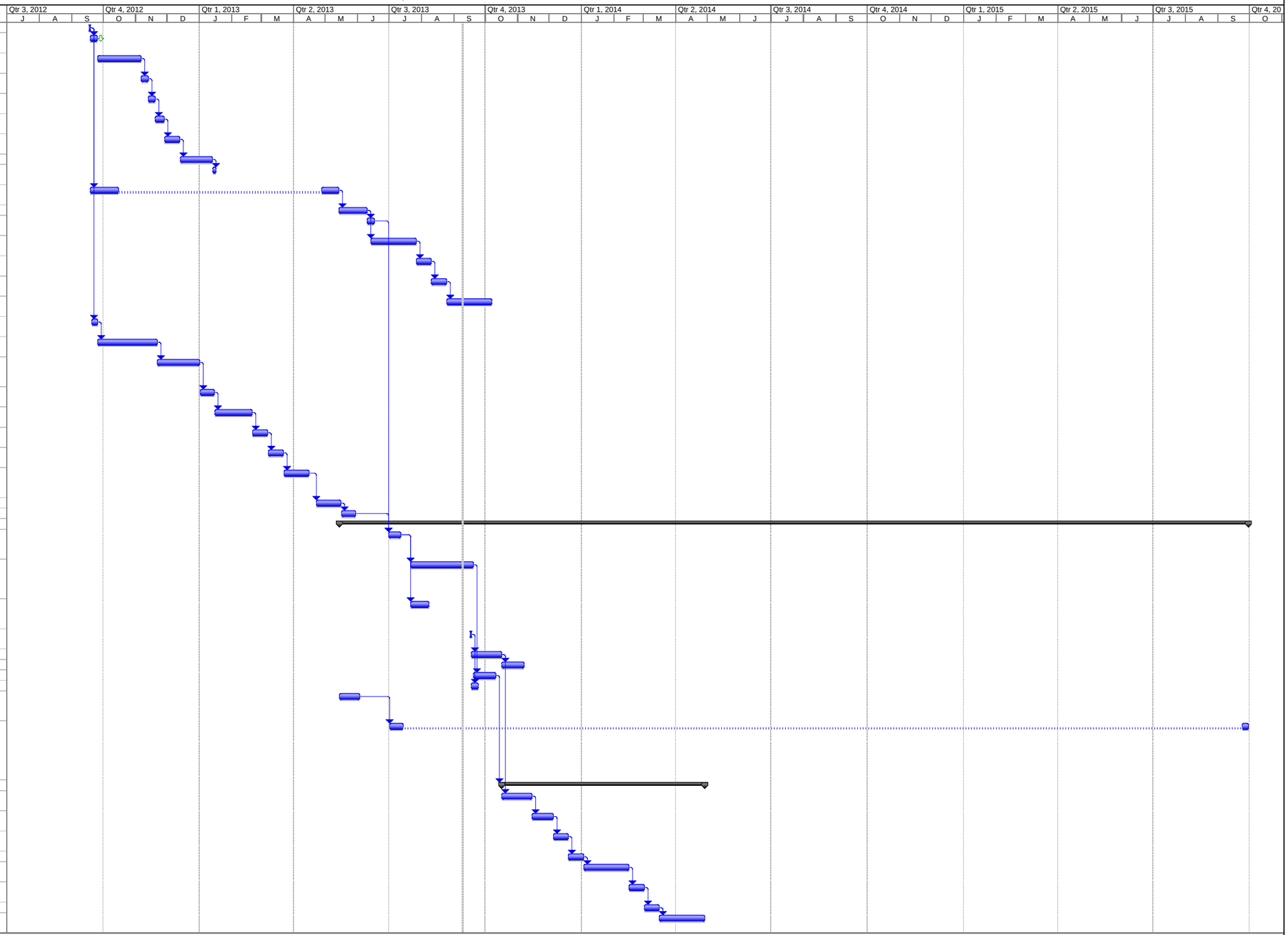

RVAAP Environ. Remed. Services
Date: Mon 9/9/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	14
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	9-16-13 to 9-20-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services			

Summary of Activities

- Completed TCS operations for items stored in ECM 7-C-2.
- Completed demolition of the additional MEC items identified at the stream diversion channel during the August 2013 bi-annual stream monitoring operations.
- Processed (TCS flashing) the additional munitions debris items identified at the stream diversion channel during the August 2013 bi-annual stream monitoring operations.
- Profile for disposal PPE drums staged in ECM 7-C-2 in process.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- Path forward for post flood event repairs to the stream channel and slope being evaluated by USACE Louisville District.
- A site visit was conducted by RVAAP FM and Ohio EPA representative Eileen Mohr on September 18, 2013. During site visit PIKA inquired about the post operational sampling task for under the TCS gravel pad. Both the RVAAP FM and Ohio EPA concurred (based on visual examination today) that since no spills occurred during the TCS operations, the post operations soil samples associated with the TCS pad can be collected immediately adjacent to the pad (i.e., instead of directly beneath the pad). This approach will eliminate undue damage to the pad from collecting geoprobe samples through the pad.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Second of the Bi-annual IBI and QHEI stream monitoring events	-	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	-	100%
Mobilization of personnel, equipment, and supplies		100%

Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	27%	100%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	20%	40%
Dispose of Rocket Ridge and Legacy MPPEH in ECM 7-C-3	-	100%
Dispose of Rocket Ridge and Legacy MEC in ECM 7-C-4	-	100%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].

If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution:
None

Schedule for Next Week

- Collect post operations surface soil sample at TCS pad.
- Collect post demolition surface soil samples.
- Repair Rocket Ridge extension road.
- Demobilize TCS unit and associated equipment.
- Re-grade, seed, and straw disturbed areas.
- Conduct site close out with RVAAP.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

SUXOS	Lew Kovarik	UXOSO/QC	Cameron Wenzel
Project Manager	Brian Stockwell		

PHOTO LOG



Loading final bins of material from ECM 7-C-2.



Picture showing additional munitions debris items from stream diversion area being processed with material from ECM 7-C-2.





Picture showing processed material from 7-C-2 (MDAS for scrap recycling) secured in lockable roll off for transport to smelter.



Picture showing additional MEC items rigged for demolition.



Conducting post demolition recovery and inspection of resultant fragments for scrap recycling.

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

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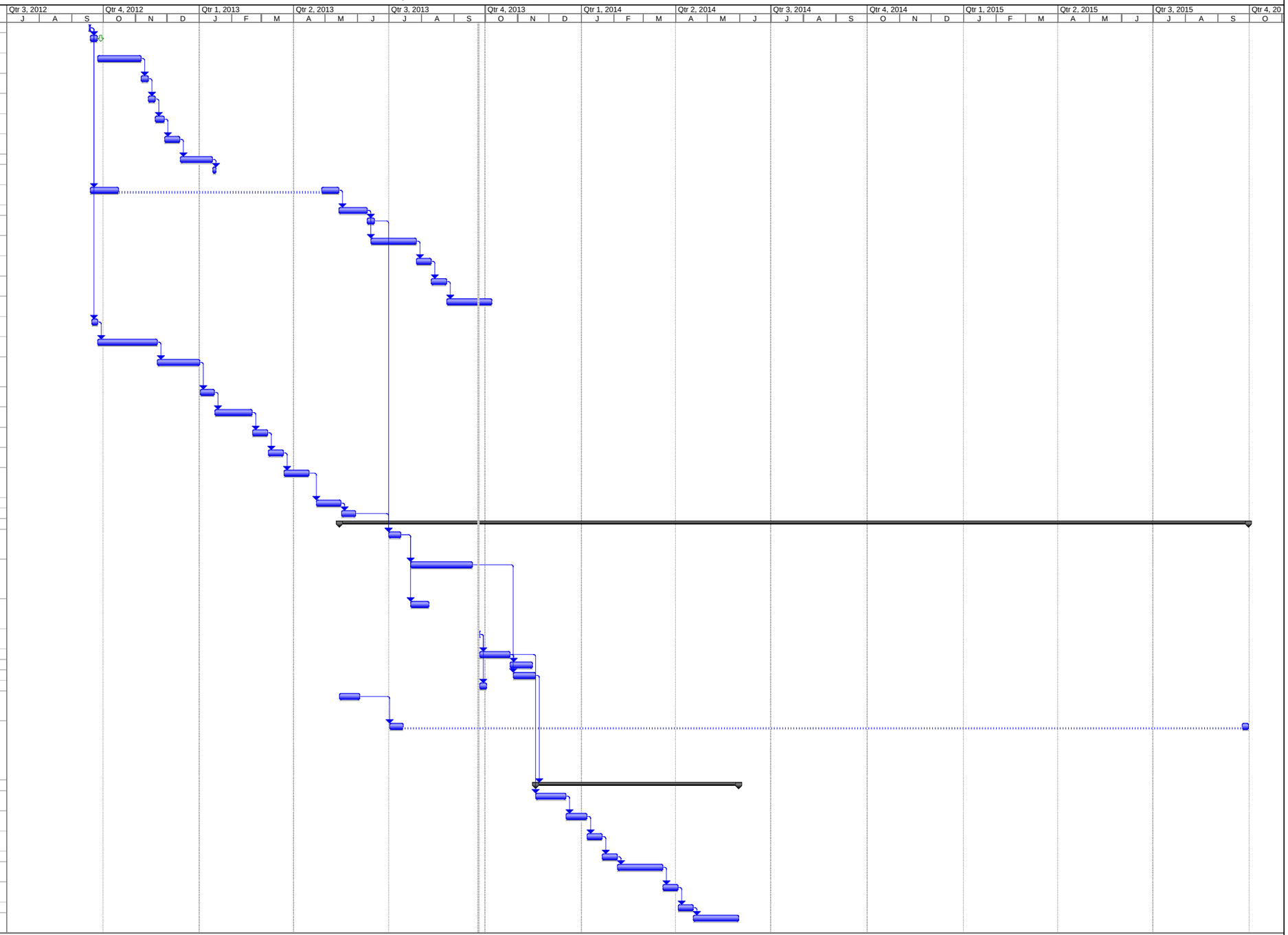
37	Annual water and biotic testing to be conducted each June and August through 2015 (i.e., 3 years of annual monitoring)	20 days	Tue 7/2/13	Wed 9/30/15	36
38	**Investigation Report**	**201 days**	**Mon 11/18/13**	**Sat 5/31/14**	34
39	Prepare and Submit Predraft Report	30 days	Mon 11/18/13	Tue 12/17/13	32
40	Army review of Pre-draft report	21 days	Tue 12/17/13	Mon 1/6/14	39
41	Pre-draft report comment response	15 days	Mon 1/6/14	Mon 1/20/14	40
42	Develop Draft report	15 days	Tue 1/21/14	Tue 2/4/14	41
43	Stakeholder review of Draft report	45 days	Tue 2/4/14	Wed 3/19/14	42
44	Draft report comment response	15 days	Thu 3/20/14	Thu 4/3/14	43
45	Develop Final Report	15 days	Thu 4/3/14	Thu 4/17/14	44
46	Stakeholder review of Final Report	45 days	Fri 4/18/14	Sat 5/31/14	45



RVAAP Environ. Remed. Services
Date: Tue 9/24/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

WEEKLY REPORT

Prime Contracts No:	W912QR-10-P-0033 and W912QR-10-C-0060		**Report No.**	15
PIKA Projects #:	10-08-112 and 12-08-151		**Date:**	9-23-13 to 9-26-13
Project:	Rocket Ridge TCRA and RVAAP Environmental Remediation Services			

Summary of Activities

- Completed repairs along ODA2 access road and the Rocket Ridge extension road.
- Completed post demolition soil and surface water sampling.
- Completed post operation soil sampling adjacent to the TCS pad.
- Demobilized all personnel and equipment (accept site trailer being demobilized next week).
- Completed site restoration operations.
- Profile for disposal PPE drums staged in ECM 7-C-2 in process.

Others:

- Conducted daily safety briefings.

Remarks (include directions received from client's representative or regulators, visitors, compliance notices received, pertinent information)

- Path forward for post flood event repairs (if needed) to the stream channel and slope being evaluated by USACE Louisville District.
- A site visit was conducted by RVAAP and Ohio EPA representatives on September 25, 2013. The site visit was for close out of the project site and included inspection of the areas requiring site restoration, the repairs along ODA2 access road and the Rocket Ridge Extension Road, and to verify that all related equipment and materials are being removed. No issues were identified. During the site visit it was clarified that the waste profile for the 2 PPE drums is in process and will be submitted for signatures next week. The drums are non-hazardous as determined through the waste characterization sampling and are labeled and staged accordingly in ECM 7-C-2. Transportation and disposal of the drums will be coordinated immediately upon completion/signature of the waste profile.

Work Completed:

	This Week	Cumulative to-date
Re-grade top of slope and reconstruct and stabilize the stream banks at the Rocket Ridge Area of Sand Creek.	-	100%
Initial IBI and QHEI stream monitoring event.	-	100%
Second of the Bi-annual IBI and QHEI stream monitoring events	-	100%
Installation of TCS Pad.	-	100%
Delivery and set up of TCS and site setup.	-	100%
Mobilization of personnel, equipment, and supplies		100%

Dispose of Rocket Ridge MPPEH in ECM 7-C-2.	-	100%
Dispose of (off-site) two (2) drums of PPE staged in ECM 7-C-2	10%	50%
Dispose of Rocket Ridge and Legacy MPPEH in ECM 7-C-3	-	100%
Dispose of Rocket Ridge and Legacy MEC in ECM 7-C-4	-	100%

Health and Safety-

Conducted health and safety meetings and task order meetings every morning, prior to commencement of daily activities.

Were there any lost time accidents this week? No [x] Yes [ ].

If "yes", refer attached summary of incident or OSHA report.

Quality Control

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Weekly Health and Safety inspection	None	None	Not Applicable

Problems and Resolution: None

Schedule for Next Week

- Demobilize site trailer.
- Process waste profile for PPE drums.

Refer attached **Schedule** for percentage of work completed and projected completion dates.

SUXOS	Lew Kovarik	UXOSO/QC	Cameron Wenzel
Project Manager	Brian Stockwell		

PHOTO LOG





Collecting post demolition soil and surface water samples.





Conducting access road repairs.



Picture showing access road repairs complete.

Schedule

Project Schedule
Environmental Remediation Services
Ravenna Army Ammunition Plant, Ravenna, Ohio

ID	Task Name	Duration	Start	Finish	Predecessors
1	Contract Award	1 day	Tue 9/18/12	Tue 9/18/12	
2	Submit pre-draft PMP	7 days	Wed 9/19/12	Tue 9/25/12	1
3	Army Review of pre- draft PMP	43 days	Wed 9/26/12	Tue 11/6/12	
4	Pre-Draft PMP comment response	7 days	Tue 11/6/12	Tue 11/13/12	3
5	Develop Draft PMP	7 days	Tue 11/13/12	Mon 11/19/12	4
6	Stakeholder review of Draft PMP	9 days	Tue 11/20/12	Wed 11/28/12	5
7	Draft PMP comment response	15 days	Thu 11/29/12	Thu 12/13/12	6
8	Develop Final PMP	32 days	Fri 12/14/12	Sun 1/13/13	7
9	Stake holder review of Final PMP	3 days	Mon 1/14/13	Wed 1/16/13	8
10	Prepare and submit Final ESS	45 days	Wed 9/19/12	Tue 5/14/13	1
11	USATCES review	28 days	Tue 5/14/13	Mon 6/10/13	10
12	DDESB Review and approval of ESS	7 days	Mon 6/10/13	Mon 6/17/13	11
13	Ohio EPA review of ESS	45 days	Fri 6/14/13	Sat 7/27/13	11
14	Draft comment clarification (if requied)	15 days	Sat 7/27/13	Sat 8/10/13	13
15	Develop revised ESS (if required)	15 days	Sat 8/10/13	Sun 8/25/13	14
16	Ohio EPA review of revised ESS	45 days	Sun 8/25/13	Mon 10/7/13	15
17	Submit Pre-draft WP, SSHP SAP, and QAAP	6 days	Thu 9/20/12	Tue 9/25/12	1
18	Army review of Pre-draft WP, SSHP, SAP and QAPP	59 days	Wed 9/26/12	Wed 11/21/12	17
19	Pre-draft WP, SSHP, SAP and QAPP comment response	42 days	Thu 11/22/12	Tue 1/1/13	18
20	Develop Draft WP,SSHP, SAP, and QAPP	14 days	Wed 1/2/13	Tue 1/15/13	19
21	Stakeholder review of Draft WP,SSHP, SAP, and QAPP	37 days	Wed 1/16/13	Wed 2/20/13	20
22	DraftWP, SSHP, SAP, And QAPP comment reponse	15 days	Thu 2/21/13	Thu 3/7/13	21
23	Develop Final WP, SSHP, SAP, and QAPP	15 days	Fri 3/8/13	Fri 3/22/13	22
24	Stakeholder review of Final WP,SSHP, SAP, and QAPP	25 days	Sat 3/23/13	Mon 4/15/13	23
25	Prepare Revised Final	24 days	Tue 4/23/13	Thu 5/16/13	24
26	Revised Final Stakeholder revie	14 days	Fri 5/17/13	Thu 5/30/13	25
27	**Begin Field Work**	**899.38 days**	**Wed 5/15/13**	**Wed 9/30/15**	
28	Mobilization, Pad installation and TCS set up	12 days	Mon 7/1/13	Fri 7/12/13	12,26
29	TCS operations for Rocket Ridge MDEH items (ECMs 7-C-2 and 7-C-3)	61 days	Mon 7/22/13	Wed 9/18/13	28
30	Explosvive venting of Rocket Ridge MDEH (ECM 7-C-4)	18 days	Mon 7/22/13	Thu 8/8/13	28
31	Post demolition soil and water sampling sampling	1 day	Wed 9/25/13	Wed 9/25/13	
32	Laboratory analysis	30 days	Thu 9/26/13	Thu 10/24/13	31
33	Data Valadation	22 days	Fri 10/25/13	Fri 11/15/13	32
34	Disposal of IDW	22 days	Mon 10/28/13	Mon 11/18/13	29
35	Site Restoration	7 days	Thu 9/26/13	Wed 10/2/13	31
36	Reconstruction and Stabilization of Stream Banks	20 days	Wed 5/15/13	Mon 6/3/13	
37	Annual water and biotic testing to be conducted each June and August through 2015 (i.e., 3 years of annual monitoring)	20 days	Tue 7/2/13	Wed 9/30/15	36
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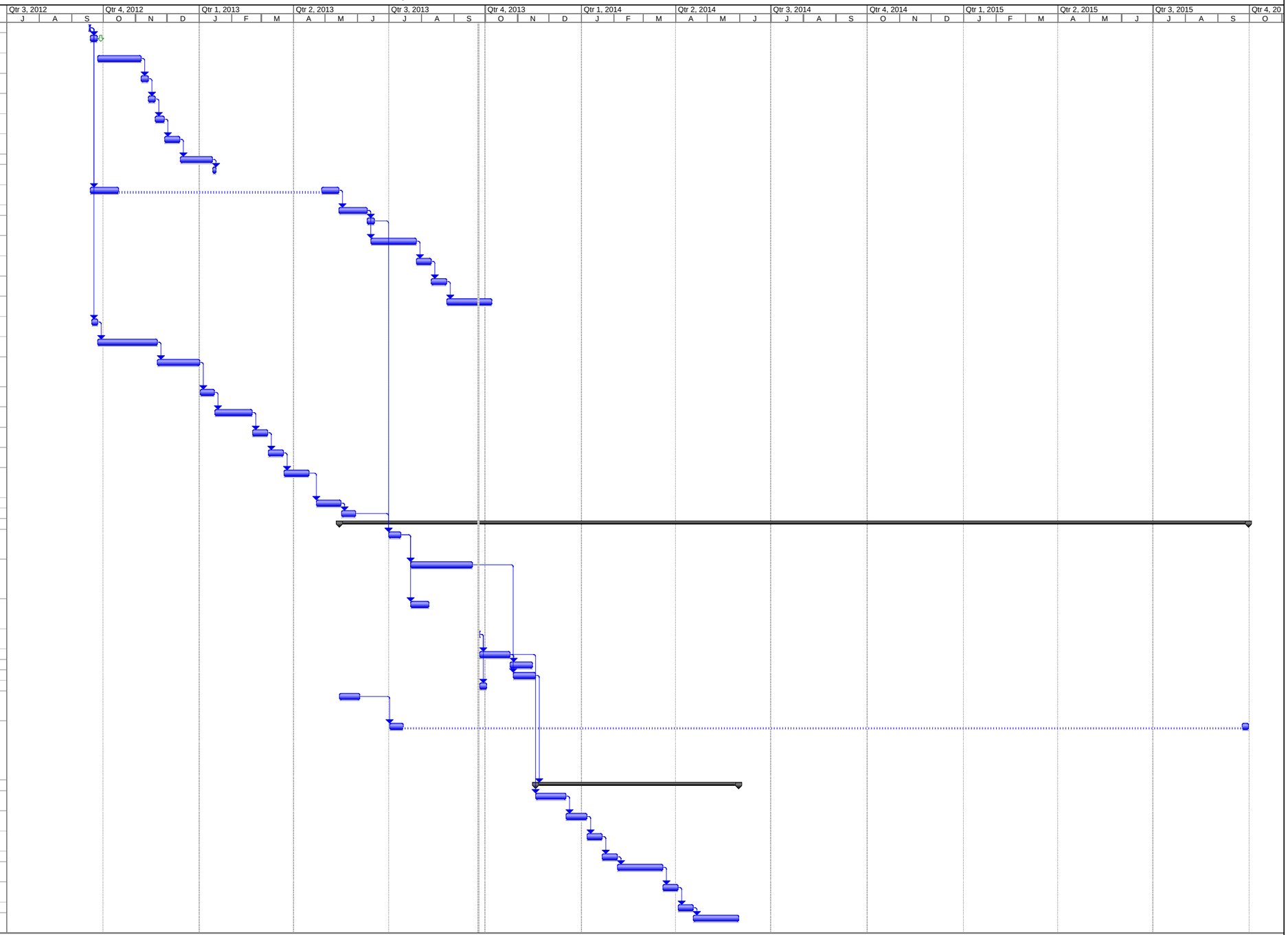

RVAAP Environ. Remed. Services
Date: Tue 9/24/13

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

Appendix D

Ohio EPA Demolition Notification and TFR

PIKA INTERNATIONAL, INC.

RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO
MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)
DEMOLITION/DISPOSAL NOTIFICATION

Date: September 18, 2013

Contractor: PIKA international, Inc. 12723 Capricorn Drive, Suite 500 Stafford, TX 77477
Location: Ravenna Army Ammunition Plant, Ravenna, OH
Project Name: RVAAP Environmental Remediation Services

POINT OF CONTACT:

Mark Patterson - RVAAP Facility Manager
Phone (330) 358-7312
Fax (330) 358-7314

Brian Stockwell – PIKA International, Inc. Project Manager
Phone (330) 296-6519
Fax (330) 296-6638

Lew Kovarik - PIKA Senior UXO Supervisor (SUXOS)
Phone (330) 296-6519
Fax (330) 296-6638

MEC SPECIFIC INFORMATION:

Location MEC was Discovered: RVAAP Rocket Ridge Area Stream Diversion Channel.

Name of Person who discovered the MEC: Lew Kovarik – PIKA International, Inc. SUXOS

Date and Time MEC was discovered: August 13, 2013. 10:00 AM

Description of MEC to be blown:

One 105mm M1 Projectile, with M51 Fuze
One 60mm M49, HE with M52 Fuze
One 3 inch HE Projectile, M52 Fuze

PROPOSED DESTRUCTION LOCATION:

RVAAP Open Detonation Area 2 (ODA2).

PROPOSED DATE OF DEMOLITION:

September 19, 2013

PIKA INTERNATIONAL, INC.

RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO
MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)
DEMOLITION/DISPOSAL NOTIFICATION

PROPOSED METHOD OF DESTRUCTION:

Demolition/disposal of the MEC items will be performed using 80 and 100 grain detonation cord, C4 demolition explosives and 21 grain perforators. The demolition/disposal operations will be conducted in accordance with Technical Manual (TM) 60A-1-1-31, USACE EM 385-1-97, Explosives Safety and Health Requirement Manual, the approved Project Work Plan For Environmental Remediation Services at Ravenna, Army Ammunition Plant (RVAAP) dated March 22,2013, Department of Defense Explosive Safety Board (DDESB) approved Explosives Safety Submission (ESS) dated May 2013, the December 2011 RVAAP Installation Spill Contingency Plan and the PIKA MEC Demolition Standard Operating Procedure (SOP).

PROPOSED METHODS TO MITIGATE/ABATE POTENTIAL CONTAMINATION:

In accordance with the Ohio EPA MEC demolition requirements, PIKA will collect surface water samples from the adjacent creek (Sand Creek) prior to the start of work and weekly thereafter for the duration of the field work. The sampling is required to verify that the demolition operations do not migrate contaminants off the ODA2 site. The surface water samples will be collected from the previously approved upstream, adjacent and downstream locations that have been established for the ODA2 range operations. Additionally, surface soil samples will be collected at the ODA2 site prior to and following the site operations to check for potential impact as a result of demolition operations. All samples will analyzed for explosives, TAL metals, and propellants. During the MEC demolition operations the ODA2 site will be inspected on a weekly basis in accordance with the parameters set forth in Appendix 2 (RCRA Inspection Requirements for Hazardous Waste - Open Detonation) of the December 2011 RVAAP Installation Spill Contingency Plan. The total quantity to be destroyed at any one time will not exceed the range limit of 25 lbs. After each detonation, the resultant scrap metal, casings, fragments and related items will be recovered from the demolition range, inspected for absence of explosives and certified by the SUXOS and the Quality Control Specialist (QCS) and placed in a lockable roll off box for disposal as scrap metal.

Upon completion, disturbed areas will be filled in, contoured, and seeded and mulched with an approved RVAAP seed mixture. If clean fill is needed it will be supplied from the Ohio EPA approved off site source (Patrick Excavating).

PREPAREDNESS AND PREVENTION:

- Prior to initiating any demolition work, a minimum 200 foot area around the demolition site will cleared of combustible material such as leaves and dry grass.
- A red warning flag and/or red flashing light will be displayed at the ODA2 entrance gate during demolition operations.
- The ODA2 entrance gate will be guarded and/or locked when demolition work is in process.

PIKA INTERNATIONAL, INC.

RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO
MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)
DEMOLITION/DISPOSAL NOTIFICATION

- Only essential personnel (as determined by the SUXOS) will be permitted within ODA2 during demolition operations.
- No demolition activities will be performed if there is less than a 2,000 for ceiling or if wind velocity is in excess of 20 mph.
- Demolition work will only be performed during daylight hours.
- Detonations will be counted to ensure detonation of all rigged shots.

NOTIFICATIONS TO BE MADE:

Prior to initiation of planned MEC Demolition/Disposal Operations, notifications will be made to the local emergency services and key project personnel listed below:

- Mark Patterson, RVAAP Facility Manager (330) 358-7311
- Glen Beckham – CELRL PM (502) 315-6799
- Shelton Poole – CELRL COR (502) 315-6290
- Katelyn Newton – CELRL Public Affairs Specialist – (502) 315-6773
- Eric Cheng – USACE, Louisville – (502) 315-7443
- OHARNG – Lt. Col. Ed Meade – (614) 336-6560
- Katie Tait – Camp Ravenna Environmental Specialist – (614) 336-6136
- Ohio EPA, NEDO DERR- Eileen Mohr - (Contact to be made by USACE Louisville District and Ohio Army National Guard)
- Ohio Army National Guard Range Control (614) 336-6041
- Air Space and Procedures Office, Cleveland Air Route Traffic Control Center (Notice to Airmen) Scott Ross - (440) 774-0426
- Akron Regional Air Quality Management District, Sean Vadas (330) 375-2402
- RVAAP Caretaker Contractor (VISTA) - (330) 358-3005
- RVAAP Security Dispatcher (Post 1) - (330) 358-2017
- Portage County EMA - Annette Petranic, Interim Director - (330) 297-3607
- Trumbull County EMA - Linda Beil, Director - (330) 675-2666
- Robinson Memorial Hospital (330) 297-0811
- Ravenna City Fire Department (330) 296-5738
- Ravenna Police Department - (330) 297-6486
- Police - Portage County Sheriff Office (330) 296-5100
- Police - Trumbull County Sheriff Office (330) 675-2508
- Ohio State Patrol (330) 297-1441

PIKA INTERNATIONAL, INC.

RAVENNA ARMY AMMUNITION PLANT, RAVENNA, OHIO
MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)
DEMOLITION/DISPOSAL NOTIFICATION

If you have any questions or require any clarification on the above listed information, please call me at 330-296-6519.

Respectfully,



Brian Stockwell
Project Manager
PIKA International, Inc.

cc: Brian Stockwell (PIKA)
Mark Patterson (RVAAP)
Eric Cheng (USACE, Louisville)
Shahrukh Kanga (PIKA)

Ravenna Arsenal TFR Request

Location– Ravenna Army Ammunition Plant Open Demolition Area 2

Reason: Explosive demolition of recovered munitions.

Effective Date/Times: 19 September 2013 (0700 - 1700)

Center Point: 411142N/810533W

Radius/Ceiling: .20 Nautical Mile/3000 feet AGL

PIKA International, Inc Contact info.: Lew Kovarik, 740-632-1143 or Brian Stockwell, 330-352-6955

INFORMATIONAL NOTICE

****

RAVENNA ARMY AMMUNITION PLANT (RVAAP)

July 23, 2013

Ravenna, OH – The US Army Corps of Engineers, Louisville District has contracted PIKA International, Inc. of Stafford, Texas to dispose of various munitions components at the Ravenna Army Ammunition Plant (RVAAP) in accordance with Army Regulations and Environmental Laws. The items were recovered during previous clearance and removal operations at the facility. Following demolition, all resultant fragments will be recycled as scrap metal in accordance with regulatory requirements. The work is expected to begin during the week of July 22, 2013 and completed by September 6, 2013.

If you have any questions concerning the activity, please contact Mark Patterson, RVAAP Facility Manager at (330) 358-7312.

INFORMATIONAL NOTICE

****

RAVENNA ARMY AMMUNITION PLANT (RVAAP)

September 18, 2013

Ravenna, OH – The US Army Corps of Engineers, Louisville District has contracted PIKA International, Inc. of Stafford, Texas to dispose of various munitions components at the Ravenna Army Ammunition Plant (RVAAP) in accordance with Army Regulations and Environmental Laws. The items were recovered during previous clearance and removal operations at the facility. Following demolition, all resultant fragments will be recycled as scrap metal in accordance with regulatory requirements. The work is expected to begin September 18, 2013 and be completed by September 20, 2013.

If you have any questions concerning the activity, please contact Mark Patterson, RVAAP Facility Manager at (330) 358-7312.

Appendix E

E-mail Correspondences

PIKA INTERNATIONAL, INC.

Sue Boles <sboles@pikainc.com>

Fwd: RRA stream restoration site visit

1 message

Brian Stockwell <bstockwell@pikainc.com> Thu, Jan 9, 2014 at 8:26 AM
To: Sue Boles <sboles@pikainc.com>

---------- Forwarded message ----------
From: Brian Stockwell <bstockwell@pikainc.com>
Date: Mon, Jun 17, 2013 at 2:50 PM
Subject: RRA stream restoration site visit
To: Eric Cheng <eric.s.cheng@usace.army.mil>
Cc: "Patterson, Mark C Mr CIV USA OSA" <mark.c.patterson@us.army.mil>, Shahrukh Kanga <skanga@pikainc.com>, Srini Neralla <sneralla@pikainc.com>

Hi Eric - Katie requested that a summary of today's site visit be prepared and forwarded along to her and Tim for their information. Picture log attached for reference:

Attendants: Mark Patterson (RVAAp Facility Manager), Eileen Mohr (Ohio EPA), Ed Wilk (Ohio EPA Division of Surface Water), Ana Burns (Davey), and Brian Stockwell (PIKA).

During the site visit a tentative date 2 July 2013 was scheduled for conducting the first IBI and QHEI stream monitoring event. Angela (VISTA) will be contacting OHARNG Range Control to determine if 2 July is open. PIKA will provide UXO support during the sampling operations. Ohio EPA representatives Eileen Mohr, Ed Wilk and Greg Orr will be on site with Davey during the sampling operations. The second of the bi-annual monitoring events is tentatively scheduled for 13 August 2013 and the final date will be verified during the July sampling event.

During the site walk the following areas were visited for inspection:

-Top of Rocket Ridge Area
-Rocket Ridge slope
-Reconstructed stream channel
-Re-graded Flood plain area
-Former stream channel

Overall the restoration of the creek and flood plain area look good however Ed has just one item that he would like to double check with Greg Orr as follows:

Ed would like to Greg to look at the the high water overflow area at the entrance to the new stream channel l (see photo) to ensure that it is not too high. Ed thinks that perhaps just removing 6-inches or so across the area using shovels would be all that may be needed. Based upon historical knowledge of the creek and experience, Mark Patterson believes that the current elevation is sufficient; however he will defer to Greg. Ed will be providing pictures to Greg for review and will advise ASAP. No other issues were identified.

If you have any questions or require any clarification please let me know.

Thanks,

Brian

--

Regards,

Brian Stockwell
Project Manager
PIKA International, Inc.
Office - 330-296-6519
Cell - 330-352-6955

RRA Stream restorations site vist 6-17-13.pdf
818K



Picture showing top of Rocket Ridge Area.



Picture showing top of slope at Rocket Ridge Area.

JUNE 17, 2013



View of Rocket Ridge slope.



View of flood plain area looking east.

JUNE 17, 2013



View of flood plain area looking northeast.



Picture showing high water overflow area at entrance to new channel.

JUNE 17, 2013



View of stream channel looking east.



View of stream channel looking west.

PIKA INTERNATIONAL, INC.

Sue Boles <sboles@pikainc.com>

Fwd: FW: Sand Creek / Rocket Ridge Area

1 message

Brian Stockwell <bstockwell@pikainc.com> Thu, Jan 9, 2014 at 8:28 AM
To: Sue Boles <sboles@pikainc.com>

---------- Forwarded message ----------
From: Patterson, Mark C Mr CIV USA OSA <mark.c.patterson@us.army.mil>
Date: Mon, Jun 24, 2013 at 3:11 PM
Subject: FW: Sand Creek / Rocket Ridge Area
To: "Cheng, Eric S LRL" <Eric.S.Cheng@usace.army.mil>, Brian Stockwell <bstockwell@pikainc.com>
Cc: "Beckham, Glen LRL" <Glen.Beckham@usace.army.mil>, "Peters, Nathaniel II LRL" <Nathaniel.Peters.II@usace.army.mil>, "Tait, Kathryn S NFG NG OHARNG (US)" <kathryn.s.tait.nfg@mail.mil>, "Merkel, Brett A CIV NG NGB (US)" <brett.a.merkel.civ@mail.mil>

ERIC, Brian,

See Ed Wilk's answer below to the question we needed answered from our onsite inspection of the stream restoration.

Mark Patterson

RVAAP/FWDA BEC

330-358-7312

From: Beals, Rod [mailto:Rod.Beals@epa.state.oh.us]
Sent: Monday, June 24, 2013 3:04 PM
To: Patterson, Mark C Mr CIV USA OSA
Subject: RE: Sand Creek / Rocket Ridge Area

Yes, the email below.

From: Patterson, Mark C Mr CIV USA OSA [mailto:mark.c.patterson@us.army.mil]
Sent: Monday, June 24, 2013 2:56 PM
To: Beals, Rod
Cc: Mohr, Eileen; Wilk, Ed; Zikmanis, Nancy

Subject: RE: Sand Creek / Rocket Ridge Area

There wasn't an attachment on the email I got. Are you referring to Ed's email below.

Mark Patterson

RVAAP/FWDA BEC

330-358-7312

From: Beals, Rod [mailto:Rod.Beals@epa.state.oh.us]
Sent: Monday, June 24, 2013 2:55 PM
To: Patterson, Mark C Mr CIV USA OSA (mark.c.patterson@us.army.mil)
Cc: Mohr, Eileen; Wilk, Ed; Zikmanis, Nancy
Subject: FW: Sand Creek / Rocket Ridge Area

Attached is a memo from our Division of Surface Water (DSW) regarding stream work that you have scheduled for July 2nd. Please contact Eileen or Ed Wilk if you have any technical questions.

From: Wilk, Ed
Sent: Monday, June 24, 2013 8:16 AM
To: Mohr, Eileen; Fisher, Todd
Cc: Orr, Greg
Subject: Sand Creek / Rocket Ridge Area

Hi everyone

I spoke with Greg Orr regarding the inflow elevation of the old (original) channel. It was decided by OEPA-DSW not to alter the existing elevation as mentioned during our on-site meeting on June 17, 2013.

The proposed scoring taking place on July 2, 2013 should be conducted in the relocated channel and within a stretch of an upstream or downstream area that demonstrates best stream representation.

Please call me if you have any questions.

Ed Wilk

OEPA-DSW-401

330-963-1172

--

Regards,

Brian Stockwell
Project Manager
PIKA International, Inc.
Office - 330-296-6519
Cell - 330-352-6955

PIKA INTERNATIONAL, INC.

Sue Boles <sboles@pikainc.com>

RE: [EXTERNAL] PIKA RV AAP ERS - pad sam pling (UNCLASSIFIED)

1 message

Cheng, Eric S LRL <Eric.S.Cheng@usace.army.mil> Thu, Sep 26, 2013 at 9:02 AM
To: Brian Stockwell <bstockwell@pikainc.com>
Cc: Rick Callahan <rcallahan@pikainc.com>, Lew Korvarik <lkovarik@pikainc.com>, Sue Boles <sboles@pikainc.com>, "Peters, Nathaniel II LRL" <Nathaniel.Peters.II@usace.army.mil>, "Beckham, Winfred G (Glen) LRL" <Glen.Beckham@usace.army.mil>

Classification: UNCLASSIFIED
Caveats: NONE

Brian,

Please proceed with sampling the TCS gravel pad as approved by Mark Patterson and Eileen Mohr per your email below. If you have any questions, please contact me.

Eric Cheng, P.E.
Environmental Engineer
Engineering Division
Environmental Branch
Louisville District
U.S. Army Corps of Engineers
Office: (502) 315-7443
Fax: (502) 315-6309
Mobile: (502) 387-0608

-----Original Message-----
From: Brian Stockwell [mailto:bstockwell@pikainc.com]
Sent: Wednesday, September 18, 2013 3:20 PM
To: Cheng, Eric S LRL
Cc: Rick Callahan; Lew Korvarik; Sue Boles
Subject: [EXTERNAL] PIKA RVAAP ERS - pad sampling

Hi Eric - during the site visit today with Mark and Eileen we inquired about the post operational sampling task for under the TCS gravel pad. Mark and Eileen concurred (based on visual examination today) that if we document (i.e., tech memo) that no spills occurred during the TCS operations we should be able to collect the sub-pad soil samples adjacent to the pad, instead of directly beneath the pad. This would eliminate undue damage to the pad from collecting geoprobe samples through the pad. Please let me know your thoughts and we will go from there. If you have any questions please let me know. Just FYI that I am on travel through tomorrow but will be checking e-mails and messages periodically and I will respond as soon as possible. Thanks much

Brian

--

Regards,

Brian Stockwell
Project Manager
PIKA International, Inc.
Office - 330-296-6519
Cell - 330-352-6955

Classification: UNCLASSIFIED
Caveats: NONE

PIKA INTERNATIONAL, INC.

Re: [EXTERNAL] Re: Ravenna - ERS - Removal Action Report (UNCLASSIFIED)

Brian Stockwell <bstockwell@pikainc.com> Thu, Jul 31, 2014 at 4:15 PM
To: "Cheng, Eric S LRL" <Eric.S.Cheng@usace.army.mil>
Cc: Sue Boles <sboles@pikainc.com>, Rick Callahan <rcallahan@pikainc.com>, Shahrukh Kanga <skanga@pikainc.com>

Eric - we will revise the report text as noted and plan for submittal 7 August 2014 (i.e., the current target date on 8 wk look ahead).

Thanks

On Thu, Jul 31, 2014 at 3:02 PM, Cheng, Eric S LRL <Eric.S.Cheng@usace.army.mil> wrote:

Classification: UNCLASSIFIED
Caveats: NONE

Sue,

I see that Brian is on vacation until next week. Just wanted to copy you on the email below in case someone is backing him up on the project. Thanks!

Eric Cheng, P.E.
Environmental Engineer
Engineering Division
Environmental Branch
Louisville District
U.S. Army Corps of Engineers
Office: (502) 315-7443
Fax: (502) 315-6309
Mobile: (502) 387-0608

—Original Message—
From: Cheng, Eric S LRL
Sent: Thursday, July 31, 2014 2:58 PM
To: 'Brian Stockwell'
Subject: FW: [EXTERNAL] Re: Ravenna - ERS - Removal Action Report (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Brian,

Please see the email thread below and revise the language to match that of my email to Brett and Kevin.

If you have any questions, please let me know. Thanks!

Eric Cheng, P.E.

Environmental Engineer
Engineering Division
Environmental Branch
Louisville District
U.S. Army Corps of Engineers
Office: (502) 315-7443
Fax: (502) 315-6309
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—Original Message—
From: Merkel, Brett A CIV NG NGB (US) [mailto:brett.a.merkel.civ@mail.mil]
Sent: Thursday, July 31, 2014 8:20 AM
To: Cheng, Eric S LRL; Sedlak, Kevin M CTR (US)
Cc: Moore, Gregory F
Subject: RE: [EXTERNAL] Re: Ravenna - ERS - Removal Action Report (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Eric,

Just getting to this now, sorry for the delay. The language from below is exactly what I am looking for to be included in the ERS report. Thanks for developing and please move out on having PIKA include it. Once included, we can have the report off to the Ohio EPA. Thanks.

Brett Merkel
ARNG-ILE Clean Up
Phone: 703-601-7785
brett.a.merkel.civ@mail.mil

Your opinion matters to me! If you would like, please click on the ICE link below to rate the service you received today:

http://ice.disa.mil/index.cfm?fa=card&s=852&sp=129361&dep=*DoD

—Original Message—
From: Cheng, Eric S LRL [mailto:Eric.S.Cheng@usace.army.mil]
Sent: Tuesday, July 29, 2014 10:44 AM
To: Merkel, Brett A CIV NG NGB (US); Sedlak, Kevin M CTR (US)
Cc: Moore, Gregory F
Subject: FW: [EXTERNAL] Re: Ravenna - ERS - Removal Action Report (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Brett and Kevin,

I asked PIKA to amend some language in the subject report to read as follows:

"The site walk, inspection and approval of the stream bank and RRA reconstruction effort was conducted by the Army and Ohio EPA stakeholders on June 17, 2013. Copies of the e-mail correspondences pertaining to the approval of the reconstruction operations are provided in Appendix E. With the reconstruction complete, approval to begin the bi-annual monitoring (described below in Section 2.3) was provided on June 24, 2013 (Appendix E). The bi-annual monitoring will be conducted for a period of three years within the restored portion

of Sand Creek to monitor the recovery of indigenous species and habitat to within acceptable limits."

I specifically asked them to take out references to "final" approval since contractually and practically, the Ohio EPA's final approval should not be given until after they accept the results of the bi-annual monitoring.

Please let me know at your earliest convenience if the language meets your approval. Once received, I will instruct PIKA to incorporate the changes and we can move to submit.

Eric Cheng, P.E.
Environmental Engineer
Engineering Division
Environmental Branch
Louisville District
U.S. Army Corps of Engineers
Office: (502) 315-7443
Fax: (502) 315-6309
Mobile: (502) 387-0608

—Original Message—
From: Brian Stockwell [mailto:bstockwell@pikainc.com]
Sent: Tuesday, July 29, 2014 9:49 AM
To: Cheng, Eric S LRL
Cc: Rick Callahan
Subject: Re: [EXTERNAL] Re: Ravenna - ERS - Removal Action Report (UNCLASSIFIED)

Hi Eric - per our conversations pertaining to the draft report and the required text clarification, please see below and let us know:

The text on page 18, lines 15-18 which reads "The final site walk and inspection of the restored stream banks and RRA was conducted by the RVAAP stakeholders on June 17, 2013. Copies of the e-mail correspondences pertaining to the final approval of the restoration operations are provided in Appendix E." will be revised to read as follows :

"The final site walk, inspection and approval of the stream bank and RRA reconstruction effort was conducted by the RVAAP stakeholders on June 17, 2013. Copies of the e-mail correspondences pertaining to the final approval of the reconstruction operations are provided in Appendix E. With the reconstruction complete, approval to begin the bi-annual monitoring (described below in Section 2.3) was provided on June 24, 2013 (Appendix E). The bi-annual monitoring will be conducted for a period of three years within the restored portion of Sand Creek to monitor the recovery of indigenous species and habitat to within acceptable limits.

On Mon, Jul 21, 2014 at 1:26 PM, Cheng, Eric S LRL <Eric.S.Cheng@usace.army.mil> wrote:

> Classification: UNCLASSIFIED
> Caveats: NONE
>
> I hope you feel better, Brian.
>
> Refresh my memory on the language we were to provide? I apologize, it's been a while.
>
> Eric Cheng, P.E.
> Environmental Engineer
> Engineering Division

Environmental Branch
Louisville District
U.S. Army Corps of Engineers
Office: (502) 315-7443 <tel:%28502%29%20315-7443>
Fax: (502) 315-6309 <tel:%28502%29%20315-6309>
Mobile: (502) 387-0608 <tel:%28502%29%20387-0608>

—Original Message—
From: Brian Stockwell [mailto:bstockwell@pikainc.com]
Sent: Monday, July 21, 2014 12:39 PM
To: Cheng, Eric S LRL
Subject: [EXTERNAL] Re: Ravenna - ERS - Removal Action Report (UNCLASSIFIED)

Hey Eric - just fyi out sick today - but yes, we are on standby for text change/modification from USACE/OHARNG pertaining to stream restoration - we have not received a transmittal letter.

thanks

On Mon, Jul 21, 2014 at 10:27 AM, Cheng, Eric S LRL <Eric.S.Cheng@usace.army.mil> wrote:

Classification: UNCLASSIFIED
Caveats: NONE

Brian,

It has been a while since I've addressed this with you, but are you still on standby to submit the subject report? If so, do you have a transmittal letter for Brett Merkel's signature?

Eric Cheng, P.E.
Environmental Engineer
Engineering Division
Environmental Branch
Louisville District
U.S. Army Corps of Engineers
Office: (502) 315-7443 <tel:%28502%29%20315-7443> <tel:%28502%29%20315-7443>
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Mobile: (502) 387-0608 <tel:%28502%29%20387-0608> <tel:%28502%29%20387-0608>

Classification: UNCLASSIFIED
Caveats: NONE

–

Regards,

Brian Stockwell
Project Manager
PIKA International, Inc.
Office - 330-296-6519
Cell - 330-352-6955

Classification: UNCLASSIFIED
Caveats: NONE

Regards,

Brian Stockwell
Project Manager
PIKA International, Inc.
Office - 330-296-6519
Cell - 330-352-6955

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Regards,

Brian Stockwell
Project Manager
PIKA International, Inc.
Office - 330-296-6519
Cell - 330-352-6955

Appendix F

2013 Stream Monitoring Letter Report

DAVEY RESOURCE GROUP
A Division of The Davey Tree Expert Company

Corporate Headquarters
1500 North Mantua Street
PO Box 5193
Kent, Ohio 44240-5193
330.673.5685
Toll Free 1.800.828.8312
Fax 330.673.0860

September 6, 2013

Ms. Colleen Loredo
Project Manager
Independence Excavating, Inc.
5720 Schaaf Road
Independence, Ohio 44131

RE: *Rocket Ridge Project Summary*—Sand Creek Stream Relocation, Ravenna Arsenal, Ravenna, Portage County, Ohio

Dear Ms. Loredo:

The relocation of Sand Creek in the Rocket Ridge area within the Ravenna Arsenal occurred in May 2013. The relocation of the stream and re-grading of the adjacent area was implemented by Independence Excavating. Davey Resource Group, a division of The Davey Tree Expert Company, planted and seeded banks of the relocated stream as well as the re-graded area adjacent to and north of the relocated stream on May 22, 2013. Davey Resource Group performed stream assessments on July 2 and August 13, 2013 which included a Qualitative Habitat Evaluation Index (QHEI) and a Fish Index of Biotic Integrity (IBI).

PLANTING

The restoration plan for the Sand Creek Stream Relocation involved the stabilization of the stream banks and adjacent area as shown in the Appendix A map. The stream banks were planted with an Ohio Floodplain Seed Mix and the adjacent area to the north was seeded with a Woodland Edge Seed Mix, as shown on the Appendix A map. After seeding, the stream banks were stabilized with erosion control blankets. One hundred and ten 3-gallon shrubs were planted in the stream bank restoration area with an additional 400 live stakes installed at the toe of the stream bank. This density of planting will provide bank stabilization and erosion control for the long term. Ten 1.5- to 2-inch caliper trees were planted in the adjacent area to the north. Photographs of these areas are located in Appendix B.

MONITORING METHODOLOGY

QHEI

Post-construction riparian development and in-stream habitat improvements within the relocated segment of Sand Creek were evaluated using the QHEI, as developed by the Ohio Environmental Protection Agency (EPA). The QHEI protocol provides a quantitative evaluation of the physical characteristics within a stream reach that are important to fish communities. The QHEI protocol designates waterways as either Coldwater Habitat (CWH), Exceptional Warmwater Habitat (EWH), Warmwater Habitat (WWH), Modified Warmwater Habitat (MWH) or Limited Resource Water (LRW).

Streams designated as having CWH are capable of supporting native cold water fish. Streams that are designated EWH are waterways with unique assemblages of aquatic life. A stream that is designated as WWH is capable of supporting warm water aquatic organisms. MWH applies to extensively modified habitats that may be capable of supporting warm water aquatic organisms. A designation of LRW for aquatic life use is used for streams with an extremely limited physical habitat. The QHEI scoring methodology takes into account six metrics which evaluate channel substrate, channel morphology, in-stream cover, riparian zone, pool/glide and riffle-run quality, and drainage area/gradient characteristics. Scores range from 1 to 100 with higher scores reflecting better quality streams.

The QHEI sampling area included the original channel, the relocated channel, and an additional fifty feet of channel extending west from the relocated channel (as indicated on the map in Appendix A). Davey Resource Group biologists found a diversity of substrate types present within the sampling area with gravel and sand being dominant. Exposed, broken bedrock within the channel is providing some high quality reaches of riffle habitat. The original stream channel is still connected to the relocated stream but does not have through flow, thereby functioning as an oxbow. The moderate amount of in-stream cover is attributed mostly to the habitat features in the original channel. The relocated reach has some areas of shallows in slow water but is too recently restored to benefit from vegetative cover.

This stream attained a QHEI score of 72.5. This high QHEI score meets the scoring requirements to be classified as a WWH stream. However, it requires more time for plant and fish communities to develop in order to achieve the full biotic assemblages typical for a stream with this classification. See Appendix C for complete QHEI results.

Fish IBI

Sampling methodology followed guidelines provided in the Ohio EPA *Biological Criteria for the Protection of Aquatic Life, Volume II* manual. The IBI measures the health of a stream based on multiple attributes of the fish population. Scoring is based on deviation from reference conditions and is classified in the Erie/Ontario Drift and Lake Plain as Fair, Marginally Good, or Good. One IBI score was determined for the relocated stream.

Survey data were collected by Davey Resource Group biologists on July 2 and August 13, 2013. Fish were collected using a specialized electroshocker long-line setup. All fish were counted and identified before being released. The sampling reach is shown on the map included in Appendix A.

During the IBI survey, a total of 12 fish species were identified within the stream sampling area (Appendix D). The IBI score for 2013 was 39, which is within the range of Marginally Good for headwater streams in the Erie/Ontario Drift and Lake Plain. For reference, streams that score 40 achieve a ranking of Good. Table 3 in Appendix E lists the scoring metrics within the Sand Creek sampling area

A high proportion of pioneer fish species were found during this biological survey, which reflects the early level of succession in the fish population. It is probable that the fish population has been negatively affected by the recentness of the restoration and the lack of vegetative cover. With the growth of the vegetation and the stabilization of the soils, it is expected that the fish population will improve.

Summary of Results

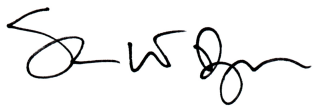
Photographs 1 and 3 (Appendix B) show the planted trees, shrubs, and seedlings that are beginning to establish on the banks of Sand Creek. These plants will provide erosion control and shade along the relocated stream reach and will improve habitat for macroinvertebrates and fish.

The relocated stream reach received a QHEI score of 72.5, which falls within the range of WWH. For this stream to attain such a high classification so recently after its construction reflects the excellent quality of restoration efforts implemented. The diversity of substrate types, the creation of riffles, and the connection to the original stream channel has enhanced the habitat potential for fish in this newly relocated stream reach. The moderate amount of in-stream cover currently present is predominately due to the existing cover in the original channel but some high quality areas of shallow water habitat have been created. The habitat potential of the relocated stream reach is expected to improve as aquatic macrophytes, root mats, and overhanging vegetation increase.

The fish IBI score was at the top of the Marginally Good range, bordering the highest possible range of Good. It is expected that the IBI score will improve as the fish population of this stream reach develops.

Thank you for the opportunity to provide you with these restoration and consulting services. In the event you have any questions or need further information, please do not hesitate to call me at 330-673-5685, ext. 8026.

Sincerely,



Shawn Bruzda
Biologist / Urban Forester
Ecological Services
Natural Resource Consulting

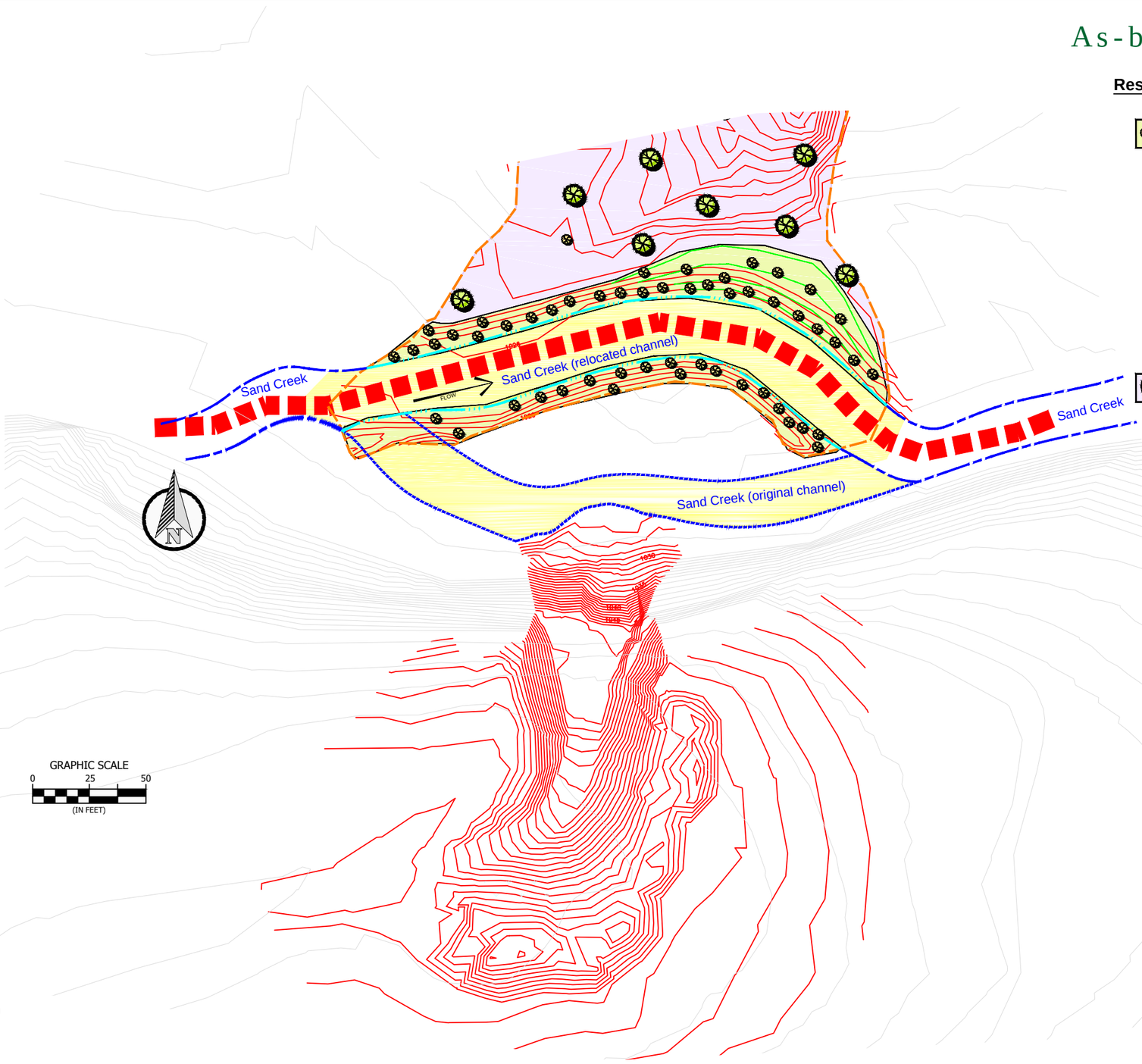
Appendix A
As-built Restoration Map

As-built Restoration Map

Seed mixes applied May 22, 2013

Ohio Prairie Nursery (Woodland Edge (modified) Seed Mix)
Elymus virginicus - Virginia Wild Rye
Hystrix patula - Bottlebrush Grass
Chamaecrista fasciculata - Partridge Pea
Heliopsis helianthoides - Ox Eye Sunflower
Echinacea purpurea - Purple Coneflower
Ratibida pinnata - Grey-Headed Coneflower
Rudbeckia hirta - Black-eyed Susan
Rudbeckia triloba - Brown-eyed Susan
Asclepias tuberosa - Butterfly Weed
Solidago sp - Goldenrod species
Monarda fistulosa - Wild Bergamot
Eupatorium purpureum - Sweet Joe Pye
Aster novae-angliae - New England Aster
Aster sp - Aster species

Ohio Prairie Nursery (Ohio Floodplain (modified) Seed Mix)
Grasses and grass-like
Elymus canadensis-Nodding Wild Rye
Elymus virginicus-Virginia Wild Rye
Carex crinita-Fringed Sedge
Carex lurida-Shallow/Lurid Sedge
Glyceria grandis-Reed Manna Grass
Scirpus atrovirens-Dark Green Bulrush
Scirpus validus-Great/Soft-stemmed Bulrush
Forbs
Actinomeris alternifolia-Wingstem
Asclepias incarnata-Swamp Milkweed
Eupatorium perfoliatum-Common Boneset
Lobelia Cardinalis-Cardinal Flower
Mimulus ringens-Monkey Flower
Rudbeckia laciniata-Green-headed Coneflower
Verbena hastata-Blue Vervain
Veronicastrum virginicum-Culver's Root



GRAPHIC SCALE
0 25 50
(IN FEET)

= Approximate project area (0.6 acre)
= Sand Creek stream (existing)
= Relocated stream channel
= Original stream channel is now a floodplain engaged ox-bow
= Bank shaping contour
= Approximate IBI reach (425 linear feet)
= Approximate QHEI reach (550 linear feet; includes restored channel and ox-bow)

Restoration areas

= Bank restoration area was seeded with a floodplain seed mix and stabilized with erosion control blanket (0.16 acre). After seeding and blanket installation, this area was planted with 110, 3-gallon shrubs, approximately 4-8 foot on center. Shrubs included *Cornus amomum* (silky dogwood), *Salix discolor* (pussy willow), *Salix exigua* (sandbar willow), and *Salix sericea* (silky willow). The toe of the restored channel area was installed with 400 live stakes. Live stakes species included native willow species listed above.

= This re-graded open area was seeded with a woodland edge seed mix (0.30 acre). This area was re-shaped and roughly re-graded. Grading was done to create a flatter mound while keeping soils away from existing trees and wet areas. After shaping this area was planted with ten 1 $\frac{1}{2}$ to 2-inch caliper trees. Trees included five *Quercus rubra* (northern red oak), three *Q. bicolor* (swamp white oak), and two *Tilia americana* (American linden). After tree planting this area was seeded and straw mulch was applied at the appropriate rate.

Plant locations are NOT TO SCALE

NOTE: Seeding rates were 10 lbs. per acre for both the native seed mixes. In addition to the native seed mixes; *Lolium multiflorum* (annual rye grass) at a rate of 20 lbs. per acre and/or *Secale cereal*e (winter rye) at rate of 1-bushel (56 lbs.) per acre was broadcast over all the restored areas prior to mulching.

As noted on the September 1, 2011 site visit, the existing seed bank is very viable as evidenced by the current vegetation regeneration observed. Herbaceous as well as numerous tree seedlings were seen. It is anticipated that the viability of the native seed bank will readily colonize the entire restoration area.

Prepared by	Prepared for			
DAVEY RESOURCE GROUP A Division of The Davey Tree Expert Company	Independence Excavating, Inc. A DiGeronimo Company	Sand Creek Stream Relocation	May 22, July 2, and August 13, 2013	Sheet **1** of **1**

Appendix B
Photographs



Photograph 1 (August 13, 2013) The open area adjacent to the relocated channel has been seeded and planted with young trees.



Photograph 2 (August 13, 2013) The substrate of the relocated portion of Sand Creek is composed primarily of sand and gravel. Large proportions of bedrock also occur.



Photograph 3 (August 13, 2013) This is a view of the relocated stream channel facing upstream. Good quality riffle habitat can be seen in this photograph.



Photograph 4 (July 2, 2013) This is a view of the relocated stream channel facing downstream. Shrubs and aquatic macrophytes are beginning to establish.



Photograph 5 (July 2, 2013) As can be seen to the right of this photograph, the original channel has been modified so that it does not have through flow, thereby functioning as an oxbow. The relocated channel is to the left.



Photograph 6 (July 2, 2013) The riparian zone around the original stream channel has not been disturbed during the restoration and relocation. The habitat in this reach accounts for most of the in-stream cover in the QHEI assessment.

Appendix C
QHEI Form

Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

QHEI Score: 72.5

Stream/Location Sand Creek – Rocket Ridge, Ravenna Arsenal *RM:* 15 *Date:* 7/2/2013

Scorers Full Name & Affiliation: Ben Schuplin

River Code: *STORET #:* *Lat/Long.:* 41.1954, -81.0936 Office verified location ☐

1] SUBSTRATE Check ONLY Two substrate TYPE BOXES:

estimate % or note every type present

	BEST TYPES	POOL	RIFFLE		OTHER T	POOL	RIFFLE
☐	BLDR /SLABS [10]			☐	HARDPAN [4]	x	x
☐	BOULDER [9]	x	x	☐	DETRITUS [3]	x	x
☐	COBBLE [8]	x	x	☐	MUCK [2]		
✓	GRAVEL [7]	x	x	☐	SILT [2]	x	x
☐	SAND [6]	x	x	☐	ARTIFICIAL [0]		
☐	BEDROCK [5]	x	x		(Score natural substrates; ignore sludge from point-sources)		

NUMBER OF BEST TYPES: ✓ 4 or more [2] ☐ 3 or less [0]

Check ONE (*Or 2 & average*)

ORIGIN		QUALITY	
☐	LIMESTONE [1]	☐	HEAVY [-2]
☐	TILLS [1]	☐	MODERATE [-1]
☐	WETLANDS [0]	✓	NORMAL [0]
☐	HARDPAN [0]	☐	FREE [1]
✓	SANDSTONE [0]	☐	EXTENSIVE [-2]
☐	RIP/RAP [0]	✓	MODERATE [-1]
☐	LACUSTRINE [0]	✓	NORMAL [0]
☐	SHALE [-1]	☐	NONE [1]
☐	COAL FINES [-2]		

SILT / Embeddedness

Substrate 15.5 *Maximum 20*

Comments

The assessment was performed in the relocated protion of Sand Creek and within the old stream channel which has been regraded and functions as an oxbow.

2] INSTREAM COVER Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep/fast water, or deep, well-defined, functional pools.

0	UNDERCUT BANKS [1]	0	POOLS >70CM [2]	3	OXBOWS/BACKWATERS [1]
1	OVERHANGING VEGETATION [1]	1	ROOTWADS [1]	1	AQUATIC MACROPHYTES[1]
2	SHALLOWS (IN SLOW WATER) [1]	0	BOULDERS [1]	0	LOGS or WOODY DEBRIS [1]
0	ROOTMATS [1]				

AMOUNT Check ONE (Or 2 & Average)

☐ EXTENSIVE >75% [11]
✓ MODERATE 25-75% [7]
☐ SPARSE 5-<25% [3]
☐ NEARLY ABSENT <5% [1]

Comments

The vegetation in the relocated stream reach is just beginning to establish. Most of cover found was in the oxbow.

Cover 12 *Maximum 20*

3] CHANNEL MORPHOLOGY Check ONE in each category (*Or 2 & average*)

SINUOSITY		DEVELOPMENT		CHANNELIZATION		STABILITY	
☐	HIGH [4]	☐	EXCELLENT [7]	✓	NONE [6]	☐	HIGH [3]
✓	MODERATE [3]	✓	GOOD [5]	☐	RECOVERED [4]	✓	MODERATE [2]
☐	LOW [2]	☐	FAIR [3]	☐	RECOVERING [3]	☐	LOW [1]
☐	NONE [1]	☐	POOR [1]	☐	RECENT OR NO RECOVEREY [1]		

Comments

Channel 16 *Maximum 20*

4] BANK EROSION AND RIPARIAN ZONE Check ONE in each category for EACH BANK (*Or 2 per bank & average*)

River right looking downstream

L	R	EROSION
✓	✓	NONE / LITTLE [3]
☐	☐	MODERATE [2]
☐	☐	HEAVY / SEVERE [1]

L	R	RIPARIAN WIDTH
✓	✓	WIDE > 50 M [4]
☐	☐	MODERATE 10-50m [3]
☐	☐	NARROW 5-1-m [2]
☐	☐	VERY NARROW <5m [1]
☐	☐	NONE [0]

L	R	FLOOD PLAIN QUALI
✓	✓	Forest, Swamp [3]
☐	☐	Shrub or Old Field [2]
☐	☐	Fenced Pasture [1]
☐	☐	Residential, Park, New Field [1]
☐	☐	Open Pasture, Rowcrop [0]

L	R	
☐	☐	Conservation Tillage [1]
☐	☐	URBAN or INDUSTRIAL [0]
☐	☐	Mining/Construction [0]

Indicate predominant land use(s) past 100m riparian.

Comments

Riparian 10 *Maximum 10*

5] POOL / GLIDE AND RIFFLE / RUN QUALITY

MAXIMUM DEPTH Check ONE (*ONLY!*)

- ☐ > 1m [6]
- ☐ 0.7-<1m [4]
- ☐ 0.4-<0.7m [2]
- ✓ 0.2m-<0.4m [1]
- ☐ < 0.2m [0]

CHANNEL WIDTH Check ONE (*Or 2 & average*)

- ✓ POOL WIDTH > RIFFLE WIDTH [2]
- ☐ POOL WIDTH = RIFFLE WIDTH [1]
- ☐ POOL WIDTH < RIFFLE WIDTH [0]

CURRENT VELOCITY Check ALL that apply

- ☐ TORRENTIAL [-1]
- ☐ VERY FAST [1]
- ✓ FAST [1]
- ✓ MODERATE [1]
- ✓ SLOW [1]
- ☐ INTERSTITIAL [-1]
- ☐ INTERMITTENT [-2]
- ☐ EDDIES [1]

Recreation Potential
Primary Contact
Secondary Contact
(circle one and comment on back)

Comments

32 cm

Pool/ Current 6 *Maximum 12*

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species:

Check ONE (*Or 2 & average*) ✓ NO RIFFLE [metric=0]

RIFFLE DEPTH

- ✓ BEST AREAS > 10CM [2]
- ☐ BEST AREAS 5-10 CM [1]
- ☐ BEST AREAS < 5 CM [metric=0]

RUN DEPTH

- ☐ MAXIMUM > 50CM [2]
- ✓ MAXIMUM < 50CM [1]

RIFFLE / RUN SUBSTRATE

- ☐ STABLE (e.g., Cobble, Boulder) [2]
- ✓ MOD. STABLE (e.g., Large Gravel) [1]
- ☐ UNSTABLE (e.g. Fine Gravel, Sand) [0]

RIFFLE / RUN EMBEDDEDNESS

- ☐ NONE [2]
- ✓ LOW [1]
- ☐ MODERATE [0]
- ☐ EXTENSIVE [-1]

Comments

12 cm

Riffle/ Run 5 *Maximum 8*

6] GRADIENT

(14 ft/mi)
DRAINAGE AREA
(3.74 mi2)

- ☐ VERY LOW - LOW [2-4]
- ☐ MODERATE [6-10]
- ✓ HIGH - VERY HIGH [10-6]

%POOL: 10 **%GLIDE:** 0 **%RUN:** 60 **%RIFFLE:** 30

Gradient 8 *Maximum 10*

Stream & Location: **Sand Creek – Rocket Ridge, Ravenna Arsenal**

A] *SAMPLED REACH*

Check ALL that apply

METHOD

- [ ] BOAT
- [ ] WADE
- [x] **L.** LINE
- [ ] **O**THER

DISTANCE

- [ ] 0.5 Km
- [ ] 0.2 Km
- [x] 0.15 Km
- [ ] 0.12 Km
- [ ] OTHER

meters

CANOPY

- [ ] **>** 85% OPEN
- [ ] **55**%-<85%
- [x] **30**%-<55%
- [ ] **10**%-<30%
- [ ] **<**10%-CLOSED

METHOD

1st -sample pass-	2nd
[ ] HIGH	[ ]
[ ] UP	[ ]
[x] NORMAL	[ ]
[ ] LOW	[ ]
[ ] DRY	[ ]

CLARITY

--sample pass-- 1st	2nd
[ ] <20 cm	[ ]
[ ] 20-<40 cm	[ ]
[ ] 40-70 cm	[ ]
[x] > 70 cm/ CTB	[ ]
[ ] Secchi Dpth	[ ]

1st _____ cm

pass

2nd _____ cm

Comment RE: Reach consistency/ Is reach typical of stream?, ***Recreation/ Observed*** - Inferred, ***Other/*** Sampling observations, Concerns, Access directions.

See map in Appendix A to see IBI length and QHEI area surveyed. Unexploded ordinances were common in the surrounding area.

B] AESTHETICS

- [ ] NUISANCE ALGAE
- [ ] INVASIVE MACROPHYTES
- [ ] EXCESS TURBIDITY
- [ ] DISCOLORATION
- [ ] FOAM / SCUM
- [ ] OIL SHEEN
- [ ] TRASH / LITTER
- [ ] NUISANCE ODOR
- [ ] SLUDGE DEPOSITS
- [ ] CSOs/SSOs/OUTFALLS

C] RECREATION

POOL: [ ] AREA >100ft² [ ] DEPTH >3ft

D] MAINTENANCE

Circle some & *COMMENT*

PUBLIC / PRIVATE / BOTH / NA
ACTIVE / HISTORIC / BOTH / NA
YOUNG-SUCCESSION-OLD
SPRAY / SNAG / REMOVED
MODIFIED / DIPPED OUT / NA
LEVEED / ONE SIDED
RELOCATED / CUTOFFS
MOVING-BEDLOAD-STABLE
ARMOURED / SLUMPS
ISLANDS / SCOURED
IMPOUNDED / DESICCATED
FLOOD CONTROL / DRAINAGE

E] ISSUES

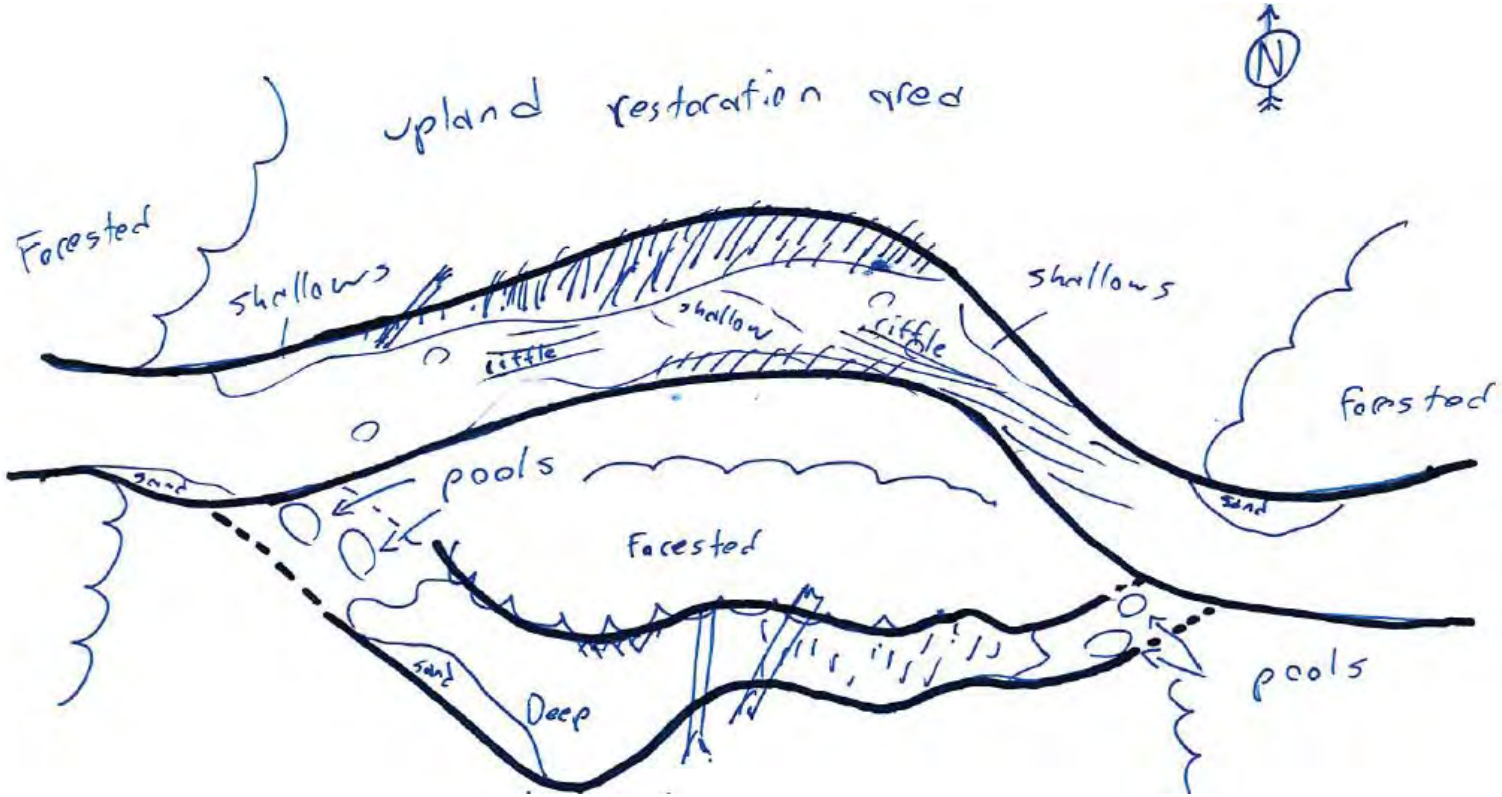
WWTP / CSO / NPDES / INDUSTRY
HARDENED / URBAN / DIRT&GRIME
CONTAMINATED / LANDFILL
BMPs-CONSTRUCTION-SEDIMENT
LOGGING / IRRIGATION / COOLING
BANK / EROSION / SURFACE
FALSE BANK / MANURE / LAGOON
WASH H_2O / TILE / H_2O TABLE
ACID / MINE / QUARRY / FLOW
NATURAL / WETLAND / STAGNANT
PARK / GOLF / LAWN / HOME
ATMOSPHERE / DATA PAUCITY

F] MEASUREMENTS

$\bar{x}$ width
$\bar{x}$ depth
max. depth
$\bar{x}$ bankfull width
bankfull $\bar{x}$ depth
W/D ratio
bankfulll max. depth
floodprone x^2 width
entrench. ratio

Legacy Tree:

Stream Drawing:



Appendix D
Comprehensive Species Lists for IBI Data

Table 1. Day One IBI Data

River Code: N/A River Mile: 15 Ecoregion: EOLP Basin: Mahoning	Stream: Sand Creek Gradient: 14 ft/mile Sampling Area: Mitigation Area- Downstream	Drainage Area: 3.7 mi^2 No. of Passes: 1 Dist. Fished: 510 ft	Sample Date: 07-02-2013 Sampler Type: E

Species Name	IBI Group	Feed Guild	Breed Guild	Pollution Tolerance	# of Fish	DELT
bluntnose minnow (*Pimephales promelas*)	N	O	C	T	147	0
central stoneroller (*Campostoma anomalum*)	N	H	N	-	13	0
creek chub (*Semotilus atromaculatus*)	N	G	N	T	21	0
fantail darter (*Etheostoma flabellare*)	D	I	C	-	19	0
green sunfish (*Lepomis cyanellus*)	S	I	C	T	3	0
greenside darter (*Etheostoma blennioides*)	S	I	C	T	23	0
johnny darter (*Etheostoma nigrum*)	D	I	C	-	5	0
northern hog sucker (*Hypentelium nigricans*)	R	I	S	M	9	0
redside dace (*Clinostomus elongatus*)	N	I	S	I	1	0
silverjaw minnow (*Notropis buccatus*)	N	I	M	-	14	0
suckermouth minnow (*Phenacobius mirabilis*)	N	I	S	-	5	0
western blacknose dace (*Rhinichthys obtusus*)	N	G	S	T	9	0
Total Fish Captured	-	-	-	-	269	0
Total Fish Included in IBI Scoring	-	-	-	-	269	0

Table 2. Day Two IBI Data

River Code: N/A River Mile: 15 Ecoregion: EOLP Basin: Mahoning	Stream: Sand Creek Gradient: 14 ft/mile Sampling Area: Mitigation Area- Downstream	Drainage Area: 3.7 mi^2 No. of Passes: 1 Dist. Fished: 510 ft	Sample Date: 08-13-2013 Sampler Type: E

Species Name	IBI Group	Feed Guild	Breed Guild	Pollution Tolerance	# of Fish	DELT
bluntnose minnow (*Pimephales promelas*)	N	O	C	T	242	0
central stoneroller (*Campostoma anomalum*)	N	H	N	-	46	0
creek chub (*Semotilus atromaculatus*)	N	G	N	T	51	0
fantail darter (*Etheostoma flabellare*)	D	I	C	-	29	0
green sunfish (*Lepomis cyanellus*)	S	I	C	T	4	0
greenside darter (*Etheostoma blennioides*)	S	I	C	T	72	0
johnny darter (*Etheostoma nigrum*)	D	I	C	-	2	0
northern hog sucker (*Hypentelium nigricans*)	R	I	S	M	15	0
redside dace (*Clinostomus elongatus*)	N	I	S	I	6	0
silverjaw minnow (*Notropis buccatus*)	N	I	M	-	5	0
suckermouth minnow (*Phenacobius mirabilis*)	N	I	S	-	1	0
western blacknose dace (*Rhinichthys obtusus*)	N	G	S	T	20	0
Total Fish Captured	-	-	-	-	493	0
Total Fish Included in IBI Scoring	-	-	-	-	493	0

Appendix E
IBI Scoring

Table 3. IBI Results

Metric	Score			
	7-2-2013		8-13-2013	
	Value	Score	Value	Score
Total Number of Species (minus exotics and hybrids)	12	5	12	5
Number of Darter/Sculpin Species	3	5	3	5
Number of Headwater Species	3	3	3	3
Number of Minnow Species	7	5	7	5
Number of Sensitive Species	3	3	3	3
% Tolerant Species	67	1	64	1
% Omnivores	55	0	49	0
% Insectivores	29	3	27	3
% Pioneering Species	71	1	61	1
Number of Individuals	269	3	493	3
Number of Simple Lithophiles	5	5	5	5
% DELT Anomalies	0	5	0	5
Individual IBI Scores	-	**39**	-	**39**
Average IBI Score		**39**		

Appendix G

Magazine Data Cards

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC Awaiting Disposal	4. LOCATION	B. 7-C-2	D. Address 8451 State Rt 5 Ravenna, Oh. 44266
5. DESCRIPTION MEC Awaiting Disposal Pallet 1			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
23 Jul 13	Items	Transferred	To	Lew	Kovarik	Lew Kovarik
5 SEP 13	Entire Contents	Transferred to Fleck	69	105D	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge2 MEC awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8415 57 RTE Ravenna OH 44266
5. DESCRIPTION Mec Awaiting Disposal Pallet			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
18 May 11	M-19 Tail Boom	RR2 Barrel 1	350 ea.		350 ea	Mel Hay
18 May 11	M-19 Tail Boom	RR2 Barrel 2	350 ea.		350 ea	Mel Hay
18 May 11	M-19 Tail Boom	RR2 Barrel 3	350 ea.		350 ea	Mel Hay
5/20/11		Inventory			checked	Mel Hay
5/26/11		Inventory			checked	Lew Kaufman
6/2/11		Inventory			checked	Lew Kaufman
6/9/11		Inventory			Checked	Lew Kaufman
6/14/11		INVENTORY			Checked	Paul Duncan
6/23/11		Inventory			checked	Mel Hay
6/30/11		Inventory			checked	Lew Kaufman
7/7/11		Inventory			checked	Lew Kaufman
7/14/11		Inventory			checked	Lew Kaufman
7/21/11		Inventory			Checked	Lew Kaufman
7/28/11		Inventory			checked	Lew Kaufman
8/4/11		INVENTORY			Checked	Mel Hay
8-11-2011		Inventory			Checked	Mel Hay
8/18/11		Inventory			checked	Mel Hay
8/25/11		Inventory			checked	Mel Hay
9/1/11		INVENTORY			Checked	Paul Duncan
9/8/11		Inventory			checked	Lew Kaufman
9/15/11		INVENTORY			checked	Paul Duncan
9-22-11		Inventory			checked	Mel Hay
9-29-11		Inventory			checked	Mel Hay
10-6-11		INVENTORY			CHECKED	Mel Hay
10/13/11		INVENTORY			Checked	Paul Duncan
10/20/11		Inventory			Checked	Mel Hay
26 Oct 11	Items	transferred	to	Marla	Patterson	Mark Patterson
24 JUL 12		Inventory			checked	Mark Patterson
22 July 13		Inventory			checked	Mark Patterson

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR-2 Mec Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8457 51 RT 3 Ravenna OH 44266
5. DESCRIPTION Mec Awaiting Disposal Pallet 2			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
5/20/11	M-19 Tail Boom	RR2 Barrel 4	350	Ø	350ea	Mel Lau
5/20/11	M-19 Tail Boom	RR2 Barrel 5	350	Ø	350ea	Mel Lau
5/20/11	M-19 Tail Boom	RR2 Barrel 6	350	Ø	350ea	Mel Lau
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lau
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	Checked	Lew Ko[illegible]
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew [illegible]
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lau
8/11/11		Inventory	Ø	Ø	checked	Mel Lau
8/18/11		Inventory	Ø	Ø	checked	Mel Lau
8/25/11		Inventory	Ø	Ø	checked	Mel Lau
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	Checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	0	0	Checked	Mel Lau
9/29/11		Inventory	0	0	checked	Mel Lau
6 Oct 11		Inventory	0	0	checked	Mel Lau
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lau
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	~~Mark~~ Lew	~~Patterson~~ Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

10 SEP 13 Entire Contents Transferred to Flash Ø 1050 0 R. Kyle Toporek

1. DODIC	2. NSN	3. LOT NO. RR2 Moc Awaiting Disposal	4. LOCATION 2-C-2	B.	D. Address 8451 ST RT 3 Ravenna OH 44265
5. DESCRIPTION Moc Awaiting Disposal Pallet 3			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
5/20/11	M-19 Tail Boom	RR2 Barrel 7	~~350~~ 300	Ø	350	Mel Lay
5/20/11	M-19 Tail Boom	RR2 Barrel 8	350	Ø	350	Mel Lay
5/20/11	M-19 Tail Boom	RR2 Barrel 9	350	Ø	350	Mel Lay
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
20 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 Jul 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	transferred	To	~~Mark~~ Lew	~~Patterson~~ Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

10 SEP 13	Entire Contents	Transferred to Flash	Ø	1050	0	R. Kyle Toporek

1. DODIC	2. NSN	3. LOT NO. RR-2 Mec Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 SR 7 Ravenna OH 44266
5. DESCRIPTION Mec Awaiting Disposal Pallet 4			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
5/20/11	M-19 Tail Boom	RR2 Barrel 10	350	∅	350	Mel Lay
5/20/11	M-19 Tail Boom	RR2 Barrel 11	350	∅	350	Mel Lay
5/20/11	M-19 Tail Boom	RR2 Barrel 12	350	∅	350	Mel Lay
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	∅	∅	checked	Lew Kovarik
6/14/11		Inventory	∅	∅	checked	Paul Duncan
6/23/11		Inventory	∅	∅	checked	Mel Lay
6/30/11		Inventory	∅	∅	checked	Lew Kovarik
7/7/11		Inventory	∅	∅	checked	Lew Kovarik
7/14/11		Inventory	∅	∅	checked	Lew Kovarik
7/21/11		Inventory	∅	∅	checked	Lew Kovarik
7/28/11		Inventory	∅	∅	checked	Lew Kovarik
8/4/11		Inventory	∅	∅	checked	Mel Lay
8/11/11		Inventory	∅	∅	checked	Mel Lay
8/18/11		Inventory	∅	∅	checked	Mel Lay
8/25/11		Inventory	∅	∅	checked	Mel Lay
9/1/11		Inventory	∅	∅	checked	Paul Duncan
9/8/11		Inventory	∅	∅	checked	Lew Kovarik
9/15/11		Inventory	∅	∅	checked	Paul Duncan
9/22/11		Inventory	∅	∅	checked	Mel Lay
9/29/11		Inventory	∅	∅	checked	Mel Lay
6 Oct 11		Inventory	∅	∅	checked	Mel Lay
10/13/11		Inventory	∅	∅	checked	Paul Duncan
20 Oct 11		Inventory	∅	∅	checked	Mel Lay
26 Oct 11	4 Items	Inventoried	To	Mark	Pat Howson	Mark Patterson
24 JUL 12		Inventory	∅	∅	checked	Mark Patterson
22 JUL 13		Inventory	∅	∅	checked	Mark Patterson
23 Jul 13	Items	Transferred	To	Mark Lew	Patterson Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89 MAGAZINE DATA CARD

10 SEP 13 Entire Contents Transferred to Flash ∅ 1050 ∅ R. Kyle Toporek

1. DODIC	2. NSN	3. LOT NO. RR 2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 STR T 5 RAVENNA OH
5. DESCRIPTION MDEH Awaiting Disposal / Pallet 5			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
5/23/11	M19 TAI/Boom	RR2 Barrel 13	350	Ø	350	Lew Kovarik
5/23/11	M19 TAI/Boom	RR2 Barrel 14	350	Ø	350	Lew Kovarik
5/23/11	M19 TAI/Boom	RR2 Barrel 15	350	Ø	350	Lew Kovarik
5/26/11		Inventory	—	—	Checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	Checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
9/22/11		Inventory	Ø	Ø	Checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	Checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
20 Oct 11		Inventory	Ø	Ø	Checked	Mel Lay
26 Oct 11	Items	Transferred	10	Mark P	Patterson	Mark Patterson
24 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 July 13	Items	Transferred	40	Mark Lew	Patterson Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89 — MAGAZINE DATA CARD

11 SEP 13 Entire Contents Transferred to FKSL 0 1050 0 R. Kyle Topouch

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 Ravenna, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet 6			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
5/23/11	M19 Tail Boom	RR2 Barrel 16	350	Ø	350	Lew Kovark
5/23/11	M19 Tail Boom	RR2 Barrel 17	350	Ø	350	Lew Kovark
5/23/11	M19 Tail Boom	RR2 Barrel 18	350	Ø	350	Lew Kovark
5/25/11		Inventory	—	—	checked	Lew Kovark
6/2/11		Inventory	—	—	Checked	Lew Kovark
6/9/11		Inventory	Ø	Ø	checked	Lew Kovark
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lau
6/30/11		Inventory	Ø	Ø	checked	Lew Kovark
7/7/11		Inventory	Ø	Ø	checked	Lew Kovark
7/14/11		Inventory	Ø	Ø	checked	Lew Kovark
7/21/11		Inventory	Ø	Ø	checked	Lew Kovark
7/28/11		Inventory	Ø	Ø	checked	Lew Kovark
8/4/11		Inventory	Ø	Ø	checked	Mel Lau
8/11/11		Inventory	Ø	Ø	checked	Mel Lau
8/18/11		Inventory	Ø	Ø	checked	Mel Lau
8/25/11		Inventory	Ø	Ø	checked	Mel Lau
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovark
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lau
9/29/11		Inventory	Ø	Ø	checked	Mel Lau
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lau
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lau
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 Jul 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Mark Lew	Patterson Kovark	Lew Kovark

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

11 SEP 13 Entire Contents Transferred to Flash Ø 1050 Ø R. Kyle Toporek

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 Bravenar Oh
5. DESCRIPTION MDEH Awaiting Disposal Pallet 7			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
5/23/11	M19 Tail Boom	RR2 Barrel 19	350	Ø	350	Lew Kovarik
5/23/11	M19 Tail Boom	RR2 Barrel 20	350	Ø	350	Lew Kovarik
5/23/11	M19 Tail Boom	RR2 Barrel 21	350	Ø	350	Lew Kovarik
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	Checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Transferred	10	Mark	By Herself	Mark Lahr
24 JUL 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 July 13	Items	transferred	to	Mark Lew	Patterson Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89 — MAGAZINE DATA CARD

11 SEP 13 — Entire Contents — Transferred to Flash — 0 — 1050 — 0 — R. Kyle Topper

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet 8			A. Hazard Class 1.10	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
5/23/11	M19 Tail Boom	RR2 Barrel 22	350	∅	350	Lew Kovarik
5/24/11	M19 Tail Boom	RR2 Barrel 23	350	∅	350	Lew Kovarik
5/24/11	M19 Tail Boom	RR2 Barrel 24	350	∅	350	Lew Kovarik
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	∅	∅	checked	Lew Kovarik
6/16/11		INVENTORY	∅	∅	Checked	PAUL DUNCAN
6/23/11		Inventory	∅	∅	checked	Mel Lay
6/30/11		Inventory	∅	∅	Checked	Lew Kovarik
7/7/11		Inventory	∅	∅	checked	Lew Kovarik
7/14/11		Inventory	∅	∅	checked	Lew Kovarik
7/21/11		Inventory	∅	∅	checked	Lew Kovarik
7/28/11		Inventory	∅	∅	checked	Lew Kovarik
8/4/11		Inventory	∅	∅	checked	Mel Lay
8/11/11		Inventory	∅	∅	checked	Mel Lay
8/18/11		Inventory	∅	∅	checked	Mel Lay
8/25/11		Inventory	∅	∅	checked	Mel Lay
9/1/11		INVENTORY	∅	∅	Checked	PAUL DUNCAN
9/8/11		Inventory	∅	∅	checked	Lew Kovarik
9/15/11		INVENTORY	∅	∅	Checked	PAUL DUNCAN
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	∅	∅	checked	PAUL DUNCAN
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	4 Items	Transferred	To	Mark	Patterson	Mark Patterson
24-July-12		Inventory	∅	∅	Checked	Mark Patterson
22 July 13		Inventory	∅	∅	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Mark Lew	Patterson Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89 — MAGAZINE DATA CARD

11 SEP 13 — Misfire Contents — Transferred to Flash — 0 — 1050 — 0 — R. Kyle Toporek

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 6451 ST RT 5 Ravenna Oh
5. DESCRIPTION MDEH Awaiting Disposal / Pallet 9			A. Hazard Class 6.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
5/24/11	M19 TAIL Boom	RR2 Barrel 25	350	Ø	350	Lew Kovarik
5/24/11	M19 TAIL Boom	RR2 Barrel 26	350	Ø	350	Lew Kovarik
5/24/11	M19 TAIL Boom	RR2 Barrel 27	350	Ø	350	Lew Kovarik
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew K
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	Checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	Checked	Mel Lay
9/4/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	Checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	Checked	Mel Lay
26 Oct 11	4 Items	Transferred	10	Mark	PAtterson	Mark Patterson
24-Jul-12		Inventory	Ø	Ø	Checked	MARK Patterson
22-JUL-13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	Transferred	+0	Mark Lew	Patterson Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89 — MAGAZINE DATA CARD

12 SEP 13 — Entire Contents — Transferred to Post — 0 — 1050 — 0 — R. Kyle Toporek

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet 10			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
5/24/11	M19 TA-1 Boom	RR2 Barrel 28	350	∅	350	Lew Kovarik
5/24/11	M19 TA-1 Boom	RR2 Barrel 29	350	∅	350	Lew Kovarik
5/24/11	M19 TA-1 Boom	RR2 Barrel 30	350	∅	350	Lew Kovarik
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	∅	∅	checked	Lew Kovarik
6/16/11		INVENTORY	∅	∅	checked	Paul Duncan
6/23/11		Inventory	0	0	checked	Mel Lay
6/30/11		Inventory	∅	∅	checked	Lew Kovarik
7/7/11		Inventory	∅	∅	checked	Lew Kovarik
7/14/11		Inventory	∅	∅	checked	Lew Kovarik
7/21/11		Inventory	∅	∅	checked	Lew Kovarik
7/28/11		Inventory	∅	∅	checked	Lew Kovarik
8/4/11		Inventory	0	0	checked	Mel Lay
8/11/11		Inventory	0	0	checked	Mel Lay
8/18/11		Inventory	0	0	checked	Mel Lay
8/25/11		Inventory	∅	∅	checked	Mel Lay
9/4/11		INVENTORY	∅	∅	Checked	Paul Duncan
9/8/11		Inventory	∅	∅	checked	Lew Kovarik
9/15/11		INVENTORY	∅	∅	Checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	Checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	∅	∅	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
28 Oct 11	Items	Trans Herred	10	Mark P	Patterson	Mark Patt
24-July-13		Inventory	∅	∅	checked	Mark Patterson
22 July 13		Inventory	∅	∅	Checked	Mark Patterson
23 Jul 13	Items	transferred	10	~~Mark~~ Lew	Patterson Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89 MAGAZINE DATA CARD

12 SEP 13 Entire Contents Transferred to Flesh 0 1050 0 R. Kyle Tipton

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7.C.2	B.	D. Address 8451 St. Rt. 5 Ravenna, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 11			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
5 SEP 13	Entire Contents	Transferred to Flash	0	1050	0	R. Kyle Toporek

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 11			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
5/24/11	M19 TAIL Boom	RR2 Barrel 31	350	Ø	350	Lew Kovarik
5/24/11	M19 TAIL Boom	RR2 Barrel 32	350	Ø	350	Lew Kovarik
5/24/11	M19 TAIL Boom	RR2 Barrel 33	350	Ø	350	Lew Kovarik
5/26/11		Inventory	——	——	checked	Lew Kovarik
6/2/11		Inventory	——	——	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	Checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark Patterson	Patterson	Mark Patterson
24 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	~~Mark~~ Lew	Patterson Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 12			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
5/24/11	M19 TAIL Boom	RR2 Barrel 34	350	Ø	350	Lew Kovarik
5/24/11	M19 TAIL Boom	RR2 Barrel 35	350	Ø	350	Lew Kovarik
5/24/11	M19 TAIL Boom	RR2 Barrel 36	350	Ø	350	Lew Kovarik
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kov
7/14/11		Inventory	Ø	Ø	checked	Lew Kov
7/21/11		Inventory	Ø	Ø	checked	Lew Kov
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Main	Patterson	Mark Patterson
24-JUL-12		Inventory	Ø	Ø	checked	Mark Patterson
22 JULY 13		Inventory	Ø	Ø	checked	Mark Patterson
23 JUL 13	Items	transferred	to	~~Mark~~ Lew	Patterson Kovarik	Lew Kov

DA FORM 3020-R, AUG 89 — MAGAZINE DATA CARD

12 SEP 13 — Entire Contents — Transferred to Floor — 0 — 1050 — 0 — R. Kyle Topsock

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 13			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
5/24/11	M19 TAIL Boom	RR2 Barrel 37	350	Ø	350	Lew Kovarik
5/24/11	M19 TAIL Boom	RR2 Barrel 38	350	Ø	350	Lew Kovarik
5/24/11	M19 TAIL Boom	RR2 Barrel 39	350	Ø	350	Lew Kovarik
6/2/11		Inventory	—	—	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	Checked	Mel Lay
6 Oct 11		Inventory	0	0	checking	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	transferred	TO	Mark T	Patterson	Mark Patterson
24-JULY-12		Inventory	0	0	checked	Mark Patterson
22 JULY 13		Inventory	0	0	checked	Mark Patterson
23 Jul 13	Items	transferred	to	~~Mark~~ Lew	Patterson	Kovarik / Lew Kovarik
12 SEP 13	Empty Containers	Transferred to FLASH Ø		1050	0	P. Kyle Topped

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 14			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
5/25/11	M19 Tail Boom	RR2 Barrel 40	350	Ø	350	Lew Kovarik
5/25/11	M19 Tail Boom	RR2 Barrel 41	350	Ø	350	Lew Kovarik
5/25/11	M19 Tail Boom	RR2 Barrel 42	350	Ø	350	Lew Kovarik
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	Checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July-12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July-13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	~~Mark~~ Lew	~~Patterson~~ Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

10 Sep 13 Entire Contents Transferred to Flash Ø 05Ø Lew Kovarik

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 15			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
5/25/11	M19 TAIL Boom	RR2 Barrel 43	350	Ø	350	Lew Kovanic
5/25/11	M19 TAIL Boom	RR2 Barrel 44	350	Ø	350	Lew Kovanic
5/25/11	M19 TAIL Boom	RR2 Barrel 45	350	Ø	350	Lew Kovanic
5/26/11		Inventory	—	—	checked	Lew Kovanic
6/2/11		Inventory	—	—	checked	Lew Kovanic
6/9/11		Inventory	Ø	Ø	checked	Lew Kovanic
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Hay
6/30/11		Inventory	Ø	Ø	Checked	Lew Kovanic
7/7/11		Inventory	Ø	Ø	checked	Lew Kov
7/14/11		Inventory	Ø	Ø	checked	Lew Kov
7/21/11		Inventory	Ø	Ø	checked	Lew Kov
7/28/11		Inventory	Ø	Ø	checked	Lew Kovanic
8/4/11		Inventory	Ø	Ø	checked	Mel Hay
8/11/11		Inventory	Ø	Ø	checked	Mel Hay
8/18/11		Inventory	Ø	Ø	checked	Mel Hay
8/25/11		Inventory	Ø	Ø	checked	Mel Hay
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovanic
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Hay
9/29/11		Inventory	Ø	Ø	checked	Mel Hay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Hay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Hay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24-July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 July 13	Items	transferred	to	~~Mark~~ Lew	~~Patterson~~ Kovanic	Lew Kovanic

DA FORM 3020-R, AUG 89 MAGAZINE DATA CARD

10 Sep 13 Items Transferred to Flash Ø 1050 Ø Lew Kovanic

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 16			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
5/25/11	M19 TAIL Boom	RR2 Barrel 46	350	Ø	350	Lew Kovarik
5/25/11	M19 TAIL Boom	RR2 BARREL 47	350	Ø	350	Lew Kovarik
5/25/11	M19 TAIL Boom	RR2 BARREL 48	350	Ø	350	Lew Kovarik
5/26/11		INVENTORY	—	—	checked	Lew Kovarik
6/2/11		INVENTORY	—	—	checked	Lew Kovarik
6/9/11		INVENTORY	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
6/23/11		INVENTORY	Ø	Ø	checked	Mel Lay
6/30/11		INVENTORY	Ø	Ø	checked	Lew Kovarik
7/7/11		INVENTORY	Ø	Ø	checked	Lew Kovarik
7/14/11		INVENTORY	Ø	Ø	checked	Lew Kovarik
7/21/11		INVENTORY	Ø	Ø	checked	Lew Kovarik
7/28/11		INVENTORY	Ø	Ø	checked	Lew Kovarik
8/4/11		INVENTORY	Ø	Ø	checked	Mel Lay
8/11/11		INVENTORY	Ø	Ø	checked	Mel Lay
8/18/11		INVENTORY	Ø	Ø	checked	Mel Lay
8/25/11		INVENTORY	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/8/11		INVENTORY	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/22/11		INVENTORY	Ø	Ø	checked	Mel Lay
9/29/11		INVENTORY	Ø	Ø	checked	Mel Lay
6 Oct 11		INVENTORY	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
20 Oct 11		INVENTORY	Ø	Ø	checked	Mel Lay
26 Oct 11	4 Items	TRANSFERRED	70	MARK	Pat Herson	Mark Patterson
24-JULY-12		INVENTORY	Ø	Ø	CHECKED	Mark Patterson
22 JULY 13		INVENTORY	Ø	Ø	CHECKED	Mark Patterson
23 July 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89 — MAGAZINE DATA CARD

10 SEP 13 Entire Contents Transferred to Flash 6 1050 0 R. Kyle Toporek

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 17			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
5/25/11	M19 TAIL Boom	RR2 Barrel 49	350	Ø	350	Lew Kovarik
5/25/11	M19 TAIL Boom	RR2 Barrel 50	350	Ø	350	Lew Kovarik
5/25/11	M19 TAIL Boom	RR2 Barrel 51	350	Ø	350	Lew Kovarik
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kov
7/7/11		Inventory	Ø	Ø	checked	Lew Kov
7/14/11		Inventory	Ø	Ø	checked	Lew Kov
7/21/11		Inventory	Ø	Ø	checked	Lew Kov
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	transferred	To	MSR K	Patterson	Mark Patterson
24-July-12		Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. 2R2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 St. Rt. 5 Revenna, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #17			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	 B. LOSS	10 BALANCE	11 PRINTED NAME
9 SEP 13	Entire Contents	Transferred to Flash	0	1850	0	T.R. Kyle Tsparek

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 18			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
5/25/11	M19 Tail Boom	RR2 Barrel 52	350	Ø	350	Lew Kovarik
5/25/11	M19 Tail Boom	RR2 Barrel 53	350	Ø	350	Lew Kovarik
5/25/11	M19 Tail Boom	RR2 Barrel 54	350	Ø	350	Lew Kovarik
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Law
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Law
8/11/11		Inventory	Ø	Ø	checked	Mel Law
8/18/11		Inventory	Ø	Ø	checked	Mel Law
8/25/11		Inventory	Ø	Ø	checked	Mel Law
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Law
9/29/11		Inventory	Ø	Ø	checked	Mel Law
6 Oct 11		Inventory	Ø	Ø	checked	Mel Law
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Law
26 Oct 11	Items	Items Removed	To	Mark H.	Patterson	Mark Patterson
24-JULY-12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 St. Rt. 5 Ravenna, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #18			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
9 SEP 13	Entire Contents	Transferred to Flash	Ø	1860	0	R. Rudz Teporek

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 19			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
5/25/11	M19 TAIL Boom	RR2 Barrel 55	350	Ø	350	Lew Kovarik
5/25/11	M19 TAIL Boom	RR2 Barrel 56	350	Ø	350	Lew Kovarik
5/25/11	M19 TAIL Boom	RR2 Barrel 57	350	Ø	350	Lew Kovarik
5/26/11		Inventory	—	—	350	Lew Kovarik
6/2/11		Inventory	—	—	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	Checked	Mel Lay
6/30/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	Checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	Checked	Mel Lay
8/11/11		Inventory	Ø	Ø	Checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	Checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	Checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	Checked	Mel Lay
9/29/11		Inventory	Ø	Ø	Checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	Checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	Checked	Mel Lay
26 Oct 11	Items	Transferred	TO	Mark P	Pat Hogue	Mark Patterson
24-JUL-12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	TO	Lew	Kovarik	Lew Kovarik

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MOEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 St. Rt. 5 Ravenna, OH
5. DESCRIPTION MOEH Awaiting Disposal Pallet #19			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
9 SEP 13	Entire Contents	Transferred to Flesh	0	1050	0	R Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 20			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
5/31/11	M19 TAIL Boom	RR2 Barrel 58	350	Ø	350	Lew Kovarik
5/31/11	M19 TAIL Boom	RR2 Barrel 59	350	Ø	350	Lew Kovarik
5/31/11	M19 TAIL Boom	RR2 Barrel 60	350	Ø	350	Lew Kovarik
6/2/11		Inventory	—	—	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kov
7/14/11		Inventory	Ø	Ø	checked	Lew Kov
7/21/11		Inventory	Ø	Ø	checked	Lew K
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		Inventory	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	Checked	Mel Lay
6Oct11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20Oct11		Inventory	0	0	Checked	Mel Lay
26 Oct 11	1 Items	Transferred	To	Mark	Patterson	Mark Patt
24-Jul-12		Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	0	0	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew K
9SEP13	Entire Contents	Transferred to Flash	Ø	1850	0	R. Kyle Taporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #21			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
5/31/11	M19 TAIL Boom	RR2 Barrel 61	350	Ø	350	Lew Kovarik
5/31/11	M19 TAIL Boom	RR2 Barrel 62	350	Ø	350	Lew Kovarik
5/31/11	M19 TAIL Boom	RR2 Barrel 63	350	Ø	350	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	Checked	Mel Lay
6 OCT 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	4 Items	Transferred	To	Mark Pa	Patterson	Mark Patterson
24-JUL-12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
26 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
6 SEP 13	Entire Contents	Transferred to Flesh	Ø	1850	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #22			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
5/31/11	M19 Tail Boom	RR2 Barrel 64	350	Ø	350	Lew Kovarik
5/31/11	M19 Tail Boom	RR2 Barrel 65	350	Ø	350	Lew Kovarik
5/31/11	M19 Tail Boom	RR2 Barrel 66	350	Ø	350	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kov[illegible]
7/14/11		Inventory	Ø	Ø	checked	Lew Kov[illegible]
7/21/11		Inventory	Ø	Ø	checked	Lew [illegible]
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patt
24-Jul-12		Inventory	Ø	Ø	checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13.	Items	transferred	to	Lew	Kovarik	Lew Kovarik
6 SEP 13	Entire Contents	Transferred to Flash	Ø	1850	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 mDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION mDEH Awaiting Disposal Pallet #23			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
6/1/11	M19 Tail Boom	RR2 Barrel 67	350	Ø	350	Lew Kovarik
6/1/11	M19 Tail Boom	RR2 Barrel 68	350	Ø	350	Lew Kovarik
6/1/11	M19 Tail Boom	RR2 Barrel 69	350	Ø	350	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	Checked	Lew Kov
7/14/11		Inventory	Ø	Ø	Checked	Lew Kov
7/21/11		Inventory	Ø	Ø	Checked	Lew Kov
7/28/11		Inventory	Ø	Ø	checked	Lew Kov
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		Inventory	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	Checked	Lew Kovarik
9/15/11		Inventory	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	Checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		Inventory	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Transfered	To	Mark	Patterson	Mark Patterson
24-Jul-12		Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kov
6 SEP 13	Entire Contents	Transferred to Flash	Ø	1050	0	R. Kyle Tapia

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 mDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #24			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
6/1/11	M19 Tail Boom	RR2 Barrel 70	350	Ø	350	Lew Kovarik
6/6/11	M19 Tail Boom	RR2 Barrel 71	350	Ø	350	Lew Kovarik
6/1/11	M19 Tail Boom	RR2 Barrel 72	350	Ø	350	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	70	Mark	M Hanson	Mark Patterson
24-Jul-12		Checked	Ø	Ø	Checked	Mark Patterson
22 July 13		Checked	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
6 SEP 13	Entire Contents	Transferred to Flash	Ø	1850	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #25			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
6/1/11	M19 Tail Boom	RR2 Barrel 73	350	Ø	350	Lew Kovarik
6/1/11	M19 Tail Boom	RR2 Barrel 74	350	Ø	350	Lew Kovarik
6/1/11	M19 Tail Boom	RR2 Barrel 75	350	Ø	350	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew [illegible]
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew [illegible]
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Transferred To		Mark	Patterson	Mark Patterson
24-Jul-12		Inventory	Ø	Ø	checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
5 SEP 13	Entire Contents	Transferred to Flash	Ø	1050	0	R. Kyle Toporak

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #26			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
6/8/11	M19 Tail Boom	RR2 Barrel 76	350	∅	350	Lew Kovarik
6/9/11	M19 Tail Boom	RR2 Barrel 77	350	∅	350	Lew Kovarik
6/9/11	M19 Tail Boom	RR2 Barrel 78	350	∅	350	Lew Kovarik
6/9/11		Inventory	∅	∅	checked	Lew Kovarik
6/16/11		INVENTORY	∅	∅	Checked	Paul Duncan
6/23/11		Inventory	∅	∅	checked	Mel Lay
6/30/11		Inventory	∅	∅	checked	Lew Kovarik
7/7/11		Inventory	∅	∅	checked	Lew Kovarik
7/14/11		Inventory	∅	∅	checked	Lew Kovarik
7/21/11		Inventory	∅	∅	checked	Lew Kovarik
7/28/11		Inventory	∅	∅	checked	Lew Kovarik
8/4/11		Inventory	∅	∅	checked	Mel Lay
8/11/11		Inventory	∅	∅	checked	Mel Lay
8/18/11		Inventory	∅	∅	checked	Mel Lay
8/25/11		Inventory	∅	∅	checked	Mel Lay
9/1/11		INVENTORY	∅	∅	Checked	Paul Duncan
9/8/11		Inventory	∅	∅	checked	Lew Kovarik
9/15/11		INVENTORY	∅	∅	Checked	Paul Duncan
9/22/11		Inventory	∅	∅	checked	Mel Lay
9/29/11		Inventory	∅	∅	checked	Mel Lay
6 Oct 11		Inventory	∅	∅	checked	Mel Lay
10/13/11		INVENTORY	∅	∅	Checked	Paul Duncan
20 Oct 11		Inventory	∅	∅	checked	Mel Lay
26 Oct 11	Items	Transferred	TO	Mark Patterson		Mark Patterson
24-JULY-12		Inventory	∅	∅	Checked	Mark Patterson
22 JUN 13		Inventory	∅	∅	Checked	Mark Patterson
23 JUN 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
17 SEP 13	Empty Contents	Transferred to Flash	∅	1050	∅	R. Kyle Toomey

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #27			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
6/9/11	M19 Tail Boom	RR2 Barrel 79	350	Ø	350	Lew Kovarik
6/9/11	M19 Tail Boom	RR2 Barrel 80	350	Ø	350	Lew Kovarik
6/9/11	M19 Tail Boom	RR2 Barrel 81	350	Ø	350	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kov
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew K
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patt
24-July-12		Inventory	Ø	Ø	checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew K
17 SEP 13	Entire Contents	Transferred to Flash	Ø	1050	0	R. Kyl Topovek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 mDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION mDEH Awaiting Disposal Pallet #28			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
6/22/11	M19 Tail Boom	RR2 Barrel 82	350	ø	350	Mel Lay
6/22/11	M19 Tail Boom	RR2 Barrel 83	350	ø	350	Mel Lay
6/22/11	M19 Tail Boom	RR2 Barrel 84	350	ø	350	Mel Lay
6/23/11		Inventory	ø	ø	checked	Mel Lay
6/30/11		Inventory	ø	ø	checked	Lew Kovarik
7/7/11		Inventory	ø	ø	checked	Lew Kovarik
7/14/11		Inventory	ø	ø	checked	Lew Kovarik
7/21/11		Inventory	ø	ø	checked	Lew Kovarik
7/28/11		Inventory	ø	ø	checked	Lew Kovarik
8/4/11		Inventory	ø	ø	checked	Mel Lay
8/11/11		Inventory	ø	ø	checked	Mel Lay
8/18/11		Inventory	ø	ø	checked	Mel Lay
8/25/11		Inventory	ø	ø	checked	Mel Lay
9/1/11		INVENTORY	ø	ø	checked	PAUL DUNCAN
9/8/11		Inventory	ø	ø	checked	Lew Kovarik
9/15/11		INVENTORY	ø	ø	checked	PAUL DUNCAN
9/22/11		Inventory	ø	ø	checked	Mel Lay
9/29/11		Inventory	ø	ø	checked	Mel Lay
6 Oct 11		Inventory	ø	ø	checked	Mel Lay
10/13/11		INVENTORY	ø	ø	checked	PAUL DUNCAN
20 Oct 11		Inventory	ø	ø	checked	Mel Lay
26 Oct 11	I Trans	Transferred	10	Mark Pa	Hanson	Mark Pat
24 Jul 12		Inventory	ø	ø	Checked	Mark Patterson
22 Jul 13		Inventory	ø	ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
17 Sep 13	Kittle Contents	Transferred to Flash	ø	1050	0	R. Kyle Tyson

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8951 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #39			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
6/23/11	M19 Tail Boom	RR2 Barrel 85	350	~~0~~	350	Lew Kovarik
6/23/11	M19 Tail Boom	RR2 Barrel 86	350	~~0~~	350	Lew Kovarik
6/23/11	M19 Tail Boom	RR2 Barrel 87	350	~~0~~	350	Lew Kovarik
6/23/11	M19 Tail Boom	RR2 Barrel 88	350	~~0~~	350	Lew Kovarik
6/30/11		Inventory	~~0~~	~~0~~	checked	Lew Kovarik
7/7/11		Inventory	~~0~~	~~0~~	checked	Lew Kovarik
7/14/11		Inventory	~~0~~	~~0~~	Checked	Lew Kovarik
7/21/11		Inventory	~~0~~	~~0~~	checked	Lew Kovarik
7/28/11		Inventory	~~0~~	~~0~~	checked	Lew Kovarik
8/4/11		Inventory	~~0~~	~~0~~	checked	Mel Lay
8/11/11		Inventory	~~0~~	~~0~~	checked	Mel Lay
8/18/11		Inventory	~~0~~	~~0~~	checked	Mel Lay
8/25/11		Inventory	~~0~~	~~0~~	checked	Mel Lay
9/1/11		INVENTORY	~~0~~	~~0~~	checked	Paul Duncan
9/8/11		Inventory	~~0~~	~~0~~	checked	Lew Kovarik
9/15/11		INVENTORY	~~0~~	~~0~~	checked	Paul Duncan
9/22/11		Inventory	0	0	Checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	~~0~~	~~0~~	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11		4 Items	Trans Ferred To	Mark Patterson		Mark Patterson
24 JUL 12		Inventory	~~0~~	~~0~~	Checked	Mark Patterson
22 JUL 13		Inventory	~~0~~	~~0~~	Checked	Mark Patterson
23 JUL 13		Transferred	~~To~~	Lew	Kovarik	Lew Kovarik
16 SEP 13	Entire Contents	Transfered to Flash	~~0~~	1050	0	Rick Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 30			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
6/28/11	M19 Tail Boom	RR2 Barrel 89	350	Ø	350	Lew Kovarik
6/28/11	M19 Tail Boom	RR2 Barrel 90	350	Ø	350	Lew Kovarik
6/28/11	M19 Tail Boom	RR2 Barrel 91	350	Ø	350	Lew Kovarik
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/22/11		Inventory	Ø	Ø	Checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Transferred to	To	Mark	Patterson	Mark Patterson
24 Jul 12		Inventory	Ø	Ø	checked	Mark Patterson
22 Jul 13		Inventoried	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
18 SEP 13	Entire Contents	Transferred to Flesh	Ø	1850	0	R. Kyle Toland

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 mDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION mDEH Awaiting Disposal Pallet #31			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
6/29/11	M19 Tail Boom	RR2 Barrel 92	350	Ø	350	Lew Kovarik
6/29/11	M19 Tail Boom	RR2 Barrel 93	350	Ø	350	Lew Kovarik
6/29/11	M19 Tail Boom	RR2 Barrel 94	350	Ø	350	Lew Kovarik
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Melvin Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	Checked	Mel Lay
9/29/11		Inventory	Ø	Ø	Checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
26 Oct 11		Inventory	Ø	Ø	Checked	Mel Lay
26 Oct 11	2 Items	Trans Fr Rail	2	Mark	Ck Horsey	Mark Patterson
24 JUL 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
18 SEP 13	Entire Contents	Tools turned to Flora	Ø	1050	0	B. Kyle Tapanila

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #32			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
7/6/11	M19 Tail Boom	RR2 Barrel 95	350	Ø	350	Lew Kovarik
7/6/11	M19 Tail Boom	RR2 Barrel 96	350	Ø	350	Lew Kovarik
7/6/11	M19 Tail Boom	RR2 Barrel 97	350	Ø	350	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	Checked	Mel Lay
9/4/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	0	0	Checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
19 Aug 13	Entire Contents	Transferred to Plesi	Ø	1050	0	R. Kyle Toporch

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 33			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
7/7/11	M19 Tail Boom	RR2 Barrel 98	350	∅	350	Lew Kovarik
7/7/11	M19 Tail Boom	RR2 Barrel 99	350	∅	350	Lew Kovarik
7/7/11	M19 Tail Boom	RR2 Barrel 100	350	∅	350	Lew Kovarik
7/14/11		Inventory	∅	∅	checked	Lew Kovarik
7/21/11		Inventory	∅	∅	checked	Lew Kovarik
7/28/11		Inventory	∅	∅	checked	Lew Kovarik
8/4/11		Inventory	∅	∅	checked	Mel Lay
8/11/11		Inventory	∅	∅	checked	Mel Lay
8/18/11		Inventory	∅	∅	checked	Mel Lay
8/25/11		Inventory	∅	∅	checked	Mel Lay
9/1/11		INVENTORY	∅	∅	checked	PAUL DUNCAN
9/8/11		Inventory	∅	∅	checked	Lew Kovarik
9/15/11		INVENTORY	∅	∅	checked	PAUL DUNCAN
9/22/11		Inventory	∅	∅	Checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	∅	∅	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items Transfers	Items Transferred	To	Mark	Pa Hersga	Mark Patterson
24 JULY 12		Inventory	∅	0	CHECKED	Mark Patterson
22 JULY 13		Inventory	∅	0	CHECKED	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
19 AUG 13	Entire Contents	Transferred to Floor	∅	1050	0	R-16/6 Topper

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Pallet # 34			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
7/14/11	MIG TAIL BOOM	RR2 Barrel 101	350	Ø	350	Lew Kovarik
7/21/11	MIG TAIL BOOM ~~Inventory~~	RR2 Barrel 102	350	Ø	350	Lew Kovarik
7/21/11	MIG TAIL BOOM	RR2 Barrel 103	350	Ø	350	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew K
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/22/11		Inventory	Ø	O	Checked	Mel Lay
9/29/11		Inventory	O	O	checked	Mel Lay
6 Oct 11		Inventory	O	O	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
20 Oct 11		Inventory	O	O	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patt
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	checked	Mark Patt
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
20 AUG 13	Entire Contents	Transferred to Flex	Ø	1050	O	R. Kyle Topour

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #35			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
7/27/11	M19 Tail Boom	RR2 Barrel 104	350	Ø	350	Lew Kovarik
7/27/11	M19 Tail Boom	RR2 Barrel 105	350	Ø	350	Lew Kovarik
7/27/11	M19 Tail Boom	RR2 Barrel 106	350	Ø	350	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/22/11		Inventory	Ø	Ø	Checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	I Tems	Transferred	To	Mark	Patterson	Mark Patt
24 JUL 12		Inventory	Ø	Ø	checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
20 AUG 13	Entire Contents	Transferred to Flash	Ø	1050	Ø	R. Kyle Topcon

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #36			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
7/28/11	M19 Tail Boom	RR2 Barrel 107	350	∅	350	Lew Kovarik
7/28/11	M19 Tail Boom	RR2 Barrel 108	350	∅	350	Lew Kovarik
7/28/11	M19 Tail Boom	RR2 Barrel 109	350	∅	350	Lew Kovarik
8/4/11		Inventory	0	0	checked	Mel Lay
8/11/11		Inventory	0	0	checked	Mel Lay
8/18/11		Inventory	0	0	Checked	Mel Lay
8/25/11		Inventory	∅	∅	checked	Mel Lay
9/1/11		Inventory	∅	∅	Checked	Paul Duncan
9/8/11		Inventory	∅	∅	checked	Lew Kovarik
9/15/11		Inventory	∅	∅	checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	Checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		Inventory	∅	∅	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	I Items	Transferred	To	Mark	Patterson	Mark Patterson
24 Jul 12		Inventory	0	0	Checked	Mark Patterson
22 July 13		Inventory	0	0	Checked	Mark Patterson
23 Jul 13	Items	Transferred	to	Lew	Kovarik	Lew Kovarik
20 AUG 13	Entire Contents	Transferred to Plasti	∅	1050	0	R. Kyle Topmiller

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 mDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION mDEH Awaiting Disposal Pallet #37			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
8/4/11	M19 Tail Boom	RR2 Barrel 110	350	∅	350	Mel Lay
8/4/11	M19 Tail Boom	RR2 Barrel 111	350	∅	350	Mel Lay
8/4/11	M19 Tail Boom	RR2 Barrel 112	350	∅	350	Mel Lay
8/11/11		Inventory	∅	∅	Checked	Mel Lay
8/18/11		Inventory	∅	∅	Checked	Mel Lay
8/25/11		Inventory	∅	∅	Checked	Mel Lay
9/1/11		INVENTORY	∅	∅	Checked	Paul Duncan
9/8/11		Inventory	∅	∅	Checked	Lew Kovarik
9/15/11		INVENTORY	∅	∅	Checked	Paul Duncan
9/22/11		Inventory	∅	∅	Checked	Mel Lay
9/28/11		Inventory	0	0	Checked	Mel Lay
6 Oct 11		Inventory	0	0	Checked	Mel Lay
10/13/11		INVENTORY	∅	∅	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	Checked	Mel Lay
26 Oct 11	Items	Trans Items	To	Mark	Pat Hanson	Mark Patterson
24 JUL 12		Inventory	∅	∅	Checked	Mark Patterson
22 JULY 13		Inventory	∅	∅	Checked	Mark Patterson
23 Jul 13	Items	transfered	to	Lew	Kovarik	Lew Kovarik
19 AUG 13	Entire Contents	Transferred to Flesh	∅	1050	0	R. Kyle Taporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 mDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION mDEH Awaiting Disposal Pallet #38			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
8/9/11	M19 Tail Boom	RR2 Barrel 113	350	ø	350	Mel Lay
8/4/11	M19 Tail Boom	RR2 Barrel 114	350	ø	350	Mel Lay
8/4/11	M19 Tail Boom	RR2 Barrel 115	132	ø	132	Mel Lay
8/11/11		Inventory	ø	ø	checked	Mel Lay
8/18/11		Inventory	ø	ø	checked	Mel Lay
8/25/11		Inventory	ø	ø	checked	Mel Lay
9/1/11		Inventory	ø	ø	Checked	Paul Duncan
9/8/11		Inventory	ø	ø	checked	Lew Kovarik
9/15/11		Inventory	ø	ø	Checked	Paul Duncan
9/22/11		Inventory	ø	ø	Checked	Mel Lay
9/29/11		Inventory	ø	ø	checked	Mel Lay
6 Oct 11		Inventory	ø	ø	checked	Mel Lay
10/13/11		Inventory	ø	ø	checked	Paul Duncan
20 Oct 11		Inventory	ø	ø	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark P	Patterson	Mark Patterson
24 Jul 12		Inventory	ø	ø	checked	Mark Patterson
22 July 13		Inventory	ø	ø	checked	Mark Patterson
23 Jul 13	Items	Transferred	To	Lew	Kovarik	Lew Kovarik
19 AUG 13	Entire Contents	Transferred to Flash	ø	1050	0	R. Kyle Toborek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 ST RT 5 RAVENNA, OH
5. DESCRIPTION MDEH Awaiting Disposal Pallet #39			A. Hazard Class 1.1D	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
3 Oct 11	M19 Tail Boom	RR2 Barrel 116	350	Ø	350	Mel Lay
3 Oct 11	M19 Tail Boom	RR2 Barrel 117	350	Ø	350	Mel Lay
3 Oct 11	M19 Tail Boom	RR2 Barrel 118	350	Ø	350	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Trans Ferred	To	Mark	Patterson	Mark Patterson
24 Jul 12		Inventory	0	0	Checked	Mark Patterson
22 Jul 13		Inventory	0	0	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
5 SEP 13	Entire Contents	Transferred to Flash	Ø	1050	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. RR2 MDEH Awaiting Disposal	4. LOCATION 7-C-2	B.	D. Address 8451 St. Rt 5 Ravenna, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Pallet #40			A. Hazard Class 1.1D	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
30 Oct 11	M14 TRL Boom	RR2 Barrel 119	331	0	331	Mel Law
30 Oct 11	PPE	RR2 Barrel 120	(1) Barrel	0		Mel Law
30 Oct 11	PPE	RR2 Barrel 121	(1) Barrel	0		Mel Law
6 Oct 11		Inventory	0	0	Checked	Mel Law
13 Oct 11		Inventory	0	0	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	Checked	Mel Law
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 Jul 12		Inventory	0	0	Checked	Mark Patterson
22 Jul 13		Inventory	0	0	Checked	Mark Patterson
23 Jul 13	Items	transferred	0	0	Checked	Lew Kovarik
5 Sep 13	Items Transferred to Flash		0	331	0	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH INSP MEC AWAITING FLASHING	4. LOCATION 7-C-3	B.	D. Address 5451 ST RT 5 RAVENNA OH
5. DESCRIPTION MEC AWAITING FLASHING BOX I			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
9/2/09	75 MM APHE	Received	4	Ø	4	Lew Kovarik
9/2/09	75MM HE (TRACER)	Received	4	Ø	4	Lew Kovarik
9/2/09	B.D. FUZES	Received	2	Ø	2	Lew Kovarik
9/2/09	20MM T.P.	Received	1	Ø	1	Lew Kovarik
9/2/09	FUZE BOOSTER CUPS	Received	2	Ø	2	Lew Kovarik
9/2/09	CARTRIDGE IGNITOR	Received	2	Ø	2	Lew Kovarik
9/2/09	P.D FUZES	Received	7	Ø	7	Lew Kovarik
9/3/09		Inventory	—	—	checked	Lew Kovarik
9/11/09		Inventory	—	—	checked	Mark P
9-17-09		Inventory	—	—	checked	Mark P
9-24-09		Inventory	—	—	checked	Mark P
10-01-09		Inventory	—	—	checked	Mark P
10-08-09		Inventory	—	—	checked	Mark P
10-08-09	ITEMS	TRANSFERRED TO	Mark Patterson			Mark Patterson
19 JUL 10		Inventory	Ø	Ø	checked	Mark Patterson
12 JUL 11		Inventory	Ø	Ø	Checked	Mark Patterson
24 JUL 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 2013	ITEMS	TRANSFERRED	TO	LEW	KOVARIK	Lew Kovarik
04 SEP 13	ENTIRE CONTENTS	TRANSFERRED TO FLASH	Ø	24	0	R. Kyle Toomb

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO.	4. LOCATION	B.	D.
SUQS	– Glass	Jar	7-C-3		4451 S.R.5 Ravenna OH 44266
5. DESCRIPTION			A. 1.3	C.	E.
Propellant – Glass Jar					

6. DATE	7. DOCUMENT NO.	8. ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10. BALANCE	11. PRINTED NAME
7.18.12	Propellant	Received	45	-0	45	Angela Makin
7.24.12	Propelland	Inventory	~~0~~	-0	45	Mark Patterson
4.10.13	SUQS	Received	10	-0	55	Angela Makin
22 JUL 13	Inventory	Checked	0	0	55	Lew Kowalik
23 JUL 13	Items	Transferred to Lew Kowalik				
04 SEP 13	Entire Contents	Transferred to Flesh	0	100	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89 **MAGAZINE DATA CARD**

Continued on Reverse

For use of this form, see DA PAM 710-2-1; the proponent agency is DCSLOG

PREVIOUS EDITION IS OBSOLETE

USAPPC V1.01

1. DODIC	2. NSN	3. LOT NO.	4. LOCATION	B.	D.
5. DESCRIPTION			A.	C.	E.

6. DATE	7. DOCUMENT NO.	8. ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10. BALANCE	11. PRINTED NAME

REVERSE, DA FORM 3020-R, AUG 89 **MAGAZINE DATA CARD** *Use Other Side First*

USAPPC V1.01

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPPEH For Flashing	4. LOCATION 7-C-3	B.	D. Address 8751 STRT 5 RAVENNA OH 44266
5. DESCRIPTION 1 cu.yd. Box of MPPEH For Flashing Box RRF007		3262 LBS	A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/5/11		Rocket Ridge 2	1 cuyd Box	Ø	1 cuyd Box	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	Byron Gum
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		Inventory	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		Inventory	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checking	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		Inventory	Ø	Ø	Checked	Paul Duncan

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPPEH For Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION 1 cuyd Box of MPPEH For Flashing Box # RRF002		32621bs	A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
10/2011		INVENTORY	Ø	Ø	Checked	Mel Lam
26 Oct 11	Items	Transferred	To	Mark	Patterson	[signature]
24 Jul 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	[signature]
17 AUG 13	Entire Contents	Transferred to Flash	Ø	1 cuyd Box	0	R Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

2

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPREH for Flashings	4. LOCATION 7-C-3	B.	D. Address 2451 STR T5 RAVENNA, OH 44266
5. DESCRIPTION 1 cuyd Box of MPREH for Flashing Box RRF002		2690 4B	A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/5/11		Rocket Ridge 2	1 cuyd Box	Ø	1 cuyd Box	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	Checked	Mel Lay
4/21/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	Checked	Mel Lay
5/20/11		Inventory	Ø	Ø	Checked	Mel Lay
5/26/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/2/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	Checked	Mel Lay
6/30/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	Checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	Checked	Mel Lay
8/11/11		Inventory	Ø	Ø	Checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	Checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	Checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	Checked	Mel Lay
9/29/11		Inventory	Ø	Ø	Checked	Mel Lay
10/6/11		Inventory	Ø	Ø	Checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPPEH For Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 St Rt 5 Ravenna, OH 44266
5. DESCRIPTION 1 cuyd Box of MPPEH For Flashing		Box # RRF002 2690 lbs	A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
10/20/11		Inventory	Ø	Ø	Checked	[illegible]
26 Oct 11	Items	Transferred	To	Mark	Patterson	[illegible]
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	[illegible]
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
12 AUG 13	Entire Contents	Transferred to Flash	Ø	1 cuyd Box	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO Rocket Ridge 2 MPPEH for Flashing	4. LOCATION 7-C-3	B.	D. Address 9451 ST RT 5 RAVENNA OH 44266
5. DESCRIPTION 1 cuyd Box of MPPEH for Flashing Box RRF003		2634 LBS	A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/5/11		Rocket Ridge 2	1 cuyd Box	Ø	1 cuyd Box	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/21/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	Checked	Mel Lay
5/20/11		Inventory	Ø	Ø	Checked	Mel Lay
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	Checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPPEH for Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 St Rt 5 Ravenna, OH 44266
5. DESCRIPTION 1 cvyd Box of MPPEH for Flashing		Box # RRF003 2634 lbs	A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
10/20/11		Inventory	Ø	Ø	Checked	Mel Lyn
26 Oct 11	Items	Transferred	TO	Mark	Patterson	Mark Patt
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patt
23 Jul 2013	Items	transferred	to	Lew	Kovarik	Lew Kovarik
21 AUG 13	Entire Contents	Transferred to Flash	Ø	1 cvyd Box	0	R. Kyle Topont

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPPEH for Flashing &	4. LOCATION 7-C-3	B.	D. Address 8451 S RT 5 Ravenna OH 44266
5. DESCRIPTION 1 cuyd Box of MPPEH for Flashing Box RRF004		2952 LBS	A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/5/11		Rocket Ridge 2	1 cuyd Box	Ø	1 cuyd Box	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel L
4/21/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	[illegible]
5/5/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
3/20/12		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew K
7/21/11		Inventory	Ø	Ø	checked	Lew K
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		Inventory	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	Checked	Lew Kovarik
9/15/11		Inventory	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		Inventory	Ø	Ø	Checked	Paul Duncan

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPPEH For Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 St Rt 5 Ravenna, OH 44266

5. DESCRIPTION		A. Hazard Class	C.	E.
1 cuyd Box of MPPEH For Flashing Box # RRF004	2952 lbs	1.1		

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
10/20/11		Inventory	Ø	Ø	Checked	Melhay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patt
24 Jul 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	To	Lew	Kovarik	Lew Kovarik
25 Jul 13	Entire Contents	Transferred to Flash	Ø	1 Cu yd Box	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPREH for Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION 1 cuyd Box of MPREH for Flashing Box RRF005		3645 LBS	A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/5/11		Rocket Ridge 2	1 cuyd Box	Ø	1 cuyd Box	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel L
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	[illegible]
5/5/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	Checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew K
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
9/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	Checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPPEH FOR FLASHING	4. LOCATION 7-C-3	B.	D. Address 8451 St Rt 5 RAVENNA, OH 44266
5. DESCRIPTION 1 Cuyd Box of MPPEH FOR FLASHING Box # KRF005		3645 lbs	A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
10 Oct 11		Inventory	Ø	Ø	Checked	Mel Legg
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 Jul 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
04 SEP 13	Entire Contents	Transferred to Flash	Ø	1 Co xd Box	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MREH for Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 3rd RT 5 RAVENNA, OH 44266
5. DESCRIPTION 1 wood box of MREH for Flashing BOX RRF0016		3548 LBS	A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
4/5/11		Rocket Ridge 2	1 wood BOX	Ø	1 wood BOX	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	Checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	—	—	Checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	Checked	Lew K
7/14/11		Inventory	Ø	Ø	checked	Lew K
7/21/11		Inventory	Ø	Ø	Checked	Lew K
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	Checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPPEH FOR FLASHING	4. LOCATION 7-C-3	B.	D. Address 8457 St Rt 5 RAVENNA, OH 44266

5. DESCRIPTION		A. Hazard Class	C.	E.
1 cuyd Box of MPPEH FOR FLASHING Box # RRF006	3548 lbs	1.1		

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
10/20/11		INVENTORY	Ø	Ø	Checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patt
24 JUL 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	Transferred	to	Lew	Kovarik	Lew Kovarik
27 AUG 13	Entire Contents	Transferred to Flash	Ø	1 cuyd Box	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPREH for Flashing	4. LOCATION 7-C-3	B.	D. Address 9151 ST RT 5 RAVENNA, Oh 44266
5. DESCRIPTION 1 Lwd Box of MPREH for Flashing Box RRF007		LBS 3415 LBS	A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
4/7/11		Rocket Ridge 2	1 Lwd Box	Ø	1 Lwd Box	Lew Kovarik
4/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2	4. LOCATION	B.	D. Address 8457 St Rt 5
		MPPEH FOR FLASHING	7-C-3		RAVENNA, OH 44266

5. DESCRIPTION		A. Hazard Class	C.	E.
1 cu yd Box of MPPEH FOR FLASHING Box # RRF007	3415 lbs	1.1		

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
10/20/11		Inventory	Ø	Ø	Checked	Mark Patterson
26 Oct 11	Items	Transferred	To	Mark	Bo Hanson	Mark Patterson
24 Jul 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
12 AUG 13	Entire Contents	Transferred to Flash	Ø	1 cu yd Box	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH for Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 ST RT 5 Ravenna, Oh 44266
5. DESCRIPTION 1 Lwyd Box MDEH for Flashing Box RRF008		2012 lbs	A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
5/9/11		Rocket Ridge 2	1 Lwyd Box	Ø	1 Lwyd Box	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lau
5/20/11		Inventory	Ø	Ø	checked	Mel Lau
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lau
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew [illegible]
7/21/11		Inventory	Ø	Ø	checked	Lew [illegible]
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lau
8/11/11		Inventory	Ø	Ø	checked	Mel Lau
8/18/11		Inventory	Ø	Ø	checked	Mel Lau
8/25/11		Inventory	Ø	Ø	checked	Mel Lau
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lau
9/29/11		Inventory	0	0	checked	Mel Lau
6 Oct 11		Inventory	Ø	0	checked	Mel Lau
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lau
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	transferred	To	Lew	Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH for Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 St. Rt. 5 Ravenna, OH 44266
5. DESCRIPTION 1 cu yd Box of MDEH for Flashing Box RRF008		2012 165	A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
14 AUG 13	Entire Contents	Transferred to Flash	0	1 cu yd Box	0	R. Kyle Taporek
NH						

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge2 MDEH for Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION 1 cuyd Box MDEH for Flash Box RRF009		3254165	A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
5/9/11		Rocket Ridge2	1 cuydBox	Ø	1 cuydBox	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	—	—	checked	Lew Kovarik
6/2/11		Inventory	—	—	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		Inventory	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		Inventory	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	Checked	Mel Lay
10/13/11		Inventory	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	Ø	0	checked	Mel Lay
28 Oct 11	1 Items	Trans Ferred	To	Mark K	By Hand	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	Transferred	To	Lew	Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH for Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 S.R. 15 Ravenna, OH 44266
5. DESCRIPTION 1 cu yd Box MDEH for Flash RR F009		3254 lbs	A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	 B. LOSS	10 BALANCE	11 PRINTED NAME
15 AUG 13	Entire Contents	Transferred to Flash	Ø	1 cu yd DQ	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEA MAPP Hot for Flashing	4. LOCATION	B.	D. Address
	3598154		7-C-3		8451 ST RT 5 RAVENNA OH

5. DESCRIPTION	A. Hazard Class	C.	E.
1 cuyd Box of MDEA for Flashing Box RRF010	1.1		

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
5/26/11		Rocket Ridge 2	1 cuyd Box	Ø	1 cuyd Box	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew K
7/14/11		Inventory	Ø	Ø	checked	Lew K
7/21/11		Inventory	Ø	Ø	checked	Lew K
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Lew Kov
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	4 Tons S	Trans Fr Rod	10	Mat K	Pay Hes on	Mel Lay
14 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
23 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 July 13	Items	Transferred	0	Lew	Kovarik	Lew Kov
22 Aug 13	Entire Contents	Transferred to Flash	Less 0	1 cuyd Box	0	R. Kyle Topper

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO.	4. LOCATION	B.	D. Address
	2250 lbs	MPPEH For Flashing Rocket Ridge 2	7-C-3		8451 St Rt 5 Ravenna

5. DESCRIPTION		A. Hazard Class	C.	E.
1 Cu yd Box MPEH For Flashing	RRF011	1.1		

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
8-31-11		Rocket Ridge 2	1 Cu yd Box	0	1 Cu yd Box	Mel Kay
9/1/11		Inventory	0	0	Checked	Paul Duncan
9/8/11		Inventory	0	0	Checked	Lew Kovarik
9/15/11		Inventory	0	0	Checked	Paul Duncan
9/22/11		Inventory	0	0	Checked	Mel Kay
9/29/11		Inventory	0	0	Checked	Mel Kay
6 Oct 11		Inventory	0	0	Checked	Mel Kay
10/13/11		Inventory	0	0	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	Checked	Mel Kay
26 Oct 11	Items	Transferred	40	Mark	Patterson	Mark Patterson
24 JUL 12		Inventory	0	0	Checked	Mark Patterson
22 July 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 13	Items	transferred	40	Lew	Kovarik	Lew Kovarik
14 AUG 13	Entire Contents	Transferred to Flash	0	1 cu yd Box	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO.	4. LOCATION	B.	D. Address
	2654 lbs	Rocket Ridge 2 MDEH For Flashing	7-C-3		8451 St RT 5 Ravenna

5. DESCRIPTION		A. Hazard Class	C.	E.
1 Cu YD Box MDEH For Flashing RRF012		1.1		

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
8-31-11		Rocket Ridge 2	1 Cu YD Box	0	1 Cu YD Box	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	[illegible]
9/15/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	Checked	Mel Lay
6 Oct 11		Inventory	0	0	Checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	[illegible]
24 JUL 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew [illegible]
27 AUG 13	Entire Contents	Transferred to Flash	Ø	1 cu yd box	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2	4. LOCATION	B.	D. Address 8457 SRT 3
	2865-16S	MDEH For Flashing	J-C-3		Ravenna

5. DESCRIPTION	A. Hazard Class	C.	E.
1 CU 4D Box MDEH For Flashing RRF013	1.1		

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
31-11		Rocket Ridge 2	1 Cu 4D Box	0	1 Cu 4D Box	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	Checked	Mel Lay
Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
20 Oct 11		Inventory	0	0	Checked	Mel Lay
26 Oct 11	Items	Transfer Factory	To	Mark	Patterson	Mark Patterson
24 JUN 12		Inventory	0	0	Checked	Mark Patterson
22 JUL 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 13	Items	Transferred	To	Lew	Kovarik	Lew Kovarik
28 AUG 13	Entire Contents	Transferred to Flash	Ø	1 cu yd Box	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge2	4. LOCATION	B.	D. Address 8451 St Rt 5
	2530 lbs	MDEH For Flashing	7-C-3		Bryenna OH 44266

5. DESCRIPTION		A. Hazard Class	C.	E.
1 cu yd Box MDEH For Flashing	RRF014	1.1		

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
9/22/11	Rocket Ridge2		1 cu yd Box	Ø	1 cu yd Box	Paul Duncan
9/29/11		Inventory	0	0	checked	Mel Lee
6 Oct 11		Inventory	0	0	checked	Mel Lee
10/13/11		Inventory	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lee
26 Oct 11	Items	transferred	To	Melt	Pat Morse	Mark Patterson
24 Oct 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew K
15 Aug 13	Entire Contents	Transferred to Flash	Ø	1 cu yd Box	0	R Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2	4. LOCATION	B.	D. Address 8456 ST Rt 5
	3000 lbs	MDEH For Flashing	7-C-3		Ravenna, OH 44266
5. DESCRIPTION			A. Hazard Class	C.	E.
1 cu YD Box MDEH For Flashing RRF015			1.1		

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
9/22/11	Rocket Ridge 2		1 cuYD Box	ø	1 cuYd Box	Paul Duncan
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		Inventory	ø	ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	2 Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 13		Inventory	ø	ø	checked	Mark Patterson
22 July 13		Inventory	ø	ø	checked	Mark Patterson
23 July 13	Items	transferred	to	Lew	Kovarik	Lew Rice
28 AUG 13	Entire Contents	Transferred to Flash	ø	1 cu yd box	0	Kyle Topnik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO.	4. LOCATION	B.	D. Address
	3125 lbs	Rocket Ridge 2 MDEH For Flashing	7-C-3		8451 St. Rt. 5 Ravenna, OH 44266

5. DESCRIPTION		A. Hazard Class	C.	E.
1 cu yd Box MDEH For Flashing	RRF Ø16	1.1		

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
9/22/11	Rocket Ridge 2		1 cu yd Box	Ø	1 cu yd Box	Paul Duncan
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		Inventory	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Trans Fr/W	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovaik	Lew Kovaik
22 Aug 13	Entire Contents	Transferred to Flash	Ø	1 cu yd Box	Ø	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO.	4. LOCATION	B.	D. Address
	3172 lbs	Rocket Ridge 2 MDEH For Flashing	7-C-3		8452 St. Rt 5 Ravenna, OH 44266

5. DESCRIPTION		A. Hazard Class	C.	E.
1 cuyd Box MDEH For Flashing	RRF Ø17	1-1		

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
9/22/11	Rocket Ridge 2		1 cuyd Box	Ø	1 cuyd Box	Paul Duncan
9/29/11		Inventory	Ø	Ø	checked	Mel Lau
6 Oct 11		Inventory	O	O	checked	Mel Lau
10/13/11		Inventory	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	O	O	checked	Mel Lau
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patt
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
26 AUG 13	Entire Contents	Transferred to Flash	Ø	1 cu yd Box	O	R. Kyle Topock

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH FOR FLASHING	4. LOCATION 7-C-3	B.	D. Address 8451 St. Rt 5 RAVENNA, OH 44266
5. DESCRIPTION 1 cuyd Box MDEH FOR FLASHING RRF018		2316 lbs	A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
10/11/11		Rocket Ridge 2	1 cuyd Box	Ø	1 cuyd Box	Paul Duncan
10/13/11		Inventory	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	Checked	Mel Ley
26 Oct 11	Items	Transferred	To	Mark	Pat Herron	Mark Patterson
24 JULY 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JULY 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
26 AUG 13	Entire Contents	Transferred to Flesh	Ø	1 cu yd Box	0	P. Kyle Tolbert

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH For Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 St. Rt 5 Ravenna, OH 44266
5. DESCRIPTION 1 cuyd Box MDEH For Flashing RRF Ø19		2902 lbs	A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
10/11/11		Rocket Ridge 2	1 cuyd Box	Ø	1 cuyd Box	Paul Duncan
10/13/11		Inventory	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel [illegible]
26 Oct 11	Items	Transferring	To	Mark	Patterson	Mark Patt
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 AUG 13	Entire Contents	Transferred to Flash	Ø	1 cu yd Box	Ø	R. Kyle Tupouk

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH Inspection Mech Awaiting Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 SR 225 Ravenna OH
5. DESCRIPTION Box A Tracer Element For 152 mm proj			A. Hazard Class	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
9-9-09		Received	3000		3000	Mark Patterson
9-11-09		Inventory	—	—	Checked	Mark Patterson
9-17-09		Inventory	—	—	checked	Mark Patterson
9-24-09		Inventory	—	—	checked	Mark Patterson
10-01-09		Inventory	—	—	Checked	Mark Patterson
10-08-09		Inventory	—	—	checked	Mark Patterson
10-08-09	Items	Transferred To	Mark	Patterson		Mark Patterson
19 July 10		Inventory	0	0	Checked	Mark Patterson
12 July 11		Inventory	0	0	Checked	Mark Patterson
24 July 12		Inventory	0	0	Checked	Mark Patterson
22 JULY 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 2013	Items	Transferred	to	Lew	Kovarik	Lew Kovarik
28 AUG 13	Entire Contents	Transferred to Flesh	0	3000	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH Inspection Mech Awaiting Flashing	4. LOCATION 7C-3	B.	D. Address 8451 St RTS Ravenna, Ohio
5. DESCRIPTION Box B Tracer Element For 152mm prog			A. Hazard Class 1.4	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
9-10-09		Received	3000		3000	Mark P
9-11-09		Inventory	—	—	checked	Mark P
9-17-09		Inventory	—	—	checked	Mark P
9-24-09		Inventory	—	—	checked	Mark P
10-01-09		Inventory	—	—	checked	Mark P
10-08-09		Inventory	—	—	checked	Mark P
10-08-09	Items	Transferred TO	Mark	Patterson		Mark Patterson
19 JULY 10		Inventory	0	0	checked	Mark Patterson
12 JULY 11		Inventory	0	0	checked	Mark Patterson
24 JULY 12		Inventory	0	0	checked	Mark Patterson
22 JUL 13		Inventory	0	0	checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
04 SEP 13	Entire Contents	Transferred to Flash	0	3000	0	Tr. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH Inspection Mec Awaiting Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 ST RTS Ravenna Ohio
5. DESCRIPTION Box C Tracer Element For 152mm Projo			A. Hazard Class 1.4	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
9-11-09		Received	3000	—	3000	[illegible]
9-17-09		Inventory	—	—	Checked	[illegible]
9-24-09		Inventory	—	—	checked	[illegible]
10-01-09		Inventory	—	—	checked	[illegible]
10-08-09		Inventory	—	—	checked	[illegible]
10-08-09	Items	Transferred To	Mark	Patterson		Mark Patt
19 July 10		Inventory	Ø	Ø	checked	Mark Patterson
12 July 11		Inventory	Ø	Ø	checked	Mark Patterson
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
04 SEP 13	Entire Contents	Transferred to Flash	Ø	3000	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPAT Inspection Mec awaiting Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 SR 7 S Ravenna Ohio
5. DESCRIPTION Box D Tracer Elomant For 152mm Proj			A. Hazard Class 1.4	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
9-15-09		Received	3000	—	3000	Mark Lo
9-17-09		Inventory	—	—	Checked	Mark Lo
9-24-09		Inventory	—	—	checked	Mark Lo
10-01-09		Inventory	—	—	checked	Mark Lo
10-08-09		Inventory	—	—	checked	Mark Lo
10-08-09	Items	Transferred	To Mark	Patterson		Mark Patterson
19 July 10		Inventory	0	0	Checked	Mark Patterson
12 July 11		Inventory	0	0	Checked	Mark Patterson
24 July 12		Inventory	0	0	Checked	Mark Patterson
22 JUL 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 13	Items	Transferred	40	Lew	Kovarik	Lew Kovarik
04 SEP 13	Entire Contents	Transferred to Flash	0	3000	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH Inspection Mec Auxiliary Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 SR 93 Ravenna Oh.
5. DESCRIPTION Box E Tracer Element For 152mm Proj			A. Hazard Class 1.4	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
9-16-09		Received	3000	—	3000	[signature]
9-17-09		Inventory	—	—	Checked	[signature]
9-24-09		Inventory	—	—	Checked	[signature]
10-01-09		Inventory	—	—	Checked	[signature]
10-08-09		Inventory	—	—	Checked	[signature]
10-08-09	Items	Transferred To	Mark	Pat Herson		[signature]
19 July 10		Inventory	Ø	Ø	Checked	Mark Patterson
12 July 11		Inventory	Ø	Ø	Checked	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	[signature]
23 JUL 13	Items	Transferred	to	Lew	Kovarik	[signature]
28 AUG 13	Entire Contents	Transferred to Flash	Ø	3000	0	[signature]

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH Inspection Mec Awaiting Flashing	4. LOCATION 7-C-3	B.	D. Address 8461 5th RTS Raeven NA
5. DESCRIPTION Box F Tracer Element For 152mm Proj			A. Hazard Class 1.4	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
9-17-09		Received	3000	-	3000	Mark Patterson
9-24-09		Inventory	-	-	checked	Mark Patterson
10-01-09		Inventory	-	-	Checked	Mark Patterson
10-08-09		Inventory	-	-	checked	Mark Patterson
10-08-09	Items	Transferred To	Mark	Patterson		Mark Patterson
19 July 10		Inventory	Ø	Ø	Checked	Mark Patterson
12 July 11		Inventory	Ø	Ø	Checked	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
27 AUG 13	Entire Contents	Transferred to Flash	Ø	3000	0	R Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH Inspection	4. LOCATION	B.	D. Address 8451 ST RTE 5
		Mec Awaiting Flashing	7-C-3		RAVENNA
5. DESCRIPTION Box G Tracer Element For 152mm Proj			A. Hazard Class 1.4	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
9-21-09		Received	3000	—	3000	
9-24-09		Inventory	—	—	checked	
10-01-09		Inventory	—	—	checked	
10-08-09		Inventory	—	—	Checked	
10-08-09	Items Transferred To		Mark	Patterson		
19-July-10		Inventory	0	0	checked	Mark Patterson
12-July-11		Inventory	0	0	Checked	Mark Patterson
24-July-12		Inventory	0	0	Checked	Mark Patterson
22 JUL 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
27 AUG 13	Entire Contents	Transferred to Flash	0	3000	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH Inspection MES-Awaiting Flashing	4. LOCATION 7-C-3	B.	D. Address 8951 ST RTE Rawlins
5. DESCRIPTION BOX H Tracer Element For 152mm proj			A. Hazard Class 1.4	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
9-22-09		Received	3000	—	3000	Mark Patterson
9-24-09		Inventory	—	—	checked	Mark Patterson
10-01-09		Inventory	—	—	checked	Mark Patterson
10-08-09		Inventory	—	—	checked	Mark Patterson
10-08-09	Items	Transferred To	Mark	Patterson		Mark Patterson
19-July-10		Inventory	0	0	Checked	Mark Patterson
12-July-11		Inventory	0	0	Checked	Mark Patterson
24-July-12		Inventory	0	0	Checked	Mark Patterson
22 JUL 13		Inventory	0	0	Checked	Mark Patterson
23 Jul 13	Items	Transferred	To	Lew	Kovarik	Lew K
26 AUG 13	Entire Contents	Transferred to Flesh	0	3000	0	R. Kyle Taporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEP Inspection Mec Awaiting Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 ST RTS Savanna
5. DESCRIPTION Box I Tracer Element For 152 mm Proj			A. Hazard Class 1.4J	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
9-23-09		Received	3000	-	3000	Mark Za
9-24-09		Inventory	-	-	Checked	Mark Za
10-01-09		Inventory	-	-	Checked	Mark Za
10-08-09		Inventory	-	-	Checked	Mark Za
10-08-09	Items	Transferred To	Mark	Patterson		Mark Patterson
14 July 10		Inventory	0	0	Checked	Mark Patterson
12 July 11		Inventory	0	0	Checked	Mark Patterson
24 July 12		Inventory	0	0	Checked	Mark Patterson
29 Jul 13		Inventory	0	0	Checked	Mark Patterson
23 Jul 13	Items	Transferred	To	Lew	Kovarik	Lew Kovarik
26 AUG 13	Entire Contents	Transferred to Flash	0	3000	0	R. Kyle Tapscott

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH Inspection MEC Awaiting Flashing	4. LOCATION 7-C-3	B.	D. Address 8451 ST RT. RAVENNA OH
5. DESCRIPTION Box J Tracer Element For 152 mm projo			A. Hazard Class 1.4	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
9-24-09		Received	1296	—	1296	[illegible]
10-01-09		Inventory	—	—	Checked	[illegible]
10-08-09		Inventory	—	—	Checked	[illegible]
10-08-09	Items Transferred To		Mark	Patterson		Mark Patterson
19 July 10		Inventory	Ø	Ø	Checked	Mark Patterson
12 July 11		Inventory	Ø	Ø	Checked	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew K
25 AUG 13	Entire Contents	Transferred to Flash	Ø	1296	Ø	JR Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH Inspection Mec Awaiting Flashing	4. LOCATION 7-C-3	B.	D. Address 8th ST RT Ravenna, OH
5. DESCRIPTION Box K · Mec Awaiting Flashing			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
10-06-09	MK 29 Mod 2	Received	16	Ø	16	Mel Lay
10-06-09	MK 10 Base Fuze	Received	63	Ø	63	Mel Lay
10-06-09	VT Fuses	Received	29	Ø	29	Mel Lay
10-06-09	Flash Tubes	Received	139	Ø	139	Mel Lay
10-08-09		Inventory	—	—	Checked	Mel Lay
10-08-09	Items Transferred To		Mark	Patterson		Mark Patterson
19 JULY 10		Inventory	Ø	Ø	checked	Mark Patterson
12 July 11		Inventory	Ø	Ø	checked	Mark Patterson
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
04 SEP 13	Entire Contents	Transferred to Flash	Ø	297	0	R. Kyle Tapscott

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge #2 MEC AWAITING DISPOSAL	4. LOCATION 7-C-4	B.	D. Address 6451 ST RT 5 RAVENNA OH 44266
5. DESCRIPTION MEC AWAITING DISPOSAL (BOX I)			A. Hazard Class 1.1	C.	E.

	6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
1	9/14/10	Broken 90mm W/HE	Rocket Ridge #2	1	Ø	1	Lew Kovarik
1	9/14/10	5" Rocket Warhead	Rocket Ridge #2	1	Ø	1	Lew Kovarik
4	9/14/10	P.D. Fuze W/ Tetryl	Rocket Ridge #2	1	Ø	1	Lew Kovarik
7	9/14/10	Base of Fuze W/HE	Rocket Ridge #2	1	Ø	1	Lew Kovarik
7	9/15/10	PD Fuze (T-BAR)	Rocket Ridge #2	1	Ø	1	Lew Kovarik
8	9/15/10	Fuze Component	Rocket Ridge #2	1	Ø	1	Lew Kovarik
7	9/15/10	20MM HE Proso	Rocket Ridge #2	1	Ø	1	Lew Kovarik
7	9/16/10	20 mm HE Proso	Rocket Ridge #2	4	Ø	4	Lew Kovarik
1	9/16/10	P.D. Fuze	Rocket Ridge 2	3	Ø	3	Lew Kovarik
7	9/16/10	40 mm Frag Bar W/HE	Rocket Ridge 2	1	Ø	1	Lew Kovarik
147	9/16/10	Fuze Components	Rocket Ridge 2	4	Ø	4	Lew Kovarik
	9/16/10	3" W.P. Proso	Inventory	—	—	checked	Lew Kovarik
	9/21/10	~~75mm Shrapnel Bowl~~	RR #2	1	Ø	1	Lew Kovarik
	9/21/10	PD Fuze	RR #2	1	Ø	1	Lew Kovarik
	9/21/10	PD Fuze (TBAR)	RR #2	2	Ø	2	Lew Kovarik
	9/21/10	Grenade Fuze	RR #2	1	Ø	1	Lew Kovarik
	9/21/10	Base of Fuze	RR #2	1	Ø	1	Lew Kovarik
	9/21/10	RIBD Fuze	RR #2	1	Ø	1	Lew Kovarik
	9/21/10	Base Fuze Bottom	RR #2	1	Ø	1	Lew Kovarik
	9/21/10	Top of PD Fuze	RR #2	1	Ø	1	Lew Kovarik
	9/21/10	PD Fuze (20mm)	RR #2	1	Ø	1	Lew Kovarik
	9/21/10	Half 40mm Frag Ball	RR #2	1	Ø	1	Lew Kovarik
	9/22/10	Fuze Component	RR #2	8	Ø	8	Lew Kovarik
	9/22/10	mech Time Fuze	RR #2	1	Ø	1	Lew Kovarik
	9/22/10	Half of 40mm Cart Case	RR #2	1	Ø	1	Lew Kovarik
	9/22/10	BD Fuze Tracer Element	RR #2	1	Ø	1	Lew Kovarik
	9/22/10		Inventory	—	—	checked	Lew Kovarik
	9/28/10	3" W.P. Proso	Transferred to Bucket	Ø	1	Ø	Lew Kovarik
	9/30/10		Inventory	Ø	Ø	checked	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge #2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal (Box 1)			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
10/7/10		Inventory	Ø	Ø	checked	Lew Kovarik
10/14/10		Inventory	Ø	Ø	checked	Lew Kovarik
10/21/10		Inventory	Ø	Ø	checked	Lew Kovarik
10/28/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/4/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/11/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/18/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/24/10		Inventory	Ø	Ø	checked	Lew Kovarik
12/3/10		Inventory	Ø	Ø	checked	Lew Kovarik
12/9/10		Inventory	Ø	Ø	checked	Lew Kovarik
12/16/10		Inventory	Ø	Ø	checked	Lew Kovarik
1/6/11		Inventory	Ø	Ø	checked	Mel Lay
1/13/11		Inventory	Ø	Ø	checked	Lew Kovarik
1/20/11		Inventory	Ø	Ø	checked	Lew Kovarik
1/27/11		Inventory	Ø	Ø	checked	Lew Kovarik
2/3/11		Inventory	Ø	Ø	checked	Lew Kovarik
2/10/11		Inventory	Ø	Ø	checked	Lew Kovarik
2/17/11		Inventory	Ø	Ø	checked	Lew Kovarik
2/24/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/4/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/10/11		Inventory	Ø	Ø	Checked	Mel Lay
3/17/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/24/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/31/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/29/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 Mec Awaiting Disposal	4. LOCATION J-C-4	B.	D. Address 5451 St Rt 5 Ravenna OH 44266
5. DESCRIPTION Mec Awaiting Disposal (Box 1)			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
5/12/11		Inventory	0	0	checked	Mel Lay
5/20/11		Inventory	0	0	checked	Mel Lay
5/26/11		Inventory	0	0	checked	Lew Kovarik
6/2/11		Inventory	0	0	Checked	Lew Kovarik
6/9/11		Inventory	0	0	checked	Lew Kovarik
6/16/11		INVENTORY	0	0	Checked	Paul Duncan
6/23/11		Inventory	0	0	checked	Mel Lay
6/30/11		Inventory	0	0	checked	Lew Kovarik
7/7/11		Inventory	0	0	Checked	Lew Kovarik
7/14/11		Inventory	0	0	checked	Lew Kovarik
7/21/11		Inventory	0	0	checked	Lew Kovarik
7/28/11		Inventory	0	0	Checked	Lew Kovarik
8/4/11		Inventory	0	0	checked	Mel Lay
8/11/11		Inventory	0	0	checked	Mel Lay
8/18/11		Inventory	0	0	checked	Mel Lay
8/25/11		Inventory	0	0	Checked	Mel Lay
9/1/11		INVENTORY	0	0	CHECKED	PAUL DUNCAN
9/8/11		Inventory	0	0	Checked	Lew Kovarik
9/15/11		INVENTORY	0	0	Checked	PAUL DUNCAN
9/22/11		Inventory	0	0	Checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	0	0	Checked	PAUL DUNCAN
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	1 Items	Item Found	To	Map Tool	Pat Harrison	Mark Patterson
24 JULY 12		Inventory	0	0	Checked	Mark Patterson
22 JULY 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
24 JUL 13	Broken 90mm w/HE # 5 RR#2 Box 1	RKT WHO transferred Items transferred to FLASH	to Box 28	2	0	Kyle Toporek
24 JUL 13				Remaining	0	Kyle Toporek

DA FORM 3020-R, AUG 89 MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge #2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 2			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
9/27/10	VT Fuze	Rocket Ridge 2	1	Ø	1	Lew Kovarik
9/27/10	152mm BD Fuzes	RR 2	2	Ø	2	Lew Kovarik
9/27/10	Bomb Adapter Complete	RR 2	1	Ø	1	Lew Kovarik
9/27/10	Booster Cup Bottom	RR 2	1	Ø	1	Lew Kovarik
9/27/10	BD Fuze T-BAR	RR 2	13	Ø	13	Lew Kovarik
9/28/10	3" W.P. Projo	RR 2	1	Ø	1	Lew Kovarik
9/28/10	PD Fuze TBAR	RR2	3	Ø	3	Lew Kovarik
9/28/10	VT Fuze	RR2	1	Ø	1	Lew Kovarik
9/28/10	Fuze Components	RR2	2 PCS	Ø	2 PCS	Lew Kovarik
9/28/10	40mm Frag Ball	RR2	2	Ø	2	Lew Kovarik
9/28/10	20 mm Projo	RR2	1	Ø	1	Lew Kovarik
9/28/10	3" W.P. Projo	RR2 11 rnds to Rocket	Ø	1	Ø	Lew Kovarik
9/29/10	20 mm Projo	RR2	6	Ø	6	Lew Kovarik
9/30/10	20 mm Projo	RR2	3	Ø	3	Lew Kovarik
9/30/10	Booster Cup Bottom	RR2	1	Ø	1	Lew Kovarik
9/30/10	40 mm Frag Ball	RR2	1	Ø	1	Lew Kovarik
9/30/10		Inventory	Ø	Ø	checked	Lew Kovarik
10/4/10	PD Fuze	RR2	1	Ø	1	Lew Kovarik
10/4/10	20 mm Projo	RR2	1	Ø	1	Lew Kovarik
10/4/10	40 mm HE Projo	RR2	1	Ø	1	Lew Kovarik
10/4/10	40 mm Cart Base	RR2	1	Ø	1	Lew Kovarik
10/7/10		Inventory	Ø	Ø	checked	Lew Kovarik
10/14/10		Inventory	Ø	Ø	checked	Lew Kovarik
10/21/10		Inventory	Ø	Ø	checked	Lew Kovarik
10/28/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/4/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/11/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/18/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/24/10		Inventory	Ø	Ø	checked	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge #2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 6451 STR 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 2			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
12/3/10		Inventory	Ø	Ø	checked	Lew Kouarek
12/9/10		Inventory	Ø	Ø	checked	Lew Kouarek
12/16/10		Inventory	Ø	Ø	checked	Lew Kouarek
1/6/11		Inventory	Ø	Ø	checked	Mel Lay
1/13/11		Inventory	Ø	Ø	checked	Lew Kouarek
1/20/11		Inventory	Ø	Ø	checked	Lew Kouarek
1/27/11		Inventory	Ø	Ø	checked	Lew Kouarek
2/3/11		Inventory	Ø	Ø	checked	Lew Kouarek
2/10/11		Inventory	Ø	Ø	checked	Lew Kouarek
2/17/11		Inventory	Ø	Ø	checked	Lew Kouarek
2/24/11		Inventory	Ø	Ø	checked	Lew Kouarek
3/4/11		Inventory	Ø	Ø	checked	Lew Kouarek
3/10/11		Inventory	Ø	Ø	checked	Mel Lay
3/17/11		Inventory	Ø	Ø	checked	Lew Kouarek
3/24/11		Inventory	Ø	Ø	checked	Lew Kouarek
3/31/11		Inventory	Ø	Ø	checked	Lew Kouarek
4/7/11		Inventory	Ø	Ø	checked	Lew Kouarek
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kouarek
4/29/11		Inventory	Ø	Ø	checked	Lew Kouarek
5/5/11		Inventory	Ø	Ø	checked	Lew Kouarek
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kouarek
6/2/11		Inventory	Ø	Ø	checked	Lew Kouarek
6/9/11		Inventory	Ø	Ø	checked	Lew Kouarek
6/16/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kouarek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO.	4. LOCATION	B.	D. Address
		Rocket Ridge 2 MDEH Awaiting Disposal	7-C-4		8451 ST RT 5 RAVENNA, OH 44266

5. DESCRIPTION		A. Hazard Class	C.	E.
MDEH Awaiting Disposal Box 2		1.1		

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/22/11		Inventory	O	O	checked	Mel Lay
9/29/11		Inventory	O	O	Checked	Mel Lay
6 Oct 11		Inventory	O	O	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
20 Oct 11		Inventory	O	O	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
24 Jul 13	Items Transferred to Be Flashed					Lew Kovarik
~~24 Jul 13~~ 02 Aug 13	Entire Contents	transferred to Disposal	O	-	O	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge #2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 6451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 3			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
10/5/10	152 mm B.D Fuze	Rocket Ridge 2	2	Ø	2	Lew Kovarik
10/5/10	MT Fuze	Rocket Ridge 2	1	Ø	1	Lew Kovarik
10/5/10	P.D. Fuze (TBAR)	Rocket Ridge 2	2	Ø	2	Lew Kovarik
10/5/10	37 mm DD Fuze	Rocket Ridge 2	4	Ø	4	Lew Kovarik
10/5/10	20 mm Projo	Rocket Ridge 2	3	Ø	3	Lew Kovarik
10/5/10	Booster Cup	Rocket Ridge 2	1	Ø	1	Lew Kovarik
10/5/10	PD Fuze	RR #2	1	Ø	1	Lew Kovarik
10/6/10	152 mm B.D. Fuze	RR #2	1	Ø	1	Lew Kovarik
10/6/10	40 mm Trag Ball	RR 2	1	Ø	1	Lew Kovarik
10/6/10	MT. Fuze	RR 2	1	Ø	1	Lew Kovarik
10/6/10	HALF MT Fuze	RR 2	1	Ø	1	Lew Kovarik
10/6/10	P.D. Fuze (HALF)	RR 2	1	Ø	1	Lew Kovarik
10/6/10	Fuze Components	RR 2	3	Ø	3	Lew Kovarik
10/6/10	20 mm Projo	RR 2	1	Ø	1	Lew Kovarik
10/7/10	20 mm Projo	RR 2	2	Ø	2	Lew Kovarik
10/7/10	152 mm B.D. Fuze	RR 2	1	Ø	1	Lew Kovarik
10/7/10	Booster Tube	RR 2	1	Ø	1	Lew Kovarik
10/7/10		Inventory	Ø	Ø	checked	Lew Kovarik
10/12/10	P.D. Fuze (TBAR)	RR 2	1	Ø	1	Lew Kovarik
10/12/10	90mm Projo HE	RR 2	1	Ø	1	Lew Kovarik
10/14/10	152mm B.D Fuze	RR 2	1	Ø	1	Lew Kovarik
10/14/10	20 mm Projo	RR 2	3	Ø	3	Lew Kovarik
10/14/10	Fuze Components	RR 2	4	Ø	4	Lew Kovarik
10/14/10	37mm Projo (Tracer Intact)	RR 2	1	Ø	1	Lew Kovarik
10/14/10	B. D. Fuze	RR 2	1	Ø	1	Lew Kovarik
10/14/10		Inventory	Ø	Ø	checked	Lew Kovarik
10/21/10		Inventory	Ø	Ø	checked	Lew Kovarik
10/28/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/4/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/11/10		Inventory	Ø	Ø	checked	Lew Kovarik

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Radford #2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 3			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
11/18/10		Inventory	0	0	checked	Lew Kovarik
11/24/10		Inventory	0	0	checked	Lew Kovarik
12/3/10		Inventory	0	0	Checked	Lew Kovarik
12/9/10		Inventory	0	0	checked	Lew Kovarik
12/16/10		Inventory	0	0	checked	Lew Kovarik
1/6/11		Inventory	0	0	checked	Mel Lay
1/13/11		Inventory	0	0	checked	Lew Kovarik
1/20/11		Inventory	0	0	checked	Lew Kovarik
1/27/11		Inventory	0	0	checked	Lew Kovarik
2/3/11		Inventory	0	0	checked	Lew Kovarik
2/10/11		Inventory	0	0	checked	Lew Kovarik
2/17/11		Inventory	0	0	Checked	Lew Kovarik
2/24/11		Inventory	0	0	checked	Lew Kovarik
3/4/11		Inventory	0	0	Checked	Lew Kovarik
3/10/11		Inventory	0	0	checked	Mel Lay
3/17/11		Inventory	0	0	checked	Lew Kovarik
3/24/11		Inventory	0	0	checked	Lew Kovarik
3/31/11		Inventory	0	0	checked	Lew Kovarik
4/7/11		Inventory	0	0	checked	Lew Kovarik
4/14/11		Inventory	0	0	checked	Mel Lay
4/21/11		Inventory	0	0	checked	Lew Kovarik
4/29/11		Inventory	0	0	checked	Lew Kovarik
5/5/11		Inventory	0	0	checked	Lew Kovarik
5/12/11		Inventory	0	0	checked	Mel Lay
5/20/11		Inventory	0	0	checked	Mel Lay
5/26/11		Inventory	0	0	checked	Lew Kovarik
6/2/11		Inventory	0	0	checked	Lew Kovarik
6/9/11		Inventory	0	0	checked	Lew Kovarik
6/16/11		INVENTORY	0	0	Checked	PAUL DUNCAN

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOC NO. Rocket Ridge MEC Awaiting Disposal #2	4. LOCATION J-C-4	B.	D. Address 8451 ST RT 5 Ravenna OH 44266
5. DESCRIPTION MEC Awaiting Disposal Bot 3			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
6/23/11		Inventory	6	6	checked	Mel Lay
6/30/11		Inventory	0	0	checked	Lew Kovarik
7/7/11		Inventory	0	0	Checked	Lew Kovarik
7/14/11		Inventory	0	0	checked	Lew Kovarik
7/21/11		Inventory	0	0	checked	Lew Kovarik
7/28/11		Inventory	0	0	Checked	Lew Kovarik
8/4/11		Inventory	6	6	Checked	Mel Lay
8/11/11		Inventory	6	6	checked	Mel Lay
8/18/11		Inventory	0	6	checked	Mel Lay
8/25/11		Inventory	0	6	checked	Mel Lay
9/1/11		INVENTORY	0	0	checked	PAUL DUNCAN
9/8/11		Inventory	0	0	checked	Lew Kovarik
9/15/11		INVENTORY	0	0	Checked	PAUL DUNCAN
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	0	0	Checked	PAUL DUNCAN
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	J. Toms	Transferred	10	Mark	PA Hanson	Mark Patterson
24 JULY 12		Inventory	0	0	Checked	MARK PATHERSON
22 JUL 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
24 JUL 13	20MM PROJO	transferred to Flash	0	2	0	R. Kyle Toporek
25 JUL 13	152 MM BD FUZE	Flash	0	4	0	R. Kyle Toporek
25 JUL 13	77 MM PROJO	Flash	0	1	3	R. Kyle Toporek
25 JUL 13	MT FUZE	Flash	0	3	3	R. Kyle Toporek
25 JUL 13	PD FUZE (T BAR)	Flash	0	2	1	R. Kyle Toporek
25 JUL 13	BD FUZE	Flash	0	1	1	R. Kyle Toporek
31 JUL 13	20 MM PROJO	Transferred to Disposal	0	1	0	R. Kyle Toporek

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MAGAZINE DATA CARD

02 AUG 13 PIBD Fuzes Transferred to Disposal 0 7 0 R. Kyle Toporek

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge #2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 St Rt. 5 Ravenna, OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 3			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
05 AUG 13	90 mm proj	Transferred to Box 26	0	-1	0	R Kyle Topsock
05 AUG 13	T. Box	Transferred to Flash	0	1	0	R. Kyle Topsock
05 AUG 13	Entire Contents	Transferred to Disposal			0	R. Kyle Topsock

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge #2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 STRT 5 Ravenna, Oh 44266
5. DESCRIPTION MEC Awaiting Disposal Box 4			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
10/20/10	B.D. Fuze	Rocket Ridge 2	1	Ø	1	Lew Kovarik
10/20/10	20 mm Projo	RR 2	4	Ø	4	Lew Kovarik
10/20/10	P.D. Fuze	RR 2	1	Ø	1	Lew Kovarik
10/20/10	Booster Cup (Bottom)	RR 2	1	Ø	1	Lew Kovarik
10/20/10	Fuze Component	RR 2	1	Ø	1	Lew Kovarik
10/21/10		Inventory	Ø	Ø	Checked	Lew Kovarik
10/25/10	Practice Bomb MK23	RR 2	1	Ø	1	Lew Kovarik
10/25/10	40mm Grenade	RR 2	6	Ø	6	Lew Kovarik
10/25/10	P.D. Fuze T-BAR	RR 2	3	Ø	3	Lew Kovarik
10/25/10	P.D. Fuze	RR 2	1	Ø	1	Lew Kovarik
10/25/10	Fuze Component	RR 2	1	Ø	1	Lew Kovarik
10/25/10	20 mm Projo	RR 2	1	Ø	1	Lew Kovarik
10/25/10	Grenade Fuze	RR 2	1	Ø	1	Lew Kovarik
10/25/10	37mm Projo (Pieces)	RR 2	3	Ø	3	Lew Kovarik
10/25/10	Partial Mortar Tail Boom w/Primer	RR 2	1	Ø	1	Lew Kovarik
10/25/10	Booster Cup	RR 2	1	Ø	1	Lew Kovarik
10/25/10	Auxiliary Detonating Fuze	RR 2	3	Ø	3	Lew Kovarik
10/27/10	Auxiliary Detonating Fuze	RR 2	1	Ø	1	Lew Kovarik
10/27/10	40 mm Grenade	RR 2	1	Ø	1	Lew Kovarik
10/27/10	B.D. Fuze	RR 2	1	Ø	1	Lew Kovarik
10/27/10	20mm Projo	RR 2	1	Ø	1	Lew Kovarik
10/27/10	Grenade Fuze (Hand)	RR 2	1	Ø	1	Lew Kovarik
10/27/10	P.D. Fuze (T-BAR)	RR 2	1	Ø	1	Lew Kovarik
10/28/10		Inventory	Ø	Ø	Checked	Lew Kovarik
11/4/10	P.D Fuze (T-BAR)	RR 2	2	Ø	2	Lew Kovarik
11/4/10	20 mm Projo	RR 2	4	Ø	4	Lew Kovarik
11/4/10	Grenade Fuze	RR 2	2	Ø	2	Lew Kovarik
11/4/10	P.D. Fuze	RR 2	1	Ø	1	Lew Kovarik
11/4/10	Booster Tube	RR 2	1	Ø	1	Lew Kovarik

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge #2 MEC Auditing Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 Ravenna OH 44266
5. DESCRIPTION MEC Auditing Disposal Box 4			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
11/4/10	40mm Grenade Det	RR2	1	0	1	Lew Kovarik
11/4/10		Inventory	0	0	checked	Lew Kovarik
11/9/10	152mm B.D. Fuze	RR2	5	0	5	Lew Kovarik
11/9/10	~~Fuze~~ Bomb Fuze	"	1	0	1	Lew Kovarik
11/9/10	20mm Proj	"	3	0	3	Lew Kovarik
11/9/10	P.D. Fuze	"	1	0	1	Lew Kovarik
11/9/10	M.T. Fuze	"	1	0	1	Lew Kovarik
11/9/10	37mm Proj to Recce	"	3	0	3	Lew Kovarik
11/9/10	Fuze Booster Cups	"	3	0	3	Lew Kovarik
11/9/10	Howitzer Det Fuze	"	1	0	1	Lew Kovarik
11/9/10	Grenade Fuze	"	1	0	1	Lew Kovarik
11/9/10	B.D. Fuze (37mm)	"	1	0	1	Lew Kovarik
11/9/10	40 mm Fuzes	"	2	0	2	Lew Kovarik
11/16/10		Inventory	0	0	checked	Lew Kovarik
11/18/10		Inventory	0	0	checked	Lew Kovarik
11/24/10		Inventory	0	0	checked	Lew Kovarik
12/3/10		Inventory	0	0	Checked	Lew Kovarik
12/9/10		Inventory	0	0	checked	Lew Kovarik
12/16/10		Inventory	0	0	checked	Lew Kovarik
1/6/11		Inventory	0	0	Checked	Mel Lay
1/13/11		Inventory	0	0	checked	Lew Kovarik
1/20/11		Inventory	0	0	checked	Lew Kovarik
1/27/11		Inventory	0	0	checked	Lew Kovarik
2/3/11		Inventory	0	0	checked	Lew Kovarik
2/10/11		Inventory	0	0	checked	Lew Kovarik
2/17/11		Inventory	0	0	checked	Lew Kovarik
2/24/11		Inventory	0	0	Checked	Lew Kovarik
3/4/11		Inventory	0	0	Checked	Lew Kovarik
3/10/11		Inventory	0	0	Checked	Mel Lay

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO Rocket Ridge #2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 St RT 5 RAVENNA OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 4			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
3/17/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/24/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/31/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	Checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	Checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/22/11		Inventory	Ø	Ø	Checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge-2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 St RT 5 Ravenna OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 4			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	TO	Mark	Patterson	Mark Patt
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
29 JUL 13	40mm Grenade	transferred to Box 28	0	2	0	R. Kyle Toporek
29 JUL 13	Booster Cup	transferred to Box 28	0	1	0	R. Kyle Toporek
29 JUL 13	Entire Contents	transferred to Flash				R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 5			A. Hazard Class	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
3/24/11	30mm Projo	Rocket Ridge 2	3		3	Lew Kovarik
3/24/11	25mm Projo	" "	3		3	Lew Kovarik
3/24/11	20mm Projo	" "	47		47	Lew Kovarik
3/24/11	Booster Cup	" "	1		1	Lew Kovarik
3/24/11	VT Fuze	" "	1		1	Lew Kovarik
3/24/11	Burster Tube	" "	1		1	Lew Kovarik
3/24/11		Inventory			checked	Lew Kovarik
3/31/11		Inventory			checked	Lew Kovarik
4/7/11		Inventory			checked	Lew Kovarik
4/14/11		Inventory			checked	Mel Lay
4/21/11		Inventory			checked	Lew Kovarik
4/28/11		Inventory			Checked	Bruce Jean
5/5/11		Inventory			checked	Lew Kovarik
5/12/11		Inventory			checked	Mel Lay
5/20/11		Inventory			checked	Mel Lay
5/26/11		Inventory			checked	Lew Kovarik
6/2/11		Inventory			Checked	Lew Kovarik
6/9/11		Inventory			checked	Lew Kovarik
6/16/11		INVENTORY			Checked	Paul Duncan
6/23/11		Inventory			checked	Mel Lay
6/30/11		Inventory			checked	Lew Kovarik
7/7/11		Inventory			Checked	Lew Kovarik
7/14/11		Inventory			Checked	Lew K
7/21/11		Inventory			checked	Lew Kov
7/28/11		Inventory			Checked	Lew Kovarik
8/4/11		Inventory			checked	Mel Lay
8/11/11		Inventory			checked	Mel Lay
8/18/11		Inventory			Checked	Mel Lay
8/25/11		Inventory			Checked	Mel Lay

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge MEC Awaiting Disposal	4. LOCATION 7-2-4	B.	D. Address 9451 ST RT 5 RAVENNA OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 5			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
11/10/10	40mm Grenade	Rocket Ridge 2	1	Ø	1	Lew Kovarik
11/10/10	20mm Projo	Rocket Ridge 2	1	Ø	1	Lew Kovarik
11/10/10	Fuze Booster Cup	" "	1	Ø	1	Lew Kovarik
11/10/10	Grenade Fuze	" "	1	Ø	1	Lew Kovarik
11/11/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/15/10	152mm B.D. Fuze	Rocket Ridge 2	2	Ø	2	Lew Kovarik
11/15/10	37mm Projo	Rocket Ridge 2	2	Ø	2	Lew Kovarik
11/15/10	Fuze Components	Rocket Ridge 2	1	Ø	1	Lew Kovarik
11/15/10	Fuze Booster Cup	Rocket Ridge 2	1	Ø	1	Lew Kovarik
11/18/10		Inventory	Ø	Ø	checked	Lew Kovarik
11/24/10		Inventory	Ø	Ø	checked	Lew Kovarik
12/3/10		Inventory	Ø	Ø	checked	Lew Kovarik
12/9/10		Inventory	Ø	Ø	checked	Lew Kovarik
12/16/10		Inventory	Ø	Ø	checked	Lew Kovarik
1/6/11		Inventory	Ø	Ø	checked	Mel Lay
1/13/11		Inventory	Ø	Ø	checked	Lew Kovarik
1/20/11		Inventory	Ø	Ø	checked	Lew Kovarik
1/27/11		Inventory	Ø	Ø	checked	Lew Kovarik
2/3/11		Inventory	Ø	Ø	checked	Lew Kovarik
2/10/11		Inventory	Ø	Ø	checked	Lew Kovarik
2/17/11		Inventory	Ø	Ø	checked	Lew Kovarik
2/24/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/4/11		Inventory	Ø	Ø	checked	Mel Lay
3/10/11		Inventory	Ø	Ø	checked	Mel Lay
3/17/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/24/11	75mm Shrapnel Projo	RR 2	2	Ø	2	Lew Kovarik
3/24/11	Hand Grenade MK II	RR 2	2	Ø	2	Lew Kovarik
3/24/11	40mm Projo (BOFORS)	RR 2	2	Ø	2	Lew Kovarik
3/24/11	37mm Projo	RR 2	10	Ø	10	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocker Ridge 2	4. LOCATION	B.	D. Address 8451 ST RT 5 RAVENNA OH 44266
		MEC AWAITING DISPOSAL	7-C-4		
5. DESCRIPTION MEC AWAITING DISPOSAL		Box 5	A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
9/1/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Leon Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	Checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	ITEMS	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
26 JUL 13	20mm proj	transferred to Flash	0	1	46	R. Kyle Toporek
29 JUL 13	Grenade MK D	transferred to Flash	0	2	1	R. Kyle Toporek
29 JUL 13	152 mm B.D. fuze	Transferred to Flash	0	1	1	R. Kyle Toporek
31 JUL 13	20mm Proj	Transferred to DISPOSAL	0	46	0	R. Kyle Toporek
02 AUG 13	Booster Cup	Transferred to Disposal	0	1	0	R. Kyle Toporek
05 AUG 13	152 mm B.D. fuze	Transferred to Disposal	0	1	0	R. Kyle Toporek
05 AUG 13	Booster Cups	Transferred to Disposal	0	2	0	R. Kyle Toporek
05 AUG 13	fuze Component	Transferred to Disposal	0	1	0	R. Kyle Toporek
06 AUG 13	Entire Contents	Transferred to Disposal			0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC Awaiting Disposal	4. LOCATION 7C-4	B.	D. Address 8451 ST RT 5 RAVENNA OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 6			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
3/7/11	PIBD Fuzes	Rocket Ridge 2	28	Ø	28	Lew Kovarik
3/7/11	P.D. Fuzes	Rocket Ridge 2	11	Ø	11	Lew Kovarik
3/7/11	M.T. Fuzes	RR #2	2	Ø	2	Lew Kovarik
3/7/11	100 series Bomb Fuze	RR #2	1	Ø	1	Lew Kovarik
3/7/11	B.D. Fuzes	RR #2	3	Ø	3	Lew Kovarik
3/7/11	P.D. Fuze (T-BAR)	RR #2	1	Ø	1	Lew Kovarik
3/7/11	Fuze Component	RR #2	1	Ø	1	Lew Kovarik
3/7/11	175mm B.D. Fuzes	RR #2	2	Ø	2	Lew Kovarik
3/10/11		Inventory	Ø	Ø	Checked	Mel Lay
3/17/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/24/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/31/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	Bruce Lyon
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC AWAITING DISPOSAL	4. LOCATION 7-C-4	B.	D. Address 8451 ST. RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC AWAITING DISPOSAL Box 6			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
8/4/11		Inventory	0	0	Checked	Mel Lay
8/11/11		Inventory	0	0	checked	Mel Lay
8/18/11		Inventory	0	0	Checked	Mel Lay
8/25/11		Inventory	0	0	Checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	175 mm BD fuzes	Transferred to Flash	0	2	0	R. Kyle Toporek
25 JUL 13	P.D. Fuzes	Transferred to Flash	0	11	0	R. Kyle Toporek
25 JUL 13	Fuze Component	Transferred to Flash	0	1	0	R. Kyle Toporek
25 JUL 13	P.D. (T BAR)	Transferred to Flash	0	1	0	R. Kyle Toporek
25 JUL 13	MT Fuzes	Transferred to Flash	0	2	0	R. Kyle Toporek
02 AUG 13	100 Series Bomb fuze	Gain From Box 6	1	0	0	R. Kyle Toporek
02 AUG 13	BD fuze	Gain from Box 6	1	0	2	R. Kyle Toporek
05 AUG 13	Entire Contents	Transferred to Disposal	0	All	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 Mec Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 SR 45 Ravenna Oh. 44266
5. DESCRIPTION Mec Awaiting Disposal Box 7			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
3/7/11	20mm projo	Rocket Ridge 2	26	Ø	26	Mel Lay
3/7/11	Pd Fuzes	" "	7	Ø	7	Mel Lay
3/7/11	60mm Mortar HE unfuzed	" "	2	Ø	2	Mel Lay
3/7/11	81mm mortar HE unfuzed	" "	1	Ø	1	Mel Lay
3/7/11	37mm HE unfuzed	" "	1	Ø	1	Mel Lay
3/7/11	Fuze Component	" "	1	Ø	1	Mel Lay
3/7/11	Bd Fuze	" "	1	0	1	Mel Lay
3/9/11	60 mm mortar HE unfuzed	" "	1	Ø	1	Lew Kovarik
3/8/11	40mm HE (BOFORS)	" "	1	Ø	1	Lew Kovarik
3/8/11	VT Fuzes	" "	5	Ø	5	Lew Kovarik
3/8/11	75 mm Projo	" "	1	Ø	1	Lew Kovarik
3/10/11		Inventory	Ø	Ø	checked	Mel Lay
3/17/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/24/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/31/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 7			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
7/14/11		Inventory	Ø	Ø	checked	Lew K
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	Checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Trans. Ferred	To	Mgr ft	Pa Hetson	Mark Patt
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	20 MM proje	transferred to Flash	0	7	23	R. Kyle Toporek
25 JUL 13	PD fuzes	transferred to Flash	0	5	2	R. Kyle Toporek
25 JUL 13	VT Fuzes	transferred to Flash	0	3	2	R. Kyle Toporek
05 AUG 13	20mm PROJ	Transferred to Disposal	0	23	0	R. Kyle Toporek
05 AUG 13	BD. Fuze	Transferred to Disposal	0	1	0	R. Kyle Toporek
05 AUG 13	V.T. Fuze	Transferred to Disposal	0	4	0	R. Kyle Toporek
06 AUG 13	Entire Contents	Transferred to Disposal	Ø	All	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC Awaiting Disp	4. LOCATION C-C-4	B.	D. Address 9451 ST RT 5 RAVENNA OH 44266
5. DESCRIPTION MEC Awaiting Disposal BOX 8			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
3/8/11	PIBD Fuzes	Rocket Ridge	10	Ø	10	Lew Kovanic
3/8/11	20 MM Proto's	Rocket Ridge	53	Ø	53	Lew Kovanic
3/8/11	MT Fuze	Rocket Ridge	2	Ø	2	Lew Kovanic
3/8/11	P.D. Fuze	" "	7	Ø	7	Lew Kovanic
3/8/11	32 MM Protos	" "	2	Ø	2	Lew Kovanic
3/8/11	30 MM Proto's	" "	2	Ø	2	Lew Kovanic
3/8/11	BD Fuzes	" "	4	Ø	4	Lew Kovanic
3/10/11		Inventory	Ø	Ø	Checked	Mel Law
3/17/11		Inventory	Ø	Ø	Checked	Lew Kovanic
3/24/11		Inventory	Ø	Ø	Checked	Lew Kovanic
3/31/11		Inventory	Ø	Ø	Checked	Lew Kovanic
4/7/11		Inventory	Ø	Ø	checked	Lew Kovanic
4/14/11		Inventory	Ø	Ø	Checked	Mel Law
4/21/11		Inventory	Ø	Ø	Checked	Lew Kovanic
4/29/11		Inventory	Ø	Ø	Checked	
5/5/11		Inventory	Ø	Ø	Checked	Lew Kovanic
5/12/11		Inventory	Ø	Ø	Checked	Mel Law
5/20/11		Inventory	Ø	Ø	Checked	Mel Law
5/26/11		Inventory	Ø	Ø	Checked	Lew Kovanic
6/2/11		Inventory	—	—	Checked	Lew Kovanic
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovanic
6/16/11		Inventory	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	Checked	Mel Law
6/30/11		Inventory	Ø	Ø	Checked	Lew Kovanic
7/7/11		Inventory	Ø	Ø	Checked	Lew Kovanic
7/14/11		Inventory	Ø	Ø	Checked	Lew Kovanic
7/21/11		Inventory	Ø	Ø	Checked	Lew Kovanic
7/28/11		Inventory	Ø	Ø	Checked	Lew Kovanic
8/4/11		Inventory	Ø	Ø	Checked	Mel Law

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 Mec Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 845 1 ST RT 5 Ravenna OH 44265
5. DESCRIPTION Mec Awaiting Disposal Box 8			A. Hazard Class	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
8/11/11		Inventory	0	0	checked	Mel Lay
8/18/11		Inventory	0	0	checked	Mel Lay
8/25/11		Inventory	0	0	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	Checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patt
24 JUL 12		Inventory	Ø	Ø	checked	Mark Patterson
24 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	To	Lew	Kovarik	Lew Kovarik
25 JUL 13	PD Fuzes	Transferred to Flash	0	7	0	R. Kyle Toporek
25 JUL 13	MT Fuzes	Transferred to Flash	0	2	0	R. Kyle Toporek
31 JUL 13	20mm plate	Transferred to Disposal	0	43	0	R. Kyle Toporek
02 AUG 13	PIBD	Transferred to Disposal	0	10	0	R. Kyle Toporek
05 AUG 13	B.D. Fuzes	Transferred to Disposal	0	4	0	R. Kyle Toporek
06 AUG 13	Entire Contents	Transferred to Disposal	Ø	All	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 2451 ST RT 5 Ravenna oh 44266
5. DESCRIPTION MEC Awaiting Disposal Box 9			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
3/8/11	37 mm PROTO	Rocket Ridge 2	1	Ø	1	Lew Kovarik
3/8/11	P.D. Fuze (T-BAR)	" "	1	Ø	1	Lew Kovarik
3/8/11	MT Fuzes	" "	4	Ø	4	Lew Kovarik
3/8/11	P.D Fuzes	" "	14	Ø	14	Lew Kovarik
3/10/11		Inventory	-0-	-0-	Checked	Mel Lay
3/17/11		Inventory	Ø	Ø	Checked	Lew Kovarik
3/21/11	PIBD Fuzes	Rocket Ridge 2	33	Ø 33	Checked	Lew Kovarik
3/21/11	20 mm Proto	Rocket Ridge 2	23	Ø 23	Checked	Lew Kovarik
3/21/11	30 mm Proto	" "	1	Ø	1	Lew Kovarik
3/21/11	37 mm Proto	" "	1	Ø	1	Lew Kovarik
3/24/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/31/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	-0-	-0-	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	-0-	-0-	Checked	Mel Lay
5/20/11		Inventory	-0-	-0-	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	-0-	-0-	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	Checked	Lew Kovarik

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 St. Rt. 5 Ravenna, OH 44226
5. DESCRIPTION MEC Awaiting Disposal Box 9			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
8/4/11		Inventory	0	0	checked	Mel Lay
8/11/11		Inventory	0	0	checked	Mel Lay
8/18/11		Inventory	0	0	checked	Mel Lay
8/25/11		Inventory	0	0	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	P.D. fuzes	transferred to Flesh	0	15	0	R. Kyle Toporek
25 JUL 13	M.T. fuzes	Trasferred to Flesh	0	3	0	R. Kyle Toporek
02 AUG 13	P.B.D fuzes	Transferred to DISPOSAL	0	33	0	R. Kyle Toporek
05 AUG 13	Entire Contents	Transferred to Disposal	0	41	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal/ Box 10			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
3/21/11	P.D. Fuzes	RR2	46	Ø	46	Lew Kovarik
3/21/11	MT Fuzes	"	4	Ø	4	Lew Kovarik
3/21/11	PIBD Booster Cup	"	3	Ø	3	Lew Kovarik
3/21/11	PIBD Fuze	"	1	Ø	1	Lew Kovarik
3/21/11	BD Fuze	"	1	Ø	1	Lew Kovarik
3/21/11	Auxiliary Detonating Fuze	"	1	Ø	1	Lew Kovarik
3/21/11	37mm Proso	"	1	Ø	1	Lew Kovarik
3/21/11	SIAP Flare	"	1	Ø	1	Lew Kovarik
3/22/11	60mm Flare	"	1	Ø	1	Brice Freeman
3/22/11	60mm Mortar	"	2	Ø	2	Brice Freeman
3/22/11	20mm Proso	"	18	Ø	18	Brice Freeman
3/22/11	37mm Proso	"	1	Ø	1	Brice Freeman
3/22/11	25mm Proso	"	1	Ø	1	Brice Freeman
3/24/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/31/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Bldg 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 Ravenna, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 10			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
7/14/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/28/11		Inventory	Ø	Ø	Checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	Checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	Checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	Checked	Mel Lay
9/29/11		Inventory	Ø	Ø	Checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		~~Checked~~ Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
24 JUL 13	P.D. Fuzes	transferred Box 1	0	43	~~Toporok~~ 3	R.K. Toporok
24 JUL 13	PIBD Fuzes	transferred Box 1	0	1	0	R.K. Toporok
24 JUL 13	MT Fuzes	transferred Box 1	0	4	0	R.K. Toporok
24 JUL 13	PIBD Booster Cups	transferred Box 1	0	3	0	R. Kyle Toporok
24 JUL 13	Slap Flare	transferred Box 1	0	1	0	R. Kyle Toporok
24 JUL 13	20 MM projo	transferred Box 1	0	~~#~~ 2	#16	R. Kyle Toporok
31 JUL 13	20 mm projo	Transferred to Disposal	0	16	0	R. Kyle Toporok
~~02 AUG 13~~	~~PD fuzes~~	~~Transferred to Disposal~~	~~0~~	~~46~~		
02 AUG 13	PD fuzes	Transferred to Disposal	0	3	0	R. Kyle Toporok
05 AUG 13	BD fuze	Transferred to Disposal	0	1	0	R. Kyle Toporok

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge #3 MDEH	4. LOCATION 7C4	B.	D. Address 8051 St. Rt 5 Ravenna OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 10			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
06 AUG 13	Entire Contents	Transferred to Disposal	0	All	0	R. Kyle Tupper

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 RAVENNA OH 44266
5. DESCRIPTION MEC Awaiting Disposal / BOX 11			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
3/22/11	VT Fuzes	Rocket Ridge 2	2	Ø	2	Lew Kovarik
3/22/11	MT Fuze	Rocket Ridge 2	1	Ø	1	Lew Kovarik
3/22/11	PIBD Booster Cup	" "	1	Ø	1	Lew Kovarik
3/22/11	PIBD Fuzes	" "	23	Ø	23	Lew Kovarik
3/22/11	P.D. Fuzes	" "	51	Ø	51	Lew Kovarik
3/24/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/31/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	Checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	Checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEDH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 St Rt 5 Ravenna, OH 44266
5. DESCRIPTION MEDH Awaiting Disposal Box 11			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	P.D. Fuzes	Transferred to Flash	0	51	0	Richard K. Toporek
25 JUL 13	MT Fuzes	Transferred to Flash	0	1	0	R. Kyle Toporek
02 AUG 13	VT Fuzes	Transferred to Box 26	0	2	0	R. Kyle Toporek
02 AUG 13	Entire Contents	Transferred to Disposal	0	All	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8461 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 12			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
3/23/11	KIBD Fuzes	Rocket Ridge 2	19	0	19	Lew Kovarik
3/23/11	BD Fuzes	" "	9	0	9	Lew Kovarik
3/23/11	RD Fuzes	" "	37	0	37	Lew Kovarik
3/23/11	VT Fuzes	" "	7	0	7	Lew Kovarik
3/24/11		Inventory	0	0	checked	Lew Kovarik
3/31/11		Inventory	0	0	Checked	Lew Kovarik
4/7/11		Inventory	0	0	Checked	Lew Kovarik
4/14/11		Inventory	0	0	checked	Mel Lay
4/21/11		Inventory	0	0	Checked	Lew Kovarik
4/28/11		Inventory	0	0	Checked	[illegible]
5/5/11		Inventory	0	0	checked	Lew Kovarik
5/12/11		Inventory	0	0	Checked	Mel Lay
5/20/11		Inventory	0	0	checked	Mel Lay
5/26/11		Inventory	0	0	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	0	0	checked	Lew Kovarik
6/16/11		INVENTORY	0	0	checked	Paul Duncan
6/23/11		Inventory	0	0	checked	Mel Lay
6/30/11		Inventory	0	0	Checked	Lew Kovarik
7/7/11		Inventory	0	0	Checked	Lew Kovarik
7/14/11		Inventory	0	0	Checked	Lew K[illegible]
7/21/11		Inventory	0	0	Checked	Lew K[illegible]
7/28/11		Inventory	0	0	checked	Lew Kovarik
8/4/11		Inventory	0	0	checked	Mel Lay
8/11/11		Inventory	0	0	checked	Mel Lay
8/18/11		Inventory	0	0	checked	Mel Lay
8/25/11		Inventory	0	0	checked	Mel Lay
9/1/11		INVENTORY	0	0	Checked	Paul Duncan
9/8/11		Inventory	0	0	checked	Lew Kovarik

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC AWAITING DISPOSAL	4. LOCATION 7-C-4	B.	D. Address 8451 St Rt 5 RAVENNA, OH 44266
5. DESCRIPTION MEC AWAITING DISPOSAL BOX 12			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
9/15/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
20 Oct 11		Inventory	Ø	Ø	Checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew K
02 AUG 13	PI OD	Transferred to Disposal	0	19	0	R. Kyle Toporek
02 AUG 13	PD	Transferred to Disposal	0	3	0	R. Kyle Toporek
05 AUG 13	Entire Contents	Transferred to Disposal	0	411	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC AWAITING DISPOSAL	4. LOCATION 7-C-4	B.	D. Address 8457 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC AWAITING DISPOSAL BOX 13			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
3/23/11	20 MM PROTO	Rocket Ridge 2	137	Ø	137	Lew Kovarik
3/23/11	25mm Proto	" "	4	Ø	4	Lew Kovarik
3/23/11	30mm Proto	" "	5	Ø	5	Lew Kovarik
3/24/11		Inventory	Ø	Ø	checked	Lew Kovarik
3/31/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/29/11		Inventory	Ø	Ø	checked	
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	Checking	Mel Lay
8/11/11		Inventory	Ø	Ø	Checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checking	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	Checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8957 SR 7 S Ravenna OH 44266
5. DESCRIPTION MDEH Awaiting Disposal		Bot. 13	A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
9/22/11		Inventory	C	C	checked	Mel Lay
9/29/11		Inventory	O	O	checked	Mel Lay
6 Oct 11		Inventory	O	O	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	PAUL DUNKAN
20 Oct 11		Inventory	O	O	checked	Mel Lay
26 Oct 11	4 Items	Transferred	To	Mark P	Patterson	Mark Patterson
24 JULY 12		Inventory	Ø	Ø	checked	MARK PATTERSON
22 JUNE 13		Inventory	Ø	Ø	checked	Mark Patterson
23 JUN 13	Items	transferred	40	Lew	Kovarik	Lew Kovarik
31 JUL 13	Transferred to Box 15	25 mm	O	4	O	R. Kyle Topper
31 JUL 13	Transferred to Box 15	30 mm	O	5	O	R. Kyle Topper
02 AUG 13	Transferred to Disposal	Entire Contents	O	ALL	O	R. Kyle Topper

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 845-1 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal/ BOX 14			A. Hazard Class	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
3/28/11	PIBD Fuzes	Rocket Ridge 2	33	Ø	33	Lew Kovanic
3/28/11	PD Fuzes	Rocket Ridge 2	50	Ø	50	Lew Kovanic
3/28/11	BD Fuze	Rocket Ridge 2	1	Ø	1	Lew Kovanic
3/28/11	Booster Cup	" "	2	Ø	2	Lew Kovanic
3/31/11		Inventory	Ø	Ø	checked	Lew Kovanic
4/7/11		Inventory	Ø	Ø	checked	Lew Kovanic
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovanic
4/28/11		Inventory	4	Ø	checked	Lew Kovanic
5/5/11		Inventory	Ø	Ø	checked	Lew Kovanic
5/14/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovanic
6/2/11		Inventory	—	—	checked	Lew Kovanic
6/9/11		Inventory	Ø	Ø	checked	Lew Kovanic
6/16/11		INVENTORY	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovanic
7/7/11		Inventory	Ø	Ø	checked	Lew Kovanic
7/14/11		Inventory	Ø	Ø	checked	Lew Kovanic
7/21/11		Inventory	Ø	Ø	checked	Lew Kovanic
7/28/11		Inventory	Ø	Ø	checked	Lew Kovanic
8/4/11		Inventory	Ø	Ø	Checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovanic
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDeH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 Ravenna, OH 44266
5. DESCRIPTION MDeH Awaiting Disposal Box 14			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
9/22/11		Inventory	0	0	Checked	Mel Hay
9/29/11		Inventory	0	0	checked	Mel Hay
6 Oct 11		Inventory	0	0	Checked	Mel Hay
10/13/11		Inventory	0	0	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Hay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	0	0	Checked	Mark Patterson
22 July 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	PD Fuzes	Transferred to Flash	0	47	3	R. Kyle Toporek
02 Aug 13	BD Fuze	Transferred to Disposal	0	1	0	R. Kyle Toporek
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	0	~~[illegible]~~
02 AUG 13	Entire Contents	Transferred to Disposal	0	All	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8951 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal BOX 15			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
3/28/11	75mm Proto HE	Rocket Ridge 2	1	Ø	1	Lew Kovarik
3/28/11	76mm Proto Shrapnel	" "	1	Ø	1	Lew Kovarik
3/28/11	40mm Proto (Bofors)	" "	1	Ø	1	Lew Kovarik
3/28/11	105mm Proto HE	" "	1	Ø	1	Lew Kovarik
3/28/11	37mm Proto HE	" "	2	Ø	2	Lew Kovarik
3/28/11	30mm Proto	" "	3	Ø	3	Lew Kovarik
3/28/11	20mm Proto	" "	7	Ø	7	Lew Kovarik
3/28/11	Bomb Fuzes	" "	2	Ø	2	Lew Kovarik
3/28/11	MT Fuze	" "	15	Ø	15	Lew Kovarik
3/28/11	PD Fuzes	" "	2	Ø	2	Lew Kovarik
3/28/11	Booster Cup	" "	2	Ø	2	Lew Kovarik
3/31/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	Paul Duncan
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	Checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	1	—	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew K
7/21/11		Inventory	Ø	Ø	checked	Lew K
7/28/11		Inventory	Ø	Ø	checked	Lew K

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8431 St. Rt. 5 Ravenna, OH 44266
5. DESCRIPTION MEC Awaitin Disposal Box 15			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	Ø	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	MT Fuzes	transferred to Flash	0	15	0	R. Kyle Toporek
25 JUL 13	PD Fuzes	transferred to Flash	0	2	1	R. Kyle Toporek
25 JUL 13	20MM Proj	Transferred to Flash	0	1	6	R. Kyle Toporek
25 JUL 13	Bomb Fuzes	transferred to Flash	0	2	0	R. Kyle Toporek
31 JUL 13	25mm	~~Transferred to Boost~~ Gain	4	0	4	R. Kyle T[illegible]
31 JUL 13	30mm	~~Transf~~ Gain	5	0	5	R. Kyle T[illegible]
02 Aug 13	Booster Cone	Transferred to Disposal	0	2	0	R. Kyle Toporek
05 AUG 13	P.D. face	Transferred to Disposal	0	1	0	R. Kyle Toporek
06 AUG 13	Entire Contents	Transferred Disposal	0	All	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge2 MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8457 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal BOX 16			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
3/29/11	PIBD Fuzes	Rocket Ridge2	57	Ø	57	Lew Kovarik
3/29/11	PD Fuzes	" "	33	Ø	33	Lew Kovarik
3/29/11	Booster Cups	" "	3	Ø	3	Lew Kovarik
3/31/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checking	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 Ravenna OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 16			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
9/29/11		Inventory	0	0	checked	Mel Lee
6 Oct 11		Inventory	0	0	checked	Mel Lee
10/13/11		INVENTORY	Ø	Ø	checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lee
26 Oct 11	Items	Transferred	To	Mark	Patterson	[illegible]
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarek	Lew [illegible]
25 JUL 13	PD fuzes	Transferred to Flash	0	33	0	R. Kyle Toporek
25 JUL 13	Booster cup	Transferred to Flash	0	1	2	R. Kyle Toporek
01 AUG 13	PIBD fuzes	Transferred to Disposal	0	57	0	R. Kyle Toporek
02 AUG 13	Entire Contents	Transferred to Disposal	0	All	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO Rocket Ridge2 MEC Awaiting Disposal	4. LOCATION 7-G-4	B.	D. Address 8457 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 17			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
3/29/11	20 mm Proj	Rocket Ridge2	13	Ø	13	Lew Kovarik
3/29/11	30 mm Proj	" "	3	Ø	3	Lew Kovarik
3/29/11	37 mm Proj	" "	4	Ø	4	Lew Kovarik
3/29/11	40 mm Proj (Bofors)	" "	2	Ø	2	Lew Kovarik
3/29/11	Bomb Fuzes	" "	2	Ø	2	Lew Kovarik
3/29/11	UT Fuzes	" "	6	Ø	6	Lew Kovarik
3/29/11	60 mm Illum Cartridge	" "	1	Ø	1	Lew Kovarik
3/29/11	75mm Proj Shrapnel	" "	1	Ø	1	Lew Kovarik
3/29/11	75 mm Proj HE	" "	1	Ø	1	Lew Kovarik
3/29/11	90 mm Proj HE	" "	1	Ø	1	Lew Kovarik
3/29/11	20 lb Frag Bomb	" "	1	Ø	1	Lew Kovarik
3/31/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/29/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/27/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Dunbar
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MEC AWAITING DISPOSAL	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MEC AWAITIN DISPOSAL Box 17			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
8/4/11		Inventory	0	0	checked	Mel Lay
8/11/11		Inventory	0	0	checked	Mel Lay
8/18/11		Inventory	0	0	Checked	Mel Lay
8/25/11		Inventory	0	0	Checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	Checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	CHECKED	PAUL DUNCAN
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transfered	To	Mark	By Herself	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	Transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	37MM Projo	transferred to Disposal	0	3	1	R. Kyle Tapscott
31 JUL 13	20mm Projo	transferred to Disposal	0	17	0	[illegible]
05 AUG 13	Bomb fuzes	Transferred to Disposal	0	2	0	R. Kyle Tapscott
05 AUG 13	VT fuzes	Transferred to Disposal	0	6	0	R. Kyle Tapscott
08 AUG 13	Entire Contents	Transferred to Disposal	0	All	0	R. Kyle Tapscott

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8151 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal / Box 18			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
3/30/11	20mm Proto	Rocket Ridge 2	32	Ø	32	Lew Kovarik
3/30/11	25mm Proto	Rocket Ridge 2	2	Ø	2	Lew Kovarik
3/30/11	30mm Proto	" "	2	Ø	2	Lew Kovarik
3/30/11	37mm Proto	" "	3	Ø	3	Lew Kovarik
3/30/11	60mm Proto	" "	1	Ø	1	Lew Kovarik
3/30/11	90mm Proto Base	" "	1	Ø	1	Lew Kovarik
3/30/11	VT Fuzes	" "	7	Ø	7	Lew Kovarik
3/30/11	Bomb Fuze	" "	1	Ø	1	Lew Kovarik
3/30/11	MT Fuze	" "	10	Ø	10	Lew Kovarik
3/3/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/29/11		Inventory	Ø	Ø	checked	[illegible]
5/5/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION J-C-4	B.	D. Address 8451 STATE RT 5 Rawenna OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Boxes			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
8/18/11		Inventory	0	0	checked	Mel Lay
8/25/11		Inventory	0	0	checked	Mel Lay
9/1/11		INVENTORY	0	0	Checked	PAUL DUNCAN
9/8/11		Inventory	0	0	checked	Lew Kovarik
9/15/11		INVENTORY	0	0	checked	PAUL DUNCAN
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	0	0	Checked	PAUL DUNCAN
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	2 Items	Transferred	To	Mark	Patterson	Mark Patterson
24 JUN 12		Inventory	0	0	Checked	MARK PATTERSON
22 JUN 13		Inventory	0	0	Checked	Mark Patterson
23 JUN 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	MT Fuzes	transferred to Flash	0	9	1	R. Kyle Toporek
25 JUL 13	37 MM Projo	transferred to Flash	0	1	0	R. Kyle Toporek
31 JUL 13	20 mm projo	transferred to Disposal	0	32	0	R. Kyle Toporek
05 AUG 13	VT fuze	Transferred to Disposal	0	7	0	R. Kyle Toporek
05 AUG 13	Bomb fuze	transferred to Disposal	0	1	0	R. Kyle Toporek
05 AUG 13	MT. fuze	Transferred to Disposal	0	1	0	R. Kyle Toporek
06 AUG 13	Entire Contents	Transferred to Disposal	0	ALL	0	R. Kyle Toporek
06 AUG 13						

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEM Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MDEM Awaiting Disposal Box 19			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
3/30/11	PD Fuze	Rocket Ridge 2	67	Ø	67	Lew Kovarik
3/30/11	PJBD Fuze	" "	14	Ø	14	Lew Kovarik
3/30/11	PD Fuze (T BAR)	" "	2	Ø	2	Lew Kovarik
3/30/11	BD Fuze	" "	7	Ø	7	Lew Kovarik
3/30/11	Booster Cups	" "	2	Ø	2	Lew Kovarik
3/30/11	Partial Bomb Fuze	" "	1	Ø	1	Lew Kovarik
3/30/11	PD Fuze	" "	1	Ø	1	Lew Kovarik
3/31/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	checked	Bruce Fox
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 St Rt 5 Ravenna, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal		Box 19	A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	[illegible]
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	~~transferred to Box 28~~ PIBD Fuze	transferred to Box 28	0	14	0	R. Kyle Topanek
25 JUL 13	PD Fuze	Transferred to Box 28	0	6	61	R. Kyle Topanek
25 JUL 13	PD Fuze (TBAR)	transferred to Box 28	0	1	1	R. Kyle Topanek
25 JUL 13	BD Fuze	transferred to Box 28	0	6	1	R. Kyle Topanek
25 JUL 13	Partial Bomb Fuze	transferred to Box 28	0	1	0	R. Kyle Topanek
25 JUL 13	Entire Contents	Transferred to Flash	0	All	0	R. Kyle Topanek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal / Box 20			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/5/11	PIBD Fuze	Rocket Ridge	73	Ø	73	Lew Kovarik
4/5/11	Booster Cup	" "	3	Ø	3	Lew Kovarik
4/5/11	MT Fuze	" "	1	Ø	1	Lew Kovarik
4/5/11	P.D Fuze	" "	7	Ø	7	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	Checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	Mel Lay
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		Inventory	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		Inventory	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	Ø	Ø	checked	Mel Lay

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 St RT 5 Ravenna OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Bot 20			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarek	Lew Kovarek
01 AUG 13	Booster Cups	transferred to Box 28	0	3	0	R. Kyle Toporek
01 AUG 13	MT Fuze	transferred to Flash	0	1	0	R. Kyle Toporek
01 AUG 13	PD fuzes	transferred to Flash	0	7	0	R. Kyle Toporek
01 AUG 13	Entire Contents	transferred to Disposal	0	73	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8457 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal/ BOX 21			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/5/11	20MM PROJO	Rocket Ridge 2	68	Ø	68	Lew Kovarik
4/5/11	25MM PROJO	" "	3	Ø	3	Lew Kovarik
4/5/11	30MM PROJO	" "	7	Ø	7	Lew Kovarik
4/5/11	Bomb Fuze	" "	1	Ø	1	Lew Kovarik
4/5/11	VT Fuze	" "	2	Ø	2	Lew Kovarik
4/5/11	5" AP Flare	" "	1	Ø	1	Lew Kovarik
4/6/11	25MM PROJO	" "	5	Ø	5	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	Checked	Mel Lay
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	Checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	Checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 St Rt 5 Ravenna, OH 44264
5. DESCRIPTION MDEH Awaiting Disposal Box 21			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	0	0	Checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	Checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patt
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	Transferred	To	Lew	Kovarik	Lew Kovarik
29 JUL 13	Bomb Fuze	Transferred to Flask	0	1	0	R. Kyle Toporek
29 JUL 13	Slap Flare	Transferred to Flask	0	1	0	R. Kyle Toporek
29 JUL 13	20 MM projo	Transferred to Flask	0	5	63	R. Kyle Toporek
31 JUL 13	20mm projo	Transferred to Flask	0	63	0	R. Kyle Toporek
05 AUG 13	VT. fuzes	Transferred to Flask	0	2	0	R. Kyle Toporek
06 AUG 13	Entire Contents	Transferred to Disposal	0	All	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8151 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 22			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/6/11	PD Fuze	Rocket Ridge 2	50	Ø	50	Lew Kovarik
4/6/11	PDBD	" "	13	Ø	13	Lew Kovarik
4/6/11	VT Fuze	" "	2	Ø	2	Lew Kovarik
4/6/11	PD Fuze (TBAR)	" "	2	Ø	2	Lew Kovarik
4/6/11	Bomb Fuze	" "	4	Ø	4	Lew Kovarik
4/6/11	MT Fuze	" "	2	Ø	2	Lew Kovarik
4/6/11	FBD Fuze	" "	1	Ø	1	Lew Kovarik
4/6/11	SIAD Flare	" "	1	Ø	1	Lew Kovarik
4/6/11	Booster Cup	" "	2	Ø	2	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	Checked	Mel Lay
5/26/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	Checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2	4. LOCATION 7-C-4	B.	D. Address 8451 ST RTS Ravenna OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 22			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
8/25/11		Inventory	0	0	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 Jul 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	PIBD Fuzes	transferred to Box 28	0	13	0	R. Kyle Toporek
25 JUL 13	PD fuzes	transferred to Box 28	0	8	0	R. Kyle Toporek
25 JUL 13	VT Fuze 1 full/1 partial	transferred to Box 28	0	1	0	R. Kyle Toporek
25 JUL 13	Bomb fuze	transferred to Box 28	0	2	0	R. Kyle Toporek
25 JUL 13	PD fuze (1 BAR)	transferred to Box 28	0	1	0	R. Kyle Toporek
25 JUL 13	MT Fuze	transferred to Box 28	0	1	0	R. Kyle Toporek
25 JUL 13	Entire Contents	Transferred to Flash	0	All	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 Ravenna, Oh. 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 23			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/6/11	37MM PROTO	Rocket Ridge 2	10	Ø	10	Lew Kovarik
4/6/11	40MM PROTO (EOFURS)	" "	4	Ø	4	Lew Kovarik
4/6/11	30MM PROTO	" "	13	Ø	13	Lew Kovarik
4/6/11	60MM PROTO	" "	3	Ø	3	Lew Kovarik
4/6/11	20MM PROTO	" "	66	Ø	66	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	checked	Bill Fox
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checking	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MPEIH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 9451 State Rt 5 Ravenna OH
5. DESCRIPTION MPEIH Awaiting Disposal BOT 23			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	0	0	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	4 Items	Transferred	0	Mark P	Patterson	Mark Patterson
24 JULY 12		Inventory	0	0	Checked	Mark Patterson
22 JULY 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 13	Items	Transferred	To	Lew	Kovarek	Lew Kovarek
24 JUL 13	20 mm proto	Transferred to Disposal	0	60	0	R. Ickes @ Toronto
06 AUG 13	Entire Contents	Transferred to Disposal	0	All	0	R. Ickes Toronto

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 845 1 ST RT 5 RAVENNA, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal BOX 24			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/7/11	PD Fuze	Rocket Ridge 2	53	Ø	53	Lew Kovarik
4/7/11	MT Fuze	" "	13	Ø	13	Lew Kovarik
4/7/11	VT Fuze	" "	2	Ø	2	Lew Kovarik
4/7/11	SLAP Flare	" "	2	Ø	2	Lew Kovarik
4/7/11	PD Fuze	" "	1	Ø	1	Lew Kovarik
4/7/11	BD Fuze	" "	2	Ø	2	Lew Kovarik
4/7/11	PDBD Fuze	" "	17	Ø	17	Lew Kovarik
4/7/11	Booster Cup	" "	3	Ø	3	Lew Kovarik
4/7/11	Bomb Fuze	" "	1	Ø	1	Lew Kovarik
4/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4/28/11		Inventory	Ø	Ø	checked	[illegible]
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	Checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		Inventory	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kov
7/21/11		Inventory	Ø	Ø	checked	Lew Ko
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8457 ST RT 5 Ravenna OH 44266
5. DESCRIPTION M. DEW Awaiting Disposal Box 24			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
8/25/11		Inventory	0	0	checked	Mel Lay
9/1/11		INVENTORY	0	0	Checked	PAUL DUNCAN
9/8/11		Inventory	0	0	checked	ANN Kovarik
9/15/11		INVENTORY	0	0	Checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	0	0	Checked	PAUL DUNCAN
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	+ Items	Transferred	To	Mark	Patterson	Mark Patterson
24 JUL 12		Inventory	0	0	Checked	Mark Patterson
22 JUL 13		Inventory	0	0	Checked	Mark Patterson
23 Jul 13	Items	Transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	PD fuzes	Transferred to Flash	0	50	3	R. Kyle Topnik
25 JUL 13	PD fuze	Transferred to Flash	0	1	0	R. Kyle Topnik
25 JUL 13	MT Fuze	Transferred to Flash	0	13	0	R. Kyle Topnik
29 JUL 13	Slap Fleet	Transferred to Flash	0	2	0	R. Kyle Topnik

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 9451 ST RT 5 RAVENNA OH 44266
5. DESCRIPTION MDEH Awaiting Disposal / BOX 25			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11.
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/7/11	30mm Proto	Rocket Ridge 2	1	Ø	1	Lew Kovarik
4/7/11	37mm Proto	" "	1	Ø	1	Lew Kovarik
4/7/11	75mm Proto Base	" "	1	Ø	1	Lew Kovarik
4/7/11	75mm Proto Shrapnel	" "	1	Ø	1	Lew Kovarik
4/7/11	81 mm Proto	" "	1	Ø	1	Lew Kovarik
4/7/11	60mm Proto	" "	1	Ø	1	Lew Kovarik
4/7/11	20mm Proto	" "	7	Ø	7	Lew Kovarik
4/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/12/11	VT Fuze	Rocket Ridge 2	7	Ø	7	Lew Kovarik
4/12/11	SIAP Flare	" "	1	Ø	1	Lew Kovarik
4/12/11	MT Fuze	" "	4	Ø	4	Lew Kovarik
4/12/11	PD Fuze	" "	7	Ø	7	Lew Kovarik
4/12/11	20mm Proto	" "	3	Ø	3	Lew Kovarik
4/12/11	PIBA Fuze	" "	18	Ø	18	Lew Kovarik
4/12/11	30mm Proto	" "	1	Ø	1	Lew Kovarik
4/14/11		Inventory	Ø	Ø	checked	Mel Lay
4/21/11		Inventory	Ø	Ø	Checked	Lew Kovarik
4/29/11		Inventory	Ø	Ø	Checked	[illegible]
5/5/11		Inventory	Ø	Ø	Checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	Checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	Checked	Paul Duncan
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	[illegible]

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 Ravenna, OH
5. DESCRIPTION MDEH Awaiting Disposal Box 25			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
7-21-11		Inventory	Ø	Ø	checked	Lew K
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	Checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	Checked	Mel Lay
8/25/11		Inventory	Ø	Ø	Checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
9/22/11		Inventory	0	0	Checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	Checked	PAUL DUNCAN
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	P.D. fuzes	Transferred to Flash	0	7	0	R. Kyle Topovek
25 JUL 13	M.T. fuzes	Transferred to Flash	0	3	1	R. Kyle Topovek
29 JUL 13	20mm proj	Transferred to Flash	0	1	2	R. Kyle Topovek
29 JUL 13	Slap Flare	Transferred to Flash	0	1	0	R. Kyle Topovek
31 JUL 13	20mm proj	Transferred to Disposal	0	9	0	R. Kyle Topovek
05 AUG 13	V.T. Fuzes	Transferred to Disposal	0	7	0	R. Kyle Topovek
05 AUG 13	M.T. Fuze	Transferred to Disposal	0	1	0	R. Kyle Topovek
06 AUG 13	Entire Contents	Transferred to Disposal	0	All	0	R. Kyle Topovek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 Ravenna, Oh 44266
5. DESCRIPTION MDEH Awaiting Disposal / Box 26			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
4/20/11	20mm Proto	Rocket Ridge 2	87	Ø	87	Lew Kovarik
4/20/11	25mm Proto	" "	4	Ø	4	Lew Kovarik
4/20/11	30mm Proto	" "	8	Ø	8	Lew Kovarik
4/20/11	37mm Proto	" "	6	Ø	6	Lew Kovarik
4/20/11	40mm Proto (Bofors)	" "	2	Ø	2	Lew Kovarik
4/20/11	75mm Proto (M48)	" "	1	Ø	1	Lew Kovarik
4/20/11	2016 Frag Bomb (unfused)	" "	1	Ø	1	Lew Kovarik
4/20/11	90mm APHE Proto	" "	1	Ø	1	Lew Kovarik
4/20/11	5" Rocket WARHEAD	" "	1	Ø	1	Lew Kovarik
4/20/11	PIBD Fuze	" "	12	Ø	12	Lew Kovarik
4/20/11	MT Fuze	" "	4	Ø	4	Lew Kovarik
4/20/11	PD Fuze (M52)	" "	19	Ø	19	Lew Kovarik
4/20/11	VT Fuze	" "	14	Ø	14	Lew Kovarik
4/20/11	Bomb Fuze	" "	8	Ø	8	Lew Kovarik
4/20/11	PD Fuze (TBAR)	" "	4	Ø	4	Lew Kovarik
4/20/11	PD Fuze (Rocket)	" "	1	Ø	1	Lew Kovarik
4/20/11	Booster Cup	" "	6	Ø	6	Lew Kovarik
4/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
4-28-11	25mm Projo	Rocket Ridge 2	3	Ø	3	Mel Lay
4-28-11	30mm Projo	" " "	2	Ø	2	Mel Lay
4-28-11	Mech Time Fuze	" " "	9	Ø	9	Mel Lay
4-28-11	Pd Fuze	" " "	51	Ø	51	Mel Lay
4-28-11	20mm Projo	" " "	42	0	42	Mel Lay
4-29-11	INVENTORY	INVENTORY	Ø	Ø	Ø	
5/2/11	MT Fuze	Rocket Ridge 2	7	Ø	7	Lew Kovarik
5/2/11	20mm Proto	" "	1	Ø	1	Lew Kovarik
5/5/11		Inventory	Ø	Ø	checked	Lew Kovarik
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
5/20/11		Inventory	Ø	Ø	checked	Mel Lay

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MAGAZINE DATA CARD

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1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 Ravenna Oh 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 26			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11 PRINTED NAME
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew [illegible]
7/21/11		Inventory	Ø	Ø	checked	Lew [illegible]
7/28/11		Inventory	Ø	Ø	checked	Lew [illegible]
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	MT Fuzes	transferred to Flash	0	18	2	R. Kyle Topner
25 JUL 13	PD Fuzes	transferred to Flash	0	65	5	R. Kyle Topner
29 JUL 13	20mm proje	transferred to Flash	0	4	83	R. Kyle Topner
29 JUL 13	MT Fuze	transferred to Flash	0	1	3	R. Kyle Topner

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. 645 State St. Ravenna, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 26			A. 1.1	C.	E.

6. DATE	7. DOCUMENT NO.	8. ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10. BALANCE	11. PRINTED NAME
31 JUL 13	20mm projo	Transferred to Disposal	0	125	0	R. Kyle Toporek
01 AUG 13	PIBD fuzes	Transferred to Disposal	0	12	0	R. Kyle Toporek
02 AUG 13	DD	Transferred to Disposal	0	5	0	R. Kyle Toporek
02 AUG 13	Booster Cups	Transferred to Disposal	0	6	0	R. Kyle Toporek
05 AUG 13	T-BAR fuzes	Transferred to Disposal	0	4	0	R. Kyle Toporek
05 AUG 13	JT fuzes	Transferred to Disposal	0	17	0	R. Kyle Toporek
05 AUG 13	Bomb fuzes	Transferred to Disposal	0	8	0	R. Kyle Toporek
05 AUG 13	BD. fuzes	Transferred to Disposal	0	4	0	R. Kyle Toporek
05 AUG 13	RKT WHD	Transferred to Disposal	0	2	0	R. Kyle Toporek
05 AUG 13	M.T. Fuze	Transferred to Disposal	0	1	0	R. Kyle Toporek
~~05 AUG 13~~	~~Step Flare~~	~~Transferred from Box 5 to Disposal~~	~~2~~	~~0~~	~~2~~	~~R. Kyle Toporek~~
07 AUG 13	Misc Fire Contents	Transferred to Disposal	0	All	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89 **MAGAZINE DATA CARD**

For use of this form, see DA PAM 710-2-1; the proponent agency is DCSLOG

Continued on Reverse

PREVIOUS EDITION IS OBSOLETE

USAPPC V1.01

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION J-C-4	B.	D. Address 8451 RTS Ravenna OH 44266
5. DESCRIPTION MDEH Awaiting Disposal ~Box 27			A. Hazard Class 4.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
5/12/11		Inventory	Ø	Ø	checked	Mel Lay
3/20/11		Inventory	Ø	Ø	checked	Mel Lay
5/26/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/2/11		Inventory	—	—	checked	Lew Kovarik
6/9/11		Inventory	Ø	Ø	checked	Lew Kovarik
6/16/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
6/23/11		Inventory	Ø	Ø	checked	Mel Lay
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/21/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
9/22/11		Inventory	Ø	Ø	checked	Mel Lay
9/29/11		Inventory	Ø	Ø	checked	Mel Lay
6 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
10/13/11		INVENTORY	Ø	Ø	checked	PAUL DUNCAN
20 Oct 11		Inventory	Ø	Ø	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	Patterson	Mark Patterson
24 July 12		Inventory	Ø	Ø	checked	Mark Patterson
22 July 13		Inventory	Ø	Ø	checked	Mark Patterson
23 Jul 13	Items	Transferred	To	Lew	Kovarik	Lew Kovarik
~~25 Jul 13~~		~~[illegible]~~	~~0~~	~~18~~	~~[illegible]~~	

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 Rt 5 Ravenna OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 27			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	B. LOSS	10 BALANCE	11. PRINTED NAME
4-28-11	Base Detonating Fuze	Rocket Ridge 2	49	0	49	Mel Lay
4-29-11	5" Rocket WH w/motor	" " "	2	0	2	Mel Lay
4-29-11	90mm unFuzed	" " "	1	0	1	Mel Lay
4-29-11	Component	" " "	1	0	1	Mel Lay
4-29-11	Rocket Venturi	" " "	1	0	1	Mel Lay
4-29-11	Slap Flare	" " "	1	0	1	Mel Lay
4-29-11	Bomb Fuze	" " "	1	0	1	Mel Lay
4-29-11	155 Base w/HE	" " "	1	0	1	Mel Lay
4-29-11	105 Projo HE unFuzed	" " "	1	0	1	Mel Lay
4-29-11	75mm HE	" " "	1	0	1	Mel Lay
4-29-11	T-Bar Fuze	" " "	2	0	2	Mel Lay
4-29-11	60mm mortar	" " "	2	0	2	Mel Lay
4-29-11	Base Fuze w/Tracer	" " "	5	0	5	Mel Lay
4-29-11	37mm	" " "	3	0	3	Mel Lay
4-29-11	Mech Time Fuze	" " "	1	0	1	Mel Lay
4-29-11	Pd Fuzes	" " "	1	0	1	Mel Lay
4-29-11	Bomb Fuze	" " "	4	0	4	Mel Lay
4-29-11	75mm Shrapnel	" " "	1	0	1	Mel Lay
4-29-11	VT Fuzes	" " "	15	0	15	Mel Lay
4-29-11	Bomb Fuze	" " "	1	0	1	Mel Lay
4-29-11		INVENTORY	0	0	0	[illegible]
5/2/11	PIBD Fuzes	Rocket Ridge 2	32	0	32	Lew Kovarik
5/2/11	90mm Projo unfuzed	" "	1	0	1	Lew Kovarik
5/2/11	PD Fuze (Rocket)	" "	2	0	2	Lew Kovarik
5/2/11	PD Fuze (M52)	" "	29	0	29	Lew Kovarik
5/2/11	Slap Flare	" "	1	0	1	Lew Kovarik
5/2/11	100 Series Bomb Fuze	" "	2	0	2	Lew Kovarik
5/2/11	Booster Cup	" "	1	0	1	Lew Kovarik
5/5/11		Inventory	0	0	checked	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEM Awaiting Disposal	4. LOCATION 7-C4	B.	D. Address 8457 SR 534 Ravenna OH 44266
5. DESCRIPTION MDEM Awaiting Disposal Box 27			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
29 JUL 13	P.D. fuzes	Transferred to Flash	0	30	0	R. Kyle Toporek
29 JUL 13	B.D. fuzes	Transferred to Flash	0	3	46	R. Kyle Toporek
29 JUL 13	Compartment	Transferred to Flash	0	1	0	R. Kyle Toporek
29 JUL 13	M.T. Fuzes	Transferred to Flash	0	1	0	R. Kyle Toporek
29 JUL 13	Step Electric	Transferred to Flash	0	2	0	R. Kyle Toporek
29 JUL 13	Bomb Fuze	Transferred to Flash	0	4	0	R. Kyle Toporek
01 AUG 13	PIBD fuzes	Transferred to Disposed	0	32	0	R. Kyle Toporek
02 AUG 13	PD Fuzes	Transferred to Disposal	0	2	0	R. Kyle Toporek
02 AUG 13	Booster Cups	Transferred to Disposal	0	4	0	R. Kyle Toporek
05 AUG 13	DT Fuzes	Transferred to Disposal	0	15	0	R. Kyle Toporek
05 AUG 13	5" RET WHD	Transferred to Disposal	0	2	0	R. Kyle Toporek
05 AUG 13	B.D. fuzes	Transferred To Disposal	0	2	0	R. Kyle Toporek
05 AUG 13	P.D. T. BAR	Transferred to Disposal	0	2	0	R. Kyle Toporek
07 AUG 13	EN Inr Contents	Transferred to Disposal	0	All	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8461 STATE RAVENNA, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal BOX 28			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11. PRINTED NAME
6/30/11	PIBD Fuze	Rocket Ridge 2	177	Ø	177	Lew Kovarik
6/30/11	PIBD Fuze Booster Cup	" " "	2	Ø	2	Lew Kovarik
6/30/11	81mm Mortar Unfuzed	" " "	1	Ø	1	Lew Kovarik
6/30/11	VT Fuzes	" " "	2	Ø	2	Lew Kovarik
6/30/11	PD Fuze TBAR	" " "	1	Ø	1	Lew Kovarik
6/30/11	PD Fuze M52	" " "	3	Ø	3	Lew Kovarik
6/30/11	BD Fuze	" " "	1	Ø	1	Lew Kovarik
6/30/11	PTT Fuze	" " "	2	Ø	2	Lew Kovarik
6/30/11		Inventory	Ø	Ø	checked	Lew Kovarik
~~6/30/11~~ 7/7/11		Inventory	Ø	Ø	checked	Lew Kovarik
7/14/11		Inventory	Ø	Ø	checked	Lew
7/21/11		Inventory	Ø	Ø	Checked	Lew Kovarik
7/28/11		Inventory	Ø	Ø	checked	Lew Kovarik
8/4/11		Inventory	Ø	Ø	checked	Mel Lay
8/11/11		Inventory	Ø	Ø	checked	Mel Lay
8/18/11		Inventory	Ø	Ø	checked	Mel Lay
8/25/11		Inventory	Ø	Ø	checked	Mel Lay
9/1/11		Inventory	Ø	Ø	Checked	Paul Duncan
9/8/11		Inventory	Ø	Ø	checked	Lew Kovarik
9/15/11		Inventory	Ø	Ø	Checked	Paul Duncan
9/22/11		Inventory	0	0	checked	Mel Lay
9/29/11		Inventory	0	0	checked	Mel Lay
6 Oct 11		Inventory	0	0	checked	Mel Lay
10/13/11		Inventory	Ø	Ø	Checked	Paul Duncan
20 Oct 11		Inventory	0	0	checked	Mel Lay
26 Oct 11	Items	Transferred	To	Mark	PA Herzog	Mel Lay
24 JULY 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JULY 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JULY 13	Items	Transferred	To	Lew	Kovarik	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge 2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 St. Rt 5 Ravenna, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 28			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
7/24/13	9" PROJO w/HE	transferred	1	0	1	R. Kyle Toporek
7/24/13	5" RKT WHD	transferred	1	0	1	R. Kyle Toporek
7/24/13	37mm projo	transferred	1	0	1	R. Kyle Toporek
7/25/13	PIBD Fuzes	transferred	14	0	14	R. Kyle Toporek
7/25/13	PD Fuzes	transferred	6	0	6	R. Kyle Toporek
7/25/13	PD Fuze (TBAR)	transferred	1	0	1	R. Kyle Toporek
7/25/13	BD Fuze	transferred	6	0	6	R. Kyle Toporek
7/25/13	Partial Bomb Fuze	transferred	1	0	1	R. Kyle Toporek
7/25/13	PIBD Fuzes	transferred to Box 28	13	0	13	R. Kyle Toporek
7/25/13	PD Fuzes	transferred to Box 28	8	0	8	R. Kyle Toporek
7/25/13	VT Fuze (full) (partial)	transferred to Box 28	2	0	2	R. Kyle Toporek
7/25/13	Bomb fuze	transferred to Box 28	2	0	2	R. Kyle Toporek
7/25/13	PD fuze (TBAR)	transferred to Box 28	1	0	1	R. Kyle Toporek
7/25/13	MT Fuze	transferred to Box 28	1	0	1	R. Kyle Toporek
7/25/13	MT Fuze	transferred to Flesh	0	1	0	R. Kyle Toporek
7/25/13	VT Fuze	transferred to Flesh	0	15	15 1	R. Kyle Toporek
7/25/13	PD. Fuze	transferred to Flesh	0	1	28	R. Kyle Toporek
29JUN13	Grenade 40mm	Transferred to Box 28	2	2	0 2	R. Kyle Toporek
19JUN13	Booster Cup	transferred to Box 28	1	1	1	R. Kyle Toporek
01 AUG 13	Booster Cup	Received from Box 20	3	0	3	R. Kyle Toporek
01 AUG 13	PIBD	Transferred to Disposal	0	85	92/13/14 (109)	R. Kyle Toporek
02 AUG 13	PD	Transferred to Disposal	0	15	0	R. Kyle Toporek
02 AUG 13	Booster Cups	Transferred to Disposal	0	3	0	R. Kyle Toporek
02 AUG 13	PIBD Fuzes	Transferred to Disposal	0	109	0	R. Kyle Toporek
05 AUG 13	VT Fuzes	Transferred to Disposal	0	5	0	R. Kyle Toporek
05 AUG 13	Bomb Fuzes & partial	Transferred to Disposal	0	3	0	R. Kyle Toporek
05 AUG 13	Ordered 40mm	Transferred to Disposal	0	2	0	R. Kyle Toporek
05 AUG 13	BD Fuzes	Transferred to Disposal	0	7	0	R. Kyle Toporek
05 AUG 13	PD TBAR	Transferred to Disposal	0	3	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge #2 MDEH Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 St. Rt 5 Ravenna, OH 44266
5. DESCRIPTION MDEH Awaiting Disposal Box 28			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
05 AUG 13	PTT Fuzes	Transferred to Disposal	0	2	0	R. Kyle Toporek
05 AUG 13	Booster Cup	Transferred to Disposal	0	1	0	R. Kyle Toporek
07 AUG 13	Entire Contents	Transferred to Disposal	0	All	0	R. Kyle Toporek

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MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH INSP MEC AWAITING DISPOSAL	4. LOCATION 7-C-4	B.	D. Address
5. DESCRIPTION 105mm Cartridge CASINGS			A. Hazard Class 1.1.	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
8/31/09		From 7-C-3	50	—	50	Lew Kovarik
9/3/09		Inventory	—	—	50	Lew Kovarik
9/11/09		Inventory	—	—	50	Mark Patterson
9-17-09		Inventory	—	—	50	Mark Patterson
9-24-09		Inventory	—	—	50	Mark Patterson
10-01-09		Inventory	—	—	50	Mark Patterson
10-08-09		Inventory	—	—	50	Mark Patterson
10-08-09	4 Items Transferred TO	Mark	Patterson			Mark Patterson
10 July 10		Inventory	0	0	Checked	Mark Patterson
12 July 11		Inventory	0	0	Checked	Mark Patterson
24 July 12		Inventory	0	0	Checked	Mark Patterson
28 July 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
25 JUL 13	PIBD Fuzes	transferred	14	0	14	R. Kyle Topsock
25 JUL 13	PD Fuzes	transferred	6	0	6	R. Kyle Topsock
25 JUL 13	PD Fuzes (TBAR)	transferred	1	0	1	R. Kyle Topsock
25 JUL 13	BD Fuze	transferred	6	0	6	R. Kyle Topsock
25 JUL 13	Partial Bomb Fuze	transferred	1	0	1	R. Kyle Topsock
25 JUL 13	PIBD fuzes	transferred	13	0	13	R. Kyle Topsock
25 JUL 13	PD fuzes	transferred	8	0	8	R. Kyle Topsock
25 JUL 13	VT fuze 1 full/1 partial	transferred	2	0	2	R. Kyle Topsock
25 JUL 13	Bomb fuze	Transferred	2	0	2	R. Kyle Topsock
25 JUL 13	PD fuze (TBAR)	Transferred	1	0	1	R. Kyle Topsock
25 JUL 13	MT FUZE	Transferred	1	0	1	R. Kyle Topsock
28 AUG 13	Entire Contents	Transferred to Flagg	0	All	0	R. Kyle Topsock

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge #2 MEC Awaiting Disposal	4. LOCATION J-C-4	B.	D. Address 8451 St. R15 Ravenna, OH 44266
5. DESCRIPTION MEC Awaiting Disposal / Box 1 of			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
07 Aug 13	Entire Contents	Transferred to Disposal	0	All	0	T. Kyle Taporde

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH Insp MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 STAT 5 RAVENNA, OH
5. DESCRIPTION MEC Awaiting Disposal BOX 1			A. Hazard Class 1.1	C.	E.

6 DATE	7 DOCUMENT NO.	8 ACTION/PURPOSE	9. QUANTITY A. GAIN	9. QUANTITY B. LOSS	10 BALANCE	11 PRINTED NAME
9/2/09	75mm APHE	Received	2	Ø	2	Lew Kovarik
9/2/09	40mm HE (Potus)	Received	1	Ø	1	Lew Kovarik
9/2/09	37mm HE	Received	1	Ø	1	Lew Kovarik
9/2/09	Bomb Fuzes	Received	4	Ø	4	Lew Kovarik
9/2/09	DASC Det Fuzes	Received	2	Ø	2	Lew Kovarik
9/2/09	P.D. Fuzes	Received	2	Ø	2	Lew Kovarik
9/3/09		Inventory	—	—	checked	Lew Kovarik
9/11/09		Inventory	—	—	Checked	Mark Patterson
9-17-09		Inventory	—	—	Checked	Mark Patterson
9-24-09		Inventory	—	—	Checked	Mark Patterson
10-01-09		Inventory	—	—	Checked	Mark Patterson
10-08-09		Inventory	—	—	Checked	Mark Patterson
10-08-09	Items	Transferred To	Mark	Patterson		Mark Patterson
14 JULY 10		Inventory	Ø	Ø	Checked	Mark Patterson
12 JULY 11		Inventory	Ø	Ø	Checked	Mark Patterson
24 JULY 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JULY 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew Kovarik
07 Aug 13	Entire Contents	Transferred to Disposal	Ø	All	Ø	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 St RT 5 Ravenna, OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 1a.			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
8/4/09	75mm HE PROJO	Rocket Ridge	1	—	1	Lew Kovarik
8/4/09	90mm HE PROJO	Rocket Ridge	1	—	1	Lew Kovarik
8/4/09	75mm APHE Projo	Rocket Ridge	1	—	1	Lew Kovarik
8/4/09	37mm HE Projo	Rocket Ridge	1	—	1	Lew Kovarik
8/4/09	20mm Projo	Rocket Ridge	3	—	3	Lew Kovarik
8/6/09		Inventory	Ø	Ø	checked	Lew Kovarik
8/13/09		Inventory	Ø	Ø	checked	Lew Kovarik
8/20/09		Inventory	Ø	Ø	checked	Lew Kovarik
8/27/09		Inventory	Ø	Ø	checked	Lew Kovarik
9/13/09		Inventory	—	—	checked	Lew Kovarik
9/11/09		Inventory	—	—	checked	Mark Z
9-17-09		Inventory	—	—	checked	Mark Z
9-24-09		Inventory	—	—	checking	Mark Z
10-01-09		Inventory	—	—	checking	Mark Z
10-08-09		Inventory	—	—	checked	Mark Z
10-08-09	Items	Transferred To	Mark	Pat Hyson		Mark Patterson
19 July 10		Inventory	Ø	Ø	Checked	Mark Patterson
18 July 11		Inventory	Ø	Ø	Checked	Mark Patterson
24 July 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 July 13		Inventory	0	0	Checked	Mark Patterson
23 Jul 13	Items	Transferred	to	Lew	Kovarik	Lew Kovarik
24 JUL 13	37mm HE	transferred to Box 2a	0	1	0	R. Kyle Toporek
24 JUL 13	PD fuze	Received	43	0	43	R. Kyle Toporek
24 JUL 13	PIBD fuze	Received	1	0	1	R. Kyle Toporek
24 JUL 13	MT Fuze	Received	4	0	4	R. Kyle Toporek
24 JUL 13	PIBD Booster Cup	Received	3	0	3	R. Kyle Toporek
24 JUL 13	Slap flare	Received	1	0	1	R. Kyle Toporek
24 JUL 13	20 MM Projo	Received	17	0	17	R. Kyle Toporek
25 JUL 13	Entire Contents	Transferred to Flash	0	All	0	R. Kyle Toporek

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451 ST RT 5 Ravenna, OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 2			A. Hazard Class 1.3	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
8/4/09	PIBD Fuzes	Rocket Ridge	76	Ø	76	Lew Kovarik
8/6/09		Inventory	Ø	Ø	checked	Lew Kovarik
8/13/09		Inventory	Ø	Ø	checked	Lew Kovarik
8/20/09		Inventory	Ø	Ø	checked	Lew Kovarik
8/27/09		Inventory	Ø	Ø	checked	Lew Kovarik
9/3/09		Inventory	Ø	Ø	checked	Lew Kovarik
9/11/09		Inventory	—	—	checked	Mark Patterson
9-17-09		Inventory	—	—	checked	Mark Patterson
9-24-09		Inventory	—	—	checked	Mark Patterson
10-01-09		Inventory	—	—	checked	Mark Patterson
10-08-09		Inventory	—	—	checked	Mark Patterson
10-08-09	Items Transferred To		Mark	Patterson		Mark Patterson
19 JULY 10		Inventory	Ø	Ø	Checked	Mark Patterson
12 JULY 11		Inventory	Ø	Ø	Checked	Mark Patterson
24 JULY 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JULY 13		Inventory	Ø	Ø	Checked	Mark Patterson
23 JUL 13	Items	transferred	To	Lew	Kovarik	Lew Kovarik
7 Aug 13	Entire Contents Transferred to Disposal		Ø	All	Ø	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. Rocket Ridge MEC Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address 8451-3T RT 5 RAVENNA OH 44266
5. DESCRIPTION MEC Awaiting Disposal Box 3			A. Hazard Class 1.3	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
8/4/09	Bomb Fuzes	Rocket Ridge	5	Ø	5	Lew Kovarik
8/4/09	P.D. Fuzes T-BAR	Rocket Ridge	4	Ø	4	Lew Kovarik
8/4/09	VT Fuzes	Rocket Ridge	2	Ø	2	Lew Kovarik
8/4/09	PIBD Fuzes	Rocket Ridge	7	Ø	7	Lew Kovarik
8/6/09		Inventory	Ø	Ø	checked	Lew Kovarik
8/13/09		Inventory	Ø	Ø	checked	Lew Kovarik
8/20/09		Inventory	Ø	Ø	checked	Lew Kovarik
8/27/09		Inventory	Ø	Ø	checked	Lew Kovarik
9/3/09		Inventory	—	—	checked	Lew Kovarik
9/11/09		Inventory	—	—	checked	Mark P
9-17-09		Inventory	—	—	checked	Mark P
9-24-09		Inventory	—	—	checked	Mark P
10-01-09		Inventory	—	—	checked	Mark P
10-08-09		Inventory	—	—	checked	Mark P
10-08-09	Items	Transferred to	Mark	Pa Harson		Mark Patterson
19 JULY 10		Inventory	Ø	Ø	checked	Mark Patterson
12 JULY 11		Inventory	Ø	Ø	checked	Mark Patterson
24 JUNE 12		Inventory	Ø	Ø	checked	Mark Patterson
22 JULY 13		Inventory	Ø	Ø	checked	Mark Patterson
23 JUL 13	Items	Transferred	to	Lew	Kovarik	Lew Lew
29 JUL 13	Bomb Fuzes	Transferred to Flesh	0	2	3	R. Kyle Toporek
7 Aug 13	Entire Contents	Transferred to Disposal	Ø	Heath All	Ø	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO. MPPEH Inspection Mec Awaiting Disposal	4. LOCATION 7-C-4	B.	D. Address
5. DESCRIPTION Mec Awaiting Disposal Box # 4			A. Hazard Class 1.1	C.	E.

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
10-06-09	MK10 Base Fuze	Received	2	~~0~~	2	Mel Lay
10-06-09	T-BAR Fuze	Received	3	~~0~~	3	Mel Lay
10-06-09	VT Fuzes	Received	4	~~0~~	4	Mel Lay
10-06-09	40mm primers only	Received	3	~~0~~	3	Mel Lay
10-06-09	Base Fuze MK85	Received	2	~~0~~	2	Mel Lay
10-06-09	MK29 3"	Received	6	~~0~~	6	Mel Lay
10-08-09		Inventory	—	—	Checking	Mel Lay
10-08-09	Items Transferred To	Mark	Patterson			Mark Patterson
19 JUL 10		Inventory	0	0	Checked	Mark Patterson
12 JUL 11		Inventory	0	0	Checked	Mark Patterson
24 JUL 12		Inventory	0	0	Checked	Mark Patterson
22 JUL 13		Inventory	0	0	Checked	Mark Patterson
23 JUL 13	Items	Transferred	To	Lew	Kovacik	Lew Kovacik
05 AUG 13	T-BAR fuzes	Transferred to Disposal	0	3	0	R. Kyle Tapscott
05 AUG 13	MK 10 Base Fuze	Transferred to Disposal	0	2	0	R. Kyle Tapscott
05 AUG 13	V.T. fuzes	Transferred to Disposal	0	4	0	R. Kyle Tapscott
05 AUG 13	MK 29 BD. fuzes	Transferred to Disposal	0	2	0	R. Kyle Tapscott
07 AUG 13	Entire Contents	Transferred to Disposal	0	All	0	R. Kyle Tapscott

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

1. DODIC	2. NSN	3. LOT NO.	4. LOCATION	B.	D. Address 8451 S RT 5
			7-C-4		Raceway

5. DESCRIPTION		A. Hazard Class	C.	E.
Box 5 Mec Awaiting Disposal		1.1		

6	7	8	9. QUANTITY		10	11
DATE	DOCUMENT NO.	ACTION/PURPOSE	A. GAIN	B. LOSS	BALANCE	PRINTED NAME
10-07-09	40mm Frag Ball	Transferred From 7-C-2	7	0	7	[illegible]
10-07-09	Fuze Booster Cup	Transferred From 7-C-2	1	0	1	[illegible]
10-07-09	Slap Flare	Transferred From 7-C-2	2	0	2	[illegible]
10-07-09	Projo Booster Tube	Transferred From 7-C-2	1	0	1	[illegible]
10-07-09	PD Fuze	Transferred From 7-C-2	1	0	1	[illegible]
10-08-09		Inventory	—	—	checked	[illegible]
10-08-09	Items Transfer To		Mark	Patterson		Mark Patt
19 JUL 10		Inventory	Ø	Ø	Checked	Mark Patterson
12 JUL 11		Inventory	Ø	Ø	Checked	Mark Patterson
24 JUL 12		Inventory	Ø	Ø	Checked	Mark Patterson
22 JUL 13		Inventory	Ø	Ø	Checked	Mark Patt
23 JUL 13	Items	transferred	to	Lew	Kovarik	Lew K
02 AUG 13	P.D. fuze	transferred to Disposal	0	1	0	R. Kyle Toporek
05 AUG 13	Slap Flare	Transferred to Flesh	0	2	0	R. Kyle Toporek
7 Aug 13	Entire Contents	Transferred to Disposal	Ø	All	Ø	Lew Kovarik

DA FORM 3020-R, AUG 89

MAGAZINE DATA CARD

Appendix H

MEC Demolition Shot Logs

PIKA INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location: Ravenna Ammo Depot OH			Date: 7/31/13
Shot Location (OB/OD Range or Grid No.): ODA-2	Demolition Supervisor: R. Kyle Toporek	State License # (if applicable):	
Type of MEC Destroyed, Vented or Burned: 20mm projos (557)		Firing Method: Electric RED	Time of Shot: 1510/1511/1512
Direction and Distance to Nearest Building, Road, Utility Line, etc.: 1085 temp building 2200 5mi occupied 2200ft		Temp: 80° Wind Dir./Speed: NW 0-5 MPH Ceiling: 1000 ft Clouds/% Sun: 40/60	
Type and Amount of Tamping or Sandbag Mitigation Used: Buried Explosive Module 3'		Mat or Other Protection Used (list): N/A	
Seismographic / Sound Level Meter Used: Yes ☐ No ☒		Readings / Results:	

Demolition Materials Used

Description	Amount	Description	Amount
Perforator		Time Fuze	
Det Cord	30'	Squibs	
Detonator ☒ Electric ☐ Non-electric	6	Booster Block PETN	3
Non-El Detonator		Other (list) C-4	19 lbs

Certification

I certify that the explosives listed were used for their intended purpose, and that the MEC listed were rendered inert/destroyed.

Signature of Demolition Supervisor: R. Kyle Toporek Date: 7/31/13

_____ Consecutive Record Number: _____

List of MEC Destroyed, Vented or Burned:

Description	Quantity	Description	Quantity
20mm projos	557		

PIKA INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location:	Date:

PIKA INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location:		Date:
Ravenna Ammo Depot OH		8/1/13
Shot Location (OB/OD Range or Grid No.): ODA-2	Demolition Supervisor: R. Kyle Toporek	State License # (if applicable):
Type of MEC Destroyed, Vented or Burned: PIBD fuzes	Firing Method: Elect. RFD	Time of Shot: 1210/1211
Direction and Distance to Nearest Building, Road, Utility Line, etc.: 1085 Temp Building 2100ft 2200ft	Temp: 75° Wind Dir./Speed: NW 0-5 MPH Ceiling: 1000 A Clouds/% Sun: 30/70	
Type and Amount of Tamping or Sandbag Mitigation Used: Buried Explosive Module 3'	Mat or Other Protection Used (list): N/A	
Seismographic / Sound Level Meter Used: Yes ☐ No ☒	Readings / Results:	

Demolition Materials Used

Description	Amount	Description	Amount
Perforator		Time Fuze	
Det Cord	100 ft	Squibs	
Detonator ☒ Electric ☐ Non-electric	6	Booster Block	
Non-El Detonator		Other (list)	

Certification

I certify that the explosives listed were used for their intended purpose, and that the MEC listed were rendered inert/destroyed.

Signature of Demolition Supervisor: R. Kyle Toporek Date: 8/1/13

_____ Consecutive Record Number: _____

List of MEC Destroyed, Vented or Burned:

Description	Quantity	Description	Quantity
PIBD fuzes	305		

PIKA
INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location:	Date:

PIKA INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location:	Date:
Ravenna Ammo Depot	8/2/13

Shot Location (OB/OD Range or Grid No.):	Demolition Supervisor:	State License # (if applicable):
ODA-2	R. Kyle Toporek	

Type of MEC Destroyed, Vented or Burned:	Firing Method:	Time of Shot:
PIBD fuzes & P.D. fuzes	Elect RFD	1338/1333

Direction and Distance to Nearest Building, Road, Utility Line, etc.:	Temp: 75° Wind Dir./Speed: NW 0-5 MPH Ceiling: 2000-1000 Clouds/% Sun: 60/40
1085 temp building 2100ft 2200ft 5m. occupied	

Type and Amount of Tamping or Sandbag Mitigation Used:	Mat or Other Protection Used (list):
Buried Explosive Module 3'	N/A

Seismographic / Sound Level Meter Used: Yes ☐ No ☐	Readings / Results:

Demolition Materials Used

Description	Amount	Description	Amount
Perforator		Time Fuze	
Det Cord	293	Squibs	
Detonator ☒ Electric ☐ Non-electric	4	Booster Block	1
Non-El Detonator		Other (list)	

Certification

I certify that the explosives listed were used for their intended purpose, and that the MEC listed were rendered inert/destroyed.

Signature of Demolition Supervisor: [signature] Date: 8/2/13

_____ Consecutive Record Number: _____

List of MEC Destroyed, Vented or Burned:

Description	Quantity	Description	Quantity
PIBD fuzes	356		
PD fuzes	42		
Booster cups	22		

PIKA
INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location:	Date:

PIKA INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location: Ravenna Arsenal / Depot, OH		Date: 8/5/13
Shot Location (OB/OD Range or Grid No.): ODA-2	Demolition Supervisor: R. Kyle Toporek	State License # (if applicable): N/A
Type of MEC Destroyed, Vented or Burned: Various projectiles and fuzes	Firing Method: Elect. RFI	Time of Shot: 1511/1512/1513
Direction and Distance to Nearest Building, Road, Utility Line, etc.: 1800 ft temp bldg 2100ft 2200ft 5 mi occupied	Temp: 70° Wind Dir./Speed: N Ceiling: 2000 ft Clouds/% Sun: 80/20	
Type and Amount of Tamping or Sandbag Mitigation Used: Buried Explosive Module 3'	Mat or Other Protection Used (list): N/A	
Seismographic / Sound Level Meter Used: Yes ☒ No ☐	Readings / Results: N/A	

Demolition Materials Used

Description	Amount	Description	Amount
Perforator		Time Fuze	
Det Cord	60 ft	Squibs	
Detonator ☒ Electric ☐ Non-electric	6 ea.	Booster Block	4 ea.
Non-El Detonator		Other (list) C-4	8 lbs

Certification

I certify that the explosives listed were used for their intended purpose, and that the MEC listed were rendered inert/destroyed.

Signature of Demolition Supervisor: R. Kyle Toporek Date: 8/5/13

_____ Consecutive Record Number: _____

List of MEC Destroyed, Vented or Burned:

Description	Quantity	Description	Quantity
V.T. Fuzes	71	20mm projos	44
R.I.B.D. Fuzes	28	25mm projos	2
P.D. Fuzes	4	37mm projos	3
B.D. Fuzes	30	ATT Fuzes	2
Booster Cups	15	T-Bar P.D. Fuzes	17

PIKA INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location: Ravenna Arsenal / Depot ODA-2			Date: 05AUG 13
Bomb Fuzes	18		
RKT warhead	5		
5" B.D. Fuzes	4		
Fuze Components	9		
40mm Frag Balls	5		
Burster Tubes	3		
	MEC Items 260 Total		

PIKA INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location:		Date:
Ravenna Arsenal / Depot, OH		8/6/13
Shot Location (OB/OD Range or Grid No.): ODA-2	Demolition Supervisor: R. Kyle Toporek	State License # (if applicable): N/A
Type of MEC Destroyed, Vented or Burned: Various projectiles and fuzes	Firing Method: Elect. RFD	Time of Shot: 1138/1139
Direction and Distance to Nearest Building, Road, Utility Line, etc.: 5 miles nearest Bldg. / 2100 ft to road / 2200ft to utilities	Temp: 83° Wind Dir./Speed: N 0-5mph Ceiling: 2000 ft Clouds/% Sun: 60/40	
Type and Amount of Tamping or Sandbag Mitigation Used: Buried Explosive Module 3'	Mat or Other Protection Used (list):	
Seismographic / Sound Level Meter Used: Yes ☑ No ☐	Readings / Results: N/A	

Demolition Materials Used

Description	Amount	Description	Amount
Perforator	8 ea	Time Fuze	
Det Cord	55 ft	Squibs	
Detonator ☑ Electric ☐ Non-electric	4 ea.	Booster Block	4 ea.
Non-El Detonator		Other (list) C-4	6 lbs.

Certification

I certify that the explosives listed were used for their intended purpose, and that the MEC listed were rendered inert/destroyed.

Signature of Demolition Supervisor: R. Kyle Toporek Date: 8/6/13

Consecutive Record Number: _____

List of MEC Destroyed, Vented or Burned:

Description	Quantity	Description	Quantity
20 mm	2	40mm Grenade	1
25 mm	16	60 mm Mortar	11
30 mm	36	60 mm Flare	1
37 mm	28	75 mm Shrapnel	7
40mm	9	81 mm Mortar	2

PIKA INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location: Ravenna Arsenal / Depot, OH			Date: 8/6/13
Fuze	1		
Aux. Detonating Fuze	1		
Booster Tube	2		
Total	118		

PIKA INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location:		Date:
Ravenna Arsenal / Depot, OH		8/7/13
Shot Location (OB/OD Range or Grid No.): ODA-2	Demolition Supervisor: R. Kyle Toporek	State License # (if applicable): N/A
Type of MEC Destroyed, Vented or Burned: Various projectiles, RKT WHD's, illums, frag bombs & rifle grenades	Firing Method: Elect. RFD	Time of Shot: 1123/1124/1125
Direction and Distance to Nearest Building, Road, Utility Line, etc.: 5 mi nearest bldg. / 2100 ft to road / 2200 to Utilities	Temp: 67° Wind Dir./Speed: N 0-5 mph Ceiling: 1500 - 2000 ft Clouds/% Sun: 90/10	
Type and Amount of Tamping or Sandbag Mitigation Used: Buried Explosive Module 3'	Mat or Other Protection Used (list): N/A	
Seismographic / Sound Level Meter Used: Yes ☑ No ☐	Readings / Results:	

Demolition Materials Used

Description	Amount	Description	Amount
Perforator	35 ea	Time Fuze	
Det Cord	70 ft	Squibs	
Detonator ☑ Electric ☐ Non-electric	6	Booster Block	5 ea.
Non-El Detonator		Other (list) C-4	2 lbs.

Certification

I certify that the explosives listed were used for their intended purpose, and that the MEC listed were rendered inert/destroyed.

Signature of Demolition Supervisor: R. Kyle Toporek Date: 8/7/13

_____ Consecutive Record Number: _____

List of MEC Destroyed, Vented or Burned:

Description	Quantity	Description	Quantity
20 mm projos	1	40 mm Grenade primers	3
25 mm projos	8	60 mm mortar	2
30 mm projos	13	60 mm illum	1
37 mm projos	11	75 mm projo HE & AP (1)	3
40 mm projos	5	75 mm shrapnel	4

PIKA INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location: Ravenna Arsenal Depot OH			Date: 8/7/13
81 mm mortar	1		
90 mm HE	6		
105 mm projo	1		
RKT WHD 5"	5		
Rifle Grenade	1		
155 mm Base Plate w/ HE	1		
2016 Frag Bomb	2		
Bomb Fuze Component	1		
total	75		

PIKA INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location:		Date:
Ravenna Ammo Depot, OH		9/19/13
Shot Location (OB/OD Range or Grid No.):	**Demolition Supervisor:**	**State License # (if applicable):**
ODAZ	R. Kyle Toporek	N/A

Type of MEC Destroyed, Vented or Burned:	Firing Method:	Time of Shot:
HE projos & fuzes	RFD elect.	0912

Direction and Distance to Nearest Building, Road, Utility Line, etc.:	Temp: 62° Wind 0 Dir./Speed: 0 Ceiling: 1000 ft Clouds/% Sun: overcast
1800ft temp building 2100ft 2200ft 5 mi occupied	

Type and Amount of Tamping or Sandbag Mitigation Used:	Mat or Other Protection Used (list):
BEM 3'	N/A

Seismographic / Sound Level Meter Used: Yes ☒ No ☐	Readings / Results:
	N/A

Demolition Materials Used

Description	Amount	Description	Amount
Perforator	4	Time Fuze	
Det Cord	20'	Squibs	
Detonator ☒ Electric ☐ Non-electric	2	Booster Block	2
Non-El Detonator		Other (list)	

Certification

I certify that the explosives listed were used for their intended purpose, and that the MEC listed were rendered inert/destroyed.

Signature of Demolition Supervisor: _____ Date: 9/19/13

_____ Consecutive Record Number: _____

List of MEC Destroyed, Vented or Burned:

Description	Quantity	Description	Quantity
60 mm mortar w/fake fuze	1		
Mortar fuze	1		
105 mm projo	1		
3" projos 2 complete 1 partial	3		

PIKA
INTERNATIONAL, INC.

FORM-205B: DEMOLITION SHOT RECORD

Site Name/Location:	Date:

Appendix I

Scrap Metal Disposal Records

Scrap Metal Summary Table

SCRAP METAL											
DATE	TRUCK #	CARRIER	DISPOSAL FACILITY	GROSS	TARE	ADJUSTMENT (DIRT)	NET	TONS	GROSS TONS	BOL #	Weight Ticket #
09/05/13	78	Wolford	Belson Steel Center	66680	46120	0	20560	10	9.18	SS01-013-ODA2	18576
09/09/13	78	Wolford	Belson Steel Center	74840	46400	1500	26940	13	12.03	SS02-013-ODA2	18812
09/11/13	78	Wolford	Belson Steel Center	68160	46100	2000	20060	10	8.96	SS03-013-ODA2	18961
09/16/13	78	Wolford	Belson Steel Center	76380	46080	4000	26300	13	11.74	SS04-013-ODA2	19266
09/23/13	78	Wolford	Belson Steel Center	79000	46320	3000	29680	15	13.25	SS05-013-ODA2	19836
				365,060	231,020	10,500	123,540	61.77	55.15		

STRAIGHT BILL OF LADING – ORIGINAL – NOT NEGOTIABLE

Shipper's No. SS01-013 ODA2

Carrier Wolfords SCAC _____ Carrier's No. 78

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request; and all applicable state and federal regulations:

at ODA2, date 9/5/13 from RAVENNA, AAP

the Property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to delivery at said destination, if on its route, or otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said Property over all or any portion of said route to destination and as to each party at any time interested in all or any of said Property that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on the back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

TO:	Belson Steel/Center Scrap Inc	FROM:	PIKA International Inc
Consignee		Shipper	
Street	2685 N. Route 50	Street	8451 ST. RT 5
Destination	Bourbonnais Zip 60914	Origin	Ravenna Oh Zip 44266
Route			

Delivering Carrier | Vehicle Number | U.S. DOT Hazmat Reg. Number

Number and Type of Packages	HM	I.D. Number	Description of Articles	Hazard Class	Pkg. Grp.	Total Quantity (mass, volume, or activity)	Weight (subject to correction)	Class or Rate
1 Roll OFF	N	NA	Mixed Metal Scrap Steel (Material Documented As Such)	NA	NA	20 cuyd	Appx 30K	NA

BELSON STEEL/CENTER SCRAP, INC.
1685 N. RT. 50 BOURBONNAIS, IL 60914

Remit COD to:
Address:
City: State: Zip:

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

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

(Signature of Consignor)

COD AMT: $

TOTAL CHARGES: $

COD FEE: ☐ Prepaid ☐ Collect $

FREIGHT CHARGES: ☐ Prepaid ☐ Collect

NOTE: Liability Limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. 14706(c)(1)(A) and (B).

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ BY SHIPPER ☐ BY CARRIER

DRIVER'S SIGNATURE:

SHIPPER: PIKA Inc
PER: _____ DATE: 9/4/13

CARRIER: Wolfords
PER: _____ DATE: 9/5/13

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Monitored at all times the Hazardous Material is in transportation including storage incidental to transportation (172.604).

9-BLS-B4 434 (Rev. 1/07)

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

PREVIOUS EDITION MAY BE USED

DOC IDENT	RI FROM	M&S	UNIT	ISS	QUANTITY	SER	SUPPLEMENTARY ADDRESS	SIG	FUND	DISTRIBUTION	PROJECT	PRI	REQD	DEL DATE	ADV	RI	O/P	COND	MGT	UNIT PRICE DOLLARS	UNIT PRICE CTS	1. TOTAL PRICE DOLLARS	1. TOTAL PRICE CTS

2. SHIP FROM	3. SHIP TO
Ravenna Army Ammunition Plant, Ravenna, Oh	Belson Steel Bourbonnais, Il

4. MARK FOR: Mark Pozan

5. DOC DATE	6. NMFC	7. FRT RATE	8. TYPE CARGO	9. PS
	N/A	N/A	N/A	N/A

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

24. DOCUMENT NUMBER & SUFFIX (30-44)

Container 20243
Seal # N/A
Basic Material Content: Mixed Metals
Location: ODA2 Ravenna AAP, Ravenna, Oh

16. FREIGHT CLASSIFICATION NOMENCLATURE: Not Applicable (N/A)

17. ITEM NOMENCLATURE: Material Documented as Safe

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

18. TY CONT	19. NO CONT	20. TOTAL WEIGHT	21. TOTAL CUBE
N/A	N/A	Approx 30,000lbs	Not Applicable

22. RECEIVED BY: Greg Griffin

23. DATE RECEIVED: 9/6/13

26. RIC (4-6) UI (23-24) QTY (25-29) CON CODE (71) DIST (55-66) UP (74-80)

BELSON STEEL CENTER SCRAP, INC.
1685 N. RT. 50 BOURBONNAIS, IL 60914

27. ADDITIONAL DATA

This certifies and verifies that the material listed has either (1) been subjected to a 100% inspection and an independent 100% re-inspection, or (2) been processed by a DDESB-approved process with an appropriate post-processing inspection. To the best of our knowledge and belief, the material listed is free of explosive hazards and is Material Documented as Safe (MDAS)

Lew Kovarik, SUXOS
PIKA International, Inc.
Cell: 740-632-1143

Cameron Wenzel, SUXOSO/QCS
PIKA International, Inc.
Cell: 330-703-6470

Adobe Designer 7.0

PIKA INTERNATIONAL, INC.

PIKA INTERNATIONAL, INC. ESHF-204
SCRAP, MD, AND RRD CERTIFICATION, AND CHAIN OF CUSTODY FORM

Project Name and Location: ERS at RVAAP, Ravenna, Oh	Contract No: W912QR-12-C-0060	DO No:	Page 1of 1

Line	Description	Source (e.g., Grid or Range	Container/Serial Number	Container Type	Unit Wt./Vol.
1	Material Documented as Safe	RVAAP 0DA2	20243	ROLL OFF	20 Cubic Yards
2					
3					
4					
5					
6					
7					
8					

Inspector's certification: This certifies that the AEDA residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and, to the best of our knowledge and belief, are free of explosive hazards.

Printed/typed name: LEW KOVARIK	Signature:	Date: 9-05-13

Verifier certification: This certifies that the AEDA residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and, to the best of our knowledge and belief, are free of explosive hazards.

Printed/typed name: Cameron Wenzel	Signature:	Date: 9-05-13

Transporter(s)			
	Transporter 1 acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name:	Signature:	Date: 9/5/13
	Transporter 2 acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name:	Signature:	Date:

Final Disposition			
	Facility owner or operator: Certification of receipt of AEDA/Range Residue materials, except as noted above. Acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name:	Signature:	Date: 9/6/13

SON STEEL CENTER SCRAP, INC.
385 N. RT. 50 BOURBONNAIS, IL 60914

Weight Ticket - 18576 -

Printed on Friday 09/06/2013 at 07:34:01AM by Greg R

Gross	Tare	Net	Price	Amount
UNPREPARED HMS/IRON				
66680.00	46120.00	20560.00	T	

Total -

Started: Greg R

PIKA INTER.

Customer Name ID/Licence Veh/Plate

REDEEM AT CASHIER
REDIMA EN EL CAJERO

Belson Steel Center Scrap, Inc
1685 N Rt 50 Bourbonnais IL 60914

STRAIGHT BILL OF LADING – ORIGINAL – NOT NEGOTIABLE

Shipper's No. SSO2-013-0042

Carrier Wolfords SCAC _____ Carrier's No. 78

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request; and all applicable state and federal regulations:

at USA, date 9/9/13 from Ravenna OH

the Property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to delivery at said destination, if on its route, or otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said Property over all or any portion of said route to destination and as to each party at any time interested in all or any of said Property that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on the back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

TO: Consignee	Belson Steel Center Scrap Inc
Street	2685 N. Route 50
Destination	Bourbonnais IL Zip 60914
FROM: Shipper	PIKA International Inc
Street	8451 ST RT 5
Origin	Ravenna OH Zip 44266
Route	

Delivering Carrier | Vehicle Number | U.S. DOT Hazmat Reg. Number

Number and Type of Packages	HM	I.D. Number	Description of Articles	Hazard Class	Pkg. Grp.	Total Quantity (mass, volume, or activity)	Weight (subject to correction)	Class or Rate
1 Roll OFF	N	NA	Mixed metal Scrap Steel (Material Documented AS SAE)	NA	III	20 cuyd	Aprox 30,000	NA

BELSON STEEL CENTER SCRAP, INC.
1685 N. RT. 50 BOURBONNAIS, IL 60914

Remit COD to:
Address:
City: State: Zip:

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

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

(Signature of Consignor)

COD AMT: $

TOTAL CHARGES: $

COD FEE: Prepaid ☐ Collect ☐ $

FREIGHT CHARGES: ☐ Prepaid ☐ Collect

NOTE: Liability Limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. 14706(c)(1)(A) and (B).

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ BY SHIPPER ☐ BY CARRIER

DRIVER'S SIGNATURE:

SHIPPER: PIKA INC
PER: [signature] DATE: 9/9/13

CARRIER: Wolfords
PER: [signature] DATE: 9/9/13

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Monitored at all times the Hazardous Material is in transportation including storage incidental to transportation (172.604).

9-BLS-B4 434 (Rev. 1/07)

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

PREVIOUS EDITION MAY BE USED

DOC IDENT	RI FROM	M&S	UNIT ISS	QUANTITY	SER	SUPPLEMENTARY ADDRESS	SIG	FUND	DISTRIBUTION	PROJECT	PRI	REQD	DELL DATE	ADV	RI	O/P	COND	MGT	UNIT PRICE DOLLARS	UNIT PRICE CTS	1. TOTAL PRICE DOLLARS	1. TOTAL PRICE CTS

2. SHIP FROM: Ravenna Army Ammunition Plant, Ravenna, Oh

3. SHIP TO: Belson Steel Bourbonnais, Il

4. MARK FOR: Mark Pozan

5. DOC DATE	6. NMFC	7. FRT RATE	8. TYPE CARGO	9. PS
	N/A	N/A	N/A	N/A

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

24. DOCUMENT NUMBER & SUFFIX (30-44)

Container 20356
Seal # N/A
Date: 9-9-13
Basic Material Content: Mixed Metals
Location: ODA2 Ravenna AAP, Ravenna, Oh

16. FREIGHT CLASSIFICATION NOMENCLATURE: Not Applicable (N/A)

17. ITEM NOMENCLATURE: Material Documented as Safe

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

18. TY CONT	19. NO CONT	20. TOTAL WEIGHT	21. TOTAL CUBE
N/A	N/A	Approx 30,000lbs	Not Applicable

22. RECEIVED BY: BELSON STEEL CENTERS SCRAP, INC. 1695 N. RT. 50 BOURBONNAIS, IL 60914

23. DATE RECEIVED: 9/10/13

26. RIC (4-6) UI (23-24) QTY (25-29) CON CODE (71) DIST (65-66) UP (74-80)

27. ADDITIONAL DATA

This certifies and verifies that the material listed has either (1) been subjected to a 100% inspection and an independent 100% re-inspection, or (2) been processed by a DDESB-approved process with an appropriate post-processing inspection. To the best of our knowledge and belief, the material listed is free of explosive hazards and is Material Documented as Safe (MDAS)

Lew Kovarik, SUXOS
PIKA International, Inc.
Cell: 740-632-1143

Cameron Wenzel, SUXOSO/QCS
PIKA International, Inc.
Cell: 330-703-6470

Adobe Designer 7.0

PIKA INTERNATIONAL, INC.

PIKA INTERNATIONAL, INC. ESHF-204
SCRAP, MD, AND RRD CERTIFICATION, AND CHAIN OF CUSTODY FORM

Project Name and Location: ERS at RVAAP, Ravenna, Oh	Contract No: W912QR-12-C-0060	DO No:	Page 1of 1

Line	Description	Source (e.g., Grid or Range	Container/Serial Number	Container Type	Unit Wt./Vol.
1	Material Documented as Safe	RVAAP 0DA2	20356	ROLL OFF	20 Cubic Yards
2					
3					
4					
5					
6					
7					
8					

Inspector's certification: This certifies that the AEDA residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and, to the best of our knowledge and belief, are free of explosive hazards.

Printed/typed name: LEW KOVARIK	Signature:	Date: 9-09-13

Verifier certification: This certifies that the AEDA residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and, to the best of our knowledge and belief, are free of explosive hazards.

Printed/typed name: Cameron Wenzel	Signature:	Date: 9-09-13

Transporter(s)			
	Transporter 1 acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name: Bill Engeaart	Signature:	Date: 9-09-13
	Transporter 2 acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name:	Signature:	Date:

Final Disposition			
	Facility owner or operator: Certification of receipt of AEDA/Range Residue materials, except as noted above. Acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name: Gregory C Griffin	Signature:	Date: 9/10/13

BELSON STEEL CENTER SCRAP, INC.
1685 N. RT. 50 BOURBONNAIS, IL 60914

Weight Ticket - 18812 -

Printed on Tuesday 09/10/2013 at 07:19:18 AM by Greg R

Gross	Tare	Net	Price	Amount
UNPREPARED HMS/IRON				
74840.00	46400.00	28440.00	$1	

(1500.00 lbs deducted for DIRT)

Total --

Started: Greg R

PIKA INTER.

Customer Name ID/Licence Veh/Plate

REDEEM AT CASHIER
REDIMA EN EL CAJERO

Belson Steel Center Scrap, Inc
1685 N Rt 50 Bourbonnais IL 60914

STRAIGHT BILL OF LADING – ORIGINAL – NOT NEGOTIABLE

Shipper's No. SS-003-013-0042

Carrier Wolfpacks SCAC _____ Carrier's No. _____

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request; and all applicable state and federal regulations;

at ODA2, date 9/11/12 from RAVENNA AAP

the Property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to delivery at said destination, if on its route, or otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said Property over all or any portion of said route to destination and as to each party at any time interested in all or any of said Property that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on the back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

TO: Consignee Belson Steel	**FROM:** Shipper PIKA INTERNATIONAL
Street 1685 N RT 50	Street 8451 ST RT 5
Destination Bourbonnais IL Zip 60914	Origin RAVENNA OH Zip 44266
Route	

Delivering Carrier | Vehicle Number | U.S. DOT Hazmat Reg. Number

Number and Type of Packages	HM	I.D. Number	Description of Articles	Hazard Class	Pkg. Grp.	Total Quantity (mass, volume, or activity)	Weight (subject to correction)	Class or Rate
1 Roll off	N	NA	Scrap steel / Mixed METALS (MATERIAL Documented As SAFE)	NA	M	20 cu yds	APPROX 30K	

BELSON STEEL CENTER SCRAP, INC.
1685 N. RT. 50 BOURBONNAIS, IL 60914

Remit COD to:
Address:
City: State: Zip:

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

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

(Signature of Consignor)

COD AMT: $

TOTAL CHARGES: $

COD FEE: Prepaid ☐ Collect ☐ $

FREIGHT CHARGES: ☐ Prepaid ☐ Collect

NOTE: Liability Limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. 14706(c)(1)(A) and (B).

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ BY SHIPPER ☐ BY CARRIER

DRIVER'S SIGNATURE:

SHIPPER: PIKA
PER: [signature] DATE: 9/11/12

CARRIER: Wolfpacks
PER: Bill [signature] DATE: 9/11/12

EMERGENCY RESPONSE PHONE NUMBER: ( )

Monitored at all times the Hazardous Material is in transportation including storage incidental to transportation (172.604).

BOL (Rev. 1/07)

PIKA INTERNATIONAL, INC.

PIKA INTERNATIONAL, INC. ESHF-204
SCRAP, MD, AND RRD CERTIFICATION, AND CHAIN OF CUSTODY FORM

Project Name and Location: ERS at RVAAP, Ravenna, Oh		Contract No: W912QR-12-C-0060		DO No:	Page 1of 1
Line	Description	Source (e.g., Grid or Range	Container/Serial Number	Container Type	Unit Wt./Vol.
1	Material Documented as Safe	RVAAP 0DA2	20341	ROLL OFF	20 Cubic Yards
2					
3					
4					
5					
6					
7					
8					

Inspector's certification: This certifies that the AEDA residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and, to the best of our knowledge and belief, are free of explosive hazards.

Printed/typed name: LEW KOVARIK	Signature:	Date: 9-11-13

Verifier certification: This certifies that the AEDA residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and, to the best of our knowledge and belief, are free of explosive hazards.

Printed/typed name: Cameron Wenzel	Signature:	Date: 9-11-13

Transporter(s)	Transporter 1 acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name:	Signature:	Date: 9-11-13
	Transporter 2 acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name:	Signature:	Date:
Final Disposition	Facility owner or operator: Certification of receipt of AEDA/Range Residue materials, except as noted above. Acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name:	Signature:	Date: 9/12/13

BELSON STEEL CENTER SCRAP, INC.
1685 N. RT. 50 BOURBONNAIS, IL 60914

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

PREVIOUS EDITION MAY BE USED

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

1. TOTAL PRICE		2. SHIP FROM	3. SHIP TO
DOLLARS	CTS	Ravenna Army Ammunition Plant, Ravenna, Oh	Belson Steel Bourbonnais, Il
		4. MARK FOR Mark Pozan	

5. DOC DATE	6. NMFC	7. FRT RATE	8. TYPE CARGO	9. PS
	N/A	N/A	N/A	N/A

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

16. FREIGHT CLASSIFICATION NOMENCLATURE
Not Applicable (N/A)

17. ITEM NOMENCLATURE
Material Documented as Safe

18. TY CONT	19. NO CONT	20. TOTAL WEIGHT	21. TOTAL CUBE
N/A	N/A	Approx 30,000lbs	Not Applicable

22. RECEIVED BY: Greg Ruffin

23. DATE RECEIVED: 9/12/13

BELSON STEEL CENTER SCRAP, INC.
1685 N. RT 50 BOURBONNAIS, IL 60914

24. DOCUMENT NUMBER & SUFFIX (30-44)

Container 20341
Seal # N/A
Date: 9-11-13
Basic Material Content: Mixed Metals
Location: ODA2 Ravenna AAP, Ravenna, Oh

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

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

27. ADDITIONAL DATA

This certifies and verifies that the material listed has either (1) been subjected to a 100% inspection and an independent 100% re-inspection, or (2) been processed by a DDESB-approved process with an appropriate post-processing inspection. To the best of our knowledge and belief, the material listed is free of explosive hazards and is Material Documented as Safe (MDAS)

Lew Kovarik, SUXOS
PIKA International, Inc.
Cell: 740-632-1143

Cameron Wenzel, UXOSO/QCS
PIKA International, Inc.
Cell: 330-703-6470

Adobe Designer 7.0

Weight Ticket - 18961 -

Printed on Thursday 09/12/2013 at 07:13:12 AM by Greg R

Gross	Tare	Net	Price	Amount
UNPREPARED HMS/IRON				
68160.00	46100.00	22060.00	$190.00G	

(2000.00 lbs deducted for DIRT)

Total --> $

Started: Greg R

PIKA INTER.

Customer Name ID/Licence * Veh/Plate

REDEEM AT CASHIER
REDIMA EN EL CAJERO

Belson Steel Center Scrap, Inc
1685 N Rt 50 Bourbonnais IL 60914

STRAIGHT BILL OF LADING – ORIGINAL – NOT NEGOTIABLE

Shipper's No. SS04-013-0DA2

Carrier Wolfords SCAC _____ Carrier's No. 78

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request; and all applicable state and federal regulations.

at 0DA2, date 9/16/13 from RAVENNA AAP

the Property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to delivery at said destination, if on its route, or otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said Property over all or any portion of said route to destination and as to each party at any time interested in all or any of said Property that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on the back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

TO: Belson Steel Center Scrap Inc	FROM: PIKA International Inc
Consignee 2685 N. Route 50	Shipper 8451 ST RT 5
Street	Street
Destination Bourbonnais IL Zip 60914	Origin RAVENNA OH Zip 44266
Route	

Delivering Carrier | Vehicle Number | U.S. DOT Hazmat Reg. Number

Number and Type of Packages	HM	I.D. Number	Description of Articles	Hazard Class	Pkg. Grp.	Total Quantity (mass, volume, or activity)	Weight (subject to correction)	Class or Rate
1 Roll off	NA	NA	Mixed metal Scrap Steel (Material Documented As Such)	NA	NA	20 cuyd	Approx 30,000	NA

BELSON STEEL CENTER SCRAP, INC.
1685 N. RT. 50 BOURBONNAIS, IL 60914

Remit COD to:
Address:
City: State: Zip:

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

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

(Signature of Consignor)

COD AMT: $

TOTAL CHARGES: $

COD FEE: Prepaid ☐ Collect ☐ $

FREIGHT CHARGES: ☐ Prepaid ☐ Collect

NOTE: Liability Limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. 14706(c)(1)(A) and (B).

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ BY SHIPPER ☐ BY CARRIER

DRIVER'S SIGNATURE:

SHIPPER: PIKA INC PER: _____ DATE: 9/16/13

CARRIER: Wolfords PER: _____ DATE: 9/16/13

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Monitored at all times the Hazardous Material is in transportation including storage incidental to transportation (172.604).

9-BLS-B4 434 (Rev. 1/07)

PIKA INTERNATIONAL, INC.

PIKA INTERNATIONAL, INC. ESHF-204
SCRAP, MD, AND RRD CERTIFICATION, AND CHAIN OF CUSTODY FORM

Project Name and Location: ERS at RVAAP, Ravenna, Oh	Contract No: W912QR-12-C-0060		DO No:	Page 1of 1

Line	Description	Source (e.g., Grid or Range	Container/Serial Number	Container Type	Unit Wt./Vol.
1	Material Documented as Safe	RVAAP 0DA2	220397	ROLL OFF	20 Cubic Yards
2					
3					
4					
5					
6					
7					
8					

Inspector's certification: This certifies that the AEDA residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and, to the best of our knowledge and belief, are free of explosive hazards.

Printed/typed name: LEW KOVARIK	Signature: Lew K	Date: 9-16-13

Verifier certification: This certifies that the AEDA residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and, to the best of our knowledge and belief, are free of explosive hazards.

Printed/typed name: Cameron Wenzel	Signature:	Date: 9-16-13

Transporter(s)			
	Transporter 1 acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name: Bill Bryant	Signature: Bill Bryant	Date: 9-16-13
	Transporter 2 acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name:	Signature:	Date:

Final Disposition			
	Facility owner or operator: Certification of receipt of AEDA/Range Residue materials, except as noted above. Acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name:	Signature: NELSON STEEL CENTER SCRAP, INC. 1595 N. RT. 50 BOURBONNAIS, IL 60914	Date: 9/17/13

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

DOC IDENT	RI FROM	M&S	UNIT ISS	QUANTITY	SER	SUPPLEMENTARY ADDRESS	SIG	FUND	DISTRIBUTION	PROJECT	PRI	REQD	DEL DATE	ADV	RI	O/P	COND	MGT

UNIT PRICE DOLLARS	CTS	1. TOTAL PRICE DOLLARS	CTS	2. SHIP FROM	3. SHIP TO
				Ravenna Army Ammunition Plant, Ravenna, Oh	Belson Steel Bourbonnais, Il

4. MARK FOR: Mark Pozan

5. DOC DATE	6. NMFC	7. FRT RATE	8. TYPE CARGO	9. PS
	N/A	N/A	N/A	N/A

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

16. FREIGHT CLASSIFICATION NOMENCLATURE: Not Applicable (N/A)

17. ITEM NOMENCLATURE: Material Documented as Safe

18. TY CONT	19. NO CONT	20. TOTAL WEIGHT	21. TOTAL CUBE
N/A	N/A	Approx 30,000lbs	Not Applicable

22. RECEIVED BY	23. DATE RECEIVED

24. DOCUMENT NUMBER & SUFFIX (30-44)

Container 220397
Seal # N/A
Date: 9-16-13
Basic Material Content: Mixed Metals
Location: ODA2 Ravenna AAP, Ravenna, Oh

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

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

27. ADDITIONAL DATA

BELSON STEEL CENTER SCRAP, INC.
1685 N. RT. 50 BOURBONNAIS, IL 60914

This certifies and verifies that the material listed has either (1) been subjected to a 100% inspection and an independent 100% re-inspection, or (2) been processed by a DDESB-approved process with an appropriate post-processing inspection. To the best of our knowledge and belief, the material listed is free of explosive hazards and is Material Documented as Safe (MDAS)

Lew Kovarik, SUXOS
PIKA International, Inc.
Cell: 740-632-1143

Cameron Wenzel, UXOSO/QCS
PIKA International, Inc.
Cell: 330-703-6470

PREVIOUS EDITION MAY BE USED

Adobe Designer 7.0

Weight Ticket - **19266** -

Printed on Tuesday 09/17/2013 at 11:25:14 AM by Greg R

Gross	Tare	Net	Price	Amount
UNPREPARED HMS/IRON				
76380.00	46080.00	30300.00		

(4000.00 lbs deducted for DIRT)

Total -->

Started: Greg R

pika inter.

Customer Name ID/Licence Veh/Plate

REDEEM AT CASHIER
REDIMA EN EL CAJERO

Belson Steel Center Scrap, Inc
1685 N Rt 50 Bourbonnais IL 60914

STRAIGHT BILL OF LADING – ORIGINAL – NOT NEGOTIABLE

Shipper's No. SS-05-013 ODA2

Carrier Wolfords SCAC _____ Carrier's No. _____

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request; and all applicable state and federal regulations:

at ODA2, date 9/23/13 from RAVENNA AMP

the Property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to delivery at said destination, if on its route, or otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said Property over all or any portion of said route to destination and as to each party at any time interested in all or any of said Property that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on the back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

TO:	FROM:
Consignee Belson Steel Center Scrap Inc	Shipper PIKA International
Street 1685 N. RTE 50	Street 8451 ST RT 5
Destination Bourbonnais IL Zip 60914	Origin RAVENNA OH Zip 44266

Route

Delivering Carrier | Vehicle Number | U.S. DOT Hazmat Reg. Number

Number and Type of Packages	HM	I.D. Number	Description of Articles	Hazard Class	Pkg. Grp.	Total Quantity (mass, volume, or activity)	Weight (subject to correction)	Class or Rate
Roll off	N	N/A	Scrap Steel (Mixed Metals (Material Documented As Safe)	NA	NA	~~[illegible]~~ 20 wyd	Approx 30,000 lbs	NA

BELSON STEEL CENTER SCRAP, INC.
1685 N. RT. 50 BOURBONNAIS, IL 60914

Remit COD to:
Address:
City: State: Zip:

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

(Signature of Consignor)

COD AMT: $

TOTAL CHARGES: $

COD FEE: Prepaid ☐ Collect ☐ $

FREIGHT CHARGES: ☐ Prepaid ☐ Collect

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

NOTE: Liability Limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. 14706(c)(1)(A) and (B).

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ BY SHIPPER ☐ BY CARRIER

DRIVER'S SIGNATURE:

SHIPPER: PIKA
PER: [signature] DATE: 9/23/13

CARRIER: Wolfords
PER: [signature] DATE: 9/23/13

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )

Monitored at all times the Hazardous Material is in transportation including storage incidental to transportation (172.604).

9-BLS-B4 434 (Rev. 1/07)

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

PREVIOUS EDITION MAY BE USED

1 2 3 4 5 6 7	23 24 25 26 27 28 29	45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80	1. TOTAL PRICE	2. SHIP FROM	3. SHIP TO
DOC IDENT	RI FROM / M&S / UNIT / ISS / QUANTITY	SER / SUPPLEMENTARY ADDRESS / SIG / FUND / DISTRIBUTION / PROJECT / PRI / REQD / DEL / DATE / ADV / RI / O/P / COND / MGT	UNIT PRICE DOLLARS CTS / DOLLARS / CTS	Ravenna Army Ammunition Plant, Ravenna, Oh	Belson Steel Bourbonnais, Il
				4. MARK FOR: Mark Pozan	

5. DOC DATE	6. NMFC	7. FRT RATE	8. TYPE CARGO	9. PS
	N/A	N/A	N/A	N/A

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

24. DOCUMENT NUMBER & SUFFIX (30-44)

Container 20311
Seal # N/A
Date: 9-23-13
Basic Material Content: Mixed Metals
Location: ODA2 Ravenna AAP, Ravenna, Oh

16. FREIGHT CLASSIFICATION NOMENCLATURE
Not Applicable (N/A)

17. ITEM NOMENCLATURE
Material Documented as Safe

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

18. TY CONT	19. NO. CONT	20. TOTAL WEIGHT	21. TOTAL CUBE
N/A		Approx 30,000lbs	Not Applicable

22. RECEIVED BY

23. DATE RECEIVED

BELSON STEEL CENTER SCRAP, INC.
1085 N. RT. 50 BOURBONNAIS, IL 60914

BELSON STEEL CENTER SCRAP, INC.
1085 N. RT. 50 BOURBONNAIS, IL 60914

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

27. ADDITIONAL DATA

This certifies and verifies that the material listed has either (1) been subjected to a 100% inspection and an independent 100% re-inspection, or (2) been processed by a DDESB-approved process with an appropriate post-processing inspection. To the best of our knowledge and belief, the material listed is free of explosive hazards and is Material Documented as Safe (MDAS)

Lew Kovarik, SUXOS
PIKA International, Inc.
Cell: 740-632-1143

Cameron Wenzel, UXOSO/QCS
PIKA International, Inc.
Cell: 330-703-6470

Adobe Designer 7.0

PIKA INTERNATIONAL, INC.

PIKA INTERNATIONAL, INC. ESHF-204
SCRAP, MD, AND RRD CERTIFICATION, AND CHAIN OF CUSTODY FORM

Project Name and Location: ERS at RVAAP, Ravenna, Oh		Contract No: W912QR-12-C-0060		DO No:	Page 1of 1
Line	Description	Source (e.g., Grid or Range	Container/Serial Number	Container Type	Unit Wt./Vol.
1	Material Documented as Safe	RVAAP 0DA2	20311	ROLL OFF	20 Cubic Yards
2					
3					
4					
5					
6					
7					
8					

Inspector's certification: This certifies that the AEDA residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and, to the best of our knowledge and belief, are free of explosive hazards.

Printed/typed name: LEW KOVARIK	Signature: Lew Kovarik	Date: 9-23-13

Verifier certification: This certifies that the AEDA residue, Range Residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and, to the best of our knowledge and belief, are free of explosive hazards.

Printed/typed name: Cameron Wenzel	Signature: Cam Wen	Date: 9-23-13

Transporter(s)	Transporter 1 acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name: Bill Bryant	Signature: Bill Bryant	Date: 9-23-13
	Transporter 2 acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name:	Signature:	Date:
Final Disposition	Facility owner or operator: Certification of receipt of AEDA/Range Residue materials, except as noted above. Acknowledgment of receipt of materials properly sealed/secured.		
	Printed/typed name:	Signature: Greg Bryant	Date: 9/25/13

BELSON STEEL CENTER SCRAP, INC.
3005 N. RT. 50 BOURBONNAIS, IL 60914

Weight Ticket - 19836 -

Printed on Wednesday 09/25/2013 at 03:20:27 PM by Greg R

Gross	Tare	Net	Price	Amount
UNPREPARED HMS/IRON				
79000.00	46320.00	32680.00	$190.00 GT	

(3000.00 lbs deducted for DIRT)

Total --> $

Started: Greg R

Pika International

Customer Name ID/Licence Veh/Plate

REDEEM AT CASHIER
REDIMA EN EL CAJERO

Belson Steel Center Scrap, Inc
1685 N Rt 50 Bourbonnais IL 60914

Belson Steel Center Scrap, Inc.

1685 N. Route 50
Bourbonnais, Illinois 60914

Phone (815) 932-7416
Fax (815) 932-7436

September 26, 2013

PIKA International, Inc.
4935 S. Prospect Street, Suite A
Ravenna, OH 44266

Subject: Certificate of Destruction

To Whom It May Concern:

Belson Steel Center Scrap, Inc. received 134,040 lbs. of "mixed metals" between the dates of 9/6/13 – 9/25/13. All material was processed beyond re-use, melted in an electric arc furnace, and delivered to Nucor Steel, Bourbonnais, IL. The following is a list of the containers with their received weights.

9/6/13 – Container# 20243, 20,560 lbs.
9/10/13 – Container# 20356, 28,440 lbs.
9/12/13 – Container# 20341, 22,060 lbs.
9/17/13 – Container# 220397, 30,300 lbs.
9/25/13 – Container# 20311, 32,680 lbs.

Regards,

Zac Upstone
Belson Steel Center Scrap, Inc.

Appendix J

MEC Demolition Surface Water Sampling Results

SUMMARY TABLE - 1
SURFACE WATER SAMPLE LOCATIONS

ANALYTE**, UNITS, METHOD NO.	Surface Water Background Criteria ug/L	DA2sw-096-1007-SW	Qualifier	MDL	DA2sw-096-1008-SW	Qualifier	MDL	DA2sw-096-1009-SW	Qualifier	MDL	DA2sw-096-1010-SW	Qualifier	MDL	DA2sw-099-1007-SW	Qualifier	MDL	DA2sw-099-1008-SW	Qualifier	MDL	DA2sw-099-1008-DUP	Qualifier	MDL	DA2sw-099-1009-SW	Qualifier	MDL	DA2sw-099-1010-SW	Qualifier	MDL
Sample Date		7/22/2013			8/1/2013			8/8/2013			9/25/2013			7/22/2013			8/1/2013			8/1/2013			8/8/2013			9/25/2013		
Sample Area		Pre-Demo - Upstream			Week #1 - Upstream			Week #2 - Upstream			Post Demo - Upstream			Pre-Demo - Down Stream			Week #1 - Down Stream			Week #1 - Down Stream			Week #2- Down Stream			Post Demo - Down Stream		
EXPLOSIVES ug/L																												
1,3,5-Trinitrobenzene	--	0.15	U	0.031	0.15	U	0.031	0.15	U	0.032	0.15	U	0.031	0.15	U	0.031	0.15	U	0.031	0.057	J	0.031	0.15	U	0.032	0.15	U	0.031
1,3-Dinitrobenzene	--	0.15	U	0.051	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050	0.15	U	0.050	0.15	U	0.050	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050
2,4,6-Trinitrotoluene	--	0.15	U	0.051	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050	0.15	U	0.050	0.15	U	0.050	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050
2,4-Dinitrotoluene	--	0.13	U	0.051	0.13	U	0.050	0.13	U	0.051	0.13	U	0.050	0.13	U	0.050	0.13	U	0.050	0.13	U	0.050	0.13	U	0.051	0.13	U	0.050
2,6-Dinitrotoluene	--	0.13	U	0.051	0.13	U	0.050	0.13	U	0.051	0.13	U	0.050	0.13	U	0.050	0.13	U	0.050	0.13	U	0.050	0.13	U	0.051	0.13	U	0.050
2-Amino-4,6-Dinitrotoluene	--	0.15	U	0.02	0.15	U	0.015	0.15	U	0.015	0.15	U	0.015	0.15	U	0.02	0.15	U	0.015	0.15	U	0.015	0.15	U	0.015	0.15	U	0.015
2-Nitrotoluene	--	0.51	U	0.089	0.50	U	0.088	0.51	U	0.090	0.50	U	0.089	0.50	U	0.089	0.50	U	0.088	0.50	U	0.088	0.51	U	0.090	0.50	U	0.088
3-Nitrotoluene	--	0.51	U	0.058	0.50	U	0.057	0.51	U	0.058	0.50	U	0.057	0.50	U	0.057	0.50	U	0.057	0.50	U	0.057	0.51	U	0.058	0.50	U	0.057
4-Amino-2,6-Dinitrotoluene	--	0.15	U	0.051	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050	0.15	U	0.050	0.15	U	0.050	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050
4-Nitrotoluene	--	0.51	U	0.089	0.50	U	0.088	0.51	U	0.090	0.50	U	0.089	0.50	U	0.089	0.50	U	0.088	0.50	U	0.088	0.51	U	0.090	0.50	U	0.088
HMX	--	0.15	U	0.036	0.15	U	0.036	0.15	U	0.037	0.15	U	0.036	0.15	U	0.036	0.15	U	0.036	0.15	U	0.036	0.15	U	0.037	0.15	U	0.036
Nitrobenzene	--	0.15	U	0.051	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050	0.15	U	0.050	0.15	U	0.050	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050
Nitroglycerine	--	0.66	U	0.33	0.65	U	0.33	0.66	U	0.34	0.65	U	0.33	0.66	U	0.33	0.65	U	0.33	0.65	U	0.33	0.66	U	0.34	0.65	U	0.33
PETN	--	0.66	U	0.30	0.65	U	0.30	0.66	U	0.31	0.65	U	0.30	0.66	U	0.30	0.65	U	0.30	0.65	U	0.30	0.66	U	0.31	0.65	U	0.30
RDX	--	0.15	U	0.036	0.15	U	0.036	0.15	U	0.037	0.15	U	0.036	0.15	U	0.036	0.15	U	0.036	0.15	U	0.036	0.15	U	0.037	0.15	U	0.036
Tetryl	--	0.15	U	0.05	0.15	U	0.05	0.15	U	0.051	0.15	U	0.050	0.15	U	0.05	0.15	U	0.050	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050
Nitrocellulose mg/L																												
Nitrocellulose	--	2.0	U	0.48	2.0	U	0.48	2.0	U	0.48	2.0	U	0.48	2.0	U	0.48	2.0	U	0.48	2.0	U	0.48	2.0	U	0.48	2.0	U	0.48
Nitroguanidine: 8330 Modified ug/L																												
Nitroguanidine	--	20	U	2.4	20	U	2.4	20	U	2.4	20	U	2.4	20	U	2.4	20	U	2.4	20	U	2.4	20	U	2.4	20	U	2.4
METALS 6010B ug/L																												
Aluminum	3370	200	U	97	200		97	460		97	300	U	75	200	U	97	130	J	97	200	U	97	1200		97	170	J	75
Antimony	0	4.3	J,B	1.8	2.6	J	1.8	2.4	J	1.8	25	U	7.4	1.9	J,B	1.8	10	U	1.8	10	U	1.8	1.8	J	1.8	25	U	7.4
Arsenic	3.2	**10**	U	3.2	**10**	U	3.2	**10**	U	3.2	**10**	U	**3.3**	**10**	U	3.2	**10**	U	3.2	**10**	U	3.2	**10**	U	3.2	**10**	U	3.3
Barium	47.5	22	J	0.67	21	J	0.67	20	J	0.67	25	J,B	2.8	24	J	0.67	26	J	0.67	25	J	0.67	27	J	0.67	28	J,B	2.8
Beryllium	0	5.0	U	0.46	5.0	U	0.46	5.0	U	0.46	5.0	U	0.56	5.0	U	0.46	5.0	U	0.46	5.0	U	0.46	5.0	U	0.46	5.0	U	0.56
Cadmium	0	2.0	U	0.66	2.0	U	0.66	2.0	U	0.66	5.0	U	0.39	2.0	U	0.66	2.0	U	0.66	2.0	U	0.66	2.0	U	0.66	5.0	U	0.39
Calcium (essential nutrient)	41400	38000		130	**42000**		130	27000	B	130	**44000**		630	39000		130	**47000**		130	**45000**		130	29000	B	130	**42000**		630
Chromium	0	5.0	U	2.2	5.0	U	2.2	5.0	U	2.2	7.0	U	1.4	5.0	U	2.2	50.0	U	2.2	5.0	U	2.2	2.2	J	2.2	7.0	U	1.4
Cobalt	0	7.0	U	1.7	7.0	U	1.7	7.0	U	1.7	7.0	U	1.5	7.0		1.7	7.0	U	1.7	7.0	U	1.7	7.0	U	1.7	7.0	U	1.5
Copper	7.9	**25**	U	4.5	**25**	U	4.5	**25**	U	4.5	**25**	U	4.4	**25**	U	4.5	**25**	U	4.5	**25**	U	4.5	**25**	U	4.5	**25**	U	4.4
Iron (essential nutrient)	2560	340		81	300		81	870		81	380		64	520		81	670		81	580		81	1900		81	800		64
Lead	0	2.0	J	1.9	3.0	U	1.9	3.0	U	1.9	10	U	1.7	3.0	U	1.9	3.0	U	1.9	3.0	U	1.9	3.0	U	1.9	10	U	1.7
Magnesium (essential nutrient)	10800	8600		34	10000		34	6400	B	34	10000		120	8900		34	**12000**		34	**11000**		34	7000	B	34	**11000**		120
Manganese	391	43		0.41	45	B	0.41	40	B	0.41	51	B	1.8	79		0.41	100	B	0.41	92	B	0.41	160	B	0.41	100	B	1.8
Nickel	0	40	U	3.2	40	U	3.2	40	U	3.2	40	U	2.2	40	U	3.2	40	U	3.2	40	U	3.2	40	U	3.2	40	U	2.2
Potassium (essential nutrient)	--	1700	J	72	1500	J	72	1500	J	72	2200	J	300	1800	J	72	1600	J	72	1500	J	72	1800	J	72	2200	J	300
Selenium	0	5.0	U	4.1	5.0	U	4.1	5.0	U	4.1	15	U	4.0	5.0	U	4.1	5.0	U	4.1	5.0	U	4.1	5.0	U	4.1	15	U	4.0
Silver	0	5.0	U	2.2	5.0	U	2.2	5.0	U	2.2	7.0	U	1.7	5.0	U	2.2	5.0	U	2.2	5.0	U	2.0	5.0	U	2.2	7.0	U	1.7
Sodium (essential nutrient)	--	6300		590	6600		590	3200	J	590	9100		970	560		590	6500		590	6200		590	3400	J	590	8800		970
Thallium	0	10	U	4.7	10	U	4.7	10	U	4.7	30	U	9.1	4.9	J	4.7	10	U	4.7	10	U	4.7	10	U	4.7	30	U	9.1
Vanadium	0	7.0	U	0.64	7.0	U	0.64	3.1	J	0.64	7.0	U	1.3	7.0	U	0.64	7.0	U	0.64	7.0	U	0.64	2.8	J	0.64	7.0	U	1.3
Zinc	42	**50**	U	5.0	**50**	U	5.0	**50**	U	5.0	**50**	U	15	**50**	U	5.0	5	J	5.0	7	J	5.0	17	J,B	5.0	**50**	U	15
7471A ug/L																												
Mercury	0	0.20	U	0.12	0.20	U	0.12	0.20	U	0.12	0.20	U	0.12	0.20	U	0.12	0.20	U	0.12	0.20	U	0.12	0.20	U	0.12	0.20	U	0.12

Notes:
mg/L = milligrams per liter (parts per million)
ug/L = micrograms per liter (parts per billion)
MDL - Method Detection Limit

Organics:
U = Indicates that the analyte was analyzed for but not detected
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Inorganics:
U = Indicates that the analyte was analyzed for but not detected
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B = Compound was found in the blank and sample.

Bold = > Background

SUMMARY TABLE - 1
SURFACE WATER SAMPLE LOCATIONS

ANALYTE**, UNITS, METHOD NO.	Surface Water Background Criteria ug/L	DA2sw-131-1007-SW	Qualifier	MDL	DA2sw-131-1008-SW	Qualifier	MDL	DA2sw-131-1009-SW	Qualifier	MDL	DA2sw-131-1010-SW	Qualifier	MDL
Sample Date		7/22/2013			8/1/2013			8/8/2013			9/25/2013		
Sample Area		Pre-Demo - Adjacent			Week #1 - Adjacent			Week #2- Adjacent			Post Demo - Adjacent		
EXPLOSIVES ug/L													
1,3,5-Trinitrobenzene	--	0.16	U	0.032	0.15	J	0.031	0.15	U	0.032	0.15	U	0.031
1,3-Dinitrobenzene	--	0.16	U	0.052	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050
2,4,6-Trinitrotoluene	--	0.16	U	0.052	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050
2,4-Dinitrotoluene	--	0.14	U	0.052	0.13	U	0.050	0.13	U	0.051	0.13	U	0.050
2,6-Dinitrotoluene	--	0.14	U	0.052	0.13	U	0.050	0.13	U	0.051	0.13	U	0.050
2-Amino-4,6-Dinitrotoluene	--	0.16	U	0.016	0.15	U	0.015	0.15	U	0.015	0.15	U	0.015
2-Nitrotoluene	--	0.52	U	0.092	0.50	U	0.088	0.51	U	0.090	0.50	U	0.089
3-Nitrotoluene	--	0.52	U	0.059	0.50	U	0.057	0.51	U	0.058	0.50	U	0.057
4-Amino-2,6-Dinitrotoluene	--	0.16	U	0.052	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050
4-Nitrotoluene	--	0.52	U	0.092	0.50	U	0.088	0.51	U	0.090	0.50	U	0.089
HMX	--	0.16	U	0.037	0.15	U	0.036	0.15	U	0.037	0.15	U	0.036
Nitrobenzene	--	0.16	U	0.052	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050
Nitroglycerine	--	0.68	U	0.34	0.65	U	0.33	0.66	U	0.34	0.65	U	0.33
PETN	--	0.68	U	0.31	0.65	U	0.30	0.66	U	0.31	0.65	U	0.30
RDX	--	0.16	U	0.037	0.15	U	0.036	0.15	U	0.037	0.15	U	0.036
Tetryl	--	0.16	U	0.05	0.15	U	0.050	0.15	U	0.051	0.15	U	0.050
Nitrocellulose mg/L													
Nitrocellulose	--	2.0	U	0.48	2.0	U	0.48	2.0	U	0.48	2.0	U	0.48
Nitroguanidine; 8330 Modified ug/L													
Nitroguanidine	--	20	U	2.4	20	U	2.4	20	U	2.4	20	U	2.4
METALS 6010B ug/L													
Aluminum	3370	200	U	97	200	U	97	510		97	300	U	75
Antimony	0	10	U	1.8	10	U	1.8	10	U	1.8	25	U	7.4
Arsenic	3.2	**3.3**	J	3.2	**10**	U	3.2	**10**	U	3.2	**10**	U	**3.3**
Barium	47.5	23	J	0.67	24	J	0.67	21	J	0.67	27	J,B	2.8
Beryllium	0	5.0	U	0.46	5.0	U	0.46	5.0	U	0.46	5.0	U	0.56
Cadmium	0	2.0	U	0.66	2.0	U	0.66	2.0	U	0.66	5.0	U	0.39
Calcium (essential nutrient)	41400	38000		130	**46000**		130	28000	B	130	41000		630
Chromium	0	5.0	U	2.2	5.0	U	2.2	5.0	U	2.2	7.0	U	1.4
Cobalt	0	7.0	U	1.7	7.0	U	1.7	7.0	U	1.7	7.0	U	1.5
Copper	7.9	25	U	4.5	25	U	4.5	25	U	4.5	25	U	4.4
Iron (essential nutrient)	2560	530		81	590		81	920		81	680		64
Lead	0	3.0	U	1.9	3.0	U	1.9	3.0	U	1.9	10	U	1.7
Magnesium (essential nutrient)	10800	8700		34	**11000**		34	6700	B	34	**11000**		120
Manganese	391	96		0.41	110	B	0.41	74	B	0.41	120	B	1.8
Nickel	0	40	U	3.2	40	U	3.2	40	U	3.2	40	U	2.2
Potassium (essential nutrient)	--	1700	J	72	1600	J	72	1600	J	72	2100	J	300
Selenium	0	5.0	U	4.1	5.0	U	4.1	5.0	U	4.1	15	U	4.0
Silver	0	5.0	U	2.2	5.0	U	2.2	5.0	U	2.2	7.0	U	1.7
Sodium (essential nutrient)	--	5700		590	6500		590	3300	J	590	8800		970
Thallium	0	10	U	4.7	10	U	4.7	10	U	4.7	30	U	9.1
Vanadium	0	7.0	U	0.64	7.0	U	0.64	1.8	J	0.64	7.0	U	1.3
Zinc	42	**50**	U	5.0	**50**	U	5.0	**50**	U	5.0	**50**	U	15
7471A µg/L													
Mercury	0	0.20	U	0.12	0.20	U	0.12	0.20	U	0.12	0.20	U	0.12

Notes:
mg/L = milligrams per liter (parts per million)
ug/L = micrograms per liter (parts per billion)
MDL - Method Detection Limit
Organics:
U = Indicates that the analyte was analyzed for but not detected
J = Result is less than the RL but greater than or equal to the MDL
Inorganics:
U = Indicates that the analyte was analyzed for but not detected
J = Result is less than the RL but greater than or equal to the MDL
B = Compound was found in the blank and sample.
Bold = > Background

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA2SW-096-1007-SW

Ravenna Army Ammunition Plant

Date: 22 July 2013 Weather Cloudy / Rain Temperature 77°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle	X	Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1050 hrs

Sample Type: Composite - MI - Grab
If MI, # of increments taken: _____

Location: Plotted on Map - Staked in Field
Estimated - Measured - Surveyed

Sample Depth: 0-5" FT (below surface)

Decon: Dedicated - Each Day - Each Location

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate		QA Samples			
Temperature	°C	Pesticides/PCBs		Asbestos		MS/MSD	Yes		
Sp. Conductance:	uMHOs	Cyanides		pH		Duplicate ID	NA		
pH	units	TOC		White Phosphorus		Equipment Rinse ID	NA		
Turbidity	N.T.U.	Grain Size				Trip Blank ID	NA		

Sample Description

Clear, no odor, no sheen, low turbidity

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address: _____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: [signature]

Reviewed by: Rick Callahan (Please Print)

Signature: [signature] Date: 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA2SW-096-1008-SW

Ravenna Army Ammunition Plant

Date: 01 Aug 2013 **Weather** Partly Cloudy **Temperature** 73°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle	X	Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1430 hrs

Sample Type: Composite - MI - (Grab)
If MI, # of increments taken: _____

Location: Plotted on Map - Staked in Field
Estimated - Measured - (Surveyed)

Sample Depth: 0-5" FT (below surface)

Decon: (Dedicated) - Each Day - Each Location

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate		**QA Samples**			
Temperature	°C	Pesticides/PCBs		Asbestos		MS/MSD			
Sp. Conductance:	uMHOs	Cyanides		pH		Duplicate ID			
pH	units	TOC		White Phosphorus		Equipment Rinse ID			
Turbidity	N.T.U.	Grain Size				Trip Blank ID			

Sample Description

clear, no odor, no sheen, low turbidity

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address: _____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: _____ **Date:** 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA2SW-096-1009-SW

Ravenna Army Ammunition Plant

Date: 08 Aug 2013 **Weather** Partly Cloudy **Temperature** 75°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle	X	Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1005 hrs

Sample Type: Composite - MI - (Grab)

If MI, # of increments taken: _____

Location: Plotted on Map - Staked in Field - Estimated - Measured - (Surveyed)

Sample Depth: 0-5" FT (below surface)

Decon: (Dedicated) - Each Day - Each Location

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate					
Temperature	°C	Pesticides/PCBs		Asbestos		QA Samples			
Sp. Conductance:	uMHOs	Cyanides		pH		MS/MSD			
pH	units	TOC		White Phosphorus		Duplicate ID			
Turbidity	N.T.U.	Grain Size				Equipment Rinse ID			
						Trip Blank ID			

Sample Description

clear, no odor, no sheen, low turbidity.

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address:

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: Rick Callahan Date: 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA25W-096-1010-SW

Ravenna Army Ammunition Plant

Date: 25 Sept 2013 **Weather** Partly Cloudy **Temperature** 55°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle	X	Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1136 hrs

Sample Type: Composite - MI - (Grab)
If MI, # of increments taken: _____

Location: Plotted on Map - (Staked in Field)
Estimated - Measured - Surveyed

Sample Depth: 0-6" FT (below surface)

Decon: (Dedicated) - Each Day - Each Location

Field Parameters
(at time of sample)

PID / FID Readings:		
Background:		ppm
Sample:		ppm
Water Level	\	FT
Temperature		°C
Sp. Conductance:		uMHOs
pH		units
Turbidity		N.T.U.

Analytical Parameters

VOC		TPH GRO	
SVOC		TPH DRO	
Explosives	X	Chromium +6	
Propellants	X	Nitrate	
TAL Metals	X	Sulfate	
Pesticides/PCBs		Asbestos	
Cyanides		pH	
TOC		White Phosphorus	
Grain Size			

Other Parameters

Corrosivity			
Reactivity Sulfide/Cyanide			
Ignitability			

QA Samples

MS/MSD	
Duplicate ID	
Equipment Rinse ID	
Trip Blank ID	

Sample Description

Clear, no odor, no sheen, low turbidity

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address: _____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: _____ **Date:** 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA25W-099-1007-SW

Ravenna Army Ammunition Plant

Date: 22 July 2013 **Weather** Cloudy/Rain **Temperature** 77°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle	X	Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1130 hrs

Sample Type: Composite - MI - (Grab)
If MI, # of increments taken: _____

Location: Plotted on Map - (Staked in Field)
Estimated - Measured - (Surveyed)

Sample Depth: 0-5" FT (below surface)

Decon: (Dedicated) - Each Day - Each Location

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate					
Temperature	°C	Pesticides/PCBs		Asbestos		QA Samples			
Sp. Conductance:	uMHOs	Cyanides		pH		MS/MSD			
pH	units	TOC		White Phosphorus		Duplicate ID			
Turbidity	N.T.U.	Grain Size				Equipment Rinse ID			
						Trip Blank ID			

Sample Description

Clear, no odor, no sheen, low turbidity

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address: _____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: _____ **Date:** 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA2SW-099-1008-SW

Date: 01 Aug 2013 **Weather** Partly Cloudy **Temperature** 73°

Ravenna Army Ammunition Plant

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle	X	Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1328 hrs

Sample Type: Composite - MI - (Grab)

If MI, # of increments taken: _____

Location: Plotted on Map - Staked in Field Estimated - Measured - (Surveyed)

Sample Depth: 0-5" FT (below surface)

Decon: (Dedicated) Each Day - Each Location

Field Parameters
(at time of sample)

PID / FID Readings:		
Background:	ppm	
Sample:	ppm	
Water Level	FT	
Temperature	°C	
Sp. Conductance:	uMHOs	
pH	units	
Turbidity	N.T.U.	

Analytical Parameters

VOC		TPH GRO	
SVOC		TPH DRO	
Explosives	X	Chromium +6	
Propellants	X	Nitrate	
TAL Metals	X	Sulfate	
Pesticides/PCBs		Asbestos	
Cyanides		pH	
TOC		White Phosphorus	
Grain Size			

Other Parameters

Corrosivity			
Reactivity Sulfide/Cyanide			
Ignitability			

QA Samples

MS/MSD	NA
Duplicate ID	DA2SW-099-1008-DUP
Equipment Rinse ID	NA
Trip Blank ID	NA

Sample Description

Clear, no odor, no sheen, low turbidity

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address: _____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Suzy Boles (Please Print)

Signature: Suzy Boles

Reviewed by: Rick Collahan (Please Print)

Signature: [signature] Date: 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA2SW-099-1009-SW

Ravenna Army Ammunition Plant

Date: 08 Aug 2013 **Weather** Partly Cloudy. **Temperature** 75°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle		Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1040 hrs

Sample Type: Composite - MI - (Grab)
If MI, # of increments taken: ____

Location: Plotted on Map - Staked in Field
Estimated - Measured - (Surveyed)

Sample Depth: 0-5 FT (below surface)

Decon: (Dedicated) Each Day - Each Location

Field Parameters
(at time of sample)

PID / FID Readings:	
Background:	ppm
Sample:	ppm
Water Level	FT
Temperature	°C
Sp. Conductance:	uMHOs
pH	units
Turbidity	N.T.U.

Analytical Parameters

VOC		TPH GRO	
SVOC		TPH DRO	
Explosives	X	Chromium +6	
Propellants	X	Nitrate	
TAL Metals	X	Sulfate	
Pesticides/PCBs		Asbestos	
Cyanides		pH	
TOC		White Phosphorus	
Grain Size			

Other Parameters

Corrosivity			
Reactivity Sulfide/Cyanide			
Ignitability			

QA Samples

MS/MSD	
Duplicate ID	
Equipment Rinse ID	
Trip Blank ID	

Sample Description

Clear, no odor, no sheen, low turbidity.

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: ____

Name: ____

Agency/Company: ____

Address: ____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: [signature] **Date:** 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA2SW-099-1010-SW

Date: 25 Sept 2013 **Weather** Partly Cloudy **Temperature** 55°

Ravenna Army Ammunition Plant

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle	X	Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1059 hrs **Sample Type:** Composite - MI - (Grab) If MI, # of increments taken: _____ **Location:** Plotted on Map - Staked in Field - Estimated - Measured - Surveyed

Sample Depth: 0-5" FT (below surface) **Decon:** (Dedicated) - Each Day - Each Location

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate		**QA Samples**			
Temperature	°C	Pesticides/PCBs		Asbestos		MS/MSD			
Sp. Conductance:	uMHOs	Cyanides		pH		Duplicate ID			
pH	units	TOC		White Phosphorus		Equipment Rinse ID			
Turbidity	N.T.U.	Grain Size				Trip Blank ID			

Sample Description

clear, no odor, no sheen, low turbidity

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address: _____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: R Callahan Date: 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA2SW-131-1007-SW

Date: 22 July 2013 **Weather** Cloudy/Rain **Temperature** 77°

Ravenna Army Ammunition Plant

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle	X	Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1150 hrs

Sample Type: Composite - MI - (Grab)
If MI, # of increments taken: _____

Location: Plotted on Map - (Staked in Field)
Estimated - Measured - (Surveyed)

Sample Depth: 0-5 FT (below surface)

Decon: (Dedicated) - Each Day - Each Location

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate		**QA Samples**			
Temperature	°C	Pesticides/PCBs		Asbestos		MS/MSD			
Sp. Conductance:	uMHOs	Cyanides		pH		Duplicate ID			
pH	units	TOC		White Phosphorus		Equipment Rinse ID			
Turbidity	N.T.U.	Grain Size				Trip Blank ID			

Sample Description

Clear, no odor, no sheen, low turbidity

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address: _____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: Rick Callahan **Date:** 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA2SW-131-1008-SW

Ravenna Army Ammunition Plant

Date: 01 Aug 2013 **Weather** Partly Cloudy **Temperature** 73°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle	X	Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1350 hrs

Sample Type: Composite - MI - (Grab)
If MI, # of increments taken: _____

Location: Plotted on Map - Staked in Field
Estimated - Measured - (Surveyed)

Sample Depth: 0-5 FT (below surface)

Decon: (Dedicated) - Each Day - Each Location

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate		**QA Samples**			
Temperature	°C	Pesticides/PCBs		Asbestos		MS/MSD			
Sp. Conductance:	uMHOs	Cyanides		pH		Duplicate ID			
pH	units	TOC		White Phosphorus		Equipment Rinse ID			
Turbidity	N.T.U.	Grain Size				Trip Blank ID			

Sample Description

Clear, no odor, no sheen, low turbidity.

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address: _____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Spillman (Please Print)

Signature: [signature] Date: 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA2SW-131-1009-SW

Ravenna Army Ammunition Plant

Date: 08 Aug 2013 **Weather** Partly Cloudy **Temperature** 73°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle	X	Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1030 hrs

Sample Type: Composite - MI - (Grab)
If MI, # of increments taken: _____

Location: Plotted on Map - Staked in Field
Estimated - Measured - (Surveyed)

Sample Depth: 0-5" FT (below surface)

Decon: (Dedicated) Each Day - Each Location

Field Parameters
(at time of sample)

PID / FID Readings:		
Background:	ppm	
Sample:	ppm	
Water Level	FT	
Temperature	°C	
Sp. Conductance:	uMHOs	
pH	units	
Turbidity	N.T.U.	

Analytical Parameters

VOC		TPH GRO	
SVOC		TPH DRO	
Explosives	X	Chromium +6	
Propellants	X	Nitrate	
TAL Metals	X	Sulfate	
Pesticides/PCBs		Asbestos	
Cyanides		pH	
TOC		White Phosphorus	
Grain Size			

Other Parameters

Corrosivity			
Reactivity Sulfide/Cyanide			
Ignitability			

QA Samples

MS/MSD	
Duplicate ID	
Equipment Rinse ID	
Trip Blank ID	

Sample Description

Clear, no odor, no sheen, low turbidity

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address: _____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: _____ **Date:** 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA2SW-131-1010-SW

Date: 25 Sept 2013 **Weather** Partly Cloudy **Temperature** 55°

Ravenna Army Ammunition Plant

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle	X	Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe		Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1109 hrs

Sample Type: Composite - MI - (Grab)
If MI, # of increments taken: _____

Location: Plotted on Map - (Staked in Field)
Estimated - Measured - Surveyed

Sample Depth: 0-5" FT (below surface)

Decon: (Dedicated) - Each Day - Each Location

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate					
Temperature	°C	Pesticides/PCBs		Asbestos					
Sp. Conductance:	uMHOs	Cyanides		pH					
pH	units	TOC		White Phosphorus					
Turbidity	N.T.U.	Grain Size							

QA Samples	
MS/MSD	
Duplicate ID	
Equipment Rinse ID	
Trip Blank ID	

Sample Description

clear, no odor, no sheen, low turbidity

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address: _____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Gallahar (Please Print)

Signature: _____ Date: 10/7/13

Client Sample ID: DA2sw-096-1007-SW
Date Collected: 07/22/13 10:50
Date Received: 07/22/13 17:00

Lab Sample ID: 240-27158-1
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		07/25/13 13:37	08/01/13 14:47	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.15	U	0.15	0.031	ug/L		07/25/13 11:19	07/31/13 14:21	1
1,3-Dinitrobenzene	0.15	U	0.15	0.051	ug/L		07/25/13 11:19	07/31/13 14:21	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.051	ug/L		07/25/13 11:19	07/31/13 14:21	1
2,4-Dinitrotoluene	0.13	U	0.13	0.051	ug/L		07/25/13 11:19	07/31/13 14:21	1
2,6-Dinitrotoluene	0.13	U	0.13	0.051	ug/L		07/25/13 11:19	07/31/13 14:21	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		07/25/13 11:19	07/31/13 14:21	1
2-Nitrotoluene	0.51	U	0.51	0.089	ug/L		07/25/13 11:19	07/31/13 14:21	1
3-Nitrotoluene	0.51	U	0.51	0.058	ug/L		07/25/13 11:19	07/31/13 14:21	1
4-Nitrotoluene	0.51	U	0.51	0.089	ug/L		07/25/13 11:19	07/31/13 14:21	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.051	ug/L		07/25/13 11:19	07/31/13 14:21	1
HMX	0.15	U	0.15	0.036	ug/L		07/25/13 11:19	07/31/13 14:21	1
RDX	0.15	U	0.15	0.036	ug/L		07/25/13 11:19	07/31/13 14:21	1
Nitrobenzene	0.15	U	0.15	0.051	ug/L		07/25/13 11:19	07/31/13 14:21	1
Tetryl	0.15	U	0.15	0.051	ug/L		07/25/13 11:19	07/31/13 14:21	1
Nitroglycerin	0.66	U	0.66	0.33	ug/L		07/25/13 11:19	07/31/13 14:21	1
PETN	0.66	U	0.66	0.30	ug/L		07/25/13 11:19	07/31/13 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*96*		*79 - 111*	*07/25/13 11:19*	*07/31/13 14:21*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	200	U	200	97	ug/L		07/24/13 07:55	07/25/13 10:10	1
Antimony	**4.3**	**J B**	10	1.8	ug/L		07/24/13 07:55	07/25/13 10:10	1
Barium	**22**	**J**	200	0.67	ug/L		07/24/13 07:55	07/25/13 10:10	1
Beryllium	5.0	U	5.0	0.46	ug/L		07/24/13 07:55	07/25/13 10:10	1
Calcium	**38000**		5000	130	ug/L		07/24/13 07:55	07/25/13 10:10	1
Cadmium	2.0	U	2.0	0.66	ug/L		07/24/13 07:55	07/25/13 10:10	1
Cobalt	7.0	U	7.0	1.7	ug/L		07/24/13 07:55	07/25/13 10:10	1
Chromium	5.0	U	5.0	2.2	ug/L		07/24/13 07:55	07/25/13 10:10	1
Copper	25	U	25	4.5	ug/L		07/24/13 07:55	07/25/13 10:10	1
Iron	**340**		100	81	ug/L		07/24/13 07:55	07/25/13 10:10	1
Potassium	**1700**	**J**	5000	72	ug/L		07/24/13 07:55	07/25/13 10:10	1
Magnesium	**8600**		5000	34	ug/L		07/24/13 07:55	07/25/13 10:10	1
Manganese	**43**		15	0.41	ug/L		07/24/13 07:55	07/25/13 10:10	1
Silver	5.0	U	5.0	2.2	ug/L		07/24/13 07:55	07/25/13 10:10	1
Sodium	**6300**		5000	590	ug/L		07/24/13 07:55	07/25/13 10:10	1
Nickel	40	U	40	3.2	ug/L		07/24/13 07:55	07/25/13 10:10	1
Vanadium	7.0	U	7.0	0.64	ug/L		07/24/13 07:55	07/25/13 10:10	1
Zinc	50	U	50	5.0	ug/L		07/24/13 07:55	07/25/13 10:10	1
Arsenic	10	U	10	3.2	ug/L		07/24/13 07:55	07/25/13 10:10	1
Lead	**2.0**	**J**	3.0	1.9	ug/L		07/24/13 07:55	07/25/13 10:10	1
Selenium	5.0	U	5.0	4.1	ug/L		07/24/13 07:55	07/25/13 10:10	1
Thallium	10	U	10	4.7	ug/L		07/24/13 07:55	07/25/13 10:10	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27158-1

Client Sample ID: DA2sw-096-1007-SW
Date Collected: 07/22/13 10:50
Date Received: 07/22/13 17:00

Lab Sample ID: 240-27158-1
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		07/24/13 15:00	07/25/13 15:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		07/29/13 08:32	07/30/13 10:18	1

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Client Sample ID: DA2sw-096-1008-SW
Date Collected: 08/01/13 14:30
Date Received: 08/02/13 08:45

Lab Sample ID: 240-27508-1
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		08/07/13 11:40	08/08/13 11:56	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.15	U	0.15	0.031	ug/L		08/06/13 17:02	08/08/13 17:58	1
1,3-Dinitrobenzene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 17:58	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 17:58	1
2,4-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		08/06/13 17:02	08/08/13 17:58	1
2,6-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		08/06/13 17:02	08/08/13 17:58	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		08/06/13 17:02	08/08/13 17:58	1
2-Nitrotoluene	0.50	U	0.50	0.088	ug/L		08/06/13 17:02	08/08/13 17:58	1
3-Nitrotoluene	0.50	U	0.50	0.057	ug/L		08/06/13 17:02	08/08/13 17:58	1
4-Nitrotoluene	0.50	U	0.50	0.088	ug/L		08/06/13 17:02	08/08/13 17:58	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 17:58	1
HMX	0.15	U	0.15	0.036	ug/L		08/06/13 17:02	08/08/13 17:58	1
RDX	0.15	U	0.15	0.036	ug/L		08/06/13 17:02	08/08/13 17:58	1
Nitrobenzene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 17:58	1
Tetryl	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 17:58	1
Nitroglycerin	0.65	U	0.65	0.33	ug/L		08/06/13 17:02	08/08/13 17:58	1
PETN	0.65	U	0.65	0.30	ug/L		08/06/13 17:02	08/08/13 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*92*		*79 - 111*	*08/06/13 17:02*	*08/08/13 17:58*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	200	U	200	97	ug/L		08/06/13 06:37	08/09/13 12:07	1
Antimony	**2.6**	**J**	10	1.8	ug/L		08/06/13 06:37	08/09/13 12:07	1
Barium	**21**	**J**	200	0.67	ug/L		08/06/13 06:37	08/09/13 12:07	1
Beryllium	5.0	U	5.0	0.46	ug/L		08/06/13 06:37	08/09/13 12:07	1
Calcium	**42000**		5000	130	ug/L		08/06/13 06:37	08/09/13 12:07	1
Cadmium	2.0	U	2.0	0.66	ug/L		08/06/13 06:37	08/09/13 12:07	1
Cobalt	7.0	U	7.0	1.7	ug/L		08/06/13 06:37	08/09/13 12:07	1
Chromium	5.0	U	5.0	2.2	ug/L		08/06/13 06:37	08/09/13 12:07	1
Copper	25	U	25	4.5	ug/L		08/06/13 06:37	08/09/13 12:07	1
Iron	**300**		100	81	ug/L		08/06/13 06:37	08/09/13 12:07	1
Potassium	**1600**	**J**	5000	72	ug/L		08/06/13 06:37	08/09/13 12:07	1
Magnesium	**10000**		5000	34	ug/L		08/06/13 06:37	08/09/13 12:07	1
Manganese	**45**	**B**	15	0.41	ug/L		08/06/13 06:37	08/09/13 12:07	1
Silver	5.0	U	5.0	2.2	ug/L		08/06/13 06:37	08/09/13 12:07	1
Sodium	**6600**		5000	590	ug/L		08/06/13 06:37	08/09/13 12:07	1
Nickel	40	U	40	3.2	ug/L		08/06/13 06:37	08/09/13 12:07	1
Vanadium	7.0	U	7.0	0.64	ug/L		08/06/13 06:37	08/09/13 12:07	1
Zinc	50	U	50	5.0	ug/L		08/06/13 06:37	08/09/13 12:07	1
Arsenic	10	U	10	3.2	ug/L		08/06/13 06:37	08/09/13 12:07	1
Lead	3.0	U	3.0	1.9	ug/L		08/06/13 06:37	08/09/13 12:07	1
Selenium	5.0	U	5.0	4.1	ug/L		08/06/13 06:37	08/09/13 12:07	1
Thallium	10	U	10	4.7	ug/L		08/06/13 06:37	08/09/13 12:07	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27508-1

Client Sample ID: DA2sw-096-1008-SW
Date Collected: 08/01/13 14:30
Date Received: 08/02/13 08:45

Lab Sample ID: 240-27508-1
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		08/06/13 13:30	08/09/13 10:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		08/12/13 07:18	08/12/13 15:20	1

8

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27746-1

Client Sample ID: DA2sw-096-1009-SW
Date Collected: 08/08/13 10:05
Date Received: 08/08/13 18:10

Lab Sample ID: 240-27746-1
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		08/13/13 06:11	08/13/13 09:52	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.15	U	0.15	0.032	ug/L		08/13/13 06:02	08/13/13 19:59	1
1,3-Dinitrobenzene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 19:59	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 19:59	1
2,4-Dinitrotoluene	0.13	U	0.13	0.051	ug/L		08/13/13 06:02	08/13/13 19:59	1
2,6-Dinitrotoluene	0.13	U	0.13	0.051	ug/L		08/13/13 06:02	08/13/13 19:59	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		08/13/13 06:02	08/13/13 19:59	1
2-Nitrotoluene	0.51	U	0.51	0.090	ug/L		08/13/13 06:02	08/13/13 19:59	1
3-Nitrotoluene	0.51	U	0.51	0.058	ug/L		08/13/13 06:02	08/13/13 19:59	1
4-Nitrotoluene	0.51	U	0.51	0.090	ug/L		08/13/13 06:02	08/13/13 19:59	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 19:59	1
HMX	0.15	U	0.15	0.037	ug/L		08/13/13 06:02	08/13/13 19:59	1
RDX	0.15	U	0.15	0.037	ug/L		08/13/13 06:02	08/13/13 19:59	1
Nitrobenzene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 19:59	1
Tetryl	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 19:59	1
Nitroglycerin	0.66	U	0.66	0.34	ug/L		08/13/13 06:02	08/13/13 19:59	1
PETN	0.66	U	0.66	0.31	ug/L		08/13/13 06:02	08/13/13 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*91*		*79 - 111*	*08/13/13 06:02*	*08/13/13 19:59*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**460**		200	97	ug/L		08/13/13 07:00	08/19/13 12:43	1
Antimony	**2.4**	**J**	10	1.8	ug/L		08/13/13 07:00	08/19/13 12:43	1
Barium	**20**	**J**	200	0.67	ug/L		08/13/13 07:00	08/19/13 12:43	1
Beryllium	5.0	U	5.0	0.46	ug/L		08/13/13 07:00	08/19/13 12:43	1
Calcium	**27000**	**B**	5000	130	ug/L		08/13/13 07:00	08/19/13 12:43	1
Cadmium	2.0	U	2.0	0.66	ug/L		08/13/13 07:00	08/19/13 12:43	1
Cobalt	7.0	U	7.0	1.7	ug/L		08/13/13 07:00	08/19/13 12:43	1
Chromium	5.0	U	5.0	2.2	ug/L		08/13/13 07:00	08/19/13 12:43	1
Copper	25	U	25	4.5	ug/L		08/13/13 07:00	08/19/13 12:43	1
Iron	**870**		100	81	ug/L		08/13/13 07:00	08/19/13 12:43	1
Potassium	**1500**	**J**	5000	72	ug/L		08/13/13 07:00	08/19/13 12:43	1
Magnesium	**6400**	**B**	5000	34	ug/L		08/13/13 07:00	08/19/13 12:43	1
Manganese	**40**	**B**	15	0.41	ug/L		08/13/13 07:00	08/19/13 12:43	1
Silver	5.0	U	5.0	2.2	ug/L		08/13/13 07:00	08/19/13 12:43	1
Sodium	**3200**	**J**	5000	590	ug/L		08/13/13 07:00	08/19/13 12:43	1
Nickel	40	U	40	3.2	ug/L		08/13/13 07:00	08/19/13 12:43	1
Vanadium	**3.1**	**J**	7.0	0.64	ug/L		08/13/13 07:00	08/19/13 12:43	1
Zinc	50	U	50	5.0	ug/L		08/13/13 07:00	08/19/13 12:43	1
Arsenic	10	U	10	3.2	ug/L		08/13/13 07:00	08/19/13 12:43	1
Lead	3.0	U	3.0	1.9	ug/L		08/13/13 07:00	08/19/13 12:43	1
Selenium	5.0	U	5.0	4.1	ug/L		08/13/13 07:00	08/19/13 12:43	1
Thallium	10	U	10	4.7	ug/L		08/13/13 07:00	08/19/13 12:43	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27746-1

Client Sample ID: DA2sw-096-1009-SW
Date Collected: 08/08/13 10:05
Date Received: 08/08/13 18:10

Lab Sample ID: 240-27746-1
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		08/12/13 12:35	08/14/13 09:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		08/19/13 10:43	08/19/13 15:08	1

8

Client Sample ID: DA2sw-096-1010-SW
Date Collected: 09/25/13 11:36
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-9
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		10/04/13 13:01	10/09/13 17:17	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.15	U	0.15	0.031	ug/L		10/01/13 13:19	10/04/13 19:51	1
1,3-Dinitrobenzene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 19:51	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 19:51	1
2,4-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		10/01/13 13:19	10/04/13 19:51	1
2,6-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		10/01/13 13:19	10/04/13 19:51	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		10/01/13 13:19	10/04/13 19:51	1
2-Nitrotoluene	0.50	U	0.50	0.089	ug/L		10/01/13 13:19	10/04/13 19:51	1
3-Nitrotoluene	0.50	U	0.50	0.057	ug/L		10/01/13 13:19	10/04/13 19:51	1
4-Nitrotoluene	0.50	U	0.50	0.089	ug/L		10/01/13 13:19	10/04/13 19:51	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 19:51	1
HMX	0.15	U	0.15	0.036	ug/L		10/01/13 13:19	10/04/13 19:51	1
RDX	0.15	U	0.15	0.036	ug/L		10/01/13 13:19	10/04/13 19:51	1
Nitrobenzene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 19:51	1
Tetryl	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 19:51	1
Nitroglycerin	0.65	U	0.65	0.33	ug/L		10/01/13 13:19	10/04/13 19:51	1
PETN	0.65	U	0.65	0.30	ug/L		10/01/13 13:19	10/04/13 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*90*		*79 - 111*	*10/01/13 13:19*	*10/04/13 19:51*	*1*

Method: 6010B/DOD - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	25	U	25	7.4	ug/L		10/01/13 08:40	10/07/13 10:27	1
Arsenic	10	U	10	3.3	ug/L		10/01/13 08:40	10/07/13 10:27	1
Cadmium	5.0	U	5.0	0.39	ug/L		10/01/13 08:40	10/07/13 10:27	1
Chromium	7.0	U	7.0	1.4	ug/L		10/01/13 08:40	10/07/13 10:27	1
Cobalt	7.0	U	7.0	1.5	ug/L		10/01/13 08:40	10/07/13 10:27	1
Lead	10	U	10	1.7	ug/L		10/01/13 08:40	10/07/13 10:27	1
Selenium	15	U	15	4.0	ug/L		10/01/13 08:40	10/07/13 10:27	1
Silver	7.0	U	7.0	1.7	ug/L		10/01/13 08:40	10/07/13 10:27	1
Thallium	30	U	30	9.1	ug/L		10/01/13 08:40	10/07/13 10:27	1
Vanadium	7.0	U	7.0	1.3	ug/L		10/01/13 08:40	10/07/13 10:27	1
Barium	**25**	**J B**	200	2.8	ug/L		10/01/13 08:40	10/07/13 10:27	1
Beryllium	5.0	U	5.0	0.56	ug/L		10/01/13 08:40	10/07/13 10:27	1
Calcium	**44000**		5000	630	ug/L		10/01/13 08:40	10/07/13 10:27	1
Copper	25	U	25	4.4	ug/L		10/01/13 08:40	10/07/13 10:27	1
Magnesium	**10000**		5000	120	ug/L		10/01/13 08:40	10/07/13 10:27	1
Manganese	**51**	**B**	15	1.8	ug/L		10/01/13 08:40	10/07/13 10:27	1
Nickel	40	U	40	2.2	ug/L		10/01/13 08:40	10/07/13 10:27	1
Sodium	**9100**		5000	970	ug/L		10/01/13 08:40	10/07/13 10:27	1
Aluminum	300	U	300	75	ug/L		10/01/13 08:40	10/07/13 10:27	1
Zinc	50	U	50	15	ug/L		10/01/13 08:40	10/07/13 10:27	1
Iron	**380**		250	64	ug/L		10/01/13 08:40	10/07/13 10:27	1
Potassium	**2200**	**J**	5000	300	ug/L		10/01/13 08:40	10/07/13 10:27	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-29485-1

Client Sample ID: DA2sw-096-1010-SW
Date Collected: 09/25/13 11:36
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-9
Matrix: Water

Method: 7470A/DOD - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.20	U	0.20	0.12	ug/L		09/27/13 15:15	10/02/13 16:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		10/07/13 10:02	10/08/13 14:52	1

8

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27158-1

Client Sample ID: DA2sw-099-1007-SW
Date Collected: 07/22/13 11:30
Date Received: 07/22/13 17:00

Lab Sample ID: 240-27158-2
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		07/25/13 13:37	08/01/13 15:40	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.15	U	0.15	0.031	ug/L		07/25/13 11:19	07/31/13 16:31	1
1,3-Dinitrobenzene	0.15	U	0.15	0.050	ug/L		07/25/13 11:19	07/31/13 16:31	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.050	ug/L		07/25/13 11:19	07/31/13 16:31	1
2,4-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		07/25/13 11:19	07/31/13 16:31	1
2,6-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		07/25/13 11:19	07/31/13 16:31	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		07/25/13 11:19	07/31/13 16:31	1
2-Nitrotoluene	0.50	U	0.50	0.089	ug/L		07/25/13 11:19	07/31/13 16:31	1
3-Nitrotoluene	0.50	U	0.50	0.057	ug/L		07/25/13 11:19	07/31/13 16:31	1
4-Nitrotoluene	0.50	U	0.50	0.089	ug/L		07/25/13 11:19	07/31/13 16:31	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.050	ug/L		07/25/13 11:19	07/31/13 16:31	1
HMX	0.15	U	0.15	0.036	ug/L		07/25/13 11:19	07/31/13 16:31	1
RDX	0.15	U	0.15	0.036	ug/L		07/25/13 11:19	07/31/13 16:31	1
Nitrobenzene	0.15	U	0.15	0.050	ug/L		07/25/13 11:19	07/31/13 16:31	1
Tetryl	0.15	U	0.15	0.050	ug/L		07/25/13 11:19	07/31/13 16:31	1
Nitroglycerin	0.66	U	0.66	0.33	ug/L		07/25/13 11:19	07/31/13 16:31	1
PETN	0.66	U	0.66	0.30	ug/L		07/25/13 11:19	07/31/13 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*96*		*79 - 111*	*07/25/13 11:19*	*07/31/13 16:31*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	200	U	200	97	ug/L		07/24/13 07:55	07/25/13 10:25	1
Antimony	**1.9**	**J B**	10	1.8	ug/L		07/24/13 07:55	07/25/13 10:25	1
Barium	**24**	**J**	200	0.67	ug/L		07/24/13 07:55	07/25/13 10:25	1
Beryllium	5.0	U	5.0	0.46	ug/L		07/24/13 07:55	07/25/13 10:25	1
Calcium	**39000**		5000	130	ug/L		07/24/13 07:55	07/25/13 10:25	1
Cadmium	2.0	U	2.0	0.66	ug/L		07/24/13 07:55	07/25/13 10:25	1
Cobalt	7.0	U	7.0	1.7	ug/L		07/24/13 07:55	07/25/13 10:25	1
Chromium	5.0	U	5.0	2.2	ug/L		07/24/13 07:55	07/25/13 10:25	1
Copper	25	U	25	4.5	ug/L		07/24/13 07:55	07/25/13 10:25	1
Iron	**520**		100	81	ug/L		07/24/13 07:55	07/25/13 10:25	1
Potassium	**1800**	**J**	5000	72	ug/L		07/24/13 07:55	07/25/13 10:25	1
Magnesium	**8900**		5000	34	ug/L		07/24/13 07:55	07/25/13 10:25	1
Manganese	**79**		15	0.41	ug/L		07/24/13 07:55	07/25/13 10:25	1
Silver	5.0	U	5.0	2.2	ug/L		07/24/13 07:55	07/25/13 10:25	1
Sodium	**5600**		5000	590	ug/L		07/24/13 07:55	07/25/13 10:25	1
Nickel	40	U	40	3.2	ug/L		07/24/13 07:55	07/25/13 10:25	1
Vanadium	7.0	U	7.0	0.64	ug/L		07/24/13 07:55	07/25/13 10:25	1
Zinc	50	U	50	5.0	ug/L		07/24/13 07:55	07/25/13 10:25	1
Arsenic	10	U	10	3.2	ug/L		07/24/13 07:55	07/25/13 10:25	1
Lead	3.0	U	3.0	1.9	ug/L		07/24/13 07:55	07/25/13 10:25	1
Selenium	5.0	U	5.0	4.1	ug/L		07/24/13 07:55	07/25/13 10:25	1
Thallium	**4.9**	**J**	10	4.7	ug/L		07/24/13 07:55	07/25/13 10:25	1

8

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27158-1

Client Sample ID: DA2sw-099-1007-SW
Date Collected: 07/22/13 11:30
Date Received: 07/22/13 17:00

Lab Sample ID: 240-27158-2
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		07/24/13 15:00	07/25/13 15:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		07/29/13 08:32	07/30/13 10:24	1

8

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27508-1

Client Sample ID: DA2sw-099-1008-SW
Date Collected: 08/01/13 13:28
Date Received: 08/02/13 08:45

Lab Sample ID: 240-27508-2
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		08/07/13 11:40	08/08/13 12:50	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.15	U	0.15	0.031	ug/L		08/06/13 17:02	08/08/13 18:41	1
1,3-Dinitrobenzene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 18:41	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 18:41	1
2,4-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		08/06/13 17:02	08/08/13 18:41	1
2,6-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		08/06/13 17:02	08/08/13 18:41	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		08/06/13 17:02	08/08/13 18:41	1
2-Nitrotoluene	0.50	U	0.50	0.088	ug/L		08/06/13 17:02	08/08/13 18:41	1
3-Nitrotoluene	0.50	U	0.50	0.057	ug/L		08/06/13 17:02	08/08/13 18:41	1
4-Nitrotoluene	0.50	U	0.50	0.088	ug/L		08/06/13 17:02	08/08/13 18:41	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 18:41	1
HMX	0.15	U	0.15	0.036	ug/L		08/06/13 17:02	08/08/13 18:41	1
RDX	0.15	U	0.15	0.036	ug/L		08/06/13 17:02	08/08/13 18:41	1
Nitrobenzene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 18:41	1
Tetryl	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 18:41	1
Nitroglycerin	0.65	U	0.65	0.33	ug/L		08/06/13 17:02	08/08/13 18:41	1
PETN	0.65	U	0.65	0.30	ug/L		08/06/13 17:02	08/08/13 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*90*		*79 - 111*	*08/06/13 17:02*	*08/08/13 18:41*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**130**	**J**	200	97	ug/L		08/06/13 06:37	08/09/13 12:26	1
Antimony	10	U	10	1.8	ug/L		08/06/13 06:37	08/09/13 12:26	1
Barium	**26**	**J**	200	0.67	ug/L		08/06/13 06:37	08/09/13 12:26	1
Beryllium	5.0	U	5.0	0.46	ug/L		08/06/13 06:37	08/09/13 12:26	1
Calcium	**47000**		5000	130	ug/L		08/06/13 06:37	08/09/13 12:26	1
Cadmium	2.0	U	2.0	0.66	ug/L		08/06/13 06:37	08/09/13 12:26	1
Cobalt	7.0	U	7.0	1.7	ug/L		08/06/13 06:37	08/09/13 12:26	1
Chromium	5.0	U	5.0	2.2	ug/L		08/06/13 06:37	08/09/13 12:26	1
Copper	25	U	25	4.5	ug/L		08/06/13 06:37	08/09/13 12:26	1
Iron	**670**		100	81	ug/L		08/06/13 06:37	08/09/13 12:26	1
Potassium	**1600**	**J**	5000	72	ug/L		08/06/13 06:37	08/09/13 12:26	1
Magnesium	**12000**		5000	34	ug/L		08/06/13 06:37	08/09/13 12:26	1
Manganese	**100**	**B**	15	0.41	ug/L		08/06/13 06:37	08/09/13 12:26	1
Silver	5.0	U	5.0	2.2	ug/L		08/06/13 06:37	08/09/13 12:26	1
Sodium	**6500**		5000	590	ug/L		08/06/13 06:37	08/09/13 12:26	1
Nickel	40	U	40	3.2	ug/L		08/06/13 06:37	08/09/13 12:26	1
Vanadium	7.0	U	7.0	0.64	ug/L		08/06/13 06:37	08/09/13 12:26	1
Zinc	**6.0**	**J**	50	5.0	ug/L		08/06/13 06:37	08/09/13 12:26	1
Arsenic	10	U	10	3.2	ug/L		08/06/13 06:37	08/09/13 12:26	1
Lead	3.0	U	3.0	1.9	ug/L		08/06/13 06:37	08/09/13 12:26	1
Selenium	5.0	U	5.0	4.1	ug/L		08/06/13 06:37	08/09/13 12:26	1
Thallium	10	U	10	4.7	ug/L		08/06/13 06:37	08/09/13 12:26	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27508-1

Client Sample ID: DA2sw-099-1008-SW
Date Collected: 08/01/13 13:28
Date Received: 08/02/13 08:45

Lab Sample ID: 240-27508-2
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		08/06/13 13:30	08/09/13 10:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		08/12/13 07:18	08/12/13 15:26	1

8

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27508-1

Client Sample ID: DA2sw-099-1008-DUP
Date Collected: 08/01/13 13:28
Date Received: 08/02/13 08:45

Lab Sample ID: 240-27508-3
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		08/07/13 11:40	08/08/13 13:07	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.057**	**J**	0.15	0.031	ug/L		08/06/13 17:02	08/08/13 19:25	1
1,3-Dinitrobenzene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 19:25	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 19:25	1
2,4-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		08/06/13 17:02	08/08/13 19:25	1
2,6-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		08/06/13 17:02	08/08/13 19:25	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		08/06/13 17:02	08/08/13 19:25	1
2-Nitrotoluene	0.50	U	0.50	0.088	ug/L		08/06/13 17:02	08/08/13 19:25	1
3-Nitrotoluene	0.50	U	0.50	0.057	ug/L		08/06/13 17:02	08/08/13 19:25	1
4-Nitrotoluene	0.50	U	0.50	0.088	ug/L		08/06/13 17:02	08/08/13 19:25	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 19:25	1
HMX	0.15	U	0.15	0.036	ug/L		08/06/13 17:02	08/08/13 19:25	1
RDX	0.15	U	0.15	0.036	ug/L		08/06/13 17:02	08/08/13 19:25	1
Nitrobenzene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 19:25	1
Tetryl	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 19:25	1
Nitroglycerin	0.65	U	0.65	0.33	ug/L		08/06/13 17:02	08/08/13 19:25	1
PETN	0.65	U	0.65	0.30	ug/L		08/06/13 17:02	08/08/13 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*88*		*79 - 111*	*08/06/13 17:02*	*08/08/13 19:25*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	200	U	200	97	ug/L		08/06/13 06:37	08/09/13 12:30	1
Antimony	10	U	10	1.8	ug/L		08/06/13 06:37	08/09/13 12:30	1
Barium	**25**	**J**	200	0.67	ug/L		08/06/13 06:37	08/09/13 12:30	1
Beryllium	5.0	U	5.0	0.46	ug/L		08/06/13 06:37	08/09/13 12:30	1
Calcium	**45000**		5000	130	ug/L		08/06/13 06:37	08/09/13 12:30	1
Cadmium	2.0	U	2.0	0.66	ug/L		08/06/13 06:37	08/09/13 12:30	1
Cobalt	7.0	U	7.0	1.7	ug/L		08/06/13 06:37	08/09/13 12:30	1
Chromium	5.0	U	5.0	2.2	ug/L		08/06/13 06:37	08/09/13 12:30	1
Copper	25	U	25	4.5	ug/L		08/06/13 06:37	08/09/13 12:30	1
Iron	**580**		100	81	ug/L		08/06/13 06:37	08/09/13 12:30	1
Potassium	**1500**	**J**	5000	72	ug/L		08/06/13 06:37	08/09/13 12:30	1
Magnesium	**11000**		5000	34	ug/L		08/06/13 06:37	08/09/13 12:30	1
Manganese	**92**	**B**	15	0.41	ug/L		08/06/13 06:37	08/09/13 12:30	1
Silver	5.0	U	5.0	2.2	ug/L		08/06/13 06:37	08/09/13 12:30	1
Sodium	**6200**		5000	590	ug/L		08/06/13 06:37	08/09/13 12:30	1
Nickel	40	U	40	3.2	ug/L		08/06/13 06:37	08/09/13 12:30	1
Vanadium	7.0	U	7.0	0.64	ug/L		08/06/13 06:37	08/09/13 12:30	1
Zinc	**7.1**	**J**	50	5.0	ug/L		08/06/13 06:37	08/09/13 12:30	1
Arsenic	10	U	10	3.2	ug/L		08/06/13 06:37	08/09/13 12:30	1
Lead	3.0	U	3.0	1.9	ug/L		08/06/13 06:37	08/09/13 12:30	1
Selenium	5.0	U	5.0	4.1	ug/L		08/06/13 06:37	08/09/13 12:30	1
Thallium	10	U	10	4.7	ug/L		08/06/13 06:37	08/09/13 12:30	1

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Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27508-1

Client Sample ID: DA2sw-099-1008-DUP
Date Collected: 08/01/13 13:28
Date Received: 08/02/13 08:45

Lab Sample ID: 240-27508-3
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		08/06/13 13:30	08/09/13 10:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		08/12/13 07:18	08/12/13 15:28	1

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Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27746-1

Client Sample ID: DA2sw-099-1009-SW
Date Collected: 08/08/13 10:40
Date Received: 08/08/13 18:10

Lab Sample ID: 240-27746-2
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		08/13/13 06:13	08/13/13 10:45	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.15	U	0.15	0.032	ug/L		08/13/13 06:02	08/13/13 20:43	1
1,3-Dinitrobenzene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 20:43	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 20:43	1
2,4-Dinitrotoluene	0.13	U	0.13	0.051	ug/L		08/13/13 06:02	08/13/13 20:43	1
2,6-Dinitrotoluene	0.13	U	0.13	0.051	ug/L		08/13/13 06:02	08/13/13 20:43	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		08/13/13 06:02	08/13/13 20:43	1
2-Nitrotoluene	0.51	U	0.51	0.090	ug/L		08/13/13 06:02	08/13/13 20:43	1
3-Nitrotoluene	0.51	U	0.51	0.058	ug/L		08/13/13 06:02	08/13/13 20:43	1
4-Nitrotoluene	0.51	U	0.51	0.090	ug/L		08/13/13 06:02	08/13/13 20:43	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 20:43	1
HMX	0.15	U	0.15	0.037	ug/L		08/13/13 06:02	08/13/13 20:43	1
RDX	0.15	U	0.15	0.037	ug/L		08/13/13 06:02	08/13/13 20:43	1
Nitrobenzene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 20:43	1
Tetryl	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 20:43	1
Nitroglycerin	0.66	U	0.66	0.34	ug/L		08/13/13 06:02	08/13/13 20:43	1
PETN	0.66	U	0.66	0.31	ug/L		08/13/13 06:02	08/13/13 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*90*		*79 - 111*	*08/13/13 06:02*	*08/13/13 20:43*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1200**		200	97	ug/L		08/13/13 07:00	08/19/13 13:03	1
Antimony	**1.8**	**J**	10	1.8	ug/L		08/13/13 07:00	08/19/13 13:03	1
Barium	**27**	**J**	200	0.67	ug/L		08/13/13 07:00	08/19/13 13:03	1
Beryllium	5.0	U	5.0	0.46	ug/L		08/13/13 07:00	08/19/13 13:03	1
Calcium	**29000**	**B**	5000	130	ug/L		08/13/13 07:00	08/19/13 13:03	1
Cadmium	2.0	U	2.0	0.66	ug/L		08/13/13 07:00	08/19/13 13:03	1
Cobalt	7.0	U	7.0	1.7	ug/L		08/13/13 07:00	08/19/13 13:03	1
Chromium	**2.2**	**J**	5.0	2.2	ug/L		08/13/13 07:00	08/19/13 13:03	1
Copper	25	U	25	4.5	ug/L		08/13/13 07:00	08/19/13 13:03	1
Iron	**1900**		100	81	ug/L		08/13/13 07:00	08/19/13 13:03	1
Potassium	**1800**	**J**	5000	72	ug/L		08/13/13 07:00	08/19/13 13:03	1
Magnesium	**7000**	**B**	5000	34	ug/L		08/13/13 07:00	08/19/13 13:03	1
Manganese	**160**	**B**	15	0.41	ug/L		08/13/13 07:00	08/19/13 13:03	1
Silver	5.0	U	5.0	2.2	ug/L		08/13/13 07:00	08/19/13 13:03	1
Sodium	**3400**	**J**	5000	590	ug/L		08/13/13 07:00	08/19/13 13:03	1
Nickel	40	U	40	3.2	ug/L		08/13/13 07:00	08/19/13 13:03	1
Vanadium	**2.8**	**J**	7.0	0.64	ug/L		08/13/13 07:00	08/19/13 13:03	1
Zinc	**17**	**J B**	50	5.0	ug/L		08/13/13 07:00	08/19/13 13:03	1
Arsenic	10	U	10	3.2	ug/L		08/13/13 07:00	08/19/13 13:03	1
Lead	3.0	U	3.0	1.9	ug/L		08/13/13 07:00	08/19/13 13:03	1
Selenium	5.0	U	5.0	4.1	ug/L		08/13/13 07:00	08/19/13 13:03	1
Thallium	10	U	10	4.7	ug/L		08/13/13 07:00	08/19/13 13:03	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27746-1

Client Sample ID: DA2sw-099-1009-SW
Date Collected: 08/08/13 10:40
Date Received: 08/08/13 18:10

Lab Sample ID: 240-27746-2
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		08/12/13 12:35	08/14/13 09:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		08/19/13 10:43	08/19/13 15:14	1

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Client Sample ID: DA2sw-099-1010-SW
Date Collected: 09/25/13 10:59
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-10
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		10/04/13 13:01	10/09/13 17:34	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.15	U	0.15	0.031	ug/L		10/01/13 13:19	10/04/13 20:35	1
1,3-Dinitrobenzene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 20:35	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 20:35	1
2,4-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		10/01/13 13:19	10/04/13 20:35	1
2,6-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		10/01/13 13:19	10/04/13 20:35	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		10/01/13 13:19	10/04/13 20:35	1
2-Nitrotoluene	0.50	U	0.50	0.088	ug/L		10/01/13 13:19	10/04/13 20:35	1
3-Nitrotoluene	0.50	U	0.50	0.057	ug/L		10/01/13 13:19	10/04/13 20:35	1
4-Nitrotoluene	0.50	U	0.50	0.088	ug/L		10/01/13 13:19	10/04/13 20:35	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 20:35	1
HMX	0.15	U	0.15	0.036	ug/L		10/01/13 13:19	10/04/13 20:35	1
RDX	0.15	U	0.15	0.036	ug/L		10/01/13 13:19	10/04/13 20:35	1
Nitrobenzene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 20:35	1
Tetryl	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 20:35	1
Nitroglycerin	0.65	U	0.65	0.33	ug/L		10/01/13 13:19	10/04/13 20:35	1
PETN	0.65	U	0.65	0.30	ug/L		10/01/13 13:19	10/04/13 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*91*		*79 - 111*	*10/01/13 13:19*	*10/04/13 20:35*	*1*

Method: 6010B/DOD - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	25	U	25	7.4	ug/L		10/01/13 08:40	10/07/13 10:38	1
Arsenic	10	U	10	3.3	ug/L		10/01/13 08:40	10/07/13 10:38	1
Cadmium	5.0	U	5.0	0.39	ug/L		10/01/13 08:40	10/07/13 10:38	1
Chromium	7.0	U	7.0	1.4	ug/L		10/01/13 08:40	10/07/13 10:38	1
Cobalt	7.0	U	7.0	1.5	ug/L		10/01/13 08:40	10/07/13 10:38	1
Lead	10	U	10	1.7	ug/L		10/01/13 08:40	10/07/13 10:38	1
Selenium	15	U	15	4.0	ug/L		10/01/13 08:40	10/07/13 10:38	1
Silver	7.0	U	7.0	1.7	ug/L		10/01/13 08:40	10/07/13 10:38	1
Thallium	30	U	30	9.1	ug/L		10/01/13 08:40	10/07/13 10:38	1
Vanadium	7.0	U	7.0	1.3	ug/L		10/01/13 08:40	10/07/13 10:38	1
Barium	**28**	**J B**	200	2.8	ug/L		10/01/13 08:40	10/07/13 10:38	1
Beryllium	5.0	U	5.0	0.56	ug/L		10/01/13 08:40	10/07/13 10:38	1
Calcium	**42000**		5000	630	ug/L		10/01/13 08:40	10/07/13 14:35	1
Copper	25	U	25	4.4	ug/L		10/01/13 08:40	10/07/13 10:38	1
Magnesium	**11000**		5000	120	ug/L		10/01/13 08:40	10/07/13 10:38	1
Manganese	**100**	**B**	15	1.8	ug/L		10/01/13 08:40	10/07/13 10:38	1
Nickel	40	U	40	2.2	ug/L		10/01/13 08:40	10/07/13 10:38	1
Sodium	**8800**		5000	970	ug/L		10/01/13 08:40	10/07/13 10:38	1
Aluminum	**170**	**J**	300	75	ug/L		10/01/13 08:40	10/07/13 10:38	1
Zinc	50	U	50	15	ug/L		10/01/13 08:40	10/07/13 10:38	1
Iron	**800**		250	64	ug/L		10/01/13 08:40	10/07/13 10:38	1
Potassium	**2200**	**J**	5000	300	ug/L		10/01/13 08:40	10/07/13 10:38	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-29485-1

Client Sample ID: DA2sw-099-1010-SW
Date Collected: 09/25/13 10:59
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-10
Matrix: Water

Method: 7470A/DOD - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.20	U	0.20	0.12	ug/L		09/27/13 15:15	10/02/13 16:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		10/07/13 10:02	10/08/13 14:54	1

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Client Sample ID: DA2sw-031-1007-SW
Date Collected: 07/22/13 11:50
Date Received: 07/22/13 17:00

Lab Sample ID: 240-27158-3
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		07/25/13 13:37	08/01/13 15:58	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.16	U	0.16	0.032	ug/L		07/25/13 11:19	07/31/13 17:15	1
1,3-Dinitrobenzene	0.16	U	0.16	0.052	ug/L		07/25/13 11:19	07/31/13 17:15	1
2,4,6-Trinitrotoluene	0.16	U	0.16	0.052	ug/L		07/25/13 11:19	07/31/13 17:15	1
2,4-Dinitrotoluene	0.14	U	0.14	0.052	ug/L		07/25/13 11:19	07/31/13 17:15	1
2,6-Dinitrotoluene	0.14	U	0.14	0.052	ug/L		07/25/13 11:19	07/31/13 17:15	1
2-Amino-4,6-dinitrotoluene	0.16	U	0.16	0.016	ug/L		07/25/13 11:19	07/31/13 17:15	1
2-Nitrotoluene	0.52	U	0.52	0.092	ug/L		07/25/13 11:19	07/31/13 17:15	1
3-Nitrotoluene	0.52	U	0.52	0.059	ug/L		07/25/13 11:19	07/31/13 17:15	1
4-Nitrotoluene	0.52	U	0.52	0.092	ug/L		07/25/13 11:19	07/31/13 17:15	1
4-Amino-2,6-dinitrotoluene	0.16	U	0.16	0.052	ug/L		07/25/13 11:19	07/31/13 17:15	1
HMX	0.16	U	0.16	0.037	ug/L		07/25/13 11:19	07/31/13 17:15	1
RDX	0.16	U	0.16	0.037	ug/L		07/25/13 11:19	07/31/13 17:15	1
Nitrobenzene	0.16	U	0.16	0.052	ug/L		07/25/13 11:19	07/31/13 17:15	1
Tetryl	0.16	U	0.16	0.052	ug/L		07/25/13 11:19	07/31/13 17:15	1
Nitroglycerin	0.68	U	0.68	0.34	ug/L		07/25/13 11:19	07/31/13 17:15	1
PETN	0.68	U	0.68	0.31	ug/L		07/25/13 11:19	07/31/13 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*93*		*79 - 111*	*07/25/13 11:19*	*07/31/13 17:15*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	200	U	200	97	ug/L		07/24/13 07:56	07/25/13 10:29	1
Antimony	10	U	10	1.8	ug/L		07/24/13 07:56	07/25/13 10:29	1
Barium	**23**	**J**	200	0.67	ug/L		07/24/13 07:56	07/25/13 10:29	1
Beryllium	5.0	U	5.0	0.46	ug/L		07/24/13 07:56	07/25/13 10:29	1
Calcium	**38000**		5000	130	ug/L		07/24/13 07:56	07/25/13 10:29	1
Cadmium	2.0	U	2.0	0.66	ug/L		07/24/13 07:56	07/25/13 10:29	1
Cobalt	7.0	U	7.0	1.7	ug/L		07/24/13 07:56	07/25/13 10:29	1
Chromium	5.0	U	5.0	2.2	ug/L		07/24/13 07:56	07/25/13 10:29	1
Copper	25	U	25	4.5	ug/L		07/24/13 07:56	07/25/13 10:29	1
Iron	**530**		100	61	ug/L		07/24/13 07:56	07/25/13 10:29	1
Potassium	**1700**	**J**	5000	72	ug/L		07/24/13 07:56	07/25/13 10:29	1
Magnesium	**8700**		5000	34	ug/L		07/24/13 07:56	07/25/13 10:29	1
Manganese	**96**		15	0.41	ug/L		07/24/13 07:56	07/25/13 10:29	1
Silver	5.0	U	5.0	2.2	ug/L		07/24/13 07:56	07/25/13 10:29	1
Sodium	**5700**		5000	590	ug/L		07/24/13 07:56	07/25/13 10:29	1
Nickel	40	U	40	3.2	ug/L		07/24/13 07:56	07/25/13 10:29	1
Vanadium	7.0	U	7.0	0.64	ug/L		07/24/13 07:56	07/25/13 10:29	1
Zinc	50	U	50	5.0	ug/L		07/24/13 07:56	07/25/13 10:29	1
Arsenic	**3.3**	**J**	10	3.2	ug/L		07/24/13 07:56	07/25/13 10:29	1
Lead	3.0	U	3.0	1.9	ug/L		07/24/13 07:56	07/25/13 10:29	1
Selenium	5.0	U	5.0	4.1	ug/L		07/24/13 07:56	07/25/13 10:29	1
Thallium	10	U	10	4.7	ug/L		07/24/13 07:56	07/25/13 10:29	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27158-1

Client Sample ID: DA2sw-031-1007-SW
Date Collected: 07/22/13 11:50
Date Received: 07/22/13 17:00

Lab Sample ID: 240-27158-3
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		07/24/13 15:00	07/25/13 15:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		07/29/13 08:32	07/30/13 10:26	1

8

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27508-1

Client Sample ID: DA2sw-131-1008-SW
Date Collected: 08/01/13 13:50
Date Received: 08/02/13 08:45

Lab Sample ID: 240-27508-4
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		08/07/13 11:40	08/08/13 13:25	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.15	U	0.15	0.031	ug/L		08/06/13 17:02	08/08/13 20:09	1
1,3-Dinitrobenzene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 20:09	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 20:09	1
2,4-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		08/06/13 17:02	08/08/13 20:09	1
2,6-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		08/06/13 17:02	08/08/13 20:09	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		08/06/13 17:02	08/08/13 20:09	1
2-Nitrotoluene	0.50	U	0.50	0.088	ug/L		08/06/13 17:02	08/08/13 20:09	1
3-Nitrotoluene	0.50	U	0.50	0.057	ug/L		08/06/13 17:02	08/08/13 20:09	1
4-Nitrotoluene	0.50	U	0.50	0.088	ug/L		08/06/13 17:02	08/08/13 20:09	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 20:09	1
HMX	0.15	U	0.15	0.036	ug/L		08/06/13 17:02	08/08/13 20:09	1
RDX	0.15	U	0.15	0.036	ug/L		08/06/13 17:02	08/08/13 20:09	1
Nitrobenzene	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 20:09	1
Tetryl	0.15	U	0.15	0.050	ug/L		08/06/13 17:02	08/08/13 20:09	1
Nitroglycerin	0.65	U	0.65	0.33	ug/L		08/06/13 17:02	08/08/13 20:09	1
PETN	0.65	U	0.65	0.30	ug/L		08/06/13 17:02	08/08/13 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*89*		*79 - 111*	*08/06/13 17:02*	*08/08/13 20:09*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	200	U	200	97	ug/L		08/06/13 06:37	08/09/13 12:42	1
Antimony	10	U	10	1.8	ug/L		08/06/13 06:37	08/09/13 12:42	1
Barium	**24**	**J**	200	0.67	ug/L		08/06/13 06:37	08/09/13 12:42	1
Beryllium	5.0	U	5.0	0.46	ug/L		08/06/13 06:37	08/09/13 12:42	1
Calcium	**46000**		5000	130	ug/L		08/06/13 06:37	08/09/13 12:42	1
Cadmium	2.0	U	2.0	0.66	ug/L		08/06/13 06:37	08/09/13 12:42	1
Cobalt	7.0	U	7.0	1.7	ug/L		08/06/13 06:37	08/09/13 12:42	1
Chromium	5.0	U	5.0	2.2	ug/L		08/06/13 06:37	08/09/13 12:42	1
Copper	25	U	25	4.5	ug/L		08/06/13 06:37	08/09/13 12:42	1
Iron	**690**		100	81	ug/L		08/06/13 06:37	08/09/13 12:42	1
Potassium	**1600**	**J**	5000	72	ug/L		08/06/13 06:37	08/09/13 12:42	1
Magnesium	**11000**		5000	34	ug/L		08/06/13 06:37	08/09/13 12:42	1
Manganese	**110**	**B**	15	0.41	ug/L		08/06/13 06:37	08/09/13 12:42	1
Silver	5.0	U	5.0	2.2	ug/L		08/06/13 06:37	08/09/13 12:42	1
Sodium	**6500**		5000	590	ug/L		08/06/13 06:37	08/09/13 12:42	1
Nickel	40	U	40	3.2	ug/L		08/06/13 06:37	08/09/13 12:42	1
Vanadium	7.0	U	7.0	0.64	ug/L		08/06/13 06:37	08/09/13 12:42	1
Zinc	50	U	50	5.0	ug/L		08/06/13 06:37	08/09/13 12:42	1
Arsenic	10	U	10	3.2	ug/L		08/06/13 06:37	08/09/13 12:42	1
Lead	3.0	U	3.0	1.9	ug/L		08/06/13 06:37	08/09/13 12:42	1
Selenium	5.0	U	5.0	4.1	ug/L		08/06/13 06:37	08/09/13 12:42	1
Thallium	10	U	10	4.7	ug/L		08/06/13 06:37	08/09/13 12:42	1

8

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27508-1

Client Sample ID: DA2sw-131-1008-SW
Date Collected: 08/01/13 13:50
Date Received: 08/02/13 08:45

Lab Sample ID: 240-27508-4
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		08/06/13 13:30	08/09/13 10:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		08/12/13 07:18	08/12/13 15:30	1

8

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27746-1

Client Sample ID: DA2sw-131-1009-SW
Date Collected: 08/08/13 10:30
Date Received: 08/08/13 18:10

Lab Sample ID: 240-27746-3
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		08/13/13 06:13	08/13/13 11:03	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.15	U	0.15	0.032	ug/L		08/13/13 06:02	08/13/13 22:10	1
1,3-Dinitrobenzene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 22:10	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 22:10	1
2,4-Dinitrotoluene	0.13	U	0.13	0.051	ug/L		08/13/13 06:02	08/13/13 22:10	1
2,6-Dinitrotoluene	0.13	U	0.13	0.051	ug/L		08/13/13 06:02	08/13/13 22:10	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		08/13/13 06:02	08/13/13 22:10	1
2-Nitrotoluene	0.51	U	0.51	0.090	ug/L		08/13/13 06:02	08/13/13 22:10	1
3-Nitrotoluene	0.51	U	0.51	0.058	ug/L		08/13/13 06:02	08/13/13 22:10	1
4-Nitrotoluene	0.51	U	0.51	0.090	ug/L		08/13/13 06:02	08/13/13 22:10	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 22:10	1
HMX	0.15	U	0.15	0.037	ug/L		08/13/13 06:02	08/13/13 22:10	1
RDX	0.15	U	0.15	0.037	ug/L		08/13/13 06:02	08/13/13 22:10	1
Nitrobenzene	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 22:10	1
Tetryl	0.15	U	0.15	0.051	ug/L		08/13/13 06:02	08/13/13 22:10	1
Nitroglycerin	0.66	U	0.66	0.34	ug/L		08/13/13 06:02	08/13/13 22:10	1
PETN	0.66	U	0.66	0.31	ug/L		08/13/13 06:02	08/13/13 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*91*		*79 - 111*	*08/13/13 06:02*	*08/13/13 22:10*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**510**		200	97	ug/L		08/13/13 07:00	08/19/13 13:07	1
Antimony	10	U	10	1.8	ug/L		08/13/13 07:00	08/19/13 13:07	1
Barium	**21**	J	200	0.67	ug/L		08/13/13 07:00	08/19/13 13:07	1
Beryllium	5.0	U	5.0	0.46	ug/L		08/13/13 07:00	08/19/13 13:07	1
Calcium	**28000**	B	5000	130	ug/L		08/13/13 07:00	08/19/13 13:07	1
Cadmium	2.0	U	2.0	0.66	ug/L		08/13/13 07:00	08/19/13 13:07	1
Cobalt	7.0	U	7.0	1.7	ug/L		08/13/13 07:00	08/19/13 13:07	1
Chromium	5.0	U	5.0	2.2	ug/L		08/13/13 07:00	08/19/13 13:07	1
Copper	25	U	25	4.5	ug/L		08/13/13 07:00	08/19/13 13:07	1
Iron	**920**		100	81	ug/L		08/13/13 07:00	08/19/13 13:07	1
Potassium	**1600**	J	5000	72	ug/L		08/13/13 07:00	08/19/13 13:07	1
Magnesium	**6700**	B	5000	34	ug/L		08/13/13 07:00	08/19/13 13:07	1
Manganese	**74**	B	15	0.41	ug/L		08/13/13 07:00	08/19/13 13:07	1
Silver	5.0	U	5.0	2.2	ug/L		08/13/13 07:00	08/19/13 13:07	1
Sodium	**3300**	J	5000	590	ug/L		08/13/13 07:00	08/19/13 13:07	1
Nickel	40	U	40	3.2	ug/L		08/13/13 07:00	08/19/13 13:07	1
Vanadium	**1.8**	J	7.0	0.64	ug/L		08/13/13 07:00	08/19/13 13:07	1
Zinc	50	U	50	5.0	ug/L		08/13/13 07:00	08/19/13 13:07	1
Arsenic	10	U	10	3.2	ug/L		08/13/13 07:00	08/19/13 13:07	1
Lead	3.0	U	3.0	1.9	ug/L		08/13/13 07:00	08/19/13 13:07	1
Selenium	5.0	U	5.0	4.1	ug/L		08/13/13 07:00	08/19/13 13:07	1
Thallium	10	U	10	4.7	ug/L		08/13/13 07:00	08/19/13 13:07	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27746-1

Client Sample ID: DA2sw-131-1009-SW
Date Collected: 08/08/13 10:30
Date Received: 08/08/13 18:10

Lab Sample ID: 240-27746-3
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		08/12/13 12:35	08/14/13 09:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		08/19/13 10:43	08/19/13 15:16	1

8

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-29485-1

Client Sample ID: DA2sw-131-1010-SW
Date Collected: 09/25/13 11:09
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-11
Matrix: Water

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	20	U	20	2.4	ug/L		10/04/13 13:01	10/09/13 17:52	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.15	U	0.15	0.031	ug/L		10/01/13 13:19	10/04/13 21:19	1
1,3-Dinitrobenzene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 21:19	1
2,4,6-Trinitrotoluene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 21:19	1
2,4-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		10/01/13 13:19	10/04/13 21:19	1
2,6-Dinitrotoluene	0.13	U	0.13	0.050	ug/L		10/01/13 13:19	10/04/13 21:19	1
2-Amino-4,6-dinitrotoluene	0.15	U	0.15	0.015	ug/L		10/01/13 13:19	10/04/13 21:19	1
2-Nitrotoluene	0.50	U	0.50	0.089	ug/L		10/01/13 13:19	10/04/13 21:19	1
3-Nitrotoluene	0.50	U	0.50	0.057	ug/L		10/01/13 13:19	10/04/13 21:19	1
4-Nitrotoluene	0.50	U	0.50	0.089	ug/L		10/01/13 13:19	10/04/13 21:19	1
4-Amino-2,6-dinitrotoluene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 21:19	1
HMX	0.15	U	0.15	0.036	ug/L		10/01/13 13:19	10/04/13 21:19	1
RDX	0.15	U	0.15	0.036	ug/L		10/01/13 13:19	10/04/13 21:19	1
Nitrobenzene	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 21:19	1
Tetryl	0.15	U	0.15	0.050	ug/L		10/01/13 13:19	10/04/13 21:19	1
Nitroglycerin	0.65	U	0.65	0.33	ug/L		10/01/13 13:19	10/04/13 21:19	1
PETN	0.65	U	0.65	0.30	ug/L		10/01/13 13:19	10/04/13 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*93*		*79 - 111*	*10/01/13 13:19*	*10/04/13 21:19*	*1*

Method: 6010B/DOD - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	25	U	25	7.4	ug/L		10/01/13 08:40	10/07/13 10:42	1
Arsenic	10	U	10	3.3	ug/L		10/01/13 08:40	10/07/13 10:42	1
Cadmium	5.0	U	5.0	0.39	ug/L		10/01/13 08:40	10/07/13 10:42	1
Chromium	7.0	U	7.0	1.4	ug/L		10/01/13 08:40	10/07/13 10:42	1
Cobalt	7.0	U	7.0	1.5	ug/L		10/01/13 08:40	10/07/13 10:42	1
Lead	10	U	10	1.7	ug/L		10/01/13 08:40	10/07/13 10:42	1
Selenium	15	U	15	4.0	ug/L		10/01/13 08:40	10/07/13 10:42	1
Silver	7.0	U	7.0	1.7	ug/L		10/01/13 08:40	10/07/13 10:42	1
Thallium	30	U	30	9.1	ug/L		10/01/13 08:40	10/07/13 10:42	1
Vanadium	7.0	U	7.0	1.3	ug/L		10/01/13 08:40	10/07/13 10:42	1
Barium	**27**	**J B**	200	2.8	ug/L		10/01/13 08:40	10/07/13 10:42	1
Beryllium	5.0	U	5.0	0.56	ug/L		10/01/13 08:40	10/07/13 10:42	1
Calcium	**41000**		5000	630	ug/L		10/01/13 08:40	10/07/13 14:39	1
Copper	25	U	25	4.4	ug/L		10/01/13 08:40	10/07/13 10:42	1
Magnesium	**11000**		5000	120	ug/L		10/01/13 08:40	10/07/13 10:42	1
Manganese	**120**	**B**	15	1.8	ug/L		10/01/13 08:40	10/07/13 10:42	1
Nickel	40	U	40	2.2	ug/L		10/01/13 08:40	10/07/13 10:42	1
Sodium	**8800**		5000	970	ug/L		10/01/13 08:40	10/07/13 10:42	1
Aluminum	300	U	300	75	ug/L		10/01/13 08:40	10/07/13 10:42	1
Zinc	50	U	50	15	ug/L		10/01/13 08:40	10/07/13 10:42	1
Iron	**680**		250	64	ug/L		10/01/13 08:40	10/07/13 10:42	1
Potassium	**2100**	**J**	5000	300	ug/L		10/01/13 08:40	10/07/13 10:42	1

8

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-29485-1

Client Sample ID: DA2sw-131-1010-SW
Date Collected: 09/25/13 11:09
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-11
Matrix: Water

Method: 7470A/DOD - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.20	U	0.20	0.12	ug/L		09/27/13 15:15	10/02/13 16:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.0	U	2.0	0.48	mg/L		10/07/13 10:02	10/08/13 14:56	1

8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Test America
4101 Shuffel Drive NW
North Canton, OH 44721
330-497-9396
Fax. 1-330-497-0772

Report To:

Contact:	Brian Stockwell
Company:	PIKA International, Inc.
Address:	4935 South Prospect St
	Ravenna, OH 44266
Phone:	(330)296-6519
Fax:	(330)296-6638
Email:	

Bill To:

Contact:	Brian Stockwell
Company:	PIKA International, Inc.
Address:	4935 South Prospect St
	Ravenna, OH 44266
Phone:	(330)296-6519
Fax:	(330)296-6638
PO #:	
Quote #:	

Sampler Name: Sue Boles
Sampler Signature: Sue Boles
Project: ERS Project #12-08-151

Lab PM: John McFadden

Lab Lot #

Package Sealed: Yes No	Samples Sealed: Yes No
Received on Ice: Yes No	Samples Intact: Yes No
Temperature C of Cooler	
Within Hold Time: Yes No	
Preserv. Indicated: Yes No N/A	
pH Check OK: Yes No N/A	
Res CL2 Check OK: Yes No N/A	
Sample Labels and COC Agree: Yes No COC not present	

Date Required		Standard TAT		Refrig #											
Hard Copy				# / Cont.	glass	glass	glass	glass	glass						
Fax/Email				Volume:											
				Preserv.	4°C	4°C	4°C	4°C	4°C	4°C					

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	Explosives (8330)	Nitrocellulose (353.2)	Nitroguanadine (8330 Modified)	TAL Metals (6010B)	Mercury (7471A)				
	X	DA2sw-096-1007-SW	7/22/2013	1050	W	G	X	X	X	X	X				4°C/15-2.5 L/ HNO_3
		DA2sw-099-1007-SW	7/22/2013	1130	W	G	X	X	X	X	X				4°C/ 5 - 2.5 L/HNO_3
		DA2sw-031-1007-SW	7/22/2013	1150	W	G	X	X	X	X	X				4°C/ 5 - 2.5 L/HNO_3

240-27158 Chain of Custody

Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date: Time:
Sue Boles	PIKA International	7/22/2013	1600		TKE	7/22/13 1780
Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date: Time:
					TA	7/23/13 8:20

Matrix Key
W - Water, WW - Wastewater, DL - Drum Liquid, A Air
S - Soil, SE - Sediment, DS - Drum Solid, OL - Oil
SL - Sludge, L - Leachate, W - Wipe, O _____
SO - Solid, M - Miscellaneous

Comments:

Date Received
Courier:
Hand Delivered:
Bill of Lading:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 27158
Canton Facility

Client PIKA Site Name _____ Cooler unpacked by: Derek D. Beem

Cooler Received on 7-22-13 Opened on 7-23-13

FedEx: 1st Grd Exp UPS FAS Stetson (Client Drop Off) TestAmerica Courier Other _____

TestAmerica Cooler # Multi Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF –1 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	☐ See Multiple Cooler Form
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? (Yes) No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes (No)
12. Were air bubbles >6 mm in any VOA vials? Yes No (NA)
13. Was a trip blank present in the cooler(s)? Yes (No)

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: Derek D. Beem

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Multiple Cooler Receipt Form/Narrative — Login #: 27158
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client	5	1.4	2.4	Ice
Client	5	1.4	2.6	Ice
Client	5	0.6	1.6	Ice

Login Sample Receipt Checklist

Client: PIKA International, Inc.

Job Number: 240-27158-1

Login Number: 27158
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 07/25/13 10:18 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Test America
4101 Shuffel Drive NW
North Canton, OH 44721
330-497-9396
Fax. 1-330-497-0772

Lab Lot #

Report To:	
Contact:	Brian Stockwell
Company:	PIKA International, Inc.
Address:	4935 South Prospect St
	Ravenna, OH 44266
Phone:	(330)296-6519
Fax:	(330)296-6638
Email:	

Bill To:	
Contact:	Brian Stockwell
Company:	PIKA International, Inc.
Address:	4935 South Prospect St
	Ravenna, OH 44266
Phone:	(330)296-6519
Fax:	(330)296-6638
PO #:	
Quote #:	

Sampler Name: Sue Boles
Sampler Signature: Sue Boles
Project: ERS Project #12-08-151

Lab PM: **John McFadden**

Package Sealed	Yes / No	Samples Sealed	Yes / No
Received on Ice	Yes / No	Samples Intact	Yes / No
Temperature C of Cooler			
Within Hold Time	Yes / No		
Preserv. Indicated	Yes / No	N/A	
pH Check OK	Yes / No	N/A	
Res Cl2 Check OK	Yes / No	N/A	
Sample Labels and COC Agree	Yes / No	COC not present	

Date Required: Standard TAT
Hard Copy:
Fax/Email:

	Refrig.#							
	#/Cont	glass	glass	glass	glass	glass		
	Volume							
	Preserv.	4°C	4°C	4°C	4°C	4°C	4°C	

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	Explosives (8330)	Nitrocellulose (353.2)	Nitroguanadine (8330 Modified)	TAL Metals (6010B)	Mercury (7471A)			Preservation
		DA2sw-096-1008-SW	8/1/2013	1430	W	G	X	X	X	X	X			4°C/ 5 - 2.5 L/ HNO_3
		DA2sw-099-1008-SW	8/1/2013	1328	W	G	X	X	X	X	X			4°C/ 5 - 2.5 L/HNO_3
		DA2sw-099-1008-DUP	8/1/2013	1328	W	G	X	X	X	X	X			4°C/ 5 - 2.5 L/HNO_3
		DA2sw-131-1008-SW	8/1/2013	1350	W	G	X	X	X	X	X			4°C/ 5 - 2.5 L/HNO_3

240-27508 Chain of Custody

Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:
Sue Boles	PIKA International	8/1/2013	1645	Lance Hashman	TAL	8/1/13	1645
Relinquished by: Lance Hashman	Company:	Date: 8/1/13	Time: 520	Received By:	Company: TAL	Date: 8-2-13	Time: 845

Matrix Key

W - Water	WW - Wastewater	DL - Drum Liquid	A Air
S - Soil	SE - Sediment	DS - Drum Solid	OL - Oil
SL - Sludge	L - Leachate	W - Wipe	O
SO - Solid	M - Miscellaneous		

Comments:

Date Received	
Courier:	
Hand Delivered:	
Bill of Lading:	

TestAmerica Canton Sample Receipt Form/Narrative Login # : 27508
Canton Facility

Client PIKA Site Name _____ Cooler unpacked by: Terrell Smith

Cooler Received on 8-2-13 Opened on 8-2-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off (TestAmerica Courier) Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

~~1. Cooler temperature upon receipt~~

IR GUN# A (CF –1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

IR GUN# 4 (CF 0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C ☒ See Multiple Cooler Form

IR GUN# 5 (CF +1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

IR GUN# 8 (CF -0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 ea (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? Yes (No)
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? (Yes) No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes (No)
12. Were air bubbles >6 mm in any VOA vials? Yes No (NA)
13. Was a trip blank present in the cooler(s)? Yes (No)

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: Tom Lee

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Multiple Cooler Receipt Form/Narrative — Login # : 27508
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
CLIENT	5	1.4	2.4	ICE
CLIENT	5	1.8	2.8	ICE

Login Sample Receipt Checklist

Client: PIKA International, Inc.

Job Number: 240-27508-1

Login Number: 27508
List Number: 1
Creator: Tecson, Jeffrey

List Source: TestAmerica Sacramento
List Creation: 08/05/13 09:23 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.4,6.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	False	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Test America
4101 Shuffel Drive NW
North Canton, OH 44721
330-497-9396
Fax. 1-330-497-0772

Page 1 of 1

Report To:

Contact:	Brian Stockwell
Company:	PIKA International, Inc.
Address:	4935 South Prospect St
	Ravenna, OH 44266
Phone:	(330)296-6519
Fax:	(330)296-6638
Email:	bstockwell@pikainc.com

Bill To:

Contact:	Brian Stockwell
Company:	PIKA International, Inc.
Address:	4935 South Prospect St
	Ravenna, OH 44266
Phone:	(330)296-6519
Fax:	(330)296-6638
PO #:	
Quote #:	

Lab Lot #

Package Sealed Yes No	Samples Sealed Yes No
Received on Ice Yes No	Samples Intact Yes No
Temperature C of Cooler	
Within Hold Time Yes No	
Preserv. Indicated Yes No N/A	
pH Check OK Yes No N/A	
Res Cl2 Check OK Yes No N/A	
Sample Labels and COC Agree Yes No COC not present	

Sampler Name: Sue Boles
Sampler Signature: Sue Boles
Project: ERS Project #12-08-151

Lab PM: John McFadden

240-27746 Chain of Custody

Required	Standard TAT	Refrg #												
Copy		# / Cont.	glass	glass	glass	poly	poly							
mail		Volume												
		Preserv.	4°C	4°C	4°C	4°C HNO_3	4°C							

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	Explosives (8330)	Nitrocellulose (353.2)	Nitroguanadine (8330 Modified)	TAL Metals (6010B)	Mercury (7471A)				
		DA2sw-096-1009-SW	8/8/2013	1005	W	G	X	X	X	X	X				4°C/ 5 - 2.5 L/ HNO_3
		DA2sw-099-1009-SW	8/8/2013	1040	W	G	X	X	X	X	X				4°C/ 5 - 2.5 L/HNO_3
		DA2sw-131-1009-SW	8/8/2013	1030	W	G	X	X	X	X	X				4°C/ 5 - 2.5 L/HNO_3

Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:
Sue Boles	PIKA International	8/8/2013	1625	Lance Huckman		8813	425
Lance Huck	TAL	8813	610	[illegible]	TA	8-8-13	610

Matrix Key

W - Water	WW - Wastewater	DL - Drum Liquid	A Air
S - Soil	SE - Sediment	DS - Drum Solid	OL - Oil
SL - Sludge	L - Leachate	W - Wipe	O _____
SO - Solid	M - Miscellaneous		

Comments:

Date Received
Courier:
Hand Delivered:
Bill of Lading:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 27746
Canton Facility

Client Pika International Inc Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 8-8-13 Opened on 8-9-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # Multi Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   - IR GUN# A (CF -1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   - IR GUN# 4 (CF 0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   - IR GUN# 5 (CF +1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   - IR GUN# 8 (CF -0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

   ☑ See Multiple Cooler Form
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 8 Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Ref: SOP NC-SC-0005, Sample Receiving
\\Cansvr10\public\QAQC\SOPS\Work Instructions\WI-NC-099-061413, Rev 1 Cooler Receipt Form.doc rls

TestAmerica Multiple Cooler Receipt Form/Narrative Login # :
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client Cooler	4	1.8	1.8	Ice
893	1	2.8	2.8	I

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
DA2sw-096-1009-SW	240-27746-A-1	Plastic 500ml - with Nitric Acid	<2	_____	_____
DA2sw-099-1009-SW	240-27746-A-2	Plastic 500ml - with Nitric Acid	<2	_____	_____
DA2sw-131-1009-SW	240-27746-A-3	Plastic 500ml - with Nitric Acid	<2	_____	_____

Login Sample Receipt Checklist

Client: PIKA International, Inc.

Job Number: 240-27746-1

Login Number: 27746
List Number: 1
Creator: Hytrek, Cheryl

List Source: TestAmerica Sacramento
List Creation: 08/10/13 10:25 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Test America
4101 Shuffel Drive NW
North Canton, OH 44721
330-497-9396
Fax. 1-330-497-0772

Lab Lot #

Report To:		Bill To:	
Contact:	Brian Stockwell	Contact:	Brian Stockwell
Company:	PIKA International, Inc.	Company:	PIKA International, Inc.
Address:	4935 South Prospect St	Address:	4935 South Prospect St
	Ravenna, OH 44266		Ravenna, OH 44266
Phone:	(330)296-6519	Phone:	(330)296-6519
Fax:	(330)296-6638	Fax:	(330)296-6638
Email:		PO #:	
		Quote #:	

Sampler Name: Sue Boles
Sampler Signature: Sue Boles
Project: ERS Project #12-08-151

Lab PM: John McFadden

Package Sealed Yes No	Samples Sealed Yes No
Received on Ice Yes No	Samples Intact Yes No
Temperature C of Cooler	
Within Hold Time Yes No	
Preserv. Indicated Yes No N/A	
pH Check OK Yes No N/A	
Res CL2 Check OK Yes No N/A	
Sample Labels and COC Agree Yes No COC not present	

240-29485 Chain of Custody

e Required	Standard TAT	Refrg #												
d Copy		# / Cont.	glass	glass	glass	Poly	glass	glass	glass	glass				
/Email		Volume												
		Preserv.	4°C	4°C	4°C	HNO3	4°C	4°C	4°C	4°C				

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	Explosives (8330)	Nitrocellulose (353.2)	Nitroguanadine (8330 Modified)	TAL Metals (6010B)	Mercury (7471A)	Solids	Phosphorus	White Phosphorus	
		DA2ss-132M-1010-SO	9/25/2013	0948	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-133M-1010-SO	9/25/2013	1000	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-133M-1010-ER	9/25/2013	0720	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic
		DA2ss-134M-1010-SO	9/25/2013	1008	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-135M-1010-SO	9/25/2013	1020	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-135M-1010-DUP	9/25/2013	1020	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-250M-0002-SO	9/25/2013	1211	S	MI	X	X	X	X	X	X	X	X	2-32oz
		DA2ss-250M-0002-DUP	9/25/2013	1211	S	MI	X	X	X	X	X	X	X	X	2-32oz
		DA2sw-096-1010-SW	9/25/2013	1136	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic
		DA2sw-099-1010-SW	9/25/2013	1059	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic
		DA2sw-131-1010-SW	9/25/2013	1109	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic

Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:
Sue Boles	PIKA International	9/25/2013	1600	[signature]	[signature]	9-25-13	4:47
Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:

Matrix Key

W - Water	WW - Wastewater	DL - Drum Liquid	A Air
S - Soil	SE - Sediment	DS - Drum Solid	OL - Oil
SL - Sludge	L - Leachate	W - Wipe	O _____
SO - Solid	M - Miscellaneous		

Comments:
ALL SOIL SAMPLES MUST BE MI SAMPLE PROCESSED

Date Received
Courier:
Hand Delivered:
Bill of Lading:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 29485
Canton Facility

Client Pika International Site Name

Cooler unpacked by: Rachel D. Green

Cooler Received on 9-26-13 Opened on 9-26-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

TestAmerica Cooler # Misti Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF +2 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF +1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 5	(CF +2 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 8 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other
Concerning ____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____

TestAmerica Multiple Cooler Receipt Form/Narrative — Login # : 29485
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client Coolers	8	1.6	1.6	Ice
2	1	0.8	0.8	1
3	1	1.2	1.2	1
4	1	1.2	1.2	1

Login Sample Receipt Checklist

Client: PIKA International, Inc.

Job Number: 240-29485-1

Login Number: 29485
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 09/27/13 10:36 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: PIKA International, Inc.

Job Number: 240-29485-1

Login Number: 29485
List Number: 2
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 10/02/13 11:08 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix K

MEC Demolition MI Soil Sampling Results

SUMMARY TABLE - 2
DEMOLITION AREA ISM SOIL SAMPLE LOCATIONS

ANALYTE**, UNITS, METHOD NO.	Surface Soil Background Criteria mg/kg	DA2SS-132M-1009-SO	Qualifier	MDL	DA2SS-132M-1010-SO	Qualifier	MDL	DA2SS-133M-1009-SO	Qualifier	MDL	DA2SS-133M-1010-SO	Qualifier	MDL	DA2SS-133M-1010-ER ug/L	Qualifier	MDL	DA2SS-134M-1009-SO	Qualifier	MDL	DA2SS-134M-1010-SO	Qualifier	MDL	DA2SS-135M-1009-SO	Qualifier	MDL	DA2SS-135M-1010-SO	Qualifier	MDL	DA2SS-135M-1010-DUP	Qualifier	MDL
Sample Date		7/23/2013			9/25/2013			7/23/2013			9/25/2013			9/25/2013			7/23/2013			9/25/2013			7/23/2013			9/25/2013			9/25/2013		
Sample Area		DEMO AREA - PRE			DEMO AREA - POST			DEMO AREA - PRE			DEMO AREA - POST			DEMO AREA - POST			DEMO AREA - PRE			DEMO AREA - POST			DEMO AREA - PRE			DEMO AREA - POST			DEMO AREA - POST		
EXPLOSIVES mg/kg																														
1,3,5-Trinitrobenzene	--	0.25	U	0.0099	0.25	U	0.010	0.25	U	0.0099	0.25	U	0.010	0.15	U	0.032	0.25	U	0.0099	0.25	U	0.010	0.24	U	0.0096	0.25	U	0.0098	0.25	U	0.010
1,3-Dinitrobenzene	--	0.25	U	0.0042	0.25	U	0.0042	0.25	U	0.0041	0.25	U	0.0042	0.15	U	0.052	0.25	U	0.0042	0.25	U	0.0042	0.24	U	0.004	0.25	U	0.0041	0.25	U	0.0042
2,4,6-Trinitrotoluene	--	0.25	U	0.019	0.25	U	0.019	3.5		0.019	0.25	U	0.019	0.15	U	0.052	0.25	U	0.019	0.25	U	0.019	0.24	U	0.019	0.25	U	0.019	0.21	J	0.019
2,4-Dinitrotoluene	--	0.25	U	0.0052	0.25	U	0.0053	0.25	U	0.0052	0.25	U	0.005	0.13	U	0.052	0.25	U	0.0052	0.25	U	0.0053	0.24	U	0.0051	0.25	U	0.0052	0.25	U	0.0053
2,6-Dinitrotoluene	--	0.25	U	0.0072	0.25	U	0.0073	0.25	U	0.0072	0.25	U	0.0072	0.13	U	0.052	0.25	U	0.0072	0.25	U	0.0073	0.24	U	0.0070	0.25	U	0.0072	0.25	U	0.0073
2-Amino-4,6-Dinitrotoluene	--	0.25	U	0.012	0.25	U	0.012	0.049	J	0.012	0.25	U	0.012	0.15	U	0.015	0.25	U	0.012	0.25	U	0.012	0.24	U	0.012	0.25	U	0.012	0.25	U	0.012
2-Nitrotoluene	--	0.25	U	0.013	0.25	U	0.013	0.25	U	0.013	0.25	U	0.013	0.52	U	0.091	0.25	U	0.013	0.25	U	0.013	0.24	U	0.012	0.25	U	0.013	0.25	U	0.013
3-Nitrotoluene	--	0.25	U	0.015	0.25	U	0.015	0.25	U	0.015	0.25	U	0.015	0.52	U	0.059	0.25	U	0.015	0.25	U	0.015	0.24	U	0.015	0.25	U	0.015	0.25	U	0.015
4-Amino-2,6-Dinitrotoluene	--	0.25	U	0.0099	0.25	U	0.010	0.045	J,P	0.0099	0.25	U	0.010	0.15	U	0.052	0.25	U	0.0099	0.25	U	0.010	0.24	U	0.0096	0.25	U	0.0098	0.25	U	0.010
4-Nitrotoluene	--	0.25	U	0.018	0.25	U	0.018	0.25	U	0.018	0.25	U	0.018	0.52	U	0.091	0.25	U	0.018	0.25	U	0.018	0.24	U	0.017	0.25	U	0.018	0.25	U	0.018
HMX	--	0.25	U	0.012	0.079	J	0.012	0.25	U	0.012	1.7		0.012	0.15	U	0.037	0.21	J	0.012	0.080	J	0.012	0.022	J	0.012	0.18	J	0.012	0.13	J	0.012
Nitrobenzene	--	0.25	U	0.017	0.25	U	0.018	0.25	U	0.017	0.25	U	0.017	0.15	U	0.052	0.25	U	0.017	0.25	U	0.018	0.24	U	0.017	0.25	U	0.017	0.25	U	0.018
PETN	--	0.49	U	0.025	0.50	U	0.025	0.49	U	0.025	0.50	U	0.025	0.67	U	0.31	0.50	U	0.025	0.50	U	0.025	0.48	U	0.024	0.49	U	0.025	0.50	U	0.025
RDX	--	0.25	U	0.012	0.19	J	0.012	0.25	U	0.012	12		0.060	0.15	U	0.037	1.6		0.012	0.18	J	0.012	0.24	U	0.011	1.4		0.012	0.30		0.012
Tetryl	--	2.7		0.0099	0.25	U	0.010	0.016	J	0.0099	0.16	J	0.0099	0.15	U	0.052	0.25	U	0.0099	0.053	J	0.010	0.24	U	0.0096	0.029	J	0.0098	8.8		0.050
Propellants mg/kg																														
Nitrocellulose	--	2.4	J,B	0.79	1.1	J	0.79	2.3	J,B	0.79	6.0		0.79	2.0	U	0.48	3.5	J,B	0.79	1.8	J	0.79	2.9	J,B	0.79	1.0	J	0.79	2.7	J	0.79
Nitroglycerine	--	0.49	U	0.015	0.50	U	0.015	0.49	U	0.015	0.50	U	0.015	0.67	U	0.34	0.50	U	0.015	0.50	U	0.015	0.48	U	0.014	0.49	U	0.015	0.50	U	0.015
Nitroguanidine	--	0.25	U	0.020	0.25	U	0.020	0.25	U	0.020	0.24	U	0.019	20	U	2.4	0.24	U	0.020	0.24		0.020	0.25	U	0.02	0.24	U	0.019	0.25	U	0.020
METALS 6010B mg/kg																														
Aluminum	17700	8800		9.5	6700		8.7	9300		9.3	8700		8.7	300	U	75	7600		8.2	7500		9.1	8300		9.6	7600		8.2	8000		9.5
Antimony	0.96	**0.99**	**U**	0.38	0.90	U	0.35	**0.97**	**U**	0.38	0.90	U	0.35	25	U	7.4	0.86	U	0.33	0.95	U	0.37	**1.0**	**U**	0.39	0.85	U	0.33	**0.99**	**U**	0.39
Arsenic	15.4	15		0.3	12		0.27	15		0.29	**20**		0.27	10	U	3.3	12		0.26	13		0.28	**18**		0.30	13		0.26	14		0.30
Barium	88.4	59		0.070	49	B	0.064	85		0.069	66	B	0.064	200	U	2.8	59		0.061	58	B	0.067	73		0.071	66	B	0.061	70	B	0.070
Beryllium	0.88	0.49		0.042	0.39	J	0.039	0.51		0.042	0.46		0.039	5.0	U	0.56	0.42	J	0.037	0.44	J	0.041	0.48	J	0.043	0.41	J	0.037	0.46	J	0.043
Cadmium	0.0	0.98		0.036	1.3		0.032	1.4		0.035	1.4		0.033	5.0	U	0.390	1.2		0.031	1.4		0.034	1.1		0.036	1.5		0.031	1.6		0.036
Calcium (essential nutrient)	15800	6300		16.0	4900	B	14	6300		15	4700	B	14	5000	U	630	57		14	5600	B	15	6700		16	5300	B	14	4800	B	16.0
Chromium	--	18		0.2	16		0.18	16		0.19	16		0.18	7.0	U	1.4	14		0.17	15		0.19	18		0.20	14		0.17	16.0		0.20
Cobalt	10.4	10		0.16	7.6		0.14	10		0.15	9.4		0.14	7.0	U	1.5	8.7		0.14	8.8		0.15	9.4		0.16	9.0		0.14	9.2		0.16
Copper	17.7	**89**		0.73	**95**		0.67	**110**		0.72	**100**		0.67	25	U	4.4	**83**		0.63	**170**		0.70	**160**		0.74	**89**		0.63	**97**		0.73
Iron (essential nutrient)	23100	22000		4.8	22000	B	22	22000		4.7	**25000**	**B**	22	250	U	64	20000		4.2	**24000**	**B**	23	22000		4.9	**24000**	**B**	21	**25000**	**B**	24
Lead	26.1	23		0.19	**28**		0.17	**34**		0.18	**33**		0.17	10	U	1.7	**33**		0.16	**45**		0.18	**29**		0.19	**29**		0.16	**32**		0.19
Magnesium (essential nutrient)	3030	**3900**		5.0	2600	B	4.6	**3800**		4.9	**3100**	**B**	4.6	5000	U	120	**3100**		4.4	3000	B	4.8	**3600**		5.1	3000	B	4.4	**3100**	**B**	5.1
Manganese	1450	340	B	0.073	280	B	0.067	350	B	0.072	310	B	0.067	15	U	1.8	320	B	0.063	330	B	0.070	340	B	0.074	300	B	0.063	340	B	0.073
Nickel	21.1	**27**		0.27	**22**		0.24	**26**		0.26	**25**		0.24	40	U	2.2	**22**		0.23	**25**		0.26	**25**		0.27	**23**		0.23	**24**		0.27
Potassium (essential nutrient)	927	**1100**		6.1	910		5.6	**1200**		6.0	**1400**		5.6	5000	U	300.0	910		5.3	**950**		5.9	**1100**		6.2	**1000**		5.3	**1100**		6.2
Selenium	1.4	0.68		0.44	0.45	U	0.41	0.48	U	0.44	0.45	U	0.41	15	U	4	0.43	U	0.39	0.47	U	0.43	0.50	U	0.45	0.43	U	0.38	0.50	U	0.45
Silver	0	0.49	U	0.099	0.45	U	0.090	0.48	U	0.097	0.45	U	0.090	7.0	U	1.7	0.43	U	0.086	0.47	U	0.095	0.50	U	0.10	0.43	U	0.085	0.18	J	0.099
Sodium (essential nutrient)	123	**490**	**U**	65.0	**450**	**U**	60.0	**480**	**U**	64	**450**	**U**	60	5000	U	970	**430**	**U**	56	**470**	**U**	62.0	**500**	**U**	66	**430**	**U**	56	**500**	**U**	66
Thallium	0	0.99	U	0.54	0.9	U	0.5	0.97	U	0.53	0.90	U	0.50	30	U	9.1	0.86	U	0.47	0.95	U	0.52	1.0	U	0.55	0.85	U	0.47	0.99	U	0.55
Vanadium	31.1	14.0		0.12	11		0.11	14.0		0.12	13		0.11	7.0	U	1.3	12.0		0.10	11		0.11	13		0.12	12		0.10	12		0.12
Zinc	61.8	**140.0**		0.99	**130**		0.90	**240.0**		0.97	**180**		0.90	50	U	15.00	**180.0**		0.86	**160**		0.95	**190**		1.0	**170**		0.85	**180**		0.99
7471A mg/kg																														
Mercury	0.036	**0.21**		0.015	**0.32**		0.017	**0.26**		0.016	**0.23**		0.016	0.20		0.12	**0.23**		0.015	**0.25**		0.016	**0.21**		0.017	**0.25**		0.016	**0.19**		0.013

Notes:
mg/kg = milligrams per kilogram (parts per million)
MDL - Method Detection Limit
Organics:
U = Indicates that the analyte was analyzed for but not detected
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Inorganics:
U = Indicates that the analyte was analyzed for but not detected
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B = Compound was found in the blank and sample.
Bold = > Background

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA25S-132M-1009-S0

Ravenna Army Ammunition Plant

Date: 23 July 2013 **Weather** Sunny **Temperature** 72°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle		Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe	X	Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1205 hrs

Sample Type: Composite - (MI) - Grab
If MI, # of increments taken: 30

Location: Plotted on Map - Staked in Field
Estimated - Measured - (Surveyed)

Sample Depth: 0-1 FT (below surface)

Decon: Dedicated - Each Day - (Each Location)

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate		QA Samples			
Temperature	°C	Pesticides/PCBs		Asbestos		MS/MSD	Yes		
Sp. Conductance:	uMHOs	Cyanides		pH		Duplicate ID	NA		
pH	units	TOC		White Phosphorus		Equipment Rinse ID	NA		
Turbidity	N.T.U.	Grain Size				Trip Blank ID	NA		

Sample Description

Dark Brown, moist, no odor, no stain, poorly sorted, low plasticity, silty clay and gravel

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID: _____

Name: _____

Agency/Company: _____

Address: _____

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: _____ **Date:** 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA255-132M-1010-SO

Ravenna Army Ammunition Plant

Date: 25 Sept 2013 **Weather** Sunny **Temperature** 55°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle		Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe	X	Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 0948 hrs

Sample Type: Composite - (MI) - Grab
If MI, # of increments taken: 30

Location: Plotted on Map - Staked in Field
Estimated - Measured - Surveyed

Sample Depth: 0-1 FT (below surface)

Decon: Dedicated - Each Day - Each Location

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate		**QA Samples**			
Temperature	°C	Pesticides/PCBs		Asbestos		MS/MSD			
Sp. Conductance:	uMHOs	Cyanides		pH		Duplicate ID			
pH	units	TOC		White Phosphorus		Equipment Rinse ID			
Turbidity	N.T.U.	Grain Size				Trip Blank ID			

Sample Description

Dark brown, moist, no odor, no staining, poorly sorted, low plasticity, silty clay and gravel

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID:

Name:

Agency/Company:

Address:

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Collahan (Please Print)

Signature: [signature] Date: 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DAAss-133M-1009-S0

Date: 23 July 2013 **Weather** Sunny

Ravenna Army Ammunition Plant

Temperature 72°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle		Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe	X	Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1221 hrs

Sample Type: Composite - (MI) - Grab
If MI, # of increments taken: 30

Location: Plotted on Map - Staked in Field
Estimated - Measured - Surveyed

Sample Depth: 0-1 FT (below surface)

Decon: Dedicated - Each Day - Each Location

Field Parameters
(at time of sample)

PID / FID Readings:	
Background:	ppm
Sample:	ppm
Water Level	FT
Temperature	°C
Sp. Conductance:	uMHOs
pH	units
Turbidity	N.T.U.

Analytical Parameters

VOC		TPH GRO	
SVOC		TPH DRO	
Explosives	X	Chromium +6	
Propellants	X	Nitrate	
TAL Metals	X	Sulfate	
Pesticides/PCBs		Asbestos	
Cyanides		pH	
TOC		White Phosphorus	
Grain Size			

Other Parameters

Corrosivity			
Reactivity Sulfide/Cyanide			
Ignitability			

QA Samples

MS/MSD	
Duplicate ID	
Equipment Rinse ID	
Trip Blank ID	

Sample Description

Dark brown, moist, no odor, no stain, poorly sorted, low plasticity, silty clay and gravel

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID:

Name:

Agency/Company:

Address:

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: Date: 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA25S-133M-1010-SO

Ravenna Army Ammunition Plant

Date: 25 Sept 2013 **Weather** Sunny **Temperature** 55°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle		Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe	X	Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1000 hrs

Sample Type: Composite - (MI) Grab
If MI, # of increments taken: 30

Location: Plotted on Map - (Staked in Field)
Estimated - Measured - Surveyed

Sample Depth: 0-1 FT (below surface)

Decon: Dedicated - Each Day - (Each Location)

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate		**QA Samples**			
Temperature	°C	Pesticides/PCBs		Asbestos		MS/MSD	N/A		
Sp. Conductance:	uMHOs	Cyanides		pH		Duplicate ID	N/A		
pH	units	TOC		White Phosphorus		Equipment Rinse ID	DA25S-133M-1010-ER		
Turbidity	N.T.U.	Grain Size				Trip Blank ID	N/A		

Sample Description

Dark brown, moist, no odor, no stain, poorly sorted, low plasticity, silty clay and gravel.

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID:

Name:

Agency/Company:

Address:

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: Rick Callahan **Date:** 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA25S-134M-1009-SO

Ravenna Army Ammunition Plant

Date: 23 July 2013 **Weather** Sunny **Temperature** 72°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle		Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe	X	Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1241 hrs

Sample Type: Composite - (MI) - Grab
If MI, # of increments taken: 30

Location: Plotted on Map - Staked in Field
Estimated - Measured - (Surveyed)

Sample Depth: 0-1 FT (below surface)

Decon: Dedicated - Each Day - (Each Location)

Field Parameters
(at time of sample)

PID / FID Readings:		
Background:	ppm	
Sample:	ppm	
Water Level	FT	
Temperature	°C	
Sp. Conductance:	uMHOs	
pH	units	
Turbidity	N.T.U.	

Analytical Parameters

VOC		TPH GRO	
SVOC		TPH DRO	
Explosives	X	Chromium +6	
Propellants	X	Nitrate	
TAL Metals	X	Sulfate	
Pesticides/PCBs		Asbestos	
Cyanides		pH	
TOC		White Phosphorus	
Grain Size			

Other Parameters

Corrosivity			
Reactivity Sulfide/Cyanide			
Ignitability			

QA Samples

MS/MSD	
Duplicate ID	
Equipment Rinse ID	
Trip Blank ID	

Sample Description

Dark Brown, moist, no odor, no staining, poorly sorted, low plasticity, silty clay and gravel

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID:

Name:

Agency/Company:

Address:

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: Rick Callahan **Date:** 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA25S-134M-1010-SO

Ravenna Army Ammunition Plant

Date: 25 Sept 2013 **Weather** Sunny **Temperature** 55°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle		Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe	X	Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1008 hrs

Sample Type: Composite - (MI) - Grab
If MI, # of increments taken: 30

Location: Plotted on Map - Staked in Field
Estimated - Measured - Surveyed

Sample Depth: 0-1 FT (below surface)

Decon: Dedicated - Each Day - (Each Location)

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate					
Temperature	°C	Pesticides/PCBs		Asbestos		QA Samples			
Sp. Conductance:	uMHOs	Cyanides		pH		MS/MSD			
pH	units	TOC		White Phosphorus		Duplicate ID			
Turbidity	N.T.U.	Grain Size				Equipment Rinse ID			
						Trip Blank ID			

Sample Description

Dark Brown, moist, no odor, no stain, poorly sorted, low plasticity, silty clay and gravel

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID:

Name:

Agency/Company:

Address:

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: Rick Callahan Date: 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA25S-135M-1009-S0

Ravenna Army Ammunition Plant

Date: 23 July 2013 **Weather** Sunny **Temperature** 72°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle		Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe	X	Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1300 hrs

Sample Type: Composite - (MI) - Grab
If MI, # of increments taken: 30

Location: Plotted on Map - Staked in Field
Estimated - Measured - Surveyed

Sample Depth: 0-1 FT (below surface)

Decon: Dedicated - Each Day - Each Location

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate		**QA Samples**			
Temperature	°C	Pesticides/PCBs		Asbestos		MS/MSD			
Sp. Conductance:	uMHOs	Cyanides		pH		Duplicate ID			
pH	units	TOC		White Phosphorus		Equipment Rinse ID			
Turbidity	N.T.U.	Grain Size				Trip Blank ID			

Sample Description

Dark Brown, moist, no odor, no stain, poorly sorted, low plasticity, silty clay and gravel.

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID:

Name:

Agency/Company:

Address:

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: [signature] **Date:** 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA2ss-135M-1010 SO

Ravenna Army Ammunition Plant

Date: 25 Sept 2013 **Weather** Sunny **Temperature** 55°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle		Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe	X	Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1020 hrs

Sample Type: Composite - (MI) - Grab
If MI, # of increments taken: 30

Location: Plotted on Map - Staked in Field
Estimated - Measured - Surveyed

Sample Depth: 0 - 1 FT (below surface)

Decon: Dedicated - Each Day - Each Location

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate					
Temperature	°C	Pesticides/PCBs		Asbestos					
Sp. Conductance:	uMHOs	Cyanides		pH					
pH	units	TOC		White Phosphorus					
Turbidity	N.T.U.	Grain Size							

QA Samples	
MS/MSD	NA
Duplicate ID	DA2ss-135M-1010-DUP
Equipment Rinse ID	NA
Trip Blank ID	NA

Sample Description

Dark brown, moist, no odor, no stain
poorly sorted, low plasticity, silty clay
and gravel

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID:

Name:

Agency/Company:

Address:

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Skye Boles (Please Print)

Signature: Skye Boles

Reviewed by: Rick Callahan (Please Print)

Signature: Date: 10/7/13

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27193-1

Client Sample ID: DA2ss-132M-1009-SO
Date Collected: 07/23/13 12:05
Date Received: 07/23/13 17:00

Lab Sample ID: 240-27193-1
Matrix: Solid

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.25	U	0.25	0.020	mg/Kg		08/01/13 06:38	08/05/13 10:48	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.25	U	0.25	0.0099	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
1,3-Dinitrobenzene	0.25	U	0.25	0.0042	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
2,4,6-Trinitrotoluene	0.25	U	0.25	0.019	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
2,4-Dinitrotoluene	0.25	U	0.25	0.0052	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
2,6-Dinitrotoluene	0.25	U	0.25	0.0072	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
2-Amino-4,6-dinitrotoluene	0.25	U	0.25	0.012	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
2-Nitrotoluene	0.25	U	0.25	0.013	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
3-Nitrotoluene	0.25	U	0.25	0.015	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
4-Nitrotoluene	0.25	U	0.25	0.018	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
4-Amino-2,6-dinitrotoluene	0.25	U	0.25	0.0099	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
HMX	0.25	U	0.25	0.012	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
RDX	0.25	U	0.25	0.012	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
Nitrobenzene	0.25	U	0.25	0.017	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
Tetryl	**2.7**		0.25	0.0099	mg/Kg		08/01/13 05:57	08/02/13 17:12	1
Nitroglycerin	0.49	U	0.49	0.015	mg/Kg		08/01/13 05:57	08/05/13 19:34	1
PETN	0.49	U	0.49	0.025	mg/Kg		08/01/13 05:57	08/02/13 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*91*		*78 - 118*	*08/01/13 05:57*	*08/02/13 17:12*	*1*
3,4-Dinitrotoluene	*95*		*78 - 118*	*08/01/13 05:57*	*08/05/13 19:34*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8800**		20	9.5	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Antimony	0.99	U	0.99	0.36	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Barium	**59**		20	0.070	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Beryllium	**0.49**		0.49	0.042	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Calcium	**6300**		490	16	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Cadmium	**0.98**		0.20	0.036	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Cobalt	**10**		4.9	0.16	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Chromium	**18**		0.49	0.20	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Copper	**89**		2.5	0.73	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Iron	**22000**		9.9	4.8	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Potassium	**1100**		490	6.1	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Magnesium	**3900**		490	5.0	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Manganese	**340**	**B**	1.5	0.073	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Silver	0.49	U	0.49	0.099	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Sodium	490	U	490	65	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Nickel	**27**		3.9	0.27	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Vanadium	**14**		4.9	0.12	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Zinc	**140**		2.0	0.99	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Arsenic	**15**		0.99	0.30	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Lead	**23**		0.30	0.19	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Selenium	**0.68**		0.49	0.44	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1
Thallium	0.99	U	0.99	0.54	mg/Kg	☼	08/08/13 10:15	08/09/13 11:18	1

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Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27193-1

Client Sample ID: DA2ss-132M-1009-SO
Date Collected: 07/23/13 12:05
Date Received: 07/23/13 17:00

Lab Sample ID: 240-27193-1
Matrix: Solid
Percent Solids: 98.4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.097	0.015	mg/Kg	☼	08/08/13 14:35	08/12/13 12:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.4	J B	5.1	0.79	mg/Kg	☼	08/12/13 07:10	08/13/13 12:21	1

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Client Sample ID: DA2ss-132M-1010-SO
Date Collected: 09/25/13 09:48
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-1
Matrix: Solid

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.25	U	0.25	0.020	mg/Kg		10/03/13 16:03	10/09/13 19:39	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.25	U	0.25	0.010	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
1,3-Dinitrobenzene	0.25	U	0.25	0.0042	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
2,4,6-Trinitrotoluene	0.25	U	0.25	0.019	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
2,4-Dinitrotoluene	0.25	U	0.25	0.0053	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
2,6-Dinitrotoluene	0.25	U	0.25	0.0073	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
2-Amino-4,6-dinitrotoluene	0.25	U	0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
2-Nitrotoluene	0.25	U	0.25	0.013	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
3-Nitrotoluene	0.25	U	0.25	0.015	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
4-Nitrotoluene	0.25	U	0.25	0.018	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
4-Amino-2,6-dinitrotoluene	0.25	U	0.25	0.010	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
HMX	**0.079**	J	0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
RDX	**0.19**	J	0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
Nitrobenzene	0.25	U	0.25	0.018	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
Tetryl	0.25	U	0.25	0.010	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
Nitroglycerin	0.50	U	0.50	0.015	mg/Kg		10/03/13 14:25	10/09/13 19:12	1
PETN	0.50	U	0.50	0.025	mg/Kg		10/03/13 14:25	10/09/13 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*91*		*78 - 118*	*10/03/13 14:25*	*10/09/13 19:12*	*1*
3,4-Dinitrotoluene	*105*		*78 - 118*	*10/03/13 14:25*	*10/09/13 20:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6700**		18	8.7	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Antimony	0.90	U	0.90	0.35	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Barium	**49**	**B**	18	0.064	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Beryllium	**0.39**	J	0.45	0.039	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Calcium	**4900**	**B**	450	14	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Cadmium	**1.3**		0.18	0.032	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Cobalt	**7.6**		4.5	0.14	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Chromium	**16**		0.45	0.18	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Copper	**95**		2.3	0.67	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Iron	**22000**	**B**	45	22	mg/Kg	☼	10/07/13 10:38	10/15/13 13:59	5
Potassium	**910**		450	5.6	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Magnesium	**2600**	**B**	450	4.6	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Manganese	**280**	**B**	1.4	0.067	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Silver	0.45	U	0.45	0.090	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Sodium	450	U	450	60	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Nickel	**22**		3.6	0.24	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Vanadium	**11**		4.5	0.11	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Zinc	**130**		1.8	0.90	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Arsenic	**12**		0.90	0.27	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Lead	**28**		0.27	0.17	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Selenium	0.45	U	0.45	0.41	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1
Thallium	0.90	U	0.90	0.50	mg/Kg	☼	10/07/13 10:38	10/15/13 09:56	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-29485-1

Client Sample ID: DA2ss-132M-1010-SO
Date Collected: 09/25/13 09:48
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-1
Matrix: Solid
Percent Solids: 98.1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.32		0.11	0.017	mg/Kg	☼	10/07/13 15:15	10/08/13 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	1.1	J	5.1	0.79	mg/Kg	☼	10/15/13 10:19	10/16/13 15:24	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10	0.10	%			10/03/13 16:46	1
Percent Moisture	1.9		0.10	0.10	%			10/03/13 16:46	1

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Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27193-1

Client Sample ID: DA2ss-133M-1009-SO
Date Collected: 07/23/13 12:21
Date Received: 07/23/13 17:00

Lab Sample ID: 240-27193-2
Matrix: Solid

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.25	U	0.25	0.020	mg/Kg		08/01/13 06:38	08/05/13 11:41	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.25	U	0.25	0.0099	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
1,3-Dinitrobenzene	0.25	U	0.25	0.0041	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
2,4,6-Trinitrotoluene	**3.6**		0.25	0.019	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
2,4-Dinitrotoluene	0.25	U	0.25	0.0052	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
2,6-Dinitrotoluene	0.25	U	0.25	0.0072	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
2-Amino-4,6-dinitrotoluene	**0.049**	**J**	0.25	0.012	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
2-Nitrotoluene	0.25	U	0.25	0.013	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
3-Nitrotoluene	0.25	U	0.25	0.015	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
4-Nitrotoluene	0.25	U	0.25	0.018	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
4-Amino-2,6-dinitrotoluene	**0.045**	**J P**	0.25	0.0099	mg/Kg		08/01/13 05:57	08/05/13 20:40	1
HMX	0.25	U	0.25	0.012	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
RDX	0.25	U	0.25	0.012	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
Nitrobenzene	0.25	U	0.25	0.017	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
Tetryl	**0.016**	**J**	0.25	0.0099	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
Nitroglycerin	0.49	U	0.49	0.015	mg/Kg		08/01/13 05:57	08/02/13 19:23	1
PETN	0.49	U	0.49	0.025	mg/Kg		08/01/13 05:57	08/02/13 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*96*		*78 - 118*	*08/01/13 05:57*	*08/02/13 19:23*	*1*
3,4-Dinitrotoluene	*92*		*78 - 118*	*08/01/13 05:57*	*08/05/13 20:40*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9300**		19	9.3	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Antimony	0.97	U	0.97	0.38	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Barium	**85**		19	0.069	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Beryllium	**0.51**		0.48	0.042	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Calcium	**6300**		480	15	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Cadmium	**1.4**		0.19	0.035	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Cobalt	**10**		4.8	0.15	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Chromium	**16**		0.48	0.19	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Copper	**110**		2.4	0.72	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Iron	**22000**		9.7	4.7	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Potassium	**1200**		480	6.0	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Magnesium	**3800**		480	4.9	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Manganese	**350**	**B**	1.5	0.072	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Silver	0.48	U	0.48	0.097	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Sodium	480	U	480	64	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Nickel	**26**		3.9	0.26	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Vanadium	**14**		4.8	0.12	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Zinc	**240**		1.9	0.97	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Arsenic	**15**		0.97	0.29	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Lead	**34**		0.29	0.18	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Selenium	0.48	U	0.48	0.44	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1
Thallium	0.97	U	0.97	0.53	mg/Kg	☼	08/08/13 10:15	08/09/13 11:38	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27193-1

Client Sample ID: DA2ss-133M-1009-SO
Date Collected: 07/23/13 12:21
Date Received: 07/23/13 17:00

Lab Sample ID: 240-27193-2
Matrix: Solid
Percent Solids: 98.4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.26		0.11	0.016	mg/Kg	☼	08/08/13 14:35	08/12/13 12:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.3	J B	5.1	0.79	mg/Kg	☼	08/12/13 07:10	08/13/13 12:27	1

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Client Sample ID: DA2ss-133M-1010-SO
Date Collected: 09/25/13 10:00
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-2
Matrix: Solid

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.24	U	0.24	0.019	mg/Kg		10/03/13 16:03	10/09/13 20:32	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.25	U	0.25	0.0099	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
1,3-Dinitrobenzene	0.25	U	0.25	0.0042	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
2,4,6-Trinitrotoluene	0.25	U	0.25	0.019	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
2,4-Dinitrotoluene	0.25	U	0.25	0.0053	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
2,6-Dinitrotoluene	0.25	U	0.25	0.0072	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
2-Amino-4,6-dinitrotoluene	0.25	U	0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
2-Nitrotoluene	0.25	U	0.25	0.013	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
3-Nitrotoluene	0.25	U	0.25	0.015	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
4-Nitrotoluene	0.25	U	0.25	0.018	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
4-Amino-2,6-dinitrotoluene	0.25	U	0.25	0.0099	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
HMX	**1.7**		0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
Nitrobenzene	0.25	U	0.25	0.017	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
Tetryl	**0.16**	J	0.25	0.0099	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
Nitroglycerin	0.50	U	0.50	0.015	mg/Kg		10/03/13 14:25	10/09/13 21:22	1
PETN	0.50	U	0.50	0.025	mg/Kg		10/03/13 14:25	10/09/13 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*106*		*78 - 118*	*10/03/13 14:25*	*10/09/13 21:06*	*1*
3,4-Dinitrotoluene	*89*		*78 - 118*	*10/03/13 14:25*	*10/09/13 21:22*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
RDX	**12**		1.2	0.060	mg/Kg		10/03/13 14:25	10/10/13 14:36	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*113*		*78 - 118*	*10/03/13 14:25*	*10/10/13 14:12*	*5*
3,4-Dinitrotoluene	*94*		*78 - 118*	*10/03/13 14:25*	*10/10/13 14:36*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8700**		18	8.7	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Antimony	0.90	U	0.90	0.35	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Barium	**66**	B	18	0.064	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Beryllium	**0.46**		0.45	0.039	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Calcium	**4700**	B	450	14	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Cadmium	**1.4**		0.18	0.033	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Cobalt	**9.4**		4.5	0.14	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Chromium	**16**		0.45	0.18	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Copper	**100**		2.3	0.67	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Iron	**25000**	B	45	22	mg/Kg	☼	10/07/13 10:38	10/15/13 14:15	5
Potassium	**1400**		450	5.6	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Magnesium	**3100**	B	450	4.6	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Manganese	**310**	B	1.4	0.067	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Silver	0.45	U	0.45	0.090	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Sodium	450	U	450	60	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Nickel	**25**		3.6	0.24	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-29485-1

Client Sample ID: DA2ss-133M-1010-SO
Date Collected: 09/25/13 10:00
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-2
Matrix: Solid
Percent Solids: 97.9

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	13		4.5	0.11	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Zinc	180		1.8	0.90	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Arsenic	20		0.90	0.27	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Lead	33		0.27	0.17	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Selenium	0.45	U	0.45	0.41	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1
Thallium	0.90	U	0.90	0.50	mg/Kg	☼	10/07/13 10:38	10/15/13 10:16	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23		0.11	0.016	mg/Kg	☼	10/07/13 15:15	10/08/13 10:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	6.0		5.1	0.79	mg/Kg	☼	10/08/13 07:58	10/10/13 11:37	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10	0.10	%			10/03/13 16:46	1
Percent Moisture	2.1		0.10	0.10	%			10/03/13 16:46	1

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Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27193-1

Client Sample ID: DA2ss-134M-1009-SO
Date Collected: 07/23/13 12:41
Date Received: 07/23/13 17:00

Lab Sample ID: 240-27193-3
Matrix: Solid

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.24	U	0.24	0.020	mg/Kg		08/01/13 06:38	08/05/13 11:59	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.25	U	0.25	0.0099	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
1,3-Dinitrobenzene	0.25	U	0.25	0.0042	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
2,4,6-Trinitrotoluene	0.25	U	0.25	0.019	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
2,4-Dinitrotoluene	0.25	U	0.25	0.0052	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
2,6-Dinitrotoluene	0.25	U	0.25	0.0072	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
2-Amino-4,6-dinitrotoluene	0.25	U	0.25	0.012	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
2-Nitrotoluene	0.25	U	0.25	0.013	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
3-Nitrotoluene	0.25	U	0.25	0.015	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
4-Nitrotoluene	0.25	U	0.25	0.018	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
4-Amino-2,6-dinitrotoluene	0.25	U	0.25	0.0099	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
HMX	**0.21**	**J**	0.25	0.012	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
RDX	**1.6**		0.25	0.012	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
Nitrobenzene	0.25	U	0.25	0.017	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
Tetryl	0.25	U	0.25	0.0099	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
Nitroglycerin	0.50	U	0.50	0.015	mg/Kg		08/01/13 05:57	08/02/13 20:07	1
PETN	0.50	U	0.50	0.025	mg/Kg		08/01/13 05:57	08/02/13 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*93*		*78 - 118*	*08/01/13 05:57*	*08/02/13 20:07*	*1*
3,4-Dinitrotoluene	*94*		*78 - 118*	*08/01/13 05:57*	*08/05/13 21:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7600**		17	8.2	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Antimony	0.86	U	0.86	0.33	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Barium	**59**		17	0.061	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Beryllium	**0.42**	**J**	0.43	0.037	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Calcium	**5700**		430	14	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Cadmium	**1.2**		0.17	0.031	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Cobalt	**8.7**		4.3	0.14	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Chromium	**14**		0.43	0.17	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Copper	**83**		2.1	0.63	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Iron	**20000**		8.6	4.2	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Potassium	**910**		430	5.3	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Magnesium	**3100**		430	4.4	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Manganese	**320**	**B**	1.3	0.063	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Silver	0.43	U	0.43	0.086	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Sodium	430	U	430	56	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Nickel	**22**		3.4	0.23	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Vanadium	**12**		4.3	0.10	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Zinc	**180**		1.7	0.86	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Arsenic	**12**		0.86	0.26	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Lead	**33**		0.26	0.16	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Selenium	0.43	U	0.43	0.39	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1
Thallium	0.86	U	0.86	0.47	mg/Kg	☼	08/08/13 10:15	08/09/13 11:43	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27193-1

Client Sample ID: DA2ss-134M-1009-SO
Date Collected: 07/23/13 12:41
Date Received: 07/23/13 17:00

Lab Sample ID: 240-27193-3
Matrix: Solid
Percent Solids: 98.2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23		0.10	0.015	mg/Kg	☼	08/08/13 14:35	08/12/13 12:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	3.6	J B	5.1	0.79	mg/Kg	☼	08/12/13 07:10	08/13/13 12:29	1

8

Client Sample ID: DA2ss-134M-1010-SO
Date Collected: 09/25/13 10:08
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-4
Matrix: Solid

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.24	U	0.24	0.020	mg/Kg		10/03/13 16:03	10/09/13 20:50	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.25	U	0.25	0.010	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
1,3-Dinitrobenzene	0.25	U	0.25	0.0042	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
2,4,6-Trinitrotoluene	0.25	U	0.25	0.019	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
2,4-Dinitrotoluene	0.25	U	0.25	0.0053	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
2,6-Dinitrotoluene	0.25	U	0.25	0.0073	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
2-Amino-4,6-dinitrotoluene	0.25	U	0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
2-Nitrotoluene	0.25	U	0.25	0.013	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
3-Nitrotoluene	0.25	U	0.25	0.015	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
4-Nitrotoluene	0.25	U	0.25	0.018	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
4-Amino-2,6-dinitrotoluene	0.25	U	0.25	0.010	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
HMX	**0.080**	**J**	0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
RDX	**0.18**	**J**	0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
Nitrobenzene	0.25	U	0.25	0.018	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
Tetryl	**0.053**	**J**	0.25	0.010	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
Nitroglycerin	0.50	U	0.50	0.015	mg/Kg		10/03/13 14:25	10/09/13 22:06	1
PETN	0.50	U	0.50	0.025	mg/Kg		10/03/13 14:25	10/09/13 22:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*92*		*78 - 118*	*10/03/13 14:25*	*10/09/13 22:06*	*1*
3,4-Dinitrotoluene	*106*		*78 - 118*	*10/03/13 14:25*	*10/09/13 22:11*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7600**		19	9.1	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Antimony	0.95	U	0.95	0.37	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Barium	**58**	**B**	19	0.067	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Beryllium	**0.44**	**J**	0.47	0.041	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Calcium	**5600**	**B**	470	15	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Cadmium	**1.4**		0.19	0.034	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Cobalt	**8.8**		4.7	0.15	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Chromium	**15**		0.47	0.19	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Copper	**170**		2.4	0.70	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Iron	**24000**	**B**	47	23	mg/Kg	☼	10/07/13 10:38	10/15/13 14:19	5
Potassium	**960**		470	5.9	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Magnesium	**3000**	**B**	470	4.8	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Manganese	**330**	**B**	1.4	0.070	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Silver	0.47	U	0.47	0.095	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Sodium	470	U	470	62	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Nickel	**25**		3.8	0.26	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Vanadium	**11**		4.7	0.11	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Zinc	**160**		1.9	0.95	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Arsenic	**13**		0.95	0.28	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Lead	**45**		0.28	0.18	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Selenium	0.47	U	0.47	0.43	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1
Thallium	0.95	U	0.95	0.52	mg/Kg	☼	10/07/13 10:38	10/15/13 10:20	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-29485-1

Client Sample ID: DA2ss-134M-1010-SO
Date Collected: 09/25/13 10:08
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-4
Matrix: Solid
Percent Solids: 98.0

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25		0.11	0.016	mg/Kg	☼	10/07/13 15:15	10/08/13 11:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	1.8	J	5.1	0.79	mg/Kg	☼	10/08/13 07:58	10/10/13 11:15	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10	0.10	%			10/03/13 16:46	1
Percent Moisture	2.0		0.10	0.10	%			10/03/13 16:46	1

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Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27193-1

Client Sample ID: DA2ss-135M-1009-SO
Date Collected: 07/23/13 13:00
Date Received: 07/23/13 17:00

Lab Sample ID: 240-27193-4
Matrix: Solid

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.25	U	0.25	0.020	mg/Kg		08/01/13 06:38	08/05/13 12:17	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.24	U	0.24	0.0096	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
1,3-Dinitrobenzene	0.24	U	0.24	0.0040	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
2,4,6-Trinitrotoluene	0.24	U	0.24	0.019	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
2,4-Dinitrotoluene	0.24	U	0.24	0.0051	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
2,6-Dinitrotoluene	0.24	U	0.24	0.0070	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
2-Amino-4,6-dinitrotoluene	0.24	U	0.24	0.012	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
2-Nitrotoluene	0.24	U	0.24	0.012	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
3-Nitrotoluene	0.24	U	0.24	0.015	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
4-Nitrotoluene	0.24	U	0.24	0.017	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
4-Amino-2,6-dinitrotoluene	0.24	U	0.24	0.0096	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
HMX	**0.022**	J	0.24	0.012	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
RDX	0.24	U	0.24	0.011	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
Nitrobenzene	0.24	U	0.24	0.017	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
Tetryl	0.24	U	0.24	0.0096	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
Nitroglycerin	0.48	U	0.48	0.014	mg/Kg		08/01/13 05:57	08/02/13 20:50	1
PETN	0.48	U	0.48	0.024	mg/Kg		08/01/13 05:57	08/02/13 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*89*		*78 - 118*	*08/01/13 05:57*	*08/02/13 20:50*	*1*
3,4-Dinitrotoluene	*91*		*78 - 118*	*08/01/13 05:57*	*08/05/13 22:52*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8300**		20	9.6	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Antimony	1.0	U	1.0	0.39	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Barium	**73**		20	0.071	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Beryllium	**0.48**	J	0.50	0.043	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Calcium	**6700**		500	16	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Cadmium	**1.1**		0.20	0.036	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Cobalt	**9.4**		5.0	0.16	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Chromium	**18**		0.50	0.20	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Copper	**160**		2.5	0.74	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Iron	**22000**		10	4.9	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Potassium	**1100**		500	6.2	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Magnesium	**3600**		500	5.1	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Manganese	**340**	B	1.5	0.074	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Silver	0.50	U	0.50	0.10	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Sodium	500	U	500	66	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Nickel	**25**		4.0	0.27	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Vanadium	**13**		5.0	0.12	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Zinc	**190**		2.0	1.0	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Arsenic	**18**		1.0	0.30	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Lead	**29**		0.30	0.19	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Selenium	0.50	U	0.50	0.45	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1
Thallium	1.0	U	1.0	0.55	mg/Kg	☼	08/08/13 10:15	08/09/13 11:55	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-27193-1

Client Sample ID: DA2ss-135M-1009-SO
Date Collected: 07/23/13 13:00
Date Received: 07/23/13 17:00

Lab Sample ID: 240-27193-4
Matrix: Solid
Percent Solids: 98.3

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.11	0.017	mg/Kg	☼	08/08/13 14:35	08/12/13 12:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.9	J B	5.1	0.79	mg/Kg	☼	08/12/13 07:10	08/13/13 12:31	1

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Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-29485-1

Client Sample ID: DA2ss-135M-1010-SO
Date Collected: 09/25/13 10:20
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-5
Matrix: Solid

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.24	U	0.24	0.019	mg/Kg		10/03/13 16:03	10/09/13 21:07	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.25	U	0.25	0.0098	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
1,3-Dinitrobenzene	0.25	U	0.25	0.0041	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
2,4,6-Trinitrotoluene	0.25	U	0.25	0.019	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
2,4-Dinitrotoluene	0.25	U	0.25	0.0052	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
2,6-Dinitrotoluene	0.25	U	0.25	0.0072	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
2-Amino-4,6-dinitrotoluene	0.25	U	0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
2-Nitrotoluene	0.25	U	0.25	0.013	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
3-Nitrotoluene	0.25	U	0.25	0.015	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
4-Nitrotoluene	0.25	U	0.25	0.018	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
4-Amino-2,6-dinitrotoluene	0.25	U	0.25	0.0098	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
HMX	**0.18**	**J**	0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
RDX	**1.4**		0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
Nitrobenzene	0.25	U	0.25	0.017	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
Tetryl	**0.029**	**J**	0.25	0.0098	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
Nitroglycerin	0.49	U	0.49	0.015	mg/Kg		10/03/13 14:25	10/09/13 22:50	1
PETN	0.49	U	0.49	0.025	mg/Kg		10/03/13 14:25	10/09/13 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*90*		*78 - 118*	*10/03/13 14:25*	*10/09/13 22:50*	*1*
3,4-Dinitrotoluene	*102*		*78 - 118*	*10/03/13 14:25*	*10/09/13 23:17*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7600**		17	8.2	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Antimony	0.85	U	0.85	0.33	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Barium	**66**	**B**	17	0.061	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Beryllium	**0.41**	**J**	0.43	0.037	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Calcium	**5300**	**B**	430	14	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Cadmium	**1.6**		0.17	0.031	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Cobalt	**9.0**		4.3	0.14	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Chromium	**14**		0.43	0.17	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Copper	**89**		2.1	0.63	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Iron	**24000**	**B**	43	21	mg/Kg	☼	10/07/13 10:38	10/15/13 14:22	5
Potassium	**1000**		430	5.3	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Magnesium	**3000**	**B**	430	4.4	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Manganese	**300**	**B**	1.3	0.063	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Silver	0.43	U	0.43	0.085	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Sodium	430	U	430	56	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Nickel	**23**		3.4	0.23	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Vanadium	**12**		4.3	0.10	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Zinc	**170**		1.7	0.85	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Arsenic	**13**		0.85	0.26	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Lead	**29**		0.26	0.16	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Selenium	0.43	U	0.43	0.38	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1
Thallium	0.85	U	0.85	0.47	mg/Kg	☼	10/07/13 10:38	10/15/13 10:24	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-29485-1

Client Sample ID: DA2ss-135M-1010-SO
Date Collected: 09/25/13 10:20
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-5
Matrix: Solid
Percent Solids: 97.7

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25		0.10	0.016	mg/Kg	☼	10/07/13 15:15	10/08/13 11:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	1.0	J	5.1	0.79	mg/Kg	☼	10/08/13 07:58	10/10/13 11:17	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10	0.10	%			10/03/13 16:46	1
Percent Moisture	2.3		0.10	0.10	%			10/03/13 16:46	1

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Client Sample ID: DA2ss-135M-1010-DUP
Date Collected: 09/25/13 10:20
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-6
Matrix: Solid

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.25	U	0.25	0.020	mg/Kg		10/03/13 16:03	10/09/13 21:25	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.25	U	0.25	0.010	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
1,3-Dinitrobenzene	0.25	U	0.25	0.0042	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
2,4,6-Trinitrotoluene	**0.21**	**J**	0.25	0.019	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
2,4-Dinitrotoluene	0.25	U	0.25	0.0053	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
2,6-Dinitrotoluene	0.25	U	0.25	0.0073	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
2-Amino-4,6-dinitrotoluene	0.25	U	0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
2-Nitrotoluene	0.25	U	0.25	0.013	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
3-Nitrotoluene	0.25	U	0.25	0.015	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
4-Nitrotoluene	0.25	U	0.25	0.018	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
4-Amino-2,6-dinitrotoluene	0.25	U	0.25	0.010	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
HMX	**0.13**	**J**	0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
RDX	**0.30**		0.25	0.012	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
Nitrobenzene	0.25	U	0.25	0.018	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
Nitroglycerin	0.50	U	0.50	0.015	mg/Kg		10/03/13 14:25	10/09/13 23:33	1
PETN	0.50	U	0.50	0.025	mg/Kg		10/03/13 14:25	10/09/13 23:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*92*		*78 - 118*	*10/03/13 14:25*	*10/09/13 23:33*	*1*
3,4-Dinitrotoluene	*104*		*78 - 118*	*10/03/13 14:25*	*10/10/13 00:22*	*1*

Method: 8330B - Nitroaromatics and Nitramines (HPLC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetryl	**8.8**		1.2	0.050	mg/Kg		10/03/13 14:25	10/10/13 15:19	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*111*		*78 - 118*	*10/03/13 14:25*	*10/10/13 15:17*	*5*
3,4-Dinitrotoluene	*94*		*78 - 118*	*10/03/13 14:25*	*10/10/13 15:19*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8000**		20	9.5	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Antimony	0.99	U	0.99	0.39	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Barium	**70**	**B**	20	0.070	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Beryllium	**0.46**	**J**	0.50	0.043	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Calcium	**4800**	**B**	500	16	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Cadmium	**1.6**		0.20	0.036	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Cobalt	**9.2**		5.0	0.16	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Chromium	**16**		0.50	0.20	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Copper	**97**		2.5	0.73	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Iron	**25000**	**B**	50	24	mg/Kg	☼	10/07/13 10:38	10/15/13 14:26	5
Potassium	**1100**		500	6.2	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Magnesium	**3100**	**B**	500	5.1	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Manganese	**340**	**B**	1.5	0.073	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Silver	**0.18**	**J**	0.50	0.099	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Sodium	500	U	500	66	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Nickel	**24**		4.0	0.27	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1

Client Sample ID: DA2ss-135M-1010-DUP
Date Collected: 09/25/13 10:20
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-6
Matrix: Solid
Percent Solids: 97.8

Method: 6010B - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	12		5.0	0.12	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Zinc	180		2.0	0.99	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Arsenic	14		0.99	0.30	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Lead	32		0.30	0.19	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Selenium	0.50	U	0.50	0.45	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1
Thallium	0.99	U	0.99	0.55	mg/Kg	☼	10/07/13 10:38	10/15/13 10:36	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.088	0.013	mg/Kg	☼	10/07/13 15:15	10/08/13 11:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrocellulose	2.7	J	5.1	0.79	mg/Kg	☼	10/08/13 07:58	10/10/13 11:27	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10	0.10	%			10/03/13 16:46	1
Percent Moisture	2.2		0.10	0.10	%			10/03/13 16:46	1

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Report To:

Test America
4101 Shuffel Drive NW
North Canton, OH 44721
330-497-9396
Fax. 1-330-497-0772

Contact:	Brian Stockwell
Company:	PIKA International, Inc.
Address:	4935 South Prospect St
	Ravenna, OH 44266
Phone:	(330)296-6519
Fax:	(330)296-6638
Email:	

Bill To:

Contact:	Brian Stockwell
Company:	PIKA International, Inc.
Address:	4935 South Prospect St
	Ravenna, OH 44266
Phone:	(330)296-6519
Fax:	(330)296-6638
PO #:	
Quote #:	

Lab Lot #

Package Sealed: Yes No	Samples Sealed: Yes No
Received on Ice: Yes No	Samples Intact: Yes No
Temperature C of Cooler	

Sampler Name:	Sue Boles
Sampler Signature:	Sue Boles
Project: ERS	Project #12-08-151
Lab PM:	John McFadden

Within Hold Time: Yes No

Preserv. Indicated: Yes No N/A

pH Check OK: Yes No N/A

Res Cl2 Check OK: Yes No N/A

Sample Labels and COC Agree: Yes No COC not present

Date Required	Standard TAT
Hard Copy	
Fax/Email	

240-27193 Chain of Custody

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	Explosives (8330)	Nitrocellulose (353.2)	Nitroguanadine (8330 Modified)	TAL Metals (6010B)	Mercury (7471A)	Solids			
		Refrig #													
		#/ Cont.	glass	glass	glass	glass	glass	glass							
		Volume													
		Preserv.	4°C	4°C	4°C	4°C	4°C	4°C							
	X	DA2ss-132M-1009-SO	7/23/2013	1205	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-133M-1009-SO	7/23/2013	1221	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-134M-1009-SO	7/23/2013	1241	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-135M-1009-SO	7/23/2013	1300	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz

Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:
Sue Boles	PIKA International	7/23/2013	1600	[signature]	TA	7/23/13	1600
Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:

Matrix Key

W - Water	WW - Wastewater	DL - Drum Liquid	A Air
S - Soil	SE - Sediment	DS - Drum Solid	OL - Oil
SL - Sludge	L - Leachate	W - Wipe	O _____
SO - Solid	M - Miscellaneous		

Comments:
ALL SOIL SAMPLES MUST BE
MI SAMPLE PROCESSED

Date Received
Courier:
Hand Delivered:
Bill of Lading:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 27193
Canton Facility

Client Pika International Site Name _____ Cooler unpacked by:

Cooler Received on 7-23-13 Opened on 7/24/13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # No # Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF -1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF 0 °C)	Observed Cooler Temp. 4.6 °C	Corrected Cooler Temp. 4.6 °C	
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

Login Sample Receipt Checklist

Client: PIKA International, Inc.

Job Number: 240-27193-1

Login Number: 27193
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 07/31/13 09:49 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Test America
4101 Shuffel Drive NW
North Canton, OH 44721
330-497-9396
Fax. 1-330-497-0772

Lab Lot #

Report To:		Bill To:	
Contact:	Brian Stockwell	Contact:	Brian Stockwell
Company:	PIKA International, Inc.	Company:	PIKA International, Inc.
Address:	4935 South Prospect St	Address:	4935 South Prospect St
	Ravenna, OH 44266		Ravenna, OH 44266
Phone:	(330)296-6519	Phone:	(330)296-6519
Fax:	(330)296-6638	Fax:	(330)296-6638
Email:		PO #:	
		Quote #:	

Sampler Name: Sue Boles
Sampler Signature: Sue Boles
Project: ERS Project #12-08-151

Lab PM: John McFadden

Package Sealed Yes No	Samples Sealed Yes No
Received on Ice Yes No	Samples Intact Yes No
Temperature C of Cooler	
Within Hold Time Yes No	
Preserv. Indicated Yes No N/A	
pH Check OK Yes No N/A	
Res CL2 Check OK Yes No N/A	
Sample Labels and COC Agree Yes No COC not present	

240-29485 Chain of Custody

e Required	Standard TAT	Refrg #												
d Copy		# / Cont.	glass	glass	glass	Poly	glass	glass	glass	glass				
/Email		Volume												
		Preserv.	4°C	4°C	4°C	HNO3	4°C	4°C	4°C	4°C				

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	Explosives (8330)	Nitrocellulose (353.2)	Nitroguanadine (8330 Modified)	TAL Metals (6010B)	Mercury (7471A)	Solids	Phosphorus	White Phosphorus	
		DA2ss-132M-1010-SO	9/25/2013	0948	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-133M-1010-SO	9/25/2013	1000	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-133M-1010-ER	9/25/2013	0720	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic
		DA2ss-134M-1010-SO	9/25/2013	1008	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-135M-1010-SO	9/25/2013	1020	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-135M-1010-DUP	9/25/2013	1020	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-250M-0002-SO	9/25/2013	1211	S	MI	X	X	X	X	X	X	X	X	2-32oz
		DA2ss-250M-0002-DUP	9/25/2013	1211	S	MI	X	X	X	X	X	X	X	X	2-32oz
		DA2sw-096-1010-SW	9/25/2013	1136	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic
		DA2sw-099-1010-SW	9/25/2013	1059	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic
		DA2sw-131-1010-SW	9/25/2013	1109	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic

Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:
Sue Boles	PIKA International	9/25/2013	1600	[signature]	[signature]	9-25-13	4:47
Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:

Matrix Key

W - Water	WW - Wastewater	DL - Drum Liquid	A Air
S - Soil	SE - Sediment	DS - Drum Solid	OL - Oil
SL - Sludge	L - Leachate	W - Wipe	O _____
SO - Solid	M - Miscellaneous		

Comments:
ALL SOIL SAMPLES MUST BE MI SAMPLE PROCESSED

Date Received
Courier:
Hand Delivered:
Bill of Lading:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 29485
Canton Facility

Client Pika International Site Name

Cooler unpacked by: Rachel D. Green

Cooler Received on 9-26-13 Opened on 9-26-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

TestAmerica Cooler # Misti Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF +2 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF +1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 5	(CF +2 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 8 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other
Concerning ____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____

TestAmerica Multiple Cooler Receipt Form/Narrative — Login # : 29485
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client Coolers	8	1.6	1.6	Ice
2	1	0.8	0.8	1
3	1	1.2	1.2	1
4	1	1.2	1.2	1

Login Sample Receipt Checklist

Client: PIKA International, Inc.

Job Number: 240-29485-1

Login Number: 29485
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 09/27/13 10:36 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: PIKA International, Inc.

Job Number: 240-29485-1

Login Number: 29485
List Number: 2
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 10/02/13 11:08 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix L

TCS Operations Records

TCS Thermal Verification Tracking Form

Page 1 of 2

Ravenna Army Ammunition Plant
Ravenna, OH

Date	Cycle #	Start Time	End Time	Run Time / Notations
7/25/13	1	1450	1600	1:10
8/12/13	1	1341	~~1600~~ 1540 9/18/13 Ree	~~3:19~~ 2:19 ree 9/18/13
8/13/13	1 (cont.)	1300	1739	4:39
8/14/13	2	1100	1700	~~5:25~~ (Shutdown Mid Burn) 5:00 ree 9/18/13
08/15/13	3	0940	1427	~~4:07~~ 4:47 ree 9/18/13
8/19/13	4	11:37	1650	5:13
8/20/13	5	1042	1600	5:18
8/21/13	6	0950	1455	5:05
8/22/13	7	0855	1415	5:20
8/25/13	8	0915	1340	~~4:15~~ 4:25 ree 9/18/13
8/26/13	9	1055	1600	5:05
8/27/13	10	1240	1640	4:00
8/28/13	11	1145	1530	~~4:15~~ 3:45 ree 9/18/13
9/04/13	12	1205	1610	4:05
9/05/13	13	1328	1756	4:28
9/06/13	14	1241	1705	4:24
9/09/13	15	1138	1605	4:27
9/10/13	16	1212	1642	4:30
9/11/13	17	1122	1534	4:12
9/12/13	18	1141	1653	5:06

Logged By: James Shanka (Please Print)

Revision Signature:

TCS Thermal Verification Tracking Form

Page 2 of 2

Ravenna Army Ammunition Plant
Ravenna, OH

Date	Cycle #	Start Time	End Time	Run Time / Notations
9/16/13	19	1120	1548	4:28
9/17/13	20	1120	1640	5:20
9/18/13	21	1200	1716	5:16

Logged By: James Shanks (Please Print)

Reviewer Signature:

TCS LOG FORM

DATE: 7/25/17 Cycle #: 1 PAGE 1 OF 1

FACILITY: CUDA 2

SOURCE /BUILDING #: TCS PAP

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 800

% OUTPUT: 10%

MIN TEMP: 678

MAX TEMP: 1000

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY:

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8 (NA)
1450	Burner Started	68	75	77					
1451	Started								
1456	"Up" 5 to 6								
~~1500~~ 1600	Up to 10								
Rel.									
7/25/17									

TCS LOG FORM

DATE: 8/12/13 Cycle #: 1 PAGE 1 OF 1

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	1	(5.0 MM BTU)	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 900

% OUTPUT: 17%

MIN TEMP: 678°

MAX TEMP: 1203

HI LIMIT: (TC2) TC3

CONTROL: (TC2) TC4

LOGGED BY:

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1341	TCS ON CVS	143	145	141	150	72	72	75	86
1354	Output to 5%								
1355	Output to 10%	247	273	244	290	72	80	78	87
1357	Output to 20%								
1400	———	523	581	527	614	73	95	86	88
1402	Output to 30%	571	624	581	682	73	99	92	89
1405	———	610	896	626	950	73	110	103	90
1410	———	919	998	935	1056	73	125	126	91
1415	Output to 35%	957	1031	976	1096	72	136	143	89
1420	———	1025	1093	1046	1162	74	160	164	89
1425	~~Output to 33%~~	1130	1186	1147	1265	79	185	183	89
1430	———	1142	1192	1163	1264	88	189	165	87
1431	Output to 32%								
1435	Output to 30%	1147	1189	1164	1266	97	196	191	88
1436	Output to 29%								
1440	———	1158	1194	1174	1267	116	197	193	89
1441	Output to 28%								
1445	Output to 25%	1163	1196	1177	1259	129	198	194	89
1447	Output to 30%								
1450	———	1216	1260	1227	1322	196	203	196	88
1500	———	1307	1350	1306	1402	162	212	199	88
1515	———	1420	1456	1413	1496	176	222	211	89
1520	Output to 28%	1452	1480	1439	1511	180	640	224	91
1530	Output to 26%	1456	1477	1443	1505	183	285	226	91
1540	Shutdown to continue	8/13/13							

CONT

TCS LOG FORM

DATE: 8/13/13 Cycle #: 1 CONT PAGE 1 OF 1

FACILITY: RUMAP

SOURCE /BUILDING #:

TCS UNIT:			OPERATED AS:					
	1	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	5 MM
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO EXCESS AIR

SET POINT: 900

% OUTPUT: 10%

MIN TEMP: 678

MAX TEMP: 1700

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY:

NOT FUNCTIONAL

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1300	TCS ON								
1300	OUTPUT 15%	123	122	126	129	~~317~~	279	280	82
1305	25%	723	806	728	837	~~317~~	279	284	82
1310	25%	923	1002	931	1023	~~318~~	279	287	84
1315	30%	991	1065	995	1082	~~318~~	280	289	84
1320	35%	1172	1262	1177	1284	~~318~~	280	293	84
1325	33%	1325	1428	1328	1448	318	282	296	84
1330	30%	1390	1480	1389	1499	~~317~~	282	303	87
1345	25%	1429	1480	1424	1490	314	283	318	88
1400	—	1425	1469	1422	1478	312	283	352	85
1415	22%	1455	1480	1447	1492	311	284	394	66
1430	—	1412	1443	1409	1447	312	288	447	86
1445	—	1420	1450	1417	1454	316	323	491	87
1500	—	1438	1464	1433	1468	324	317	545	86
1515	21%	1450	1475	1444	1475	337	332	570	84
1530	—	1438	1461	1434	1463	349	356	613	82
1545	—	1443	1466	1439	1466	369	380	663	82
1600	~~20%~~	1450	1473	1445	1471	387	415	707	82
1615	—	1433	1450	1428	1448	409	455	743	84
1630	—	1433	1452	1430	1450	433	498	782	83
1645	—	1434	1454	1433	1457	468	553	989	82
1700	—	1438	1458	1437	1459	493	605	893	82
1705	—	1442	1462	1441	1463	506	624	903	81
1710	—	1442	1461	1440	1462	511	632	935	83
1715	—	1445	1464	1443	1466	—	650	934	85
1720	—	1446	1465	1444	1466	—	665	942	80
1724	BEGIN SOAK TIME								
1739	BURN COMPLETE								

TCS LOG FORM

DATE: 08/14/13 Cycle #: 2 PAGE 1 OF 2

FACILITY: RYAHP

SOURCE /BUILDING #:

TCS UNIT:	1	(5.0 MM BTU)	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 900

% OUTPUT: 1%

MIN TEMP: 678

MAX TEMP: 1500

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shaker

Burner out

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1059	TCS on 5%	78	78	75	74	72	67	67	66
1102	15%	84	93	84	101	71	68	68	67
1105	25%	300	362	313	380	71	68	68	67
1110	—	782	860	805	896	71	68	69	70
1115	—	923	993	940	1011	72	69	68	71
1120	30%	1000	1071	1017	1083	75	76	69	71
1120	25%								
1125	—	1085	1154	1100	1164	79	75	89	71
1130	—	1139	1203	1149	1213	83	91	94	72
1135	—	1187	1248	1196	1256	138	117	109	73
1140	22%	1223	1270	1228	1273	168	134	116	74
1145	—	1203	1250	1210	1256	174	152	118	75
1150	—	1219	1264	1225	1270	170	170	129	75
1155	21%	1229	1272	1236	1280	167	141	140	74
1200	—	1228	1269	1234	1272	169	196	150	74
1205	20%	1236	1275	1242	1280	172	198	156	75
1210	—	1226	1260	1230	1263	172	201	158	74
1215	—	1227	1260	1231	1264	171	203	158	75
1220	—	1233	1265	1237	1271	172	204	159	76
1225	—	1241	1270	1246	1279	173	204	161	76
1230	—	1244	1274	1248	1281	174	203	162	77
1235	19%	1252	1280	1257	1289	177	200	164	79
1240	—	1243	1271	1247	1275	182	202	165	79
1245	—	1243	1269	1246	1272	184	204	165	77
1250	—	1246	1272	1249	1276	186	202	168	77
1255	—	1247	1274	1251	1277	187	204	169	76
1300	18%	1250	1275	1253	1279	187	204	173	76
1305	—	1236	1257	1238	1261	194	202	179	76
1310	—	1232	1253	1235	1257	195	202	182	79
1315	—	1234	1255	1237	1259	198	203	188	81
1320	—	1234	1256	1237	1259	199	203	194	80

TCS LOG FORM

DATE: 08/14/13 Cycle #: 2 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY:

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1325	25%	1268	1300	1270	1320	202	205	198	77
1330	Shutdown								
1405	TCS on 5%	450	405	446	400	223	208	248	77
1410	25%	465	468	484	503	230	280	250	78
1415	—	1007	1072	1025	1091	241	290	256	78
1420	—	1134	1194	1149	1211	248	301	257	79
1425	—	1223	1280	1234	1294	253	314	257	80
1430	—	1292	1345	1301	1356	259	326	260	80
1435	—	1337	1389	1347	1400	264	340	262	81
1440	—	1388	1438	1397	1447	268	356	270	82
1445	—	1419	1467	1425	1475	273	370	276	82
1450	20%	1437	1483	1443	1492	274	406	277	82
1455	—	1401	1428	1402	1430	276	424	364	81
1500	—	1386	1412	1388	1415	279	435	365	82
1505	18%	1382	1408	1384	1411	286	446	366	83
1510		1351	1369	1351	1369	290	460	371	84
1515		1337	1354	1337	1355	296	476	380	82
1520		1327	1344	1328	1345	302	493	390	82
1525		1322	1339	1323	1342	311	514	405	83
1530		1319	1336	1320	1340	316	529	416	84
1535		1317	1332	1318	1335	326	554	430	84
1540		1315	1332	1317	1335	341	584	450	83
1545		1314	1330	1316	1334	350	601	463	83
1550		1314	1332	1316	1334	363	630	484	83
1555		1314	1333	1315	1333	375	651	500	82
1600		1316	1334	1317	1336	388	675	520	84
1605		1315	1333	1316	1334	404	700	543	83
1610		1316	1333	1317	1335	416	718	556	81
1615		1316	1333	1317	1335	433	744	581	81
1620		1315	1332	1316	1334	446	761	601	82
1625		1318	1334	1319	1337	471	795	637	81
1630		1320	1327	1321	1339	498	804	648	82
1635		1322	1338	1323	1341	499	820	666	83
1640		1324	1340	1324	1343	609	842	696	82
1645		1325	1341	1326	1343	625	861	720	82
1655		1330	1346	1331	1349	688	898	772	8
1700	BEGIN	SONIC	T	MK	(BURNER		OFF)		
1715		BURN		COMPLETE					

TCS LOG FORM

DATE: 8/15/13 Cycle #: #3 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 900

% OUTPUT: 58%

MIN TEMP: 6749.

MAX TEMP: 1200

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
0940	TCS ON	76	75	79	63	67	64	73	66
0943	15%	95	107	94	102	67	64	73	64
0945	—	326	373	330	387	67	63	71	67
0947	20%	473	540	475	500	68	64	72	67
0950	—	685	770	694	793	70	64	74	67
0955	—	850	927	860	930	84	70	79	70
1000	—	969	1043	973	1053	107	100	87	72
1005	—	1035	1106	1042	1117	125	124	90	73
1010	—	1099	1165	1102	1175	140	148	102	75
1015	—	1156	1218	1160	1227	146	160	118	75
1020	—	1183	1243	1186	1255	150	163	129	75
1025	—	1224	1280	1227	1289	155	161	140	75
1030	—	1251	1307	1255	1316	166	164	146	76
1035	—	1283	1339	1266	1338	182	165	152	76
1040	—	1310	1363	1311	1361	190	167	156	77
1045	—	1332	1384	1332	1381	197	168	158	79
1050	—	1356	1406	1357	1390	205	169	161	80
1055	23%	1377	1426	1377	1420	212	170	164	80
1100	—	1361	1401	1360	1386	222	171	170	80
1105	—	1363	1403	1363	1398	234	166	171	81
1110	22%	1372	1410	1371	1405	240	169	184	82
1115	—	1369	1404	1368	1400	258	175	191	82
1120	21%	1372	1407	1371	1403	270	177	195	80
1125	—	1359	1391	1357	1385	283	181	199	79
1130	—	1359	1389	1354	1384	290	190	207	79
1135	—	1364	1396	1362	1391	310	196	209	83
1140	—	1367	1402	1365	1394	333	204	219	83
1145	—	1371	1406	1368	1396	355	216	223	82
1150	20%	1378	1413	1374	1401	380	239	232	82
1155	—	1364	1391	1364	1394	400	259	242	83
1200	—	1361	1389	1361	1397	417	282	247	83

TCS LOG FORM

DATE: 08/15/13 Cycle #: #3 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1205	—	1362	1389	1361	1394	442	312	254	83
1210	19%	1364	1392	1363	1392	475	357	265	82
1215	—	1349	1373	1348	1374	490	398	276	81
1220	—	1344	1367	1343	1368	516	436	284	81
1225	—	1342	1365	1340	1365	548	494	299	82
1230	—	1340	1364	1340	1365	560	525	309	84
1235	—	1341	1365	1340	1366	590	582	321	85
1240	—	1343	1366	1341	1366	615	634	336	85
1245	—	1342	1365	1341	1365	625	689	350	83
1250	—	1344	1367	1342	1367	670	758	370	84
1255	—	1346	1369	1345	1370	687	784	379	85
1300	—	1347	1376	1346	1371	708	815	394	84
1305	—	1350	1373	1349	1373	743	856	416	84
1310	—	1352	1374	1351	1375	764	884	424	83
1315	—	1352	1374	1351	1374	790	919	444	82
1320	18%	1355	1378	1354	1376	813	944	460	82
1325	—	1340	1357	1337	1356	835	969	475	82
1330	—	1336	1354	1335	1354	858	992	491	83
1335	—	1332	1349	1330	1349	886	1016	511	84
1340		1330	1348	1328	1348	914	1039	531	84
1345	—	1330	1348	1329	1348	939	1064	557	83
1350	—	1330	1347	1328	1347	955	1079	573	85
1355	—	1330	1348	1329	1349	980	1101	602	85
1400	—	1332	1350	1330	1350	999	1119	625	84
1405	—	1321	1349	1330	1348	1015	1134	650	84
1410	—	1333	1352	1332	1352	1033	1149	673	84
1412	Begin Soak Time								
1427	End Soak Time Burn Complete								

TCS LOG FORM

DATE: 08/19/13 Cycle #: 4 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 900°

% OUTPUT: 1%

MIN TEMP: 678°

MAX TEMP: 1200°

HI LIMIT: (TC1) TC3

CONTROL: (TC1) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1137	TCS On	74	71	75	72	71	70	70	75
1142	15%	100	109	111	114	71	69	69	75
1145		356	409	372	425	71	70	68	75
1150	20%	492	529	509	549	77	71	71	77
1155		682	742	708	675	87	77	79	79
1200		740	799	765	918	94	88	87	81
1205		775	830	798	944	112	100	95	81
1210		800	850	825	860	135	117	107	82
1215		816	870	840	884	149	126	114	83
1220	22%	828	883	854	900	169	138	126	86
1225	21%	880	945	909	961	197	155	139	85
1230		880	940	907	955	209	170	151	84
1235	22%	874	935	898	939	214	192	169	84
1240	23%	894	952	911	955	214	214	187	83
1245		898	971	928	978	215	214	202	83
1250		902	975	932	980	215	214	208	83
1255		903	976	934	980	216	214	212	83
1300		903	978	934	982	215	214	213	83
1305		910	981	939	988	215	214	213	84
1310	22%	917	992	944	997	215	214	213	83
1315		910	982	939	986	215	214	213	86
1320		910	981	938	984	215	214	213	86
1325		915	986	941	988	215	214	213	85
1330		919	989	945	993	215	214	213	85
1335	21%	923	995	949	996	214	214	213	84
1340		912	976	936	980	212	214	213	84
1345		914	980	937	981	201	214	212	87
1350		916	983	939	987	239	214	212	84
1355	20%	923	991	943	990	317	214	212	88
1400		910	973	924	970	328	214	212	94
1405		906	971	924	963	344	214	209	88

TCS LOG FORM

DATE: 08/19/13 Cycle #: 4

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1410		905	967	924	965	370	214	200	86
1415		909	969	926	968	425	214	199	86
1420		917	974	935	977	455	213	194	88
1425		919	977	938	941	489	214	192	89
1430		927	983	943	986	519	211	252	91
1435		932	991	949	992	555	211	362	89
1440	19%	937	997	955	997	578	212	433	90
1445		922	975	937	975	611	263	486	89
1450		921	974	935	968	661	205	488	89
1455		922	977	936	970	661	201	494	91
1500		926	980	940	973	682	216	513	91
1505		931	984	944	978	700	208	527	92
1510		935	987	948	980	722	221	546	93
1515	18%	940	995	953	983	734	233	550	91
1520		925	977	939	964	751	249	561	92
1525		923	976	936	963	752	276	560	92
1530		927	980	941	967	765	296	570	90
1535		936	986	950	979	792	345	589	90
1540		945	996	961	989	805	373	594	89
1545	17%	955	998	971	999	823	398	605	90
1550		944	992	960	984	838	428	599	90
1555		946	994	963	986	844	451	615	91
1600	16%	952	1000	969	993	858	495	636	89
1605		940	984	955	975	862	526	631	88
1610		945	988	959	979	872	549	639	90
1615		951	995	965	983	881	591	640	87
1620		961	1000	974	992	887	629	648	88
1625	15%	968	1005	979	996	896	006	664	90
1630		956	993	967	982	900	696	671	90
1635	Begin Soak Time								
1650	Soak Time Complete	Shut-down							

TCS LOG FORM

DATE: 08/20/13 Cycle #: #5 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 900°

% OUTPUT: 1%

MIN TEMP: 678°

MAX TEMP: 1200°

HI LIMIT: (TC2) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1042	TCS On	78	79	77	76	68	70	68	78
1045	15%	256	357	301	396	68	72	68	80
1050		615	707	660	749	68	132	67	81
1055	20%	711	794	750	836	71	212	71	64
1100	[redacted]	744	825	782	868	78	212	75	84
1105	25%	774	851	810	896	91	212	84	87
1110	[redacted]	795	871	832	916	108	212	88	86
1115	30%	808	874	843	925	124	213	97	87
1120		819	885	856	938	142	211	106	88
1125		825	894	863	942	155	208	113	88
1130		836	904	874	952	174	208	126	91
1135		843	907	882	956	205	200	136	90
1140	35%	827	876	862	924	217	337	152	91
1145		860	916	900	968	216	411	163	91
1150		868	924	907	974	216	475	168	92
1155		879	937	917	984	216	520	179	91
1200		884	945	925	993	216	547	195	91
1205		893	952	929	997	216	569	214	92
1210		895	953	930	998	215	581	214	93
1215		899	957	934	1005	216	600	213	93
1220		904	963	939	1010	216	612	215	94
1225		910	966	943	1010	216	616	212	95
1230		915	972	947	1017	216	634	213	95
1235	30%	923	976	956	1020	216	645	213	93
1240		900	949	928	987	216	655	211	93
1245		898	951	926	986	216	663	211	92
1250	35%	898	949	924	982	216	664	211	94
1255		954	1022	987	1062	216	658	213	93
1300		981	1056	1015	1090	216	668	213	94
1305	34%	1000	1069	1033	1106	216	697	213	94
1310		983	1062	1012	1076	216	725	212	95

TCS LOG FORM

DATE: 8/20/13 Cycle #: 5 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1315		979	1037	1007	1072	216	740	211	97
1320		988	1051	1017	1086	216	739	212	96
1325		1013	1077	1040	1113	216	761	213	97
1330		1026	1091	1052	1121	216	771	212	96
1335		1031	1096	1053	1124	216	777	212	97
1340		1042	1109	1067	1137	215	800	212	97
1345	30%	1056	1122	1080	1149	215	809	213	96
1350		1024	1081	1042	1099	215	824	210	95
1355		1018	1077	1035	1092	215	835	210	94
1400	40%	1028	1099	1052	1129	215	830	212	93
1405		1191	1296	1221	1300	215	902	213	95
1410		1221	1318	1248	1329	215	939	213	94
1415		1255	1359	1281	1364	215	990	214	94
1420	38%	1287	1389	1310	1396	214	1042	213	94
1425	37%	1293	1394	1315	1402	212	1080	214	96
1430		1287	1382	1303	1393	207	1100	214	96
1435		1311	1408	1331	1427	204	1125	213	96
1420	35%	1319	1420	1340	1440	200	1137	213	97
1445		1317	1411	1335	1429	193	1155	212	96
1450		1325	1419	1344	1441	191	1169	212	97
1455	34%	1340	1435	1359	1455	189	1181	212	98
1500		1330	1420	1345	1438	184	1200	211	96
1505		1332	1418	1349	1433	181	1219	211	97
1510		1331	1419	1346	1436	180	1230	210	98
1515		1336	1423	1349	1437	176	1246	206	97
1520	33%	1343	1431	1356	1445	176	1264	208	97
1525		1342	1424	1353	1439	178	1277	203	97
1530		1344	1428	1356	1436	183	1293	197	97
1535		1349	1430	1360	1439	200	1303	196	97
1540	32%	1357	1434	1366	1442	243	1317	201	97
1545	31%	1361	1438	1369	1443	292	1326	194	97
1550		1358	1429	1365	1439	343	1336	200	96
1555		1364	1433	1371	1443	386	1346	221	95
1600	Shut Down								

TCS LOG FORM

DATE: 06/21/13 Cycle #: 6 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 900

% OUTPUT: 1%

MIN TEMP: 678°

MAX TEMP: 1200°

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
0950	TCS On	67	84	82	74	132	62	100	74
0955	15%	153	168	168	181	131	66	103	76
1000	20%	450	497	485	522	140	74	114	77
1005	25%	597	670	644	700	145	92	126	79
1010		639	925	889	961	153	108	137	82
1015	23%	940	824	940	1000	159	125	158	82
1020	21%	982	1055	1023	1085	173	135	174	84
1025	19%	1005	1066	1040	1090	190	145	202	85
1030	16%	997	1047	1024	1068	205	151	227	89
1035		994	1036	1018	1057	232	161	268	86
1040	17%	1001	1044	1025	1062	252	173	299	86
1045		995	1032	1015	1049	279	160	326	87
1050		994	1034	1018	1054	306	188	361	88
1055	16%	1007	1041	1024	1057	331	197	384	89
1100		997	1026	1013	1040	365	205	421	90
1105		998	1026	1013	1040	395	214	451	90
1110		1002	1030	1019	1044	426	228	486	91
1115	15%	1006	1035	1024	1044	465	240	529	91
1120		995	1017	1007	1028	503	256	572	92
1130		994	1015	1006	1026	527	267	599	91
1135		994	1015	1006	1026	554	279	625	92
1140		997	1018	1009	1029	579	294	655	93
1145		994	1019	1009	1029	603	309	679	93
1150		1002	1023	1014	1033	621	321	696	94
1155		1005	1025	1017	1036	643	335	718	93
1200		1010	1030	1022	1041	664	351	739	94
1205		1013	1033	1024	1043	679	361	751	94
1210		1017	1036	1028	1047	697	375	767	95
1215		1020	1039	1030	1048	712	386	778	94
1220		1026	1045	1037	1053	733	404	797	95
1225	14%	1029	1047	1039	1057	745	414	806	95

TCS LOG FORM

DATE: 8/21/13 Cycle #: 6 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1230		1014	1028	1021	1035	760	428	819	95
1235		1009	1022	1017	1030	773	434	830	95
1240		1008	1021	1015	1028	788	452	842	96
1245		1006	1019	1013	1026	800	462	852	95
1250		1006	1019	1013	1027	809	471	858	96
1255		1006	1019	1013	1026	821	482	869	96
1300		1006	1020	1014	1027	832	492	879	96
1305		1007	1021	1015	1028	845	505	889	96
1310		1008	1022	1016	1029	850	510	890	95
1315		1011	1024	1018	1031	862	525	900	97
1320		1010	1022	1017	1029	869	532	905	94
1325		1011	1024	1019	1030	876	543	912	97
1330		1013	1027	1021	1033	844	554	916	97
1335		1013	1026	1020	1033	891	564	923	96
1340		1015	1027	1022	1034	900	577	931	95
1345		1017	1029	1024	1036	906	587	934	97
1350		1017	1030	1024	1036	914	598	941	96
1355		1020	1033	1027	1040	920	606	946	96
1400		1022	1034	1029	1040	925	615	950	95
1405		1022	1034	1029	1041	930	622	956	95
1410		1023	1035	1030	1041	936	630	961	95
1415		1024	1036	1031	1042	941	637	965	94
1420		1027	1040	1031	1046	946	647	970	96
1425		1028	1040	1035	1047	951	657	974	96
1430		1030	1041	1037	1048	955	663	979	97
1435		1032	1044	1039	1050	959	671	981	97
1440	Begin Soak Time								
1455	End Soak Time	System Shutdown							

TCS LOG FORM

DATE: 08/22/13 Cycle #: 7 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1100°

% OUTPUT: 1%

MIN TEMP: 678°

MAX TEMP: 1500°

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
0855	TCS ON	84	79	80	72	69	69	71	73
0900	19%	203	211	201	219	66	69	70	75
0905	25%	476	509	462	539	66	70	70	75
0910	30%	806	875	818	920	70	70	70	77
0915	27%	972	1046	979	1090	71	71	70	79
0920	29%	1050	1111	1050	1140	75	67	70	79
0925	20%	1060	1118	1070	1145	78	68	78	80
0930		1048	1085	1048	1104	80	77	122	80
0935	18%	1066	1100	1067	1121	86	88	155	82
0940		1044	1068	1043	1086	93	99	160	83
0945		1044	1087	1043	1084	101	112	162	83
0950		1051	1074	1050	1092	109	125	163	85
0955		1056	1079	1056	1096	118	135	163	83
1000		1065	1087	1065	1104	127	142	164	85
1005		1076	1099	1076	1116	138	149	165	86
1010		1083	1105	1083	1122	145	154	163	85
1015	20%	1094	1116	1094	1131	152	157	163	86
1020		1120	1148	1122	1167	156	160	162	86
1025	23%	1151	1178	1152	1195	161	164	163	86
1030	24%	1223	1260	1225	1283	165	166	163	86
1035		1278	1317	1281	1341	168	169	165	86
1040		1314	1353	1318	1376	172	172	165	86
1045	22%	1347	1382	1348	1389	175	173	167	86
1050		1340	1367	1341	1386	179	176	166	87
1055	21%	1352	1379	1352	1394	184	177	167	86
1100		1346	1370	1346	1384	188	178	169	86
1105		1351	1375	1351	1389	186	174	174	86
1110		1357	1380	1357	1394	188	180	173	86
1115	20%	1364	1383	1365	1402	189	181	173	84
1120		1351	1367	1351	1382	191	179	173	85
1125		1353	1371	1351	1377	192	180	173	85

TCS LOG FORM

DATE: 08/22/13 Cycle #: 7 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1130		1355	1375	1354	1374	192	180	173	86
1135		1358	1375	1356	1376	194	182	171	85
1140		1361	1371	1360	1378	195	185	171	84
1145		1366	1375	1363	1384	197	183	169	84
1150		1367	1377	1366	1390	197	187	168	84
1155		1375	1385	1373	1397	198	192	167	85
1200		1371	1391	1375	1394	198	194	167	84
1205		1382	1396	1386	1399	199	198	165	85
1210		1386	1406	1383	1402	200	200	170	85
1215		1391	1406	1384	1408	200	205	175	85
1220		1394	1409	1391	1411	200	208	178	85
1225		1399	1414	1396	1416	200	211	188	87
1230		1402	1416	1400	1420	200	213	192	86
1235		1406	1421	1405	1426	201	220	202	87
1240		1410	1426	1409	1434	202	224	210	87
1245		1414	1432	1413	1442	200	232	223	89
1250	19%	1419	1437	1418	1446	200	241	236	89
1255		1409	1424	1407	1430	204	241	251	89
1300		1406	1420	1403	1426	202	250	268	89
1305	23%	1409	1430	1411	1442	203	268	290	90
1310		1450	1474	1450	1493	202	281	305	89
1315		1471	1495	1467	1499	204	295	334	88
1320	22%	1475	1493	1469	1499	206	303	353	90
1325		1492	1515	1491	1527	208	317	377	90
1330	25%	1364	1322	1360	1301	211	337	396	91
1335		1355	1385	1369	1418	228	350	429	91
1340	23%	1472	1510	1474	1528	241	360	457	91
1345	20%	1500	1530	1498	1536	266	383	483	92
1350		1300	1296	1297	1305	266	403	505	92
1355		1396	1415	1394	1424	311	422	532	91
1400		1416	1437	1416	1445	335	442	556	92
1405	19%	1433	1454	1431	1461	365	461	588	92
1410		1431	1447	1428	1453	390	483	612	93
1415	Shut Down								

TCS LOG FORM

DATE: 08/25/13 Cycle #: 8 PAGE 1 OF 2

FACILITY: RVAAD

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600'

% OUTPUT: 1%

MIN TEMP: 675'

MAX TEMP: 1500'

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
0915	TCS On	67	64	62	58	64	67	65	66
0917	15%	155	116	152	167	66	67	67	65
0920	25%	294	345	300	361	67	68	77	66
0925	35%	718	800	728	821	70	73	113	67
0930	40%	1069	1184	1082	1215	73	96	171	73
0935		1230	1359	1251	1391	80	122	207	73
0940	35%	1355	1477	1370	1505	96	155	247	76
0945	32%	1380	1476	1387	1494	119	162	284	77
0950	30%	1400	1486	1407	1503	144	166	314	79
0955	28%	1408	1479	1413	1494	165	173	299	79
1000	27%	1423	1490	1429	1509	173	178	340	80
1005	26%	1432	1492	1436	1510	181	183	379	81
1010		1433	1486	1438	1504	190	198	419	82
1015	25%	1434	1483	1440	1499	189	220	446	82
1020		1443	1492	1446	1505	190	256	483	83
1025	24%	1454	1504	1456	1514	190	291	527	84
1030		1451	1496	1451	1503	190	309	571	84
1035	23%	1456	1501	1456	1507	190	330	601	84
1040		1451	1490	1451	1495	190	357	643	85
1045		1453	1491	1453	1497	192	384	670	85
1050		1458	1497	1458	1504	194	417	707	86
1055		1462	1500	1463	1509	195	443	728	87
1100		1472	1508	1478	1511	196	460	748	88
1105	22%	1477	1514	1474	1514	197	503	775	89
1110		1469	1501	1467	1504	196	532	806	90
1115		1471	1502	1468	1505	198	555	826	90
1120		1473	1503	1471	1507	197	482	848	90
1125		1477	1507	1475	1511	196	523	865	90
1130	21%	1482	1513	1479	1517	229	548	882	93
1135		1472	1499	1469	1502	257	578	899	92
1140		1471	1496	1467	1499	271	602	916	90

TCS LOG FORM

DATE: 08/25/13 Cycle #: 8 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1145		1472	1500	1468	1501	285	633	931	93
1150		1475	1503	1471	1504	292	654	943	93
1155		1478	1507	1474	1508	312	696	961	94
1200		1481	1506	1477	1510	330	703	975	93
1205		1483	1510	1478	1512	342	716	984	94
1210	10%	1487	1515	1481	1507	339	730	997	95
1215		1330	1306	1322	1301	353	735	1006	92
1220		1267	1242	1262	1238	388	742	1015	91
1225	11%	1225	1203	1221	1202	428	750	1022	90
1230	12%	1194	1181	1196	1181	469	753	1031	91
1235		1187	1169	1183	1170	485	756	1035	92
1240	8%	1167	1151	1165	1152	512	767	1040	92
1245	6%	1075	1020	1069	1024	527	765	1043	95
1250	7%	1015	992	1010	968	554	771	1046	94
1255		977	936	973	933	577	779	1048	93
1300	8%	941	901	939	901	590	786	1048	93
1305		953	930	953	933	632	797	1048	90
1310		935	914	935	918	684	811	1046	91
1315		929	910	929	913	701	817	1045	1600
	SOAK BEGAN @ 1310 (# 8 NOT DISABLED)								
1340		SOAK COMPLETE							

TCS LOG FORM

DATE: 4/26/13 Cycle #: 9 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:								
1	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600

% OUTPUT: 1%

MIN TEMP: 678

MAX TEMP: 1500

HI LIMIT: (TC) TC3

CONTROL: (TC) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1055	TCS On	86	85	85	83	73	68	74	83
1100	15%	117	129	135	134	73	70	74	84
1105	25%	360	405	430	442	90	79	70	84
1110	35%	628	726	753	790	145	93	71	85
1115	40%	822	977	1021	1074	184	110	72	89
1120	45%	980	1140	1172	1236	213	130	66	89
1125		1100	1275	1300	1364	390	146	75	91
1130		1200	1360	1373	1450	436	163	91	92
1135	40%	1270	1423	1400	1495	483	181	111	91
1140	35%	1308	1450	1444	1511	537	205	136	94
1145	32%	1322	1452	1431	1505	562	225	143	93
1150		1336	1463	1443	1505	567	251	157	96
1155	31%	1359	1478	1453	1504	602	281	166	95
1200	29%	1364	1473	1446	1504	670	316	165	91
1205		1371	1478	1452	1508	712	354	169	95
1210		1378	1484	1455	1510	764	382	173	95
1215		1383	1483	1456	1507	827	410	179	96
1220		1387	1485	1457	1507	887	440	187	97
1225		1392	1491	1463	1513	926	478	192	97
1230	26%	1401	1499	1469	1518	954	520	197	98
1235		1402	1497	1467	1515	976	560	203	98
1240	25%	1410	1501	1470	1516	994	596	209	97
1245		1409	1497	1467	1511	1016	635	208	97
1250		1413	1501	1470	1515	1030	680	207	97
1255	24%	1418	1505	1473	1516	1037	705	209	98
1300		1417	1499	1466	1510	1054	743	209	99
1305		1418	1500	1469	1511	1062	766	211	94
1310	23%	1423	1503	1472	1512	1075	803	215	98
1315		1421	1495	1465	1503	1082	820	217	96
1320	21%	1411	1476	1446	1480	1092	846	223	94
1325	15%	1401	1460	1433	1465	1096	870	229	97

TCS LOG FORM

DATE: 8/26/13 Cycle #: 9 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1330		1365	1400	1369	1391	1097	881	232	96
1335	10%	1309	1320	1287	1302	1048	905	237	95
1340	11%	1249	1248	1222	1232	1063	928	249	97
1345	12%	1228	1226	1205	1315	1049	941	258	97
1350	13%	1212	1213	1193	1204	1034	955	261	96
1355	14%	1198	1205	1188	1198	1019	970	257	97
1400		1190	1202	1185	1198	1010	984	261	96
1405		1180	1200	1176	1190	1006	995	263	95
1410	15%	1160	1195	1181	1195	1004	1001	270	95
1415	16%	1178	1195	1191	1196	1003	1007	275	93
1420		1185	1207	1194	1210	1006	1016	284	94
1425	17%	1186	1209	1191	1214	1011	1022	293	95
1430		1196	1224	1209	1230	1018	1028	305	96
1435		1149	1228	1210	1233	1026	1035	316	96
1440		1202	1230	1212	1236	1034	1040	329	96
1445		1204	1233	1216	1239	1092	1047	345	99
1450		1206	1234	1217	1240	1051	1053	359	96
1455		1208	1236	1219	1242	1061	1058	373	97
1500		1209	1237	1220	1242	1069	1065	386	96
1505		1211	1239	1223	1245	1078	1070	400	97
1510		1211	1239	1224	1245	1086	1076	414	97
1515		1213	1240	1226	1246	1095	1081	431	97
1520		1214	1241	1226	1247	1102	1087	449	97
1525		1215	1242	1228	1248	1110	1093	467	97
1530		1217	1244	1230	1250	1116	1097	486	98
1535		1217	1244	1228	1249	1123	1101	504	96
1540		1219	1246	1232	1252	1131	1105	525	98
1545		1219	1245	1232	1250	1136	1109	542	96
1550		1221	1247	1234	1253	1143	1115	564	96
1600	System Shutdown	1223	1249	1235	1254	1156	1124	600	97
1610		1093	1062	1036	1031	1148	1127	650	95
1618	Begin Soak Time	1040	1004	994	964	1125	1129	678	94
1633	End Soak Time	969	912	966	883	1078	1130	733	99

TCS LOG FORM

DATE: 08/27/13 Cycle #: 10 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600

% OUTPUT: 1%

MIN TEMP: 678'

MAX TEMP: 1500'

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1240	TCS On	81	75	77	79	72	72	70	80
1245	15%	253	301	249	245	75	72	70	79
1247	25%	447	537	543	530	81	73	70	79
1250	35%	560	642	648	642	94	75	70	81
1255	45%	789	896	913	909	125	76	71	83
1300		966	1082	1095	1100	157	93	75	85
1305		1015	1125	1140	1145	199	100	88	85
1310		1067	1167	1191	1202	216	147	100	86
1315		1124	1219	1245	1250	199	181	158	87
1320	[redacted]	1160	1261	1284	1283	200	189	213	88
1320		1192	1294	1322	1322	203	198	213	88
1330		1228	1346	1358	1378	205	201	213	89
1335		1262	1402	1396	1443	207	201	213	88
1340		1304	[redacted]1462	1438	1502	206	200	205	89
1345	37%	1335	1485	1453	1519	204	197	204	89
1350		1359	1489	1452	1514	230	188	201	89
1355		1374	1483	1449	1507	227	186	201	89
1400	32%	1387	1498	1460	1518	223	187	202	90
1405	30%	1394	1494	1457	1512	230	189	204	89
1410	29%	1402	1497	1461	1516	237	189	205	89
1415		1404	1490	1457	1507	256	188	206	89
1420		1407	1492	1459	1509	261	188	206	90
1425	[redacted]1.27%	1416	1499	1464	1514	282	189	206	89
1430		1420	1499	1468	1516	360	191	207	90
1435	26%	1414	1484	1456	1502	307	192	207	90
1440		1416	1486	1459	1502	315	192	207	90
1445		1419	1489	1463	1505	328	193	205	90
1450		1426	1495	1464	1509	348	194	205	90
1456		1432	1501	1474	1514	372	205	206	89
1500	25%	1439	1508	1481	1521	409	215	207	90
1505		1446	1505	1478	1518	437	236	207	90

TCS LOG FORM

DATE: 06/27/13 Cycle #: 10 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1510	24%	1444	1508	1482	1521	459	254	207	90
1515		1443	1501	1477	1513	472	280	212	90
1520		1443	1502	1478	1513	476	305	227	91
1525		1445	1503	1479	1515	493	324	250	90
1530		1449	1507	1482	1518	500	344	265	90
1535	23%	1453	1512	1487	1523	507	364	300	91
1540		1440	1504	1480	1515	517	390	323	92
1545		1450	1504	1480	1514	530	418	350	91
1550		1452	1506	1482	1515	544	450	372	92
1555		1454	1507	1484	1516	556	466	405	90
1600	22%	1458	1510	1487	1519	570	493	432	90
1605		1452	1500	1478	1509	588	521	458	91
1610		1451	1499	1477	1507	616	551	483	91
1615		1450	1498	1478	1508	635	581	513	91
1620		1450	1498	1478	1510	658	606	538	89
1625		1451	1500	1486	1511	684	639	566	90
1630		1451	1501	1482	1515	709	660	590	90
1635		1455	1504	1485	1515	733	675	616	90
1640	System Shut Down	1451	1501	1500	1520	762	710	637	90
1645		1350	1340	1322	1343	909	732	655	89
1650	Begin Soak Time	1288	1264	1257	1270	829	755	679	88
1705	End Soak Time								

TCS LOG FORM

DATE: 08/24/13 Cycle #: 11 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600'

% OUTPUT: 1%

MIN TEMP: 678'

MAX TEMP: 1500'

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1145	TCS On	85	82	83	83	78	76	76	82
1146	15%	149	150	155	160	77	71	67	81
1150	25%	359	410	411	443	73	72	69	81
1152	35%	550	658	657	716	70	73	70	81
1155	45%	800	965	949	1053	70	73	71	83
1200		1055	1256	1214	1352	74	88	81	85
1205		1163	1384	1330	1471	78	77	93	87
1210	35%	1257	1438	1373	1503	85	78	115	87
1215	30%	1295	1461	1349	1518	109	108	146	87
1220		1301	1436	1378	1480	149	159	170	87
1225		1327	1453	1400	1495	185	172	181	87
1230	28%	1351	1474	1423	1515	203	175	182	86
1235	26%	1363	1470	1425	1507	202	177	182	87
1240		1357	1451	1409	1483	201	177	182	86
1245		1362	1450	1411	1482	200	176	181	87
1250		1372	1459	1421	1491	201	176	180	88
1255		1378	1463	1426	1495	202	174	180	86
1300	25%	1393	1476	1440	1508	202	179	174	88
1305		1394	1472	1437	1501	200	180	178	89
1310		1400	1476	1442	1504	198	180	180	89
1315		1409	1484	1451	1512	198	184	183	89
1320	23%	1416	1491	1459	1521	195	189	186	88
1325		1405	1467	1440	1494	192	197	191	89
1330		1404	1463	1438	1491	198	209	198	89
1335		1405	1464	1440	1493	200	227	211	89
1340		1409	1468	1443	1497	202	246	223	89
1345		1414	1472	1447	1494	202	259	232	90
1350		1422	1478	1451	1498	205	280	248	92
1355		1426	1483	1457	1506	210	302	267	91
1400		1432	1489	1462	1511	232	334	291	90
1405		1437	1492	1467	1514	242	357	306	89

TCS LOG FORM

DATE: 08/28/13 Cycle #: 11 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1410	21%	1443	1498	1473	1526	258	382	331	89
1415		1429	1473	1452	1490	290	423	355	90
1420		1425	1467	1447	1484	318	456	385	88
1425		1422	1464	1444	1480	334	491	409	89
1430		1422	1463	1443	1479	349	517	432	90
1435		1422	1463	1444	1479	372	551	463	89
1440		1424	1464	1445	1481	395	584	492	90
1445		1425	1467	1448	1483	413	609	517	90
1450		1427	1468	1449	1484	435	640	549	91
1455		1429	1470	1451	1485	453	663	574	91
1500		1432	1473	1453	1488	476	691	608	89
1505		1435	1477	1457	1492	496	715	637	90
1510		1439	1480	1460	1495	518	736	679	91
1515		1441	1484	1462	1498	536	757	700	90
1520		1444	1487	1465	1499	555	771	722	91
1530	System Shut Down	1452	1496	1470	1507	608	803	777	91
1535		1339	1294	1270	1259	627	830	797	89
1540		1281	1212	1201	1177	647	854	816	88
1545		1212	1120	1131	1099	670	890	840	88
1548	Begin Soak Time	1196	1097	1114	1077	690	887	847	88
1603	End Soak Time								

TCS LOG FORM

DATE: 9/4/13 Cycle #: 12 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600°

% OUTPUT: 1%

MIN TEMP: 674°

MAX TEMP: 1500°

HI LIMIT: (TC2) TC3

CONTROL: (3) TC2 TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1205	TCSON	86	85	84	88	68	70	67	79
1207	15%	105	113	102	125	68	70	66	80
1210	25%	307	371	309	407	69	69	65	80
1215	35%	604	727	642	799	69	70	66	81
1220	40%	866	1097	959	1175	69	73	66	83
1225		1047	1293	1164	1378	71	74	71	85
1230	35%	1122	1361	1214	1440	71	93	74	86
1235		1189	1395	1274	1463	74	103	85	87
1240		1254	1448	1332	1514	80	116	101	86
1245	30%	1302	1490	1374	1530	91	131	115	88
1250		1306	1456	1369	1503	110	147	132	88
1255	27%	1328	1474	1382	1518	133	156	146	87
1300		1320	1443	1365	1480	151	162	155	87
1305		1324	1442	1368	1483	162	168	158	89
1310		1333	1449	1373	1480	167	177	159	88
1315		1341	1451	1367	1480	168	175	160	89
1320		1351	1462	1378	1487	167	178	161	87
1325		1364	1474	1391	1499	167	180	167	89
1330	25%	1375	1484	1403	1509	161	180	168	89
1335		1367	1464	1395	1486	167	180	226	89
1340		1372	1469	1396	1486	168	190	319	90
1345		1377	1469	1401	1491	168	185	339	89
1350		1382	1475	1408	1496	170	186	365	91
1355		1389	1481	1415	1501	176	195	384	91
1400		1395	1485	1421	1506	192	206	406	90
1405		1404	1493	1428	1513	203	215	427	90
1410		1410	1499	1435	1518	211	225	446	89
1415	23%	1420	1506	1443	1526	222	236	474	91
1420		1406	1479	1427	1496	236	245	509	91
1425		1403	1474	1424	1492	247	257	538	88
1430		1403	1473	1423	1490	261	275	576	89

TCS LOG FORM

DATE: 9/4/13 Cycle #: 12 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1435		1405	1475	1425	1491	283	294	593	90
1440		1408	1478	1428	1494	294	310	621	92
1445		1412	1482	1432	1497	317	356	675	91
1450		1413	1484	1434	1498	328	362	695	90
1455		1418	1488	1438	1502	348	393	733	92
1500		1422	1494	1444	1508	366	401	758	91
1505		1426	1496	1447	1510	384	420	786	91
1510	20%	1430	1499	1450	1513	411	443	814	91
1515		1405	1454	1420	1462	424	470	847	90
1520		1397	1444	1412	1453	446	500	862	91
1525		1390	1435	1405	1444	462	522	883	91
1530		1386	1431	1403	1439	478	543	906	91
1535		1384	1427	1398	1436	503	573	927	89
1540		1381	1424	1396	1434	514	590	940	90
1545		1379	1423	1393	1433	538	619	960	91
1550		1379	1424	1392	1434	562	648	975	92
1555		1377	1421	1390	1431	582	672	988	91
1600		1378	1423	1391	1433	605	695	1000	89
1605		1379	1424	1391	1433	637	718	1012	91
1610	System Shutdown	1378	1423	1391	1433	660	743	1027	89
1615	Begin Soak Time	1318	1355	1317	1351	680	737	978	89
1630	End Soak Time								

TCS LOG FORM

DATE: 9/5/13 Cycle #: 13 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600

% OUTPUT: 1%

MIN TEMP: 678

MAX TEMP: 1500

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1328	TCS On	64	82	64	82	72	71	55	81
1330	15%	337	346	366	345	72	70	56	81
1335	25%	543	580	585	578	75	70	56	81
1340	35%	613	659	675	658	84	71	54	82
1345	40%	709	788	799	791	104	72	91	93
1350	45%	801	935	909	929	123	75	104	84
1355		891	1053	996	1032	153	83	89	84
1400		921	1083	1028	1062	175	91	83	86
1405		947	1110	1055	1084	202	104	86	87
1410	30%	952	1109	1059	1081	216	118	111	85
1415		944	1055	1053	1046	216	129	118	86
1420	40%	930	1036	1037	1024	216	129	151	86
1425		1001	1138	1151	1107	216	157	157	88
1430		1009	1136	1159	1102	216	171	153	87
1435		1013	1143	1167	1109	216	181	171	87
1440		1022	1151	1173	1118	216	205	177	86
1445		1022	1159	1163	1128	216	214	170	86
1450		1029	1168	1173	1148	216	214	188	86
1455		1038	1174	1177	1147	216	214	175	87
1500		1047	1184	1190	1156	214	215	181	87
1505		1063	1201	1200	1176	216	214	169	89
1510		1080	1215	1213	1188	216	215	170	89
1515		1093	1228	1222	1200	216	215	193	87
1520		1103	1242	1232	1214	216	214	164	88
1525		1120	1258	1248	1230	215	214	125	87
1530		1136	1276	1261	1249	215	215	174	87
1535		1157	1290	1276	1264	216	215	202	88
1540		1180	1313	1293	1292	216	215	204	88
1545		1203	1336	1309	1303	216	215	205	85
1550		1220	1357	1324	1322	216	215	207	87
1555		1246	1374	1339	1346	216	215	207	88

TCS LOG FORM

DATE: 09/05/13 Cycle #: 13 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1600		1263	1390	1354	1366	217	215	208	86
1605		1283	1410	1371	1385	217	215	180	86
1610		1302	1431	1388	1412	219	215	170	86
1615		1322	1454	1406	1429	225	215	134	87
1620		1342	1476	1414	1450	246	215	172	86
1625		1362	1500	1435	1478	303	215	177	86
1630	30%	1386	1525	1462	1519	357	215	181	87
1635		1346	1460	1390	1453	452	215	160	87
1640		1332	1446	1370	1428	511	214	205	85
1645		1327	1442	1367	1449	543	214	206	86
1650		1333	1452	1373	1456	576	214	207	85
1655		1347	1475	1389	1479	617	206	197	84
1700	25%	1388	1503	1410	1504	665	202	208	85
1705		1349	1463	1371	1467	701	211	209	85
1710		1355	1457	1376	1461	781	303	314	84
1715		1363	1463	1386	1468	806	316	356	84
1720		138	1473	1401	1477	849	350	447	84
1725		1395	1487	1421	1493	897	417	579	84
1730		1409	1498	1435	1504	928	484	657	83
1735		1425	1516	1454	1522	975	572	799	D
1740		BEGIN SOAK TIME							
1756		BURN COMPLETE							

TCS LOG FORM

DATE: 9/6/13 Cycle #: 14 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600'

% OUTPUT: 1%

MIN TEMP: 678°

MAX TEMP: 1500'

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1241	TCS ON	77	77	76	77	66	66	66	77
1243	15%	112	104	123	106	66	66	64	76
1245	25%	304	277	345	290	66	66	66	77
1250	35%	606	584	668	600	67	67	69	77
1255	40%	844	816	926	845	77	67	89	80
1300		962	929	1050	968	118	70	104	82
1305		1008	973	1105	1018	157	80	142	83
1310		1026	997	1120	1042	216	95	173	84
1315		1000	985	1096	1024	222	123	205	84
1320		1001	987	1100	1024	217	129	209	84
1325		1005	991	1099	1028	218	147	217	84
1330		1013	993	1107	1033	219	164	216	86
1335		1017	994	1111	1036	217	179	216	87
1340		1020	989	1118	1032	217	212	216	85
1345		1017	967	1119	1010	217	213	215	87
1350		1021	967	1124	1013	216	213	215	86
1355		1028	968	1130	1022	216	213	215	86
1400		1033	971	1131	1024	216	214	215	86
1405		1045	982	1142	1039	216	214	215	86
1410		1057	990	1153	1054	216	214	215	86
1415		1069	1002	1162	1062	215	214	215	86
1420		1082	1012	1179	1079	215	214	215	88
1425		1092	1022	1189	1093	216	214	214	88
1430		1099	1030	1193	1103	215	214	214	87
1435		1119	1046	1213	1118	216	214	214	88
1440		1135	1064	1232	1127	213	214	214	88
1445		1160	1087	1251	1141	213	214	214	88
1450		1183	1107	1270	1153	198	214	214	89
1455		1210	1125	1290	1170	196	215	214	88
1500		1228	1151	1311	1194	197	215	214	88
1505		1252	1169	1335	1211	199	215	215	88

TCS LOG FORM

DATE: 9/6/13 Cycle #: 14 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1510		1275	1187	1357	1231	193	216	215	88
1515		1295	1230	1382	1264	200	217	217	89
1520		1310	1253	1400	1287	223	218	217	89
1525		1338	1285	1427	1315	279	221	219	87
1530		1356	1308	1440	1335	301	223	222	87
1535		1383	1312	1463	1348	374	226	229	89
1540		1402	1329	1480	1366	412	229	235	87
1545	38%	1437	1360	1506	1389	449	242	235	89
1550	35%	1457	1387	1528	1422	542	251	244	88
1555		1460	1402	1520	1436	558	239	222	88
1600	30%	1469	1425	1529	1465	591	234	208	86
1605		1459	1440	1497	1461	695	220	194	88
1610		1465	1463	1508	1490	784	215	196	86
1615		1471	1490	1522	1505	802	221	199	85
1620	25 %	1495	1503	1537	1521	896	275	255	87
1625		1469	1490	1501	1506	1005	362	300	86
1630	22%	1451	1477	1475	1488	1067	421	331	D
1635		1447	1464	1474	1480	1168	511	442	D
1640	20%	1448	1463	1475	1479	1255	629	575	D
1650		BEGIN SOAK		SOAK	TIME				
1705			SOAK	COMPLETE					

TCS LOG FORM

DATE: 09/09/13 Cycle #: 15 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600

% OUTPUT: 1%

MIN TEMP: 678

MAX TEMP: 1500

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1138	TCS On	71	72	59	77	68	64	64	74
1140	15%	131	137	133	141	69	68	67	74
1143	25%	307	332	337	330	75	68	67	76
1145	35%	574	629	640	630	103	64	68	75
1150		799	878	900	885	149	68	78	79
1155		901	973	994	975	175	69	84	80
1200		958	1028	1050	1028	180	74	110	82
1205	40%	989	1066	1080	1057	145	84	130	84
1210		1019	1090	1111	1087	223	102	158	84
1215		1024	1087	1116	1071	217	120	184	84
1220		1028	1089	1119	1083	217	134	203	84
1225		1031	1094	1121	1085	216	150	215	84
1230		1035	1098	1127	1090	216	163	215	86
1235		1039	1101	1132	1093	214	179	215	85
1240		1038	1102	1134	1086	216	209	215	85
1245		1023	1102	1137	1087	216	214	214	86
1250		1037	1105	1140	1091	216	214	215	85
1255		1041	1114	1143	1097	216	214	214	86
1300		1048	1121	1149	1107	216	214	213	81
1305		1056	1131	1156	1115	216	214	214	85
1310		1063	1137	1165	1121	216	214	213	85
1315		1077	1151	1174	1139	215	214	213	85
1320		1086	1162	1185	1150	217	214	213	86
1325		1103	1186	1199	1163	215	214	213	87
1330		1111	1185	1207	1173	215	214	213	86
1335		1126	1200	1214	1188	215	214	214	89
1340		1133	1208	1226	1192	215	214	211	88
1345		1148	1223	1240	1211	215	214	209	89
1350		1169	1249	1262	1237	215	214	203	88
1355		1191	1279	1287	1259	288	214	200	89
1400		1213	1300	1306	1283	583	214	201	89

TCS LOG FORM

DATE: 9/9/13 Cycle #: 15 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1405		1239	1323	1329	1312	781	215	205	91
1410		1257	1344	1353	1337	861	214	245	89
1415		1280	1371	1374	1368	938	215	411	88
1420		1298	1393	1396	1387	985	215	449	89
1425		1321	1419	1419	1414	1030	215	490	89
1430		1340	1441	1438	1437	1066	215	537	90
1435		1359	1461	1465	1460	1103	216	540	93
1440	35%	1384	1488	1480	1483	1152	217	605	93
1445		1376	1470	1463	1466	1183	216	666	93
1450		1386	1480	1471	1474	1230	216	785	92
1455		1396	1491	1481	1489	1266	216	846	92
1500		1409	1506	1498	1511	1306	217	904	91
1505		1436	1537	1523	1548	1367	218	965	93
1510	25%	1467	1540	1549	1563	1424	219	1013	92
1515	20%	1484	1588	1540	1525	1480	211	1064	92
1520		1406	1471	1431	1472	1481	199	1092	93
1525		1393	1467	1422	1465	1484	194	1119	91
1530		1384	1454	1414	1458	1502	225	1131	91
1535		1361	1455	1409	1456	1534	385	1157	91
1540	[redacted]	1382	1458	1411	1460	1560	512	1170	91
1545	20%	1244	1312	1258	1310	1549	590	1163	88
1550	Begin Soak Time	1304	1368	1324	1367	1558	680	1170	89
1605	End Soak Time								

TCS LOG FORM

DATE: 9/10/13 Cycle #: 16 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600°

% OUTPUT: 1%

MIN TEMP: 1475°

MAX TEMP: 1500°

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1212	TCS On	88	69	86	89	73	74	73	94
1215	15%	150	155	150	158	75	75	71	94
1218	25%	345	376	360	375	76	74	72	93
1220	35%	498	560	540	567	77	74	72	94
1225	40%	891	947	912	973	124	77	83	98
1230		960	1076	1041	1116	134	83	101	99
1235		1004	1122	1085	1161	168	91	120	180
1240		1028	1136	1104	1174	217	106	151	101
1245		1025	1136	1102	1172	217	115	167	102
1250		1021	1139	1112	1173	217	129	197	100
1255		1023	1141	1119	1177	217	144	214	103
1300		1019	1142	1117	1170	217	154	215	104
1305		1013	1133	1120	1159	217	166	214	104
1310		1015	1138	1124	1164	216	178	214	103
1315		1021	1141	1129	1170	217	196	214	105
1320		1020	1157	1121	1180	216	213	214	105
1325		1017	1167	1123	1190	216	213	214	105
1330		1020	1176	1132	1202	216	213	214	106
1335		1029	1193	1146	1215	216	213	214	105
1340		1037	1202	1154	1225	216	213	213	106
1345		1052	1220	1166	1240	215	212	213	105
1350		1063	1230	1172	1250	215	213	214	106
1355		1073	1240	1181	1260	215	214	214	106
1400		1088	1255	1189	1273	215	214	214	106
1405		1103	1270	1199	1282	215	214	214	106
1410		1117	1282	1210	1295	215	214	213	106
1415		1130	1294	1220	1308	215	214	213	105
1420		1146	1315	1235	1330	215	214	214	106
1425		1173	1344	1257	1356	215	214	213	107
1430		1194	1369	1280	1379	273	215	213	107
1435		1210	1382	1295	1399	373	214	213	107

TCS LOG FORM

DATE: 9/10/13 Cycle #: 16 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1440		1228	1396	1312	1419	538	214	213	108
1445		1245	1415	1332	1437	649	215	213	106
1450		1260	1429	1344	1449	734	215	213	107
1455	38%	1280	1443	1360	1467	805	215	213	108
1500	36%	1293	1455	1369	1477	869	215	213	108
1505	35%	1304	1458	1368	1472	918	215	213	107
1510		1317	1468	1376	1479	976	215	213	107
1515	32%	1332	1481	1384	1495	1022	215	213	108
1520		1328	1464	1372	1476	1073	214	213	107
1525	30%	1335	1472	1378	1485	1130	206	213	106
1530		1339	1469	1371	1480	1192	242	212	106
1530	28%	1349	1485	1379	1493	1241	407	212	107
1535		1348	1482	1369	1484	1277	384	208	107
1540		1351	1486	1370	1486	1297	399	208	105
1545		1371	1513	1390	1511	1344	460	202	106
1550	25%	1384	1525	1396	1521	1390	512	144	106
1555		1373	1505	1377	1496	1416	546	200	106
1600		1378	1501	1382	1499	1432	608	240	107
1605		1384	1514	1390	1506	1449	678	293	106
1610		1395	1524	1404	1516	1469	778	350	105
1615	22%	1410	1536	1422	1529	1490	874	436	106
1620		1402	1515	1412	1505	1503	985	527	106
1625		1406	1514	1411	1504	1515	1067	658	106
1627	Begin Soak Time	1409	1516	1421	1507	1518	1086	680	
1642	End Soak Time Burn Complete								

TCS LOG FORM

DATE: 9/11/13 Cycle #: 17 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600

% OUTPUT: 1%

MIN TEMP: 678

MAX TEMP: 1500

HI LIMIT: (TC2) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1120	TCS On	86	86	85	85	73	73	73	88
1123	15%.	95	97	99	94	73	73	73	88
1125	25%.	308	314	338	305	74	73	75	88
1129	35%.	514	552	585	533	75	74	78	88
1130	40%.	800	825	850	820	79	74	94	91
1135		885	965	944	952	87	78	96	92
1140		961	1041	1071	1034	114	89	160	94
1145		998	1075	1103	1062	130	102	173	94
1150		1007	1080	1101	1064	154	115	221	94
1155		998	1069	1095	1060	181	128	222	96
1200		1004	1071	1100	1071	215	145	219	97
1205		1006	1068	1112	1073	218	156	218	97
1210		1000	1050	1109	1053	218	169	216	98
1215		995	1024	1113	1047	217	182	215	98
1220		994	1026	1114	1052	217	196	215	99
1225		1000	1034	1121	1061	216	212	215	101
1230		991	1047	1124	1070	216	214	215	102
1235		997	1057	1134	1083	216	214	215	100
1240		1007	1071	1145	1096	216	214	214	106
1245		1013	1082	1148	1105	216	214	214	101
1250		1025	1102	1160	1118	216	214	214	100
1255		1035	1120	1173	1129	216	214	214	102
1300		1050	1138	1163	1143	216	214	213	103
1305		1064	1156	1194	1159	216	214	213	103
1310		1079	1170	1205	1171	216	214	213	105
1315		1091	1184	1213	1181	216	214	213	105
1320		1109	1199	1227	1194	217	214	212	104
1325		1123	1212	1241	1212	215	214	213	104
1330		1141	1226	1258	1225	216	214	213	105
1335		1155	1238	1272	1237	216	214	213	106
1340		1176	1259	1287	1256	216	215	212	107

TCS LOG FORM

DATE: 9/11/13 Cycle #: 17 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1345		1208	1290	1315	1286	216	215	212	105
1350		1224	1309	1328	1300	216	214	220	104
1355		1246	1336	1345	1320	216	215	392	106
1400		1275	1362	1373	1349	216	215	609	104
1405		1294	1387	1389	1368	219	217	754	105
1410		1320	1414	1416	1394	219	217	892	107
1415		1343	1443	1441	1421	220	221	1000	105
1420		1363	1468	1467	1442	223	220	1093	106
1425		1387	1490	1488	1466	229	224	1173	107
1430		1415	1518	1517	1505	239	227	1264	105
1440	30%	1454	1586	1554	1581	253	236	1447	105
1445		1436	1553	1505	1538	226	216	1505	106
1450	25%	1442	1565	1507	1553	264	379	1544	105
1455		1413	1527	1461	1513	382	442	1570	105
1500		1410	1525	1460	1512	462	466	1578	105
1505		1411	1526	1457	1513	590	523	1595	105
1510		1417	1534	1461	1523	724	571	1619	106
1515		1426	1543	1471	1532	834	629	1643	X
1519	Begin Soak Time								
1534	Soak Complete	System	Shutdown						

TCS LOG FORM

DATE: 9/12/13 Cycle #: 18 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600

% OUTPUT: 1%

MIN TEMP: 678

MAX TEMP: 15001

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1147	TCS On	75	71	69	75	70	70	69	70
1150	25%	228	280	245	254	72	71	72	73
1200	40%	635	741	681	731	96	79	118	76
1205		887	1018	946	1002	102	85	122	78
1213		906	1105	1075	1042	125	96	176	80
1218		1009	1135	1058	1112	145	106	202	81
1223		1017	1141	1048	1099	165	117	215	82
1228		1022	1149	1051	1103	187	128	215	82
1233		1028	1150	1059	1104	212	138	214	83
1238		1028	1142	1058	1083	217	150	214	85
1243		1024	1140	1063	1070	217	160	214	86
1248		1028	1145	1069	1074	217	169	214	86
1253		1033	1152	1071	1083	217	180	214	87
1258		1041	1161	1079	1089	217	192	214	88
1303		1037	1169	1078	1095	216	209	214	88
1308		1039	1178	1080	1105	217	214	214	89
1313		1056	1192	1091	1117	217	214	214	90
1318		1055	1194	1096	1121	217	214	214	89
1323		1069	1207	1105	1128	216	214	214	87
1328		1078	1214	1113	1140	216	214	214	87
1333		1090	1227	1122	1154	216	214	214	89
1338		1101	1239	1129	1165	216	214	214	89
1343		1114	1247	1140	1180	215	214	214	89
1350		1125	1261	1148	1193	215	214	214	89
1356		1143	1275	1161	1204	216	214	213	88
1400		1150	1282	1167	1220	216	214	213	90
1405		1166	1294	1180	1234	214	215	214	91
1410		1173	1304	1186	1252	216	214	213	91
1415		1184	1312	1194	1260	216	214	213	89
1420		1200	1329	1212	1282	216	214	213	89
1425		1217	1345	1229	1301	216	212	213	90

TCS LOG FORM

DATE: 9/12/13 Cycle #: 18 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1430		1223	1361	1245	1319	216	214	213	90
1435		1249	1377	1261	1338	216	214	223	91
1440		1268	1396	1278	1359	216	215	300	90
1445		1286	1413	1298	1381	217	215	484	90
1450		1301	1430	1321	1408	218	215	657	91
1455		1318	1455	1346	1437	220	216	809	90
1500		1333	1472	1372	1461	224	217	929	91
1505		1350	1490	1395	1482	231	220	1025	89
1510		1370	1512	1422	1513	238	222	1105	90
1515	35%	1388	1533	1447	1544	247	225	1178	89
1520		1385	1518	1436	1531	237	221	1289	89
1525	30%	1381	1510	1423	1519	230	220	1298	86
1530		1375	1506	1405	1405	221	220	1348	88
1535		1381	1515	1409	1410	208	218	1377	86
1540		1391	1536	1423	1540	195	218	1431	85
1545		1412	1555	1438	1556	193	218	1446	85
1550		1384	1516	1403	1513	192	216	1484	84
1555		1388	1512	1405	1512	20	214	1497	84
1600		1392	1516	1410	1516	272	216	1507	83
1605	23%	1400	1523	1422	1526	350	216	1525	83
1610		1397	1510	1415	1513	449	214	1539	84
1615		1400	1512	1420	1516	591	213	1549	84
1620		1410	1520	1432	1524	811	242	1564	86
1625	20%	1420	1526	1440	1532	937	311	1574	83
1630		1413	1500	1423	1505	1071	428	1586	83
1635		1417	1496	1426	1502	1152	560	1589	83
1650	Begin Soak Time								
1653	End Soak Time System Shutdown								

TCS LOG FORM

DATE: 9/16/13 Cycle #: 19 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600'

% OUTPUT: 1%

MIN TEMP: 678'

MAX TEMP: 1500'

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1120	TCS on	68	67	67	65	66	66	65	67
1122	15%	96	97	113	96	67	66	66	67
1125	25%	269	278	346	287	70	66	77	67
1127	35%	462	479	594	500	77	67	118	68
1130	40%	563	603	707	623	101	67	214	69
1135		846	868	1030	911	162	68	211	72
1140		927	934	1103	990	217	74	184	76
1145		967	978	1145	1035	217	83	205	77
1150		992	1001	1156	1055	217	94	207	77
1155		992	1004	1146	1058	216	111	217	77
1200		980	1006	1137	1055	218	126	223	80
1205		980	1010	1131	1058	218	139	224	81
1210		985	1015	1134	1059	218	153	315	79
1215		990	1014	1143	1046	220	167	215	79
1220		990	996	1148	1025	221	180	215	82
1225		989	987	1153	1023	218	210	215	83
1230		989	994	1158	1026	218	214	215	83
1235		995	1000	1165	1030	218	214	214	81
1240		1006	1011	1174	1035	218	214	214	83
1245		1015	1025	1181	1046	218	214	214	84
1250		1023	1034	1186	1052	218	214	214	83
1255		1034	1049	1201	1064	218	214	214	84
1300		1042	1057	1206	1075	218	214	214	82
1305		1055	1067	1215	1087	218	214	214	81
1310		1067	1074	1226	1094	218	214	214	83
1315		1079	1093	1235	1109	219	214	214	84
1320		1091	1105	1249	1125	219	214	214	82
1325		1107	1119	1264	1140	221	214	214	82
1330		1121	1132	1279	1151	232	214	214	82
1335		1138	1151	1295	1167	255	214	214	81
1340		1155	1166	1304	1181	281	214	214	82

TCS LOG FORM

DATE: 9/16/13 Cycle #: 19 PAGE 2 OF 2

FACILITY: RVAAD

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1345		1172	1182	1324	1192	296	214	214	83
1350		1191	1204	1341	1211	296	215	214	85
1355		1209	1221	1355	1224	283	215	214	85
1400		1226	1238	1369	1243	287	215	215	86
1405		1243	1254	1385	1261	309	215	215	87
1410		1271	1280	1410	1278	381	216	216	84
1415		1297	1308	1436	1309	499	218	218	84
1420		1319	1326	1454	1324	588	221	222	83
1425		1342	1351	1474	1349	678	225	226	81
1430		1370	1380	1498	1370	778	232	232	84
1435		1397	1403	1529	1406	832	240	244	85
1440	35%	1425	1437	1555	1444	894	243	274	86
1445		1429	1452	1552	1455	943	297	392	85
1450	30%	1452	1476	1571	1482	982	369	536	84
1455		1445	1476	1541	1476	1019	357	690	84
1500		1457	1498	1552	1497	1036	360	790	83
1505	25%	1479	1527	1568	1524	1058	412	897	82
1510		1472	1524	1557	1516	1080	481	975	80
1515		1475	1528	1536	1522	1091	550	1024	80
1520		1492	1544	1548	1540	1101	579	1082	81
1525		1418	1467	1383	1450	1110	640	1120	81
1530		1286	1322	1221	1311	1114	592	1165	X
1533	Begin Soak Time								
1548	End Soak Time / System Shut down								

TCS LOG FORM

DATE: 9/17/13 Cycle #: 20 PAGE 1 OF 3

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	1	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	6 MM
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO EXCESS AIR

SET POINT: 1600°

% OUTPUT: 1%

MIN TEMP: 678°

MAX TEMP: 1500°

HI LIMIT: TC1 TC3

CONTROL: TC2 TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1120	TCS on	67	67	62	65	63	63	62	59
1122	15%	98	103	104	99	63	63	61	62
1125	25%	315	343	355	330	63	63	61	61
1127	35%	446	497	530	484	63	63	61	61
1130	40%	746	822	865	805	69	65	64	65
1135		883	970	1028	952	203	71	78	67
1140		946	1029	1105	1019	202	81	96	69
1145		990	1064	1158	1058	200	95	132	70
1150		1015	1085	1192	1079	204	110	153	72
1155		1004	1060	1197	1061	220	126	176	73
1200		1004	1055	1201	1060	220	142	192	73
1205		1007	1057	1203	1063	219	152	214	75
1210		1004	1049	1208	1033	218	162	214	76
1215		998	1030	1205	1010	214	168	211	76
1220		1000	1030	1212	1016	217	174	214	76
1225		1001	1038	1218	1019	217	181	214	76
1230		989	1044	1222	1029	217	186	214	77
1235		994	1056	1225	1040	217	192	214	77
1240		1004	1072	1233	1052	217	197	214	77
1245		1015	1086	1244	1060	216	203	214	80
1250		1025	1099	1256	1077	216	206	217	78
1255		1039	1116	1261	1090	216	209	214	78
1300		1053	1133	1270	1107	216	216	214	80
1305		1065	1145	1281	1119	216	216	214	79
1310		1084	1167	1296	1145	215	214	214	81
1315		1107	1189	1311	1165	215	216	214	80
1320		1115	1198	1319	1175	216	216	214	83
1325		1134	1217	1331	1198	215	216	214	80
1330		1149	1233	1341	1220	215	216	214	81
1335		1170	1254	1353	1237	215	216	214	81
1340		1168	1277	1369	1256	214	216	214	82

TCS LOG FORM

DATE: 9/17/13 Cycle #: 20 PAGE 2 OF 3

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1345		1202	1296	1381	1270	214	216	215	81
1350		1221	1319	1391	1287	214	216	216	81
1355		1241	1343	1418	1312	215	216	216	84
1400		1261	1366	1432	1329	214	217	216	82
1405		1281	1389	1450	1353	214	217	217	82
1410		1302	1415	1471	1380	215	211	220	82
1415		1330	1448	1498	1416	216	218	222	82
1420		1364	1486	1528	1460	217	214	223	82
1425	35%.	1387	1512	1550	1495	218	229	219	84
1430	30%.	1395	1519	1543	1506	216	274	212	83
1435		1382	1498	1510	1486	215	273	204	82
1440		1387	1504	1511	1493	215	283	200	82
1445		1396	1513	1518	1502	214	386	201	82
1450		1412	1526	1527	1512	214	223	196	82
1455		1428	1539	1540	1524	214	218	197	82
1500		1451	1557	1558	1542	215	218	198	82
1505	25%.	1475	1575	1571	1562	215	218	195	82
1510	22%.	1463	1546	1536	1529	214	216	195	82
1515		1443	1513	1503	1496	214	214	192	81
1520		1435	1500	1492	1482	214	215	191	80
1525		1433	1492	1488	1474	214	217	191	82
1530		1432	1489	1487	1473	213	712	189	81
1535		1435	1489	1489	1475	213	864	191	82
1540		1439	1492	1492	1480	213	947	193	83
1545		1444	1491	1498	1486	213	1196	195	81
1550		1451	1503	1506	1498	212	1326	198	80
1555		1457	1507	1510	1502	212	1371	202	82
1600		1464	1513	1514	1507	216	1412	208	81
1605		1472	1521	1520	1513	263	1430	236	80
1610		1481	1529	1526	1521	344	1445	249	80
1615		1490	1538	1537	1528	455	1459	264	80
1620	30%	1446	1471	1425	1465	551	1458	262	81
1625	35%.	1392	1409	1353	1405	622	1421	270	79
1630		1268	1271	1291	1249	715	1334	338	78
1635	30%.	1452	1510	1530	1506	749	1368	364	78
1640	System Shutdown	1375	1394	1330	1389	861	1411	362	79
1645		1392	1430	1387	1424	921	1401	379	76
1650		1372	1413	1366	1407	979	1388	405	76

TCS LOG FORM

DATE: 9/17/13 Cycle #: 20 PAGE 3 OF 3

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shanker

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1655		1362	1405	1356	1399	1004	1362	422	76

TCS LOG FORM

DATE: 9/18/13 Cycle #: 21 PAGE 1 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

TCS UNIT:	(1)	5.0 MM BTU	OPERATED AS:	1 MM	2 MM	3 MM	4 MM	(5 MM)
	2	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM
	3	15 MM BTU	OPERATED AS:	3 MM	6 MM	9 MM	12 MM	15 MM

INITIAL SETTINGS

OUTPUT: ON RATIO (EXCESS AIR)

SET POINT: 1600

% OUTPUT: 1%

MIN TEMP: 1078

MAX TEMP: 1500

HI LIMIT: (TC1) TC3

CONTROL: (TC2) TC4

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1200	TCS on	72	74	73	71	66	65	87	72
1202	15%	111	128	121	135	66	65	84	75
1205	25%	352	387	362	342	65	65	91	75
1207	35%	524	600	550	624	65	66	92	76
1210	40%	812	910	836	950	66	69	92	78
1215		952	1067	984	1105	80	77	93	79
1220		1018	1140	1053	1178	125	89	97	81
1225		1050	1174	1084	1208	144	103	104	82
1230		1077	1203	1111	1234	174	128	117	82
1235		1079	1204	1116	1234	212	148	137	83
1240		1083	1211	1126	1236	215	173	160	81
1245		1073	1199	1124	1161	215	191	180	83
1250		1070	1197	1125	1177	215	199	202	83
1255		1074	1201	1130	1181	215	199	221	84
1300		1078	1207	1138	1190	216	203	238	84
1305		1079	1202	1142	1194	216	209	254	85
1310		1065	1226	1142	1203	215	210	271	86
1315		1071	1241	1150	1211	215	212	294	85
1320		1078	1252	1163	1223	215	216	313	87
1325		1084	1261	1170	1237	216	216	335	87
1330		1091	1273	1183	1247	215	216	365	86
1335		1100	1287	1194	1261	215	216	396	87
1340		1107	1296	1206	1276	215	216	425	87
1345		1114	1308	1217	1287	215	216	454	86
1350		1133	1330	1233	1302	215	216	483	89
1355		1140	1341	1244	1315	215	216	513	89
1400		1156	1352	1253	1329	215	216	545	89
1405		1169	1367	1264	1347	215	217	570	90
1410		1187	1384	1276	1365	215	216	596	91
1415		1202	1404	1290	1387	215	217	623	91
1420		1217	1419	1304	1402	215	216	651	91

TCS LOG FORM

DATE: 09/18/13 Cycle #: 21 PAGE 2 OF 2

FACILITY: RVAAP

SOURCE /BUILDING #:

LOGGED BY: J. Shankar

TIME	ADJUSTMENT	TC 1	TC2	TC3	TC4	TC5	TC6	TC7	TC8
1425		1230	1439	1319	1415	215	216	673	90
1430		1245	1456	1331	1429	215	216	704	89
1435		1259	1473	1348	1447	212	217	724	87
1440		1284	1494	1365	1476	208	216	748	87
1445	35%	1300	1518	1384	1498	208	216	770	86
1450	↓	1298	1503	1371	1481	212	216	791	87
1455	↓	1311	1515	1377	1494	212	216	812	86
1500	↓	1331	1537	1395	1517	212	216	834	85
1505	30%	1353	1561	1415	1543	212	216	858	84
1510	↓	1335	1527	1384	1505	211	216	878	84
1515	↓	1342	1531	1389	1510	211	216	896	84
1520	25%	1354	1540	1396	1519	210	216	915	84
1525	↓	1318	1494	1349	1464	209	215	932	85
1530	27%	1313	1467	1345	1455	208	215	949	84
1535	↓	1331	1494	1364	1476	207	215	966	84
1540	↓	1343	1503	1374	1489	209	215	983	86
1545	↓	1358	1516	1387	1502	215	215	996	84
1550	↓	1373	1529	1402	1515	233	215	1007	89
1555	↓	1390	1540	1416	1536	244	215	1021	86
1600	25%	1412	1560	1436	1560	261	216	1037	89
1605	22%	1413	1548	1439	1550	282	215	1049	87
1610	↓	1410	1513	1425	1517	310	214	1060	87
1615	↓	1430	1511	1446	1515	343	220	1071	86
1620	↓	1446	1511	1461	1514	393	239	1083	84
1625	↓	1460	1516	1476	1520	473	274	1095	84
1630	↓	1474	1523	1488	1527	564	316	1108	83
1635	↓	1486	1530	1499	1534	652	359	1121	84
1640	20%	1495	1536	1507	1539	732	397	1134	82
1645	↓	1482	1514	1492	1518	843	447	1148	81
1650	↓	1482	1512	1491	1516	932	489	1162	62
1655	↓	1482	1511	1492	1514	1004	523	1175	81
1700	↓	1483	1511	1492	1515	1063	553	1188	81
1705	↓	1485	1514	1495	1517	1120	588	1201	85
1710	18%	1475	1494	1481	1499	1164	622	1211	D
1715		1462	1480	1470	1486	1190	646	1227	D
1716	BURNER OFF	BEGIN		SOAK					
1731	BURN		COMPLETE						

Appendix M

Akron Regional Air Quality Letter

AKRON REGIONAL
AIR QUALITY MANAGEMENT DISTRICT

Agent of the Ohio Environmental Protection Agency • Division of the Summit County Health District
Serving Medina, Portage and Summit Counties

TELEPHONE: (330) 375-2480 FAX: (330) 375-2402

June 4, 2012

Mr. Richard Callahan
PIKA International, Inc.
3975 Walnutwood Way
Uniontown, OH 44685

Re: De Minimis Exemption – OAC rule 3745-15-05 for a thermal convection system at the Ravenna Army Ammunition Plant

Dear Mr. Callahan:

I have received and reviewed your May 24, 2012 letter in which you are requesting concurrence with your proposal to install and operate a thermal convection system to complete the thermal verification of munitions scrap at the Ravenna Army Ammunition Plant as a "De Minimis" air contaminant source in accordance with the exemption provided in OAC rule 3745-15-05.

OAC rule 3745-15-05(B), in part, exempts any air contaminant source from the requirements of Chapter 3704 of the Revised Code and rules adopted thereunder; i.e., the requirement to obtain an air permit to install and/or operate, if the potential to emit of each criteria air pollutant does not exceed ten pounds per day. OAC rule 3745-15-05(D) proceeds to exempt sources that have a potential emissions greater than ten pounds per day, provided adequate records are maintained to demonstrate that actual emissions from the source do not exceed ten pounds per day.

Your letter indicates that the potential emissions are greater than ten pounds per day, however, operations would be restricted and records would be maintained to demonstrate that actual emissions do not exceed ten pounds per day.

Please note that the resultant permit exemption is lost if at any time actual emissions exceed ten pounds per day or if other information becomes available sufficient to negate the exemption. The owner or operator of the air contaminate source must keep adequate records available for review to demonstrate exemption eligibility in accordance with OAC rule 3745-15-05(D) – (F).

If you have any questions or comments concerning this letter, please contact me at (330) 812-3952 or svadas@schd.org.

Sincerely,

Sean Vadas
Akron Regional Air Quality Management District

PIKA INTERNATIONAL, INC.

24 May 2012

Mr. Sean Vadas
Air Quality Engineer
Akron Regional Air Quality Management District (ARAQMD)
Room 904
146 S. High Street
Akron, OH 44308

RE: Proposed Temporary De minimus Operation of PIKAs Thermal Convection System for Flashing at the Ravenna Army Ammunition Plant

Mr. Vadas:

This letter is in regard to our recent conversation in which PIKA International, Inc. (PIKA) is proposing the temporary installation and operation of a propane fired thermal convection system (TCS) to complete the thermal verification of munitions scrap located at the Ravenna Army Ammunition Plant (RVAAP).

The information herein serves to provide your office with the necessary background and operational data to support the operation of PIKAs TCS on a temporary basis within the provisions of the "De minimus" air contaminant source exemption (OAC 3745-15-05). This proposal is similar to the operation at RVAAP which was granted approval by ARAQMD back in 2000, in that the munitions scrap has been inspected by qualified personnel and determined free of bulk energetic constituents and/or any other emission causing materials. The munitions scrap material requires only thermal verification/documentation without physical demilitarization. PIKA proposes using the Thermal Convection System (TCS), which utilizes the much more efficient and cleaner burning liquid propane fuel to complete the thermal verification of the metal scrap.

The TCS and car-bottom chamber are portable for rapid mobilization and designed for modular assembly. The assembled size for this project is 10 feet in length, 10 feet in width and 10 feet high. Photographs have been attached to demonstrate the portability of the system, which typically can be mobilized and operational within the same day of arrival. The proposed set up location for the TCS within the RVAAP facility is at the former Open Detonation Area No. 2 (ODA-2). The approximate location of which is identified on the attached map.

The TCS is a remotely operated Liquid Propane (LP) burner unit with a physical maximum output of 5 MMBTU/hr used in conjunction with an insulated car bottom chamber (described above). The electrical power required to operate the TCS unit is

supplied by a 30 – 40 KW generator. The basic operation of the unit involves opening the car bottom door to which the "cars" are attached and are pulled out to provide access. The inspected munitions scrap is loaded into metal containers and placed upon the car bottom platform (grates). Thermocouples are then placed within the center mass of the metal scrap to provide the necessary quality control data that the target temperature has been achieved. The door is closed and the operator returns to the control station to start the TCS. A conceptual schematic has been attached to this document to provide a cross sectional view of the setup.

The metal scrap is then indirectly heated to achieve and maintain the required temperature to complete the thermal verification of the materials. The target temperature for the munitions scrap is 625° F. The heated air is incrementally introduced into the car-bottom chamber containing the metal scrap and is easily maintained within 10 degrees of the desired temperature.

Once achieved, the target temperature will be maintained for 10 minutes as a conservative measure to ensure full temperature penetration of the scrap. The capacity of the car bottom is approximately 5 tons per cycle. It is anticipated that 2-3 cycles may be completed per day.

As noted above, the munitions scrap has no bulk energetic residue and each item will be visually inspected to verify the absence of potential emission-producing materials, prior to placement within the TCS car bottom unit. As a result, the only source of emissions from the TCS operations would be from the LP burner combustion exhaust and the generator supplying electric power to the system.

The emissions for the operation of the TCS have been calculated using the U.S. Environmental Protection Agency (USEPA) AP-42 emission factors for external combustion units (Section 1.5 – Liquefied Petroleum Gas Combustion and Section 3.3 – Gasoline and Diesel Industrial Engines). Factoring the time required for material handling and loading, the anticipated period of operation is 5.5 hours per day (for both the generator and TCS units) yielding the total emissions summarized on Table 1, (see attached). Tables 2 and 3 provide the emissions factors for each air contaminant as well as the hourly, daily and annual emissions for the TCS unit and generator, respectively.

As noted on Table 1, the total for each of the air contaminants generated by the combined sources within the TCS are less than 10 pounds per day for the proposed daily operating period, with the maximum being NO_x at 7.919 lbs/day. Given this information, PIKA is proposing to setup and operate the mobile Thermal Convection System at the RVAAP facility for a period of time, not to exceed 12 months beginning at the time of acceptance of this proposal by the ARAQMD. In order to verify that actual emissions from the TCS do not exceed the De minimus levels as defined in OAC 3745-

PIKA INTERNATIONAL, INC.

15-05, PIKA will maintain an Operating Log that will provide detailed information on fuel consumption and operating times of the equipment, using the calculated emissions presented herein as the basis for site operations.

If you have any questions or need clarifications, please feel free to contact me at 330-352-4822.

Sincerely,



Richard C. Callahan
Senior Technical Manager
TCS Applications





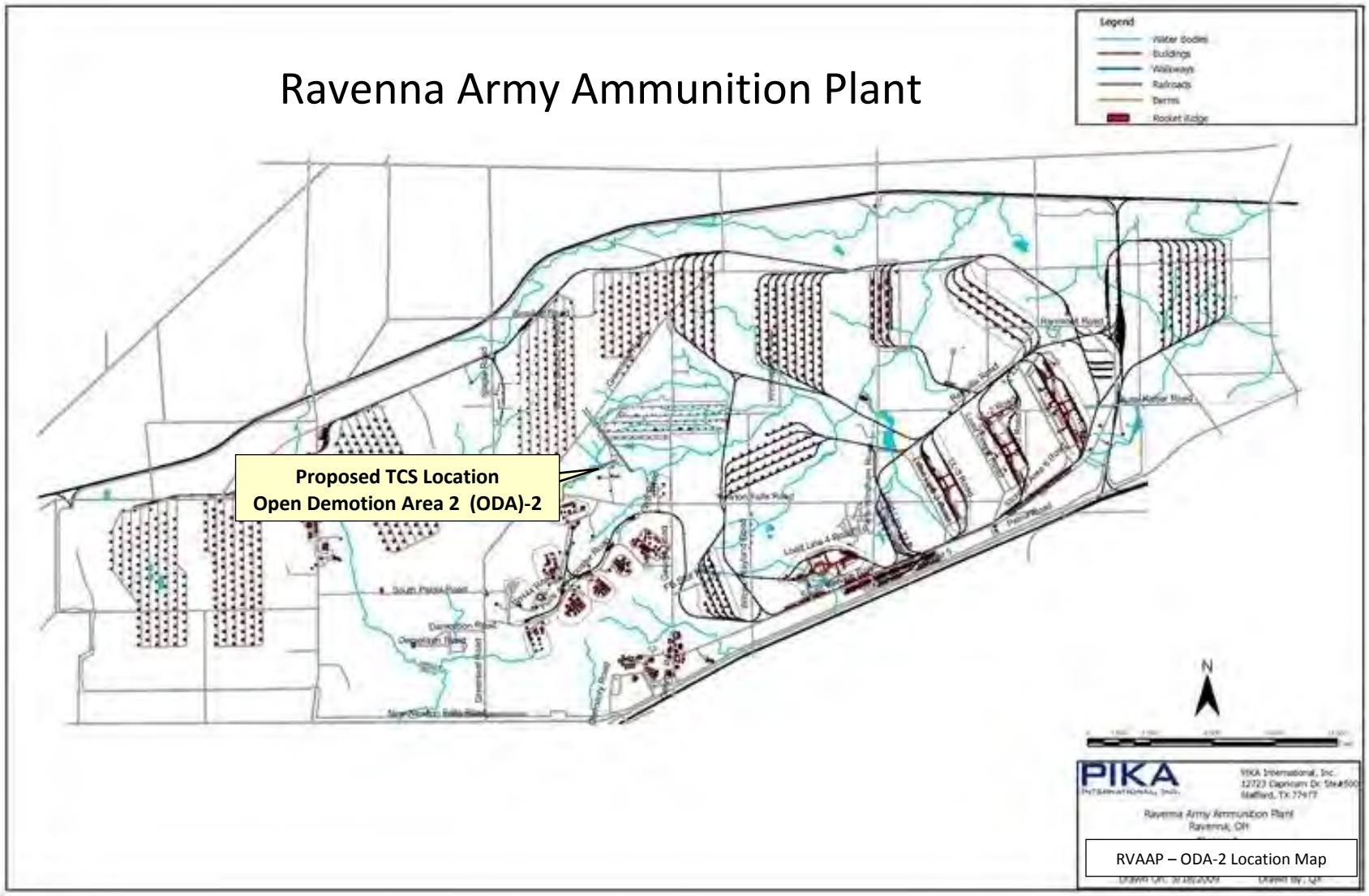
Portable Thermal Convection System







Ravenna Army Ammunition Plant



Conceptual View – TCS and Car Bottom Chamber

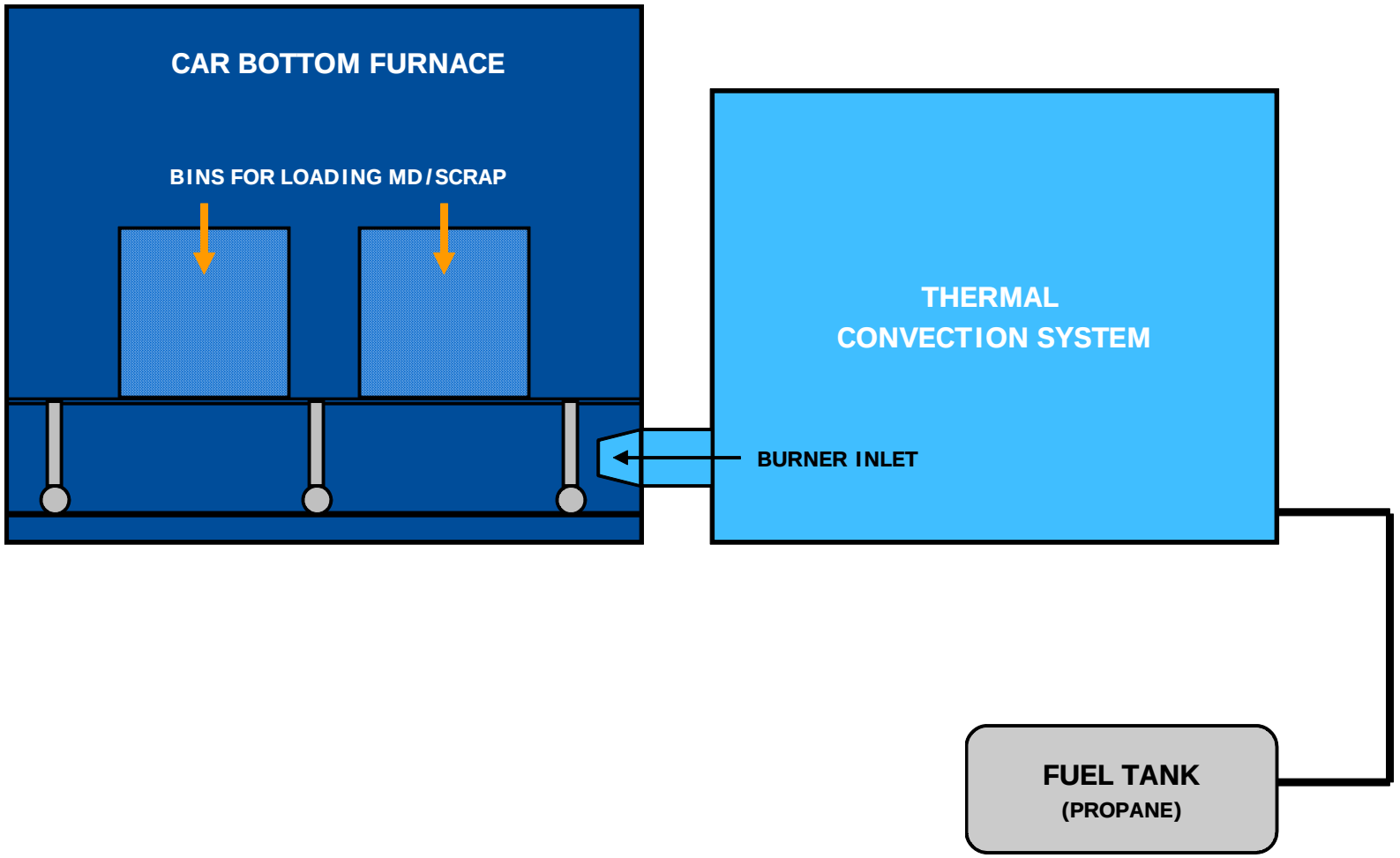


Table 1 - PIKA TCS Controlled Emissions Summary
Ravenna Facility

Pollutant	TCS Combustion Emissions			Generator Emissions			Total TCS/Generator Emissions		
	Maximum Hourly Emissions (lb/hr)	Maximum Daily Emissions (lb/day)	Maximum Annual Emissions (tons/yr)	Maximum Hourly Emissions (lb/hr)	Maximum Daily Emissions (lb/day)	Maximum Annual Emissions (tons/yr)	Maximum Hourly Emissions (lb/hr)	Maximum Daily Emissions (lb/day)	Maximum Annual Emissions (tons/yr)
NOx	0.547	3.007	0.355	0.893	4.912	0.929	*1.440*	***7.919***	*1.284*
CO	0.315	1.577	0.205	0.192	1.058	0.200	*0.508*	***2.635***	*0.405*
PM_{10}	0.029	0.147	0.019	0.063	0.345	0.065	*0.092*	***0.492***	*0.084*
SOx	0.001	0.004	0.000	0.059	0.323	0.061	*0.059*	***0.327***	*0.062*
VOC	0.042	0.210	0.027	0.073	0.401	0.076	*0.115*	***0.611***	*0.103*

Notes: **Potential emissions to satisfy the De minimus air contaminant exemption must be below 10 lbs/day for any one of the above listed air contaminants**

Table 2 - PIKA TCS Combustion Emissions
Ravenna Facility

Pollutant	Emission Factor ($lb/10^3$ Gal)[1,4]	Maximum Hourly Fuel Use (10^3 gal)[2]	Maximum Annual Fuel Use (10^3 gal)	Maximum Hourly Emissions (lb/hr)	Maximum Daily Emissions (lb/day)[3]	Maximum Annual Emissions (tons/yr)[3]
NOx	13	0.042	54.7	0.547	**3.007**	0.355
CO	7.5	0.042	54.7	0.315	**1.577**	0.205
PM_{10}	0.7	0.042	54.7	0.029	**0.147**	0.019
SOx	0.018	0.042	54.7	0.001	**0.004**	0.000
VOC	1	0.042	54.7	0.042	**0.210**	0.027

Notes:

1 - U.S. EPAs AP-42 emission factors for external combustion units (AP-42, Section 1.5, Liquefied Petroleum Gas Combustion) were used

[2] - Hourly fuel usage assume the TCS unit operates at 4 MMBTU/hr.

[3] - Annual emissions assume 5.5 hour heating operation, 5 days per week, and 52 weeks total.

[4] - SOx emission factor assumed a propane sulfur content of 0.18 grains/100 ft^3 propane gas.

Table 3 - PIKA TCS Generator Emissions
Ravenna Facility

Pollutant	Emission Factor (lb/mmBTU-hr)1	Maximum Heat Input (mmBTU/hr)	Maximum Hourly Emissions (lb/hr)[2]	Maximum Daily Emissions (lb/day)[3]	Maximum Annual Emissions (tons/yr)[3]
NOx	4.41	0.14	0.893	**4.912**	0.929
CO	0.95	0.14	0.192	**1.058**	0.200
PM_{10}	0.31	0.14	0.063	**0.345**	0.065
SOx	0.29	0.14	0.059	**0.323**	0.061
VOC	0.36	0.14	0.073	**0.401**	0.076

Notes:

[1] - U.S. EPAs AP-42 emission factors for external combustion units (AP-42, Section 3.3, Gasoline and Diesel Industrial Engines)

[2] - Hourly emissions assumes the use of 0ne (1) 30-40 KW generator fuel with a fuel usage rate of 1.5 gallons per hour and 135,000 mmBTU/hr/gallon.

[3] - Daily and Annual emissions assume 5.5 hour per day operation, 5 days per week, and 52 weeks total.

Appendix N

TCS Pad Material Certification Letter

FREEDOM MATERIALS
5839 ST. RT. 5
RAVENNA, OHIO 44266
PH-330-296-7706
FAX-330-296-7736

FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Brian Stockwell	Tim Patrick
COMPANY:	DATE:
PIKA	4/26/2013
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
RE:	YOUR REFERENCE NUMBER:

☐ URGENT X FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

The limestone we quoted for your Sand Creek relocating project in the Ravenna Arsenal is virgin material originating from Sandusky Crushed Limestone quarry. It is an ODOT approved source. If you need anything else please let me know.

Thank you,
Tim

Appendix O

TCS Pad Sampling Results

SUMMARY TABLE - 3
TCS SOIL SAMPLE LOCATIONS

ANALYTE**, UNITS, METHOD NO.	Surface Soil Background Criteria mg/kg	DA2SS-250M-0001-SO	Qualifier	MDL	DA2SS-250M-0002-SO	Qualifier	MDL	DA2SS-250M-0002-DUP	Qualifier	MDL
Sample Date		7/1/2013			9/25/2013			9/25/2013		
Sample Area		TCS PAD - PRE			TCS PAD POST			TCS PAD POST		
EXPLOSIVES mg/kg										
1,3,5-Trinitrobenzene	--	1.3	U	0.050	0.016	J	0.0099	0.021	J	0.0099
1,3-Dinitrobenzene	--	1.3	U	0.021	0.25	U	0.0042	0.25	U	0.0041
2,4,6-Trinitrotoluene	--	21		0.098	0.25	U	0.019	0.14	J	0.019
2,4-Dinitrotoluene	--	1.3	U	0.027	0.25	U	0.0053	0.25	U	0.0052
2,6-Dinitrotoluene	--	1.3	U	0.037	0.25	U	0.0073	0.25	U	0.0072
2-Amino-4,6-Dinitrotoluene	--	1.3	U	0.063	0.25	U	0.012	0.25	U	0.012
2-Nitrotoluene	--	1.3	U	0.065	0.25	U	0.013	0.25	U	0.013
3-Nitrotoluene	--	1.3	U	0.078	0.25	U	0.015	0.25	U	0.015
4-Amino-2,6-Dinitrotoluene	--	1.3	U	0.050	0.25	U	0.0099	0.25	U	0.0099
4-Nitrotoluene	--	1.3	U	0.092	0.25	U	0.018	0.25	U	0.018
HMX	--	1.3	U	0.061	0.25	U	0.012	0.25	U	0.012
Nitrobenzene	--	1.3	U	0.089	0.25	U	0.017	0.25	U	0.017
PETN	--	0.50	U	0.025	0.50	U	0.025	0.49	U	0.025
RDX	--	1.3	U	0.060	0.25	U	0.012	0.25	U	0.012
Tetryl	--	1.3	U	0.050	0.25	U	0.0099	0.25	U	0.0099
Propellants mg/kg										
Nitrocellulose	--	6.6		0.76	0.96	J	0.8	0.92	J	0.79
Nitroglycerine	--	2.5		0.075	0.5	U	0.015	0.49	U	0.015
Nitroguanidine	--	0.25	U	0.020	0.25	U	0.020	0.25	U	0.020
Total Phosphorus 365.2 mg/kg										
Total Phosphorus	--	110		0.1	42		0.097	37		0.096
White Phosphorus EPA 7580 ug/kg										
White Phosphorus	--	ND	U	0.15	ND		0.2	ND		0.22
METALS 6010B mg/kg										
Aluminum	17700	12000		9	11000		8.1	9700		8.7
Antimony	0.96	0.44	J	0.37	0.35	J	0.33	0.91	U	0.35
Arsenic	15.4	13		0.28	9.1		0.25	9.2		0.27
Barium	88.4	59		0.067	48	B	0.060	44	B	0.064
Beryllium	0.88	0.62		0.040	0.50		0.036	0.45		0.039
Cadmium	0.0	1.9		0.034	2.9		0.030	1.5		0.033
Calcium (essential nutrient)	15800	**16000**	**B**	15.0	14000	B	14	13000	B	14
Chromium	--	21		0.19	16.0		0.17	16		0.18
Cobalt	10.4	8.1		0.15	6.8		0.14	6.4		0.14
Copper	17.7	**140**		0.70	**120**		0.62	**100**		0.67
Iron (essential nutrient)	23100	23000		4.6	20000	B	21	21000	B	22
Lead	26.1	**200**		0.18	98		0.16	72		0.17
Magnesium (essential nutrient)	3030	**3300**		470	2800	B	4.3	2900	B	4.6
Manganese	1450	310	B	0.07	270	B	0.062	260	B	0.067
Nickel	21.1	**22**		0.25	16		0.23	16		0.24
Potassium (essential nutrient)	927	**1000**	**B**	5.8	920		5.2	810		5.6
Selenium	1.4	0.57		0.42	0.42	U	0.38	0.45	U	0.41
Silver	0	0.47	U	0.094	0.42	U	0.084	0.45	U	0.091
Sodium (essential nutrient)	123	88	J	62.0	**420**	**U**	56	**450**	**U**	60
Thallium	0	0.94	U	0.52	0.84	U	0.46	0.91	U	0.50
Vanadium	31.1	20.0		0.11	18		0.10	17		0.11
Zinc	61.8	**1100.0**	**B**	4.7	**800**		0.84	**540**		0.91
7471A mg/kg										
Mercury	0.036	**0.044**	**J**	0.014	0.033	J	0.015	**0.048**	**J**	0.014

Notes:
mg/kg = milligrams per kilogram (parts per million)
ug/kg = micrograms per kilogram (parts per billion)
MDL - Method Detection Limit
Organics:
U = Indicates that the analyte was analyzed for but not detected
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Inorganics:
U = Indicates that the analyte was analyzed for but not detected
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B = Compound was found in the blank and sample.
Bold = > Background

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA255-250M-0001-SO

Ravenna Army Ammunition Plant

Date: 01 July 2013 **Weather** cloudy **Temperature** 68°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle		Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe	X	Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	**Well Purging Form** Yes - No							

Sample Collection: 0745 hrs

Sample Type: Composite - (MI) - Grab
If MI, # of increments taken: 30

Location: Plotted on Map - Staked in Field
Estimated - Measured - Surveyed

Sample Depth: 0 - 1 FT (below surface)

Decon: Dedicated - Each Day - (Each Location)

Field Parameters (at time of sample)		**Analytical Parameters**				**Other Parameters**			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate		**QA Samples**			
Temperature	°C	Pesticides/PCBs		Asbestos		MS/MSD			
Sp. Conductance:	uMHOs	Cyanides		pH		Duplicate ID			
pH	units	TOC		White Phosphorus	X	Equipment Rinse ID			
Turbidity	N.T.U.	Grain Size		Phosphorus	X	Trip Blank ID			

Sample Description

Dark brown, moist, no odor, no stain, poorly sorted, low plasticity, silty clay and gravel

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID:

Name:

Agency/Company:

Address:

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: Date: 10/7/13

Field Sampling Report

PIKA INTERNATIONAL, INC.

Project Name: Environmental Remediation Services (ERS)

Location ID: DA25S-250M-0002-SO

Ravenna Army Ammunition Plant

Date: 25 SEP 2013 **Weather** Cloudy **Temperature** 55°

Sampling Information

Source	Groundwater / Product		Surface Water		Soils / Sediments / Sludge			
Method	Bailer		Sample Bottle		Scoop		Trowel	
	Pump		Bacon Bomb		Bowl		Hand Auger	
	Micro-purge				Push Probe	X	Plastic Liner	
Type/Construction					Mattocks			
Miscellaneous	Well Purging Form Yes - No							

Sample Collection: 1211 hrs

Sample Type: Composite - (MI) - Grab
If MI, # of increments taken: 30

Location: Plotted on Map - (Staked in Field)
Estimated - Measured - Surveyed

Sample Depth: 0-1 FT (below surface)

Decon: Dedicated - Each Day - (Each Location)

Field Parameters (at time of sample)		Analytical Parameters				Other Parameters			
PID / FID Readings:		VOC		TPH GRO		Corrosivity			
Background:	ppm	SVOC		TPH DRO		Reactivity Sulfide/Cyanide			
		Explosives	X	Chromium +6		Ignitability			
Sample:	ppm	Propellants	X	Nitrate					
Water Level	FT	TAL Metals	X	Sulfate					
Temperature	°C	Pesticides/PCBs		Asbestos		QA Samples			
Sp. Conductance:	uMHOs	Cyanides		pH		MS/MSD	NA		
pH	units	TOC		White Phosphorus	X	Duplicate ID	DA25S-250M-0002-DUP		
Turbidity	N.T.U.	Grain Size		Phosphorus	X	Equipment Rinse ID	NA		
						Trip Blank ID	NA		

Sample Description

Dark brown, moist, no odor, no staining. Poorly sorted, low plasticity, silty clay and gravel.

Soil sample description should include:

Munsell Color Odor Staining Texture Sorting Plasticity Moisture

Water sample description should include:

Color Odor Sheen Turbidity

Split Sample

Split Sample ID:

Name:

Agency/Company:

Address:

QA/QC Provided: MS/MSD - Duplicate - Trip Blanks - Field Blanks

Parameters: Same as Above - As Listed

Logged By: Sue Boles (Please Print)

Signature: Sue Boles

Reviewed by: Rick Callahan (Please Print)

Signature: Rick Callahan Date: 10/7/13

Client: PIKA International, Inc.
Project/Site: ERS 12-08-151

TestAmerica Job ID: 240-26428-1

Client Sample ID: DA2SS-250M-0001-SO
Date Collected: 07/01/13 07:45
Date Received: 07/02/13 08:17

Lab Sample ID: 240-26428-1
Matrix: Solid

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.25	U	0.25	0.020	mg/Kg		07/12/13 06:39	07/18/13 16:04	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	1.3	U	1.3	0.050	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
1,3-Dinitrobenzene	1.3	U	1.3	0.021	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
2,4,6-Trinitrotoluene	21		1.3	0.098	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
2,4-Dinitrotoluene	1.3	U	1.3	0.027	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
2,6-Dinitrotoluene	1.3	U	1.3	0.037	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
2-Amino-4,6-dinitrotoluene	1.3	U	1.3	0.063	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
2-Nitrotoluene	1.3	U	1.3	0.065	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
3-Nitrotoluene	1.3	U	1.3	0.078	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
4-Nitrotoluene	1.3	U	1.3	0.092	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
4-Amino-2,6-dinitrotoluene	1.3	U	1.3	0.050	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
HMX	1.3	U	1.3	0.061	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
RDX	1.3	U	1.3	0.060	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
Nitrobenzene	1.3	U	1.3	0.089	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
Tetryl	1.3	U	1.3	0.050	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
Nitroglycerin	2.5	U	2.5	0.075	mg/Kg		07/12/13 06:55	07/19/13 18:58	5
PETN	2.5	U	2.5	0.13	mg/Kg		07/12/13 06:55	07/19/13 18:58	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*109*		*78 - 118*	*07/12/13 06:55*	*07/17/13 21:46*	*5*
3,4-Dinitrotoluene	*112*		*78 - 118*	*07/12/13 06:55*	*07/19/13 18:58*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000		19	9.0	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Antimony	0.44	J	0.94	0.37	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Barium	59		19	0.067	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Beryllium	0.62		0.47	0.040	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Calcium	16000	B	470	15	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Cadmium	1.9		0.19	0.034	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Cobalt	8.1		4.7	0.15	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Chromium	21		0.47	0.19	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Copper	140		2.4	0.70	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Iron	23000		9.4	4.6	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Potassium	1000	B	470	5.8	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Magnesium	3300		470	4.8	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Manganese	310	B	1.4	0.070	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Silver	0.47	U	0.47	0.094	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Sodium	88	J	470	62	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Nickel	22		3.8	0.25	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Vanadium	20		4.7	0.11	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Zinc	1100	B	9.4	4.7	mg/Kg	☼	07/10/13 10:34	07/11/13 11:27	5
Arsenic	13		0.94	0.28	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Lead	200		0.28	0.18	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Selenium	0.67		0.47	0.42	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1
Thallium	0.94	U	0.94	0.52	mg/Kg	☼	07/10/13 10:34	07/11/13 10:45	1

Client: PIKA International, Inc.
Project/Site: ERS 12-08-151

TestAmerica Job ID: 240-26428-1

Client Sample ID: DA2SS-250M-0001-SO
Date Collected: 07/01/13 07:45
Date Received: 07/02/13 08:17

Lab Sample ID: 240-26428-1
Matrix: Solid
Percent Solids: 97.5

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044	J	0.096	0.014	mg/Kg	☼	07/10/13 14:10	07/11/13 12:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	110		11	0.11	mg/Kg	☼	07/11/13 09:04	07/11/13 15:52	1
Nitrocellulose	6.6		4.9	0.76	mg/Kg	☼	07/15/13 06:42	07/15/13 12:40	1

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ANALYTICAL REPORT

Workorder: 34-1318430
Client: Test America
Project Manager: Kevin W. Griffiths

Analytical Results

Sample ID: **DA2SS-250M-0001-50 (240-26428-**	Sampling Site: Ravenna, OH	Collected: 07/01/2013
		Received: 07/03/2013
Lab ID: 1318430001	Media: 4 oz Amber Glass Jar	
Matrix: Soil/Solid/Sediment	Sampling Parameter: NA	

Preparation: EPA 7580, Soil Prep	**Weight/Volume**	**Analysis:** EPA 7580, Soil	**Instrument ID:** GCE24
Batch: EGC/4544 (HBN: 110144)	**Initial:** 44.448 grams	**Batch:** EGC/4545 (HBN: 110151)	**Percent Solid:** NA
Prepared: 07/15/2013	**Final:** 10 mL	**Analyzed:** 07/17/2013 01:46	**Report Basis:** Wet

Analyte	ug/Kg	MDL (ug/Kg)	RL (ug/Kg)	Dilution	Qual.
White Phosphorus	ND	0.15	0.50	1	U

Comments

Quality Control: EPA 7580 - (HBN: 110144)

7580: Samples from two separate work orders batched together to conserve resources.

Quality Control: EPA 7580 - (HBN: 110151)

MS recovery outside of established limits due to unstable nature of P4 aqueous spiking solution.

Report Authorization

Method	Analyst	Data Review
EPA 7580	Christopher Winter	Mila V. Potekhin

Laboratory Contact Information

ALS Environmental
960 W Levoy Drive
Salt Lake City, Utah 84123

Phone: (801) 266-7700
Email: alslt.lab@ALSGlobal.com
Web: www.alsslc.com

Client Sample ID: DA2ss-250M-0002-SO
Date Collected: 09/25/13 12:11
Date Received: 09/26/13 15:47

Lab Sample ID: 240-29485-7
Matrix: Solid

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Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.25	U	0.25	0.020	mg/Kg		10/03/13 16:03	10/09/13 21:43	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.016**	**J**	0.25	0.0099	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
1,3-Dinitrobenzene	0.25	U	0.25	0.0042	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
2,4,6-Trinitrotoluene	0.25	U	0.25	0.019	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
2,4-Dinitrotoluene	0.25	U	0.25	0.0053	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
2,6-Dinitrotoluene	0.25	U	0.25	0.0073	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
2-Amino-4,6-dinitrotoluene	0.25	U	0.25	0.012	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
2-Nitrotoluene	0.25	U	0.25	0.013	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
3-Nitrotoluene	0.25	U	0.25	0.015	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
4-Nitrotoluene	0.25	U	0.25	0.018	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
4-Amino-2,6-dinitrotoluene	0.25	U	0.25	0.0099	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
HMX	0.25	U	0.25	0.012	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
RDX	0.25	U	0.25	0.012	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
Nitrobenzene	0.25	U	0.25	0.017	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
Tetryl	0.25	U	0.25	0.0099	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
Nitroglycerin	0.50	U	0.50	0.015	mg/Kg		10/03/13 14:25	10/10/13 00:17	1
PETN	0.50	U	0.50	0.025	mg/Kg		10/03/13 14:25	10/10/13 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*91*		*78 - 118*	*10/03/13 14:25*	*10/10/13 00:17*	*1*
3,4-Dinitrotoluene	*103*		*78 - 118*	*10/03/13 14:25*	*10/10/13 01:28*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11000**		17	8.1	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Antimony	**0.35**	**J**	0.84	0.33	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Barium	**48**	**B**	17	0.060	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Beryllium	**0.60**		0.42	0.036	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Calcium	**14000**	**B**	420	14	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Cadmium	**2.9**		0.17	0.030	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Cobalt	**6.8**		4.2	0.14	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Chromium	**16**		0.42	0.17	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Copper	**120**		2.1	0.62	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Iron	**20000**	**B**	42	21	mg/Kg	☼	10/07/13 10:38	10/15/13 14:38	5
Potassium	**920**		420	5.2	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Magnesium	**2800**	**B**	420	4.3	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Manganese	**270**	**B**	1.3	0.062	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Silver	0.42	U	0.42	0.084	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Sodium	420	U	420	56	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Nickel	**16**		3.4	0.23	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Vanadium	**18**		4.2	0.10	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Zinc	**800**		1.7	0.84	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Arsenic	**9.1**		0.84	0.25	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Lead	**98**		0.25	0.16	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Selenium	0.42	U	0.42	0.38	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1
Thallium	0.84	U	0.84	0.46	mg/Kg	☼	10/07/13 10:38	10/15/13 10:40	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-29485-1

Client Sample ID: DA2ss-250M-0002-SO
Date Collected: 09/25/13 12:11
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-7
Matrix: Solid
Percent Solids: 97.9

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033	J	0.097	0.015	mg/Kg	☼	10/07/13 15:15	10/08/13 11:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	42		9.8	0.097	mg/Kg	☼	10/03/13 06:02	10/03/13 13:57	1
Nitrocellulose	0.96	J	5.1	0.80	mg/Kg	☼	10/08/13 07:58	10/10/13 11.03	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10	0.10	%			10/03/13 16:46	1
Percent Moisture	2.1		0.10	0.10	%			10/03/13 16:46	1

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ANALYTICAL REPORT

Workorder: 34-1327087
Client: Test America
Project Manager: Kevin W. Griffiths

Analytical Results

Sample ID: **240-29485-7**	Sampling Site: ERS 24006840	Collected: 09/25/2013
Lab ID: 1327087001	Media: 4 oz Amber Glass Jar	Received: 09/27/2013
Matrix: Soil/Solid/Sediment	Sampling Parameter: NA	

Preparation: EPA 7580, Soil Prep	**Weight/Volume**	**Analysis:** EPA 7580, Soil	**Instrument ID:** GCE24	
Batch: EGC/4643 (HBN: 114559)	**Initial:** 41.886 grams	**Batch:** EGC/4644 (HBN: 114564)	**Percent Solid:** 74.7	
Prepared: 10/01/2013	**Final:** 10 mL	**Analyzed:** 10/02/2013 19:37	**Report Basis:** Dry	

Analyte	ug/Kg	MDL (ug/Kg)	RL (ug/Kg)	Dilution	Qual.
White Phosphorus	ND	0.20	0.67	1	U

Sample ID: **240-29485-8**	Sampling Site: ERS 24006840	Collected: 09/25/2013
Lab ID: 1327087002	Media: 4 oz Amber Glass Jar	Received: 09/27/2013
Matrix: Soil/Solid/Sediment	Sampling Parameter: NA	

Preparation: EPA 7580, Soil Prep	**Weight/Volume**	**Analysis:** EPA 7580, Soil	**Instrument ID:** GCE24	
Batch: EGC/4643 (HBN: 114559)	**Initial:** 44.97 grams	**Batch:** EGC/4644 (HBN: 114564)	**Percent Solid:** 69.1	
Prepared: 10/01/2013	**Final:** 10 mL	**Analyzed:** 10/02/2013 19:47	**Report Basis:** Dry	

Analyte	ug/Kg	MDL (ug/Kg)	RL (ug/Kg)	Dilution	Qual.
White Phosphorus	ND	0.22	0.72	1	U

14

Report Authorization

Method	Analyst	Peer Reviewer
EPA 7580	Christopher Winter	Thomas T. McKay
Solids/Moisture Determination	Ilse J. Ovalle	Lauren Kidd

Laboratory Contact Information

ALS Environmental
960 W Levoy Drive
Salt Lake City, Utah 84123

Phone: (801) 266-7700
Email: alslt.lab@ALSGlobal.com
Web: www.alsslc.com

Client Sample ID: DA2ss-250M-0002-DUP
Date Collected: 09/25/13 12:11
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-8
Matrix: Solid

Method: 8330 Modified - Nitroguanidine (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitroguanidine	0.25	U	0.25	0.020	mg/Kg		10/03/13 16:03	10/09/13 22:18	1

Method: 8330B - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.021**	**J**	0.25	0.0099	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
1,3-Dinitrobenzene	0.25	U	0.25	0.0041	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
2,4,6-Trinitrotoluene	**0.14**	**J**	0.25	0.019	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
2,4-Dinitrotoluene	0.25	U	0.25	0.0052	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
2,6-Dinitrotoluene	0.25	U	0.25	0.0072	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
2-Amino-4,6-dinitrotoluene	0.25	U	0.25	0.012	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
2-Nitrotoluene	0.25	U	0.25	0.013	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
3-Nitrotoluene	0.25	U	0.25	0.015	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
4-Nitrotoluene	0.25	U	0.25	0.018	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
4-Amino-2,6-dinitrotoluene	0.25	U	0.25	0.0099	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
HMX	0.25	U	0.25	0.012	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
RDX	0.25	U	0.25	0.012	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
Nitrobenzene	0.25	U	0.25	0.017	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
Tetryl	0.25	U	0.25	0.0099	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
Nitroglycerin	0.49	U	0.49	0.015	mg/Kg		10/03/13 14:38	10/10/13 01:44	1
PETN	0.49	U	0.49	0.025	mg/Kg		10/03/13 14:38	10/10/13 01:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
3,4-Dinitrotoluene	*90*		*78 - 118*	*10/03/13 14:38*	*10/10/13 01:44*	*1*
3,4-Dinitrotoluene	*103*		*78 - 118*	*10/03/13 14:38*	*10/10/13 02:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9700**		18	8.7	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Antimony	0.91	U	0.91	0.35	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Barium	**44**	**B**	18	0.064	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Beryllium	**0.45**		0.45	0.039	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Calcium	**13000**	**B**	450	14	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Cadmium	**1.6**		0.18	0.033	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Cobalt	**6.4**		4.5	0.14	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Chromium	**16**		0.45	0.18	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Copper	**100**		2.3	0.67	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Iron	**21000**	**B**	45	22	mg/Kg	☼	10/07/13 10:38	10/15/13 14:42	5
Potassium	**810**		450	5.6	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Magnesium	**2900**	**B**	450	4.6	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Manganese	**260**	**B**	1.4	0.067	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Silver	0.45	U	0.45	0.091	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Sodium	450	U	450	60	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Nickel	**16**		3.6	0.24	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Vanadium	**17**		4.5	0.11	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Zinc	**640**		1.8	0.91	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Arsenic	**9.2**		0.91	0.27	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Lead	**72**		0.27	0.17	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Selenium	0.45	U	0.45	0.41	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1
Thallium	0.91	U	0.91	0.50	mg/Kg	☼	10/07/13 10:38	10/15/13 10:44	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-29485-1

Client Sample ID: DA2ss-250M-0002-DUP
Date Collected: 09/25/13 12:11
Date Received: 09/25/13 15:47

Lab Sample ID: 240-29485-8
Matrix: Solid
Percent Solids: 97.7

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.048	J	0.096	0.014	mg/Kg	☼	10/07/13 15:15	10/08/13 11:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	37		9.7	0.096	mg/Kg	☼	10/03/13 06:08	10/03/13 13:57	1
Nitrocellulose	0.92	J	5.1	0.79	mg/Kg	☼	10/08/13 07:58	10/10/13 11:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	98		0.10	0.10	%			10/03/13 16:46	1
Percent Moisture	2.3		0.10	0.10	%			10/03/13 16:46	1

8

ANALYTICAL REPORT

Workorder: 34-1327087
Client: Test America
Project Manager: Kevin W. Griffiths

Analytical Results

Sample ID: **240-29485-7**	Sampling Site: ERS 24006840	Collected: 09/25/2013
Lab ID: 1327087001	Media: 4 oz Amber Glass Jar	Received: 09/27/2013
Matrix: Soil/Solid/Sediment	Sampling Parameter: NA	

Analysis Method: EPA 7580

Preparation: EPA 7580, Soil Prep	**Weight/Volume**	**Analysis:** EPA 7580, Soil		**Instrument ID:** GCE24	
Batch: EGC/4643 (HBN: 114559)	**Initial:** 41.886 grams	**Batch:** EGC/4644 (HBN: 114564)		**Percent Solid:** 74.7	
Prepared: 10/01/2013	**Final:** 10 mL	**Analyzed:** 10/02/2013 19:37		**Report Basis:** Dry	
Analyte	**ug/Kg**	**MDL (ug/Kg)**	**RL (ug/Kg)**	**Dilution**	**Qual.**
White Phosphorus	ND	0.20	0.67	1	U

Sample ID: **240-29485-8**	Sampling Site: ERS 24006840	Collected: 09/25/2013
Lab ID: 1327087002	Media: 4 oz Amber Glass Jar	Received: 09/27/2013
Matrix: Soil/Solid/Sediment	Sampling Parameter: NA	

Analysis Method: EPA 7580

Preparation: EPA 7580, Soil Prep	**Weight/Volume**	**Analysis:** EPA 7580, Soil		**Instrument ID:** GCE24	
Batch: EGC/4643 (HBN: 114559)	**Initial:** 44.97 grams	**Batch:** EGC/4644 (HBN: 114564)		**Percent Solid:** 69.1	
Prepared: 10/01/2013	**Final:** 10 mL	**Analyzed:** 10/02/2013 19:47		**Report Basis:** Dry	
Analyte	**ug/Kg**	**MDL (ug/Kg)**	**RL (ug/Kg)**	**Dilution**	**Qual.**
White Phosphorus	ND	0.22	0.72	1	U

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Report Authorization

Method	Analyst	Peer Reviewer
EPA 7580	Christopher Winter	Thomas T. McKay
Solids/Moisture Determination	Ilse J. Ovalle	Lauren Kidd

Laboratory Contact Information

ALS Environmental
960 W Levoy Drive
Salt Lake City, Utah 84123

Phone: (801) 266-7700
Email: alslt.lab@ALSGlobal.com
Web: www.alsslc.com

64573

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4149 (1007)

Client: PIKA International Inc	Project Manager: Brian Stockwell	Date: 01 July 2013	Page 1 of 1
Address: 4935 South Prospect St	Telephone Number (Area Code)/Fax Number: 330-296-6519	Lab Location: North Canton	
City: Ravenna / State: OH / Zip Code: 44266	Site Contact: Rick Callahan		
Project Number/Name: IERS 12-08-151	Carrier/Waybill Number:		
Contract/Purchase Order/Quote Number: 120815I-001			

Sample I.D. Number and Description	Date	Time	Sample Type	Containers: Volume	Containers: Type	Containers: No.	Preservative	Condition on Receipt/Comments	Analysis: Explosives 8330	Nitrocellulose 353.2	Nitroguanidine 8330 Mod	TAL Metals 6010B	Mercury 7471A	Phosphorus 365.2	White Phosphorus 7580	Solids
DA2ss-250M-0001-SO	7/1/13	0745	Soil	4 8 oz	~~2~~ (G)	2	4°C		X	X	X	X	X	X	X	X

Page 838 of 840

240-26428 Chain of Custody

Special Instructions:

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required: ☒ Normal ☐ Rush ☐ Other _____

QC Level: ☐ I. ☐ II. ☐ III.

Project Specific Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By	7/2/13	14:10	1. Received By: Mark Brewer	7/2/13	8:17
2. Relinquished By	7/2/13 ~~8:17~~		2. Received By: MLB		
3. Relinquished By			3. Received By		

Comments:

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

TestAmerica Canton Sample Receipt Form/Narrative Login # : 26428
Canton Facility

Client Pika International Inc. Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 7-2-13 Opened on 7-2-13

FedEx: 1st Grd Exp UPS FAS Stetson (Client Drop Off) TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF -1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		
IR GUN# 4	(CF 0 °C) Observed Cooler Temp. 5.6 °C	Corrected Cooler Temp. 5.6 °C		☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C		

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 (Yes) No
   - Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   - Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes (No)
12. Were air bubbles >6 mm in any VOA vials? Yes No (NA)
13. Was a trip blank present in the cooler(s)? Yes (No)

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Login Sample Receipt Checklist

Client: PIKA International, Inc.

Job Number: 240-26428-1

Login Number: 26428
List Number: 1
Creator: Ortiz, Ana M

List Source: TestAmerica Sacramento
List Creation: 07/10/13 11:09 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	-0.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Test America
4101 Shuffel Drive NW
North Canton, OH 44721
330-497-9396
Fax. 1-330-497-0772

Page 1 of 1

Lab Lot #

Report To:		Bill To:	
Contact:	Brian Stockwell	Contact:	Brian Stockwell
Company:	PIKA International, Inc.	Company:	PIKA International, Inc.
Address:	4935 South Prospect St	Address:	4935 South Prospect St
	Ravenna, OH 44266		Ravenna, OH 44266
Phone:	(330)296-6519	Phone:	(330)296-6519
Fax:	(330)296-6638	Fax:	(330)296-6638
Email:		PO #:	
		Quote #:	

Sampler Name: Sue Boles
Sampler Signature: Sue Boles
Project: ERS Project #12-08-151

Lab PM: John McFadden

Package Sealed Yes No	Samples Sealed Yes No
Received on Ice Yes No	Samples Intact Yes No
Temperature C of Cooler	
Within Hold Time Yes No	
Preserv. Indicated Yes No N/A	
pH Check OK Yes No N/A	
Res CL2 Check OK Yes No N/A	
Sample Labels and COC Agree Yes No COC not present	

240-29485 Chain of Custody

e Required	Standard TAT	Refrg #												
d Copy		# / Cont.	glass	glass	glass	Poly	glass	glass	glass	glass				
/Email		Volume												
		Preserv.	4°C	4°C	4°C	HNO3	4°C	4°C	4°C	4°C				

Laboratory ID	MS-MSD	Client Sample ID	Sampling Date	Sampling Time	Matrix	Comp/Grab	Explosives (8330)	Nitrocellulose (353.2)	Nitroguanadine (8330 Modified)	TAL Metals (6010B)	Mercury (7471A)	Solids	Phosphorus	White Phosphorus	
		DA2ss-132M-1010-SO	9/25/2013	0948	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-133M-1010-SO	9/25/2013	1000	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-133M-1010-ER	9/25/2013	0720	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic
		DA2ss-134M-1010-SO	9/25/2013	1008	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-135M-1010-SO	9/25/2013	1020	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-135M-1010-DUP	9/25/2013	1020	S	MI	X	X	X	X	X	X			1-32oz / 1-16oz
		DA2ss-250M-0002-SO	9/25/2013	1211	S	MI	X	X	X	X	X	X	X	X	2-32oz
		DA2ss-250M-0002-DUP	9/25/2013	1211	S	MI	X	X	X	X	X	X	X	X	2-32oz
		DA2sw-096-1010-SW	9/25/2013	1136	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic
		DA2sw-099-1010-SW	9/25/2013	1059	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic
		DA2sw-131-1010-SW	9/25/2013	1109	W	G	X	X	X	X	X				4-32oz/ 1-500mL plastic

Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:
Sue Boles	PIKA International	9/25/2013	1600	[signature]	[signature]	9-25-13	4:47
Relinquished by:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:

Matrix Key

W - Water	WW - Wastewater	DL - Drum Liquid	A Air
S - Soil	SE - Sediment	DS - Drum Solid	OL - Oil
SL - Sludge	L - Leachate	W - Wipe	O _____
SO - Solid	M - Miscellaneous		

Comments:
ALL SOIL SAMPLES MUST BE MI SAMPLE PROCESSED

Date Received
Courier:
Hand Delivered:
Bill of Lading:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 29485
Canton Facility

Client Pika International Site Name

Cooler unpacked by: Rachel D. Green

Cooler Received on 9-26-13 Opened on 9-26-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

TestAmerica Cooler # Misti Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF +2 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF +1 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 5	(CF +2 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF -0 °C) Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 8 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other
Concerning ____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____

TestAmerica Multiple Cooler Receipt Form/Narrative — Login # : 29485
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client Coolers	8	1.6	1.6	Ice
2	1	0.8	0.8	1
3	1	1.2	1.2	1
4	1	1.2	1.2	1

Login Sample Receipt Checklist

Client: PIKA International, Inc.

Job Number: 240-29485-1

Login Number: 29485
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 09/27/13 10:36 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: PIKA International, Inc.

Job Number: 240-29485-1

Login Number: 29485
List Number: 2
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 10/02/13 11:08 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix P

ODA2 Access Road Repair Material (304 Gravel) Certification Letter

FREEDOM LAND DEVELOPMENT, LLC
dba
FREEDOM MATERIALS

5839 State Route 5 P.O. Box 1010 Phone: 330-296-7790
Ravenna, Ohio 44266 Fax: 330-296-7736

September 10, 2013

To: Falkenberg Excavating
Pika International

RE: ODA #2 Ravenna Arsenal

To Whom It May Concern,

Freedom Materials will be supplying O.D.O.T. #304 Gravel to Falkenberg Excavating for the above project.

The #304 Gravel is Virgin O.D.O.T material from either Lakeside Sand & Gravel or Shelly Materials in Mantua, Ohio. Both of these sources are Group 1 O.D.O.T. approved.

If you have any questions or concerns, please do not hesitate to call.

Thank-You

Tim Patrick
Freedom Land Development
Freedom Materials

Appendix Q

Analytical Reports
Data Verification
ADR Reports

Purves Environmental

Environmental consulting

10/28/13

Brian Stockwell
PIKA International, Inc
4935 South Prospect St.
Suite A
Ravenna, OH 44266

Dear Brian:

Enclosed are the data verification reports for Job ERS Job # 12-08-151.

The Test America Job Numbers:

240-26428-1, 240-27158-1, 240-27193-1, 240-27508-1, 240-27746-1, 240-29485-1

The only issue found was that a "Login Container Summary Report" was provided in data package 240-27746-1 but not in any other data packages. It is not clear if this is part of the QAPP requirements. It is no necessary in most cases if all of the samples are received in the required containers under 40CFR136. Otherwise there were no documentation missing that would hinder the full validation of the afore mentioned data packages.

If you have any questions, please contact me at 330-687-3360 or my email address wpurves330@gmail.com.

Sincerely

William W Purves

7484 Woodspring Lane, Hudson, OH 44236 Phone: 330-687-3360
e-mail: wpurves330@gmail.com

PIKA
INTERNATIONAL, INC.

Sue Boles <sboles@pikainc.com>

RE: Data Verification question

1 message

McFadden, John <John.McFadden@testamericainc.com> Tue, Oct 29, 2013 at 10:17 AM
To: Sue Boles <sboles@pikainc.com>

Hi Sue,

This report was done about the time our lab was trying something new. The Login Container Summary Report has the pHs of the sample containers received from the client. Our lab ran a 1 week beta test (Aug. 5th to the 9th), along with other labs, to make sure the Login Container Summary report was pulling in properly and was being placed at the end of the report. It shows the three containers that were received in pre-preserved containers and that the pH was <2 for the metals bottle. Test America is going to an electronic way of recording pHs that are received in the lab in pre-preserved bottles. Each lab was doing something different so we wanted to standardize what was being done. This helps our receiving department as they don't have to hand write IDs that may be difficult for the client to read, and it saves the receiving department's time as they don't have to write out long IDs. This report has been accepted by Test America and you will see the Login Container Summary Report being included in all reports where the lab receives pre-preserved bottles.

The only exception is there will not be pre-preserved vials listed as the receiving department does not check the pH of vials due to possible loss of VOAs. The lab checks the pH of pre-preserved vials at the bench level.
Thanks,
John

JOHN MCFADDEN
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

4101 Shuffel Street NW
North Canton, OH 44720
Tel 330.966.0355 | Fax 330.497.0772
www.testamericainc.com

From: Sue Boles [mailto:sboles@pikainc.com]
Sent: Tuesday, October 29, 2013 8:39 AM
To: McFadden, John
Subject: Data Verification question

Good Morning John,

We received our data verification report back and the only issue found was that a "Login Container Summary report" was provided in data package 240-27746 but not in any other data packages. Is this something that is necessary or required?

Thanks,
Sue

--

Sue Boles
PIKA International Inc
4935 South Prospect St
Suite A
Ravenna OH 44266
Phone # 330-296-6519
Fax # 330-296-6638

Building a Clean and Secure Future

Purves Environmental

Data Verification Report Date: 10/23/13 Page 1 of 3

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
It does not validate any data or judge any data.
Complete = All requirements are met no comment required.
Incomplete = All requirements are not met, see comment section for missing information.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-26428-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS 12-08-151

	Complete	Incomplete*

*See Description in comment area for incomplete issues.

	Complete	Incomplete*
Job #	✓	
Comment		
Job Description	✓	
Comment		
Signature	✓	
Comment		
Contact Information	✓	
Comment		
Table of Contents	✓	
Comment		
Case Narrative	✓	
Comment		
Manual Integration narrative		
Narrative	✓	
Comment		
Sample Summary	✓	
Comment		
Executive Summary		
Detected Elements or Compounds	✓	
Comment		
Method Summary	✓	
Comment		
Method/Analyst Summary	✓	
Comment		

Analytical Data and Quality Control: Includes all comments, dates and flags.**
** For analysis requiring surrogates or internal standards; the verification only looks for the data to be reported, not the validation or judgment of the data.

Analytical Data	✓	
Comment		

Purves Environmental

Data Verification Continued

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
It does not validate any data or judge any data.
Complete = All requirements are met no comment required.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-26428-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS 12-08-151

Incomplete = All requirements are not met, see comment section for missing information.

Complete	Incomplete*

*See Description in comment area for incomplete issues.

Quality Control Data includes all elements of the quality control process and summaries.

	Complete	Incomplete*
Quality Control Data	✓	
Comment		
Qualifiers Definition	✓	
Comment		
Reagent Traceability and Certifications		
Summary	✓	
Comment		
Detection Limits for all analytes (Are all detection limits reported)	✓	
Matrix Spike/Matrix Spike data (Is data provided where required)	✓	
Comment		
% Solids data (where required)	✓	
Comment		
Method 8330B Explosives (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Modified Method 8330 for Nitroguanidine (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 6010B Metals (includes preparation logs, checklists, raw data and calibration data) (also includes serial dilutions, interference check data)	✓	
Comment		
Method 7471A/7470A Mercury (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 353.2 Nitrocellulose (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		

Purves Environmental

Data Verification Continued
Document Verification
This document reviews the report for all of the elements necessary for full data validation.
It does not validate any data or judge any data.
Complete = All requirements are met no comment required.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-26428-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS 12-08-151

Incomplete = All requirements are not met, see comment section for missing information.

Complete	Incomplete*

*See Description in comment area for incomplete issues.

Method 365.1 Total Phosphorus (includes preparation Logs, Checklists, raw data, and calibration Data)

✓	

Comment
Method 7580 White Phosphorus (includes preparation Logs, Checklists, raw data, and calibration Data)
A Subcontracted Analysis

✓	

Comment
Subcontractor Information and COC

✓	

Comment
Chain of Custody and Shipping documents (includes check lists)

✓	

Comment

Signature: _____
William W Purves

Purves Environmental
7484 Woodspring Lane
Hudson, OH 44236

Purves Environmental

Data Verification Report Date: 10/23/13 Page 1 of 3

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
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Incomplete = All requirements are not met, see comment section for missing information.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27158-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

	Complete	Incomplete*

*See Description in comment area for incomplete issues.

	Complete	Incomplete*
Job #	✓	
Comment		
Job Description	✓	
Comment		
Signature	✓	
Comment		
Contact Information	✓	
Comment		
Table of Contents	✓	
Comment		
Case Narrative	✓	
Comment		
Manual Integration narrative		
Narrative	✓	
Comment		
Sample Summary	✓	
Comment		
Executive Summary		
Detected Elements		
or Compounds	✓	
Comment		
Method Summary	✓	
Comment		
Method/Analyst		
Summary	✓	
Comment		

Analytical Data and Quality Control: Includes all comments, dates and flags.**
** For analysis requiring surrogates or internal standards; the verification only looks for the data to be reported, not the validation or judgment of the data.

Analytical Data	✓	
Comment		

Purves Environmental

Data Verification Continued

Document Verification

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Complete = All requirements are met no comment required.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27158-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

Incomplete = All requirements are not met, see comment section for missing information.

Complete	Incomplete*

*See Description in comment area for incomplete issues.

Quality Control Data includes all elements of the quality control process and summaries.

	Complete	Incomplete*
Quality Control Data	✓	
Comment		
Qualifiers Definition	✓	
Comment		
Reagent Traceability and Certifications		
Summary	✓	
Comment		
Detection Limits for all analytes (Are all detection limits reported)	✓	
Matrix Spike/Matrix Spike data (Is data provided where required)	✓	
Comment		
% Solids data (where required)	✓	
Comment		
Method 8330B Explosives (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Modified Method 8330 for Nitroguanidine (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 6010B Metals (includes preparation logs, checklists, raw data and calibration data) (also includes serial dilutions, interference check data)	✓	
Comment		
Method 7471A/7470A Mercury (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 353.2 Nitrocellulose (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		

Purves Environmental

Data Verification Continued

Document Verification

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Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27158-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

Incomplete = All requirements are not met, see comment section for missing information.

Complete	Incomplete*

*See Description in comment area for incomplete issues.

Chain of Custody and Shipping documents (includes check lists)

✓	

Comment

Signature: _____

William W Purves

Purves Environmental
7484 Woodspring Lane
Hudson, OH 44236

Purves Environmental

Data Verification Report Date: 10/23/13

Document Verification

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Incomplete = All requirements are not met, see comment section for missing information.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27193-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

	Complete	Incomplete*

*See Description in comment area for incomplete issues.

	Complete	Incomplete*
Job #	✓	
Comment		
Job Description	✓	
Comment		
Signature	✓	
Comment		
Contact Information	✓	
Comment		
Table of Contents	✓	
Comment		
Case Narrative	✓	
Comment		
Manual Integration narrative		
Narrative	✓	
Comment		
Sample Summary	✓	
Comment		
Executive Summary		
Detected Elements or Compounds	✓	
Comment		
Method Summary	✓	
Comment		
Method/Analyst Summary	✓	
Comment		

Analytical Data and Quality Control: Includes all comments, dates and flags.**
** For analysis requiring surrogates or internal standards; the verification only looks for the data to be reported, not the validation or judgment of the data.

Analytical Data	✓	
Comment		

Purves Environmental

Data Verification Continued 10/23/13
Document Verification
This document reviews the report for all of the elements necessary for full data validation.
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Complete = All requirements are met no comment required.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27193-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

Incomplete = All requirements are not met, see comment section for missing information.

Complete	Incomplete*

*See Description in comment area for incomplete issues.

Quality Control Data includes all elements of the quality control process and summaries.

	Complete	Incomplete*
Quality Control Data	✓	
Comment		
Qualifiers Definition	✓	
Comment		
Reagent Traceability and Certifications		
Summary	✓	
Comment		
Detection Limits for all analytes (Are all detection limits reported)	✓	
Matrix Spike/Matrix Spike data (Is data provided where required)	✓	
Comment		
% Solids data (where required)	✓	
Comment		
Method 8330B Explosives (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Modified Method 8330 for Nitroguanidine (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 6010B Metals (includes preparation logs, checklists, raw data and calibration data) (also includes serial dilutions, interference check data)	✓	
Comment		
Method 7471A/7470A Mercury (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 353.2 Nitrocellulose (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		

Purves Environmental

Data Verification Continued

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
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Complete = All requirements are met no comment required.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27193-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

Incomplete = All requirements are not met, see comment section for missing information.

Complete	Incomplete*
✓	

*See Description in comment area for incomplete issues.

Chain of Custody and Shipping documents (includes check lists)

Comment

Signature: _____

William W Purves

Purves Environmental
7484 Woodspring Lane
Hudson, OH 44236

Purves Environmental

Data Verification Report Date: 10/24/2013 Page 1 of

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
It does not validate any data or judge any data.
Complete = All requirements are met no comment required.
Incomplete = All requirements are not met, see comment section for missing information.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27508-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

	Complete	Incomplete*

*See Description in comment area for incomplete issues.

	Complete	Incomplete*
Job #	✓	
Comment		
Job Description	✓	
Comment		
Signature	✓	
Comment		
Contact Information	✓	
Comment		
Table of Contents	✓	
Comment		
Case Narrative	✓	
Comment		
Manual Integration narrative		
Narrative	✓	
Comment		
Sample Summary	✓	
Comment		
Executive Summary		
Detected Elements		
or Compounds	✓	
Comment		
Method Summary	✓	
Comment		
Method/Analyst		
Summary	✓	
Comment		

Analytical Data and Quality Control: Includes all comments, dates and flags.**
** For analysis requiring surrogates or internal standards; the verification only looks for the data to be reported, not the validation or judgment of the data.

Analytical Data	✓	
Comment		

7484 Woodspring Lane, Hudson, Oh 44236 Phone:330-687-3360, Email wpurves330@gmail.com

Purves Environmental

Data Verification Continued Date: 10/24/2013 Page 2 of

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
It does not validate any data or judge any data.
Complete = All requirements are met no comment required.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27508-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

Incomplete = All requirements are not met, see comment section for missing information.

Complete	Incomplete*

*See Description in comment area for incomplete issues.

Quality Control Data includes all elements of the quality control process and summaries.

	Complete	Incomplete*
Quality Control Data	✓	
Comment		
Qualifiers Definition	✓	
Comment		
Reagent Traceability and Certifications Summary	✓	
Comment		
Detection Limits for all analytes (Are all detection limits reported)	✓	
Matrix Spike/Matrix Spike data (Is data provided where required)	✓	
Comment		
% Solids data (where required)	✓	
Comment		
Method 8330B Explosives (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Modified Method 8330 for Nitroguanidine (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 6010B Metals (includes preparation logs, checklists, raw data and calibration data) (also includes serial dilutions, interference check data)	✓	
Comment		
Method 7471A/7470A Mercury (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 353.2 Nitrocellulose (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		

Purves Environmental

Data Verification Continued Date: 10/24/2013 Page 3 of

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
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Complete = All requirements are met no comment required.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27508-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

Incomplete = All requirements are not met, see comment section for missing information.

Complete	Incomplete*

*See Description in comment area for incomplete issues.

Chain of Custody and Shipping documents (includes check lists)

✓	

Comment

Signature: _____

William W Purves

Purves Environmental
7484 Woodspring Lane
Hudson, OH 44236

Purves Environmental

Data Verification Report Date: 10/24/2013 Page 1 of 3

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
It does not validate any data or judge any data.
Complete = All requirements are met no comment required.
Incomplete = All requirements are not met, see comment section for missing information.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27746-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

	Complete	Incomplete*

*See Description in comment area for incomplete issues.

	Complete	Incomplete*
Job #	✓	
Comment		
Job Description	✓	
Comment		
Signature	✓	
Comment		
Contact Information	✓	
Comment		
Table of Contents	✓	
Comment		
Case Narrative	✓	
Comment		
Manual Integration narrative		
Narrative	✓	
Comment		
Sample Summary	✓	
Comment		
Executive Summary		
Detected Elements or Compounds	✓	
Comment		
Method Summary	✓	
Comment		
Method/Analyst Summary	✓	
Comment		

Analytical Data and Quality Control: Includes all comments, dates and flags.**

** For analysis requiring surrogates or internal standards; the verification only looks for the data to be reported, not the validation or judgment of the data.

Analytical Data		
Comment		

Purves Environmental

Data Verification Continued Date: 10/24/2013

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
It does not validate any data or judge any data.
Complete = All requirements are met no comment required.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27746-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

Incomplete = All requirements are not met, see comment section for missing information.

Complete	Incomplete*

*See Description in comment area for incomplete issues.

Quality Control Data includes all elements of the quality control process and summaries.

	Complete	Incomplete*
Quality Control Data	✓	
Comment		
Qualifiers Definition	✓	
Comment		
Reagent Traceability and Certifications Summary	✓	
Comment		
Detection Limits for all analytes (Are all detection limits reported)	✓	
Matrix Spike/Matrix Spike data (Is data provided where required)	✓	
Comment		
% Solids data (where required)	✓	
Comment		
Method 8330B Explosives (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Modified Method 8330 for Nitroguanidine (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 6010B Metals (includes preparation logs, checklists, raw data and calibration data) (also includes serial dilutions, interference check data)	✓	
Comment		
Method 7471A/7470A Mercury (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 353.2 Nitrocellulose (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		

Purves Environmental

Data Verification Continued Date: 10/24/2013 Page 3 of 3

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
It does not validate any data or judge any data.
Complete = All requirements are met no comment required.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-27746-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS #12-08-151

Incomplete = All requirements are not met, see comment section for missing information.

Complete	Incomplete*
V	

*See Description in comment area for incomplete issues.

Chain of Custody and Shipping documents (includes check lists)

Comment Login container Summary Report Noting other Packages

Signature: William W Purves

William W Purves

Purves Environmental
7484 Woodspring Lane
Hudson, OH 44236

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
DA2sw-096-1009-SW	240-27746-A-1	Plastic 500ml - with Nitric Acid	<2	_____	_____
DA2sw-099-1009-SW	240-27746-A-2	Plastic 500ml - with Nitric Acid	<2	_____	_____
DA2sw-131-1009-SW	240-27746-A-3	Plastic 500ml - with Nitric Acid	<2	_____	_____

Purves Environmental

Data Verification Report Date: 10/27/13 Page 1 of

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
It does not validate any data or judge any data.
Complete = All requirements are met no comment required.
Incomplete = All requirements are not met, see comment section for missing information.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-29485-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS 12-08-151

	Complete	Incomplete*

*See Description in comment area for incomplete issues.

	Complete	Incomplete*
Job #	✓	
Comment		
Job Description	✓	
Comment		
Signature	✓	
Comment		
Contact Information	✓	
Comment		
Table of Contents	✓	
Comment		
Case Narrative	✓	
Comment		
Manual Integration narrative		
Narrative	✓	
Comment		
Sample Summary	✓	
Comment		
Executive Summary		
Detected Elements or Compounds	✓	
Comment		
Method Summary	✓	
Comment		
Method/Analyst Summary	✓	
Comment		

Analytical Data and Quality Control: Includes all comments, dates and flags.**

** For analysis requiring surrogates or internal standards; the verification only looks for the data to be reported, not the validation or judgment of the data.

Analytical Data	✓	
Comment		

Purves Environmental

Data Verification Continued Date: 10/27/13 Page 2 of

Document Verification

This document reviews the report for all of the elements necessary for full data validation.
It does not validate any data or judge any data.
Complete = All requirements are met no comment required.

Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
Job # 240-29485-1
Client: Pika International, 4935 South Prospect St., Suite A, Ravenna, OH 44266
Job Description: ERS 12-08-151

Incomplete = All requirements are not met, see comment section for missing information.

Complete	Incomplete*

*See Description in comment area for incomplete issues.

Quality Control Data includes all elements of the quality control process and summaries.

	Complete	Incomplete*
Quality Control Data	✓	
Comment		
Qualifiers Definition	✓	
Comment		
Reagent Traceability and Certifications		
Summary	✓	
Comment		
Detection Limits for all analytes (Are all detection limits reported)	✓	
Matrix Spike/Matrix Spike data (Is data provided where required)	✓	
Comment		
% Solids data (where required)	✓	
Comment		
Method 8330B Explosives (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Modified Method 8330 for Nitroguanidine (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 6010B Metals (includes preparation logs, checklists, raw data and calibration data) (also includes serial dilutions, interference check data)	✓	
Comment		
Method 7471A/7470A Mercury (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		
Method 353.2 Nitrocellulose (includes preparation logs, checklists, raw data and calibration data)	✓	
Comment		

Purves Environmental

Data Verification Continued Date: 10/27/13 Page 3 of

Document Verification

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Laboratory of Record: Test America, 4101 Shuffle St NW, North Canton, OH 44720
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Complete	Incomplete*

*See Description in comment area for incomplete issues.

Method 365.1 Total Phosphorus (includes preparation Logs, Checklists, raw data, and calibration Data)

✓	

Comment
Method 7580 White Phosphorus (includes preparation Logs, Checklists, raw data, and calibration Data)
A Subcontracted Analysis

✓	

Comment
Subcontractor Information and COC

✓	

Comment
Chain of Custody and Shipping documents (includes check lists)

✓	

Comment

Signature: _____
William W Purves

Purves Environmental
7484 Woodspring Lane
Hudson, OH 44236

Lab Reporting Batch	ADR Non-Conformance, Data Qualification and Outlier Reports
240-26428	EDD Non-Conformance Report Sample Qualification Report MatrixSpike/Matrix Spike Duplicate Outlier Report Reporting Limits Outlier Report
240-27158	EDD Non-Conformance Report Sample Qualification Report Method Blank Outlier Report Reporting Limits Outlier Report QC Outlier Report: Non- Qualified Outliers for Reporting Limits
240-27193	EDD Non-Conformance Report Sample Qualification Report MatrixSpike/Matrix Spike Duplicate Outlier Report Reporting Limits Outlier Report
240-27508	EDD Non-Conformance Report Sample Qualification Report Reporting Limits Outlier Report QC Outlier Report: Non- Qualified Outliers for Reporting Limits
240-27746	EDD Non-Conformance Report Sample Qualification Report Method Blank Outlier Report Reporting Limits Outlier Report QC Outlier Report: Non- Qualified Outliers for Reporting Limits
240-29485	EDD Non-Conformance Report Sample Qualification Report Laboratory Duplicate RPD Outlier Report MatrixSpike/Matrix Spike Duplicate Outlier Report Reporting Limits Outlier Report Temperature Outlier Report QC Outlier Report: Non- Qualified Outliers for Reporting Limits QC Outlier Report: Temperature

EDD Non-Conformance Report
Lab Reporting Batch ID: 240-26428-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:08**

Non-Conformance Summary Page

Type	Count
0001	0
0002	0
0003	0
0004	0
0005	0
0006	0
0007	0
0008	0
0009	0
0010	0
0011	0
0012	0
0013	0
0014	0
0015	0
0016	0
0017	0
0018	0
0019	0

Type	Count
0020	0
0021	0
0022	0
0023	0
0024	0
0025	0
0026	0
0027	0
0028	0
0029	0
0030	2
0031	0
0032	0
0033	0
0034	45
0035	0
0036	0
0037	0
0038	0
0039	0

Total : 47

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-26428-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:08**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	5	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-26428-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	6	Reporting_Limit	0034	The Reporting Limit of 1.4 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-26428-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	7	Reporting_Limit	0034	The Reporting Limit of 3.8 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-26428-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	10	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-26428-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	14	Reporting_Limit	0034	The Reporting Limit of 19 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-26428-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	18	Reporting_Limit	0034	The Reporting Limit of 4.7 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-26428-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	19	Reporting_Limit	0034	The Reporting Limit of 2.4 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-26428-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	20	Reporting_Limit	0034	The Reporting Limit of 4.7 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-26428-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	21	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-26428-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	49	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-26428-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-26428-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:08**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	50	Reporting_Limit	0034	The Reporting Limit of 1.4 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-26428-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	51	Reporting_Limit	0034	The Reporting Limit of 3.8 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-26428-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	54	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-26428-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	58	Reporting_Limit	0034	The Reporting Limit of 19 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-26428-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	62	Reporting_Limit	0034	The Reporting Limit of 4.7 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-26428-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	63	Reporting_Limit	0034	The Reporting Limit of 2.4 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-26428-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	64	Reporting_Limit	0034	The Reporting Limit of 4.7 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-26428-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	65	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-26428-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	72	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-26428-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	73	Reporting_Limit	0034	The Reporting Limit of 1.4 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-26428-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-26428-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:08**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	74	Reporting_Limit	0034	The Reporting Limit of 3.8 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-26428-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	77	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-26428-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	81	Reporting_Limit	0034	The Reporting Limit of 19 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-26428-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	85	Reporting_Limit	0034	The Reporting Limit of 4.7 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-26428-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	86	Reporting_Limit	0034	The Reporting Limit of 2.4 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-26428-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	87	Reporting_Limit	0034	The Reporting Limit of 4.7 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-26428-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	88	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-26428-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	132	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID LCS 240-93158/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	133	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID LCS 240-93158/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	134	Reporting_Limit	0034	The Reporting Limit of 4 mg/Kg for NICKEL, method 6010B, Lab Sample ID LCS 240-93158/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-26428-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:08**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	137	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for SODIUM, method 6010B, Lab Sample ID LCS 240-93158/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	141	Reporting_Limit	0034	The Reporting Limit of 20 mg/Kg for BARIUM, method 6010B, Lab Sample ID LCS 240-93158/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	145	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for COBALT, method 6010B, Lab Sample ID LCS 240-93158/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	146	Reporting_Limit	0034	The Reporting Limit of 2.5 mg/Kg for COPPER, method 6010B, Lab Sample ID LCS 240-93158/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	147	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID LCS 240-93158/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	149	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for CALCIUM, method 6010B, Lab Sample ID LCS 240-93158/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	175	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID MB 240-93158/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	176	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID MB 240-93158/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	177	Reporting_Limit	0034	The Reporting Limit of 4 mg/Kg for NICKEL, method 6010B, Lab Sample ID MB 240-93158/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	180	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for SODIUM, method 6010B, Lab Sample ID MB 240-93158/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-26428-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:08**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	184	Reporting_Limit	0034	The Reporting Limit of 20 mg/Kg for BARIUM, method 6010B, Lab Sample ID MB 240-93158/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	188	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for COBALT, method 6010B, Lab Sample ID MB 240-93158/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	189	Reporting_Limit	0034	The Reporting Limit of 2.5 mg/Kg for COPPER, method 6010B, Lab Sample ID MB 240-93158/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	190	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID MB 240-93158/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	192	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for CALCIUM, method 6010B, Lab Sample ID MB 240-93158/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Matrix Spike record in Method Batch 93294 for method 365.1. Either the record is missing, you have the wrong QCType value ("MS" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	Lab processed either MS/MSD or LCS
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Sample Duplicate record in Method Batch 93294 for method 365.1. Either the record is missing, you have the wrong QCType value ("DUP" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	Lab processed either MS/MSD or LCS

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-26428-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:08**

0001	*Field character length exceeded*
0002	*Non-numeric value in a numeric field*
0003	*Incorrectly formatted date/time value*
0004	*Invalid value*
0005	*Analytical Method, Analtye ID, Analyte Name, Matrix, and Units not found in the reference project library*
0006	*RPD value is missing from a MSD, LCSD, or laboratory duplicate sample*
0007	*Target analyte specified in library files not found in the EDD*
0008	*Discrepancy in related records found between the tables Sample Analysis and Analytical Result*
0009	*Required field not populated*
0010	*Surrogate compounds specified in the reference project library are not found in table Analytical Results*
0011	*Surrogate compounds not specified in the reference project library are found in table Analytical Results*
0012	*Spike compounds specified in the reference project library are not found in table Analytical Results or vice versa*
0013	*Target analyte not specified in the reference project library is found in Analytical Results table*
0014	*Handling Batch ID (for leachates) is missing in Table A3*
0015	*Lab_Sample_ID can not have more than one matrix type assigned to it*
0016	*Analysis_Batch ID present in the Sample Analysis table is missing from the Laboratory Instrument table*
0017	*Analysis_Batch ID present in the Laboratory Instrument table is missing from the Sample Analysis table*
0018	*Run_Batch present in the Sample Analysis table is missing from the Laboratory Instrument table*
0019	*Run_Batch present in the Laboratory Instrument table is missing from the Sample Analysis table*
0020	*Target analytes and surrogates not specified in the reference project library are found in the Laboratory Intrument table*
0021	*Analysis_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS continuing calibration (QC_Type = CCV)*
0022	*Run_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS initial calibration (QC_Type = IC)*
0023	*Incorrect naming or inconsistent collection date for MS/MSD sample and/or parent sample*
0024	*Problems with %RSD, Correlation Coefficient, and/or RRFs reported for GC/MS calibration records.*
0025	*Project Number or Project Name reported in the EDD not found in the Standard Value table*
0026	*Result value for a non-detected analyte does not match the Reporting_Limit value as reported in the EDD*
0027	*ClientSampleID present in Analytical Results table but missing in the Sample Analysis table or vice versa*
0028	*Missing associated Method Blank records for a specific Preparation Batch / Analytical Method*
0029	*Missing associated Laboratory Control Sample records for a specific Preparation Batch / Analytical Method*
0030	*Missing associated Matrix Spike / Duplicate records for a specific Method Batch / Analytical Method*
0031	*Record specified in the reference project library not found in the Analytical Results table where Reportable Result = Yes*
0032	*Duplicate records found in table Analytical Results for fields ClientSampleID, Collected, AnalyticalMethod, AnalytedID where Reportable_Result = Yes*
0033	*Missing calibration records in Table A2*

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-26428-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:08**

0034	*Report Limit from table Analytical Results exceeds the value in the reference project library (corrected for dilution and perc moist, if appl)*
0035	*Missing target analytes in IC, ICV, CV, or CCV*
0036	*Surrogate Recovery has a value greater than zero but the Lab Qualifier is like "*U*"*
0037	*Duplicate records in Table A1, A2, or A3*
0038	*Problems with QC Batch assignment*
0039	*Non-conformances related to Total Uranium assessment*

Sample Qualification Report (All Analytes)

Client Sample ID : DA2SS-250M-0001-SO
Lab Report Batch : 240-26428-1
Lab ID : TA SAC
Sample Date : 07/01/2013
Analysis Type: DL2/WET
Sample Matrix : SO
Lab Sample ID: 240-26428-1

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 5**															
1,3,5-TRINITROBENZENE	0.050		mg/Kg	U	YES															
1,3-DINITROBENZENE	0.021		mg/Kg	U	YES															
2,4,6-TNT	21		mg/Kg		YES															
2,4-DINITROTOLUENE	0.027		mg/Kg	U	YES															
2,6-DINITROTOLUENE	0.037		mg/Kg	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.063		mg/Kg	U	YES															
2-NITROTOLUENE	0.065		mg/Kg	U	YES															
3-NITROTOLUENE	0.078		mg/Kg	U	YES															
4-Amino-2,6-dinitrotoluene	0.050		mg/Kg	U	YES															
4-NITROTOLUENE	0.092		mg/Kg	U	YES															
HMX	0.061		mg/Kg	U	YES															
NITROBENZENE	0.089		mg/Kg	U	YES															
NITROGLYCERINE	0.075		mg/Kg	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.13		mg/Kg	U	YES															
RDX	0.060		mg/Kg	U	YES															
TETRYL	0.050		mg/Kg	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2SS-250M-0001-SO
Lab Report Batch : 240-26428-1
Lab ID : TA CAN
Sample Date : 07/01/2013
Analysis Type: RE2/TOT
Sample Matrix : SO
Lab Sample ID: 240-26428-1

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 5**															
ZINC	1100		mg/Kg	B	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2SS-250M-0001-SO **Lab Report Batch :** 240-26428-1 **Lab ID :** TA CAN

Sample Date : 07/01/2013 **Analysis Type: RES/TOT** **Sample Matrix :** SO

Lab Sample ID: 240-26428-1

Reviewed By / Date : **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 365.1					**Dilution: 1**															
PHOSPHORUS, TOTAL ORTHOPHOSPHATE	110		mg/Kg		YES															
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	12000		mg/Kg		YES															
ANTIMONY	0.44		mg/Kg	J	YES	**J**								J						
ARSENIC	13		mg/Kg		YES															
BARIUM	59		mg/Kg		YES															
BERYLLIUM	0.62		mg/Kg		YES															
CADMIUM	1.9		mg/Kg		YES															
CALCIUM	16000		mg/Kg	B	YES															
CHROMIUM	21		mg/Kg		YES															
COBALT	8.1		mg/Kg		YES															
COPPER	140		mg/Kg		YES															
IRON	23000		mg/Kg		YES															
LEAD	200		mg/Kg		YES															
MAGNESIUM	3300		mg/Kg		YES															
MANGANESE	310		mg/Kg	B	YES															
NICKEL	22		mg/Kg		YES															
POTASSIUM	1000		mg/Kg	B	YES															
SELENIUM	0.57		mg/Kg		YES															
SILVER	0.094		mg/Kg	U	YES															
SODIUM	88		mg/Kg	J	YES	**J**								J						
THALLIUM	0.52		mg/Kg	U	YES															
VANADIUM	20		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.044		mg/Kg	J	YES	**J**								J						
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	6.6		mg/Kg		YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2SS-250M-0001-SO
Lab Report Batch : 240-26428-1
Lab ID : TA SAC
Sample Date : 07/01/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-26428-1

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.020		mg/Kg	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 20458 **Analysis Method :** 8330 Modified **Analysis Date :** 07/18/2013

Preparation Batch : 20458 **Preparation Type :** METHOD **Preparation Date :** 07/12/2013

Lab Reporting Batch : 240-26428-1 **Lab ID:** TA SAC

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
DA2SS-250M-0001-SOM	240-26428-1MSD	SO	Nitroguanidine	75		30.00	79.00	117.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2SS-250M-0001-SO	240-26428-1

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 12-08-151 - ERS

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 20459 **Analysis Method :** 8330 **Analysis Date :** 07/19/2013

Preparation Batch : 20459 **Preparation Type :** 8330B **Preparation Date :** 07/12/2013

Lab Reporting Batch : 240-26428-1 **Lab ID:** TA SAC

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
DA2SS-250M-0001-SOM	240-26428-1MS	SO	2,4,6-TNT	-959		0.00	44.00	150.00	50.00
			Pentaerythritol Tetranitrate (PETN)	113		0.00	80.00	110.00	50.00
DA2SS-250M-0001-SOM	240-26428-1MSD		2,4,6-TNT	848		0.00	44.00	150.00	50.00
			4-Amino-2,6-dinitrotoluene	164		0.00	50.00	159.00	50.00
			Pentaerythritol Tetranitrate (PETN)	114		0.00	80.00	110.00	50.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2SS-250M-0001-SO	240-26428-1
DA2SS-250M-0001-SO	240-26428-1

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 12-08-151 - ERS

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 20585 **Analysis Method :** WS-WC-0050 **Analysis Date :** 07/15/2013

Preparation Batch : 20585 **Preparation Type :** METHOD **Preparation Date :** 07/15/2013

Lab Reporting Batch : 240-26428-1 **Lab ID:** TA SAC

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
DA2SS-250M-0001-SOM	240-26428-1MS	SO	Nitrocellulose	20		10.00	34.00	115.00	71.00
DA2SS-250M-0001-SOM	240-26428-1MSD		Nitrocellulose	23		10.00	34.00	115.00	71.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2SS-250M-0001-SO	240-26428-1

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 12-08-151 - ERS

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 93158 **Analysis Method :** 6010B **Analysis Date :** 07/11/2013

Preparation Batch : 93158 **Preparation Type :** 3050B **Preparation Date :** 07/10/2013

Lab Reporting Batch : 240-26428-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
DA2SS-250M-0001-SOM	240-26428-1MS	SO	ALUMINUM	1355		30.00	75.00	125.00	20.00
			ANTIMONY	32		30.00	75.00	125.00	20.00
			IRON	-747		30.00	75.00	125.00	20.00
			LEAD	69		30.00	75.00	125.00	20.00
			MANGANESE	140		30.00	75.00	125.00	20.00
			ZINC	336		30.00	75.00	125.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2SS-250M-0001-SO	240-26428-1

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 12-08-151 - ERS

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: 240-26428-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
DA2SS-250M-0001-SO	240-26428-1	6010B	SO	ANTIMONY	J	0.44	0.94	mg/Kg
				SODIUM	J	88	470	mg/Kg
		7471A		MERCURY	J	0.044	0.096	mg/Kg

EDD Non-Conformance Report
Lab Reporting Batch ID: 240-27158-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:41**

Non-Conformance Summary Page

Type	Count
0001	0
0002	0
0003	0
0004	0
0005	0
0006	0
0007	0
0008	0
0009	0
0010	7
0011	0
0012	0
0013	0
0014	0
0015	0
0016	0
0017	0
0018	0
0019	0

Type	Count
0020	0
0021	0
0022	0
0023	0
0024	0
0025	0
0026	0
0027	0
0028	0
0029	0
0030	0
0031	0
0032	0
0033	0
0034	154
0035	0
0036	0
0037	0
0038	0
0039	0

Total : 161

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27158-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:41**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	1	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	4	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	5	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	6	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	7	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	9	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	10	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	11	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	12	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	13	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27158-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:41**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	14	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	15	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	17	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	18	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	20	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	21	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	26	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27158-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	33	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27158-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	36	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	38	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	41	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27158-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:41**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	42	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27158-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	43	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	46	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	47	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	48	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	49	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	51	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	52	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	53	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	54	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27158-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:41**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	55	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	56	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	57	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	59	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	60	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	62	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	63	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27158-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	66	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	69	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	70	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27158-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:41**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	71	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	72	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	74	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	75	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	76	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	77	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	78	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	79	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	80	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	82	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27158-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:41**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	83	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	85	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	86	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	91	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27158-1MS, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	98	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27158-1MS, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	101	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-1MS, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	103	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-1MS, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	106	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-1MS, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	107	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27158-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	110	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27158-1MSD, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27158-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:41**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	117	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27158-1MSD, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	120	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-1MSD, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	122	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-1MSD, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	125	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-1MSD, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	126	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27158-1MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	127	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	130	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	131	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	132	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	133	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27158-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:41**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	135	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	136	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	137	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	138	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	139	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	140	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	141	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	143	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	144	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	146	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	147	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

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Lab Reporting Batch ID: 240-27158-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:41**

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Table	Record	Field	Type	Description	Lab Comments
A1	152	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27158-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	159	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27158-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	162	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	164	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	167	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	168	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27158-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	169	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	172	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	173	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	174	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

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Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	175	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	177	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	178	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	179	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	180	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	181	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	182	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	183	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	185	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	186	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	188	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

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Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	189	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	194	Reporting_Limit	0034	The Reporting Limit of 0.14 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27158-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	201	Reporting_Limit	0034	The Reporting Limit of 0.14 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27158-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	204	Reporting_Limit	0034	The Reporting Limit of 0.52 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	206	Reporting_Limit	0034	The Reporting Limit of 0.52 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	209	Reporting_Limit	0034	The Reporting Limit of 0.52 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27158-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	210	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27158-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	211	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	214	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	215	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	216	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	217	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	219	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	220	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	221	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	222	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	223	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	224	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	225	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	227	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	228	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	230	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	231	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID LCS 240-94747/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	235	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID LCS 320-21538/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	242	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID LCS 320-21538/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	245	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-21538/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	247	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-21538/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	250	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-21538/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	252	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID LCS 320-21600/2-B, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	253	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	256	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	257	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	258	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	259	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	261	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	262	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	263	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	264	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	265	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	266	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	267	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	269	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	270	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	272	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	273	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID MB 240-94747/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	277	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID MB 320-21538/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	284	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID MB 320-21538/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	287	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID MB 320-21538/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	289	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID MB 320-21538/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	292	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID MB 320-21538/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	294	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID MB 320-21600/1-B, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable

Discrepancies Between the Project Library and EDD

Table	Record	Field	Type	Description	Lab Comments
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27158-2, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27158-1MSD, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27158-1, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID LCS 320-21538/2-A, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID MB 320-21538/1-A, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27158-3, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27158-1MS, Method 8330, and Analysis Type RES.	Not a lab specific surrogate

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0001	*Field character length exceeded*
0002	*Non-numeric value in a numeric field*
0003	*Incorrectly formatted date/time value*
0004	*Invalid value*
0005	*Analytical Method, Analtye ID, Analyte Name, Matrix, and Units not found in the reference project library*
0006	*RPD value is missing from a MSD, LCSD, or laboratory duplicate sample*
0007	*Target analyte specified in library files not found in the EDD*
0008	*Discrepancy in related records found between the tables Sample Analysis and Analytical Result*
0009	*Required field not populated*
0010	*Surrogate compounds specified in the reference project library are not found in table Analytical Results*
0011	*Surrogate compounds not specified in the reference project library are found in table Analytical Results*
0012	*Spike compounds specified in the reference project library are not found in table Analytical Results or vice versa*
0013	*Target analyte not specified in the reference project library is found in Analytical Results table*
0014	*Handling Batch ID (for leachates) is missing in Table A3*
0015	*Lab_Sample_ID can not have more than one matrix type assigned to it*
0016	*Analysis_Batch ID present in the Sample Analysis table is missing from the Laboratory Instrument table*
0017	*Analysis_Batch ID present in the Laboratory Instrument table is missing from the Sample Analysis table*
0018	*Run_Batch present in the Sample Analysis table is missing from the Laboratory Instrument table*
0019	*Run_Batch present in the Laboratory Instrument table is missing from the Sample Analysis table*
0020	*Target analytes and surrogates not specified in the reference project library are found in the Laboratory Intrument table*
0021	*Analysis_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS continuing calibration (QC_Type = CCV)*
0022	*Run_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS initial calibration (QC_Type = IC)*
0023	*Incorrect naming or inconsistent collection date for MS/MSD sample and/or parent sample*
0024	*Problems with %RSD, Correlation Coefficient, and/or RRFs reported for GC/MS calibration records.*
0025	*Project Number or Project Name reported in the EDD not found in the Standard Value table*
0026	*Result value for a non-detected analyte does not match the Reporting_Limit value as reported in the EDD*
0027	*ClientSampleID present in Analytical Results table but missing in the Sample Analysis table or vice versa*
0028	*Missing associated Method Blank records for a specific Preparation Batch / Analytical Method*
0029	*Missing associated Laboratory Control Sample records for a specific Preparation Batch / Analytical Method*
0030	*Missing associated Matrix Spike / Duplicate records for a specific Method Batch / Analytical Method*
0031	*Record specified in the reference project library not found in the Analytical Results table where Reportable Result = Yes*
0032	*Duplicate records found in table Analytical Results for fields ClientSampleID, Collected, AnalyticalMethod, AnalytedID where Reportable_Result = Yes*
0033	*Missing calibration records in Table A2*

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27158-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:41**

0034	*Report Limit from table Analytical Results exceeds the value in the reference project library (corrected for dilution and perc moist, if appl)*
0035	*Missing target analytes in IC, ICV, CV, or CCV*
0036	*Surrogate Recovery has a value greater than zero but the Lab Qualifier is like "*U*"*
0037	*Duplicate records in Table A1, A2, or A3*
0038	*Problems with QC Batch assignment*
0039	*Non-conformances related to Total Uranium assessment*

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-031-1007-SW
Lab Report Batch : 240-27158-1
Lab ID : TA SAC
Sample Date : 07/22/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-27158-3

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.032		ug/L	U	YES															
1,3-DINITROBENZENE	0.052		ug/L	U	YES															
2,4,6-TNT	0.052		ug/L	U	YES															
2,4-DINITROTOLUENE	0.052		ug/L	U	YES															
2,6-DINITROTOLUENE	0.052		ug/L	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.016		ug/L	U	YES															
2-NITROTOLUENE	0.092		ug/L	U	YES															
3-NITROTOLUENE	0.059		ug/L	U	YES															
4-Amino-2,6-dinitrotoluene	0.052		ug/L	U	YES															
4-NITROTOLUENE	0.092		ug/L	U	YES															
HMX	0.037		ug/L	U	YES															
NITROBENZENE	0.052		ug/L	U	YES															
NITROGLYCERINE	0.34		ug/L	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.31		ug/L	U	YES															
RDX	0.037		ug/L	U	YES															
TETRYL	0.052		ug/L	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-031-1007-SW
Lab Report Batch : 240-27158-1
Lab ID : TA CAN
Sample Date : 07/22/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-27158-3

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	97		ug/L	U	YES															
ANTIMONY	1.8		ug/L	U	YES															
ARSENIC	3.3		ug/L	J	YES	**J**								J						
BARIUM	23		ug/L	J	YES	**J**								J						
BERYLLIUM	0.46		ug/L	U	YES															
CADMIUM	0.66		ug/L	U	YES															
CALCIUM	38000		ug/L		YES															
CHROMIUM	2.2		ug/L	U	YES															
COBALT	1.7		ug/L	U	YES															
COPPER	4.5		ug/L	U	YES															
IRON	530		ug/L		YES															
LEAD	1.9		ug/L	U	YES															
MAGNESIUM	8700		ug/L		YES															
MANGANESE	96		ug/L		YES															
NICKEL	3.2		ug/L	U	YES															
POTASSIUM	1700		ug/L	J	YES	**J**								J						
SELENIUM	4.1		ug/L	U	YES															
SILVER	2.2		ug/L	U	YES															
SODIUM	5700		ug/L		YES															
THALLIUM	4.7		ug/L	U	YES															
VANADIUM	0.64		ug/L	U	YES															
ZINC	5.0		ug/L	U	YES															
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-096-1007-SW
Lab Report Batch : 240-27158-1
Lab ID : TA SAC
Sample Date : 07/22/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-27158-1

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.031		ug/L	U	YES															
1,3-DINITROBENZENE	0.051		ug/L	U	YES															
2,4,6-TNT	0.051		ug/L	U	YES															
2,4-DINITROTOLUENE	0.051		ug/L	U	YES															
2,6-DINITROTOLUENE	0.051		ug/L	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES															
2-NITROTOLUENE	0.089		ug/L	U	YES															
3-NITROTOLUENE	0.058		ug/L	U	YES															
4-Amino-2,6-dinitrotoluene	0.051		ug/L	U	YES															
4-NITROTOLUENE	0.089		ug/L	U	YES															
HMX	0.036		ug/L	U	YES															
NITROBENZENE	0.051		ug/L	U	YES															
NITROGLYCERINE	0.33		ug/L	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.30		ug/L	U	YES															
RDX	0.036		ug/L	U	YES															
TETRYL	0.051		ug/L	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-096-1007-SW
Lab Report Batch : 240-27158-1
Lab ID : TA CAN
Sample Date : 07/22/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-27158-1

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	97		ug/L	U	YES															
ANTIMONY	4.3		ug/L	J B	YES	**J**								J						
ARSENIC	3.2		ug/L	U	YES															
BARIUM	22		ug/L	J	YES	**J**								J						
BERYLLIUM	0.46		ug/L	U	YES															
CADMIUM	0.66		ug/L	U	YES															
CALCIUM	38000		ug/L		YES															
CHROMIUM	2.2		ug/L	U	YES															
COBALT	1.7		ug/L	U	YES															
COPPER	4.5		ug/L	U	YES															
IRON	340		ug/L		YES															
LEAD	2.0		ug/L	J	YES	**J**								J						
MAGNESIUM	8600		ug/L		YES															
MANGANESE	43		ug/L		YES															
NICKEL	3.2		ug/L	U	YES															
POTASSIUM	1700		ug/L	J	YES	**J**								J						
SELENIUM	4.1		ug/L	U	YES															
SILVER	2.2		ug/L	U	YES															
SODIUM	6300		ug/L		YES															
THALLIUM	4.7		ug/L	U	YES															
VANADIUM	0.64		ug/L	U	YES															
ZINC	5.0		ug/L	U	YES															
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-099-1007-SW **Lab Report Batch :** 240-27158-1 **Lab ID :** TA SAC

Sample Date : 07/22/2013 **Analysis Type: RES** **Sample Matrix :** AQ

Lab Sample ID: 240-27158-2

Reviewed By / Date : **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.031		ug/L	U	YES															
1,3-DINITROBENZENE	0.050		ug/L	U	YES															
2,4,6-TNT	0.050		ug/L	U	YES															
2,4-DINITROTOLUENE	0.050		ug/L	U	YES															
2,6-DINITROTOLUENE	0.050		ug/L	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES															
2-NITROTOLUENE	0.089		ug/L	U	YES															
3-NITROTOLUENE	0.057		ug/L	U	YES															
4-Amino-2,6-dinitrotoluene	0.050		ug/L	U	YES															
4-NITROTOLUENE	0.089		ug/L	U	YES															
HMX	0.036		ug/L	U	YES															
NITROBENZENE	0.050		ug/L	U	YES															
NITROGLYCERINE	0.33		ug/L	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.30		ug/L	U	YES															
RDX	0.036		ug/L	U	YES															
TETRYL	0.050		ug/L	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-099-1007-SW
Lab Report Batch : 240-27158-1
Lab ID : TA CAN
Sample Date : 07/22/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-27158-2

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	97		ug/L	U	YES															
ANTIMONY	1.9		ug/L	J B	YES	**J**								J						
ARSENIC	3.2		ug/L	U	YES															
BARIUM	24		ug/L	J	YES	**J**								J						
BERYLLIUM	0.46		ug/L	U	YES															
CADMIUM	0.66		ug/L	U	YES															
CALCIUM	39000		ug/L		YES															
CHROMIUM	2.2		ug/L	U	YES															
COBALT	1.7		ug/L	U	YES															
COPPER	4.5		ug/L	U	YES															
IRON	520		ug/L		YES															
LEAD	1.9		ug/L	U	YES															
MAGNESIUM	8900		ug/L		YES															
MANGANESE	79		ug/L		YES															
NICKEL	3.2		ug/L	U	YES															
POTASSIUM	1800		ug/L	J	YES	**J**								J						
SELENIUM	4.1		ug/L	U	YES															
SILVER	2.2		ug/L	U	YES															
SODIUM	5600		ug/L		YES															
THALLIUM	4.9		ug/L	J	YES	**J**								J						
VANADIUM	0.64		ug/L	U	YES															
ZINC	5.0		ug/L	U	YES															
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Method Blank Outlier Report

Lab Reporting Batch : 240-27158-1
Lab ID: TA CAN
Analysis Method : 6010B
Analysis Date : 07/25/2013
Preparation Type : 3005A
Preparation Date : 07/24/2013
Method Blank Lab Sample ID : MB 240-94747/1-A
Preparation Batch : 94747

ANTIMONY	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	**3.33**	**10**	**ug/L**	**J**	

ANTIMONY was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
DA2sw-096-1007-SW	240-27158-1	1	4.3	J B	ug/L
DA2sw-099-1007-SW	240-27158-2	1	1.9	J B	ug/L

VANADIUM	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	**0.867**	**7.0**	**ug/L**	**J**	

VANADIUM contamination found in the method blank did not qualify any samples.

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: 240-27158-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
DA2sw-031-1007-SW	240-27158-3	6010B	AQ	ARSENIC	J	3.3	10	ug/L
				BARIUM	J	23	200	ug/L
				POTASSIUM	J	1700	5000	ug/L
DA2sw-096-1007-SW	240-27158-1			ANTIMONY	J B	4.3	10	ug/L
				BARIUM	J	22	200	ug/L
				LEAD	J	2.0	3.0	ug/L
				POTASSIUM	J	1700	5000	ug/L
DA2sw-099-1007-SW	240-27158-2			ANTIMONY	J B	1.9	10	ug/L
				BARIUM	J	24	200	ug/L
				POTASSIUM	J	1800	5000	ug/L
				THALLIUM	J	4.9	10	ug/L

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: 240-27158-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
DA2sw-031-1007-SW	240-27158-3	6010B	AQ	THALLIUM	U	4.7	2.00	ug/L
DA2sw-096-1007-SW	240-27158-1	6010B	AQ	THALLIUM	U	4.7	2.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **12-08-151 - ERS**

EDD Non-Conformance Report
Lab Reporting Batch ID: 240-27193-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/23/2014 10:32**

Non-Conformance Summary Page

Type	Count
0001	0
0002	0
0003	0
0004	0
0005	0
0006	0
0007	0
0008	0
0009	0
0010	0
0011	0
0012	0
0013	0
0014	0
0015	0
0016	0
0017	0
0018	0
0019	0

Type	Count
0020	0
0021	0
0022	0
0023	0
0024	0
0025	0
0026	0
0027	0
0028	0
0029	0
0030	0
0031	0
0032	0
0033	0
0034	71
0035	0
0036	0
0037	0
0038	0
0039	0

Total : 71

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27193-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/23/2014 10:32**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	4	Reporting_Limit	0034	The Reporting Limit of 490 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-27193-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	5	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-27193-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	6	Reporting_Limit	0034	The Reporting Limit of 3.9 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-27193-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	9	Reporting_Limit	0034	The Reporting Limit of 490 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-27193-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	13	Reporting_Limit	0034	The Reporting Limit of 20 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-27193-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	17	Reporting_Limit	0034	The Reporting Limit of 4.9 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-27193-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	18	Reporting_Limit	0034	The Reporting Limit of 2.5 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-27193-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	19	Reporting_Limit	0034	The Reporting Limit of 4.9 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-27193-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	21	Reporting_Limit	0034	The Reporting Limit of 490 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-27193-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	47	Reporting_Limit	0034	The Reporting Limit of 490 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-27193-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27193-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/23/2014 10:32**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	48	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-27193-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	49	Reporting_Limit	0034	The Reporting Limit of 3.9 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-27193-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	52	Reporting_Limit	0034	The Reporting Limit of 490 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-27193-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	56	Reporting_Limit	0034	The Reporting Limit of 20 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-27193-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	60	Reporting_Limit	0034	The Reporting Limit of 4.9 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-27193-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	61	Reporting_Limit	0034	The Reporting Limit of 2.5 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-27193-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	62	Reporting_Limit	0034	The Reporting Limit of 4.9 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-27193-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	64	Reporting_Limit	0034	The Reporting Limit of 490 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-27193-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	70	Reporting_Limit	0034	The Reporting Limit of 490 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-27193-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	71	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-27193-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27193-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/23/2014 10:32**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	72	Reporting_Limit	0034	The Reporting Limit of 3.9 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-27193-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	75	Reporting_Limit	0034	The Reporting Limit of 490 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-27193-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	79	Reporting_Limit	0034	The Reporting Limit of 20 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-27193-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	83	Reporting_Limit	0034	The Reporting Limit of 4.9 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-27193-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	84	Reporting_Limit	0034	The Reporting Limit of 2.5 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-27193-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	85	Reporting_Limit	0034	The Reporting Limit of 4.9 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-27193-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	87	Reporting_Limit	0034	The Reporting Limit of 490 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-27193-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	131	Reporting_Limit	0034	The Reporting Limit of 480 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-27193-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	132	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-27193-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	133	Reporting_Limit	0034	The Reporting Limit of 3.9 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-27193-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27193-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/23/2014 10:32**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	136	Reporting_Limit	0034	The Reporting Limit of 480 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-27193-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	140	Reporting_Limit	0034	The Reporting Limit of 19 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-27193-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	144	Reporting_Limit	0034	The Reporting Limit of 4.8 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-27193-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	145	Reporting_Limit	0034	The Reporting Limit of 2.4 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-27193-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	146	Reporting_Limit	0034	The Reporting Limit of 4.8 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-27193-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	148	Reporting_Limit	0034	The Reporting Limit of 480 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-27193-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	174	Reporting_Limit	0034	The Reporting Limit of 430 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-27193-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	175	Reporting_Limit	0034	The Reporting Limit of 1.3 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-27193-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	176	Reporting_Limit	0034	The Reporting Limit of 3.4 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-27193-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	179	Reporting_Limit	0034	The Reporting Limit of 430 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-27193-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27193-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/23/2014 10:32**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	183	Reporting_Limit	0034	The Reporting Limit of 17 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-27193-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	187	Reporting_Limit	0034	The Reporting Limit of 4.3 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-27193-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	189	Reporting_Limit	0034	The Reporting Limit of 4.3 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-27193-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	191	Reporting_Limit	0034	The Reporting Limit of 430 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-27193-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	217	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-27193-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	218	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-27193-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	219	Reporting_Limit	0034	The Reporting Limit of 4 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-27193-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	222	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-27193-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	226	Reporting_Limit	0034	The Reporting Limit of 20 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-27193-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	230	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-27193-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27193-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/23/2014 10:32**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	231	Reporting_Limit	0034	The Reporting Limit of 2.5 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-27193-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	232	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-27193-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	234	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-27193-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	260	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID LCS 240-96726/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	261	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID LCS 240-96726/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	262	Reporting_Limit	0034	The Reporting Limit of 4 mg/Kg for NICKEL, method 6010B, Lab Sample ID LCS 240-96726/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	265	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for SODIUM, method 6010B, Lab Sample ID LCS 240-96726/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	269	Reporting_Limit	0034	The Reporting Limit of 20 mg/Kg for BARIUM, method 6010B, Lab Sample ID LCS 240-96726/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	273	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for COBALT, method 6010B, Lab Sample ID LCS 240-96726/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	274	Reporting_Limit	0034	The Reporting Limit of 2.5 mg/Kg for COPPER, method 6010B, Lab Sample ID LCS 240-96726/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27193-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/23/2014 10:32**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	275	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID LCS 240-96726/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	277	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for CALCIUM, method 6010B, Lab Sample ID LCS 240-96726/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	302	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID MB 240-96726/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	303	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID MB 240-96726/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	304	Reporting_Limit	0034	The Reporting Limit of 4 mg/Kg for NICKEL, method 6010B, Lab Sample ID MB 240-96726/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	307	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for SODIUM, method 6010B, Lab Sample ID MB 240-96726/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	311	Reporting_Limit	0034	The Reporting Limit of 20 mg/Kg for BARIUM, method 6010B, Lab Sample ID MB 240-96726/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	315	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for COBALT, method 6010B, Lab Sample ID MB 240-96726/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	316	Reporting_Limit	0034	The Reporting Limit of 2.5 mg/Kg for COPPER, method 6010B, Lab Sample ID MB 240-96726/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	317	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID MB 240-96726/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27193-1

Project Library: PIKA 08092012 ERS

Laboratory: TA CAN

Library Description: Rocket Ridge

Report Date: 4/23/2014 10:32

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	319	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for CALCIUM, method 6010B, Lab Sample ID MB 240-96726/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27193-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/23/2014 10:32**

0001	*Field character length exceeded*
0002	*Non-numeric value in a numeric field*
0003	*Incorrectly formatted date/time value*
0004	*Invalid value*
0005	*Analytical Method, Analtye ID, Analyte Name, Matrix, and Units not found in the reference project library*
0006	*RPD value is missing from a MSD, LCSD, or laboratory duplicate sample*
0007	*Target analyte specified in library files not found in the EDD*
0008	*Discrepancy in related records found between the tables Sample Analysis and Analytical Result*
0009	*Required field not populated*
0010	*Surrogate compounds specified in the reference project library are not found in table Analytical Results*
0011	*Surrogate compounds not specified in the reference project library are found in table Analytical Results*
0012	*Spike compounds specified in the reference project library are not found in table Analytical Results or vice versa*
0013	*Target analyte not specified in the reference project library is found in Analytical Results table*
0014	*Handling Batch ID (for leachates) is missing in Table A3*
0015	*Lab_Sample_ID can not have more than one matrix type assigned to it*
0016	*Analysis_Batch ID present in the Sample Analysis table is missing from the Laboratory Instrument table*
0017	*Analysis_Batch ID present in the Laboratory Instrument table is missing from the Sample Analysis table*
0018	*Run_Batch present in the Sample Analysis table is missing from the Laboratory Instrument table*
0019	*Run_Batch present in the Laboratory Instrument table is missing from the Sample Analysis table*
0020	*Target analytes and surrogates not specified in the reference project library are found in the Laboratory Intrument table*
0021	*Analysis_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS continuing calibration (QC_Type = CCV)*
0022	*Run_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS initial calibration (QC_Type = IC)*
0023	*Incorrect naming or inconsistent collection date for MS/MSD sample and/or parent sample*
0024	*Problems with %RSD, Correlation Coefficient, and/or RRFs reported for GC/MS calibration records.*
0025	*Project Number or Project Name reported in the EDD not found in the Standard Value table*
0026	*Result value for a non-detected analyte does not match the Reporting_Limit value as reported in the EDD*
0027	*ClientSampleID present in Analytical Results table but missing in the Sample Analysis table or vice versa*
0028	*Missing associated Method Blank records for a specific Preparation Batch / Analytical Method*
0029	*Missing associated Laboratory Control Sample records for a specific Preparation Batch / Analytical Method*
0030	*Missing associated Matrix Spike / Duplicate records for a specific Method Batch / Analytical Method*
0031	*Record specified in the reference project library not found in the Analytical Results table where Reportable Result = Yes*
0032	*Duplicate records found in table Analytical Results for fields ClientSampleID, Collected, AnalyticalMethod, AnalytedID where Reportable_Result = Yes*
0033	*Missing calibration records in Table A2*

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27193-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/23/2014 10:32**

0034	*Report Limit from table Analytical Results exceeds the value in the reference project library (corrected for dilution and perc moist, if appl)*
0035	*Missing target analytes in IC, ICV, CV, or CCV*
0036	*Surrogate Recovery has a value greater than zero but the Lab Qualifier is like "*U*"*
0037	*Duplicate records in Table A1, A2, or A3*
0038	*Problems with QC Batch assignment*
0039	*Non-conformances related to Total Uranium assessment*

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-132M-1009-SO
Lab Report Batch : 240-27193-1
Lab ID : TA SAC
Sample Date : 07/23/2013
Analysis Type: RE2/WET
Sample Matrix : SO
Lab Sample ID: 240-27193-1

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
NITROGLYCERINE	0.015		mg/Kg	U	YES															

Project Number and Name: **12-08-151 - ERS**
Library Used: **PIKA08092012**

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-132M-1009-SO
Lab Report Batch : 240-27193-1
Lab ID : TA CAN
Sample Date : 07/23/2013
Analysis Type: RES/TOT
Sample Matrix : SO
Lab Sample ID: 240-27193-1

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	8800		mg/Kg		YES															
ANTIMONY	0.38		mg/Kg	U	YES															
ARSENIC	15		mg/Kg		YES															
BARIUM	59		mg/Kg		YES															
BERYLLIUM	0.49		mg/Kg		YES															
CADMIUM	0.98		mg/Kg		YES															
CALCIUM	6300		mg/Kg		YES															
CHROMIUM	18		mg/Kg		YES															
COBALT	10		mg/Kg		YES															
COPPER	89		mg/Kg		YES															
IRON	22000		mg/Kg		YES															
LEAD	23		mg/Kg		YES															
MAGNESIUM	3900		mg/Kg		YES															
MANGANESE	340		mg/Kg	B	YES															
NICKEL	27		mg/Kg		YES															
POTASSIUM	1100		mg/Kg		YES															
SELENIUM	0.68		mg/Kg		YES															
SILVER	0.099		mg/Kg	U	YES															
SODIUM	65		mg/Kg	U	YES															
THALLIUM	0.54		mg/Kg	U	YES															
VANADIUM	14		mg/Kg		YES															
ZINC	140		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.21		mg/Kg		YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	2.4		mg/Kg	J B	YES	**J**								J						

Project Number and Name: **12-08-151 - ERS**
Library Used: **PIKA08092012**

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-132M-1009-SO
Lab Report Batch : 240-27193-1
Lab ID : TA SAC
Sample Date : 07/23/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-27193-1

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.0099		mg/Kg	U	YES															
1,3-DINITROBENZENE	0.0042		mg/Kg	U	YES															
2,4,6-TNT	0.019		mg/Kg	U	YES															
2,4-DINITROTOLUENE	0.0052		mg/Kg	U	YES															
2,6-DINITROTOLUENE	0.0072		mg/Kg	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.012		mg/Kg	U	YES															
2-NITROTOLUENE	0.013		mg/Kg	U	YES															
3-NITROTOLUENE	0.015		mg/Kg	U	YES															
4-Amino-2,6-dinitrotoluene	0.0099		mg/Kg	U	YES															
4-NITROTOLUENE	0.018		mg/Kg	U	YES															
HMX	0.012		mg/Kg	U	YES															
NITROBENZENE	0.017		mg/Kg	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.025		mg/Kg	U	YES															
RDX	0.012		mg/Kg	U	YES															
TETRYL	2.7		mg/Kg		YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.020		mg/Kg	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-133M-1009-SO
Lab Report Batch : 240-27193-1
Lab ID : TA SAC
Sample Date : 07/23/2013
Analysis Type: RE2/WET
Sample Matrix : SO
Lab Sample ID: 240-27193-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330						**Dilution: 1**														
4-Amino-2,6-dinitrotoluene	0.045		mg/Kg	J P	YES	**J**								J						

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-133M-1009-SO
Lab Report Batch : 240-27193-1
Lab ID : TA CAN
Sample Date : 07/23/2013
Analysis Type: RES/TOT
Sample Matrix : SO
Lab Sample ID: 240-27193-2

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	9300		mg/Kg		YES															
ANTIMONY	0.38		mg/Kg	U	YES															
ARSENIC	15		mg/Kg		YES															
BARIUM	85		mg/Kg		YES															
BERYLLIUM	0.51		mg/Kg		YES															
CADMIUM	1.4		mg/Kg		YES															
CALCIUM	6300		mg/Kg		YES															
CHROMIUM	16		mg/Kg		YES															
COBALT	10		mg/Kg		YES															
COPPER	110		mg/Kg		YES															
IRON	22000		mg/Kg		YES															
LEAD	34		mg/Kg		YES															
MAGNESIUM	3800		mg/Kg		YES															
MANGANESE	350		mg/Kg	B	YES															
NICKEL	26		mg/Kg		YES															
POTASSIUM	1200		mg/Kg		YES															
SELENIUM	0.44		mg/Kg	U	YES															
SILVER	0.097		mg/Kg	U	YES															
SODIUM	64		mg/Kg	U	YES															
THALLIUM	0.53		mg/Kg	U	YES															
VANADIUM	14		mg/Kg		YES															
ZINC	240		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.26		mg/Kg		YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	2.3		mg/Kg	J B	YES	**J**								J						

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-133M-1009-SO
Lab Report Batch : 240-27193-1
Lab ID : TA SAC
Sample Date : 07/23/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-27193-2

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.0099		mg/Kg	U	YES															
1,3-DINITROBENZENE	0.0041		mg/Kg	U	YES															
2,4,6-TNT	3.5		mg/Kg		YES															
2,4-DINITROTOLUENE	0.0052		mg/Kg	U	YES															
2,6-DINITROTOLUENE	0.0072		mg/Kg	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.049		mg/Kg	J	YES	**J**								J						
2-NITROTOLUENE	0.013		mg/Kg	U	YES															
3-NITROTOLUENE	0.015		mg/Kg	U	YES															
4-NITROTOLUENE	0.018		mg/Kg	U	YES															
HMX	0.012		mg/Kg	U	YES															
NITROBENZENE	0.017		mg/Kg	U	YES															
NITROGLYCERINE	0.015		mg/Kg	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.025		mg/Kg	U	YES															
RDX	0.012		mg/Kg	U	YES															
TETRYL	0.016		mg/Kg	J	YES	**J**								J						
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.020		mg/Kg	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-134M-1009-SO
Lab Report Batch : 240-27193-1
Lab ID : TA CAN
Sample Date : 07/23/2013
Analysis Type: RES/TOT
Sample Matrix : SO
Lab Sample ID: 240-27193-3

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	7600		mg/Kg		YES															
ANTIMONY	0.33		mg/Kg	U	YES															
ARSENIC	12		mg/Kg		YES															
BARIUM	59		mg/Kg		YES															
BERYLLIUM	0.42		mg/Kg	J	YES	**J**								J						
CADMIUM	1.2		mg/Kg		YES															
CALCIUM	5700		mg/Kg		YES															
CHROMIUM	14		mg/Kg		YES															
COBALT	8.7		mg/Kg		YES															
COPPER	83		mg/Kg		YES															
IRON	20000		mg/Kg		YES															
LEAD	33		mg/Kg		YES															
MAGNESIUM	3100		mg/Kg		YES															
MANGANESE	320		mg/Kg	B	YES															
NICKEL	22		mg/Kg		YES															
POTASSIUM	910		mg/Kg		YES															
SELENIUM	0.39		mg/Kg	U	YES															
SILVER	0.086		mg/Kg	U	YES															
SODIUM	56		mg/Kg	U	YES															
THALLIUM	0.47		mg/Kg	U	YES															
VANADIUM	12		mg/Kg		YES															
ZINC	180		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.23		mg/Kg		YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	3.5		mg/Kg	J B	YES	**J**								J						

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-134M-1009-SO
Lab Report Batch : 240-27193-1
Lab ID : TA SAC
Sample Date : 07/23/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-27193-3

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.0099		mg/Kg	U	YES															
1,3-DINITROBENZENE	0.0042		mg/Kg	U	YES															
2,4,6-TNT	0.019		mg/Kg	U	YES															
2,4-DINITROTOLUENE	0.0052		mg/Kg	U	YES															
2,6-DINITROTOLUENE	0.0072		mg/Kg	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.012		mg/Kg	U	YES															
2-NITROTOLUENE	0.013		mg/Kg	U	YES															
3-NITROTOLUENE	0.015		mg/Kg	U	YES															
4-Amino-2,6-dinitrotoluene	0.0099		mg/Kg	U	YES															
4-NITROTOLUENE	0.018		mg/Kg	U	YES															
HMX	0.21		mg/Kg	J	YES	**J**								J						
NITROBENZENE	0.017		mg/Kg	U	YES															
NITROGLYCERINE	0.015		mg/Kg	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.025		mg/Kg	U	YES															
RDX	1.6		mg/Kg		YES															
TETRYL	0.0099		mg/Kg	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.020		mg/Kg	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-135M-1009-SO **Lab Report Batch :** 240-27193-1 **Lab ID :** TA CAN

Sample Date : 07/23/2013 **Analysis Type: RES/TOT** **Sample Matrix :** SO

Lab Sample ID: 240-27193-4

Reviewed By / Date : **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	8300		mg/Kg		YES															
ANTIMONY	0.39		mg/Kg	U	YES															
ARSENIC	18		mg/Kg		YES															
BARIUM	73		mg/Kg		YES															
BERYLLIUM	0.48		mg/Kg	J	YES	**J**								J						
CADMIUM	1.1		mg/Kg		YES															
CALCIUM	6700		mg/Kg		YES															
CHROMIUM	18		mg/Kg		YES															
COBALT	9.4		mg/Kg		YES															
COPPER	160		mg/Kg		YES															
IRON	22000		mg/Kg		YES															
LEAD	29		mg/Kg		YES															
MAGNESIUM	3600		mg/Kg		YES															
MANGANESE	340		mg/Kg	B	YES															
NICKEL	25		mg/Kg		YES															
POTASSIUM	1100		mg/Kg		YES															
SELENIUM	0.45		mg/Kg	U	YES															
SILVER	0.10		mg/Kg	U	YES															
SODIUM	66		mg/Kg	U	YES															
THALLIUM	0.55		mg/Kg	U	YES															
VANADIUM	13		mg/Kg		YES															
ZINC	190		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.21		mg/Kg		YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	2.9		mg/Kg	J B	YES	**J**								J						

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-135M-1009-SO
Lab Report Batch : 240-27193-1
Lab ID : TA SAC
Sample Date : 07/23/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-27193-4

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.0096		mg/Kg	U	YES															
1,3-DINITROBENZENE	0.0040		mg/Kg	U	YES															
2,4,6-TNT	0.019		mg/Kg	U	YES															
2,4-DINITROTOLUENE	0.0051		mg/Kg	U	YES															
2,6-DINITROTOLUENE	0.0070		mg/Kg	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.012		mg/Kg	U	YES															
2-NITROTOLUENE	0.012		mg/Kg	U	YES															
3-NITROTOLUENE	0.015		mg/Kg	U	YES															
4-Amino-2,6-dinitrotoluene	0.0096		mg/Kg	U	YES															
4-NITROTOLUENE	0.017		mg/Kg	U	YES															
HMX	0.022		mg/Kg	J	YES	**J**								J						
NITROBENZENE	0.017		mg/Kg	U	YES															
NITROGLYCERINE	0.014		mg/Kg	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.024		mg/Kg	U	YES															
RDX	0.011		mg/Kg	U	YES															
TETRYL	0.0096		mg/Kg	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.020		mg/Kg	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 21985 **Analysis Method :** 8330 **Analysis Date :** 08/02/2013

Preparation Batch : 21985 **Preparation Type :** 8330B **Preparation Date :** 08/01/2013

Lab Reporting Batch : 240-27193-1 **Lab ID:** TA SAC

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
DA2ss-132M-1009-SOM	240-27193-1MS	SO	TETRYL	397		0.00	37.00	150.00	50.00
DA2ss-132M-1009-SOM	240-27193-1MSD		TETRYL	346		0.00	37.00	150.00	50.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2ss-132M-1009-SO	240-27193-1
DA2ss-132M-1009-SO	240-27193-1
DA2ss-133M-1009-SO	240-27193-2
DA2ss-133M-1009-SO	240-27193-2
DA2ss-134M-1009-SO	240-27193-3
DA2ss-134M-1009-SO	240-27193-3
DA2ss-135M-1009-SO	240-27193-4
DA2ss-135M-1009-SO	240-27193-4

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 12-08-151 - ERS

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 22666 **Analysis Method :** WS-WC-0050 **Analysis Date :** 08/13/2013

Preparation Batch : 22666 **Preparation Type :** METHOD **Preparation Date :** 08/12/2013

Lab Reporting Batch : 240-27193-1 **Lab ID:** TA SAC

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
DA2ss-132M-1009-SOM	240-27193-1MSD	SO	Nitrocellulose	29		10.00	34.00	115.00	71.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2ss-132M-1009-SO	240-27193-1
DA2ss-133M-1009-SO	240-27193-2
DA2ss-134M-1009-SO	240-27193-3
DA2ss-135M-1009-SO	240-27193-4

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 12-08-151 - ERS

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 96726 **Analysis Method :** 6010B **Analysis Date :** 08/09/2013

Preparation Batch : 96726 **Preparation Type :** 3050B **Preparation Date :** 08/08/2013

Lab Reporting Batch : 240-27193-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
DA2ss-132M-1009-SOM	240-27193-1MS	SO	ALUMINUM	687		30.00	75.00	125.00	20.00
			ANTIMONY	31		30.00	75.00	125.00	20.00
			CALCIUM	66		30.00	75.00	125.00	20.00
			COPPER	37		30.00	75.00	125.00	20.00
			IRON	514		30.00	75.00	125.00	20.00
			LEAD	73		30.00	75.00	125.00	20.00
			MAGNESIUM	70		30.00	75.00	125.00	20.00
			MANGANESE	44		30.00	75.00	125.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2ss-132M-1009-SO	240-27193-1
DA2ss-133M-1009-SO	240-27193-2
DA2ss-134M-1009-SO	240-27193-3
DA2ss-135M-1009-SO	240-27193-4

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 12-08-151 - ERS

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: 240-27193-1 **Lab ID:** TA SAC

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
DA2ss-132M-1009-SO	240-27193-1	WS-WC-0050	SO	Nitrocellulose	J B	2.4	5.1	mg/Kg
DA2ss-133M-1009-SO	240-27193-2	8330		2-AMINO-4,6-DINITROTOLUENE	J	0.049	0.25	mg/Kg
				4-Amino-2,6-dinitrotoluene	J P	0.045	0.25	mg/Kg
				TETRYL	J	0.016	0.25	mg/Kg
		WS-WC-0050		Nitrocellulose	J B	2.3	5.1	mg/Kg
DA2ss-134M-1009-SO	240-27193-3	6010B		BERYLLIUM	J	0.42	0.43	mg/Kg
		8330		HMX	J	0.21	0.25	mg/Kg
		WS-WC-0050		Nitrocellulose	J B	3.5	5.1	mg/Kg
DA2ss-135M-1009-SO	240-27193-4	6010B		BERYLLIUM	J	0.48	0.50	mg/Kg
		8330		HMX	J	0.022	0.24	mg/Kg
		WS-WC-0050		Nitrocellulose	J B	2.9	5.1	mg/Kg

EDD Non-Conformance Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

Non-Conformance Summary Page

Type	Count
0001	0
0002	0
0003	0
0004	0
0005	0
0006	0
0007	0
0008	0
0009	0
0010	6
0011	0
0012	0
0013	0
0014	0
0015	0
0016	0
0017	0
0018	0
0019	0

Type	Count
0020	0
0021	0
0022	0
0023	0
0024	0
0025	0
0026	0
0027	0
0028	0
0029	0
0030	3
0031	0
0032	0
0033	0
0034	166
0035	0
0036	0
0037	0
0038	0
0039	0

Total : 175

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	1	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	4	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	5	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	6	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	7	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	9	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	10	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	11	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	12	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	13	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	14	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	15	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	17	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	18	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	20	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	21	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	26	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27508-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	33	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27508-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	36	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	38	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	41	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	42	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27508-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	43	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	46	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	47	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	48	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	49	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	51	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	52	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	53	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	54	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	55	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	56	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	57	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	59	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	60	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	62	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	63	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27508-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	65	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	68	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	69	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

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Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	70	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	71	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	73	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	74	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	75	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	76	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	77	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	78	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	79	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	81	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	82	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	84	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	85	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	88	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27508-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	90	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27508-1MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	91	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	94	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	95	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	96	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	97	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	99	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	100	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	101	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	102	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	103	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	104	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	105	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	107	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	108	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	110	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	111	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	116	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27508-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	123	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27508-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	126	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	128	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	131	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	132	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27508-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	133	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	136	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	137	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	138	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	139	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	141	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	142	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	143	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	144	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	145	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	146	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	147	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	149	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	150	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	152	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	153	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	158	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27508-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	165	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27508-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	168	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	170	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	173	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	174	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27508-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	175	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	178	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	179	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	180	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	181	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	183	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	184	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	185	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	186	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	187	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	188	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	189	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	191	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	192	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	194	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	195	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	200	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27508-4, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	207	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27508-4, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	210	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-4, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	212	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-4, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	215	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27508-4, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	216	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27508-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	217	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	220	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	221	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	222	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	223	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	225	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	226	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	227	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	228	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	229	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	230	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	231	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	233	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	234	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	236	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	237	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID LCS 240-96285/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	241	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID LCS 320-22343/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	247	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID MB 320-22343/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	254	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID MB 320-22343/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	257	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID MB 320-22343/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	259	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID MB 320-22343/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	262	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID MB 320-22343/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	264	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID MB 320-22466/1-B, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	267	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID LCS 320-22343/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	270	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-22343/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	272	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-22343/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	275	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-22343/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	277	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID LCS 320-22466/2-B, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	278	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	281	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	282	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	283	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	284	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	286	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	287	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	288	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	289	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	290	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	291	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	292	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	294	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	295	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	297	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	298	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID MB 240-96285/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Matrix Spike record in Method Batch 96286 for method 7470A. Either the record is missing, you have the wrong QCType value ("MS" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	lab processed either MS/MSD or LCS
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Matrix Spike record in Method Batch 22343 for method 8330. Either the record is missing, you have the wrong QCType value ("MS" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	lab processed either MS/MSD or LCS
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Matrix Spike Duplicate record in method batch 22343 for method 8330. Either the record is missing, you have the wrong QCType value ("MSD" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	lab processed either MS/MSD or LCS

Discrepancies Between the Project Library and EDD

Table	Record	Field	Type	Description	Lab Comments
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID LCS 320-22343/2-A, Method 8330, and Analysis Type RES.	not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27508-1, Method 8330, and Analysis Type RES.	not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27508-3, Method 8330, and Analysis Type RES.	not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID MB 320-22343/1-A, Method 8330, and Analysis Type RES.	not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27508-4, Method 8330, and Analysis Type RES.	not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27508-2, Method 8330, and Analysis Type RES.	not a lab specific surrogate

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

0001	*Field character length exceeded*
0002	*Non-numeric value in a numeric field*
0003	*Incorrectly formatted date/time value*
0004	*Invalid value*
0005	*Analytical Method, Analtye ID, Analyte Name, Matrix, and Units not found in the reference project library*
0006	*RPD value is missing from a MSD, LCSD, or laboratory duplicate sample*
0007	*Target analyte specified in library files not found in the EDD*
0008	*Discrepancy in related records found between the tables Sample Analysis and Analytical Result*
0009	*Required field not populated*
0010	*Surrogate compounds specified in the reference project library are not found in table Analytical Results*
0011	*Surrogate compounds not specified in the reference project library are found in table Analytical Results*
0012	*Spike compounds specified in the reference project library are not found in table Analytical Results or vice versa*
0013	*Target analyte not specified in the reference project library is found in Analytical Results table*
0014	*Handling Batch ID (for leachates) is missing in Table A3*
0015	*Lab_Sample_ID can not have more than one matrix type assigned to it*
0016	*Analysis_Batch ID present in the Sample Analysis table is missing from the Laboratory Instrument table*
0017	*Analysis_Batch ID present in the Laboratory Instrument table is missing from the Sample Analysis table*
0018	*Run_Batch present in the Sample Analysis table is missing from the Laboratory Instrument table*
0019	*Run_Batch present in the Laboratory Instrument table is missing from the Sample Analysis table*
0020	*Target analytes and surrogates not specified in the reference project library are found in the Laboratory Intrument table*
0021	*Analysis_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS continuing calibration (QC_Type = CCV)*
0022	*Run_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS initial calibration (QC_Type = IC)*
0023	*Incorrect naming or inconsistent collection date for MS/MSD sample and/or parent sample*
0024	*Problems with %RSD, Correlation Coefficient, and/or RRFs reported for GC/MS calibration records.*
0025	*Project Number or Project Name reported in the EDD not found in the Standard Value table*
0026	*Result value for a non-detected analyte does not match the Reporting_Limit value as reported in the EDD*
0027	*ClientSampleID present in Analytical Results table but missing in the Sample Analysis table or vice versa*
0028	*Missing associated Method Blank records for a specific Preparation Batch / Analytical Method*
0029	*Missing associated Laboratory Control Sample records for a specific Preparation Batch / Analytical Method*
0030	*Missing associated Matrix Spike / Duplicate records for a specific Method Batch / Analytical Method*
0031	*Record specified in the reference project library not found in the Analytical Results table where Reportable Result = Yes*
0032	*Duplicate records found in table Analytical Results for fields ClientSampleID, Collected, AnalyticalMethod, AnalytedID where Reportable_Result = Yes*
0033	*Missing calibration records in Table A2*

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27508-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 14:58**

0034	*Report Limit from table Analytical Results exceeds the value in the reference project library (corrected for dilution and perc moist, if appl)*
0035	*Missing target analytes in IC, ICV, CV, or CCV*
0036	*Surrogate Recovery has a value greater than zero but the Lab Qualifier is like "*U*"*
0037	*Duplicate records in Table A1, A2, or A3*
0038	*Problems with QC Batch assignment*
0039	*Non-conformances related to Total Uranium assessment*

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-096-1008-SW
Lab Report Batch : 240-27508-1
Lab ID : TA SAC
Sample Date : 08/01/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-27508-1

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.031		ug/L	U	YES															
1,3-DINITROBENZENE	0.050		ug/L	U	YES															
2,4,6-TNT	0.050		ug/L	U	YES															
2,4-DINITROTOLUENE	0.050		ug/L	U	YES															
2,6-DINITROTOLUENE	0.050		ug/L	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES															
2-NITROTOLUENE	0.088		ug/L	U	YES															
3-NITROTOLUENE	0.057		ug/L	U	YES															
4-Amino-2,6-dinitrotoluene	0.050		ug/L	U	YES															
4-NITROTOLUENE	0.088		ug/L	U	YES															
HMX	0.036		ug/L	U	YES															
NITROBENZENE	0.050		ug/L	U	YES															
NITROGLYCERINE	0.33		ug/L	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.30		ug/L	U	YES															
RDX	0.036		ug/L	U	YES															
TETRYL	0.050		ug/L	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-096-1008-SW
Lab Report Batch : 240-27508-1
Lab ID : TA CAN
Sample Date : 08/01/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-27508-1

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	97		ug/L	U	YES															
ANTIMONY	2.6		ug/L	J	YES	**J**								J						
ARSENIC	3.2		ug/L	U	YES															
BARIUM	21		ug/L	J	YES	**J**								J						
BERYLLIUM	0.46		ug/L	U	YES															
CADMIUM	0.66		ug/L	U	YES															
CALCIUM	42000		ug/L		YES															
CHROMIUM	2.2		ug/L	U	YES															
COBALT	1.7		ug/L	U	YES															
COPPER	4.5		ug/L	U	YES															
IRON	300		ug/L		YES															
LEAD	1.9		ug/L	U	YES															
MAGNESIUM	10000		ug/L		YES															
MANGANESE	45		ug/L	B	YES															
NICKEL	3.2		ug/L	U	YES															
POTASSIUM	1500		ug/L	J	YES	**J**								J						
SELENIUM	4.1		ug/L	U	YES															
SILVER	2.2		ug/L	U	YES															
SODIUM	6600		ug/L		YES															
THALLIUM	4.7		ug/L	U	YES															
VANADIUM	0.64		ug/L	U	YES															
ZINC	5.0		ug/L	U	YES															
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-099-1008-DUP
Lab Report Batch : 240-27508-1
Lab ID : TA SAC
Sample Date : 08/01/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-27508-3

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.057		ug/L	J	YES	**J**								J						
1,3-DINITROBENZENE	0.050		ug/L	U	YES															
2,4,6-TNT	0.050		ug/L	U	YES															
2,4-DINITROTOLUENE	0.050		ug/L	U	YES															
2,6-DINITROTOLUENE	0.050		ug/L	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES															
2-NITROTOLUENE	0.088		ug/L	U	YES															
3-NITROTOLUENE	0.057		ug/L	U	YES															
4-Amino-2,6-dinitrotoluene	0.050		ug/L	U	YES															
4-NITROTOLUENE	0.088		ug/L	U	YES															
HMX	0.036		ug/L	U	YES															
NITROBENZENE	0.050		ug/L	U	YES															
NITROGLYCERINE	0.33		ug/L	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.30		ug/L	U	YES															
RDX	0.036		ug/L	U	YES															
TETRYL	0.050		ug/L	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-099-1008-DUP
Lab Report Batch : 240-27508-1
Lab ID : TA CAN
Sample Date : 08/01/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-27508-3

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	97		ug/L	U	YES															
ANTIMONY	1.8		ug/L	U	YES															
ARSENIC	3.2		ug/L	U	YES															
BARIUM	25		ug/L	J	YES	**J**								J						
BERYLLIUM	0.46		ug/L	U	YES															
CADMIUM	0.66		ug/L	U	YES															
CALCIUM	45000		ug/L		YES															
CHROMIUM	2.2		ug/L	U	YES															
COBALT	1.7		ug/L	U	YES															
COPPER	4.5		ug/L	U	YES															
IRON	580		ug/L		YES															
LEAD	1.9		ug/L	U	YES															
MAGNESIUM	11000		ug/L		YES															
MANGANESE	92		ug/L	B	YES															
NICKEL	3.2		ug/L	U	YES															
POTASSIUM	1500		ug/L	J	YES	**J**								J						
SELENIUM	4.1		ug/L	U	YES															
SILVER	2.2		ug/L	U	YES															
SODIUM	6200		ug/L		YES															
THALLIUM	4.7		ug/L	U	YES															
VANADIUM	0.64		ug/L	U	YES															
ZINC	7.1		ug/L	J	YES	**J**								J						
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-099-1008-SW
Lab Report Batch : 240-27508-1
Lab ID : TA SAC
Sample Date : 08/01/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-27508-2

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.031		ug/L	U	YES															
1,3-DINITROBENZENE	0.050		ug/L	U	YES															
2,4,6-TNT	0.050		ug/L	U	YES															
2,4-DINITROTOLUENE	0.050		ug/L	U	YES															
2,6-DINITROTOLUENE	0.050		ug/L	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES															
2-NITROTOLUENE	0.088		ug/L	U	YES															
3-NITROTOLUENE	0.057		ug/L	U	YES															
4-Amino-2,6-dinitrotoluene	0.050		ug/L	U	YES															
4-NITROTOLUENE	0.088		ug/L	U	YES															
HMX	0.036		ug/L	U	YES															
NITROBENZENE	0.050		ug/L	U	YES															
NITROGLYCERINE	0.33		ug/L	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.30		ug/L	U	YES															
RDX	0.036		ug/L	U	YES															
TETRYL	0.050		ug/L	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-099-1008-SW
Lab Report Batch : 240-27508-1
Lab ID : TA CAN
Sample Date : 08/01/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-27508-2

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	130		ug/L	J	YES	**J**								J						
ANTIMONY	1.8		ug/L	U	YES															
ARSENIC	3.2		ug/L	U	YES															
BARIUM	26		ug/L	J	YES	**J**								J						
BERYLLIUM	0.46		ug/L	U	YES															
CADMIUM	0.66		ug/L	U	YES															
CALCIUM	47000		ug/L		YES															
CHROMIUM	2.2		ug/L	U	YES															
COBALT	1.7		ug/L	U	YES															
COPPER	4.5		ug/L	U	YES															
IRON	670		ug/L		YES															
LEAD	1.9		ug/L	U	YES															
MAGNESIUM	12000		ug/L		YES															
MANGANESE	100		ug/L	B	YES															
NICKEL	3.2		ug/L	U	YES															
POTASSIUM	1600		ug/L	J	YES	**J**								J						
SELENIUM	4.1		ug/L	U	YES															
SILVER	2.2		ug/L	U	YES															
SODIUM	6500		ug/L		YES															
THALLIUM	4.7		ug/L	U	YES															
VANADIUM	0.64		ug/L	U	YES															
ZINC	5.0		ug/L	J	YES	**J**								J						
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-131-1008-SW
Lab Report Batch : 240-27508-1
Lab ID : TA SAC
Sample Date : 08/01/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-27508-4

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.031		ug/L	U	YES															
1,3-DINITROBENZENE	0.050		ug/L	U	YES															
2,4,6-TNT	0.050		ug/L	U	YES															
2,4-DINITROTOLUENE	0.050		ug/L	U	YES															
2,6-DINITROTOLUENE	0.050		ug/L	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES															
2-NITROTOLUENE	0.088		ug/L	U	YES															
3-NITROTOLUENE	0.057		ug/L	U	YES															
4-Amino-2,6-dinitrotoluene	0.050		ug/L	U	YES															
4-NITROTOLUENE	0.088		ug/L	U	YES															
HMX	0.036		ug/L	U	YES															
NITROBENZENE	0.050		ug/L	U	YES															
NITROGLYCERINE	0.33		ug/L	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.30		ug/L	U	YES															
RDX	0.036		ug/L	U	YES															
TETRYL	0.050		ug/L	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-131-1008-SW
Lab Report Batch : 240-27508-1
Lab ID : TA CAN
Sample Date : 08/01/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-27508-4

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	97		ug/L	U	YES															
ANTIMONY	1.8		ug/L	U	YES															
ARSENIC	3.2		ug/L	U	YES															
BARIUM	24		ug/L	J	YES	**J**								J						
BERYLLIUM	0.46		ug/L	U	YES															
CADMIUM	0.66		ug/L	U	YES															
CALCIUM	46000		ug/L		YES															
CHROMIUM	2.2		ug/L	U	YES															
COBALT	1.7		ug/L	U	YES															
COPPER	4.5		ug/L	U	YES															
IRON	590		ug/L		YES															
LEAD	1.9		ug/L	U	YES															
MAGNESIUM	11000		ug/L		YES															
MANGANESE	110		ug/L	B	YES															
NICKEL	3.2		ug/L	U	YES															
POTASSIUM	1600		ug/L	J	YES	**J**								J						
SELENIUM	4.1		ug/L	U	YES															
SILVER	2.2		ug/L	U	YES															
SODIUM	6500		ug/L		YES															
THALLIUM	4.7		ug/L	U	YES															
VANADIUM	0.64		ug/L	U	YES															
ZINC	5.0		ug/L	U	YES															
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: 240-27508-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
DA2sw-096-1008-SW	240-27508-1	6010B	AQ	ANTIMONY	J	2.6	10	ug/L
				BARIUM	J	21	200	ug/L
				POTASSIUM	J	1500	5000	ug/L
DA2sw-099-1008-DUP	240-27508-3			BARIUM	J	25	200	ug/L
				POTASSIUM	J	1500	5000	ug/L
				ZINC	J	7.1	50	ug/L
		8330		1,3,5-TRINITROBENZENE	J	0.057	0.15	ug/L
DA2sw-099-1008-SW	240-27508-2	6010B		ALUMINUM	J	130	200	ug/L
				BARIUM	J	26	200	ug/L
				POTASSIUM	J	1600	5000	ug/L
				ZINC	J	5.0	50	ug/L
DA2sw-131-1008-SW	240-27508-4			BARIUM	J	24	200	ug/L
				POTASSIUM	J	1600	5000	ug/L

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: 240-27508-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
DA2sw-096-1008-SW	240-27508-1	6010B	AQ	THALLIUM	U	4.7	2.00	ug/L
DA2sw-099-1008-DUP	240-27508-3	6010B	AQ	THALLIUM	U	4.7	2.00	ug/L
DA2sw-099-1008-SW	240-27508-2	6010B	AQ	THALLIUM	U	4.7	2.00	ug/L
DA2sw-131-1008-SW	240-27508-4	6010B	AQ	THALLIUM	U	4.7	2.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **12-08-151 - ERS**

EDD Non-Conformance Report
Lab Reporting Batch ID: 240-27746-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:20**

Non-Conformance Summary Page

Type	Count
0001	0
0002	0
0003	0
0004	0
0005	0
0006	0
0007	0
0008	0
0009	0
0010	6
0011	0
0012	0
0013	0
0014	0
0015	0
0016	0
0017	0
0018	0
0019	0

Type	Count
0020	0
0021	0
0022	0
0023	0
0024	0
0025	0
0026	0
0027	0
0028	0
0029	0
0030	3
0031	0
0032	0
0033	0
0034	149
0035	0
0036	0
0037	0
0038	0
0039	0

Total : 158

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27746-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:20**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	2	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	3	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	4	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	5	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	7	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	8	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	9	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	10	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	11	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	12	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27746-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:20**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	13	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	15	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	16	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	18	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	19	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	24	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27746-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	31	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27746-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	34	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27746-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	36	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27746-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	38	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	41	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27746-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:20**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	42	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	43	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	44	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	46	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	47	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	48	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	49	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	50	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	51	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	52	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27746-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:20**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	54	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	55	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	57	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	58	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	63	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27746-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	70	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27746-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	73	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27746-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	75	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27746-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	78	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27746-1, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	79	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27746-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	80	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	83	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	84	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	85	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	86	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	88	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	89	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	90	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	91	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	92	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	93	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable

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Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

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Table	Record	Field	Type	Description	Lab Comments
A1	94	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	96	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	97	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	99	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	100	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27746-1DUP, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	102	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	105	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	106	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	107	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	108	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	110	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	111	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	112	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	113	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	114	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	115	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	116	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	118	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	119	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	121	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	122	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	125	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27746-1MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	127	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27746-1MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	128	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	131	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	132	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	133	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	134	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	136	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	137	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	138	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	139	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	140	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	141	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	142	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	144	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	145	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	147	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	148	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	153	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-27746-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	160	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-27746-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	163	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-27746-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	165	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-27746-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	168	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27746-2, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	169	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27746-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	170	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	173	Reporting_Limit	0034	The Reporting Limit of 0.51 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-27746-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	174	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-27746-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	176	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	179	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	180	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	181	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	182	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	184	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	185	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	186	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	187	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	188	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	189	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	190	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	192	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	193	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	195	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	196	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID LCS 240-97151/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	199	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID LCS 320-22765/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	206	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID LCS 320-22765/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	209	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-22765/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	211	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-22765/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	214	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-22765/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	216	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID LCS 320-23023/2-B, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	218	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID LCSD 320-22765/3-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	225	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID LCSD 320-22765/3-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	228	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID LCSD 320-22765/3-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	230	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID LCSD 320-22765/3-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	233	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID LCSD 320-22765/3-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	236	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for ALUMINUM, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	239	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	240	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	241	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	242	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	244	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27746-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:20**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	245	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for THALLIUM, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	246	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ANTIMONY, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	247	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	248	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	249	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	250	Reporting_Limit	0034	The Reporting Limit of 2 ug/L for CADMIUM, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	252	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	253	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	255	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	256	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID MB 240-97151/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27746-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:20**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	259	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID MB 320-22765/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	266	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID MB 320-22765/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	269	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID MB 320-22765/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	271	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID MB 320-22765/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	274	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID MB 320-22765/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	276	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID MB 320-23023/1-B, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Matrix Spike Duplicate record in method batch 22765 for method 8330. Either the record is missing, you have the wrong QCType value ("MSD" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	Lab processed either MS/MSD or LCS
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Matrix Spike record in Method Batch 22765 for method 8330. Either the record is missing, you have the wrong QCType value ("MS" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	Lab processed either MS/MSD or LCS
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Matrix Spike record in Method Batch 96993 for method 7470A. Either the record is missing, you have the wrong QCType value ("MS" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	Lab processed either MS/MSD or LCS

Discrepancies Between the Project Library and EDD

Table	Record	Field	Type	Description	Lab Comments
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID LCS 320-22765/2-A, Method 8330, and Analysis Type RES.	Not a lab specific surrogate

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27746-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:20**

Discrepancies Between the Project Library and EDD

Table	Record	Field	Type	Description	Lab Comments
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27746-1, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27746-3, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID MB 320-22765/1-A, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-27746-2, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID LCSD 320-22765/3-A, Method 8330, and Analysis Type RES.	Not a lab specific surrogate

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27746-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:20**

0001	*Field character length exceeded*
0002	*Non-numeric value in a numeric field*
0003	*Incorrectly formatted date/time value*
0004	*Invalid value*
0005	*Analytical Method, Analtye ID, Analyte Name, Matrix, and Units not found in the reference project library*
0006	*RPD value is missing from a MSD, LCSD, or laboratory duplicate sample*
0007	*Target analyte specified in library files not found in the EDD*
0008	*Discrepancy in related records found between the tables Sample Analysis and Analytical Result*
0009	*Required field not populated*
0010	*Surrogate compounds specified in the reference project library are not found in table Analytical Results*
0011	*Surrogate compounds not specified in the reference project library are found in table Analytical Results*
0012	*Spike compounds specified in the reference project library are not found in table Analytical Results or vice versa*
0013	*Target analyte not specified in the reference project library is found in Analytical Results table*
0014	*Handling Batch ID (for leachates) is missing in Table A3*
0015	*Lab_Sample_ID can not have more than one matrix type assigned to it*
0016	*Analysis_Batch ID present in the Sample Analysis table is missing from the Laboratory Instrument table*
0017	*Analysis_Batch ID present in the Laboratory Instrument table is missing from the Sample Analysis table*
0018	*Run_Batch present in the Sample Analysis table is missing from the Laboratory Instrument table*
0019	*Run_Batch present in the Laboratory Instrument table is missing from the Sample Analysis table*
0020	*Target analytes and surrogates not specified in the reference project library are found in the Laboratory Intrument table*
0021	*Analysis_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS continuing calibration (QC_Type = CCV)*
0022	*Run_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS initial calibration (QC_Type = IC)*
0023	*Incorrect naming or inconsistent collection date for MS/MSD sample and/or parent sample*
0024	*Problems with %RSD, Correlation Coefficient, and/or RRFs reported for GC/MS calibration records.*
0025	*Project Number or Project Name reported in the EDD not found in the Standard Value table*
0026	*Result value for a non-detected analyte does not match the Reporting_Limit value as reported in the EDD*
0027	*ClientSampleID present in Analytical Results table but missing in the Sample Analysis table or vice versa*
0028	*Missing associated Method Blank records for a specific Preparation Batch / Analytical Method*
0029	*Missing associated Laboratory Control Sample records for a specific Preparation Batch / Analytical Method*
0030	*Missing associated Matrix Spike / Duplicate records for a specific Method Batch / Analytical Method*
0031	*Record specified in the reference project library not found in the Analytical Results table where Reportable Result = Yes*
0032	*Duplicate records found in table Analytical Results for fields ClientSampleID, Collected, AnalyticalMethod, AnalytedID where Reportable_Result = Yes*
0033	*Missing calibration records in Table A2*

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-27746-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:20**

0034	*Report Limit from table Analytical Results exceeds the value in the reference project library (corrected for dilution and perc moist, if appl)*
0035	*Missing target analytes in IC, ICV, CV, or CCV*
0036	*Surrogate Recovery has a value greater than zero but the Lab Qualifier is like "*U*"*
0037	*Duplicate records in Table A1, A2, or A3*
0038	*Problems with QC Batch assignment*
0039	*Non-conformances related to Total Uranium assessment*

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-096-1009-SW
Lab Report Batch : 240-27746-1
Lab ID : TA SAC
Sample Date : 08/08/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-27746-1

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.032		ug/L	U	YES															
1,3-DINITROBENZENE	0.051		ug/L	U	YES															
2,4,6-TNT	0.051		ug/L	U	YES															
2,4-DINITROTOLUENE	0.051		ug/L	U	YES															
2,6-DINITROTOLUENE	0.051		ug/L	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES															
2-NITROTOLUENE	0.090		ug/L	U	YES															
3-NITROTOLUENE	0.058		ug/L	U	YES															
4-Amino-2,6-dinitrotoluene	0.051		ug/L	U	YES															
4-NITROTOLUENE	0.090		ug/L	U	YES															
HMX	0.037		ug/L	U	YES															
NITROBENZENE	0.051		ug/L	U	YES															
NITROGLYCERINE	0.34		ug/L	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.31		ug/L	U	YES															
RDX	0.037		ug/L	U	YES															
TETRYL	0.051		ug/L	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-096-1009-SW
Lab Report Batch : 240-27746-1
Lab ID : TA CAN
Sample Date : 08/08/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-27746-1

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	460		ug/L		YES															
ANTIMONY	2.4		ug/L	J	YES	**J**								J						
ARSENIC	3.2		ug/L	U	YES															
BARIUM	20		ug/L	J	YES	**J**								J						
BERYLLIUM	0.46		ug/L	U	YES															
CADMIUM	0.66		ug/L	U	YES															
CALCIUM	27000		ug/L	B	YES															
CHROMIUM	2.2		ug/L	U	YES															
COBALT	1.7		ug/L	U	YES															
COPPER	4.5		ug/L	U	YES															
IRON	870		ug/L		YES															
LEAD	1.9		ug/L	U	YES															
MAGNESIUM	6400		ug/L	B	YES															
MANGANESE	40		ug/L	B	YES															
NICKEL	3.2		ug/L	U	YES															
POTASSIUM	1500		ug/L	J	YES	**J**								J						
SELENIUM	4.1		ug/L	U	YES															
SILVER	2.2		ug/L	U	YES															
SODIUM	3200		ug/L	J	YES	**J**								J						
THALLIUM	4.7		ug/L	U	YES															
VANADIUM	3.1		ug/L	J	YES	**J**								J						
ZINC	5.0		ug/L	U	YES															
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-099-1009-SW
Lab Report Batch : 240-27746-1
Lab ID : TA SAC
Sample Date : 08/08/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-27746-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.032		ug/L	U	YES															
1,3-DINITROBENZENE	0.051		ug/L	U	YES															
2,4,6-TNT	0.051		ug/L	U	YES															
2,4-DINITROTOLUENE	0.051		ug/L	U	YES															
2,6-DINITROTOLUENE	0.051		ug/L	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES															
2-NITROTOLUENE	0.090		ug/L	U	YES															
3-NITROTOLUENE	0.058		ug/L	U	YES															
4-Amino-2,6-dinitrotoluene	0.051		ug/L	U	YES															
4-NITROTOLUENE	0.090		ug/L	U	YES															
HMX	0.037		ug/L	U	YES															
NITROBENZENE	0.051		ug/L	U	YES															
NITROGLYCERINE	0.34		ug/L	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.31		ug/L	U	YES															
RDX	0.037		ug/L	U	YES															
TETRYL	0.051		ug/L	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-099-1009-SW
Lab Report Batch : 240-27746-1
Lab ID : TA CAN
Sample Date : 08/08/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-27746-2

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	1200		ug/L		YES															
ANTIMONY	1.8		ug/L	J	YES	**J**								J						
ARSENIC	3.2		ug/L	U	YES															
BARIUM	27		ug/L	J	YES	**J**								J						
BERYLLIUM	0.46		ug/L	U	YES															
CADMIUM	0.66		ug/L	U	YES															
CALCIUM	29000		ug/L	B	YES															
CHROMIUM	2.2		ug/L	J	YES	**J**								J						
COBALT	1.7		ug/L	U	YES															
COPPER	4.5		ug/L	U	YES															
IRON	1900		ug/L		YES															
LEAD	1.9		ug/L	U	YES															
MAGNESIUM	7000		ug/L	B	YES															
MANGANESE	160		ug/L	B	YES															
NICKEL	3.2		ug/L	U	YES															
POTASSIUM	1800		ug/L	J	YES	**J**								J						
SELENIUM	4.1		ug/L	U	YES															
SILVER	2.2		ug/L	U	YES															
SODIUM	3400		ug/L	J	YES	**J**								J						
THALLIUM	4.7		ug/L	U	YES															
VANADIUM	2.8		ug/L	J	YES	**J**								J						
ZINC	17		ug/L	J B	YES	**J**								J						
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-131-1009-SW
Lab Report Batch : 240-27746-1
Lab ID : TA SAC
Sample Date : 08/08/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-27746-3

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.032		ug/L	U	YES															
1,3-DINITROBENZENE	0.051		ug/L	U	YES															
2,4,6-TNT	0.051		ug/L	U	YES															
2,4-DINITROTOLUENE	0.051		ug/L	U	YES															
2,6-DINITROTOLUENE	0.051		ug/L	U	YES															
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES															
2-NITROTOLUENE	0.090		ug/L	U	YES															
3-NITROTOLUENE	0.058		ug/L	U	YES															
4-Amino-2,6-dinitrotoluene	0.051		ug/L	U	YES															
4-NITROTOLUENE	0.090		ug/L	U	YES															
HMX	0.037		ug/L	U	YES															
NITROBENZENE	0.051		ug/L	U	YES															
NITROGLYCERINE	0.34		ug/L	U	YES															
Pentaerythritol Tetranitrate (PETN)	0.31		ug/L	U	YES															
RDX	0.037		ug/L	U	YES															
TETRYL	0.051		ug/L	U	YES															
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-131-1009-SW
Lab Report Batch : 240-27746-1
Lab ID : TA CAN
Sample Date : 08/08/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-27746-3

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	510		ug/L		YES															
ANTIMONY	1.8		ug/L	U	YES															
ARSENIC	3.2		ug/L	U	YES															
BARIUM	21		ug/L	J	YES	**J**								J						
BERYLLIUM	0.46		ug/L	U	YES															
CADMIUM	0.66		ug/L	U	YES															
CALCIUM	28000		ug/L	B	YES															
CHROMIUM	2.2		ug/L	U	YES															
COBALT	1.7		ug/L	U	YES															
COPPER	4.5		ug/L	U	YES															
IRON	920		ug/L		YES															
LEAD	1.9		ug/L	U	YES															
MAGNESIUM	6700		ug/L	B	YES															
MANGANESE	74		ug/L	B	YES															
NICKEL	3.2		ug/L	U	YES															
POTASSIUM	1600		ug/L	J	YES	**J**								J						
SELENIUM	4.1		ug/L	U	YES															
SILVER	2.2		ug/L	U	YES															
SODIUM	3300		ug/L	J	YES	**J**								J						
THALLIUM	4.7		ug/L	U	YES															
VANADIUM	1.8		ug/L	J	YES	**J**								J						
ZINC	5.0		ug/L	U	YES															
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Method Blank Outlier Report

Lab Reporting Batch : 240-27746-1
Lab ID: TA CAN
Analysis Method : 6010B
Analysis Date : 08/19/2013
Preparation Type : 3005A
Preparation Date : 08/13/2013
Method Blank Lab Sample ID : MB 240-97151/1-A
Preparation Batch : 97151

CALCIUM	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	160	5000	ug/L	J	

CALCIUM contamination found in the method blank did not qualify any samples.

MAGNESIUM	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	47.5	5000	ug/L	J	

MAGNESIUM contamination found in the method blank did not qualify any samples.

MANGANESE	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	0.844	15	ug/L	J	

MANGANESE contamination found in the method blank did not qualify any samples.

ZINC	Result	Reporting Limit	Units	Lab Qual	Comments
Method Blank Result:	12.5	50	ug/L	J	

ZINC was qualified due to method blank contamination in the following associated samples:

Client Sample ID	Lab Sample ID	Dilution	Result	Lab Qual	Result Units
DA2sw-099-1009-SW	240-27746-2	1	17	J B	ug/L

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: 240-27746-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
DA2sw-096-1009-SW	240-27746-1	6010B	AQ	ANTIMONY	J	2.4	10	ug/L
				BARIUM	J	20	200	ug/L
				POTASSIUM	J	1500	5000	ug/L
				SODIUM	J	3200	5000	ug/L
				VANADIUM	J	3.1	7.0	ug/L
DA2sw-099-1009-SW	240-27746-2			ANTIMONY	J	1.8	10	ug/L
				BARIUM	J	27	200	ug/L
				CHROMIUM	J	2.2	5.0	ug/L
				POTASSIUM	J	1800	5000	ug/L
				SODIUM	J	3400	5000	ug/L
				VANADIUM	J	2.8	7.0	ug/L
				ZINC	J B	17	50	ug/L
DA2sw-131-1009-SW	240-27746-3			BARIUM	J	21	200	ug/L
				POTASSIUM	J	1600	5000	ug/L
				SODIUM	J	3300	5000	ug/L
				VANADIUM	J	1.8	7.0	ug/L

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: 240-27746-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
DA2sw-096-1009-SW	240-27746-1	6010B	AQ	THALLIUM	U	4.7	2.00	ug/L
DA2sw-099-1009-SW	240-27746-2	6010B	AQ	THALLIUM	U	4.7	2.00	ug/L
DA2sw-131-1009-SW	240-27746-3	6010B	AQ	THALLIUM	U	4.7	2.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **12-08-151 - ERS**

EDD Non-Conformance Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Non-Conformance Summary Page

Type	Count
0001	0
0002	0
0003	0
0004	0
0005	0
0006	0
0007	0
0008	0
0009	0
0010	6
0011	0
0012	0
0013	0
0014	0
0015	0
0016	0
0017	0
0018	0
0019	0

Type	Count
0020	0
0021	0
0022	0
0023	0
0024	0
0025	0
0026	0
0027	0
0028	0
0029	0
0030	5
0031	0
0032	0
0033	0
0034	302
0035	0
0036	0
0037	0
0038	0
0039	0

Total : 313

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	27	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	28	Reporting_Limit	0034	The Reporting Limit of 1.4 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-29485-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	29	Reporting_Limit	0034	The Reporting Limit of 3.6 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-29485-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	32	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-29485-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	36	Reporting_Limit	0034	The Reporting Limit of 18 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-29485-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	40	Reporting_Limit	0034	The Reporting Limit of 4.5 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-29485-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	41	Reporting_Limit	0034	The Reporting Limit of 2.3 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-29485-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	42	Reporting_Limit	0034	The Reporting Limit of 4.5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-29485-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	44	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-29485-1, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	68	Reporting_Limit	0034	The Reporting Limit of 300 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	69	Reporting_Limit	0034	The Reporting Limit of 250 ug/L for IRON, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	70	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for LEAD, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 3 ug/L (corrected for dilution, if applicable).	Acceptable
A1	71	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	72	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	73	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	74	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	75	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for SILVER, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	76	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	77	Reporting_Limit	0034	The Reporting Limit of 30 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	78	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	79	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	80	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	81	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	82	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	83	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for CHROMIUM, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	84	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	85	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	87	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	88	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for SELENIUM, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	89	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-29485-10, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	93	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-29485-10, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	100	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-29485-10, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	103	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-10, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	105	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-10, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	108	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-10, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	109	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-29485-10, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	110	Reporting_Limit	0034	The Reporting Limit of 300 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	111	Reporting_Limit	0034	The Reporting Limit of 250 ug/L for IRON, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	112	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for LEAD, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 3 ug/L (corrected for dilution, if applicable).	Acceptable
A1	113	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	114	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	115	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	116	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	117	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for SILVER, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	118	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	119	Reporting_Limit	0034	The Reporting Limit of 30 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	120	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	121	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	122	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	123	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	124	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	125	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for CHROMIUM, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	126	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	127	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	129	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	130	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for SELENIUM, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	131	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-29485-11, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	135	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-29485-11, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	142	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-29485-11, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	145	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-11, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	147	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-11, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	150	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-11, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	151	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-29485-11, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	155	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	156	Reporting_Limit	0034	The Reporting Limit of 1.4 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-29485-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	157	Reporting_Limit	0034	The Reporting Limit of 3.6 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-29485-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	160	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-29485-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	164	Reporting_Limit	0034	The Reporting Limit of 18 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-29485-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	168	Reporting_Limit	0034	The Reporting Limit of 4.5 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-29485-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	169	Reporting_Limit	0034	The Reporting Limit of 2.3 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-29485-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	170	Reporting_Limit	0034	The Reporting Limit of 4.5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-29485-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	172	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-29485-1DUP, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	178	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	179	Reporting_Limit	0034	The Reporting Limit of 1.4 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-29485-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	180	Reporting_Limit	0034	The Reporting Limit of 3.6 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-29485-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	183	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-29485-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	187	Reporting_Limit	0034	The Reporting Limit of 18 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-29485-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	191	Reporting_Limit	0034	The Reporting Limit of 4.5 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-29485-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	192	Reporting_Limit	0034	The Reporting Limit of 2.3 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-29485-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	193	Reporting_Limit	0034	The Reporting Limit of 4.5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-29485-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	195	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-29485-1MS, Analysis Type RE2/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	214	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	215	Reporting_Limit	0034	The Reporting Limit of 1.4 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-29485-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	216	Reporting_Limit	0034	The Reporting Limit of 3.6 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-29485-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	219	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-29485-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	223	Reporting_Limit	0034	The Reporting Limit of 18 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-29485-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	227	Reporting_Limit	0034	The Reporting Limit of 4.5 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-29485-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	228	Reporting_Limit	0034	The Reporting Limit of 2.3 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-29485-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	229	Reporting_Limit	0034	The Reporting Limit of 4.5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-29485-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	231	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-29485-2, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	269	Reporting_Limit	0034	The Reporting Limit of 300 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	270	Reporting_Limit	0034	The Reporting Limit of 250 ug/L for IRON, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	271	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for LEAD, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 3 ug/L (corrected for dilution, if applicable).	Acceptable
A1	272	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	273	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	274	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	275	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	276	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for SILVER, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	277	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	278	Reporting_Limit	0034	The Reporting Limit of 30 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	279	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	280	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	281	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	282	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	283	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	284	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for CHROMIUM, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	285	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

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Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	286	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	288	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	289	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	290	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for SELENIUM, method 6010B, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	294	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-29485-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	301	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-29485-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	304	Reporting_Limit	0034	The Reporting Limit of 0.52 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	306	Reporting_Limit	0034	The Reporting Limit of 420 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-29485-7, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	335	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-8, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	336	Reporting_Limit	0034	The Reporting Limit of 1.4 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-29485-8, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	337	Reporting_Limit	0034	The Reporting Limit of 3.6 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-29485-8, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

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Table	Record	Field	Type	Description	Lab Comments
A1	340	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-29485-8, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	344	Reporting_Limit	0034	The Reporting Limit of 18 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-29485-8, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	348	Reporting_Limit	0034	The Reporting Limit of 4.5 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-29485-8, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	350	Reporting_Limit	0034	The Reporting Limit of 4.5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-29485-8, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	352	Reporting_Limit	0034	The Reporting Limit of 450 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-29485-8, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	366	Reporting_Limit	0034	The Reporting Limit of 0.52 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	369	Reporting_Limit	0034	The Reporting Limit of 0.52 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-3, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	370	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-29485-3, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	371	Reporting_Limit	0034	The Reporting Limit of 300 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	372	Reporting_Limit	0034	The Reporting Limit of 250 ug/L for IRON, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

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Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	373	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for LEAD, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 3 ug/L (corrected for dilution, if applicable).	Acceptable
A1	374	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	375	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	376	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	377	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	378	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for SILVER, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	379	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	380	Reporting_Limit	0034	The Reporting Limit of 30 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	381	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	382	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

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Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	383	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	384	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	385	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	386	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for CHROMIUM, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	387	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	388	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	390	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	391	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	392	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for SELENIUM, method 6010B, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	394	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-29485-3MS, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable

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Lab Reporting Batch ID: 240-29485-1

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Table	Record	Field	Type	Description	Lab Comments
A1	395	Reporting_Limit	0034	The Reporting Limit of 300 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	396	Reporting_Limit	0034	The Reporting Limit of 250 ug/L for IRON, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	397	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for LEAD, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 3 ug/L (corrected for dilution, if applicable).	Acceptable
A1	398	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	399	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	400	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	401	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	402	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for SILVER, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	403	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	404	Reporting_Limit	0034	The Reporting Limit of 30 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

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Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	405	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	406	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	407	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	408	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	409	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	410	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for CHROMIUM, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	411	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	412	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	414	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	415	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	416	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for SELENIUM, method 6010B, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	418	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-29485-3MSD, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	421	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	422	Reporting_Limit	0034	The Reporting Limit of 1.4 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-29485-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	423	Reporting_Limit	0034	The Reporting Limit of 3.8 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-29485-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	426	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-29485-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	430	Reporting_Limit	0034	The Reporting Limit of 19 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-29485-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	434	Reporting_Limit	0034	The Reporting Limit of 4.7 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-29485-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	435	Reporting_Limit	0034	The Reporting Limit of 2.4 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-29485-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	436	Reporting_Limit	0034	The Reporting Limit of 4.7 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-29485-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

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Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	438	Reporting_Limit	0034	The Reporting Limit of 470 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-29485-4, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	464	Reporting_Limit	0034	The Reporting Limit of 430 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-5, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	465	Reporting_Limit	0034	The Reporting Limit of 1.3 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-29485-5, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	466	Reporting_Limit	0034	The Reporting Limit of 3.4 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-29485-5, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	469	Reporting_Limit	0034	The Reporting Limit of 430 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-29485-5, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	473	Reporting_Limit	0034	The Reporting Limit of 17 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-29485-5, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	477	Reporting_Limit	0034	The Reporting Limit of 4.3 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-29485-5, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	479	Reporting_Limit	0034	The Reporting Limit of 4.3 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-29485-5, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.3 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	481	Reporting_Limit	0034	The Reporting Limit of 430 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-29485-5, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 113 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	496	Reporting_Limit	0034	The Reporting Limit of 300 ug/L for ALUMINUM, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	497	Reporting_Limit	0034	The Reporting Limit of 250 ug/L for IRON, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

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Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

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Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	498	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for LEAD, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 3 ug/L (corrected for dilution, if applicable).	Acceptable
A1	499	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	500	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	501	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	502	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	503	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for SILVER, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	504	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	505	Reporting_Limit	0034	The Reporting Limit of 30 ug/L for THALLIUM, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	506	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for ANTIMONY, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	507	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	508	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	509	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	510	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for CADMIUM, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	511	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for CHROMIUM, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	512	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	513	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	515	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	516	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	517	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for SELENIUM, method 6010B, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	521	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID 240-29485-9, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	532	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-6, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	533	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-29485-6, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

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Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

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Table	Record	Field	Type	Description	Lab Comments
A1	534	Reporting_Limit	0034	The Reporting Limit of 4 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-29485-6, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	537	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-29485-6, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	541	Reporting_Limit	0034	The Reporting Limit of 20 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-29485-6, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	545	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-29485-6, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	546	Reporting_Limit	0034	The Reporting Limit of 2.5 mg/Kg for COPPER, method 6010B, Lab Sample ID 240-29485-6, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	547	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-29485-6, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	549	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for CALCIUM, method 6010B, Lab Sample ID 240-29485-6, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	578	Reporting_Limit	0034	The Reporting Limit of 420 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID 240-29485-7, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	579	Reporting_Limit	0034	The Reporting Limit of 1.3 mg/Kg for MANGANESE, method 6010B, Lab Sample ID 240-29485-7, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	580	Reporting_Limit	0034	The Reporting Limit of 3.4 mg/Kg for NICKEL, method 6010B, Lab Sample ID 240-29485-7, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	583	Reporting_Limit	0034	The Reporting Limit of 420 mg/Kg for SODIUM, method 6010B, Lab Sample ID 240-29485-7, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 112 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	587	Reporting_Limit	0034	The Reporting Limit of 17 mg/Kg for BARIUM, method 6010B, Lab Sample ID 240-29485-7, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1.1 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	591	Reporting_Limit	0034	The Reporting Limit of 4.2 mg/Kg for COBALT, method 6010B, Lab Sample ID 240-29485-7, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	593	Reporting_Limit	0034	The Reporting Limit of 4.2 mg/Kg for VANADIUM, method 6010B, Lab Sample ID 240-29485-7, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2.2 mg/Kg (corrected for dilution and % moi, if applicable).	Acceptable
A1	600	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID 240-29485-9, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	603	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-9, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	605	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-9, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	608	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID 240-29485-9, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	609	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID 240-29485-9, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	611	Reporting_Limit	0034	The Reporting Limit of 300 ug/L for ALUMINUM, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	612	Reporting_Limit	0034	The Reporting Limit of 250 ug/L for IRON, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	613	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for LEAD, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 3 ug/L (corrected for dilution, if applicable).	Acceptable
A1	614	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	615	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	616	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	617	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	618	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for SILVER, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	619	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	620	Reporting_Limit	0034	The Reporting Limit of 30 ug/L for THALLIUM, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	621	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for ANTIMONY, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	622	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	623	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	624	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	625	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for CADMIUM, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	626	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for CHROMIUM, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	627	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	628	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	630	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	631	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	632	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for SELENIUM, method 6010B, Lab Sample ID LCS 240-103610/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	636	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID LCS 240-104463/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	637	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID LCS 240-104463/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	638	Reporting_Limit	0034	The Reporting Limit of 4 mg/Kg for NICKEL, method 6010B, Lab Sample ID LCS 240-104463/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	641	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for SODIUM, method 6010B, Lab Sample ID LCS 240-104463/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	645	Reporting_Limit	0034	The Reporting Limit of 20 mg/Kg for BARIUM, method 6010B, Lab Sample ID LCS 240-104463/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	649	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for COBALT, method 6010B, Lab Sample ID LCS 240-104463/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	650	Reporting_Limit	0034	The Reporting Limit of 2.5 mg/Kg for COPPER, method 6010B, Lab Sample ID LCS 240-104463/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	651	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID LCS 240-104463/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	653	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for CALCIUM, method 6010B, Lab Sample ID LCS 240-104463/2-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	658	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID LCS 320-26457/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable

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Table	Record	Field	Type	Description	Lab Comments
A1	665	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID LCS 320-26457/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	668	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-26457/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	670	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-26457/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	673	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID LCS 320-26457/2-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	693	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID LCS 320-26800/2-B, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A1	697	Reporting_Limit	0034	The Reporting Limit of 300 ug/L for ALUMINUM, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	698	Reporting_Limit	0034	The Reporting Limit of 250 ug/L for IRON, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	699	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for LEAD, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 3 ug/L (corrected for dilution, if applicable).	Acceptable
A1	700	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for MAGNESIUM, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	701	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for MANGANESE, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	702	Reporting_Limit	0034	The Reporting Limit of 40 ug/L for NICKEL, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	703	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for POTASSIUM, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	704	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for SILVER, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	705	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for SODIUM, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 200 ug/L (corrected for dilution, if applicable).	Acceptable
A1	706	Reporting_Limit	0034	The Reporting Limit of 30 ug/L for THALLIUM, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	707	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for ANTIMONY, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	708	Reporting_Limit	0034	The Reporting Limit of 10 ug/L for ARSENIC, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	709	Reporting_Limit	0034	The Reporting Limit of 200 ug/L for BARIUM, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	710	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for BERYLLIUM, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	711	Reporting_Limit	0034	The Reporting Limit of 5 ug/L for CADMIUM, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	712	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for CHROMIUM, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	713	Reporting_Limit	0034	The Reporting Limit of 7 ug/L for COBALT, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	714	Reporting_Limit	0034	The Reporting Limit of 25 ug/L for COPPER, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	716	Reporting_Limit	0034	The Reporting Limit of 50 ug/L for ZINC, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 10 ug/L (corrected for dilution, if applicable).	Acceptable
A1	717	Reporting_Limit	0034	The Reporting Limit of 5000 ug/L for CALCIUM, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 ug/L (corrected for dilution, if applicable).	Acceptable
A1	718	Reporting_Limit	0034	The Reporting Limit of 15 ug/L for SELENIUM, method 6010B, Lab Sample ID MB 240-103610/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 5 ug/L (corrected for dilution, if applicable).	Acceptable
A1	722	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for MAGNESIUM, method 6010B, Lab Sample ID MB 240-104463/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	723	Reporting_Limit	0034	The Reporting Limit of 1.5 mg/Kg for MANGANESE, method 6010B, Lab Sample ID MB 240-104463/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	724	Reporting_Limit	0034	The Reporting Limit of 4 mg/Kg for NICKEL, method 6010B, Lab Sample ID MB 240-104463/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	727	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for SODIUM, method 6010B, Lab Sample ID MB 240-104463/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	731	Reporting_Limit	0034	The Reporting Limit of 20 mg/Kg for BARIUM, method 6010B, Lab Sample ID MB 240-104463/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 1 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	735	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for COBALT, method 6010B, Lab Sample ID MB 240-104463/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	736	Reporting_Limit	0034	The Reporting Limit of 2.5 mg/Kg for COPPER, method 6010B, Lab Sample ID MB 240-104463/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	737	Reporting_Limit	0034	The Reporting Limit of 5 mg/Kg for VANADIUM, method 6010B, Lab Sample ID MB 240-104463/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 2 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	739	Reporting_Limit	0034	The Reporting Limit of 500 mg/Kg for CALCIUM, method 6010B, Lab Sample ID MB 240-104463/1-A, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 100 mg/Kg (corrected for dilution, if applicable).	Acceptable
A1	744	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,4-DINITROTOLUENE, method 8330, Lab Sample ID MB 320-26457/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	751	Reporting_Limit	0034	The Reporting Limit of 0.13 ug/L for 2,6-DINITROTOLUENE, method 8330, Lab Sample ID MB 320-26457/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.1 ug/L (corrected for dilution, if applicable).	Acceptable
A1	754	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 2-NITROTOLUENE, method 8330, Lab Sample ID MB 320-26457/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	756	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 3-NITROTOLUENE, method 8330, Lab Sample ID MB 320-26457/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable
A1	759	Reporting_Limit	0034	The Reporting Limit of 0.5 ug/L for 4-NITROTOLUENE, method 8330, Lab Sample ID MB 320-26457/1-A, Analysis Type RES, exceeds the project library specified reporting limit of 0.2 ug/L (corrected for dilution, if applicable).	Acceptable

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Method/QAPP QC Non-conformances

Table	Record	Field	Type	Description	Lab Comments
A1	780	Reporting_Limit	0034	The Reporting Limit of 2 mg/L for Nitrocellulose, method WS-WC-0050, Lab Sample ID MB 320-26800/1-B, Analysis Type RES/TOT, exceeds the project library specified reporting limit of 0.5 mg/L (corrected for dilution, if applicable).	Acceptable
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Sample Duplicate record in Method Batch 103965 for method 365.1. Either the record is missing, you have the wrong QCType value ("DUP" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	Lab processed either MS/MSD or LCS
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Matrix Spike record in Method Batch 26457 for method 8330. Either the record is missing, you have the wrong QCType value ("MS" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	Lab processed either MS/MSD or LCS
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Matrix Spike record in Method Batch 26992 for method WS-WC-0050. Either the record is missing, you have the wrong QCType value ("MS" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	Lab processed either MS/MSD or LCS
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Matrix Spike Duplicate record in method batch 26457 for method 8330. Either the record is missing, you have the wrong QCType value ("MSD" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	Lab processed either MS/MSD or LCS
A3		Method_Batch / Lab_Analysis_Ref_Method_ID	0030	Table A3 is missing a Matrix Spike record in Method Batch 103183 for method 7470A. Either the record is missing, you have the wrong QCType value ("MS" is the correct value in this case), or your MethodBatch IDs are incorrectly entered.	Lab processed either MS/MSD or LCS

Discrepancies Between the Project Library and EDD

Table	Record	Field	Type	Description	Lab Comments
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-29485-3, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-29485-9, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID LCS 320-26457/2-A, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID MB 320-26457/1-A, Method 8330, and Analysis Type RES.	Not a lab specific surrogate
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-29485-10, Method 8330, and Analysis Type RES.	Not a lab specific surrogate

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

Discrepancies Between the Project Library and EDD

Table	Record	Field	Type	Description	Lab Comments
A1		Missing surrogate record	0010	Surrogate 1,2-DINITROBENZENE(ClientAnalyteID: 528-29-0) specified in the project library for Method 8330 is not reported for Lab Sample ID 240-29485-11, Method 8330, and Analysis Type RES.	Not a lab specific surrogate

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

0001	*Field character length exceeded*
0002	*Non-numeric value in a numeric field*
0003	*Incorrectly formatted date/time value*
0004	*Invalid value*
0005	*Analytical Method, Analtye ID, Analyte Name, Matrix, and Units not found in the reference project library*
0006	*RPD value is missing from a MSD, LCSD, or laboratory duplicate sample*
0007	*Target analyte specified in library files not found in the EDD*
0008	*Discrepancy in related records found between the tables Sample Analysis and Analytical Result*
0009	*Required field not populated*
0010	*Surrogate compounds specified in the reference project library are not found in table Analytical Results*
0011	*Surrogate compounds not specified in the reference project library are found in table Analytical Results*
0012	*Spike compounds specified in the reference project library are not found in table Analytical Results or vice versa*
0013	*Target analyte not specified in the reference project library is found in Analytical Results table*
0014	*Handling Batch ID (for leachates) is missing in Table A3*
0015	*Lab_Sample_ID can not have more than one matrix type assigned to it*
0016	*Analysis_Batch ID present in the Sample Analysis table is missing from the Laboratory Instrument table*
0017	*Analysis_Batch ID present in the Laboratory Instrument table is missing from the Sample Analysis table*
0018	*Run_Batch present in the Sample Analysis table is missing from the Laboratory Instrument table*
0019	*Run_Batch present in the Laboratory Instrument table is missing from the Sample Analysis table*
0020	*Target analytes and surrogates not specified in the reference project library are found in the Laboratory Intrument table*
0021	*Analysis_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS continuing calibration (QC_Type = CCV)*
0022	*Run_Batch relationship missing between a GC/MS tune (QC_Type = IPC) and a GC/MS initial calibration (QC_Type = IC)*
0023	*Incorrect naming or inconsistent collection date for MS/MSD sample and/or parent sample*
0024	*Problems with %RSD, Correlation Coefficient, and/or RRFs reported for GC/MS calibration records.*
0025	*Project Number or Project Name reported in the EDD not found in the Standard Value table*
0026	*Result value for a non-detected analyte does not match the Reporting_Limit value as reported in the EDD*
0027	*ClientSampleID present in Analytical Results table but missing in the Sample Analysis table or vice versa*
0028	*Missing associated Method Blank records for a specific Preparation Batch / Analytical Method*
0029	*Missing associated Laboratory Control Sample records for a specific Preparation Batch / Analytical Method*
0030	*Missing associated Matrix Spike / Duplicate records for a specific Method Batch / Analytical Method*
0031	*Record specified in the reference project library not found in the Analytical Results table where Reportable Result = Yes*
0032	*Duplicate records found in table Analytical Results for fields ClientSampleID, Collected, AnalyticalMethod, AnalytedID where Reportable_Result = Yes*
0033	*Missing calibration records in Table A2*

EDD Non-Conformance Detail Report
Lab Reporting Batch ID: 240-29485-1

Project Library: PIKA 08092012 ERS **Laboratory: TA CAN**

Library Description: Rocket Ridge **Report Date: 4/22/2014 15:30**

0034	*Report Limit from table Analytical Results exceeds the value in the reference project library (corrected for dilution and perc moist, if appl)*
0035	*Missing target analytes in IC, ICV, CV, or CCV*
0036	*Surrogate Recovery has a value greater than zero but the Lab Qualifier is like "*U*"*
0037	*Duplicate records in Table A1, A2, or A3*
0038	*Problems with QC Batch assignment*
0039	*Non-conformances related to Total Uranium assessment*

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-132M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RE2/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-1

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 5**															
IRON	22000		mg/Kg	B	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-132M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RES/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-1

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	6700		mg/Kg		YES															
ANTIMONY	0.35		mg/Kg	U	YES															
ARSENIC	12		mg/Kg		YES															
BARIUM	49		mg/Kg	B	YES															
BERYLLIUM	0.39		mg/Kg	J	YES	**J**								J						
CADMIUM	1.3		mg/Kg		YES															
CALCIUM	4900		mg/Kg	B	YES															
CHROMIUM	16		mg/Kg		YES															
COBALT	7.6		mg/Kg		YES															
COPPER	95		mg/Kg		YES															
LEAD	28		mg/Kg		YES															
MAGNESIUM	2600		mg/Kg	B	YES															
MANGANESE	280		mg/Kg	B	YES															
NICKEL	22		mg/Kg		YES															
POTASSIUM	910		mg/Kg		YES															
SELENIUM	0.41		mg/Kg	U	YES															
SILVER	0.090		mg/Kg	U	YES															
SODIUM	60		mg/Kg	U	YES															
THALLIUM	0.50		mg/Kg	U	YES															
VANADIUM	11		mg/Kg		YES															
ZINC	130		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.32		mg/Kg		YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	1.1		mg/Kg	J	YES	**J**								J						

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-132M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-29485-1

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.010		mg/Kg	U	YES		OutX													
1,3-DINITROBENZENE	0.0042		mg/Kg	U	YES		OutX													
2,4,6-TNT	0.019		mg/Kg	U	YES		OutX													
2,4-DINITROTOLUENE	0.0053		mg/Kg	U	YES		OutX													
2,6-DINITROTOLUENE	0.0073		mg/Kg	U	YES		OutX													
2-AMINO-4,6-DINITROTOLUENE	0.012		mg/Kg	U	YES		OutX													
2-NITROTOLUENE	0.013		mg/Kg	U	YES		OutX													
3-NITROTOLUENE	0.015		mg/Kg	U	YES		OutX													
4-Amino-2,6-dinitrotoluene	0.010		mg/Kg	U	YES		OutX													
4-NITROTOLUENE	0.018		mg/Kg	U	YES		OutX													
HMX	0.079		mg/Kg	J	YES	**J**	OutX							J						
NITROBENZENE	0.018		mg/Kg	U	YES		OutX													
NITROGLYCERINE	0.015		mg/Kg	U	YES		OutX													
Pentaerythritol Tetranitrate (PETN)	0.025		mg/Kg	U	YES		OutX													
RDX	0.19		mg/Kg	J	YES	**J**	OutX							J						
TETRYL	0.010		mg/Kg	U	YES		OutX													
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.020		mg/Kg	U	YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-133M-1010-ER
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-29485-3

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.032		ug/L	U	YES		OutX													
1,3-DINITROBENZENE	0.052		ug/L	U	YES		OutX													
2,4,6-TNT	0.052		ug/L	U	YES		OutX													
2,4-DINITROTOLUENE	0.052		ug/L	U	YES		OutX													
2,6-DINITROTOLUENE	0.052		ug/L	U	YES		OutX													
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES		OutX													
2-NITROTOLUENE	0.091		ug/L	U	YES		OutX													
3-NITROTOLUENE	0.059		ug/L	U	YES		OutX													
4-Amino-2,6-dinitrotoluene	0.052		ug/L	U	YES		OutX													
4-NITROTOLUENE	0.091		ug/L	U	YES		OutX													
HMX	0.037		ug/L	U	YES		OutX													
NITROBENZENE	0.052		ug/L	U	YES		OutX													
NITROGLYCERINE	0.34		ug/L	U	YES		OutX													
Pentaerythritol Tetranitrate (PETN)	0.31		ug/L	U	YES		OutX													
RDX	0.037		ug/L	U	YES		OutX													
TETRYL	0.052		ug/L	U	YES		OutX													
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-133M-1010-ER
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-29485-3

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	75		ug/L	U	YES															
ANTIMONY	7.4		ug/L	U	YES															
ARSENIC	3.3		ug/L	U	YES															
BARIUM	2.8		ug/L	U	YES															
BERYLLIUM	0.56		ug/L	U	YES															
CADMIUM	0.39		ug/L	U	YES															
CALCIUM	630		ug/L	U	YES															
CHROMIUM	1.4		ug/L	U	YES															
COBALT	1.5		ug/L	U	YES															
COPPER	4.4		ug/L	U	YES															
IRON	64		ug/L	U	YES															
LEAD	1.7		ug/L	U	YES															
MAGNESIUM	120		ug/L	U	YES															
MANGANESE	1.8		ug/L	U	YES															
NICKEL	2.2		ug/L	U	YES															
POTASSIUM	300		ug/L	U	YES															
SELENIUM	4.0		ug/L	U	YES															
SILVER	1.7		ug/L	U	YES															
SODIUM	970		ug/L	U	YES															
THALLIUM	9.1		ug/L	U	YES															
VANADIUM	1.3		ug/L	U	YES															
ZINC	15		ug/L	U	YES															
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-133M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: DL/WET
Sample Matrix : SO
Lab Sample ID: 240-29485-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 5**															
RDX	12		mg/Kg		YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-133M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RE2/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 5**															
IRON	25000		mg/Kg	B	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-133M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RES/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	8700		mg/Kg		YES															
ANTIMONY	0.35		mg/Kg	U	YES															
ARSENIC	20		mg/Kg		YES															
BARIUM	66		mg/Kg	B	YES															
BERYLLIUM	0.46		mg/Kg		YES															
CADMIUM	1.4		mg/Kg		YES															
CALCIUM	4700		mg/Kg	B	YES															
CHROMIUM	16		mg/Kg		YES															
COBALT	9.4		mg/Kg		YES															
COPPER	100		mg/Kg		YES															
LEAD	33		mg/Kg		YES															
MAGNESIUM	3100		mg/Kg	B	YES															
MANGANESE	310		mg/Kg	B	YES															
NICKEL	25		mg/Kg		YES															
POTASSIUM	1400		mg/Kg		YES															
SELENIUM	0.41		mg/Kg	U	YES															
SILVER	0.090		mg/Kg	U	YES															
SODIUM	60		mg/Kg	U	YES															
THALLIUM	0.50		mg/Kg	U	YES															
VANADIUM	13		mg/Kg		YES															
ZINC	180		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.23		mg/Kg		YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	6.0		mg/Kg		YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-133M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-29485-2

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.0099		mg/Kg	U	YES		OutX													
1,3-DINITROBENZENE	0.0042		mg/Kg	U	YES		OutX													
2,4,6-TNT	0.019		mg/Kg	U	YES		OutX													
2,4-DINITROTOLUENE	0.0053		mg/Kg	U	YES		OutX													
2,6-DINITROTOLUENE	0.0072		mg/Kg	U	YES		OutX													
2-AMINO-4,6-DINITROTOLUENE	0.012		mg/Kg	U	YES		OutX													
2-NITROTOLUENE	0.013		mg/Kg	U	YES		OutX													
3-NITROTOLUENE	0.015		mg/Kg	U	YES		OutX													
4-Amino-2,6-dinitrotoluene	0.0099		mg/Kg	U	YES		OutX													
4-NITROTOLUENE	0.018		mg/Kg	U	YES		OutX													
HMX	1.7		mg/Kg		YES		OutX													
NITROBENZENE	0.017		mg/Kg	U	YES		OutX													
NITROGLYCERINE	0.015		mg/Kg	U	YES		OutX													
Pentaerythritol Tetranitrate (PETN)	0.025		mg/Kg	U	YES		OutX													
TETRYL	0.16		mg/Kg	J	YES	**J**	OutX							J						
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.019		mg/Kg	U	YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-134M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RE2/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-4

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 5**															
IRON	24000		mg/Kg	B	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-134M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RES/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-4

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	7500		mg/Kg		YES															
ANTIMONY	0.37		mg/Kg	U	YES															
ARSENIC	13		mg/Kg		YES															
BARIUM	58		mg/Kg	B	YES															
BERYLLIUM	0.44		mg/Kg	J	YES	**J**								J						
CADMIUM	1.4		mg/Kg		YES															
CALCIUM	5600		mg/Kg	B	YES															
CHROMIUM	15		mg/Kg		YES															
COBALT	8.8		mg/Kg		YES															
COPPER	170		mg/Kg		YES															
LEAD	45		mg/Kg		YES															
MAGNESIUM	3000		mg/Kg	B	YES															
MANGANESE	330		mg/Kg	B	YES															
NICKEL	25		mg/Kg		YES															
POTASSIUM	950		mg/Kg		YES															
SELENIUM	0.43		mg/Kg	U	YES															
SILVER	0.095		mg/Kg	U	YES															
SODIUM	62		mg/Kg	U	YES															
THALLIUM	0.52		mg/Kg	U	YES															
VANADIUM	11		mg/Kg		YES															
ZINC	160		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.25		mg/Kg		YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	1.8		mg/Kg	J	YES	**J**								J						

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-134M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-29485-4

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.010		mg/Kg	U	YES		OutX													
1,3-DINITROBENZENE	0.0042		mg/Kg	U	YES		OutX													
2,4,6-TNT	0.019		mg/Kg	U	YES		OutX													
2,4-DINITROTOLUENE	0.0053		mg/Kg	U	YES		OutX													
2,6-DINITROTOLUENE	0.0073		mg/Kg	U	YES		OutX													
2-AMINO-4,6-DINITROTOLUENE	0.012		mg/Kg	U	YES		OutX													
2-NITROTOLUENE	0.013		mg/Kg	U	YES		OutX													
3-NITROTOLUENE	0.015		mg/Kg	U	YES		OutX													
4-Amino-2,6-dinitrotoluene	0.010		mg/Kg	U	YES		OutX													
4-NITROTOLUENE	0.018		mg/Kg	U	YES		OutX													
HMX	0.080		mg/Kg	J	YES	**J**	OutX							J						
NITROBENZENE	0.018		mg/Kg	U	YES		OutX													
NITROGLYCERINE	0.015		mg/Kg	U	YES		OutX													
Pentaerythritol Tetranitrate (PETN)	0.025		mg/Kg	U	YES		OutX													
RDX	0.18		mg/Kg	J	YES	**J**	OutX							J						
TETRYL	0.053		mg/Kg	J	YES	**J**	OutX							J						
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.020		mg/Kg	U	YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-135M-1010-DUP
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: DL/WET
Sample Matrix : SO
Lab Sample ID: 240-29485-6

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 5**															
TETRYL	8.8		mg/Kg		YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-135M-1010-DUP
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RE2/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-6

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 5**															
IRON	25000		mg/Kg	B	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-135M-1010-DUP
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RES/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-6

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	8000		mg/Kg		YES															
ANTIMONY	0.39		mg/Kg	U	YES															
ARSENIC	14		mg/Kg		YES															
BARIUM	70		mg/Kg	B	YES															
BERYLLIUM	0.46		mg/Kg	J	YES	**J**								J						
CADMIUM	1.6		mg/Kg		YES															
CALCIUM	4800		mg/Kg	B	YES															
CHROMIUM	16		mg/Kg		YES															
COBALT	9.2		mg/Kg		YES															
COPPER	97		mg/Kg		YES															
LEAD	32		mg/Kg		YES															
MAGNESIUM	3100		mg/Kg	B	YES															
MANGANESE	340		mg/Kg	B	YES															
NICKEL	24		mg/Kg		YES															
POTASSIUM	1100		mg/Kg		YES															
SELENIUM	0.45		mg/Kg	U	YES															
SILVER	0.18		mg/Kg	J	YES	**J**								J						
SODIUM	66		mg/Kg	U	YES															
THALLIUM	0.55		mg/Kg	U	YES															
VANADIUM	12		mg/Kg		YES															
ZINC	180		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.19		mg/Kg		YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	2.7		mg/Kg	J	YES	**J**								J						

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-135M-1010-DUP
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-29485-6

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.010		mg/Kg	U	YES		OutX													
1,3-DINITROBENZENE	0.0042		mg/Kg	U	YES		OutX													
2,4,6-TNT	0.21		mg/Kg	J	YES	**J**	OutX							J						
2,4-DINITROTOLUENE	0.0053		mg/Kg	U	YES		OutX													
2,6-DINITROTOLUENE	0.0073		mg/Kg	U	YES		OutX													
2-AMINO-4,6-DINITROTOLUENE	0.012		mg/Kg	U	YES		OutX													
2-NITROTOLUENE	0.013		mg/Kg	U	YES		OutX													
3-NITROTOLUENE	0.015		mg/Kg	U	YES		OutX													
4-Amino-2,6-dinitrotoluene	0.010		mg/Kg	U	YES		OutX													
4-NITROTOLUENE	0.018		mg/Kg	U	YES		OutX													
HMX	0.13		mg/Kg	J	YES	**J**	OutX							J						
NITROBENZENE	0.018		mg/Kg	U	YES		OutX													
NITROGLYCERINE	0.015		mg/Kg	U	YES		OutX													
Pentaerythritol Tetranitrate (PETN)	0.025		mg/Kg	U	YES		OutX													
RDX	0.30		mg/Kg		YES		OutX													
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.020		mg/Kg	U	YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-135M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RE2/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-5

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 5**															
IRON	24000		mg/Kg	B	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-135M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RES/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-5

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	7600		mg/Kg		YES															
ANTIMONY	0.33		mg/Kg	U	YES															
ARSENIC	13		mg/Kg		YES															
BARIUM	66		mg/Kg	B	YES															
BERYLLIUM	0.41		mg/Kg	J	YES	**J**								J						
CADMIUM	1.5		mg/Kg		YES															
CALCIUM	5300		mg/Kg	B	YES															
CHROMIUM	14		mg/Kg		YES															
COBALT	9.0		mg/Kg		YES															
COPPER	89		mg/Kg		YES															
LEAD	29		mg/Kg		YES															
MAGNESIUM	3000		mg/Kg	B	YES															
MANGANESE	300		mg/Kg	B	YES															
NICKEL	23		mg/Kg		YES															
POTASSIUM	1000		mg/Kg		YES															
SELENIUM	0.38		mg/Kg	U	YES															
SILVER	0.085		mg/Kg	U	YES															
SODIUM	56		mg/Kg	U	YES															
THALLIUM	0.47		mg/Kg	U	YES															
VANADIUM	12		mg/Kg		YES															
ZINC	170		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.25		mg/Kg		YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	1.0		mg/Kg	J	YES	**J**								J						

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-135M-1010-SO
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-29485-5

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.0098		mg/Kg	U	YES		OutX													
1,3-DINITROBENZENE	0.0041		mg/Kg	U	YES		OutX													
2,4,6-TNT	0.019		mg/Kg	U	YES		OutX													
2,4-DINITROTOLUENE	0.0052		mg/Kg	U	YES		OutX													
2,6-DINITROTOLUENE	0.0072		mg/Kg	U	YES		OutX													
2-AMINO-4,6-DINITROTOLUENE	0.012		mg/Kg	U	YES		OutX													
2-NITROTOLUENE	0.013		mg/Kg	U	YES		OutX													
3-NITROTOLUENE	0.015		mg/Kg	U	YES		OutX													
4-Amino-2,6-dinitrotoluene	0.0098		mg/Kg	U	YES		OutX													
4-NITROTOLUENE	0.018		mg/Kg	U	YES		OutX													
HMX	0.18		mg/Kg	J	YES	**J**	OutX							J						
NITROBENZENE	0.017		mg/Kg	U	YES		OutX													
NITROGLYCERINE	0.015		mg/Kg	U	YES		OutX													
Pentaerythritol Tetranitrate (PETN)	0.025		mg/Kg	U	YES		OutX													
RDX	1.4		mg/Kg		YES		OutX													
TETRYL	0.029		mg/Kg	J	YES	**J**	OutX							J						
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.019		mg/Kg	U	YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-250M-0002-DUP
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RE2/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-8

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 5**															
IRON	21000		mg/Kg	B	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-250M-0002-DUP **Lab Report Batch :** 240-29485-1 **Lab ID :** TA CAN

Sample Date : 09/25/2013 **Analysis Type: RES/TOT** **Sample Matrix :** SO

Lab Sample ID: 240-29485-8

Reviewed By / Date : **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 365.1					**Dilution: 1**															
PHOSPHORUS, TOTAL ORTHOPHOSPHATE	37		mg/Kg		YES		OutX													
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	9700		mg/Kg		YES															
ANTIMONY	0.35		mg/Kg	U	YES															
ARSENIC	9.2		mg/Kg		YES															
BARIUM	44		mg/Kg	B	YES															
BERYLLIUM	0.45		mg/Kg		YES															
CADMIUM	1.5		mg/Kg		YES															
CALCIUM	13000		mg/Kg	B	YES															
CHROMIUM	16		mg/Kg		YES															
COBALT	6.4		mg/Kg		YES															
COPPER	100		mg/Kg		YES															
LEAD	72		mg/Kg		YES															
MAGNESIUM	2900		mg/Kg	B	YES															
MANGANESE	260		mg/Kg	B	YES															
NICKEL	16		mg/Kg		YES															
POTASSIUM	810		mg/Kg		YES															
SELENIUM	0.41		mg/Kg	U	YES															
SILVER	0.091		mg/Kg	U	YES															
SODIUM	60		mg/Kg	U	YES															
THALLIUM	0.50		mg/Kg	U	YES															
VANADIUM	17		mg/Kg		YES															
ZINC	540		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.048		mg/Kg	J	YES	**J**								J						
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.92		mg/Kg	J	YES	**J**								J						

Project Number and Name: **12-08-151 - ERS** **Library Used:** **PIKA08092012**

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-250M-0002-DUP
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-29485-8

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.021		mg/Kg	J	YES	**J**	OutX							J						
1,3-DINITROBENZENE	0.0041		mg/Kg	U	YES		OutX													
2,4,6-TNT	0.14		mg/Kg	J	YES	**J**	OutX							J						
2,4-DINITROTOLUENE	0.0052		mg/Kg	U	YES		OutX													
2,6-DINITROTOLUENE	0.0072		mg/Kg	U	YES		OutX													
2-AMINO-4,6-DINITROTOLUENE	0.012		mg/Kg	U	YES		OutX													
2-NITROTOLUENE	0.013		mg/Kg	U	YES		OutX													
3-NITROTOLUENE	0.015		mg/Kg	U	YES		OutX													
4-Amino-2,6-dinitrotoluene	0.0099		mg/Kg	U	YES		OutX													
4-NITROTOLUENE	0.018		mg/Kg	U	YES		OutX													
HMX	0.012		mg/Kg	U	YES		OutX													
NITROBENZENE	0.017		mg/Kg	U	YES		OutX													
NITROGLYCERINE	0.015		mg/Kg	U	YES		OutX													
Pentaerythritol Tetranitrate (PETN)	0.025		mg/Kg	U	YES		OutX													
RDX	0.012		mg/Kg	U	YES		OutX													
TETRYL	0.0099		mg/Kg	U	YES		OutX													
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.020		mg/Kg	U	YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-250M-0002-SO
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RE2/TOT
Sample Matrix : SO
Lab Sample ID: 240-29485-7

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 5**															
IRON	20000		mg/Kg	B	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-250M-0002-SO **Lab Report Batch :** 240-29485-1 **Lab ID :** TA CAN

Sample Date : 09/25/2013 **Analysis Type: RES/TOT** **Sample Matrix :** SO

Lab Sample ID: 240-29485-7

Reviewed By / Date : **Approved By / Date :**

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 365.1					**Dilution: 1**															
PHOSPHORUS, TOTAL ORTHOPHOSPHATE	42		mg/Kg		YES		OutX													
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	11000		mg/Kg		YES															
ANTIMONY	0.35		mg/Kg	J	YES	**J**								J						
ARSENIC	9.1		mg/Kg		YES															
BARIUM	48		mg/Kg	B	YES															
BERYLLIUM	0.50		mg/Kg		YES															
CADMIUM	2.9		mg/Kg		YES															
CALCIUM	14000		mg/Kg	B	YES															
CHROMIUM	16		mg/Kg		YES															
COBALT	6.8		mg/Kg		YES															
COPPER	120		mg/Kg		YES															
LEAD	98		mg/Kg		YES															
MAGNESIUM	2800		mg/Kg	B	YES															
MANGANESE	270		mg/Kg	B	YES															
NICKEL	16		mg/Kg		YES															
POTASSIUM	920		mg/Kg		YES															
SELENIUM	0.38		mg/Kg	U	YES															
SILVER	0.084		mg/Kg	U	YES															
SODIUM	56		mg/Kg	U	YES															
THALLIUM	0.46		mg/Kg	U	YES															
VANADIUM	18		mg/Kg		YES															
ZINC	800		mg/Kg		YES															
Analysis Method : 7471A					**Dilution: 1**															
MERCURY	0.033		mg/Kg	J	YES	**J**								J						
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.96		mg/Kg	J	YES	**J**								J						

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2ss-250M-0002-SO
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: RES/WET
Sample Matrix : SO
Lab Sample ID: 240-29485-7

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.016		mg/Kg	J	YES	**J**	OutX							J						
1,3-DINITROBENZENE	0.0042		mg/Kg	U	YES		OutX													
2,4,6-TNT	0.019		mg/Kg	U	YES		OutX													
2,4-DINITROTOLUENE	0.0053		mg/Kg	U	YES		OutX													
2,6-DINITROTOLUENE	0.0073		mg/Kg	U	YES		OutX													
2-AMINO-4,6-DINITROTOLUENE	0.012		mg/Kg	U	YES		OutX													
2-NITROTOLUENE	0.013		mg/Kg	U	YES		OutX													
3-NITROTOLUENE	0.015		mg/Kg	U	YES		OutX													
4-Amino-2,6-dinitrotoluene	0.0099		mg/Kg	U	YES		OutX													
4-NITROTOLUENE	0.018		mg/Kg	U	YES		OutX													
HMX	0.012		mg/Kg	U	YES		OutX													
NITROBENZENE	0.017		mg/Kg	U	YES		OutX													
NITROGLYCERINE	0.015		mg/Kg	U	YES		OutX													
Pentaerythritol Tetranitrate (PETN)	0.025		mg/Kg	U	YES		OutX													
RDX	0.012		mg/Kg	U	YES		OutX													
TETRYL	0.0099		mg/Kg	U	YES		OutX													
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	0.020		mg/Kg	U	YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-096-1010-SW
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-29485-9

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.031		ug/L	U	YES		OutX													
1,3-DINITROBENZENE	0.050		ug/L	U	YES		OutX													
2,4,6-TNT	0.050		ug/L	U	YES		OutX													
2,4-DINITROTOLUENE	0.050		ug/L	U	YES		OutX													
2,6-DINITROTOLUENE	0.050		ug/L	U	YES		OutX													
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES		OutX													
2-NITROTOLUENE	0.089		ug/L	U	YES		OutX													
3-NITROTOLUENE	0.057		ug/L	U	YES		OutX													
4-Amino-2,6-dinitrotoluene	0.050		ug/L	U	YES		OutX													
4-NITROTOLUENE	0.089		ug/L	U	YES		OutX													
HMX	0.036		ug/L	U	YES		OutX													
NITROBENZENE	0.050		ug/L	U	YES		OutX													
NITROGLYCERINE	0.33		ug/L	U	YES		OutX													
Pentaerythritol Tetranitrate (PETN)	0.30		ug/L	U	YES		OutX													
RDX	0.036		ug/L	U	YES		OutX													
TETRYL	0.050		ug/L	U	YES		OutX													
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-096-1010-SW
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-29485-9

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	75		ug/L	U	YES															
ANTIMONY	7.4		ug/L	U	YES															
ARSENIC	3.3		ug/L	U	YES															
BARIUM	25		ug/L	J B	YES	**J**								J						
BERYLLIUM	0.56		ug/L	U	YES															
CADMIUM	0.39		ug/L	U	YES															
CALCIUM	44000		ug/L		YES															
CHROMIUM	1.4		ug/L	U	YES															
COBALT	1.5		ug/L	U	YES															
COPPER	4.4		ug/L	U	YES															
IRON	380		ug/L		YES															
LEAD	1.7		ug/L	U	YES															
MAGNESIUM	10000		ug/L		YES															
MANGANESE	51		ug/L	B	YES															
NICKEL	2.2		ug/L	U	YES															
POTASSIUM	2200		ug/L	J	YES	**J**								J						
SELENIUM	4.0		ug/L	U	YES															
SILVER	1.7		ug/L	U	YES															
SODIUM	9100		ug/L		YES															
THALLIUM	9.1		ug/L	U	YES															
VANADIUM	1.3		ug/L	U	YES															
ZINC	15		ug/L	U	YES															
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-099-1010-SW
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RE2/TOT
Sample Matrix : AQ
Lab Sample ID: 240-29485-10

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
CALCIUM	42000		ug/L		YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-099-1010-SW
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-29485-10

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.031		ug/L	U	YES		OutX													
1,3-DINITROBENZENE	0.050		ug/L	U	YES		OutX													
2,4,6-TNT	0.050		ug/L	U	YES		OutX													
2,4-DINITROTOLUENE	0.050		ug/L	U	YES		OutX													
2,6-DINITROTOLUENE	0.050		ug/L	U	YES		OutX													
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES		OutX													
2-NITROTOLUENE	0.088		ug/L	U	YES		OutX													
3-NITROTOLUENE	0.057		ug/L	U	YES		OutX													
4-Amino-2,6-dinitrotoluene	0.050		ug/L	U	YES		OutX													
4-NITROTOLUENE	0.088		ug/L	U	YES		OutX													
HMX	0.036		ug/L	U	YES		OutX													
NITROBENZENE	0.050		ug/L	U	YES		OutX													
NITROGLYCERINE	0.33		ug/L	U	YES		OutX													
Pentaerythritol Tetranitrate (PETN)	0.30		ug/L	U	YES		OutX													
RDX	0.036		ug/L	U	YES		OutX													
TETRYL	0.050		ug/L	U	YES		OutX													
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-099-1010-SW
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-29485-10

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	170		ug/L	J	YES	**J**								J						
ANTIMONY	7.4		ug/L	U	YES															
ARSENIC	3.3		ug/L	U	YES															
BARIUM	28		ug/L	J B	YES	**J**								J						
BERYLLIUM	0.56		ug/L	U	YES															
CADMIUM	0.39		ug/L	U	YES															
CHROMIUM	1.4		ug/L	U	YES															
COBALT	1.5		ug/L	U	YES															
COPPER	4.4		ug/L	U	YES															
IRON	800		ug/L		YES															
LEAD	1.7		ug/L	U	YES															
MAGNESIUM	11000		ug/L		YES															
MANGANESE	100		ug/L	B	YES															
NICKEL	2.2		ug/L	U	YES															
POTASSIUM	2200		ug/L	J	YES	**J**								J						
SELENIUM	4.0		ug/L	U	YES															
SILVER	1.7		ug/L	U	YES															
SODIUM	8800		ug/L		YES															
THALLIUM	9.1		ug/L	U	YES															
VANADIUM	1.3		ug/L	U	YES															
ZINC	15		ug/L	U	YES															
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-131-1010-SW
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RE2/TOT
Sample Matrix : AQ
Lab Sample ID: 240-29485-11

Reviewed By / Date :

Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
CALCIUM	41000		ug/L		YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-131-1010-SW
Lab Report Batch : 240-29485-1
Lab ID : TA SAC
Sample Date : 09/25/2013
Analysis Type: RES
Sample Matrix : AQ
Lab Sample ID: 240-29485-11

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 8330					**Dilution: 1**															
1,3,5-TRINITROBENZENE	0.031		ug/L	U	YES		OutX													
1,3-DINITROBENZENE	0.050		ug/L	U	YES		OutX													
2,4,6-TNT	0.050		ug/L	U	YES		OutX													
2,4-DINITROTOLUENE	0.050		ug/L	U	YES		OutX													
2,6-DINITROTOLUENE	0.050		ug/L	U	YES		OutX													
2-AMINO-4,6-DINITROTOLUENE	0.015		ug/L	U	YES		OutX													
2-NITROTOLUENE	0.089		ug/L	U	YES		OutX													
3-NITROTOLUENE	0.057		ug/L	U	YES		OutX													
4-Amino-2,6-dinitrotoluene	0.050		ug/L	U	YES		OutX													
4-NITROTOLUENE	0.089		ug/L	U	YES		OutX													
HMX	0.036		ug/L	U	YES		OutX													
NITROBENZENE	0.050		ug/L	U	YES		OutX													
NITROGLYCERINE	0.33		ug/L	U	YES		OutX													
Pentaerythritol Tetranitrate (PETN)	0.30		ug/L	U	YES		OutX													
RDX	0.036		ug/L	U	YES		OutX													
TETRYL	0.050		ug/L	U	YES		OutX													
Analysis Method : 8330 Modified					**Dilution: 1**															
Nitroguanidine	2.4		ug/L	U	YES		OutX													

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Sample Qualification Report (All Analytes)

Client Sample ID : DA2sw-131-1010-SW
Lab Report Batch : 240-29485-1
Lab ID : TA CAN
Sample Date : 09/25/2013
Analysis Type: RES/TOT
Sample Matrix : AQ
Lab Sample ID: 240-29485-11

Reviewed By / Date :
Approved By / Date :

Analyte Name	Result	Uncertainty / Error	Result Units	Lab Qual	Rep Res	Overall Qual*	Temp	HT	MB	LCS	MS	Lab Dup	Surr	Rep Limit	Moist Tot/Dis	Field QC	Tune	IC	ICV	CV / CCV
Analysis Method : 6010B					**Dilution: 1**															
ALUMINUM	75		ug/L	U	YES															
ANTIMONY	7.4		ug/L	U	YES															
ARSENIC	3.3		ug/L	U	YES															
BARIUM	27		ug/L	J B	YES	**J**								J						
BERYLLIUM	0.56		ug/L	U	YES															
CADMIUM	0.39		ug/L	U	YES															
CHROMIUM	1.4		ug/L	U	YES															
COBALT	1.5		ug/L	U	YES															
COPPER	4.4		ug/L	U	YES															
IRON	680		ug/L		YES															
LEAD	1.7		ug/L	U	YES															
MAGNESIUM	11000		ug/L		YES															
MANGANESE	120		ug/L	B	YES															
NICKEL	2.2		ug/L	U	YES															
POTASSIUM	2100		ug/L	J	YES	**J**								J						
SELENIUM	4.0		ug/L	U	YES															
SILVER	1.7		ug/L	U	YES															
SODIUM	8800		ug/L		YES															
THALLIUM	9.1		ug/L	U	YES															
VANADIUM	1.3		ug/L	U	YES															
ZINC	15		ug/L	U	YES															
Analysis Method : 7470A					**Dilution: 1**															
MERCURY	0.12		ug/L	U	YES															
Analysis Method : WS-WC-0050					**Dilution: 1**															
Nitrocellulose	0.48		mg/L	U	YES															

* Overall result qualifier reflects summation of qualifiers added during automated data review and any qualifiers added manually for categories not assessed by automated data review

Laboratory Duplicate RPD Outlier Report

Method Batch : 104463 **Analysis Method :** 6010B **Analysis Date :** 10/15/2013

Lab Reporting Batch : 240-29485-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported RPD	Project Limit RPD
DA2ss-132M-1010-SODUP	240-29485-1DUP	SO	CALCIUM	22	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2ss-132M-1010-SO	240-29485-1
DA2ss-133M-1010-SO	240-29485-2
DA2ss-134M-1010-SO	240-29485-4
DA2ss-135M-1010-DUP	240-29485-6
DA2ss-135M-1010-SO	240-29485-5
DA2ss-250M-0002-DUP	240-29485-8
DA2ss-250M-0002-SO	240-29485-7

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 103965 **Analysis Method :** 365.1 **Analysis Date :** 10/03/2013

Preparation Batch : 103965 **Preparation Type :** Gen Prep **Preparation Date :** 10/03/2013

Lab Reporting Batch : 240-29485-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
DA2ss-250M-0002-SOM	240-29485-7MSD	SO	PHOSPHORUS, TOTAL ORTHOP	86	60		90.00	110.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2ss-250M-0002-DUP	240-29485-8
DA2ss-250M-0002-SO	240-29485-7

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 12-08-151 - ERS

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 104463 **Analysis Method :** 6010B **Analysis Date :** 10/15/2013

Preparation Batch : 104463 **Preparation Type :** 3050B **Preparation Date :** 10/07/2013

Lab Reporting Batch : 240-29485-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
DA2ss-132M-1010-SOM	240-29485-1MS	SO	ALUMINUM	447		30.00	75.00	125.00	20.00
			ANTIMONY	36		30.00	75.00	125.00	20.00
			BERYLLIUM	73		30.00	75.00	125.00	20.00
			CHROMIUM	70		30.00	75.00	125.00	20.00
			COPPER	9		30.00	75.00	125.00	20.00
			IRON	-458		30.00	75.00	125.00	20.00
			MAGNESIUM	73		30.00	75.00	125.00	20.00
			MANGANESE	63		30.00	75.00	125.00	20.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2ss-132M-1010-SO	240-29485-1
DA2ss-133M-1010-SO	240-29485-2
DA2ss-134M-1010-SO	240-29485-4
DA2ss-135M-1010-DUP	240-29485-6
DA2ss-135M-1010-SO	240-29485-5
DA2ss-250M-0002-DUP	240-29485-8
DA2ss-250M-0002-SO	240-29485-7

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 12-08-151 - ERS

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 26697 **Analysis Method :** 8330 **Analysis Date :** 10/09/2013

Preparation Batch : 26697 **Preparation Type :** 8330B **Preparation Date :** 10/03/2013

Lab Reporting Batch : 240-29485-1 **Lab ID:** TA SAC

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
DA2ss-132M-1010-SOM	240-29485-1MS	SO	HMX	422		0.00	50.00	150.00	50.00
			RDX	1959		0.00	50.00	150.00	50.00
DA2ss-132M-1010-SOM	240-29485-1MSD		HMX		114	0.00	50.00	150.00	50.00
			NITROGLYCERINE	633	150		77.00	112.00	50.00
			RDX		174	0.00	50.00	150.00	50.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2ss-132M-1010-SO	240-29485-1
DA2ss-132M-1010-SO	240-29485-1
DA2ss-133M-1010-SO	240-29485-2
DA2ss-133M-1010-SO	240-29485-2
DA2ss-134M-1010-SO	240-29485-4
DA2ss-134M-1010-SO	240-29485-4
DA2ss-135M-1010-DUP	240-29485-6
DA2ss-135M-1010-DUP	240-29485-6
DA2ss-135M-1010-SO	240-29485-5
DA2ss-135M-1010-SO	240-29485-5
DA2ss-250M-0002-DUP	240-29485-8
DA2ss-250M-0002-DUP	240-29485-8
DA2ss-250M-0002-SO	240-29485-7
DA2ss-250M-0002-SO	240-29485-7

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 12-08-151 - ERS

Matrix Spike / Matrix Spike Duplicate Recovery and RPD Outlier Report

Method Batch : 27546 **Analysis Method :** WS-WC-0050 **Analysis Date :** 10/16/2013

Preparation Batch : 27546 **Preparation Type :** METHOD **Preparation Date :** 10/15/2013

Lab Reporting Batch : 240-29485-1 **Lab ID:** TA SAC

Client Sample ID	Lab Sample ID	Matrix	Analyte Name	Reported *		Project Limits (Percent)			
				Percent Recovery	RPD	Rejection Point**	Lower Limit	Upper Limit	RPD
DA2ss-132M-1010-SOM	240-29485-1MS	SO	Nitrocellulose	17		10.00	34.00	115.00	71.00
DA2ss-132M-1010-SOM	240-29485-1MSD		Nitrocellulose	19		10.00	34.00	115.00	71.00

Associated Samples: All samples in Method Batch

Client Sample ID	Lab Sample ID
DA2ss-132M-1010-SO	240-29485-1

* Only those Percent Recovery and/or RPD values outside project limits are listed in this report.
** Metal are also assessed against an upper rejection point of 150 percent for waters and 200 percent for soils and sediments

Project Number and Name: 12-08-151 - ERS

Reporting Limits Outlier Report (detected results reported below the reporting limit)

Lab Report Batch: 240-29485-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	EDD Reporting Limit	Units
DA2ss-132M-1010-SO	240-29485-1	6010B	SO	BERYLLIUM	J	0.39	0.45	mg/Kg
		8330		HMX	J	0.079	0.25	mg/Kg
				RDX	J	0.19	0.25	mg/Kg
		WS-WC-0050		Nitrocellulose	J	1.1	5.1	mg/Kg
DA2ss-133M-1010-SO	240-29485-2	8330		TETRYL	J	0.16	0.25	mg/Kg
DA2ss-134M-1010-SO	240-29485-4	6010B		BERYLLIUM	J	0.44	0.47	mg/Kg
		8330		HMX	J	0.080	0.25	mg/Kg
				RDX	J	0.18	0.25	mg/Kg
				TETRYL	J	0.053	0.25	mg/Kg
		WS-WC-0050		Nitrocellulose	J	1.8	5.1	mg/Kg
DA2ss-135M-1010-DUP	240-29485-6	6010B		BERYLLIUM	J	0.46	0.50	mg/Kg
				SILVER	J	0.18	0.50	mg/Kg
		8330		2,4,6-TNT	J	0.21	0.25	mg/Kg
				HMX	J	0.13	0.25	mg/Kg
		WS-WC-0050		Nitrocellulose	J	2.7	5.1	mg/Kg
DA2ss-135M-1010-SO	240-29485-5	6010B		BERYLLIUM	J	0.41	0.43	mg/Kg
		8330		HMX	J	0.18	0.25	mg/Kg
				TETRYL	J	0.029	0.25	mg/Kg
		WS-WC-0050		Nitrocellulose	J	1.0	5.1	mg/Kg
DA2ss-250M-0002-DUP	240-29485-8	7471A		MERCURY	J	0.048	0.096	mg/Kg
		8330		1,3,5-TRINITROBENZENE	J	0.021	0.25	mg/Kg
				2,4,6-TNT	J	0.14	0.25	mg/Kg
		WS-WC-0050		Nitrocellulose	J	0.92	5.1	mg/Kg
DA2ss-250M-0002-SO	240-29485-7	6010B		ANTIMONY	J	0.35	0.84	mg/Kg
		7471A		MERCURY	J	0.033	0.097	mg/Kg
		8330		1,3,5-TRINITROBENZENE	J	0.016	0.25	mg/Kg
		WS-WC-0050		Nitrocellulose	J	0.96	5.1	mg/Kg
DA2sw-096-1010-SW	240-29485-9	6010B	AQ	BARIUM	J B	25	200	ug/L
				POTASSIUM	J	2200	5000	ug/L
DA2sw-099-1010-SW	240-29485-10			ALUMINUM	J	170	300	ug/L
				BARIUM	J B	28	200	ug/L
				POTASSIUM	J	2200	5000	ug/L
DA2sw-131-1010-SW	240-29485-11			BARIUM	J B	27	200	ug/L
				POTASSIUM	J	2100	5000	ug/L

Temperature Outlier Report

Lab Report Batch: **Lab ID:**

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temp (C)	Temperature Criteria (C)			Between High and Gross Exceedence			Above Gross Exceedence		
								Detect Quals		Non-Detect Qual(s)	Detect Quals		Non-Detect Qual(s)
					Low	High	Gross Exceed	Non-Biased	Biased		Non-Biased	Biased	

QC Outlier Report: Non-Qualified Outliers for Reporting Limits
(Sample is non-detect but reported result exceeds project requirements for reporting limit)

Lab Report Batch: 240-29485-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Analyte Name	Lab Qualifier	Result	Reporting Limit Criteria*	Units
DA2ss-133M-1010-ER	240-29485-3	6010B	AQ	ANTIMONY	U	7.4	5.00	ug/L
				CALCIUM	U	630	100.00	ug/L
				MAGNESIUM	U	120	100.00	ug/L
				POTASSIUM	U	300	200.00	ug/L
				SODIUM	U	970	200.00	ug/L
				THALLIUM	U	9.1	2.00	ug/L
				ZINC	U	15	10.00	ug/L
DA2sw-096-1010-SW	240-29485-9	6010B	AQ	ANTIMONY	U	7.4	5.00	ug/L
				THALLIUM	U	9.1	2.00	ug/L
				ZINC	U	15	10.00	ug/L
DA2sw-099-1010-SW	240-29485-10	6010B	AQ	ANTIMONY	U	7.4	5.00	ug/L
				THALLIUM	U	9.1	2.00	ug/L
				ZINC	U	15	10.00	ug/L
DA2sw-131-1010-SW	240-29485-11	6010B	AQ	ANTIMONY	U	7.4	5.00	ug/L
				THALLIUM	U	9.1	2.00	ug/L
				ZINC	U	15	10.00	ug/L

* Reporting Limit Criteria = (Dilution Factor) * (Reporting Limit from the reference project library) * (Percent Moisture Correction)
Percent Moisture Correction:
Soil: 100 / (100 - Percent Moisture)
Water: 1

Project Number and Name: **12-08-151 - ERS**

QC Outlier Report: Temperature (Non-qualified Outliers)

Lab Report Batch: 240-29485-1 **Lab ID:** TA CAN

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
DA2ss-250M-0002-DUP	240-29485-8	365.1	SO	1.6	2.0	6.0
DA2ss-250M-0002-SO	240-29485-7	365.1	SO	1.6	2.0	6.0
DA2ss-250M-0002-SOMS	240-29485-7MS	365.1	SO	1.6	2.0	6.0
DA2ss-250M-0002-SOMSD	240-29485-7MSD	365.1	SO	1.6	2.0	6.0
DA2ss-132M-1010-SO	240-29485-1	8330	SO	1.6	2.0	
DA2ss-132M-1010-SOMS	240-29485-1MS	8330	SO	1.6	2.0	
DA2ss-132M-1010-SOMSD	240-29485-1MSD	8330	SO	1.6	2.0	
DA2ss-133M-1010-ER	240-29485-3	8330	AQ	1.6	2.0	
DA2ss-133M-1010-SO	240-29485-2	8330	SO	1.6	2.0	
DA2ss-134M-1010-SO	240-29485-4	8330	SO	1.6	2.0	
DA2ss-135M-1010-DUP	240-29485-6	8330	SO	1.6	2.0	
DA2ss-135M-1010-SO	240-29485-5	8330	SO	1.6	2.0	
DA2ss-250M-0002-DUP	240-29485-8	8330	SO	1.6	2.0	
DA2ss-250M-0002-SO	240-29485-7	8330	SO	1.6	2.0	
DA2sw-096-1010-SW	240-29485-9	8330	AQ	1.6	2.0	
DA2sw-099-1010-SW	240-29485-10	8330	AQ	1.6	2.0	
DA2sw-131-1010-SW	240-29485-11	8330	AQ	1.6	2.0	
DA2ss-132M-1010-SO	240-29485-1	8330 Modified	SO	1.6	2.0	
DA2ss-132M-1010-SOMS	240-29485-1MS	8330 Modified	SO	1.6	2.0	
DA2ss-132M-1010-SOMSD	240-29485-1MSD	8330 Modified	SO	1.6	2.0	
DA2ss-133M-1010-ER	240-29485-3	8330 Modified	AQ	1.6	2.0	
DA2ss-133M-1010-ERMS	240-29485-3MS	8330 Modified	AQ	1.6	2.0	
DA2ss-133M-1010-ERMSD	240-29485-3MSD	8330 Modified	AQ	1.6	2.0	
DA2ss-133M-1010-SO	240-29485-2	8330 Modified	SO	1.6	2.0	
DA2ss-134M-1010-SO	240-29485-4	8330 Modified	SO	1.6	2.0	
DA2ss-135M-1010-DUP	240-29485-6	8330 Modified	SO	1.6	2.0	
DA2ss-135M-1010-SO	240-29485-5	8330 Modified	SO	1.6	2.0	
DA2ss-250M-0002-DUP	240-29485-8	8330 Modified	SO	1.6	2.0	
DA2ss-250M-0002-SO	240-29485-7	8330 Modified	SO	1.6	2.0	
DA2sw-096-1010-SW	240-29485-9	8330 Modified	AQ	1.6	2.0	
DA2sw-099-1010-SW	240-29485-10	8330 Modified	AQ	1.6	2.0	

Project Number and Name: ***12-08-151 - ERS***

QC Outlier Report: Temperature (Non-qualified Outliers)

Lab Report Batch: 240-29485-1 **Lab ID:** TA SAC

Client Sample ID	Lab Sample ID	Analysis Method	Matrix	Sample Temperature (C)	Criteria	
					Lower Limit	Upper Limit
DA2sw-131-1010-SW	240-29485-11	8330 Modified	AQ	1.6	2.0	

Appendix R

PPE Drum Disposal Records

PIKA INTERNATIONAL, INC.

November 7, 2013

Mr. Eric Cheng
U.S. Army Corps of Engineers, Louisville District
ATTN: CELRL-PM-P-E
600 Martin Luther King, Jr. Place
Louisville, Kentucky 40202-0059

Reference: Contract No. W912QR-12-C-0060, Environmental Remediation Services at the Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio

Subject: Contract Line Item (CLIN) 2.2 – Implementation of Environmental Remediation Services Work Plan ~ Characterization and Disposal Letter Report for Decontamination Fluids

Dear Mr. Cheng:

Investigative activities in accordance with the *Environmental Remediation Services Sampling and Analysis Plan Addendum No. 1* (March 2013) (herein referred to as the SAP Addendum No. 1) were performed from May 13, 2013 through September 26, 2013. These activities have resulted in the generation of Investigation-Derived Waste (IDW) equipment decontamination fluids. The purpose of this letter is to characterize and classify IDW for disposal and to propose methods for disposing the IDW.

This letter report includes a summary of IDW generated, the origin of the IDW (Table 1), as well as proposed classification and recommendations for disposal of the IDW (Table 2). This letter report follows guidance established by the following:

1) The *Facility-Wide Sampling and Analysis Plan* (USACE 2011) (herein referred to at the Facility-Wide SAP);
2) The SAP Addendum No. 1; and

One distinct IDW stream was sampled as part of the Environmental Remediation Services (ERS) field activities. The waste stream was composited and sampled on August 22, 2013 per requirements outlined in Section 7.0 of the Facility-wide SAP and SAP Addendum No. 1. IDW stream generated was:

- One (1) 5-gallon bucket containing Deionized (DI) rinse water and Alconox wash water from decontamination of sampling equipment used during pre and post MEC demolition operations and pre and post TCS pad sampling operations.

- The 5-gallon bucket of rinse/wash water was consolidated with the two (2) PPE drums staged in RVAAP earth covered magazine (ECM) 7-C-2 that were included in the RVAAP Environmental Remediation Services project scope of work for disposal. The PPE drums were generated during the Rocket Ridge Area (RRA) Time Critical Removal Action (TCRA) white phosphorus removal operations and consisted of waste PPE coveralls, water, 5-gallon buckets, and poly rope. The water was required for packaging the PPE drums as a precaution due to the potential white phosphorus contamination.

Table 1. Summary of Sampled Investigation-Derived Wastes from Sampling Activities for the Environmental Remediation Services Sampling.

Container Number	Container Type and Size	Contents	Generation Date	Sample ID	Date Sampled
RRA-120 and RRA -121	55 Gallon, Steel, Closed Top Drum	Non-Potable water, DI Water, alconox wash water, PPE coveralls, rope, and plastic 5-gallon buckets.	10/3/11 – 8/19/13	DA2DR-001WC-0001-PP	8/22/2013

IDW Discussion

Per Section 7.0 of the Facility-wide SAP, one composite waste samples was collected for Toxicity Characteristic Leaching Procedure (TCLP) and white phosphorus parameters and submitted for laboratory analysis to characterize the waste streams for disposal. The sample (DA2DR-001WC-0001-PP) characterized two (2), 55-gallon drums containing PPE coveralls, non-potable water, poly rope and 5-gallon plastic buckets from previous RRA TCRA operations and DI rinse water and alconox wash water from RVAAP ERS sampling equipment decontamination operations. Upon receipt of analytical results from the laboratory, the analytical results were reviewed to determine if the waste was potentially hazardous. This review consisted of a comparison of the analytical results against the TCLP criteria presented in Table 7-1, Maximum Concentration of Contaminants for the Toxicity Characteristic (40 *CFR* 261.24), presented in the Facility-Wide SAP (USACE 2011) and Resource Conservation Recovery Act (RCRA) Hazardous Waste regulations 40 *CFR* 261 – 265.

Attachment 1 presents the analytical laboratory data and approved waste profile for IDW generated during the RVAAP ERS field activities. The results are summarized below:

1) All analytical results were below quantitative limits;
2) The pH for the waste is considered neutral (7.35 S. U. < pH < 12 S.U.);
3) The flash point was >180°F.

Given the observed analytical results, it is recommended that IDW stream be classified as non-hazardous, non-contaminated.

Recommended Disposal Pathways for IDW

Table 2 presents the disposal pathway identified as a result of IDW characterization data. Please note that this IDW has been characterized under provisions of the Facility-Wide SAP and SAP Addendum No. 1 using TCLP analyses and process knowledge. PIKA recommends that this IDW be disposed of (incineration) as non-hazardous, non-contaminated waste by Heritage – WTI waste facility in East Liverpool, Ohio unless the U.S. Army has additional information that would result in the IDW meeting the definition of a listed hazardous waste as defined in 40 CFR Part 261 Subpart D.

Table 2. Summary of Final Waste Classification and Recommended Disposal

NON-HAZARDOUS WASTE			
Container	**Medium**	**Waste Criterion**	**Disposal Recommendation**
RRA-120 and RRA-121	Solid	Inorganics, organics	Permitted Treatment or Waste Facility

Since RVAAP, under RCRA, is the generator of this material, PIKA requests concurrence or direction on the waste classification and recommended disposal pathways prior to disposal. Following your concurrence, we will proceed with the appropriate waste disposal.

If you have any questions, or require additional information, please do not hesitate to contact me at (330) 296-6519.

Sincerely,

PIKA INTERNATIONAL



Brian Stockwell
Project Manager

cc: Eric Cheng – USACE
RVAAP Mark Patterson
RVAAP Brad Kline – VISTA
OHARNG Kevin Sedlak

ATTACHMENT 1
ANALYTICAL RESULTS FOR IDW

Client Sample ID: DA2DR-001WC-0001-PP
Date Collected: 08/22/13 09:30
Date Received: 08/23/13 08:00

Lab Sample ID: 240-28253-2
Matrix: Solid

Method: 8260B/DoD - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.0095	mg/L			09/04/13 01:59	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			09/04/13 01:59	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			09/04/13 01:59	1
Benzene	0.025	U	0.025	0.0065	mg/L			09/04/13 01:59	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			09/04/13 01:59	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			09/04/13 01:59	1
Chloroform	0.025	U	0.025	0.0080	mg/L			09/04/13 01:59	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			09/04/13 01:59	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			09/04/13 01:59	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			09/04/13 01:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*90 - 115*		*09/04/13 01:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 121*		*09/04/13 01:59*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 124*		*09/04/13 01:59*	*1*
Dibromofluoromethane (Surr)	*96*		*84 - 128*		*09/04/13 01:59*	*1*

Method: 8270C/DoD - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034	mg/L		08/28/13 07:48	08/31/13 16:32	1
2,4,5-Trichlorophenol	0.020	U	0.020	0.00030	mg/L		08/28/13 07:48	08/31/13 16:32	1
2,4,6-Trichlorophenol	0.020	U	0.020	0.00024	mg/L		08/28/13 07:48	08/31/13 16:32	1
2,4-Dinitrotoluene	0.020	U	0.020	0.00025	mg/L		08/28/13 07:48	08/31/13 16:32	1
Hexachlorobenzene	0.020	U	0.020	0.000085	mg/L		08/28/13 07:48	08/31/13 16:32	1
Hexachlorobutadiene	0.020	U	0.020	0.00027	mg/L		08/28/13 07:48	08/31/13 16:32	1
Hexachloroethane	0.020	U	0.020	0.00019	mg/L		08/28/13 07:48	08/31/13 16:32	1
3 & 4 Methylphenol	**0.0041**	**J**	0.040	0.00080	mg/L		08/28/13 07:48	08/31/13 16:32	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		08/28/13 07:48	08/31/13 16:32	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		08/28/13 07:48	08/31/13 16:32	1
Pentachlorophenol	0.040	U	0.040	0.00027	mg/L		08/28/13 07:48	08/31/13 16:32	1
Pyridine	**0.0023**	**J**	0.020	0.00035	mg/L		08/28/13 07:48	08/31/13 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*22 - 110*	*08/28/13 07:48*	*08/31/13 16:32*	*1*
2-Fluorophenol (Surr)	*18*		*10 - 110*	*08/28/13 07:48*	*08/31/13 16:32*	*1*
Nitrobenzene-d5 (Surr)	*70*		*29 - 111*	*08/28/13 07:48*	*08/31/13 16:32*	*1*
Terphenyl-d14 (Surr)	*88*		*40 - 119*	*08/28/13 07:48*	*08/31/13 16:32*	*1*
2,4,6-Tribromophenol (Surr)	*85*		*17 - 117*	*08/28/13 07:48*	*08/31/13 16:32*	*1*
Phenol-d5 (Surr)	*56*		*10 - 110*	*08/28/13 07:48*	*08/31/13 16:32*	*1*

Method: 8081/DOD - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	0.030	U	0.030	0.000079	mg/L		08/28/13 07:52	08/30/13 18:57	1
Endrin	0.010	U	0.010	0.000026	mg/L		08/28/13 07:52	08/30/13 18:57	1
gamma-BHC (Lindane)	0.010	U	0.010	0.000015	mg/L		08/28/13 07:52	08/30/13 18:57	1
Heptachlor	0.010	U	0.010	0.000019	mg/L		08/28/13 07:52	08/30/13 18:57	1
Heptachlor epoxide	0.010	U	0.010	0.000017	mg/L		08/28/13 07:52	08/30/13 18:57	1
Methoxychlor	0.030	U	0.030	0.000077	mg/L		08/28/13 07:52	08/30/13 18:57	1
Toxaphene	0.50	U	0.50	0.00077	mg/L		08/28/13 07:52	08/30/13 18:57	1

Client: PIKA International, Inc.
Project/Site: ERS

TestAmerica Job ID: 240-28253-1

Client Sample ID: DA2DR-001WC-0001-PP
Date Collected: 08/22/13 09:30
Date Received: 08/23/13 08:00

Lab Sample ID: 240-28253-2
Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*44 - 144*	*08/28/13 07:52*	*08/30/13 18:57*	*1*
DCB Decachlorobiphenyl	*68*		*44 - 144*	*08/28/13 07:52*	*08/30/13 18:57*	*1*
Tetrachloro-m-xylene	*132*	*X*	*44 - 127*	*08/28/13 07:52*	*08/30/13 18:57*	*1*
Tetrachloro-m-xylene	*80*		*44 - 127*	*08/28/13 07:52*	*08/30/13 18:57*	*1*

Method: 8151/DOD - Herbicides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	0.25	U	0.25	0.00021	mg/L		08/28/13 07:54	08/30/13 17:01	1
Silvex (2,4,5-TP)	0.050	U	0.050	0.00010	mg/L		08/28/13 07:54	08/30/13 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*75*		*37 - 116*	*08/28/13 07:54*	*08/30/13 17:01*	*1*
2,4-Dichlorophenylacetic acid	*90*		*37 - 116*	*08/28/13 07:54*	*08/30/13 17:01*	*1*

Method: 6010B/DOD - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.50	U	0.50	0.0017	mg/L		08/28/13 10:07	09/03/13 19:11	1
Arsenic	**0.017**	**J**	0.50	0.0033	mg/L		08/28/13 10:07	09/03/13 19:11	1
Barium	**0.33**	**J B**	10	0.0028	mg/L		08/28/13 10:07	09/03/13 19:11	1
Cadmium	0.10	U	0.10	0.00039	mg/L		08/28/13 10:07	09/03/13 19:11	1
Chromium	**1.3**	**B**	0.50	0.0014	mg/L		08/28/13 10:07	09/03/13 19:11	1
Lead	**0.024**	**J**	0.50	0.0017	mg/L		08/28/13 10:07	09/03/13 19:11	1
Selenium	0.25	U	0.25	0.0040	mg/L		08/28/13 10:07	09/03/13 19:11	1

Method: 7470A/DOD - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hg	0.0020	U	0.0020	0.00012	mg/L		08/28/13 14:00	08/29/13 14:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.30**	**J**	0.74	0.15	mg/Kg	☼	09/03/13 09:30	09/03/13 11:46	1
Sulfide	44	U	44	32	mg/Kg	☼	08/29/13 10:20	08/29/13 14:50	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	**>180**		1.00	1.00	Degrees F			08/26/13 10:22	1
pH	**7.35**		0.100	0.100	SU			08/26/13 16:46	1
Percent Solids	**69**		0.10	0.10	%			09/05/13 15:12	1
Percent Moisture	**31**		0.10	0.10	%			09/05/13 15:12	1

ANALYTICAL REPORT

Workorder: 34-1324043
Client: Test America
Project Manager: Kevin W. Griffiths

Analytical Results

Sample ID: DA2DR-001WC-0001-PP(240-282532	Sampling Site: ERS 24006840	Collected: 08/22/2013
		Received: 08/28/2013
Lab ID: 1324043001	Media: Bulk	
Matrix: Soil/Solid/Sediment	Sampling Parameter: NA	

Analysis Method - EPA 7580

Preparation: EPA 7580, Soil Prep	**Weight/Volume**	**Analysis:** EPA 7580, Soil	**Instrument ID:** GCE24
Batch: EGC/4607 (HBN: 112777)	**Initial:** 135.08 grams	**Batch:** EGC/4608 (HBN: 112783)	**Percent Solid:** NA
Prepared: 08/29/2013	**Final:** 10 mL	**Analyzed:** 08/30/2013 16:15	**Report Basis:** Wet

Analyte	ug/Kg	MDL (ug/Kg)	RL (ug/Kg)	Dilution	Qual.
White Phosphorus	ND	0.15	0.50	1	U

Comments

Quality Control: EPA 7580 - (HBN: 112783)

Sample required 500mL of ASTM Type II H2O for adequate coverage of sample to avoid absorption of extraction solvent (iso-octane).

Sample saturated with unknown liquid.

Sample consists of several types of materials. Glass, yellow plastic rope, unknown materials rope, black webbing of unknown material, plastic green solid center cylinder.

Results may be biased high or low due to unknown efficiency of method on matrix presented to ALS for anlysis by EPA 7580.

Report Authorization

Method	Analyst	Peer Review
EPA 7580	Christopher Winter	Mila V. Potekhin

Laboratory Contact Information

ALS Environmental
960 W Levoy Drive
Salt Lake City, Utah 84123

Phone: (801) 266-7700
Email: alslt.lab@ALSGlobal.com
Web: www.alsslc.com

HERITAGE-WTI, INC.
WASTESTREAM FORM
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Heritage-WTI Use Only	
Quote #:	WS#:
Product Code:	Price:

1. GENERATOR INFORMATION (HES-WTI #) *	
Generator Name	Ravenna Army Ammunition Plant
Address	8451 State Route 5
City, State, Zip	Ravenna, Oh 44266
Tech. Contact Name	Mark Patterson
Phone 330-3587312	Fax 330-358-7313
24 Hour Emergency Number	330-352-6955
E-mail Address	mark.c.patterson.civ@mail.mil
US EPA ID Number	
State ID Numbers	OH5-210-020-736
Status	LQG ☐ SQG ☐ CESQG ☐ Non-hazardous ☐

2. BILLING INFORMATION (HES-WTI#) *	
Customer Name	Univar USA
Address	P.O. Box 84889
City, State, Zip	Seattle, WA 98124-4889
Contact Name	Accounts Payable
Phone (713) 644-1601	Fax (713) 641-5423
E-mail Address	

3. MANIFEST MAIL ADDRESS *(If different from generator)*	
Contact Name	same
Company Name	
Address	
City, State, Zip	

4. Generator SIC Code	If 3312, do you perform Coke Oven Byproduct Recovery Operations? Yes ☐ No ☒	If 28__, 2911, 3312, or 4953, what is the Total Annual Benzene (TAB) in Megagrams/year?

5. Common Name	Waste personal protective equipment and miscellaneous debris
6. Process Generating Waste	Military Instillation Site Cleanup
7. DOT Description * (*if available*)	Non-hazardous debris and water
8.	Identify US EPA waste codes None
9.	If D001-D043, are any Underlying Hazardous Constituents (UHCs) present? Yes ☐ No ☒ NA ☐ If yes, list in Section 13.
10.	If F001-F005, or F039, list the F-listed hazardous constituents in Section 13.
11.	US EPA Form Code * W319 — US EPA Source Code *
12.	Identify state waste codes None

13. Waste Composition: Using specific chemical names and/or descriptions of waste composition, list all constituents present in the wastestream, and identify those that are underlying hazardous constituents (UHCs), or F001-F005/F039 hazardous constituents. Attach available analysis or MSDSs. **Total composition must equal or exceed 100%.**

Constituents	Range	Units	UHC?	F-Listed?
Water	60	%	Yes ☐	Yes ☐
Debris (PPE coveralls, pieces of 5-gallon buckets, knee pads and poly rope)	35-40	%	Yes ☐	Yes ☐
			Yes ☐	Yes ☐
			Yes ☐	Yes ☐
			Yes ☐	Yes ☐
			Yes ☐	Yes ☐
			Yes ☐	Yes ☐

14.	Color Varies	Appearance Solids under Water	Odor None

15a. Chemical Properties

Flash Point (F°)	< 73 ☐	BTU/lb	< 2,000 ☒	Solid ☒	Free Liquids? Yes ☒ No ☐
	< 100 ☐		2,000-6,000 ☐	Liquid ☐	Will waste dump out of drums? Yes ☒ No ☐
	100-140 ☐		6,000-10,000 ☐	Sludge ☐	Is the waste pumpable? Yes ☐ No ☒
	141-200 ☐		> 10,000 ☐	Semi-solid ☐	Debris?(List type in Section 13) Yes ☒ No ☐
	> 200 ☒			Powder ☐	Is the waste dusty? Yes ☐ No ☒
				Gas ☐	
Boiling Point (F°)	< 100 ☐	pH Range	7.0-8.0	% Solids 40	% Liquids 60
	> 100 ☒				

Note: * These sections will be completed by HES-WTI if left blank

Common Name (same as Item #5):

16. Check all that apply. Marking any of these may require additional documentation or follow-up information.

16a.

Aerosols	☐	Metal Powders	☐
Air Reactive	☐	Oxidizer	☐
Ammonia	☐	Pathogen	☐
Asbestos	☐	Pesticide	☐
Autoignitable	☐	Polymerizable	☐
Biological	☐	Pyrophoric	☐
Carcinogen	☐	Radioactive	☐
Chelating Agent	☐	Sanitary	☐
Compressed Gas	☐	Shams	☐
Dioxins	☐	Shock Sensitive	☐
Etiological	☐	Spontaneously Combustible	☐
Explosive	☐	Sulfide	☐
Herbicide	☐	Temperature Control Required	☐
Infectious	☐	Temperature Sensitive	☐
Insecticide	☐	Water Reactive	☐
Lab Pack	☐		
Medical	☐		
Metal Fines	☐		

16b.
Used oil? (per 40 CFR 279) Yes ☐ No ☒
Used oil mixed with hazardous waste? Yes ☐ No ☐
Total Halogens (TX) concentration? < 1000 PPM ☐ > 1000 PPM ☐

16c.
PCBs? (per 40 CFR 761) Yes ☐ No ☒
If yes, PCB concentration? < 50 PPM ☐ > 50 PPM ☐
Greater than 50 PPM source? Yes ☐ No ☐

16d.
Does this material require any special handling? Yes ☒ No ☐
If yes, explain: Phosphorous should be kept under water

16e.
Volatile Organic Compound > 500 PPM? Yes ☐ No ☒
Subject to Subpart CC? (per 40 CFR 265.1080-1091) Yes ☐ No ☒

16f.
Do any exclusions/exemptions apply? Yes ☐ No ☒
If yes, note the exclusion/exemption: _____

16g.
Generated from electroplating process? Yes ☐ No ☒

16h. Additional Comments: _____

17. Transporter: HES-WTI Transport ☐ Other ☒ (Complete below)

Transporter Name	UNIVAR USA INC - CL
Address	1686 East Highland Road
City, State, Zip	Twinsburg, Ohio 44087
Contact/Phone	Becky Neal
US EPA ID No.	OHD981094972

18. Packaging:

		Size:
Bulk Liquid	☐	
Bulk Solid	☐	
Cu Yd Bag/Box	☐	
Cylinder	☐	
Drum	☒	55 Ga
Tote (Metal)	☐	
Tote (Poly)	☐	

19. Volume:
1-20/Year
1-20/Shipment
☒ One time – 2 drums total
☐ Ongoing

20. Check or List Attachments: Lab Data ☒ MSDS ☐ Cylinder Form ☐ Packing List ☐ Other (list) ☐

21. CERTIFICATION *Sign and date the certification.*

I hereby certify that I am an authorized agent of the generator, and warrant on behalf of the generator, that all information submitted herein and attached documentation contains true, accurate and complete descriptions of this material. Any sample submitted for analysis is representative of the material being offered for approval. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I will notify Heritage-WTI, Inc. of any changes in generator status, any information on this form, or any information on the attachments. This certification and signature apply to this form, to all attachments checked in section 20, and to the land disposal restriction notification (LDR) generated from this information.

Signature	Printed Name	Date	Company
Mark Patterson	Mark Patterson	10/22/13	U.S. Army – RVAAP

22. COMPLETE THIS SECTION FOR NON-HAZARDOUS MATERIAL BEING MANAGED TO A NON-HAZARDOUS PROCESS (EXAMPLE: SUBTITLE D LANDFILL or MASS-BURN)

22a. Does this waste exhibit the chemical characterization of an oxidizer? Yes ☐ No ☒

22b. Is this waste a listed waste? (U, P, K, or F codes) Yes ☐ No ☒

22c. This waste is not characteristically hazardous for D001-D043 based on attached lab data (mark LD), attached MSDS (mark MSDS), or generator knowledge (mark GK).

D001 (Ignitability)	LD	TCLP VOLATILES		TCLP SEMI-VOLATILES		D038 Pyridine	LD
D002 (Corrosivity)	LD	D018 Benzene	LD	D023 o-Cresol	LD	D041 2,4,5-Trichlorophenol	LD
D003 (Reactivity)	LD	D019 Carbon Tetrachloride	LD	D024 m-Cresol	LD	D042 2,4,6-Trichlorophenol	LD
TCLP METALS		D021 Chlorobenzene	LD	D025 p-Cresol	LD	HERBICIDES & PESTICIDES	
D004 Arsenic	LD	D022 Chloroform	LD	D026 Cresol	LD	D012 Endrin	LD
D005 Barium	LD	D028 1,2 –Dichloroethane	LD	D027 1,4-Dichlorobenzene	LD	D013 Lindane	LD
D006 Cadmium	LD	D029 1,1-Dichloroethylene	LD	D030 2,4-Dinitrotoluene	LD	D014 Methoxychlor	LD
D007 Chromium	LD	D035 Methyl Ethyl Ketone	LD	D032 Hexachlorobenzene	LD	D015 Toxaphene	LD
D008 Lead	LD	D039 Tetrachloroethylene	LD	D033Hexachlorobutadiene	LD	D016 2,4-D	LD
D009 Mercury	LD	D040 Trichloroethylene	LD	D034 Hexachloroethane	LD	D017 2,4,5-TP(Silvex)	LD
D010 Selenium	LD	D043 Vinyl Chloride	LD	D036 Nitrobenzene	LD	D020 Chlordane	LD
D011 Silver	LD			D037 Pentachlorophenol	LD	D031 Heptachlor	LD

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Heritage Use Only	
Quote #:	WS#:
Business Type: Repeatable: ☐	Non-Repeatable: ☐
Product Code:	Price:

TSD:	Coolidge, AZ ☐	Indianapolis, IN ☐	Kansas City, MO ☐	Roachdale, IN ☐	Heritage-WTI ☒	Heritage-PR ☐
Service Location:	Albany, NY ☐	Charlotte, NC ☐	East Liverpool, OH ☒	Hayward, CA ☐	Houston, TX ☐	Iowa City, IA ☐
	Lemont, IL ☐	Louisville, KY ☐	Signal Hill, CA ☐	St. Louis, MO ☐	Toledo, OH ☐	Tulsa, OK ☐

1. GENERATOR INFORMATION (Heritage#)

Generator Name	Ravenna Army Ammunition Plant
Address	8451 State Route 5
City, State	Ravenna, OH
Zip, County	44266
Tech. Contact Name	Katie Tait
Phone 614-336-6136	Fax none
24 Hour Emergency Number	1-800-851-8061
E-mail Address	kathryn.s.tait.nfg@mail.mil
US EPA ID Number	
State ID Numbers	OH5-210-020-736
Status	LQG ☐ SQG ☐ CESQG ☒ Non-hazardous ☐

2. BILLING INFORMATION (Heritage #)

Customer Name	Univar USA
Address	P.O. Box 84889
City, State	Seattle, WA
Zip, County	98124-4889
Contact Name	Accounts Payable
Phone 713-644-1601	Fax 713-641-5423
E-mail Address	

3. MANIFEST MAIL ADDRESS *(If different from generator)*

Contact Name	Katie Tait
Company Name	Ohio Army National Guard Camp Ravenna
Address	1438 State Route 534 SW
City, State, Zip	Newton Falls, Oh

4. Generator SIC Code	If 3312, generated from Coke Oven Byproduct Recovery Operations? Yes ☐ No ☐	If 28_ _, 2911, 3312, or 4953, what is the Total Annual Benzene (TAB) in Megagrams/year?

5. Common Name: Waste Personal Protective Equipment and Miscellaneous Debris

6. Process Generating Waste: Military Instillation Site Clean-up

7. DOT Description: Non Hazardous Debris and Water

8.	Identify US EPA waste codes None	
9.	D001-D043, F001-F005, or F039 underlying or hazardous constituents present? Yes ☐ No ☒ NA ☐ If yes, list in Section 12.	
10.	US EPA Form Code W319	US EPA Source Code
11.	Identify state waste codes None	

12. Waste Composition: Using specific chemical names and/or descriptions of waste composition, list all constituents present in the wastestream, and identify those that are underlying hazardous constituents (UHCs), or F001-F005/F039 hazardous constituents. Attach available analysis or MSDSs. **Total composition must equal or exceed 100%.**

Constituents	Range	Units	UHC?	F-Listed?
Water	60	%	Yes ☐	Yes ☐
Debris (PPE Coveralls, Pieces of 5-Gallon Buckets, Knee Pads, Poly Rope)	35-40	%	Yes ☐	Yes ☐
			Yes ☐	Yes ☐
			Yes ☐	Yes ☐
			Yes ☐	Yes ☐
			Yes ☐	Yes ☐
			Yes ☐	Yes ☐

13.	Color Varies	Odor None	

14.

14a. Chemical Properties

Flash Point (F°)	< 73	☐	BTU/lb Range	
	73-<100	☐		
	100-<140	☐		
	140-<200	☐	Low 0	
	>= 200	☒		
			High 2000	
Boiling Point (F°)	< 100	☐	pH Range	7.0-8.0
	> 100	☒		

14b. Physical Properties at 70°F

Solid	☒	Free Liquids/Fail Paint Filter?	Yes ☒ No ☐
Liquid	☐	Will waste dump out of drums?	Yes ☒ No ☐
Sludge	☐	Is the waste pumpable?	Yes ☐ No ☒
Semi-solid	☐	Will heat improve flow?	Yes ☐ No ☒
Powder	☐	Debris?(List type in Section 12)	Yes ☒ No ☐
Gas	☐	Dust hazard?	Yes ☐ No ☒

% Solids 40	% Liquids 60

Common Name (same as Item #5): Waste Personal Protective Equipment and Miscellaneous Debris

15. Check all that apply. Marking any of these may require additional documentation or follow-up information for approval. ***Marks new sections.***

*15a. Potential High Hazards			
Air Reactive	☐	Shock Sensitive	☐
Autoignitable	☐	Spontaneously Combustible	☐
Cyanide	☐	Sulfide	☐
Explosive	☐	Temperature Control Required	☐
Metal Fines	☐	Temperature Sensitive	☐
Metal Powders	☐	Water Reactive	☐
Organic Peroxides	☐	Not Applicable	☒
Oxidizers	☐		
Peroxide Forming	☐		
Pyrophoric	☐		
Self Heating	☐		

15b. Other Properties			
Aerosols	☐	Infectious Agents	☐
Ammonia	☐	Insecticide	☐
Asbestos	☐	Lab Pack	☐
Biological	☐	Medical	☐
Carcinogen	☐	Pathogen	☐
Chelating Agent	☐	Pesticide	☐
Compressed Gas	☐	Polymerizable	☐
Dioxins,Furans	☐	Radioactive	☐
Etiological	☐	Sanitary	☐
Herbicide	☐	Sharps	☐

15e. Used oil? (40 CFR 279)
Yes ☐ No ☒

Used oil mixed with hazardous waste?
Yes ☐ No ☐

Total Halogens (TX) concentration?
< 1000 PPM ☐
> 1000 PPM ☐

15f. PCBs? (40 CFR 761)
Yes ☐ No ☒

If yes, PCB concentration?(ppm)
0-49 ☐
50-499 ☐
>= 500 ☐

Greater than 50 ppm source?
Yes ☐ No ☐

15g. Subject to Subpart CC? (40CFR 264/5. 1080-1091, LQG>26gal, >500ppmw VOC)
Yes ☐ No ☒

15h. Subject to Benzene NESHAP controls? (40 CFR 61.340-358)
Yes ☐ No ☒

*15i. Does this material require any special handling related to employee safety, storage conditions, spill clean-up, sampling, etc.? Yes ☒ No ☐
If yes, explain below: Phosphorous should be kept under water

15j. Do any exclusions/exemptions apply? Yes ☐ No ☒
If yes, describe:

*15k. Is this material overpacked? Yes ☐ No ☒
If yes, explain why:

*15l. Does this material have potential to build pressure in the container? Yes ☐ No ☒
If yes, explain:

*15c. Have the containers been stored outside? Yes ☒ No ☐ If yes, condition? New

*15m. Has this material been rejected from another facility? Yes ☐ No ☒
If yes, explain why:

*15d. Does this waste have any undisclosed hazards or prior incidents associated with it, which could affect the way it should be handled? Yes ☐ (If yes, attach detailed explanation) No ☒

15n. Additional Comments/ Special Waste Type: Yes ☐ No ☒

16. Transporter: Heritage Transport ☐ Other ☒ (Complete below)

Transporter Name	Univar USA Inc - CL
Address	1686 East Highland Road
City, State, Zip	Twinsburg, Ohio 44087
Contact/Phone	Becky Neal
US EPA ID No.	OH981094972

17. Packaging:		Size:	18. Volume:
Bulk Liquid	☐		
Bulk Solid	☐		
Cu Yd Bag/Box	☐		1-20/Year
Cylinder	☐		
Drum	☒	55 G	2 drums total/Shipment
Tote (Metal)	☐		
Tote (Poly)	☐		

19. Check or List Attachments: Lab Data ☒ MSDS ☐ Cylinder Form ☐ Packing List ☐ Other (list) ☐

20. CERTIFICATION Sign and date the certification. I hereby certify that I am an authorized agent of the generator, and warrant on behalf of the generator, that all information submitted herein and attached documentation contains true, accurate and complete descriptions of this material. Any sample submitted for analysis or attached laboratory data is representative of the material being offered for approval. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I will notify Heritage Environmental Services, LLC or Heritage-WTI, Inc. of any changes in generator status, any information on this form, or any information on the attachments. This certification and signature apply to this form, to all attachments checked in section 19, and to the land disposal restriction notification (LDR) generated from this information. For Lab Packs only: To the best of my knowledge, all labels on the inner and outer containers, and all information recorded on the packing inventory sheet for each Lab Pack, correctly identifies the contained chemicals. Where testing has been necessary to characterize material in the lab pack, I have used test methods equivalent to those specified in the Permittee's current operating permit Lab Pack Procedure.

Signature	Printed Name	Date	Company
Kathleen S Tait		1/17/2014	OHARNG

21. **COMPLETE THIS SECTION FOR NON-HAZARDOUS MATERIAL**

21a. Is this waste a listed waste? (U, P, K, or F codes) Yes ☐ No ☒

21b. This waste is not characteristically hazardous for D001-D043 based on attached lab data (**mark LD**), attached MSDS (**mark MSDS**), or generator knowledge(**mark GK**).

		TCLP VOLATILES		TCLP SEMI-VOLATILES			
D001 (Ignitability)	LD	D018 Benzene	LD	D023 o-Cresol	LD	D038 Pyridine	LD
D002 (Corrosivity)	LD	D019 Carbon Tetrachloride	LD	D024 m-Cresol	LD	D041 2,4,5-Trichlorophenol	LD
D003 (Reactivity)	LD	D021 Chlorobenzene	LD	D025 p-Cresol	LD	D042 2,4,6-Trichlorophenol	LD
TCLP METALS		D022 Chloroform	LD	D026 Cresol	LD	**HERBICIDES & PESTICIDES**	
D004 Arsenic	LD	D028 1,2 –Dichloroethane	LD	D027 1,4-Dichlorobenzene	LD	D012 Endrin	LD
D005 Barium	LD	D029 1,1-Dichloroethylene	LD	D030 2,4-Dinitrotoluene	LD	D013 Lindane	LD
D006 Cadmium	LD	D035 Methyl Ethyl Ketone	LD	D032 Hexachlorobenzene	LD	D014 Methoxychlor	LD
D007 Chromium	LD	D039 Tetrachloroethylene	LD	D033Hexachlorobutadiene	LD	D015 Toxaphene	LD
D008 Lead	LD	D040 Trichloroethylene	LD	D034 Hexachloroethane	LD	D016 2,4-D	LD
D009 Mercury	LD	D043 Vinyl Chloride	LD	D036 Nitrobenzene	LD	D017 2,4,5-TP(Silvex)	LD
D010 Selenium	LD					D020 Chlordane	LD

	D011 Silver	LD		D037 Pentachlorophenol	LD	D031 Heptachlor	LD

1-800-851-8061 ORDER # CLC716213

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	OH5210020736	1	~~Use as USA for: 800-535-5053~~ KST	000049183

5. Generator's Name and Mailing Address
RAVENNA ARMY AMMUNITION
8451 STATE ROUTE 5
RAVENNA, OH 44266
Generator's Phone: 330 358-2920

Generator's Site Address (if different than mailing address)
Mailing Address: Camp Ravenna
1438 State Route 534 SW
Newton Falls OH 44444 (614) 536-6136

6. Transporter 1 Company Name
1. UNIVAR USA INC.
U.S. EPA ID Number
OHD981494972

7. Transporter 2 Company Name
~~2. HERITAGE TRANSPORT LLC~~ per J May 2-7-14
U.S. EPA ID Number
~~IND[illegible]~~

8. Designated Facility Name and Site Address
HERITAGE - WTI, INC., D.B.A. WTI
1250 ST GEORGE STREET
E LIVERPOOL, OH 43920
Facility's Phone: 330-385-7333
U.S. EPA ID Number
OHD980615541

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. NON-HAZARDOUS DEBRIS AND WATER (DEBRIS-PPE, BUCKETS, KNEE PADS, POLY ROPE)	2	DM	110	G
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information
1. 139829-1 NON HAZARDOUS DEBRIS AND WATER
PLACARDS PROVIDED BY CARRIER/SHIPPER YES NO DRIVER SIGNATURE
**** ER CALLER MUST IDENTIFY UNIVAR USA AS REGISTRANT (CONTRACT # 97569) ****

T113421

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: Kathryn S. Tait
Signature: Kathryn S Tait
Month 1 Day 30 Year 14

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: DARRYL HANIC
Signature: Darryl Hanic
Month 1 Day 30 Year 14
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Adam Roberts
Signature: [signature]
Month 2 Day 6 Year 14

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

Appendix S

Cumulative Signed Documentation/Correspondence

NATIONAL GUARD BUREAU
111 SOUTH GEORGE MASON DRIVE
ARLINGTON VA 22204-1373

August 7, 2014

Ohio Environmental Protection Agency
DERR-NEDO
Attn: Ms. Nancy Zikmanis, Environmental Supervisor
2110 East Aurora Road
Twinsburg, OH 44087-1924

Subject: Submittal of the Draft Removal Action Report for Environmental Remediation Services for the former Ravenna Army Ammunition Plant (RVAAP) Restoration Program Portage/Trumbull Counties, RVAAP-04 Open Demolition Area (ODA) #2
Ohio EPA ID # 267-000-859-022

Dear Ms. Zikmanis:

In support of the Environmental Remediation Services (ERS) project at the Open Demolition Area (ODA) #2 of the former Ravenna Army Ammunition Plant (RVAAP), the Army is submitting the Draft Removal Action Report to the Ohio EPA for review.

This report summarizes the activities completed under the ERS project, including the reconstruction and stabilization of the stream banks at the Rocket Ridge Area; the demolition of stockpiled munitions and explosives of concern (MEC) and material documented as an explosive hazard (MDEH); and the thermal flashing of stockpiled material potentially presenting an explosive hazard (MPPEH). This report also includes discussion regarding the three (3) years of biannual water and biotic testing that began after the completion of reconstruction and stabilization activities.

Please contact the undersigned at (703) 601-7785 or brett.a.merkel.civ@mail.mil if there are issues or concerns with this submission.

Sincerely,

Brett Merkel

Brett A. Merkel
RVAAP Restoration Program Manager
Army National Guard Directorate

cc: Rod Beals, Ohio EPA, DERR-NEDO
Justin Burke, Ohio EPA – DERR-CO
Kevin Sedlak, ARNG, Camp Ravenna
Katie Tait, OHARNG Camp Ravenna
Greg Moore, USACE Louisville
Eric Cheng, USACE Louisville
Gail Harris, Vista Sciences

OhioEPA

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

December 3, 2014

Mr. Brett Merkel
Army National Guard Directorate
ARNGD-ILE Clean UP
111 South George Mason Drive
Arlington, VA 22203

Re: US Army Ravenna Ammunition Plt RVAAP
Assessment
Remedial Response
Portage County
267000859

Subject: Comments for the "Draft Removal Action Report for Environmental Remediation Services for the Former Ravenna Army Ammunition Plant (RVAAP) Restoration Program Portage/Trumbull Counties, RVAAP-04 Open Demolition Area #2," Dated August 7, 2014 (Work Activity No. 267-000859-022)

Dear Mr. Merkel:

The Ohio Environmental Protection Agency (Ohio EPA), Northeast District Office (NEDO), Division of Environmental Response and Revitalization (DERR) has received and reviewed the document entitled, "Draft Removal Action Report for Environmental Remediation Services for the former Ravenna Army Ammunition Plant (RVAAP) Restoration Program Portage/Trumbull Counties, RVAAP-04 Open Demolition Area #2," dated August, 7, 2014. This document, received by Ohio EPA's NEDO on August 12, 2014, was prepared by PIKA International Inc.

Ohio EPA has reviewed the document cited above and has no comments on the document. Therefore, the "Draft Removal Action Report for Environmental Remediation Services for the Former Ravenna Army Ammunition Plant (RVAAP) Restoration Program Portage/Trumbull Counties, RVAAP-04 Open Demolition Area #2" is approved as drafted. Please submit the final document for Ohio EPA's records.

If you have any questions or concerns, please do not hesitate to contact me at (330) 963-1235.

Sincerely,

Nicholas Roope, Site Coordinator
Division of Environmental Response and Revitalization

NCR/nvr

cc: Gregory F. Moore, USACE, Louisville District
Katie Tait/Kevin Sedlak, Camp Ravenna Environmental Office, Newton Falls
Haney/Harris, Camp Ravenna Environmental Office, Vista Sciences, Newton Falls
ec: Rod Beals, Ohio EPA, NEDO, DERR
Nancy Zikmanis, Ohio EPA, NEDO, DERR
Justin Burke, Ohio EPA, CO, DERR
Andrew Kocher, Ohio EPA, NEDO, DERR

E-MAILED 12-08-2014 BMH

Scanned By: BMH Date: 12-08-2014

Northeast District Office • 2110 East Aurora Road • Twinsburg, OH 44087-1924
www.epa.ohio.gov • (330) 963-1200 • (330) 487-0769 (fax)

RECEIVED 12-08-2014

Appendix T

Comment Response Table

Comment Resolution Table

Installation: RVAAP/Camp Ravenna
Document: Draft Removal Action Report for Environmental Remediation Services at Ravenna Army Ammunition Plant
Reviewer(s): Katie Tait, Environmental Specialist 2, Ohio Army National Guard
Date: August 12, 2014

Cmt. No.	Page or Sheet	Comment	Recommendation	Response
1	General	"Removal Action Report" – Should this be titled as "Removal Action Completion Report"		As per PIKA's conversation with the reviewer on 12-15-14, no change to the document title is required.
2	Pg 9, Line 30-33	Need to insert the updated facility description that was sent out to all contractors.		As per PIKA's conversation with the reviewer on 12-15-14, no change to the document title is required.
3	Pg 19, Line 22	"weekly reports contained Appendix…" Insert in prior to Appendix.		Revision made as requested.