Draft

Remedial Action Report
for Soil, Sediment, and Surface Water
at RVAAP-13 Building 1200

Ravenna Army Ammunition Plant
Portage and Trumbull Counties, Ohio

Contract No. W912QR-04-D-0028
Delivery Order No. 0001

Prepared for:

US Army Corps of Engineers®

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Louisville District

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March 17, 2015

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14. ABSTRACT

This remedial action report summarizes activities performed in support of the plan for implementing Alternative 2 in accordance with the approved Record of Decision for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200. This remedial action report summarizes the excavation and removal of 376 tons of contaminated surface soil within the area of concern (AOC). Implementation of this remedial action resulted in attainment of CERCLA closure for soil, sediment, and surface water for the future land use (Military Training) or Unrestricted (Residential) Land Use.

15. SUBJECT TERMS

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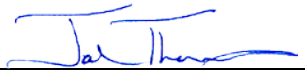
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Leidos has completed the Remedial Action Report for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 at the Ravenna Army Ammunition Plant, Portage and Trumbull Counties, Ohio. Notice is hereby given that an independent technical review has 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 data quality objectives; technical assumptions; methods, procedures, and materials to be used; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing United States Army Corps of Engineers (USACE) policy.



/Jed Thomas, PE
Study/Design Team Leader

3/13/2015
Date



W. Kevin Jago
Independent Technical Review Team Leader

3/13/2015
Date

Significant concerns and the explanation of the resolution are as follows:

Internal Leidos Independent Technical Review was conducted on the Preliminary Draft version of this document. Subsequent versions of this document (e.g., Draft and Final) will incorporate changes based on the technical reviews of USACE, the Ohio Army National Guard, and the Ohio Environmental Protection Agency. Internal Leidos Independent Technical Review comments are recorded on a Document Review Record per Leidos quality assurance procedure QAAP 3.1. This Document Review Record is maintained in the project file. Changes to the report addressing the comments have been verified by the Study/Design Team Leader.

As noted above, all concerns resulting from independent technical review of the project have been considered.



Lisa Jones-Bateman
Senior Program Manager

3/13/2015
Date

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Documentation of Ohio EPA Approval of Final Document

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Draft

Remedial Action Report for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200

Volume One - Main Report and Attachments
Version 1.0

Ravenna Army Ammunition Plant
Portage and Trumbull Counties, Ohio

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OHARNG = Ohio Army National Guard
Ohio EPA CO = Ohio Environmental Protection Agency Central Office
Ohio EPA DERR = Ohio Environmental Protection Agency Division of Environmental Response and Revitalization
REIMS = Ravenna Environmental Information Management System
USACE = United States Army Corps of Engineers

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ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
ARAR	Applicable and Relevant or Appropriate Requirement
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Chemical of Concern
CUG	Cleanup Goal
ERA	Ecological Risk Assessment
FS	Feasibility Study
ft	Feet
FWCUG	Facility-Wide Cleanup Goal
HAZWOPER	Hazardous Waste Operations and Emergency Response
HHRA	Human Health Risk Assessment
ISM	Incremental Sampling Method
OHARNG	Ohio Army National Guard
Ohio EPA	Ohio Environmental Protection Agency
PBA	Performance-Based Acquisition
PBA08 RI	PBA08 Remedial Investigation
PCB	Polychlorinated Biphenyl
QA	Quality Assurance
RAO	Remedial Action Objective
RAR	Remedial Action Report
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
RSL	Regional Screening Level
RVAAP	Ravenna Army Ammunition Plant
SAIC	Science Applications International Corporation
SVOC	Semi-Volatile Organic Compound
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USP&FO	U.S. Property and Fiscal Officer
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

This Remedial Action Report (RAR) describes the field activities specified in the *Remedial Design for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 and RVAAP-48 Anchor Test Area* (USACE 2014b) specific to the Building 1200 area of concern (AOC) at the former Ravenna Army Ammunition Plant (RVAAP). This report documents the attainment of the selected remedy in the *Record of Decision for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200* (USACE 2014a) (herein referred to as the Building 1200 ROD). The selected remedy for soil, sediment, and surface water at the Building 1200 AOC was to excavate contaminated surface soil [0-1 ft below ground surface (bgs)] to achieve a cleanup goal (CUG) of a 1,450 mg/kg concentration of manganese in surface soil for Unrestricted (Residential) Land Use. This CUG is the RVAAP facility-wide background concentration for manganese in surface soil. No chemicals of concern (COCs) were identified in subsurface soil, sediment, or surface water at the AOC; therefore, no action was required for these media.

The remedial action described within this RAR attained the remedial action CUG and remedial action objective established in the Building 1200 Record of Decision (ROD). During field activities performed from November 2014 to January 2015, 376 tons of contaminated soil was removed from two distinct areas at the Building 1200 AOC. For purposes of this report, the contaminated area at incremental sampling method (ISM) sampling locations B12ss-016M and B12ss-017M (just east of the footprint of former Building 1200) is referred to as the "Open Area" (Figure 3-1). The contaminated area at ISM sampling location B12ss-022M (ditch south of the former settling pond discharge area) is referred to as the "Drainage Ditch" (Figure ES-2). The excavated contaminated soil was transported for off-site disposal, and ISM confirmation samples were collected for laboratory analysis and comparison against the CUG.

The Open Area excavation was completed after the first phase of soil removal, as all confirmation samples were below the CUG of 1,450 mg/kg (Figure ES-1). Three phases of soil removal were performed for the Drainage Ditch. After the third phase of soil removal, confirmation sample results indicated that seven of the nine confirmation samples of the excavation extent were below the CUG of 1,450 mg/kg for manganese (Figure ES-2). The following provides further details of the samples that exceeded the CUG:

1. Confirmation sample B12cs-073M was representative of the excavation wall from point 24 to point 26. To refine the areas that potentially required additional excavation, samples B12cs-072M (point 25 to point 26) and B12cs-074M (point 24 to point 25) were collected as subsamples of that same area. These subsamples had manganese concentrations below the CUG; therefore, the excavation wall is considered to have attained the CUG and no further soil removal is required.
2. Confirmation sample B12cs-075M was collected within a previous ISM sample location (B12ss-038M) which was sampled in February 2010 as part of the remedial investigation (RI) conducted at the Building 1200 AOC. Sample location B12ss-038M had a manganese concentration of 919 mg/kg, and the preceding Comprehensive Environmental Response,

Compensation, and Liability Act (CERCLA) documents determined that the area was not a risk to future receptors and did not require remediation. The manganese concentration in sample B12cs-075M (1,700 mg/kg) was below both the U.S. Environmental Protection Agency (USEPA) Regional Screening Level (RSL) for residential exposure to soil (1,800 mg/kg) and the RVAAP facility-wide subsurface soil (1-13 ft bgs) background concentration (3,030 mg/kg).

The U.S. Army and Ohio Environmental Protection Agency (Ohio EPA) held discussions on January 7, 2015, regarding the status of the remedial action and the data described above. In consideration that: 1) residual manganese concentrations in sample B12cs-075M from the southernmost excavation wall were below the USEPA residential RSL for soil and the RVAAP facility-wide subsurface soil background value, 2) that all other areas of the excavation were confirmed to be below the CUG, and 3) that the southern excavation extent had extended into an ISM area previously determined to be below the CUG, Ohio EPA concurred that additional soil removal was not required to attain remedial action objectives and Unrestricted (Residential) Land Use. The modeled excavation extents and sample results are presented in Figures ES-1 and ES-2. The final surveyed excavation extents are presented in Figure ES-3.

Upon confirming that no further excavation was required, the excavation at the Open Area was backfilled using soil from a U.S. Army and Ohio EPA approved source and graded to match the existing drainage pattern and neighboring and/or original elevations. The Drainage Ditch was backfilled with No. 3 coarse aggregate and graded to neighboring and/or original elevations. Re-vegetation and re-seeding of disturbed areas at the Open Area took place during the week of December 8, 2014, using seed mixtures detailed in Tables 8-3 and 8-4 of the remedial design (USACE 2014b). Re-seeding of the disturbed areas at and near the Drainage Ditch will be completed once the weather is more conducive for restoration activities.

By achieving the remedial action objectives, the Building 1200 AOC allows for Unrestricted (Residential) Land Use for soil, sediment, and surface water. Land use controls, CERCLA five-year reviews, or operations and maintenance sampling are not required for these media.

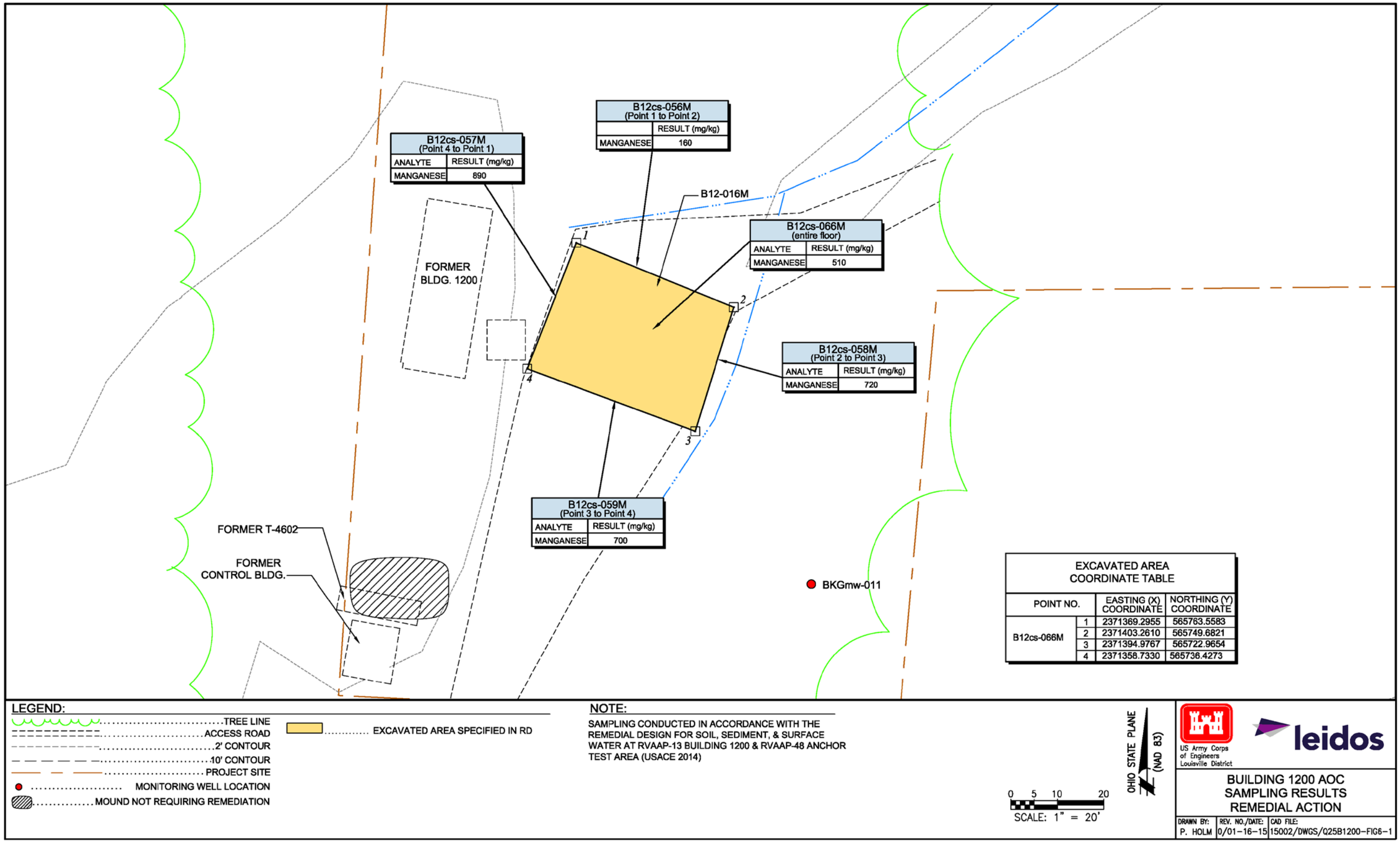


Figure ES-1. Excavation Area, Open Area (Based on Field Estimates)

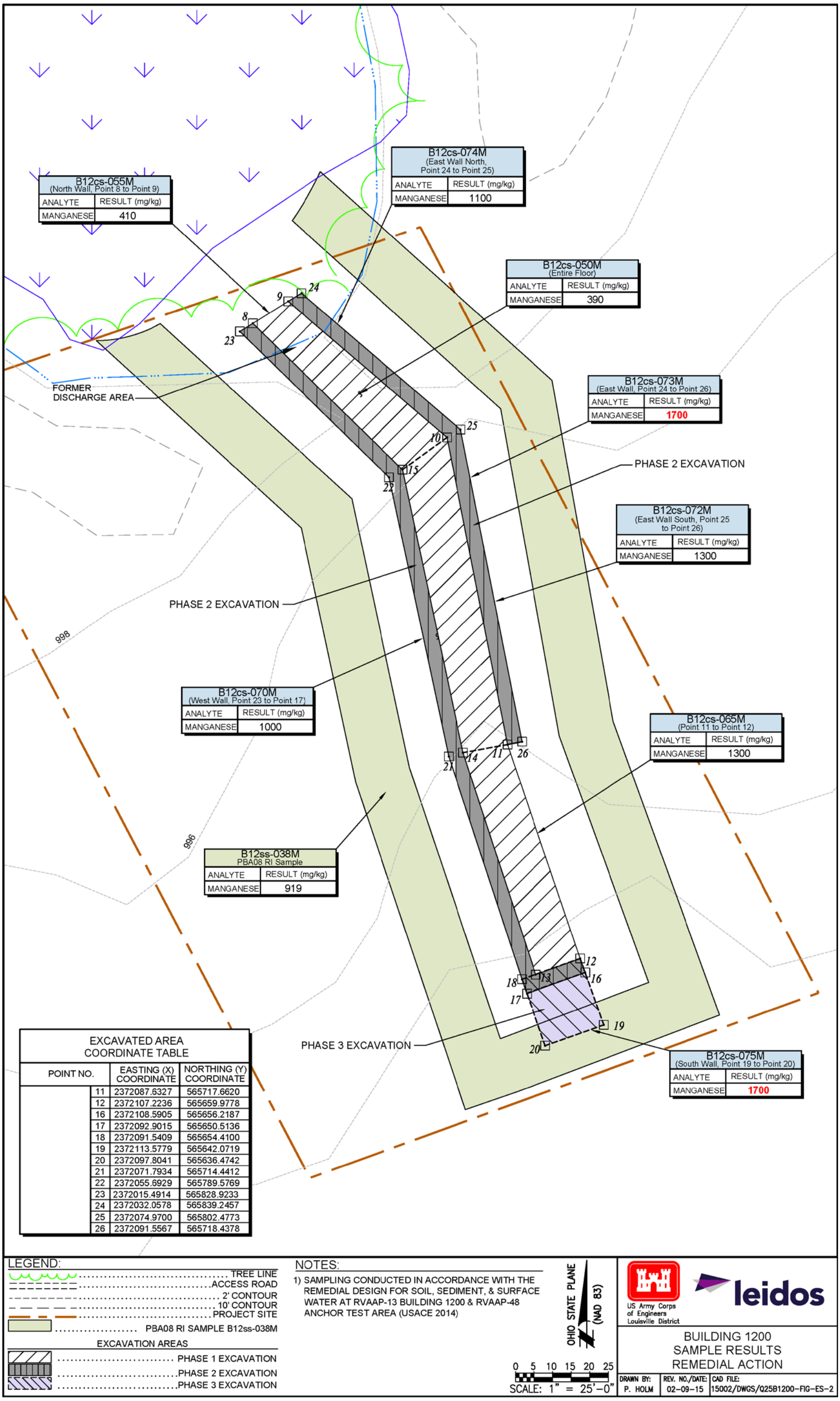


Figure ES-2. Excavation Area, Drainage Ditch (Based on Field Estimates)

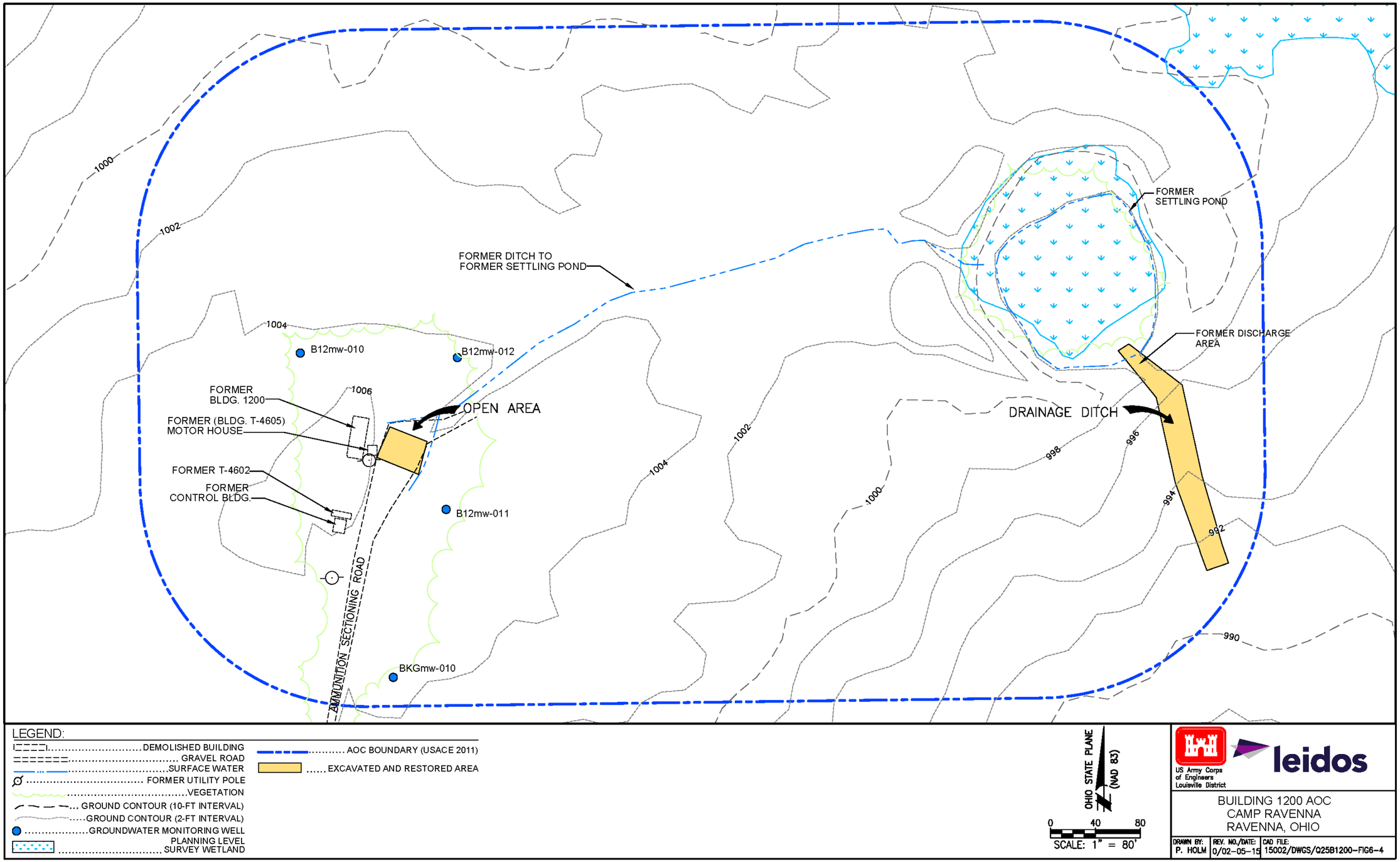


Figure ES-3. Excavation Area, Drainage Ditch (Final Surveyed Extent)

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1.0 INTRODUCTION

Leidos Engineering of Ohio, Inc. [formerly part of Science Applications International Corporation (SAIC)] has been contracted by the U.S. Army Corps of Engineers (USACE), Louisville District to provide environmental services to achieve response complete, remedy in place, or site closeout at the Building 1200 (RVAAP-13) area of concern (AOC) within the former Ravenna Army Ammunition Plan (RVAAP) in Ravenna, Ohio. This Remedial Action Report (RAR) describes the field activities specified in the *Remedial Design for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 and RVAAP-48 Anchor Test Area* (USACE 2014b) (herein referred to as the RD) specific to the Building 1200 AOC and documents attainment of the selected remedy in the *Record of Decision for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200* (USACE 2014a) (herein referred to as the Building 1200 ROD).

This work is being performed in accordance with USACE, Louisville District, Multiple Award Remediation Contract W912QR-04-D-0028, Delivery Order No. 0001, under a Performance-based Acquisition (PBA). In addition, planning and performance of all work elements is being conducted in accordance with the requirements of the Ohio Environmental Protection Agency (Ohio EPA) *Director's Final Findings and Orders* dated June 10, 2004 (Ohio EPA 2004).

1.1 PURPOSE

The purpose of this RAR is to document completion of the selected remedial action alternative specified in the B1200 ROD and summarize field activities specified in the RD that are specific to the Building 1200 AOC. Remedial actions specific to RVAAP-48, Anchor Test Area, are summarized in a separate RAR.

The Building 1200 AOC will be used for Military Training. The remedial alternative selected in the Building 1200 ROD for soil, sediment, and surface water was Alternative 2: Attain Unrestricted (Residential) Land Use. Therefore, the selected remedy met and exceeded remedial action objectives (RAOs) for the future use. The Building 1200 ROD specified that surface soil [0-1 ft below ground surface (bgs) containing manganese exceeding cleanup goals (CUGs) should be remediated to a level protective of human health. No COCs were identified in subsurface soil, sediment, or surface water at the AOC; therefore, no action was required for these media.

The selected remedy was executed in accordance with the RD (USACE 2014b). This RAR presents the confirmation sampling scheme and analytical results which verify the achievement of Unrestricted (Residential) Land Use.

1.2 REPORT ORGANIZATION

This RAR is organized as follows:

- Section 2: describes the facility and AOC;

- Section 3: outlines RAOs and CUGs;
- Section 4: presents the project organization and coordination;
- Section 5: discusses construction mobilization and site preparation;
- Section 6: describes soil removal and confirmation sampling activities;
- Section 7: summarizes site restoration activities;
- Section 8: presents the conclusions;
- Section 9: lists the references used in the document.
- Appendices:
    - Appendix A. Utility Clearance
    - Appendix B. Field Change Request Forms
    - Appendix C. Laboratory Analytical Results
    - Appendix D. Manifest Log, Waste Profile, and Waste Manifests
    - Appendix E. Stormwater Construction Site Inspection Reports
    - Appendix F. Release of Rain Water from Secondary Containment Forms
    - Appendix G. Memorandum for Record
    - Appendix H. Property Management Plan Insertion

2.0 BACKGROUND INFORMATION

This section describes the former RVAAP, the Building 1200 AOC, and discusses previous investigations at the Building 1200 AOC.

2.1 FACILITY DESCRIPTION

The facility, consisting of 21,683 acres, 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 city of Newton Falls (Figure 2-1). The facility, previously known as RVAAP, was formerly used as a load, assemble, and pack facility for munitions production. As of September 2013, administrative accountability for the entire acreage of the facility has been transferred to the U.S. Property and Fiscal Officer (USP&FO) for Ohio and was subsequently licensed to the Ohio Army National Guard (OHARNG) for use as a military training site (Camp Ravenna). References to RVAAP in this document relate to previous activities at the facility related to former munitions production activities or to activities being conducted under the restoration/cleanup program.

2.2 BUILDING 1200 AOC BACKGROUND INFORMATION AND PREVIOUS INVESTIGATIONS

The Building 1200 AOC is a former operational facility designated as RVAAP-13. The AOC is approximately 7.7 acres and is situated in the eastern portion of Camp Ravenna (Figures 2-2 and 2-3). From 1941 to 1971, three buildings served as a quality assurance (QA) inspection station that encompassed disassembly of production line munitions items from explosive melt-pour operations. Building demolition activities took place between November 2004 and August 2005, and no buildings or structures remain at the AOC. The remaining surface features include the access road, drainage ditch from the former operations area to the former settling pond, and the former settling pond and associated discharge area.

Since 1989, the Building 1200 AOC has been included in various assessments and investigations including:

- Resource Conservation and Recovery Act Facility Assessment (Jacobs 1989);
- Preliminary Assessment for the Characterization of Areas of Contamination (USACE 1996);
- Phase I Remedial Investigation of High-Priority Areas of Concern (USACE 1998); and
- Characterization of 14 AOCs (MKM 2007).

In 2010, the PBA08 Remedial Investigation (PBA08 RI) was implemented to supplement historical data available for the AOC and support development of the *Remedial Investigation/Feasibility Study Report for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200* (USACE 2012). Sampling results were combined with applicable results of previous sampling events to evaluate the nature and extent of contamination, examine contaminant fate and transport, conduct risk assessments, and

evaluate potential remedial alternatives. A human health risk assessment (HHRA) and ecological risk assessment (ERA) were conducted to document chemicals of concern (COCs) that may pose potential risks to human health and the environment resulting from exposure to contamination at the Building 1200 AOC. Manganese was the only human health COC identified in surface soil (0-1 ft bgs). No COCs were identified for subsurface soil (1-13 ft bgs), sediment, or surface water. The ERA concluded with a Level II Screening Level ERA, recommending no further action from the ecological perspective. The contaminant fate and transport evaluation indicated soil remediation was not warranted to protect groundwater resources.

The CUG for manganese in surface soil was developed in the feasibility study (FS) to support the remedial alternative selection process for soil remediation. The remedial alternatives were developed by combining general response actions, technology types, and process options retained from screening remedial technology/process options. Remedial alternatives assured adequate protection of human health and the environment, achieved RAOs, met Applicable and Relevant or Appropriate Requirements (ARARs), and permanently and significantly reduced the volume, toxicity, and/or mobility of COCs. Remedial alternatives were evaluated against the nine Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) criteria (overall protection of human health and the environment; compliance with ARARs; long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; cost; state acceptance; and community acceptance) and were compared against one another as part of the selection process.

The recommended alternative in the FS [and further modified in the *Proposed Plan for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200* (USACE 2013) and approved in the *Record of Decision for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200* (USACE 2014a)] was Attain Unrestricted (Residential) Land Use. This alternative involved removing shallow surface soil (0-1 ft bgs) at incremental sampling method (ISM) locations B12ss-016M, B12ss-017M, and B12ss-022M (Figure 2-3) that exceeded the CUG for manganese (1,450 mg/kg). For purposes of this RAR, ISM sampling locations B12ss-016M and B12ss-017M are referred to as the Open Area and ISM sample location B12ss-022M is referred to as the Drainage Ditch.

2.3 COMMUNITY INVOLVEMENT AND REGULATORY APPROVAL

The *Proposed Plan for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200* (USACE 2013) was presented to the public on August 7, 2013. A 30-day public comment period was conducted from July 25, 2013 to August 23, 2013 and a public meeting was held on August 7, 2013 so the public could provide comments for consideration as part of the remedy selection process. The Army did not receive any verbal or written comments during the public meeting and public comment period.

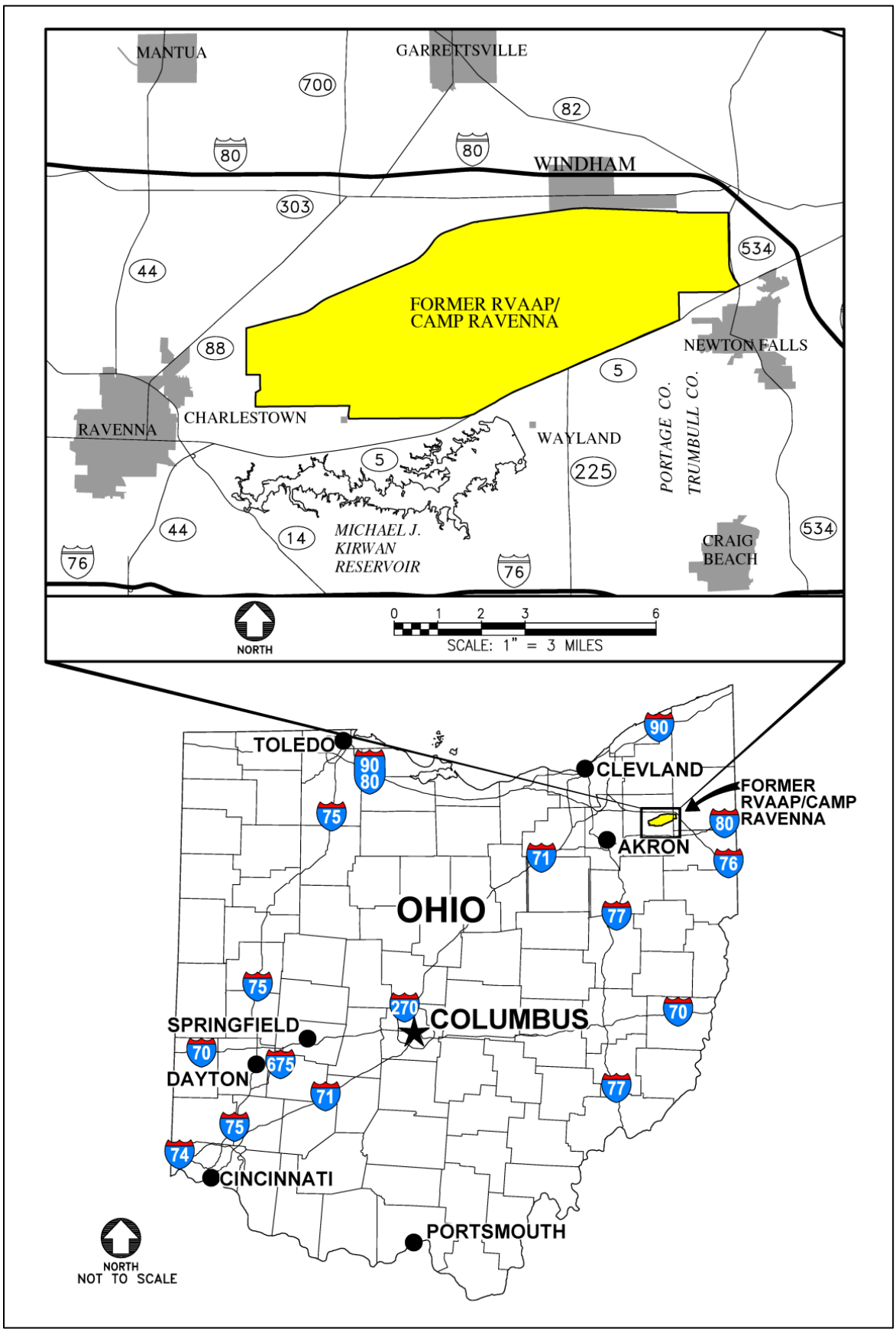
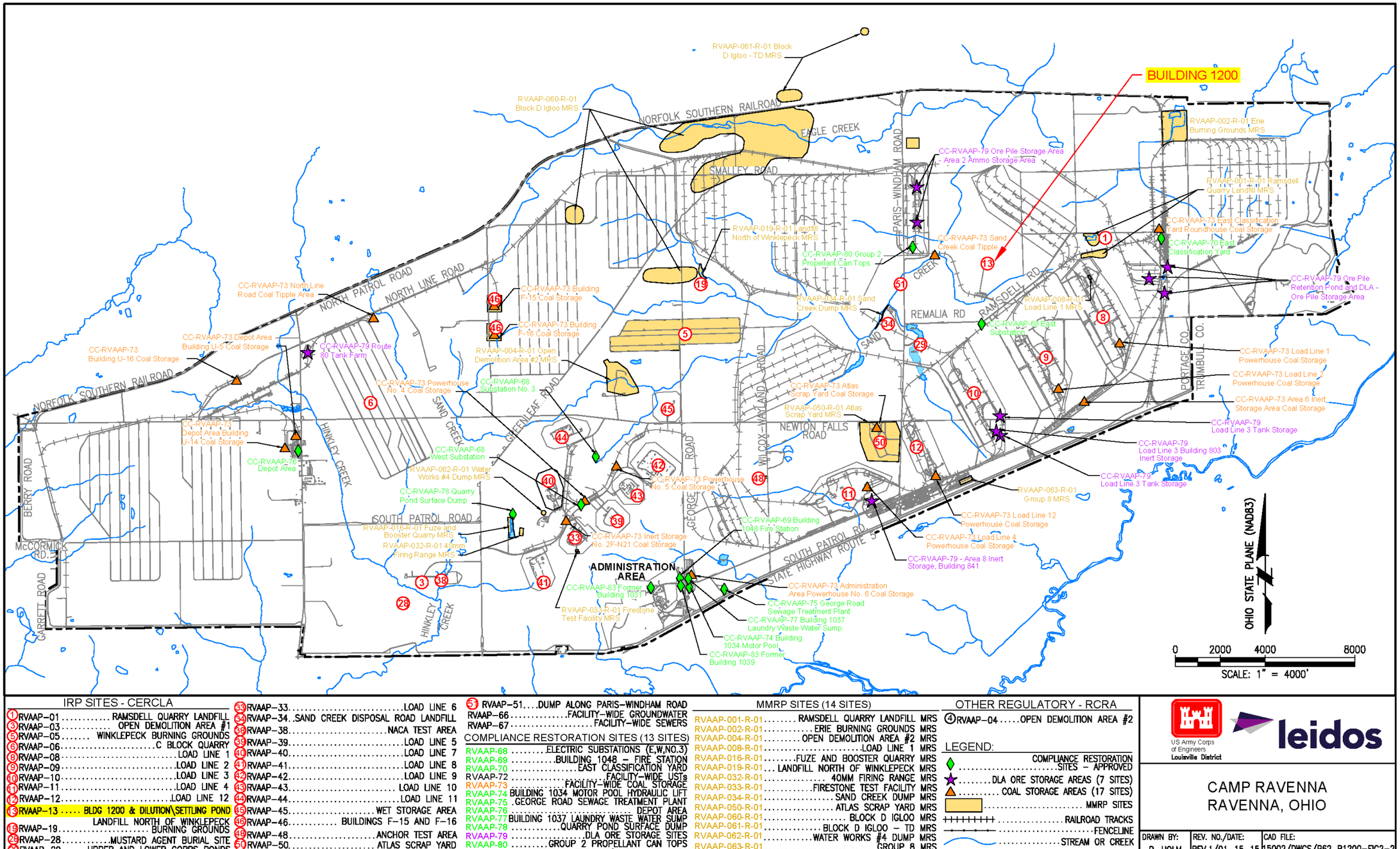


Figure 2-1. General Location and Orientation of Camp Ravenna

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IRP SITES - CERCLA

1	RVAAP-01 ..... RAMSDELL QUARRY LANDFILL
3	RVAAP-03 ..... OPEN DEMOLITION AREA #1
5	RVAAP-05 ..... WINKLEPECK BURNING GROUNDS
6	RVAAP-06 ..... C BLOCK QUARRY
8	RVAAP-08 ..... LOAD LINE 1
9	RVAAP-09 ..... LOAD LINE 2
10	RVAAP-10 ..... LOAD LINE 3
11	RVAAP-11 ..... LOAD LINE 4
12	RVAAP-12 ..... LOAD LINE 12
13	RVAAP-13 ..... BLDG 1200 & DILUTION\SETTLING POND
	LANDFILL NORTH OF WINKLEPECK
19	RVAAP-19 ..... BURNING GROUNDS
28	RVAAP-28 ..... MUSTARD AGENT BURIAL SITE
29	RVAAP-29 ..... UPPER AND LOWER COBBS PONDS
33	RVAAP-33 ..... LOAD LINE 6
34	RVAAP-34 ..SAND CREEK DISPOSAL ROAD LANDFILL
38	RVAAP-38 ..... NACA TEST AREA
39	RVAAP-39 ..... LOAD LINE 5
40	RVAAP-40 ..... LOAD LINE 7
41	RVAAP-41 ..... LOAD LINE 8
42	RVAAP-42 ..... LOAD LINE 9
43	RVAAP-43 ..... LOAD LINE 10
44	RVAAP-44 ..... LOAD LINE 11
45	RVAAP-45 ..... WET STORAGE AREA
46	RVAAP-46 ..... BUILDINGS F-15 AND F-16
48	RVAAP-48 ..... ANCHOR TEST AREA
50	RVAAP-50 ..... ATLAS SCRAP YARD
51	RVAAP-51 ....DUMP ALONG PARIS-WINDHAM ROAD
	RVAAP-66 ..... FACILITY-WIDE GROUNDWATER
	RVAAP-67 ..... FACILITY-WIDE SEWERS

COMPLIANCE RESTORATION SITES (13 SITES)

RVAAP-68	ELECTRIC SUBSTATIONS (E,W,NO.3)
RVAAP-69	BUILDING 1048 – FIRE STATION
RVAAP-70	EAST CLASSIFICATION YARD
RVAAP-72	FACILITY-WIDE USTs
RVAAP-73	FACILITY-WIDE COAL STORAGE
RVAAP-74	BUILDING 1034 MOTOR POOL HYDRAULIC LIFT
RVAAP-75	GEORGE ROAD SEWAGE TREATMENT PLANT
RVAAP-76	DEPOT AREA
RVAAP-77	BUILDING 1037 LAUNDRY WASTE WATER SUMP
RVAAP-78	QUARRY POND SURFACE DUMP
RVAAP-79	DLA ORE STORAGE SITES
RVAAP-80	GROUP 2 PROPELLANT CAN TOPS
RVAAP-83	FORMER BUILDINGS 1031 AND 1039

MMRP SITES (14 SITES)

RVAAP-001-R-01	RAMSDELL QUARRY LANDFILL MRS
RVAAP-002-R-01	ERIE BURNING GROUNDS MRS
RVAAP-004-R-01	OPEN DEMOLITION AREA #2 MRS
RVAAP-008-R-01	LOAD LINE 1 MRS
RVAAP-016-R-01	FUZE AND BOOSTER QUARRY MRS
RVAAP-019-R-01	LANDFILL NORTH OF WINKLEPECK MRS
RVAAP-032-R-01	40MM FIRING RANGE MRS
RVAAP-033-R-01	FIRESTONE TEST FACILITY MRS
RVAAP-034-R-01	SAND CREEK DUMP MRS
RVAAP-050-R-01	ATLAS SCRAP YARD MRS
RVAAP-060-R-01	BLOCK D IGLOO MRS
RVAAP-061-R-01	BLOCK D IGLOO – TD MRS
RVAAP-062-R-01	WATER WORKS #4 DUMP MRS
RVAAP-063-R-01	GROUP 8 MRS

OTHER REGULATORY - RCRA

4	RVAAP-04 ..... OPEN DEMOLITION AREA #2

LEGEND:

- COMPLIANCE RESTORATION SITES – APPROVED
- DLA ORE STORAGE AREAS (7 SITES)
- COAL STORAGE AREAS (17 SITES)
- MMRP SITES
- RAILROAD TRACKS
- FENCELINE
- STREAM OR CREEK

US Army Corps of Engineers Louisville District

leidos

CAMP RAVENNA
RAVENNA, OHIO

DRAWN BY:	REV. NO./DATE:	CAD FILE:
P. HOLM	REV.1/01-15-15	15002/DWGS/P62_B1200-FIG2-2

Figure 2-2. Camp Ravenna Installation Map

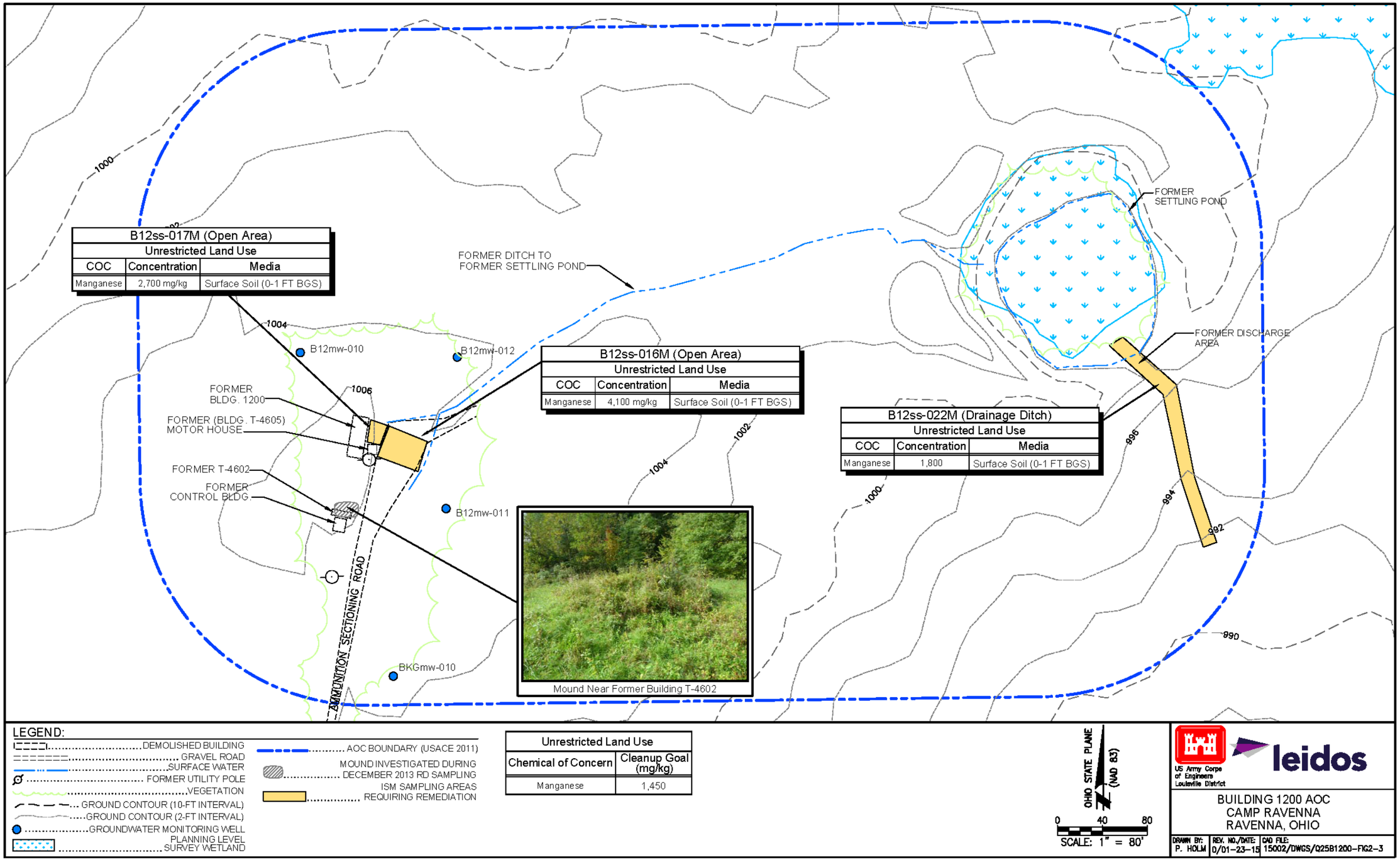


Figure 2-3. Features of the Building 1200 AOC

3.0 REMEDIAL ACTION OBJECTIVE AND CLEANUP GOAL

This section describes the RAO and CUG for the selected remedy. The RAO specifies requirements the remedial action must fulfill to protect human health and the environment under current and future land use. CUGs are the chemical concentrations required to achieve the RAO.

3.1 REMEDIAL ACTION OBJECTIVE

The RAO specified in the Building 1200 ROD was to prevent: (1) National Guard Trainee exposure to COCs above CUGs in soil; (2) adverse ecological effects from previous AOC activities; and (3) negative groundwater impacts from contaminant migration from source media (e.g., soil). The selected remedy [Alternative 2: Attain Unrestricted (Residential) Land Use] attained and exceeded the RAO by remediating manganese in surface soil to a depth of 1 ft bgs at ISM locations B12ss-016M, B12ss-017M, and B12ss-022M. No remedial actions were required for subsurface soil, sediment, or surface water. No remedial actions were required to protect ecological resources or groundwater.

3.2 REMEDIAL ACTION CLEANUP GOAL

Table 3-1 presents the CUG to attain Unrestricted (Residential) Land Use for the Building 1200 AOC. The HHRA identified manganese in surface soil (0-1 ft bgs) as a COC for the National Guard Trainee and Resident Farmer. Consequently, surface soil (0-1 ft bgs) at ISM locations B12ss-016M, B12ss-017M, and B12ss-022M required remediation to attain the future land use (Military Training) or Unrestricted (Residential) Land Use. No COCs were identified in subsurface soil, sediment, or surface water for either the National Guard Trainee or Resident Farmer.

Table 3-1. Summary of COCs, CUGs, and Locations Requiring Remedy at the Building 1200 AOC

Media	Chemicals of Concern	Cleanup Goals	Location and Depth Requiring Remediation (Manganese Concentration)
Surface Soil	Manganese	1,450 mg/kg[1]	B12ss-016M (4,100 mg/kg), B12ss-017M (2,700 mg/kg), B12ss-022M (1,800 mg/kg) at 0-1 ft bgs
Subsurface Soil	None	Not applicable	Not applicable
Sediment	None	Not applicable	Not applicable
Surface Water	None	Not applicable	Not applicable

[1] The cleanup goal for manganese is the Ravenna Army Ammunition Plant facility-wide background value for surface soil (0-1 ft bgs).
ft = Feet.
bgs = Feet below ground surface
mg/kg = Milligrams per kilogram.

3.3 REMEDIAL DESIGN SAMPLING

To ensure the areas with contamination at the Open Area (B12ss-016M and B12ss-017M) and Drainage Ditch (B12ss-022M) were adequately defined prior to the remedial action, and to refine areas and volumes of soil removal, the RD included provisions for additional sampling to ensure all contaminated soil was removed during this remedial action. RD sampling was conducted to collect surface soil (0-1 ft bgs) samples from nine ISM areas in December 2013 (Figure 3-1) to further refine the areas requiring soil removal. The removal of all contaminated soil was further ensured by confirmation ISM sampling conducted on the sidewalls and excavation floor after the soil removal activities.

RD sample results exceeding the manganese CUG at the Building 1200 AOC are presented in Table 3-2. The ISM sample locations above the CUG required soil removal with confirmation sampling. The ISM sample areas below the CUG (B12ss-041M and B12ss-046M) did not require soil removal.

Table 3-2. Remedial Design Sampling Results and Cleanup Goal Comparison

Station	Sample ID	Manganese Concentration (mg/kg)	Concentration Exceed Manganese CUG of 1,450 mg/kg?
B12ss-041M	B12ss-041M-0001-SO	690	No
B12ss-042M	B12ss-042M-0002-SO	3600	Yes
B12ss-043M	B12ss-043M-0004-SO	3600	Yes
B12ss-044M	B12ss-044M-0005-SO	4400	Yes
B12ss-045M	B12ss-045M-0006-SO	3500	Yes
B12ss-046M	B12ss-046M-0007-SO	550	No
B12ss-047M	B12ss-047M-0008-SO	1900	Yes
B12ss-048M	B12ss-048M-0010-SO	1500	Yes
B12ss-049M	B12ss-049M-0011-SO	1500	Yes

CUG = Cleanup goal.
ID = Identification.
mg/kg = Milligrams per kilogram.

3.4 BUILDING 1200 MOUND REMEDIAL DESIGN SAMPLING

As discussed in Section 4.3 of the *Remedial Investigation/Feasibility Study Report for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200* (USACE 2012), an asbestos visual inspection did not identify any asbestos on the ground surface at the AOC. However, the inspection recommended further investigation of a 4 ft high by 21 ft long by 13 ft wide mound near the footprint of former Building T-4602. As part of RD activities, a total of 30 push-probe aliquots were collected and visually examined in December 2013. In addition, five test pits along the sides and top of the mound were excavated with a shovel to the base of the mound, and the surface of the mound was cleared of snow and vegetation to allow for visual inspection. No building debris or construction materials were observed in the push probes, on the surface of the mound, or in the test pits (USACE 2014b). Soil samples were collected, and none of the sample results exceeded the facility-wide background values and Resident Receptor (Adult/Child) facility-wide cleanup goals (FWCUGs) for RVAAP. Therefore, no remedial actions were required for this mound.

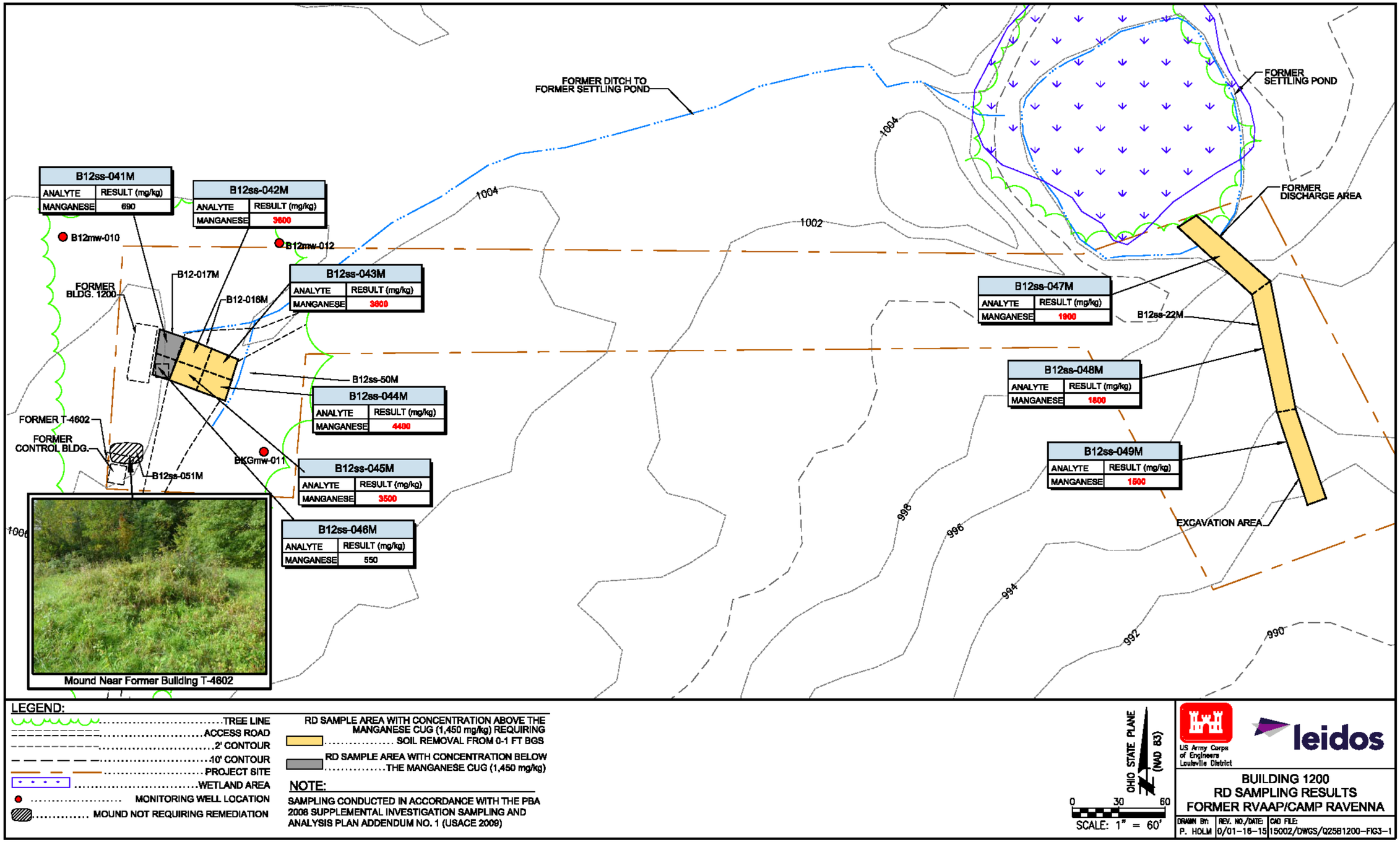


Figure 3-1. Remedial Design Sampling Scheme

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4.0 PROJECT ORGANIZATION AND COORDINATION

This section presents the project organization and describes the project team coordination. Figure 4-1 presents the project organization chart for this remedial action. The U.S. Army was the lead entity and was responsible for implementing this remedial action. USACE, Louisville District provided technical oversight on behalf of the U.S. Army. Ohio EPA was the regulatory authority governing work on this remedial action. Leidos was the primary contractor responsible for implementing the RD, which included the following:

- Selecting and procuring a qualified remedial subcontractor (Chemtron Corporation) to perform the work described herein;
- Providing project management and construction oversight;
- Coordinating transportation and disposal activities with the Camp Ravenna Environmental Office; and
- Collecting confirmation samples.

A full description of the roles and responsibilities is included in Section 2.0 of the RD.

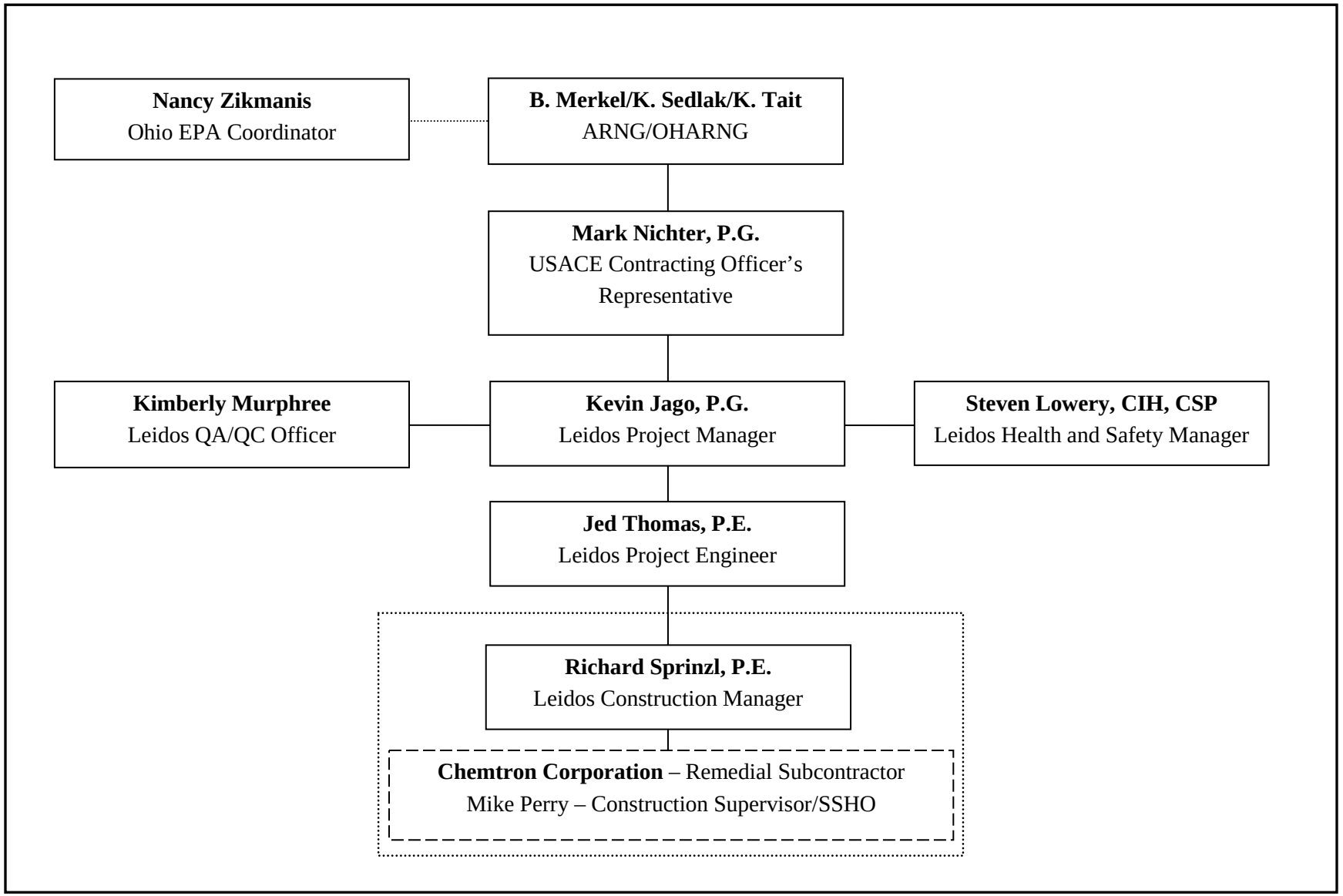


Figure 4-1. Project Organizational Chart

5.0 CONSTRUCTION MOBILIZATION

This section describes construction mobilization and site preparation activities required to implement the RD, including notification requirements and site preparation activities.

5.1 UTILITY CLEARANCE

On November 12, 2014, the U.S. Army confirmed there were no known subsurface hazards at or near the planned excavation areas. The e-mail documentation of the utility clearance is presented in Appendix A.

5.2 SITE CONTROL AND ACCESS

Prior to implementing the remedial action, Leidos submitted a roster of all personnel (including subcontractors) who would be working at the AOC. The personnel were all Hazardous Waste Operations and Emergency Response (HAZWOPER) trained, provided appropriate certifications, and received a briefing prior to conducting field activities. The Leidos Construction Manager coordinated with Camp Ravenna regarding incoming deliveries or pickups. Signs were erected along the traffic route to expedite deliveries, maintain traffic flow, promote safety, and prevent interference with other Camp Ravenna operations.

5.3 LAND SURVEY

Prior to starting excavation activities, the Leidos remedial action subcontractor (herein referred to as Subcontractor) established the initial horizontal limits of excavation by land survey for each removal area. The excavation limits were demarcated by wooden stakes to help guide operators implementing the soil removal activities.

5.4 VEGETATION CLEARING

On November 7, 2014, Leidos conducted a site walk with Camp Ravenna Environmental Office to review planned clearing and grubbing activities. On November 18 and 19, 2014, the site was grubbed and cleared to facilitate equipment access along the off-road haul route and excavate the contaminated soil from the Drainage Ditch. The Subcontractor removed as few trees as possible to perform the excavation. A few large trees near the Drainage Ditch required removal prior to implementing additional excavation activities. In accordance with Camp Ravenna Environmental Office requirements, these large trees were cut to manageable sections and staged near Building 812 for public sale as firewood under the Camp Ravenna natural resources program. Scrub, small trees, and saplings were grubbed and cleared without cutting or chipping and scattered at the project site.

5.5 STORMWATER CONTROLS

In accordance with the RD, silt fencing was installed to prevent siltation from the construction area at both excavation areas. In addition to the RD specifications, a straw bale check dam was placed within the two ditches north and east of the Open Area and at the north end of the Drainage Ditch. A portion of the Open Area was used as a stockpile area; a straw bale berm was constructed around the stockpile area. Photograph 5-1 shows the silt fence downgradient of the Open Area, and Photograph 5-2 shows the straw bale berm around the stockpile area. Photograph 5-3 shows the silt fence downgradient of the Drainage Ditch, and Photograph 5-4 shows the straw bale check dam north of the Drainage Ditch. Excavation areas and stockpiles area were opened at the beginning of each day and covered with impermeable plastic sheeting at the end of each day's activities, where appropriate. Stormwater controls were inspected by the Leidos Construction Manager on a daily basis during construction activities, and on a weekly basis between construction phases. The completed stormwater construction site inspection reports are presented in Appendix E.

The RD required containerization and characterization of any excavation water that collected in the excavated areas with soil remaining above the CUG. Excavation water was defined as water (e.g., rainwater, groundwater) that came in contact with any contaminated areas. Due to the best management practices employed during remedial activities (e.g., covering the excavated area at night), no excavation water required containerization. Stormwater accumulated on top of plastic in both excavation areas. The Subcontractor removed the non-contact stormwater with either a submersible or trash pump, and it was then pumped through downgradient stormwater controls. The discharge was monitored for adequate sediment control. The quantities of discharges were tracked on the Release of Rain Water from Secondary Containment form provided by Camp Ravenna Environmental Office. The completed forms are presented in Appendix F.



Photograph 5-1. Silt Fence Installed Downgradient of the Open Area



Photograph 5-2. Straw Bale Berm around the Stockpile Area



Photograph 5-3. Silt Fence Installed Downgradient of the Drainage Ditch



Photograph 5-4. Straw Bale Check Dam at the Drainage Ditch

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6.0 EXCAVATION AND SAMPLING ACTIVITIES

This section summarizes the soil excavation and disposal activities conducted during this remedial action.

6.1 SOIL REMOVAL AND CONFIRMATION SAMPLING PROCEDURES

Soil removal activities began on November 19, 2014, and were completed on December 22, 2014. Appendix D contains the manifest log, waste profile, and waste manifests. During the soil removal activities, 376 tons of non-hazardous soil was removed from the Open Area and Drainage Ditch and stockpiled within the Open Area. Stockpiled soil was transferred to lined, on-road haul trucks for off-site disposal. Plastic sheeting was placed between the stockpile area and truck to contain spillage. Any spillage was transferred to the stockpile or into a haul truck. Once the on-road haul truck was filled, the exterior of the truck was inspected to ensure no contaminated soil was present. The truck was covered prior to leaving the construction site. Once the on-road haul truck left the site, the contaminated soil was transported for acceptance by Envirite of Ohio in Canton, Ohio, and ultimately disposed at American Landfill in Waynesburg, Ohio. A 312E Hydraulic Excavator was used to excavate soil to a minimum of 1 ft bgs from both removal areas at the Building 1200 AOC.

Two field change requests (FCR-RVAAPB1200-001 and FCR-RVAAPB1200-003) were approved for the potential use of drying agents (Calciment© and Stabl-Zorb) in the event the soil was too saturated for transport or acceptance by the disposal facility. Neither of the drying agents was needed at the Building 1200 AOC, as the soil was adequately dry for transport and acceptance. The field change request forms for this project are presented in Appendix B.

Excavation equipment was decontaminated after coming in contact with contaminated soil and before contacting other materials in accordance with Section 6.4 of the RD (USACE 2014b). Additionally, the excavation equipment was decontaminated prior to being removed from the work site. The Leidos Field Manager inspected equipment prior to handling restoration materials or demobilization.

After excavation activities were completed, confirmatory ISM samples were collected from excavation sidewalls and floors and analyzed in accordance with Section 7.0 of the RD (USACE 2014b). Disposable sampling equipment, including sterile plastic scoops and foil pans were used to collect ISM sample aliquots; therefore, no decontamination was required. All confirmatory samples were dried, sieved, and ground finely by TestAmerica Laboratories, Inc. (located in North Canton, Ohio) and were analyzed for total manganese. The results were compared against the CUG of 1,450 mg/kg. All confirmation soil sample results are presented in Appendix C.

Sections 6.2 and 6.3 describe the soil removal activities and confirmation sampling in further detail.

6.2 OPEN AREA

Surface soil removed from the Open Area consisted mainly of ballast, gravel, topsoil, and sandstone. The excavation bottom was sandstone with some large rocks. The excavated soil was directly loaded into lined on-road haul trucks. Photograph 6-1 shows the removal and loading of surface soil from the contaminated area, and Photograph 6-2 shows the covered and secured excavated area and remaining stockpile.



Photograph 6-1. Removing and Loading Surface Soil from the Open Area



Photograph 6-2. Covered and Secured Excavated Open Area and Stockpile

Five confirmatory ISM samples (plus one field duplicate) were collected from the excavation footprint at locations B12cs-056M, B12cs-057M, B12cs-058M, B12cs-059M, and B12cs-066M (Figure 6-1). The confirmation sample results showed the remedial activities attained the CUG for manganese, and no additional soil removal was required from this area. The confirmation soil sample results are summarized in Table 6-1 and presented in Appendix C. Figure 6-1 shows the plan view of the excavated area.

Table 6-1. Confirmation Sample Results, Open Area

Location			Sample ID	Manganese Concentration (mg/kg)	Lab Result below Cleanup Goal?[a]
Description	Field Point	Sample Location			
Northern wall	Point 1 to 2	B12cs-056M	B12cs-056M-0022-SO	160	Yes
Northern wall, field duplicate	Point 1 to 2	B12cs-056M	B12cs-056M-0027-FD	120	Yes
Western wall	Point 4 to 1	B12cs-057M	B12cs-057M-0023-SO	890	Yes
Eastern wall	Point 2 to 3	B12cs-058M	B12cs-058M-0024-SO	720	Yes
Southern wall	Point 3 to 4	B12cs-059M	B12cs-059M-0025-SO	700	Yes
Excavation floor	All	B12cs-066M	B12cs-066M-0021-SO	510	Yes

[a] Remedial action cleanup goal for manganese in soil is 1,450 mg/kg.
ID = Identification.
mg/kg = Milligrams per kilogram.

6.3 DRAINAGE DITCH

Three phases of soil excavation and confirmation sampling from the Drainage Ditch were required. The following subsections describe these phases in detail.

6.3.1 Phase 1

Phase 1 excavation of the Drainage Ditch consisted of removing the entirety of ISM location B12ss-022M to 1 ft bgs. Soil was excavated with the 312E Hydraulic Excavator and loaded into a Terramac RT9 tracked, off-road haul truck to transport the soil to the stockpile area. Excavated material mainly consisted of saturated organic material, silt and clay (excavation floor). Photograph 6-3 shows the removal of surface soil from the Drainage Ditch, and Photograph 6-4 shows the loading of contaminated soil into the tracked off-road haul truck. Photograph 6-5 shows the completed Phase 1 removal of surface soil from the contaminated ditch area, and Photograph 6-6 shows the loading of stockpiled soil into an on-road haul truck.



Photograph 6-3. Removing Surface Soil from the Drainage Ditch (Phase 1)



Photograph 6-4. Loading Contaminated Soil into the Tracked Truck (Phase 1)



Photograph 6-5. Completed Excavation at northern end of Drainage Ditch (Phase 1)



Photograph 6-6. Loading Stockpiled Soil

Five confirmatory ISM samples were collected from the floor and sidewalls of the excavated Drainage Ditch (Figure 6-2). Based on the manganese concentrations of these confirmatory ISM samples, additional ISM soil samples representing subdivided areas may have been analyzed. The confirmation sample results showed the following:

1) B12cs-050M (floor) – Confirmation sample was below the CUG. No additional removal was required from the floor.
2) B12cs-055M (north wall, Point 8 to 9) - Confirmation sample was below the CUG. No additional removal was required from the wall.
3) B12cs-052M (south wall, Point 12 to 13) – Confirmation sample exceeded the CUG. Additional soil removal from this area required in Phase 2.
4) B12cs-053M (east wall, Point 9 to 12) – Confirmation sample exceeded the CUG. To refine areas requiring further soil removal, this sample location was further subdivided into three sample locations, sampled, and analyzed. The confirmation sample results of the subdivided sample locations are described below:
    a. B12cs-063M (east wall, Point 9 to 10) - Confirmation sample exceeded the CUG. Additional soil removal from this area required in Phase 2.
    b. B12cs-064M (east wall, Point 10 to 11) - Confirmation sample exceeded the CUG. Additional soil removal from this area required in Phase 2.
    c. B12cs-065M (east wall, Point 11 to 12) - Confirmation sample was below the CUG. No additional soil removal was required.
5) B12cs-054M (west wall, Point 8 to 13) - Confirmation sample exceeded the CUG. To refine areas requiring further soil removal, this sample location was further subdivided into three sample locations, sampled, and analyzed. The confirmation sample results of the subdivided sample locations are described below:
    a. B12cs-060M (west wall, Point 8 to 15) - Confirmation sample exceeded the CUG. Additional soil removal from this area required in Phase 2.
    b. B12cs-061M (west wall, Point 14 to 15) - Confirmation sample exceeded the CUG. Additional soil removal from this area required in Phase 2.
    c. B12cs-062M (west wall, Point 13 to 14) - Confirmation sample exceeded the CUG. Additional soil removal from this area required in Phase 2.

Phase 1 confirmation soil sample results are summarized in Table 6-2. Figure 6-2 shows the plan view of the Phase 1 excavated extent of B12ss-022M, confirmation sample locations, and identifies areas that required additional removal after the Phase 1 soil removal.

6.3.2 Phase 2

Phase 2 excavation of the Drainage Ditch, soil stockpiling, and loadout was performed the week of December 8, 2014. Additional tree clearing was completed for excavation and moving equipment. Surface soil (0-1 ft bgs) was excavated 4 ft beyond the existing lateral extent at the locations that had manganese concentrations above the CUG during the Phase 1 activities.

Table 6-2. Confirmation Sample Results, Drainage Ditch, Phase 1 Excavation

Location			Sample ID	Manganese Concentration (mg/kg)	Lab Result below Cleanup Goal?[a]
Description	Field Point	Sample Location			
Excavation floor	All	B12cs-050M	B12cs-050M-0016-SO	390	Yes
Northern wall	Point 8 to 9	B12cs-055M	B12cs-055M-0020-SO	410	Yes
Southern wall	Point 12 to 13	B12cs-052M	B12cs-052M-0017-SO	1900	No
Southern wall, field duplicate	Point 12 to 13	B12cs-052M	B12cs-052M-0026-FD	3600	No
Western wall	Point 8 to 13	B12cs-054M	B12cs-054M-0019-SO	1900	No
Western wall-Subdivided North	Point 8 to 15	B12cs-060M	B12cs-060M-0031-SO	2100	No
Western Wall-Subdivided Middle	Point 14 to 15	B12cs-061M	B12cs-061M-0032-SO	1800	No
Western wall-Subdivided South	Point 13 to 14	B12cs-062M	B12cs-062M-0033-SO	1500	No
Eastern wall	Point 9 to 12	B12cs-053M	B12cs-053M-0018-SO	1800	No
Eastern wall-Subdivided North	Point 9 to 10	B12cs-063M	B12cs-063M-0034-SO	1700	No
Eastern wall-Subdivided Middle	Point 10 to 11	B12cs-064M	B12cs-064M-0035-SO	2300	No
Eastern wall-Subdivided South	Point 11 to 12	B12cs-065M	B12cs-065M-0036-SO	1300	Yes

[a] Remedial action cleanup goal for manganese in soil is 1,450 mg/kg.
ID = Identification.
mg/kg = Milligrams per kilogram.

After the Phase 2 soil removal activities were complete, three confirmatory ISM samples were collected from the newly excavated side walls on December 10, 2014. Based on the manganese concentrations of these confirmatory ISM samples, additional ISM soil samples representing subdivided areas may have been analyzed. The confirmation sample results showed the following:

1) B12cs-070M (western wall, Point 17 to 23) - Confirmation sample was below the CUG. No additional removal was required from the wall.
2) B12cs-073M (eastern wall, Point 24 to 26) – Confirmation sample exceeded the CUG. To refine areas requiring further soil removal, this sample location was further subdivided into two sample locations, sampled, and analyzed. The confirmation sample results of the subdivided sample locations are described below:
    a. B12cs-072M (Point 25 to 26) - Confirmation sample was below the CUG. No additional removal was required from the wall.
    b. B12cs-074M (Point 24 to 25) - Confirmation sample was below the CUG. No additional removal was required from the wall.
3) B12cs-068M (south wall, Point 16 to 17) - Confirmation sample exceeded the CUG. Due to the small size of the sample location, this sample was not split. Since the location had a manganese concentration above the CUG, additional excavation was required in Phase 3.

The Phase 2 confirmation soil sample results are summarized in Table 6-3. Figure 6-3 shows the plan view of the excavated area after Phase 2 and confirmation sample locations.

Table 6-3. Confirmation Sample Results, Drainage Ditch, Phase 2 Excavation

Location			Sample ID	Manganese Concentration (mg/kg)	Lab Result below Cleanup Goal?[a]
Description	Field Point	Sample Location			
Western wall	Point 23 to 17	B12cs-070M	B12cs-070M-0040-SO	1000	Yes
Eastern wall	Point 24 to 26	B12cs-073M	B12cs-073M-0043-SO	1700	No
Eastern wall-Subdivided North	Point 24 to 25	B12cs-074M	B12cs-074M-0044-SO	1100	Yes
Eastern wall-Subdivided Middle	Point 25 to 26	B12cs-072M	B12cs-072M-0042-SO	1300	Yes
Southern wall	Point 17 to 16	B12cs-068M	B12cs-068M-0038-SO	4200	No

[a] Remedial action cleanup goal for manganese in soil is 1,450 mg/kg.
ID = Identification.
mg/kg = Milligrams per kilogram.

6.3.3 Phase 3

Phase 3 excavation of the southern wall (ISM sample B12cs-068M), soil stockpiling, and loadout was performed on December 22 and 23, 2014. The southern wall was excavated for an additional 15 ft laterally (0-1 ft bgs). One confirmation ISM sample, B12cs-075M (Figure 6-3, Point 19 to Point 20), and one field duplicate were collected on December 22, 2014. The laboratory results indicate manganese concentrations were slightly above the remedial action CUG. Photograph 6-7 shows the completed Phase 3 excavation, and Photograph 6-8 shows the Phase 3 stockpile area. The

confirmation soil sample results are summarized in Table 6-4. Figure 6-3 shows the plan view of the excavated area after Phase 3.



Photograph 6-7. Completed Phase 3 Excavation



Photograph 6-8. Phase 3 Soil Stockpile Area

Table 6-4. Confirmation Sample Results, Drainage Ditch, Phase 3 Excavation

Location			Sample ID	Manganese Concentration (mg/kg)	Lab Result below Cleanup Goal?[a]
Description	Field Point	Sample Location			
Southern wall	Point 19 to 20	B12cs-075M	B12cs-075M-0046-SO	1700	No
Southern wall, field duplicate	Point 19 to 20	B12cs-075M	B12cs-075M-0047-FD	1600	No

[a] Remedial action cleanup goal for manganese in soil is 1,450 mg/kg.
ID = Identification.
mg/kg = Milligrams per kilogram.

6.3.4 Meeting with Ohio EPA

The Army and Ohio EPA held a meeting on January 7, 2015, to discuss status of the Building 1200 AOC remedial action and confirmation sampling results for the Phase 3 excavation. Information presented and discussed at the meeting included the fact that the Phase 3 excavation had extended into a previous ISM sample location (B12ss-038M) collected in February 2010 as part of the PBA08 RI conducted at the Building 1200 AOC. The Phase 3 confirmation sample B12cs-075M was collected within the footprint of the previous ISM sample B12ss-038M. Sample location B12ss-038M had a manganese concentration of 919 mg/kg, and the preceding CERCLA documents determined that this area was not a risk to future receptors and did not require remediation. The manganese concentration in confirmation sample B12cs-075M (1,700 mg/kg) was below the U.S. Environmental Protection Agency (USEPA) Regional Screening Level (RSL) for residential exposure to soil (1,800 mg/kg) and the RVAAP facility-wide subsurface soil (1-13 ft bgs) background concentration (3,030 mg/kg).

In consideration that: 1) residual manganese concentrations in sample B12cs-075M from the southernmost excavation wall were below the USEPA residential RSL for soil and the RVAAP

facility-wide subsurface soil background value, 2) all other areas of the excavation were confirmed to be below the CUG, and 3) the southern excavation extent had extended into an ISM area previously determined to be below the CUG, Ohio EPA concurred that additional soil removal was not required to attain RAOs and Unrestricted (Residential) Land Use. Appendix G contains the Memorandum for Record documenting agreements made during this meeting.

6.4 POST-EXCAVATION LAND SURVEY

The Subcontractor utilized depth controls to ensure that a minimum of 1 ft depth was achieved throughout the excavation of surface soil at both removal areas, and was verified by Leidos Field Manager. A post-excavation land survey was performed at both excavation areas to record the final excavation extents presented in Figure 6-4.

6.5 UNEXPECTED MATERIALS

No unexpected materials were encountered during soil removal activities.

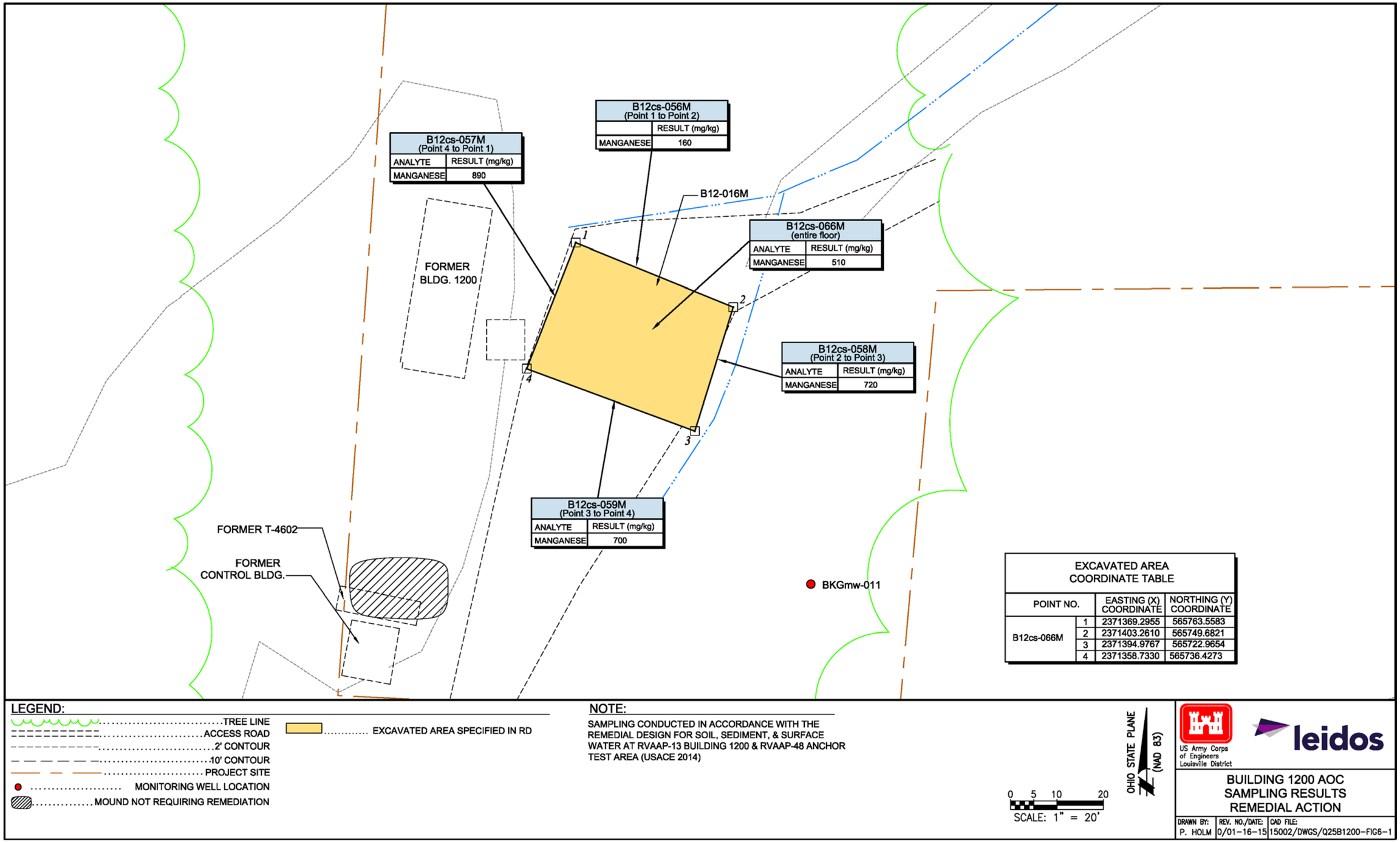


Figure 6-1. Excavation Area, Open Area (Based on Field Estimates)

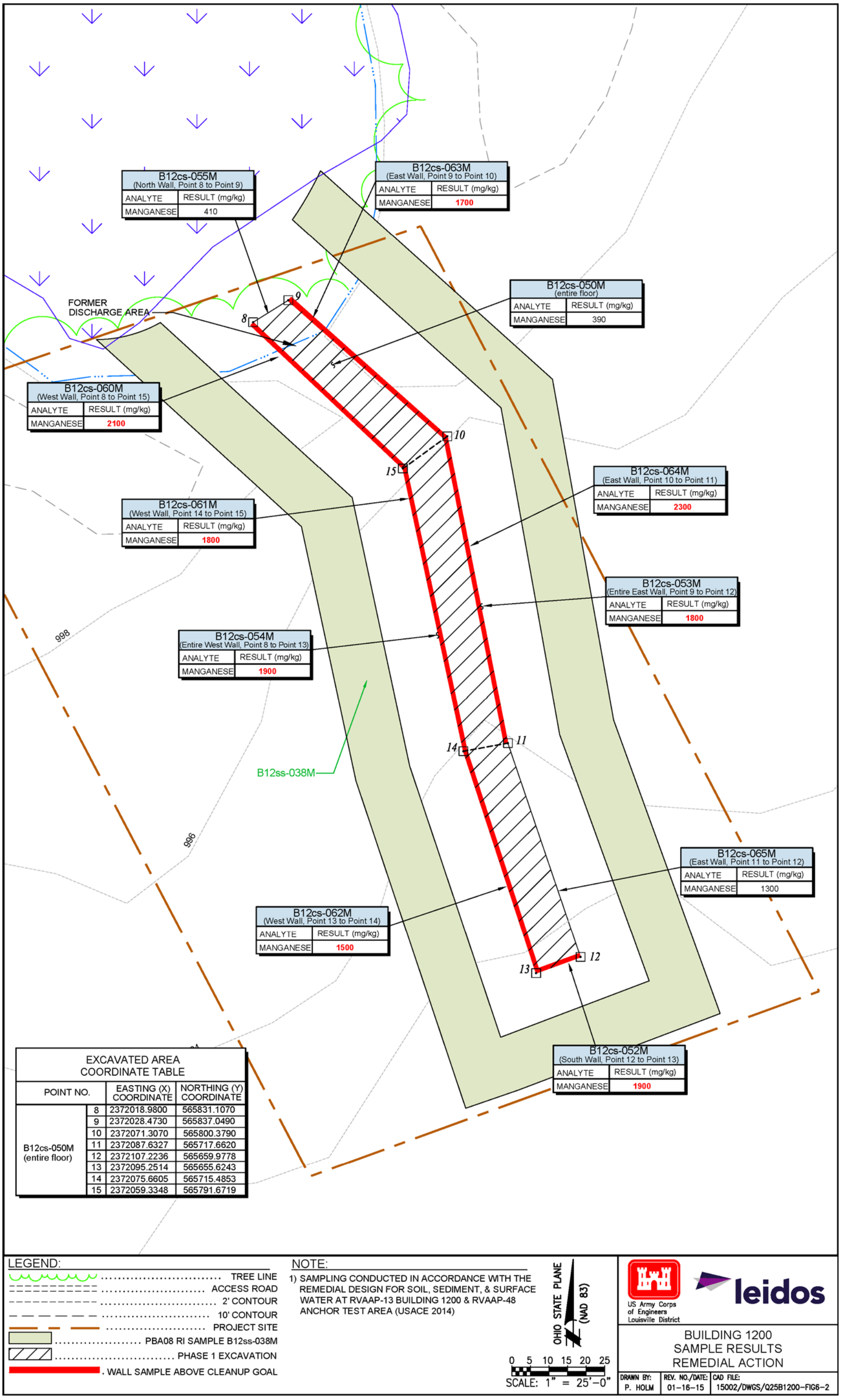
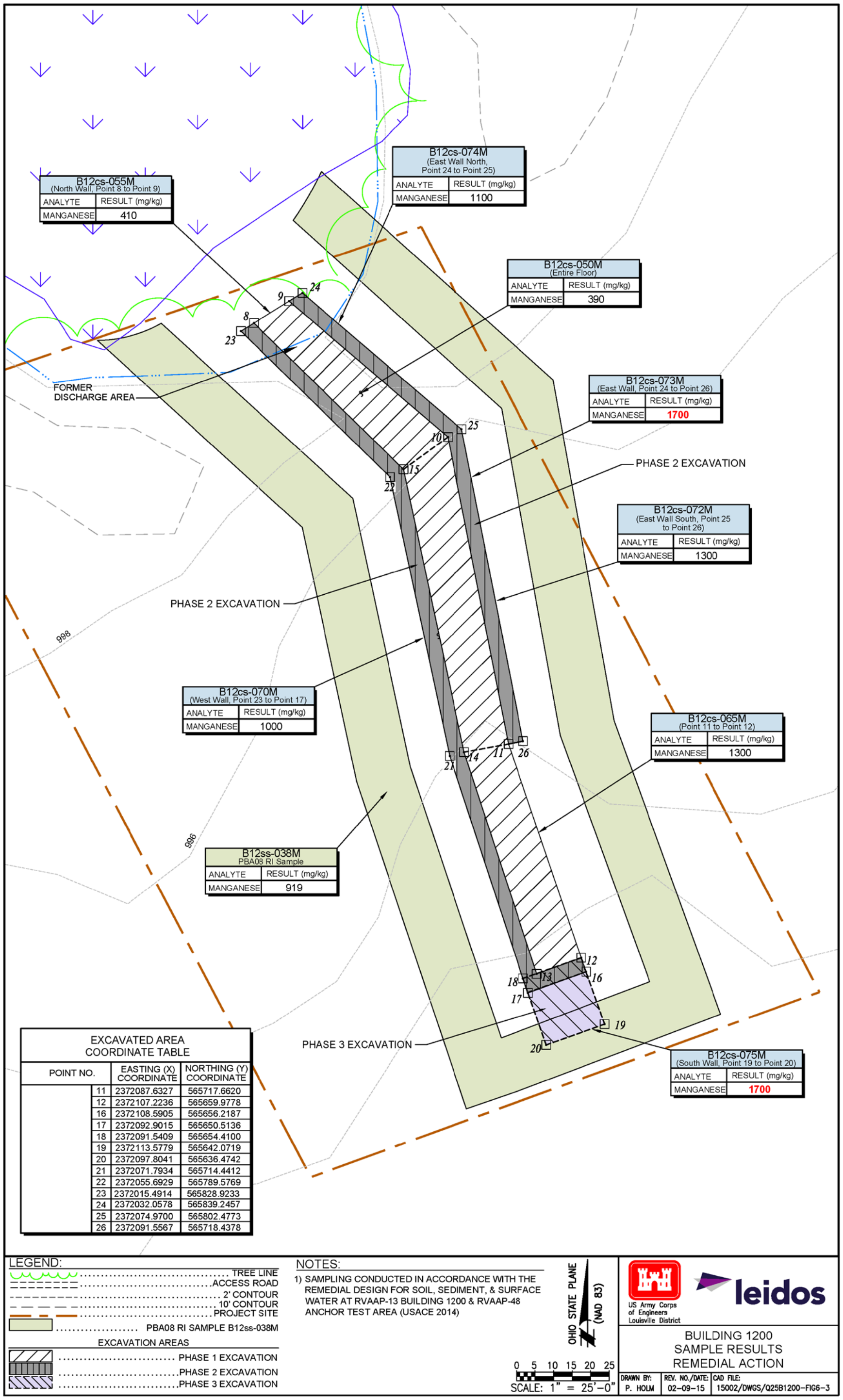


Figure 6-2. Excavation Area, Drainage Ditch, Phase 1 (Based on Field Estimates)



1 **Figure 6-3. Excavation Area, Drainage Ditch, Phases 2 and 3 (Based on Field Estimates)**

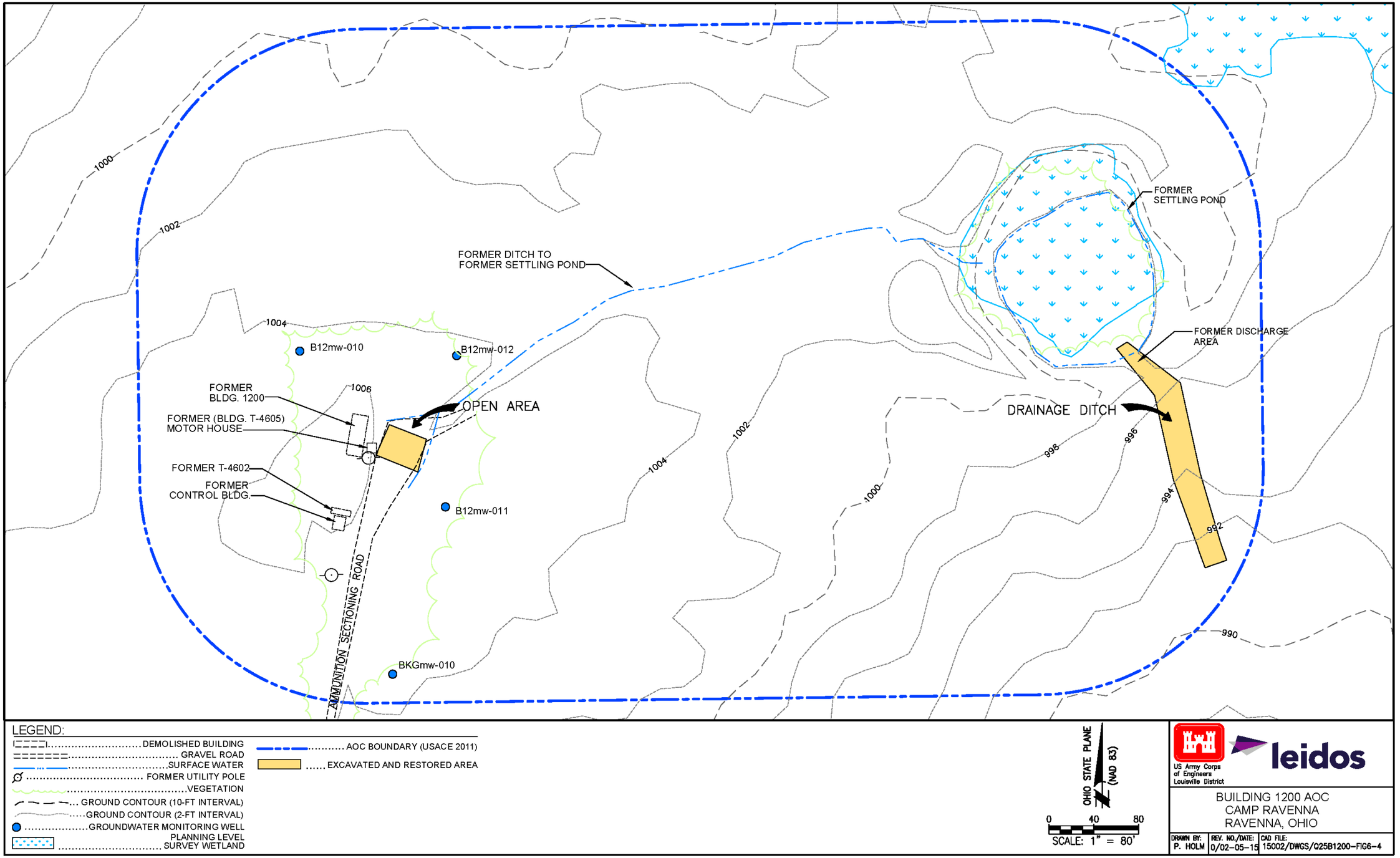


Figure 6-4. Building 1200 Excavation Areas (Final Surveyed Extent)

7.0 SITE RESTORATION

The following sections describe the site restoration activities performed in accordance with Section 8.0 of the RD.

7.1 BACKFILL SOURCE PILE

Section 8.1 of the RD indicated a previous backfill source would be utilized for backfill once CUGs were attained during the soil excavation in the Open Area. However, the backfill source specified in the RD was no longer available for use. Accordingly, Leidos identified and sampled a new backfill source at Patrick Excavating and Trucking at 5839 State Route 5, Ravenna, Ohio.

On September 11, 2014, the staged backfill source at Patrick Excavating and Trucking was sampled. One ISM sample (B12bf-060M-0014M-SO) was collected and analyzed for RVAAP full-suite parameters, except volatile organic compounds (VOCs). One discrete sample (B12bf-060-0015-SO) was collected and analyzed for VOCs.

Data was screened using the RVAAP facility-wide surface soil background values and Resident Receptor CUGs at 10^{-6} risk. The USEPA RSL for residential exposure for soil (10^{-6} risk) was used if an analyte did not have a CUG. A brief summary of the results is presented below.

- All analyte concentrations were below either the RVAAP facility-wide surface background values or the screening level.
- All pesticide, polychlorinated biphenyl (PCB), explosive, propellant, and VOC analyte concentrations were either not detectable or had estimated concentrations less than laboratory reporting levels.
- All semi-volatile organic compound (SVOC) analyte concentrations were either not detectable or were below the screening level, with the exception of benzo(a)pyrene at a concentration of 0.11 mg/kg. The concentration of benzo(a)pyrene (0.11 mg/kg) is less than half the RVAAP FWCUG for the Resident Farmer at 10^{-5} (0.221 mg/kg).

The results of the background sampling event and Ohio EPA's approval to use this source are documented in the field change request (FCR-RVAAPB1200-002) presented in Appendix B.

7.2 BACKFILLING OPEN EXCAVATIONS

Upon confirming that no further excavation was required, the excavation footprint in the Open Area was backfilled using soil from the approved source and graded to match the existing drainage pattern and neighboring and/or original elevations. The backfill material was graded and compacted. Disturbed areas adjacent to the excavation area were re-graded to fix ruts as necessary. Photograph 7-1 shows the backfilled excavation area at the Open Area, and Photograph 7-2 shows the excavation area after seeding and mulching.



Photograph 7-1. Backfilled "Open" Excavation Area



Photograph 7-2. "Open" Excavation Area after Backfill, Seeding, and Mulching

The excavation footprint of the Drainage Ditch was backfilled using No. 3 coarse aggregate and graded to match the neighboring and/or original elevations. Disturbed areas adjacent to the ditch and haul route were re-graded as necessary. Photograph 7-3 shows the backfilled excavation area, and Photograph 7-4 shows the haul route after re-grading and mulching.



Photograph 7-3. Backfilled "Ditch" Excavation Area



Photograph 7-4. Haul Route after Re-grading, and Mulching

7.3 RE-VEGETATION AND REMOVAL OF EROSION CONTROLS

Re-vegetation and re-seeding of disturbed areas at the Open Area and east of the Drainage Ditch took place during the week of December 8, 2014. Re-seeding of the area was performed with the prescribed seed mixtures detailed in Tables 8-3 and 8-4 of the RD. Re-seeding of the disturbed areas at and near the Drainage Ditch will be completed once the weather is more conducive for restoration activities. Leidos will continue to perform weekly inspections of the site and the silt fencing to ensure the stormwater controls are intact until vegetation is established to 70 percent coverage. The inspection frequency may be reduced to at least once per month if runoff is unlikely due to weather conditions (e.g., snow, ice, ground frozen). Upon establishing the required vegetation coverage, the silt fencing and other stormwater controls will be removed and disposed.

8.0 CONCLUSIONS

The selected remedy for soil, sediment, and surface water at the Building 1200 AOC, as documented in the Building 1200 ROD (USACE 2014a), was to excavate contaminated soil from two removal areas to achieve a manganese CUG of 1,450 mg/kg for Unrestricted (Residential) Land Use. The remedial action described within this RAR attained the remedial action CUG and RAO established in the Building 1200 ROD (USACE 2014a). Table 8-1 presents the removal totals from the Building 1200 AOC.

Table 8-1. Soil Removal Quantity

Location	Total Waste Volume (tons)
Building 1200 AOC	376

The Open Area excavation was completed after the first phase of soil removal, as all confirmation samples were below the CUG of 1,450 mg/kg. Three phases of soil removal were performed for the Drainage Ditch. After the third phase of soil removal, confirmation sample results indicated that seven of the nine confirmation samples of the excavation extent were below the CUG of 1,450 mg/kg for manganese. Table 8-2 presents the confirmation sample results for the final excavation extents. The following details the samples that exceeded the CUG:

1) Confirmation sample B12cs-073M was representative of the excavation wall from point 24 to point 26. To refine the areas that potentially required additional excavation, samples B12cs-072M (point 25 to point 26) and B12cs-074M (point 24 to point 25) were collected as subsamples of that same area. These subsamples had manganese concentrations below the CUG; therefore, the excavation wall is considered to have attained the CUG and no further soil removal is required.
2) Confirmation sample B12cs-075M was collected within a previous ISM sample location (B12ss-038M) which was sampled in February 2010 as part of the PBA08 RI conducted at the Building 1200 AOC. Sample location B12ss-038M had a manganese concentration of 919 mg/kg, and the preceding CERCLA documents determined that this area was not a risk to future receptors and did not require remediation. The manganese concentration in sample B12cs-075M (1,700 mg/kg) was below the USEPA RSL for residential exposure to soil (1,800 mg/kg) and the RVAAP facility-wide subsurface soil (1-13 ft bgs) background concentration (3,030 mg/kg).

The Army and Ohio EPA held discussions on January 7, 2015, regarding the status of the remedial action and the data described above, and, Ohio EPA concurred that additional soil removal was not required to attain RAOs and Unrestricted (Residential) Land Use (USACE 2014c). Appendix H presents an insert for the Property Management Plan that provides a summary of the Building 1200 AOC, the remedial activities completed, and documentation that no land use controls are required for soil, sediment, and surface water after completion of this remedial action.

Table 8-2. Confirmation Soil Sample Results of Final Excavation Extent

Confirmation Sample Area Description	Confirmation Sample Location	Confirmation Soil Sample Results (Manganese Concentration, mg/kg)	Confirmation Sample Result Below Cleanup Goal?[a]
Open Area			
B12cs-056M (Northern Wall	B12cs-056M	160	Yes
B12cs-057M (Western wall)	B12cs-057M	890	Yes
B12cs-058M (Eastern Wall)	B12cs-058M	720	Yes
B12cs-059M (Southern wall)	B12cs-059M	700	Yes
B12cs-066M (Excavation floor)	B12cs-066M	510	Yes
Drainage Ditch			
Excavation floor, Phase 1	B12cs-050M	390	Yes
Northern wall, Phase 1	B12cs-055M	410	Yes
Western wall, Phase 2	B12cs-070M	1000	Yes
Eastern wall- Subdivided South, Phase 1	B12cs-065M	1300	Yes
Eastern wall, Phase 2	B12cs-073M	1700	No
Eastern wall- Subdivided Middle, Phase 2	B12cs-072M	1100	Yes
Eastern wall- Subdivided North, Phase 2	B12cs-074M	1300	Yes
Southern wall, Phase 3	B12cs-075M	1700	No[b]

[a] Remedial action cleanup goal for manganese in soil is 1,450 mg/kg.
[b] Result is below EPA Regional Screening Level (RSL) (1,800 mg/kg) and PBA08 RI sample B12ss-038M (919 mg/kg) was below CUG. Army and Ohio EPA held discussions on January 7, 2015 and concurred no additional excavation is required (USACE 2014c).
mg/kg = Milligrams per kilogram.

By achieving the remedial action CUG, the Building 1200 AOC allows for Unrestricted (Residential) Land Use for soil, sediment, and surface water. Land use controls, CERCLA five-year reviews, or operations and maintenance sampling are not required for these media.

9.0 REFERENCES

Jacobs (Jacobs Engineering Group, Inc.) 1989. *RCRA Facility Assessment, Preliminary Review/ Visual Site Inspection Ravenna Army Ammunition Plant Ravenna, Ohio*. October 1989.

MKM Engineers, Inc. (MKM) 2007. *Characterization of 14 AOCs at Ravenna Army Ammunition Plant*. March 2007.

Ohio Environmental Protection Agency (Ohio EPA) 2004. *Director's Final Findings and Orders in the Matter of U.S. Department of the Army, Ravenna Army Ammunitions Plant*. June 2004.

USACE (U.S. Army Corps of Engineers) 1996. *Preliminary Assessment for the Ravenna Army Ammunition Plant, Ravenna, Ohio*. February 1996.

USACE 1998. *Phase I Remedial Investigation Report for High-Priority Areas of Concern at the Ravenna Army Ammunition Plant, Ravenna, Ohio*. February 1998.

USACE 2012. *Remedial Investigation/Feasibility Study Report for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 at the Ravenna Army Ammunition Plant, Ravenna, Ohio*. March 2012.

USACE 2013. *Proposed Plan for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 at the Ravenna Army Ammunition Plant, Ravenna, Ohio*. April 2013.

USACE 2014a. *Record of Decision for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 at the Ravenna Army Ammunition Plant, Ravenna, Ohio*. March 2014.

USACE 2014b. *Remedial Design for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 and RVAAP-48 Anchor Test Area at the Ravenna Army Ammunition Plant*. August 2014.

USACE 2014c. *Memorandum for Record from Army to Ohio EPA DERR-NEDO, Ravenna Army Ammunition Plant (RVAAP) Restoration Program, Portage/Trumbull Counties, RVAAP-13 Building 1200 Remedial Action*. January 15, 2015.

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APPENDIX A
UTILITY CLEARANCE

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Thomas, Jed H.

From: Sedlak, Kevin M CTR (US) <kevin.m.sedlak.ctr@mail.mil>
Sent: Wednesday, November 12, 2014 7:28 AM
To: Thomas, Jed H.
Cc: Sprinzl, Rich E.
Subject: RE: B1200 and ATA - Utility Clearance (UNCLASSIFIED)
Signed By: kevin.m.sedlak.ctr@mail.mil

Classification: UNCLASSIFIED
Caveats: NONE

There are no known active utilities buried or aboveground in either area.

Kevin Sedlak
Restoration Project Manager
Camp Ravenna
1438 State Route 534 SW
Newton Falls, OH 44444
ARNG-ILE Clean Up
Office Phone 614-336-6000 Ex 2053
mailto:kevin.m.sedlak.ctr@mail.mil

-----Original Message-----
From: Thomas, Jed H. [mailto:JED.H.THOMAS@leidos.com]
Sent: Tuesday, November 11, 2014 12:42 PM
To: Sedlak, Kevin M CTR (US)
Cc: Sprinzl, Rich E.
Subject: RE: B1200 and ATA - Utility Clearance

Hi Kevin - Just following up, can you confirm the info below regarding the utility clearance at the Building 1200 or Anchor Test Area soil removal areas? Thank you.

From: Thomas, Jed H.
Sent: Monday, November 03, 2014 4:54 PM
To: Kevin Sedlak (kevin.m.sedlak.ctr@mail.mil)
Cc: Sprinzl, Rich E.
Subject: B1200 and ATA - Utility Clearance

Kevin -

Per the Remedial Design and Leidos' requirements, can you confirm to the best of your knowledge that there are no known subsurface assets or hazards at or near where the Building 1200 and Anchor Test Area soil removal areas will take place?

Please let me know if you have any questions or need additional information.

Thank you,

Jed

Jed Thomas | Leidos

Project Manager | Environmental Restoration Division

phone: 330.405.5802

fax: 330.405.9811
jed.h.thomas@leidos.com <mailto:john.t.doe@leidos.com> |
leidos.com/engineering <http://www.leidos.com/engineering>

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Classification: UNCLASSIFIED
Caveats: NONE

APPENDIX B
FIELD CHANGE REQUEST FORMS

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FIELD CHANGE REQUEST (FCR) FCR-RVAAPB1200-001

FCR NO. FCR-RVAAPB1200-001 DATE INITIATED 10/27/14
PROJECT Building 1200 and Anchor Test Area Remedial Action
CONTRACT NO. GSA Contract No. W912QR-04-D-0028 Delivery Order No. 0001

REQUESTOR IDENTIFICATION
NAME Jed Thomas ORGANIZATION Leidos PHONE 330-405-5802

TITLE Deputy Project Manager SIGNATURE

BASELINE IDENTIFICATION

BASELINE(S) AFFECTED ☐ Cost ☐ Scope ☐ Milestone ☒ Method of Accomplishment

AFFECTED DOCUMENT (TITLE, NUMBER AND SECTION)
Remedial Design for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 and RVAAP-48 Anchor Test Area (Section 6.0)

DESCRIPTION OF CHANGE:
Due to the timing of the remedial action and potential saturated soil that may be encountered, Leidos and Remedial Subcontractor would also like a provision to use Calciment® as a drying agent during the Building 1200 and Anchor Test Area remedial actions. On an as needed basis, Calciment® will be mixed with excavated soil. The drying agent will be mixed with the excavated soil to ensure the material does not have free liquids when it is loaded to the haul trucks and can be accepted for disposed at the landfill. The Calciment will not change the characteristics of the disposed material. Attached to this FCR are lab sheets presenting typical chemical analysis and TCLP analysis of Calciment®.

JUSTIFICATION:

Justification for use of the Calciment® is to ensure haul trucks do not contain any free liquids during transport and the excavated material is dry enough to be accepted at the receiving landfill.

IMPACT OF NOT IMPLEMENTING REQUEST:

The use of the drying agent will ensure the truck loads will not leak during transportation to the landfill and will ensure the landfill will accept the disposed material. The use of the Calciment® will minimize disposal volumes, relative to volumes created from other drying agents such as sawdust.

PARTICIPANTS AFFECTED BY IMPLEMENTING REQUEST:
Leidos and Remedial Subcontractor

COST ESTIMATE ($) 0 ESTIMATOR SIGNATURE No cost impact to USACE
PHONE NA DATE NA

PREVIOUS FCR AFFECTED ☐ YES ☒ NO; IF YES, FCR NO. ___

USACE COTR Frank W. Nutter DATE 10/29/2014

OHIO EPA PROJECT MANAGER DATE 11/5/14

LEIDOS H&S MANGER SIGNATURE (IF APPLICABLE) NA DATE NA

MINTEK RESOURCES, INC.

CALCIMENT®

Typical Chemical Analysis
Grand River

Element	Formula	Percent
Total Calcium Oxide	CaO	64.89
Magnesium Oxide	MgO	2.86
Silicon Dioxide	SiO_2	7.86
Aluminum Oxide	Al_2O_3	3.56
Iron Oxide	$Fe2O_3$	0.89
Potassium Oxide	K_2O_3	0.46
Sulfur Trioxide	SO_3	4.34
Sodium Oxide	Na_2O	.38
Titanium Dioxide	TiO_2	0.13
Manganese Dioxide	MnO_2	0.04
Phosphorus Pentoxide	P_2O_5	0.20
Strontium Oxide	SrO	0.07
Barium Oxide	BaO	0.07
Carbon	C	14.25
Available\Free Calcium Oxide		40 - 45

MINTEK RESOURCES, INC.

CALCIMENT®

TCLP

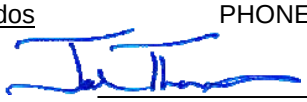
Grand River, OH

ELEMENT	FORMULA	RESULT mg/L	LIMIT
ARSENIC	As	< 2.500	5.00
BARIUM	Ba	0.300	100.00
CADMIUM	Cd	< 0.010	1.00
CHROMIUM	Cr	< 0.050	0.05
LEAD	Pb	< 0.10	5.00
MERCURY	Hg	< 0.005	0.20
SELENIUM	Se	< 0.50	1.00
SILVER	Ag	<0.01	5.00

FIELD CHANGE REQUEST (FCR) FCR-RVAAPB1200-002

FCR NO. FCR-RVAAPB1200-002 DATE INITIATED 10/24/14
PROJECT Building 1200 and Anchor Test Area Remedial Action
CONTRACT NO. GSA Contract No. W912QR-04-D-0028 Delivery Order No. 0001

REQUESTOR IDENTIFICATION
NAME Jed Thomas ORGANIZATION Leidos PHONE 330-405-5802

TITLE Deputy Project Manager SIGNATURE 

BASELINE IDENTIFICATION

BASELINE(S) AFFECTED ☐ Cost ☐ Scope ☐ Milestone ☒ Method of Accomplishment

AFFECTED DOCUMENT (TITLE, NUMBER AND SECTION)
Remedial Design for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 and RVAAP-48 Anchor Test Area (Section 8.1)

DESCRIPTION OF CHANGE:
Section 8.1 of the referenced Remedial Design indicates the a previous backfill source will be utilized for backfill once the cleanup goals are attained during the soil excavation at the Building 1200 and Anchor Test Area AOCs. However, the backfill source specified in the Remedial Design is no longer available for use. Accordingly, Leidos identified and sampled a new backfill source at Patrick Excavating and Trucking at 5839 State Route 5, Ravenna, Ohio.

On September 11, 2014, the staged backfill source at Patrick Excavating and Trucking was sampled. One ISM sample (B12bf-060M-0014M-SO) was collected and analyzed for RVAAP full suite parameters except VOCs. One discrete sample (B12bf-060-0015-SO) was collected and analyzed for VOCs.

The results of the analyses are attached to this FCR. Data was screened using the RVAAP surface soil background values and Resident Receptor cleanup goals (CUGs) at 10-6 risk. The EPA Regional Screening Level for resident for soil (10-6 risk) (May 2014) was used if an analyte did not have a CUG. A brief summary of the results are presented below.

1) All analyte concentrations were below either the surface background values or the screening level.
2) All pesticide, PCB, explosive, and VOC analyte concentrations were either not detectable or had estimated concentrations.
3) All SVOC analyte concentrations were either not detectable or were below the screening level, with the exception of benzo(a)pyrene at a concentration of 0.11 mg/kg. The concentration of benzo(a)pyrene (0.11 mg/kg) is less than half the Resident Farmer CUG at 10-5 of 0.221 mg/kg.

Additional details of the sampling activities will be presented in the Remedial Action Report.

JUSTIFICATION:

The justification for this FCR is to obtain approval of staged soil for use as backfill after the Building 1200 and Anchor Test Areas meet the cleanup goals. As noted, the source used previously and cited in the Remedial Design is no longer available for use. Having acceptable backfill available for the remedial action is a critical component of completing this remedial action.

IMPACT OF NOT IMPLEMENTING REQUEST:

The impact of not implementing request is there will not be soil backfill available at the time the cleanup goals are attained during the soil removal activities. This would result in having open excavations that may result in ponding of storm water, safety hazards, and will delay the overall site restoration component of this remedial action.

FIELD CHANGE REQUEST (FCR) FCR-RVAAPB1200-002

PARTICIPANTS AFFECTED BY IMPLEMENTING REQUEST:
Leidos and Remedial Subcontractor

COST ESTIMATE ($) 0 ESTIMATOR SIGNATURE No cost impact to USACE
PHONE NA DATE NA

PREVIOUS FCR AFFECTED ☐ YES ☒ NO; IF YES, FCR NO. ___

USACE COTR Mark W. Nielsen DATE 10/29/2014

OHIO EPA PROJECT MANAGER [signature] DATE 11/5/14

LEIDOS H&S MANGER SIGNATURE (IF APPLICABLE) NA DATE NA

Page 2 of 2

Building 1200/Anchor Test Area Backfill Sample Results

Sample Id	CAS Number	Background Criteria	Screening Level(HQ=.1, Risk=1E-6)	Screening Level Source	B12bf-060-0015-SO	B12bf-060M-0014-SO
Date					**09/11/14**	**09/11/14**
Analyte						
Metals						
Aluminum	7429-90-5	17700	7380	RFC	NR	6400
Antimony	7440-36-0	0.96	2.82	RFC	NR	0.13 J
Arsenic	7440-38-2	15.4	0.425	RFA	NR	7.4
Barium	7440-39-3	88.4	1413	RFC	NR	46 J
Beryllium	7440-41-7	0.88	16	RSL	NR	0.38 J
Cadmium	7440-43-9	0	6.41	RFC	NR	<0.35 UJ
Calcium	7440-70-2	15800	1000000	RDA	NR	1700
Chromium	7440-47-3	17.4	8147	RFC	NR	15 J
Cobalt	7440-48-4	10.4	131	RFC	NR	6.4
Copper	7440-50-8	17.7	311	RFC	NR	7.4
Iron	7439-89-6	23100	180000	RDA	NR	14000
Lead	7439-92-1	26.1	400	RSL	NR	17
Magnesium	7439-95-4	3030	1000000	RDA	NR	1200
Manganese	7439-96-5	1450	293	RFC	NR	590
Nickel	7440-02-0	21.1	155	RFC	NR	11 J
Potassium	7440-09-7	927	1000000	RDA	NR	370
Selenium	7782-49-2	1.4	39	RSL	NR	1.4
Silver	7440-22-4	0	38.6	RFC	NR	0.038 J
Sodium	7440-23-5	123	1000000	RDA	NR	71 J
Thallium	7440-28-0	0	0.612	RFC	NR	<0.35 UJ
Vanadium	7440-62-2	31.1	44.9	RFC	NR	15
Zinc	7440-66-6	61.8	2321	RFC	NR	33 J
Organics - Explosives						
1,3,5-Trinitrobenzene	99-35-4		225	RFC	NR	<0.05 U
1,3-Dinitrobenzene	99-65-0		0.765	RFC	NR	<0.05 U
2,4,6-Trinitrotoluene	118-96-7		3.65	RFC	NR	<0.05 U
2,4-Dinitrotoluene	121-14-2		0.753	RFA	NR	<0.05 U
2,6-Dinitrotoluene	606-20-2		0.769	RFA	NR	<0.05 U
2-Amino-4,6-Dinitrotoluene	35572-78-2		1.54	RFC	NR	<0.05 U
2-Nitrotoluene	88-72-2		3.88	RFC	NR	<0.05 U
3-Nitrotoluene	99-08-1		0.62	RSL	NR	<0.05 U
4-Amino-2,6-Dinitrotoluene	19406-51-0		1.54	RFC	NR	<0.05 U
4-Nitrotoluene	99-99-0		52.5	RFC	NR	<0.05 U
HMX	2691-41-0		359	RFC	NR	<0.05 U
Nitrobenzene	98-95-3		5.1	RSL	NR	<0.05 U
Nitrocellulose	9004-70-0		18000000	RSL	NR	<1.8 U
Nitroglycerin	55-63-0		52.5	RFC	NR	<0.25 U
Nitroguanidine	556-88-7		620	RSL	NR	<0.039 U
PETN	78-11-5		12	RSL	NR	0.04 J
RDX	121-82-4		8.03	RFC	NR	<0.05 U
Tetryl	479-45-8		12	RSL	NR	<0.05 U
Organics - Semivolatile						
1,2,4-Trichlorobenzene	120-82-1		5.8	RSL	NR	<0.043 U

Building 1200/Anchor Test Area Backfill Sample Results

Sample Id	CAS Number	Background Criteria	Screening Level(HQ=.1, Risk=1E-6)	Screening Level Source	B12bf-060-0015-SO	B12bf-060M-0014-SO
Date					09/11/14	09/11/14
Analyte						
1,2-Dichlorobenzene	95-50-1		180	RSL	NR	<0.086 U
1,3-Dichlorobenzene	541-73-1			NR	NR	<0.086 U
1,4-Dichlorobenzene	106-46-7		2.6	RSL	NR	<0.086 U
2,4,5-Trichlorophenol	95-95-4		620	RSL	NR	<0.17 U
2,4,6-Trichlorophenol	88-06-2		6.2	RSL	NR	<0.086 UJ
2,4-Dichlorophenol	120-83-2		18	RSL	NR	<0.17 U
2,4-Dimethylphenol	105-67-9		120	RSL	NR	<0.17 U
2,4-Dinitrophenol	51-28-5		12	RSL	NR	<0.17 U
2-Chloronaphthalene	91-58-7		630	RSL	NR	<0.0043 U
2-Chlorophenol	95-57-8		39	RSL	NR	<0.086 U
2-Methyl-4,6-dinitrophenol	534-52-1		0.49	RSL	NR	<0.086 U
2-Methylnaphthalene	91-57-6		30.6	RFC	NR	0.011 J
2-Methylphenol	95-48-7		310	RSL	NR	<0.17 U
2-Nitrobenzenamine	88-74-4		61	RSL	NR	<0.086 U
2-Nitrophenol	88-75-5			NR	NR	<0.086 U
3+4-Methylphenol	15831-10-4		620	RSL	NR	<0.17 U
3,3'-Dichlorobenzidine	91-94-1		1.2	RSL	NR	<0.17 U
3-Nitrobenzenamine	99-09-2			NR	NR	<0.17 U
4-Bromophenyl phenyl ether	101-55-3			NR	NR	<0.086 U
4-Chloro-3-methylphenol	59-50-7		620	RSL	NR	<0.17 U
4-Chlorobenzenamine	106-47-8		2.7	RSL	NR	<0.17 U
4-Chlorophenyl phenyl ether	7005-72-3			NR	NR	<0.086 U
4-Nitrobenzenamine	100-01-6		25	RSL	NR	<0.17 U
4-Nitrophenol	100-02-7		61.2	RFC	NR	<0.17 U
Acenaphthene	83-32-9		350	RSL	NR	<0.0085 U
Acenaphthylene	208-96-8		170	RSL	NR	<0.0043 U
Anthracene	120-12-7		1700	RSL	NR	0.013 J
Benz(a)anthracene	56-55-3		0.221	RFA	NR	0.084
Benzenemethanol	100-51-6		620	RSL	NR	<0.17 U
Benzo(a)pyrene	50-32-8		0.022	RFA	NR	0.11 *
Benzo(b)fluoranthene	205-99-2		0.221	RFA	NR	0.16
Benzo(ghi)perylene	191-24-2		170	RSL	NR	0.12
Benzo(k)fluoranthene	207-08-9		2.21	RFA	NR	0.086
Benzoic acid	65-85-0		25000	RSL	NR	0.2 J
Bis(2-chloroethoxy)methane	111-91-1		23	RFC	NR	<0.17 U
Bis(2-chloroethyl) ether	111-44-4		0.23	RSL	NR	<0.0085 U
Bis(2-chloroisopropyl) ether	108-60-1		4.9	RSL	NR	<0.086 U
Bis(2-ethylhexyl)phthalate	117-81-7		38	RSL	NR	<0.086 U
Butyl benzyl phthalate	85-68-7		280	RSL	NR	<0.086 U
Carbazole	86-74-8		44.6	RFC	NR	<0.086 U
Chrysene	218-01-9		22.1	RFA	NR	0.11
Di-n-butyl phthalate	84-74-2		620	RSL	NR	<0.086 U
Di-n-octylphthalate	117-84-0		62	RSL	NR	<0.086 U
Dibenz(a,h)anthracene	53-70-3		0.022	RFA	NR	<0.0085 U

Building 1200/Anchor Test Area Backfill Sample Results

Sample Id	CAS Number	Background Criteria	Screening Level(HQ=.1, Risk=1E-6)	Screening Level Source	B12bf-060-0015-SO	B12bf-060M-0014-SO
Date					**09/11/14**	**09/11/14**
Analyte						
Dibenzofuran	132-64-9		15.3	RFC	NR	<0.0085 U
Diethyl phthalate	84-66-2		4900	RSL	NR	<0.086 U
Dimethyl phthalate	131-11-3			NR	NR	<0.086 U
Fluoranthene	206-44-0		163	RFC	NR	0.2
Fluorene	86-73-7		243	RFC	NR	<0.0085 U
Hexachlorobenzene	118-74-1		0.33	RSL	NR	<0.0085 U
Hexachlorobutadiene	87-68-3		6.2	RSL	NR	<0.086 U
Hexachlorocyclopentadiene	77-47-4		37	RSL	NR	<0.086 U
Hexachloroethane	67-72-1		4.3	RSL	NR	<0.086 U
Indeno(1,2,3-cd)pyrene	193-39-5		0.221	RFA	NR	0.096
Isophorone	78-59-1		560	RSL	NR	<0.086 U
N-Nitroso-di-n-propylamine	621-64-7		0.12	RFC	NR	<0.086 U
N-Nitrosodiphenylamine	86-30-6		110	RSL	NR	<0.086 U
Naphthalene	91-20-3		122	RFC	NR	0.0093 J
Pentachlorophenol	87-86-5		2.12	RFA	NR	<0.086 U
Phenanthrene	85-01-8		170	RSL	NR	0.066
Phenol	108-95-2		1800	RSL	NR	<0.086 U
Pyrene	129-00-0		122	RFC	NR	0.16
Organics - Pesticide/PCB						
4,4'-DDD	72-54-8		2.2	RSL	NR	<0.0017 U
4,4'-DDE	72-55-9		2.63	RFC	NR	0.0011 J
4,4'-DDT	50-29-3		1.9	RSL	NR	<0.0017 U
Aldrin	309-00-2		0.053	RFC	NR	<0.0017 U
Dieldrin	60-57-1		0.056	RFC	NR	<0.0017 U
Endosulfan I	959-98-8		37	RSL	NR	<0.0017 U
Endosulfan II	33213-65-9		37	RSL	NR	<0.0017 U
Endosulfan sulfate	1031-07-8		37	RSL	NR	<0.0017 U
Endrin	72-20-8		1.12	RFC	NR	<0.0017 U
Endrin aldehyde	7421-93-4		1.8	RSL	NR	<0.0017 U
Endrin ketone	53494-70-5		1.8	RSL	NR	<0.0017 U
Heptachlor	76-44-8		0.198	RFC	NR	<0.0017 U
Heptachlor epoxide	1024-57-3		0.098	RFC	NR	<0.0017 U
Lindane	58-89-9		0.56	RSL	NR	0.003 J
Methoxychlor	72-43-5		31	RSL	NR	<0.0033 U
Toxaphene	8001-35-2		0.48	RSL	NR	<0.034 U
alpha-BHC	319-84-6		0.085	RSL	NR	0.0049 J
alpha-Chlordane	5103-71-9		1.8	RSL	NR	<0.0017 U
beta-BHC	319-85-7		0.496	RFC	NR	0.0023 J
delta-BHC	319-86-8			NR	NR	<0.0017 U
gamma-Chlordane	5103-74-2		1.8	RSL	NR	0.0019 J
Organics - Volatile						
1,1,1-Trichloroethane	71-55-6		640	RSL	<0.0012 U	NR
1,1,2,2-Tetrachloroethane	79-34-5		0.6	RSL	<0.0012 UJ	NR
1,1,2-Trichloroethane	79-00-5		0.15	RSL	<0.0012 U	NR

Building 1200/Anchor Test Area Backfill Sample Results

Sample Id Date Analyte	CAS Number	Background Criteria	Screening Level(HQ=.1, Risk=1E-6)	Screening Level Source	B12bf-060-0015-SO 09/11/14	B12bf-060M-0014-SO 09/11/14
1,1-Dichloroethane	75-34-3		3.6	RSL	<0.0012 U	NR
1,1-Dichloroethene	75-35-4		23	RSL	<0.0012 U	NR
1,2-Dibromoethane	106-93-4		0.036	RSL	<0.0012 UJ	NR
1,2-Dichloroethane	107-06-2		0.46	RSL	<0.0012 U	NR
1,2-Dichloroethene	540-59-0			NR	<0.0024 U	NR
1,2-Dichloropropane	78-87-5		1	RSL	<0.0024 U	NR
2-Butanone	78-93-3		2700	RSL	<0.0047 U	NR
2-Hexanone	591-78-6		20	RSL	<0.0012 U	NR
4-Methyl-2-pentanone	108-10-1		530	RSL	<0.0012 U	NR
Acetone	67-64-1		6100	RSL	<0.018 UJ	NR
Benzene	71-43-2		1.2	RSL	<0.00059 UJ	NR
Bromochloromethane	74-97-5		15	RSL	<0.0024 U	NR
Bromodichloromethane	75-27-4		0.29	RSL	<0.00059 UJ	NR
Bromoform	75-25-2		67	RSL	<0.0012 U	NR
Bromomethane	74-83-9		0.68	RSL	<0.0012 U	NR
Carbon disulfide	75-15-0		77	RSL	<0.0012 U	NR
Carbon tetrachloride	56-23-5		0.65	RSL	<0.0012 U	NR
Chlorobenzene	108-90-7		28	RSL	<0.0012 UJ	NR
Chloroethane	75-00-3		1400	RSL	<0.0012 U	NR
Chloroform	67-66-3		0.32	RSL	<0.00059 U	NR
Chloromethane	74-87-3		11	RSL	<0.00059 U	NR
Dibromochloromethane	124-48-1		0.73	RSL	<0.0012 UJ	NR
Ethylbenzene	100-41-4		5.8	RSL	<0.00059 UJ	NR
Methylene chloride	75-09-2		35	RSL	<0.0024 U	NR
Styrene	100-42-5		600	RSL	<0.00059 UJ	NR
Tetrachloroethene	127-18-4		8.1	RSL	<0.0012 UJ	NR
Toluene	108-88-3		490	RSL	<0.00059 UJ	NR
Trichloroethene	79-01-6		0.41	RSL	<0.0012 UJ	NR
Vinyl chloride	75-01-4		0.059	RSL	<0.0012 U	NR
Xylenes, total	1330-20-7		58	RSL	<0.0024 U	NR
cis-1,3-Dichloropropene	10061-01-5		1.8	RSL	<0.0012 UJ	NR
trans-1,3-Dichloropropene	10061-02-6		1.8	RSL	<0.0012 U	NR

*- Exceeds screening level
NR- not reported
U-not detected
UJ-not detected, reporting limit estimated
J- estimated
RFC-Resident Farmer Child
RFA-Resident Farmer Adult
RDA-Recommended dail allowance for nutrient
RSL-EPA Regional Screening Level for resident for soil (May 2014)

FIELD CHANGE REQUEST (FCR) FCR-RVAAPB1200-003

FCR NO. FCR-RVAAPB1200-003 DATE INITIATED 11/3/14
PROJECT Building 1200 and Anchor Test Area Remedial Action
CONTRACT NO. GSA Contract No. W912QR-04-D-0028 Delivery Order No. 0001

REQUESTOR IDENTIFICATION
NAME Jed Thomas ORGANIZATION Leidos PHONE 330-405-5802

TITLE Deputy Project Manager SIGNATURE

BASELINE IDENTIFICATION

BASELINE(S) AFFECTED ☐ Cost ☐ Scope ☐ Milestone ☒ Method of Accomplishment

AFFECTED DOCUMENT (TITLE, NUMBER AND SECTION)
Remedial Design for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 and RVAAP-48 Anchor Test Area (Section 6.0)

DESCRIPTION OF CHANGE:
Due to the timing of the remedial action and potential saturated soil that may be encountered, in addition to potentially using Calciment® as a drying agent, Leidos and Remedial Subcontractor would also like a provision to use Stabl-Zorb as a drying agent during the Building 1200 and Anchor Test Area remedial actions. On an as needed basis, the Stabl-Zorb will be mixed with excavated soil. Stabl-Zorb is designed to both aid in fluid stabilization and is an all-natural product made of corncob. Stabl-Zorb is an environmentally-friendly remediation material. The drying agent will be mixed with the excavated soil to ensure the material does not have free liquids when it is loaded to the haul trucks and can be accepted for disposed at the landfill. The Stabl-Zorb will not change the characteristics of the disposed material. Attached to this FCR are Safety Data Sheets associated with this material.

JUSTIFICATION:

Justification for use of the Stabl-Zorb is to ensure haul trucks do not contain any free liquids during transport and the excavated material is dry enough to be accepted at the receiving landfill.

IMPACT OF NOT IMPLEMENTING REQUEST:

The use of the drying agent will ensure the truck loads will not leak during transportation to the landfill and will ensure the landfill will accept the disposed material. The use of the Stabl-Zorb will minimize disposal volumes, relative to volumes created from other drying agents such as sawdust.

PARTICIPANTS AFFECTED BY IMPLEMENTING REQUEST:
Leidos and Remedial Subcontractor

COST ESTIMATE ($) 0 ESTIMATOR SIGNATURE No cost impact to USACE
PHONE NA DATE NA

PREVIOUS FCR AFFECTED ☐ YES ☒ NO; IF YES, FCR NO. ___

USACE COTR Mark W. Nutter DATE 11/4/2014

OHIO EPA PROJECT MANAGER DATE 11/5/2014

LEIDOS H&S MANGER SIGNATURE (IF APPLICABLE) NA DATE NA

THE ANDERSONS
SAFETY DATA SHEET

DATE PREPARED: 10/17/00 CURRENT AS OF: 6/18/14

SECTION 1: PRODUCT / SUPPLIER IDENTIFICATION

PRODUCT NAMES: Dri-Zorb®, DZ300, Stabl-Cobs™, Stabl-Pell™, Grit-O'Cobs®, Lite-R'Cobs®, XRP®, Stabl-Zorb™

PRODUCT USE: Corncob carrier / filler

MFR INFO: The Andersons Cob Products
PO Box 119
Maumee, Ohio, USA 43537

FOR EMERGENCY: (800) 757-8951
FOR INFORMATION: (419) 891-2957

SECTION 2: HAZARDS IDENTIFICATION

HAZARD SYMBOLS / STATEMENTS:



WARNING **MAY CAUSE MILD SKIN IRRITATION**
MAY CAUSE EYE IRRITATION
MAY CAUSE RESPIRATORY IRRITATION

HAZARD CLASSIFICATIONS:	CATEGORY	INTERPRETATION
SKIN IRRITATION	3	Mild
EYE IRRITATION	2B	Severe Eye Irritation Possible
TARGET ORGAN SYSTEMIC TOXICITY	3	Transient Respiratory Irritation Possible

PRECAUTIONARY STATEMENTS:

- *IF SKIN IRRITATION OCCURS, GET MEDICAL ADVICE*
- *IF IN EYES, RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES – REMOVE CONTACT LENSES*
- *IF EYE IRRITATION PERSISTS, GET MEDICAL ADVICE*
- *WASH HANDS AFTER HANDLING*
- *USE ONLY OUTDOORS OR IN WELL VENTILATED AREAS*
- *AVOID BREATHING DUST*
- *IF INHALED, REMOVE TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING*
- *DISPOSE OF CONTENTS / CONTAINER IN ACCORDANCE WITH NATIONAL / REGIONAL / LOCAL REGULATIONS*

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY	SYNONYM	CAS NUMBER	CONCENTRATION (%)
Corncob fractions		Not listed	100.0

CORNCOBS

SECTION 4: FIRST AID MEASURES

IF INHALED:	Move victim to fresh air. Seek medical attention if irritation persists.
IF ON SKIN:	Wash affected areas with soap and water. Seek medical attention if irritation persists. Wash contaminated clothing before re-use.
IF IN THE EYES:	Immediately flush with water for at least 20 minutes. Seek medical attention if irritation persists.
IF SWALLOWED:	If victim is alert and not convulsing, give one glass of water to dilute material. Seek immediate medical attention.
SPECIAL TREATMENT:	None known
HEALTH HAZARDS:	See Section 11

SECTION 5: FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:	Use media suitable for surrounding fire. No special media required.
SPECIFIC FIRE HAZARDS:	Decomposition products may be toxic; typical of wood smoke.
SPECIAL FIREFIGHTING PROCEDURES:	Wear full protective clothing and positive-pressure self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPILL / RELEASE PROCEDURES:	Collect spilled product and store to re-use. Contaminated product and/or environmental media should be recovered and disposed of properly.
ENVIRONMENTAL PRECAUTIONS:	Prevent spilled material from entering storm drains or water bodies.
PROTECTIVE EQUIPMENT:	See Section 8

SECTION 7: HANDLING AND STORAGE

Store in a cool, dry, well ventilated area.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:

HAZARDOUS COMPONENT	OSHA PEL	ACGIH TLV
Corncob fractions	15 mg/m^3 (total) 5 mg/m^3 (respirable)	10 mg/m^3 (inhalable) 3 mg/m^3 (respirable)

CORNCOBS

PERSONAL PROTECTIVE EQUIPMENT / PROTECTION MEASURES / CONTROLS:

RESPIRATORY PROTECTION:	NIOSH approved particulate respirator, if required
EYE PROTECTION:	Safety glasses with sideshields, goggles, or faceshield recommended
SKIN PROTECTION:	Long sleeves, cotton gloves recommended
VENTILATION:	Local exhaust ventilation recommended

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Tan granules, with no appreciable odor
pH:	Not available
MELTING POINT:	Not applicable
BOILING POINT:	Not applicable
FLASH POINT:	350°F (open cup), 388°F (closed cup)
EVAPORATION RATE:	Not applicable
FLAMMABLE LIMITS:	Not applicable
VAPOR PRESSURE:	Not applicable
VAPOR DENSITY:	Not applicable
SPECIFIC GRAVITY:	0.8 – 1.2
SOLUBILITY (IN WATER):	Practically insoluble
PARTITION COEFFICIENT:	Not applicable
AUTOIGNITION TEMP:	Not applicable
DECOMPOSITION TEMP:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	Product is stable
CONDITIONS TO AVOID:	Excessive heat (over 300°F)
INCOMPATIBILITY:	Strong oxidizers, caustics, acids

HAZARDOUS DECOMPOSITION PRODUCTS: CO_x

SECTION 11: TOXICOLOGICAL INFORMATION

HEALTH EFFECTS: May be irritating to the nose and respiratory tract. Skin irritation may result from repeated or prolonged exposure. May also be irritating to the eyes.

CARCINOGENICITY: The ingredient is not a known / listed carcinogen.

INGREDIENT TOXICITY RANGES:

ORAL:	None listed
DERMAL:	None listed
INHALATION:	None listed

SECTION 12: ECOLOGICAL INFORMATION

This product is not known to be ecotoxic, persistent, or have the potential to bioaccumulate.

CORNCOBS

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all national, regional / state, and local regulations. Reuse recovered product where possible.

SECTION 14: TRANSPORT INFORMATION

This product is not regulated as a transportation hazard.

SECTION 15: REGULATORY INFORMATION

SARA SECTION 311 / 312 HAZARD CATEGORY: IMMEDIATE HAZARD

SECTION 16: OTHER INFORMATION

NFPA RATINGS:	HEALTH	1
	FLAMMABILITY	0
	INSTABILITY	0
HMIS RATINGS:	HEALTH	1
	FLAMMABILITY	0
	PHYSICAL HAZARD	0

PREPARED BY: SS

The information and data contained herein is based upon facts considered to be correct as of the date hereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will The Andersons be responsible for damages of any nature whatsoever resulting from the use or reliance upon this information. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which this information refers.

APPENDIX C
LABORATORY ANALYTICAL RESULTS

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-44673-1

Client Project/Site: RVAAP Building 1200 and ATA Remedial Act

For:

Leidos, Inc.
8866 Commons Boulevard
Suite 201
Twinsburg, Ohio 44087

Attn: Jed Thomas

Authorized for release by:
11/28/2014 5:08:43 PM

Mark Loeb, Project Manager II
(330)966-9387
mark.loeb@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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QualifiersG

Metals

Qualifier	Qualifier Description
D.	The reported value is from a dilution.
J.	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteri.
4.	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not . pplicable.a
U.	Undetected at the Limit of Detection.a

lossaryG

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤.	Listed under the "D" column to designate that the result is reported on a dry weight basis.
%R.	Percent Recovery.
CFL.	Contains Free Liquid.
CNF.	Contains no Free Liquid.
DER.	Duplicate error ratio (normalized absolute difference).
Dil Fac.	Dilution Factor.
DL, RA, RE, IN.	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample.
DLC.	Decision level concentration.
MDA.	Minimum detectable activity.
EDL.	Estimated Detection Limit.
MDC.	Minimum detectable concentration.
MDL.	Method Detection Limit.
ML.	Minimum Level (Dioxin).
NC.	Not Calculated.
ND.	Not detected at the reporting limit (or MDL or EDL if shown).
PQL.	Practical Quantitation Limit.
QC.	Quality Control.
RER.	Relative error ratio.
RL.	Reporting Limit or Requested Limit (Radiochemistry).
RPD.	Relative Percent Difference, a measure of the relative difference between two points.
TEF.	Toxicity Equivalent Factor (Dioxin).
TEQ.	Toxicity Equivalent Quotient (Dioxin).

Job ID: 240-44673-1vS

Laboratory: TestAmerica CantonS

NarrativeS

CASE NARRATIVES

Client: Leidos, Inc.S

Project: RVAAP Building 1200 and ATA Remedial ActS

Report Number: 240-44673-1S

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples an1 no 1 problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control 1 limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of 1 the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted 1samples, 1 the reporting limits are adjusted relative to the dilution required.1

Calculations are performed before rounding to avoid round-off errors in calculated results.1

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed 1n the 1 individual sections below.1

TestAmerica utilizes USEPA approved methods and DOD QSM, where applicable, in all analytical work. The samples presented in this 1 report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A 1 summary of QC data for these analyses is included at the back of the report. 1
1
TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses 1 performed by TestAmerica facilities were done using established 1aboratory SOPs that incorporate QA/QC procedures described in the 1 applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and 1data 1 have been found to be compliant with laboratory protocols unless otherwise noted below. 1
1
All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the 1 method header.1

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.1

All parameters for which TestAmerica North Canton has certification were evaluated to the limit of detection (LOD) and include qualified 1 results where applicable. Parameters not certified under QSM, if any, were evaluated to the detection limit (DL) and include qualified 1 results where applicable.1

The sample(s) that contain constituents flagged with U are undetected. The result associated with this flag is the limit of d1tection (LOD).1

RECEIPTS

The samples were received on 1 /21/2014 9:45 AM; the samples arrived in good condition, properly preserved and, where required,1on 1 ice. The temperatures of the 2 coolers at receipt time were 10.2º C and 11.2º C.1

TOTAL METALS (ICPMS) WITH INCREMENTAL SAMPLE PREPARATIONS

Samples B12CS-050M-0016-SO (240-44673-1), B12CS-052M-0017-SO (240-44673-2), B12CS-053M-0018-SO (240-44673-3), 1 B12CS-054M-0019-SO (240-44673-4), B12CS-055M-0020-SO (240-44673-5) and B12CS-052M-0026-FD (240-44673-9) were analyzed 1 for total metals (ICPMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 1 2012 and EPA SW-846 Method 6020 DoD. The samples began the drying process on 11/21/2014, were processed and sieved on 1/24/2014, digested on 1 /25/2014 and analyzed on 1 /26/2014. 1

Manganese failed the recovery criteria high for the MS of sample B12CS-050M-0016-SOMS (240-44673-1) in batch 240-158728.1

Job ID: 240-44673-1 (Continued)vS

Laboratory: TestAmerica Canton (Continued)S

Manganese exceeded the RPD limit for the duplicate of sample B12CS-050M-0016-SODU (240-44673-1). 1

Samples B12CS-052M-0017-SO (240-44673-2)[5X], B12CS-053M-0018-SO (240-44673-3)[5X], B12CS-054M-0019-SO (240-44673-4)[5X] 1
and B12CS-052M-0026-FD (240-44673-9)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.1

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.1

TOTAL SOLIDS/PERCENT MOISTURES

Samples B12CS-050M-0016-SO (240-44673-1), B12CS-052M-0017-SO (240-44673-2), B12CS-053M-0018-SO (240-44673-3), 1
B12CS-054M-0019-SO (240-44673-4), B12CS-055M-0020-SO (240-44673-5) and B12CS-052M-0026-FD (240-44673-9) were analyzed 1
for Total Solids/Percent Moisture in accordance with Percent Moisture method. The samples were leached on 11/21/2014 and analyzed on
1/25/2014. 1

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.1

Method Summary

Client: Leidos, Inc
TestAmerica Job ID: 240-44673-1.
Project/Site: RVAAP Building 1200 and ATA Remedial Act.

Method	Method Description	Protocol	Laboratory
6020.	Metals (ICP/MS).	SW846.	TAL CAN.
Moisture.	Percent Moisture.	EPA.	TAL CAN.

Protocol References:

EPA = US Environmental Protection Agency.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396.

Sample Summary

Client: Leidos, Inc
TestAmerica Job ID: 240-44673-1.
Project/Site: RVAAP Building 1200 and ATA Remedial Act.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-44673-1.	B12CS-050M-0016-SO.	Solid.	11/19/14 16:05.	11/21/14 09:45.
240-44673-2.	B12CS-052M-0017-SO.	Solid.	11/19/14 15:15.	11/21/14 09:45.
240-44673-3.	B12CS-053M-0018-SO.	Solid.	11/19/14 15:30.	11/21/14 09:45.
240-44673-4.	B12CS-054M-0019-SO.	Solid.	11/19/14 15:55.	11/21/14 09:45.
240-44673-5.	B12CS-055M-0020-SO.	Solid.	11/20/14 15:58.	11/21/14 09:45.
240-44673-9	B12CS-052M-0026-FD.	Solid.	11/19/14 15:15.	11/21/14 09:45.

Detection Summary7

Client: Leidos, Inc
Project/Site: RVAAP Building 1200 and ATA Remedial Act.

TestAmerica Job ID: 240-44673-1.

Client Sample ID: B12CS-050M-0016-SO7 — Lab Sample ID: 240-44673-17

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D7	Method7	Prep Type7
Manganese.	390.	J D	0.95.	0.11.	mg/Kg.	2.	☼	6020.	Total/NA

Client Sample ID: B12CS-052M-0017-SO7 — Lab Sample ID: 240-44673-27

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D7	Method7	Prep Type7
Manganese.	1900.	D	2.3.	0.27.	mg/Kg.	5.	☼	6020.	Total/NA

Client Sample ID: B12CS-053M-0018-SO7 — Lab Sample ID: 240-44673-37

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D7	Method7	Prep Type7
Manganese.	1800.	D	2.3.	0.28.	mg/Kg.	5.	☼	6020.	Total/NA

Client Sample ID: B12CS-054M-0019-SO7 — Lab Sample ID: 240-44673-47

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D7	Method7	Prep Type7
Manganese.	1900.	D	2.5.	0.29.	mg/Kg.	5.	☼	6020.	Total/NA

Client Sample ID: B12CS-055M-0020-SO7 — Lab Sample ID: 240-44673-57

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D7	Method7	Prep Type7
Manganese.	410.	D	0.83.	0.099.	mg/Kg.	2.	☼	6020.	Total/NA

Client Sample ID: B12CS-052M-0026-FD7 — Lab Sample ID: 240-44673-97

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D7	Method7	Prep Type7
Manganese.	3600.	D	4.8.	0.58.	mg/Kg.	10.	☼	6020.	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: B12CS-050M-0016-SOr
Lab Sample ID: 240-44673-1r
Date Collected: 11/19/14 16:05r
Matrix: Solidr
Date Received: 11/21/14 09:45r
Percent Solids: 97.6r

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	390r	J Dr	0.95.	0.11.	mg/Kg.	☼	11/25/14 10:31.	11/26/14 10:30.	2.

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	98r		0.10.	0.10.	%			11/25/14 09:29.	1.
Percent Moisturer	2.4r		0.10.	0.10.	%			11/25/14 09:29.	1.

Client Sample ID: B12CS-052M-0017-SOr
Lab Sample ID: 240-44673-2r
Date Collected: 11/19/14 15:15r
Matrix: Solidr
Date Received: 11/21/14 09:45r
Percent Solids: 97.1r

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	1900r	Dr	2.3.	0.27.	mg/Kg.	☼	11/25/14 10:31.	11/26/14 15:28.	5.

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	97r		0.10.	0.10.	%			11/25/14 09:29.	1.
Percent Moisturer	2.9r		0.10.	0.10.	%			11/25/14 09:29.	1.

Client Sample ID: B12CS-053M-0018-SOr

Lab Sample ID: 240-44673-3r

Date Collected: 11/19/14 15:30r

Matrix: Solidr

Date Received: 11/21/14 09:45r

Percent Solids: 96.7r

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	1800r	Dr	2.3.	0.28.	mg/Kg.	☼	11/25/14 10:31.	11/26/14 15:31.	5.

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	97r		0.10.	0.10.	%			11/25/14 09:29.	1.
Percent Moisturer	3.3r		0.10.	0.10.	%			11/25/14 09:29.	1.

Client Sample ID: B12CS-054M-0019-SOr
Lab Sample ID: 240-44673-4r
Date Collected: 11/19/14 15:55r
Matrix: Solidr
Date Received: 11/21/14 09:45r
Percent Solids: 96.9r

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	1900r	Dr	2.5.	0.29.	mg/Kg.	☼	11/25/14 10:31.	11/26/14 15:35.	5.

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	97r		0.10.	0.10.	%			11/25/14 09:29.	1.
Percent Moisturer	3.1r		0.10.	0.10.	%			11/25/14 09:29.	1.

Client Sample ID: B12CS-055M-0020-SOr
Lab Sample ID: 240-44673-5r
Date Collected: 11/20/14 15:58r
Matrix: Solidr
Date Received: 11/21/14 09:45r
Percent Solids: 98.2r

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	410r	Dr	0.83.	0.099.	mg/Kg.	☼	11/25/14 10:31.	11/26/14 11:07.	2.

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	98r		0.10.	0.10.	%			11/25/14 09:29.	1.
Percent Moisturer	1.8r		0.10.	0.10.	%			11/25/14 09:29.	1.

Client: Leidos, Inc
Project/Site: RVAAP Building 1200 and ATA Remedial Act.

TestAmerica Job ID: 240-44673-1.

Client Sample ID: B12CS-052M-0026-FDr
Date Collected: 11/19/14 15:15r
Date Received: 11/21/14 09:45r

Lab Sample ID: 240-44673-9r
Matrix: Solidr
Percent Solids: 96.2r

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	3600r	Dr	4.8.	0.58.	mg/Kg.	☼	11/25/14 10:31.	11/26/14 15:50.	10.

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	96r		0.10.	0.10.	%			11/25/14 09:29.	1.
Percent Moisturer	3.8r		0.10.	0.10.	%			11/25/14 09:29.	1.

Method: 6020 - Metals (ICP/MS)Rk

Lab Sample ID: MB 240-158406/1-A ^2k
Matrix: Solidk
Analysis Batch: 158728k

Client Sample ID: Method Blank
Prep Type: Total/NAk
Prep Batch: 158406k

Analytek	MBk Resultk	MBk Qualifierk	LOQk	DLk	Unitk	Dk	Preparedk	Analyzed	Dil Fac
Manganese.	0.40.	U.	1.0.	0.12.	mg/Kg.		11/25/14 10:31.	11/26/14 10:22.	2.

Lab Sample ID: LCS 240-158406/2-A ^2k
Matrix: Solidk
Analysis Batch: 158728k

Client Sample ID: Lab Control Samplek
Prep Type: Total/NAk
Prep Batch: 158406k

Analytek			Spikek Addedk	LCSk Resultk	LCSk Qualifierk	Unitk	Dk	%Reck	%Rec.k Limitsk		
Manganese.			100.	98.9.	D.	mg/Kg.		99.	80.-.120.		

Lab Sample ID: 240-44673-1 MSk
Matrix: Solidk
Analysis Batch: 158728k

Client Sample ID: B12CS-050M-0016-SOk
Prep Type: Total/NAk
Prep Batch: 158406k

Analytek	Samplek sultk	Samplek Qualifierk	Spikek Addedk	MSk Resultk	MSk Qualifierk	Unitk	Dk	%Reck	%Rec.k Limitsk		
Manganese.	390.	J D.	9.49.	416.	4 D.	mg/Kg.	☼	319.	10.-.199.		

Lab Sample ID: 240-44673-1 DUk
Matrix: Solidk
Analysis Batch: 158728k

Client Sample ID: B12CS-050M-0016-SOk
Prep Type: Total/NAk
Prep Batch: 158406k

Analytek	Samplek sultk	Samplek Qualifierk		DUk Resultk	DUk Qualifierk	Unitk	Dk			PDk	PDk Limitk
Manganese.	390.	J D.		563.	J D.	mg/Kg.	☼			37.	20.

Method: Moisture - Percent Moisturek

Lab Sample ID: 240-44673-3 DUk
Matrix: Solidk
Analysis Batch: 158378k

Client Sample ID: B12CS-053M-0018-SOk
Prep Type: Total/NAk

Analytek	Samplek sultk	Samplek Qualifierk		DUk Resultk	DUk Qualifierk	Unitk	Dk			PDk	PDk Limit
Percent Solids.	97.			97.		%.				0.1.	20.
Percent Moisture.	3.3.			3.2.		%.				3.	20.

Metalstb

ISM Prep Batch: 157912b

Lab Sample IDb	Client Sample IDb	Prep Typeb	Matrixb	Methodb	Prep Batchb
240-44673-1.	B12CS-050M-0016-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-1 DU.	B12CS-050M-0016-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-1 MS.	B12CS-050M-0016-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-2.	B12CS-052M-0017-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-3.	B12CS-053M-0018-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-4.	B12CS-054M-0019-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-5.	B12CS-055M-0020-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-9.	B12CS-052M-0026-FD.	Total/NA.	Solid.	Increment, Prep.	

Prep Batch: 158406b

Lab Sample IDb	Client Sample IDb	Prep Typeb	Matrixb	Methodb	Prep Batchb
240-44673-1.	B12CS-050M-0016-SO	Total/NA.	Solid.	3050B.	157912.
240-44673-1 DU.	B12CS-050M-0016-SO	Total/NA.	Solid.	3050B.	157912.
240-44673-1 MS.	B12CS-050M-0016-SO	Total/NA.	Solid.	3050B.	157912.
240-44673-2.	B12CS-052M-0017-SO	Total/NA.	Solid.	3050B.	157912.
240-44673-3.	B12CS-053M-0018-SO	Total/NA.	Solid.	3050B.	157912.
240-44673-4.	B12CS-054M-0019-SO	Total/NA.	Solid.	3050B.	157912.
240-44673-5.	B12CS-055M-0020-SO	Total/NA.	Solid.	3050B.	157912.
240-44673-9.	B12CS-052M-0026-FD.	Total/NA.	Solid.	3050B.	157912.
LCS 240-158406/2-A ^2.	Lab Control Sample.	Total/NA.	Solid.	3050B.	
MB 240-158406/1-A ^2.	Method Blank.	Total/NA.	Solid.	3050B.	

Analysis Batch: 158728b

Lab Sample IDb	Client Sample IDb	Prep Typeb	Matrixb	Methodb	Prep Batchb
240-44673-1.	B12CS-050M-0016-SO	Total/NA.	Solid.	6020.	158406.
240-44673-1 DU.	B12CS-050M-0016-SO	Total/NA.	Solid.	6020.	158406.
240-44673-1 MS.	B12CS-050M-0016-SO	Total/NA.	Solid.	6020.	158406.
240-44673-2.	B12CS-052M-0017-SO	Total/NA.	Solid.	6020.	158406.
240-44673-3.	B12CS-053M-0018-SO	Total/NA.	Solid.	6020.	158406.
240-44673-4.	B12CS-054M-0019-SO	Total/NA.	Solid.	6020.	158406.
240-44673-5.	B12CS-055M-0020-SO	Total/NA.	Solid.	6020.	158406.
240-44673-9.	B12CS-052M-0026-FD.	Total/NA.	Solid.	6020.	158406.
LCS 240-158406/2-A ^2.	Lab Control Sample.	Total/NA.	Solid.	6020.	158406.
MB 240-158406/1-A ^2.	Method Blank.	Total/NA.	Solid.	6020.	158406.

General Chemistrytb

ISM Prep Batch: 157912b

Lab Sample IDb	Client Sample IDb	Prep Typeb	Matrixb	Methodb	Prep Batchb
240-44673-1.	B12CS-050M-0016-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-2.	B12CS-052M-0017-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-3.	B12CS-053M-0018-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-3 DU.	B12CS-053M-0018-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-4.	B12CS-054M-0019-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-5.	B12CS-055M-0020-SO	Total/NA.	Solid.	Increment, Prep.	
240-44673-9.	B12CS-052M-0026-FD.	Total/NA.	Solid.	Increment, Prep.	

Analysis Batch: 158378b

Lab Sample IDb	Client Sample IDb	Prep Typeb	Matrixb	Methodb	Prep Batchb
240-44673-1.	B12CS-050M-0016-SO	Total/NA.	Solid.	Moisture.	157912.

General Chemistry (Continued)tb

Analysis Batch: 158378 (Continued)b

Lab Sample IDb	Client Sample IDb	Prep Typeb	Matrixb	Methodb	Prep Batchb
240-44673-2.	B12CS-052M-0017-SO	Total/NA.	Solid.	Moisture.	157912.
240-44673-3.	B12CS-053M-0018-SO	Total/NA.	Solid.	Moisture.	157912.
240-44673-3 DU.	B12CS-053M-0018-SO	Total/NA.	Solid.	Moisture.	157912.
240-44673-4.	B12CS-054M-0019-SO	Total/NA.	Solid.	Moisture.	157912.
240-44673-5.	B12CS-055M-0020-SO	Total/NA.	Solid.	Moisture.	157912.
240-44673-9.	B12CS-052M-0026-FD.	Total/NA.	Solid.	Moisture.	157912.

Client Sample ID: B12CS-050M-0016-SO3 Lab Sample ID: 240-44673-13

Date Collected: 11/19/14 16:053 **Matrix: Solid3**
Date Received: 11/21/14 09:453 **Percent Solids: 97.63**

Prep Type3	Batch3 Type3	Batch3 Method3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
Total/NA1	ISM Prep1	Increment, Prep			579121	1/21/14 14:001	DRJ	TAL CAN1
Total/NA1	Prep1	3050B			58406	/25/14 10:31	DEE1	TAL CAN1
Total/NA1	Analysis1	60201		21	58728	/26/14 10:301	AMM21	TAL CAN1
Total/NA1	ISM Prep1	Increment, Prep1			57912	1/21/14 14:001	DRJ1	TAL CAN1
Total/NA1	Analysis1	Moisture			158378	/25/14 09:29	KS1	TAL CAN1

Client Sample ID: B12CS-052M-0017-SO3 Lab Sample ID: 240-44673-23

Date Collected: 11/19/14 15:153 **Matrix: Solid3**
Date Received: 11/21/14 09:453 **Percent Solids: 97.13**

Prep Type3	Batch3 Type3	Batch3 Method3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
Total/NA1	ISM Prep1	Increment, Prep			579121	1/21/14 14:001	DRJ	TAL CAN1
Total/NA1	Prep1	3050B			58406	/25/14 10:31	DEE1	TAL CAN1
Total/NA1	Analysis1	60201		51	58728	/26/14 15:281	AMM21	TAL CAN1
Total/NA1	ISM Prep1	Increment, Prep1			57912	1/21/14 14:001	DRJ1	TAL CAN1
Total/NA1	Analysis1	Moisture1			58378	/25/14 09:29	KS1	TAL CAN1

Client Sample ID: B12CS-053M-0018-SO3 Lab Sample ID: 240-44673-3

Date Collected: 11/19/14 15:303 **Matrix: Solid3**
Date Received: 11/21/14 09:453 **Percent Solids: 96.73**

Prep Type3	Batch3 Type3	Batch3 Method3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
Total/NA1	ISM Prep1	Increment, Prep			579121	1/21/14 14:001	DRJ	TAL CAN1
Total/NA1	Prep1	3050B			58406	/25/14 10:31	DEE1	TAL CAN1
Total/NA1	Analysis1	60201		51	58728	/26/14 15:31	AMM21	TAL CAN1
Total/NA1	ISM Prep1	Increment, Prep1			57912	1/21/14 14:001	DRJ1	TAL CAN1
Total/NA1	Analysis1	Moisture1			58378	/25/14 09:29	KS1	TAL CAN1

Client Sample ID: B12CS-054M-0019-SO3 Lab Sample ID: 240-44673-43

Date Collected: 11/19/14 15:553 **Matrix: Solid3**
Date Received: 11/21/14 09:453 **Percent Solids: 96.93**

Prep Type3	Batch3 Type3	Batch3 Method3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
Total/NA1	ISM Prep1	Increment, Prep			1579121	1/21/14 14:001	DRJ	TAL CAN1
Total/NA1	Prep1	3050B			58406	/25/14 10:31	DEE1	TAL CAN1
Total/NA1	Analysis1	60201		5	158728	/26/14 15:351	AMM21	TAL CAN1
Total/NA1	ISM Prep1	Increment, Prep1			57912	1/21/14 14:001	DRJ1	TAL CAN1
Total/NA1	Analysis1	Moisture1			58378	/25/14 09:29	KS1	TAL CAN1

Lab Chronicle3

Client: Leidos, Inc.1
Project/Site: RVAAP Building 1200 and ATA Remedial Act1

TestAmerica Job ID: 240-44673-1

Client Sample ID: B12CS-055M-0020-SO3

Lab Sample ID: 240-44673-53

Date Collected: 11/20/14 15:583
Matrix: Solid3
Date Received: 11/21/14 09:453
Percent Solids: 98.23

Prep Type3	Batch3 Type3	Batch3 Method3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
Total/NA1	ISM Prep1	Increment, Prep			579121	1/21/14 14:001	DRJ	TAL CAN1
Total/NA1	Prep1	3050B			58406	/25/14 10:31	DEE1	TAL CAN1
Total/NA1	Analysis1	60201		21	58728	/26/14 1 :071	AMM21	TAL CAN1
Total/NA1	ISM Prep1	Increment, Prep1			57912	1/21/14 14:001	DRJ1	TAL CAN1
Total/NA1	Analysis1	Moisture			158378	/25/14 09:29	KS1	TAL CAN1

Client Sample ID: B12CS-052M-0026-FD3

Lab Sample ID: 240-44673-93

Date Collected: 11/19/14 15:153
Matrix: Solid3
Date Received: 11/21/14 09:453
Percent Solids: 96.23

Prep Type3	Batch3 Type3	Batch3 Method3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
Total/NA1	ISM Prep1	Increment, Prep			1579121	1/21/14 14:001	DRJ	TAL CAN1
Total/NA1	Prep1	3050B			58406	/25/14 10:31	DEE1	TAL CAN1
Total/NA1	Analysis1	6020		0	158728	/26/14 15:501	AMM21	TAL CAN1
Total/NA1	ISM Prep1	Increment, Prep1			57912	1/21/14 14:001	DRJ1	TAL CAN1
Total/NA1	Analysis1	Moisture1			58378	/25/14 09:29	KS1	TAL CAN1

Laboratory References:3

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-93961

Certification Summary

Client: Leidos, Inc.1 TestAmerica Job ID: 240-44673-1
Project/Site: RVAAP Building 1200 and ATA Remedial Act1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.1

Authority	Program	EPA Region	Certification ID	Expiration Date
California1	NELAP1	91	01 44CA1	06-30-14 *d1
California1	State Program1	91	29271	04-30-15d1
Connecticut1	State Program1		PH-0590	12-31-14d1
Florida1	NELAP1	41	E872251	06-30-15d1
Georgia1	State Program1	41	N/A1	06-30-15d1
Illinois1	NELAP1	51	2000041	07-31-15d1
Kansas1	NELAP1	71	E-103361	01-31-15d1
Kentucky (UST)1	State Program1	41	581	06-30-15d1
L-A-B1	DoD ELAP1		23151	07-18-16d1
Minnesota1	NELAP1	51	039-999-348	12-31-14d1
Nevada1	State Program1	91	OH-000482008A1	07-31-15d1
New Jersey1	NELAP1	21	OH001	06-30-15d1
New York1	NELAP1	2	109751	03-31-15d1
Ohio VAP1	State Program1	51	CL0024	10-31-15d1
Pennsylvania1	NELAP1	31	68-003401	08-31-15d1
Texas1	NELAP1	61		08-31-15d1
USDA1	Federal1		P330-13-00319	1-26-16d1
Virginia1	NELAP1	31	4601751	09-14-15d1
Washington1	State Program	101	C971	01-12-15d1
West Virginia DEP1	State Program1	31	210	12-31-14d1
Wisconsin1	State Program1	51	9995181901	08-31-15d1

* Certification renewal pending - certification considered vali1.1

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

9.8, 10.8

leidos

Chain of Custody Record

Leidos, Inc.

COC No.: RVAAP-RA-03

Page 1 of 2

Date: ~~11/20/14~~ 11/20/14

Name: Leidos
Address: 8866 Commons Blvd., Suite 201, Twinsburg, OH 44087
Phone Number: 330-405-5802
Project Manager: Jed Thomas
Project Name: Building 1200/ATA RA Confirmation Sampling (RVAAP)
~~Job/P.O. 172819.00.09456.00.9500.02.001 PO10025302~~

Sampler (Signature) RSmrl (Printed Name) Rich Sprinzl

Laboratory Name: Test America
Address: 4101 Shuffel St. NW, North Canton, OH 44720
Phone: 330-497-9396
Fax: 330-497-0772

Laboratory No.	Field Sample #	Location ID	Depth	Date	Time	Matrix	Requested Parameters: Total As (~~6010~~)	Total Mn (~~6010~~)	No. of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS	
	B12cs-050M-0016-SO	B12cs-050M	0-1	11/19/14	1605	S		X	2	ISM Processing, RUSH	1
	B12cs-052M-0017-SO	B12cs-052M	0-1	11/19/14	1515	S		X	1	ISM Processing	2
	B12cs-053M-0018-SO	B12cs-053M	0-1	11/19/14	1530	S		X	2	ISM Processing	3
	B12cs-054M-0019-SO	B12cs-054M	0-1	11/19/14	1555	S		X	1	ISM Processing	4
	B12cs-055M-0020-SO	B12cs-055M	0-1	11/20/14	1558	S		X	1	ISM Processing	5
	B12cs-065M-0036-SO	B12cs-065M	0-1	11/19/14	1535	S		X	1	HOLD AFTER ISM PROCESSING	6
	B12cs-062M-0033-SO	B12cs-062M	0-1	11/19/14	1552	S		X	1	↓	7
	B12cs-044M-0030-SO	B12cs-044M	0-1	11/19/14	1610	S		X	1	↓	8
	B12cs-052M-0026-FD	B12cs-052M	0-1	11/19/14	1515	S		X	1	ISM / RUSH	9
	B12cs-064M-0035-SO	B12cs-064M	0-1	11/20/14	1520	S		X	1	HOLD POST-ISM	10
	B12cs-048M-0029-SO	B12cs-048M	0-1	11/20/14	1548	S		X	1	HOLD POST-ISM	11

Subtotal Number of Containers: 13
Total: 17

Notes: ~~A: Cool MS~~

ISM PROCESSING REQUIRED FOR ALL SAMPLES UNLESS NOTED OTHERWISE ABOVE
*RUSH (3-DAY) TAT REQUESTED (POST DRYING)
Methods: → HOLD SAMPLES → PERFORM ISM PROCESSING THEN HOLD SAMPLE UNTIL LEIDOS EVALUATES PRIMARY SAMPLES DATA.
1.) SW 846 3540/6010B

Shipment Method: ~~UPS~~ Fedex 8653 4778 9135 (2 coolers)
Airbill No.:

Relinquished by	Date	Received by	Date	Time
RSmrl	11/20/14	FEDEX	11/20/14	
Signature		Signature		
Rich Sprinzl	Time 2000	Printed Name		Time
Printed Name: LEIDOS		Company		
Company				
Relinquished by	Date	Received by	Date	Time
Signature		Signature: N. Sulek	11-21-14	945
Printed Name	Time	Printed Name: TA		
Company		Company		

① Ditch Floor
② Ditch South Wall (12-13)
③ Ditch East Wall (9-10-11-12)
④ Ditch West Wall (13-14-15-8)
⑤ Ditch North Wall (8-9)
⑥ Ditch-East Wall (11-12)
⑦ Ditch-West Wall (13-14)
⑧ Ditch-Floor (11-12-13-14)
VOC = volatile organic compound
SVOC = semi-volatile organic compound
⑨ N/A
⑩ Ditch-East Wall (10-11)
⑪ Ditch-Floor (10-11-14-15)
S = Soil/solid matrix

Leidos, Inc.

leidos

Chain of Custody Record

Leidos, Inc.

COC No.: RVAAP-RA-03

Page 2 of 2 Date: 11/20/14

Name: Leidos
Address: 8866 Commons Blvd., Suite 201, Twinsburg, OH 44087
Phone Number: 330-405-5802
Project Manager: Jed Thomas
Project Name: Building 1200/ATA RA Confirmation Sampling (RVAAP)
~~Job/P.O. 172819.00.09456.00.9500.02.001 PO10025302~~
Sampler (Signature) RSmf (Printed Name) RichSprinzl

Laboratory Name: Test America
Address: 4101 Shuffel St. NW, North Canton, OH 44720
Phone: 330-497-9396
Fax: 330-497-0772

Laboratory No.	Field Sample #	Location ID	Depth	Date	Time	Matrix	Requested Parameters: ~~Total As (A)~~ S	Total Mn (A) S	No. of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	B12CS-063M-0034-SO	B12CS-063M	0-1	11/20/14	1618	S		X	1	HOLD POST-ISM PROCESSING (1)
	B12CS-047M-0028-SO	B12CS-047M	0-1	11/20/14	1620	S		X	1	(2)
	B12CS-061M-0032-SO	B12CS-061M	0-1	11/20/14	1623	S		X	1	(3)
	B12CS-060M-0031-SO	B12CS-060M	0-1	11/20/14	1625	S		X	1	(4)

RS 11/20/14

Relinquished by	Date	Received by	Date
Signature: RSmf	11/20/14	Signature: FEDEX	11/20/14
Printed Name: RichSprinzl	Time: 2000	Printed Name: RS	Time:
Company: LEIDOS		Company:	
Relinquished by	Date	Received by	Date
Signature:		Signature:	11-21-14
Printed Name:	Time	Printed Name: N.S-tek	Time: 945
Company:		Company: TA	

Subtotal Number of Containers: 4
Total: 17

Notes:
~~A- Cool 4°C~~ (5)
ISM PROCESSING REQUIRED FOR ALL SAMPLES UNLESS NOTED OTHERWISE ABOVE
-HOLD SAMPLES => PERFORM ISM PROCESSING
Methods: THEN HOLD PENDING ANALYSIS OF PRIMARY SAMPLES
1.) SW 846 3540/6010B
* RUSH 3DAY TAT REQUESTED (POST-DRYING)
(1) Ditch-Eastwall (9-10)
(2) Ditch-Floor (8-9-10-15)
(3) Ditch-West Wall (14-15)
(4) DITCH - WEST WALL (8-15)

VOC = volatile organic compound
SVOC = semi-volatile organic compound (5)

S = Soil/solid matrix

Shipment Method: Fedex
Airbill No.: 8653 4778 9135 (2 coolers)

TestAmerica Canton Sample Receipt Form/Narrative Login # : 44873
Canton Facility

Client Leidos Site Name _____ Cooler unpacked by:

Cooler Received on 11-21-14 Opened on 11-21-14

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

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 +4.0 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 4	(CF +1.2 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	☑ See Multiple Cooler Form
IR GUN# 5	(CF +0.4 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 8	(CF +0.7 °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# HC425511
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: HKP

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
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\WI_QA use only\WI-NC-099M-110614 Cooler Receipt Form.doc djl

TestAmerica Multiple Cooler Receipt Form/Narrative Login # : 94673
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
client	5	9.8	10.2	NONE
↓	↓	10.8	11.2	↓

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-44673-2

Client Project/Site: RVAAP Building 1200 and ATA Remedial Act

For:

Leidos, Inc.
8866 Commons Boulevard
Suite 201
Twinsburg, Ohio 44087

Attn: Jed Thomas

Authorized for release by:
12/3/2014 6:05:35 PM

Mark Loeb, Project Manager II
(330)966-9387
mark.loeb@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Leidos, Inc.
roject/Site: RVAAP Building 1200 and ATA Remedial ActP

TestAmerica Job ID: 240-44673-2P

QualifiersG

Metals

Qualifier	Qualifier Description
DP	The reported value is from a dilution.P
UP	Undetected at the Limit of Detection.P

lossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤P	Listed under the "D" column to designate that the result is reported on a dry weight basisP
%R	Percent RecoveryP
CFLP	Contains Free LiquidP
CNFP	Contains no Free LiquidP
DERP	Duplicate error ratio (normalized absolute difference)P
Dil FacP	Dilution FactorP
DL, RA, RE, INP	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sampleP
DLCP	Decision level concentrationP
MDAP	Minimum detectable activityP
EDLP	Estimated Detection LimitP
MDCP	Minimum detectable concentrationP
MDLP	Method Detection LimitP
MLP	Minimum Level (Dioxin)P
NCP	Not CalculatedP
NDP	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation LimitP
QCP	Quality ControlP
RERP	Relative error ratioP
RLP	Reporting Limit or Requested Limit (Radiochemistry)P
RPDP	Relative Percent Difference, a measure of the relative difference between two pointsP
TEFP	Toxicity Equivalent Factor (Dioxin)P
TEQP	Toxicity Equivalent Quotient (Dioxin)P

Job ID: 240-44673-2vS

1aboratorL: yestTASrima CactocS

NarrativeS

CTnS NTEETyIRS

CVect: 1eBSsdlcmS

. roPemt: ERTT.SjSBSYScu g200 aclSTyT EeASalSaVTmtS

Eeport NBASer: 240-44673-2S

With the exceptions noted as flaus or footnotes, standard analytical protocols were followed in the analysis of the samples an1 no 1 problems were encoBntered or anomalies observed. In addition all laboratory qBality control samples were within established control 1 limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reportinu limit within the constraints of 1 the method. In some cases, dBe to interference or analytes present at hiuh concentrations, samples were dilBted. For dilBted 1samples, 1 the reportinu limits are adPBsted relative to the dilBtion reqBired.1

CalcBlations are performed before roBndinu to avoid roBnd-off errors in calcBlated resBlts.1

All holdinu times were met and proper preservation noted for the methods performed on these samples, Bnless otherwise detailed 1n the 1 individBal sections below.1

TestAmerica Btilizes U/1E1A approved methods and DOD Q/1M, where applicable, in all analytical work. The samples presented in this 1 report were analyzed for the parameter(s) listed on the analytical methods sBmmary paue in accordance with the method(s) indicated. A 1 sBmmary of QC data for these analyses is inclBded at the back of the report. 1

1

TestAmerica Canton attests to the validity of the laboratory data uenerated by TestAmerica facilities reported herein. All analyses 1 performed by TestAmerica facilities were done Bsinu established 1aboratory /1O1s that incorporate QAjQC procedBres described in the 1 applicable methods. TestAmerica's operations uroBps have reviewed the data for compliance with the laboratory QAjQC plan, and 1data 1 have been foBnd to be compliant with laboratory protocols Bnless otherwise noted below. 1

1

All solid sample resBlts are reported on an "as received" basis Bnless otherwise indicated by the presence of a % solids valBe in the 1 method header.1

This laboratory report is confidential and is intended for the sole Bse of TestAmerica and its client.1

All parameters for which TestAmerica North Canton has certification were evalBated to the limit of detection (LOD) and inclBde qBalified 1 resBlts where applicable. 1arameters not certified Bnder Q/1M, if any, were evalBated to the detection limit (DL) and inclBde qBalified 1 resBlts where applicable.1

The sample(s) that contain constitBents flauued with U are Bndetected. The resBlt associated with this flau is the limit of d4tection (LOD).1

ESCSl.SyS

The samples were received on ggj2gj20g4 9:45 AM; the samples arrived in uood condition, properly preserved and, where reqBired,1on 1 ice. The temperatBres of the 2 coolers at receipt time were g0.2º C and gg.2º C.1

SesBlts inclBded in this report are from samples taken off hold 1on g2jgj20g4.1

yOyT1 MSyT1n (IC.SMn) WlyH INCESMSNyT1 nTM.SlS .SES.STETyIONS

/1amples Vg2C/1-065M-0036-/1O (240-44673-6), Vg2C/1-062M-0033-/1O (240-44673-7), Vg2C/1-064M-0035-/1O (240-44673-g0), 1 Vg2C/1-063M-0034-/1O (240-44673-g2), Vg2C/1-06gM-0032-/1O (240-44673-g4) and Vg2C/1-060M-003g-/1O (240-44673-g5) were 1 analyzed for total metals (IC1M/1) with incremental sample preparation in accordance with ITSC Technical and SeuBlatory 81Bidance: I/1M, 1 FebrBary 20g2 and E1A /1W-G46 Method 6020 DoD. The samples beuan the dryinu process on ggj2gj20g4, were processed and sieved 1 on ggj24j20g4, diuested on g2j0gj20g4 and analyzed on g2j02j20g4. 1

Job ID: 240-44673-2 (CocticBelS)vS

1aboratorL: yestTASrima Cactoc (CocticBelS)S

Manuanese failed the recovery criteria hiuh for the M/1 of sample 240-44G32-g in batch 240-g59324. Sefer to the QC report for 1etails.1

/1amples Vg2C/1-065M-0036-/1O (240-44673-6)[g0X], Vg2C/1-062M-0033-/1O (240-44673-7)[g0X], Vg2C/1-064M-0035-/1O (240-44673-g0)1 [20X], Vg2C/1-063M-0034-/1O (240-44673-g2)[g0X], Vg2C/1-06gM-0032-/1O (240-44673-g4)[g0X] and Vg2C/1-060M-003g-/1O 1 (240-44673-g5)[20X] reqBired dilBtion prior to analysis. The reportinu limits have been adPBsted accordinuly.1

The sample dBplicate (DU) precision for manuanese in batch 240-g590g2 was oBtside control limits.1

No additional analytical or qBality issBes were noted, other than those described above or in the Definitionsj81ossary paue.1

yOyT1 nO1IDn/.S ECSNy MOInyUES

/1amples Vg2C/1-065M-0036-/1O (240-44673-6), Vg2C/1-062M-0033-/1O (240-44673-7), Vg2C/1-064M-0035-/1O (240-44673-g0), 1 Vg2C/1-063M-0034-/1O (240-44673-g2), Vg2C/1-06gM-0032-/1O (240-44673-g4) and Vg2C/1-060M-003g-/1O (240-44673-g5) were 1 analyzed for Total /1olidsj1 ercent MoistBre in accordance with 1 ercent MoistBre method. The samples were leached on ggj2gj20g4 and 1 analyzed on ggj25j20g4. 1

No analytical or qBality issBes were noted, other than those described above or in the Definitionsj81ossary paue.1

Method Summary

1 Qel.t: neiLosdIl. ,
. roPectj/.ite: SRAA. VBiCil.u g200 al.L ATA SemeLiaCAct.

TestAmerica Job ID: 240-44673-2.

Method	Method Description	Protocol	Laboratory
6020.	MetaS (I1. jM/.).	/ W846 .	TAn 1.AN.
MoistBre.	ercel.t MoistBre.	E. A.	TAn 1.AN.

Protocol References:

E. A = U/. El.virol.mel.t.C. rotectiol. Auel. y.

/.W846 = "Test MethoLs For EvaCB. til.u /. oQL Wasted. hysicaC1.hemicaCMethoLs"dThirL ELitiol.dNovember g986 Al.L Its UpLates,.

Laboratory References:

TAn 1.AN = TestAmerica 1.al.tol.d4g0g /. hBffeC/. treet NWdNorth 1.al.tol.dOH 44720dTEn (330)497-9396.

Sample Summary

Client: Leidos, Inc.
roject/Site: RVAAP Building 1200 and ATA Remedial ActP

TestAmerica Job ID: 240-44673-2P

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-44673-6P	B12CS-065M-0036-SOP	SolidP	11/19/14 15:35P	11/21/14 09:45P
240-44673-7P	B12CS-062M-0033-SOP	SolidP	11/19/14 15:52P	11/21/14 09:45P
240-44673-10P	B12CS-064M-0035-SOP	SolidP	11/20/14 15:20P	11/21/14 09:45P
240-44673-12P	B12CS-063M-0034-SOP	SolidP	11/20/14 16:18P	11/21/14 09:45P
240-44673-14P	B12CS-061M-0032-SOP	SolidP	11/20/14 16:23P	11/21/14 09:45P
240-44673-15P	B12CS-060M-0031-SOP	SolidP	11/20/14 16:25P	11/21/14 09:45P

Client Sample ID: B12CS-065M-0036-SO4 — Lab Sample ID: 240-4 673-64

Analyte4	Result4	Qualifier4	LOQ4	DL4	Unit4	Dil Fac4	D4	Method4	Prep Type4
Mal.ual.ese.	g300.	D	4,9.	0,94.	muj5u.	g0	☼	6020.	TotaQKA

Client Sample ID: B12CS-062M-0033-SO4 — Lab Sample ID: 240-4 673-74

Analyte4	Result4	Qualifier4	LOQ4	DL4	Unit4	Dil Fac4	D4	Method4	Prep Type4
Mal.ual.ese.	g900.	D	4,9.	0,99.	muj5u.	g0	☼	6020.	TotaQKA

Client Sample ID: B12CS-064M-0035-SO4 — Lab Sample ID: 240-4 673-104

Analyte4	Result4	Qualifier4	LOQ4	DL4	Unit4	Dil Fac4	D4	Method4	Prep Type4
Mal.ual.ese.	2300.	D	N,0.	g,g.	muj5u	20	☼	6020.	TotaQKA

Client Sample ID: B12CS-063M-0034-SO4 — Lab Sample ID: 240-4 673-124

Analyte4	Result4	Qualifier4	LOQ4	DL4	Unit4	Dil Fac4	D4	Method4	Prep Type4
Mal.ual.ese.	g700.	D	4,7.	0,96.	muj5u.	g0	☼	6020.	TotaQKA

Client Sample ID: B12CS-061M-0032-SO4 — Lab Sample ID: 240-4 673-14

Analyte4	Result4	Qualifier4	LOQ4	DL4	Unit4	Dil Fac4	D4	Method4	Prep Type4
Mal.ual.ese.	g800.	D	4,6.	0,96.	muj5u.	g0	☼	6020.	TotaQKA

Client Sample ID: B12CS-060M-0031-SO4 — Lab Sample ID: 240-4 673-154

Analyte4	Result4	Qualifier4	LOQ4	DL4	Unit4	Dil Fac4	D4	Method4	Prep Type4
Mal.ual.ese.	2g00.	D	8,8.	g,g.	muj5u.	20	☼	6020.	TotaQKA

Client Sample ID: B12CS-065M-0036-SOr **Lab Sample ID: 240-44673-6r**
Date Collected: 11/19/14 15:35r **Matrix: Solidr**
Date Received: 11/21/14 09:45r **Percent Solids: 96.3r**

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	1300r	Dr	4.5P	0.54P	mg/KgP	☼	12/01/14 10:57P	12/02/14 15:34P	10P

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	96r		0.10P	0.10P	%P			11/25/14 09:29	1P
Percent Moisturer	3.7r		0.10P	0.10P	%P			11/25/14 09:29	1P

Client Sample ID: B12CS-062M-0033-SOr
Lab Sample ID: 240-44673-7r
Date Collected: 11/19/14 15:52r
Matrix: Solidr
Date Received: 11/21/14 09:45r
Percent Solids: 96.5r

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	1500r	Dr	4.5P	0.55P	mg/KgP	☼	12/01/14 10:57P	12/02/14 15:38P	10P

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	96r		0.10P	0.10P	%P			11/25/14 09:29	1P
Percent Moisturer	3.5r		0.10P	0.10P	%P			11/25/14 09:29	1P

Client Sample ID: B12CS-064M-0035-SOr
Lab Sample ID: 240-44673-10r
Date Collected: 11/20/14 15:20r
Matrix: Solidr
Date Received: 11/21/14 09:45r
Percent Solids: 97.0r

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	2300r	Dr	9.0P	1.1P	mg/KgP	☼	12/01/14 10:57P	12/02/14 16:39	20P

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	97r		0.10P	0.10P	%P			11/25/14 09:29	1P
Percent Moisturer	3.0r		0.10P	0.10P	%P			11/25/14 09:29	1P

Client Sample ID: B12CS-063M-0034-SOr

Lab Sample ID: 240-44673-12r

Date Collected: 11/20/14 16:18r

Matrix: Solidr

Date Received: 11/21/14 09:45r

Percent Solids: 96.9r

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	1700r	Dr	4.7P	0.56P	mg/KgP	☼	12/01/14 10:57P	12/02/14 15:46P	10P

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	97r		0.10P	0.10P	%P			11/25/14 09:42P	1P
Percent Moisturer	3.1r		0.10P	0.10P	%P			11/25/14 09:42P	1P

Client Sample ID: B12CS-061M-0032-SOr
Date Collected: 11/20/14 16:23r
Date Received: 11/21/14 09:45r

Lab Sample ID: 240-44673-14r
Matrix: Solidr
Percent Solids: 97.1r

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	1800r	Dr	4.6P	0.56P	mg/KgP	☼	12/01/14 10:57P	12/02/14 15:49	10P

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	97r		0.10P	0.10P	%P			11/25/14 09:42P	1P
Percent Moisturer	2.9r		0.10P	0.10P	%P			11/25/14 09:42P	1P

Client Sample ID: B12CS-060M-0031-SOr
Lab Sample ID: 240-44673-15r
Date Collected: 11/20/14 16:25r
Matrix: Solidr
Date Received: 11/21/14 09:45r
Percent Solids: 96.8r

Method: 6020 - Metals (ICP/MS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Manganeser	2100r	Dr	8.8P	1.1P	mg/KgP	☼	12/01/14 10:57P	12/02/14 16:42P	20P

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	Preparedr	Analyzedr	Dil Facr
Percent Solidsr	97r		0.10P	0.10P	%P			11/25/14 09:42P	1P
Percent Moisturer	3.2r		0.10P	0.10P	%P			11/25/14 09:42P	1P

Method: 6020 - Metals (ICP/MS)k

Lab Sample ID: MB 240-159012/1-A ^2k
Matrix: Solidk
Analysis Batch: 159324k

Client Sample ID: Method Blank
Prep Type: Total/NAk
Prep Batch: 159012k

Analytek	MBk Resultk	MBk Qualifierk	LOQk	DLk	Unitk	D	Prepared	Analyzed	Dil Fac
Mal.ual.ese.	0,40.	U.	g,0.	0,g2.	mujKu.		g2j0gjg4 g0:57.	g2j02jg4 g3:g9.	2.

Lab Sample ID: LCS 240-159012/2-A ^2k
Matrix: Solidk
Analysis Batch: 159324k

Client Sample ID: Lab Control Samplek
Prep Type: Total/NAk
Prep Batch: 159012k

Analytek			Spikek Addedk	LCSk Resultk	LCSk Qualifierk	Unit	D	%Reck	%Rec.k Limitsk		
Mal.ual.ese.			g00.	88,4.	D.	mujKu.		88.	90.-.g20.		

Method: Moisture - Percent Moisturek

Lab Sample ID: 240-44673-12 DUk
Matrix: Solidk
Analysis Batch: 158378k

Client Sample ID: B12CS-063M-0034-SOk
Prep Type: Total/NAk

Analytek	Samplek sultk	Samplek Qualifierk		DUk Resultk	DUk Qualifierk	Unitk	D			PDk PDk	PDk Limit
ercel.t /.oQLs.	87.			87.		%.				0,2.	20.
ercel.t MoistBre.	3,g.			2,8.		%.				7.	20.

Metalstb

ISM Prep Batch: 157912b

Lab Sample IDb	Client Sample IDb	Prep Typeb	Matrixb	Methodb	Prep Batchb
240-44673-6P	B12CS-065M-0036-SO	Total/NAP	SolidP	Increment, PrepP	
240-44673-7P	B12CS-062M-0033-SO	Total/NAP	SolidP	Increment, PrepP	
240-44673-10P	B12CS-064M-0035-SO	Total/NAP	SolidP	Increment, PrepP	
240-44673-12P	B12CS-063M-0034-SO	Total/NAP	SolidP	Increment, PrepP	
240-44673-14P	B12CS-061M-0032-SO	Total/NAP	SolidP	Increment, PrepP	
240-44673-15P	B12CS-060M-0031-SO	Total/NAP	SolidP	Increment, PrepP	

Prep Batch: 159012b

Lab Sample IDb	Client Sample IDb	Prep Typeb	Matrixb	Methodb	Prep Batchb
240-44673-6P	B12CS-065M-0036-SO	Total/NAP	SolidP	3050BP	157912P
240-44673-7P	B12CS-062M-0033-SO	Total/NAP	SolidP	3050BP	157912P
240-44673-10P	B12CS-064M-0035-SO	Total/NAP	SolidP	3050BP	157912P
240-44673-12P	B12CS-063M-0034-SO	Total/NAP	SolidP	3050BP	157912P
240-44673-14P	B12CS-061M-0032-SO	Total/NAP	SolidP	3050BP	157912P
240-44673-15P	B12CS-060M-0031-SO	Total/NAP	SolidP	3050BP	157912P
LCS 240-159012/2-A ^2P	Lab Control SampleP	Total/NAP	SolidP	3050BP	
MB 240-159012/1-A ^2P	Method BlankP	Total/NAP	SolidP	3050BP	

Analysis Batch: 159324b

Lab Sample IDb	Client Sample IDb	Prep Typeb	Matrixb	Methodb	Prep Batchb
240-44673-6P	B12CS-065M-0036-SO	Total/NAP	SolidP	6020P	159012P
240-44673-7P	B12CS-062M-0033-SO	Total/NAP	SolidP	6020P	159012P
240-44673-10P	B12CS-064M-0035-SO	Total/NAP	SolidP	6020P	159012P
240-44673-12P	B12CS-063M-0034-SO	Total/NAP	SolidP	6020P	159012P
240-44673-14P	B12CS-061M-0032-SO	Total/NAP	SolidP	6020P	159012P
240-44673-15P	B12CS-060M-0031-SO	Total/NAP	SolidP	6020P	159012P
LCS 240-159012/2-A ^2P	Lab Control SampleP	Total/NAP	SolidP	6020P	159012P
MB 240-159012/1-A ^2P	Method BlankP	Total/NAP	SolidP	6020P	159012P

General Chemistrytb

ISM Prep Batch: 157912b

Lab Sample IDb	Client Sample IDb	Prep Typeb	Matrixb	Methodb	Prep Batchb
240-44673-6P	B12CS-065M-0036-SO	Total/NAP	SolidP	Increment, PrepP	
240-44673-7P	B12CS-062M-0033-SO	Total/NAP	SolidP	Increment, PrepP	
240-44673-10P	B12CS-064M-0035-SO	Total/NAP	SolidP	Increment, PrepP	
240-44673-12P	B12CS-063M-0034-SO	Total/NAP	SolidP	Increment, PrepP	
240-44673-12 DUP	B12CS-063M-0034-SO	Total/NAP	SolidP	Increment, PrepP	
240-44673-14P	B12CS-061M-0032-SO	Total/NAP	SolidP	Increment, PrepP	
240-44673-15P	B12CS-060M-0031-SO	Total/NAP	SolidP	Increment, PrepP	

Analysis Batch: 158378b

Lab Sample IDb	Client Sample IDb	Prep Typeb	Matrixb	Methodb	Prep Batchb
240-44673-6P	B12CS-065M-0036-SO	Total/NAP	SolidP	MoistureP	157912P
240-44673-7P	B12CS-062M-0033-SO	Total/NAP	SolidP	MoistureP	157912P
240-44673-10P	B12CS-064M-0035-SO	Total/NAP	SolidP	MoistureP	157912P
240-44673-12P	B12CS-063M-0034-SO	Total/NAP	SolidP	MoistureP	157912P
240-44673-12 DUP	B12CS-063M-0034-SO	Total/NAP	SolidP	MoistureP	157912P
240-44673-14P	B12CS-061M-0032-SO	Total/NAP	SolidP	MoistureP	157912P
240-44673-15P	B12CS-060M-0031-SO	Total/NAP	SolidP	MoistureP	157912P

Lab Chronicle3

Client: Leidos, Inc.1
1roPectj/1ite: SRAA1 VBildinu g200 and ATA Semedial Act1

TestAmerica Job ID: 240-44673-2

Client Sample ID: B12CS-05M63-00O5-S43

Lab Sample ID: 270-7753O-53

Date Collected: 11/19/17 1MCM3

63atrix: Solid3

Date Received: 11/21/17 09:7M3

Percent Solids: 95.O3

Prep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	rep1	3050V1			g590g21	g2j0gjg4 g0:571	D881	TAL CAN1
TotaljNA1	AnalEsis1	60201		g01	g593241	g2j02jg4 g5:341	AMM21	TAL CAN1
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	AnalEsis1	MoistBre1		g1	g5y37y1	ggj25jg4 09:29	K/1	TAL CAN1

Client Sample ID: B12CS-0526300OO-S43

Lab Sample ID: 270-7753O-3

Date Collected: 11/19/17 1MM23

63atrix: Solid3

Date Received: 11/21/17 09:7M3

Percent Solids: 95.M3

Prep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	rep1	3050V1			g590g21	g2j0gjg4 g0:571	D881	TAL CAN1
TotaljNA1	AnalEsis1	60201		g01	g593241	g2j02jg4 g5:3y1	AMM21	TAL CAN1
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	AnalEsis1	MoistBre1		g1	g5y37y1	ggj25jg4 09:29	K/1	TAL CAN1

Client Sample ID: B12CS-0576300OM-S43

Lab Sample ID: 270-7753O-103

Date Collected: 11/20/17 1M203

63atrix: Solid3

Date Received: 11/21/17 09:7M3

Percent Solids: 93.03

Prep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	rep1	3050V1			g590g21	g2j0gjg4 g0:571	D881	TAL CAN1
TotaljNA1	AnalEsis1	60201		201	g593241	g2j02jg4 g6:39	AMM21	TAL CAN1
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	AnalEsis1	MoistBre1		g1	g5y37y1	ggj25jg4 09:29	K/1	TAL CAN1

Client Sample ID: B12CS-05O63-00O7-S43

Lab Sample ID: 270-7753O-123

Date Collected: 11/20/17 15:183

63atrix: Solid3

Date Received: 11/21/17 09:7M3

Percent Solids: 95.93

Prep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	rep1	3050V1			g590g21	g2j0gjg4 g0:571	D881	TAL CAN1
TotaljNA1	AnalEsis1	60201		g01	g593241	g2j02jg4 g5:461	AMM21	TAL CAN1
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	AnalEsis1	MoistBre1		g1	g5y37y1	ggj25jg4 09:421	K/1	TAL CAN1

Client Sample ID: B12CS-05163-00O2-S43 Lab Sample ID: 270-7753O-173

Date Collected: 11/20/17 15:2O3 **63atrix: Solid3**

Date Received: 11/21/17 09:7M3 **Percent Solids: 93.13**

Prep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	rep1	3050V1			g590g21	g2j0gjg4 g0:571	D8181	TAL CAN1
TotaljNA1	AnalEsis1	60201		g01	g593241	g2j02jg4 g5:49	AMM21	TAL CAN1
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	AnalEsis1	MoistBre1		g1	g5y37y1	ggj25jg4 09:421	K/1	TAL CAN1

Client Sample ID: B12CS-05063-00O1-S43 Lab Sample ID: 270-7753O-1M3

Date Collected: 11/20/17 15:2M3 **63atrix: Solid3**

Date Received: 11/21/17 09:7M3 **Percent Solids: 95.83**

Prep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	Prepared3 or Analyzed3	Analyst3	Lab3
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	rep1	3050V1			g590g21	g2j0gjg4 g0:571	D8181	TAL CAN1
TotaljNA1	AnalEsis1	60201		201	g593241	g2j02jg4 g6:421	AMM21	TAL CAN1
TotaljNA1	I/1M 1rep1	Increment, 1rep1			g579g21	ggj2gjg4 g4:001	DSJ1	TAL CAN1
TotaljNA1	AnalEsis1	MoistBre1		g1	g5y37y1	ggj25jg4 09:421	K/1	TAL CAN1

Laboratory References:3

TAL CAN = TestAmerica Canton, 4g0g /1hBffel /1treet NW, North Canton, OH 44720, T81 (330)497-93961

Certification Summary

Client: Leidos, Inc.1 TestAmerica Job ID: 240-44673-2

1roPectj/1ite: SRAA1 VBildinu g200 and ATA Semedial Act1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.1

Authority	Program	EPA Region	Certification ID	Expiration Date
California1	NELA1	91	0gg44CA1	06-30-g4 *1
California1	/1tate 1rouram1	91	29271	04-30-g51
ConnecticBt1	/1tate 1rouram1	g1	H-05901	g2-3g-g41
Florida1	NELA1	41	E872251	06-30-g51
Georuia1	/1tate 1rouram1	41	NjA1	06-30-g51
Illinois1	NELA1	51	2000041	07-3g-g51
Kansas1	NELA1	71	E-g03361	0g-3g-g51
KentBcky (U/1T)1	/1tate 1rouram1	41	581	06-30-g51
-A-V1	DoD ELA1		23g51	07-g8-g61
Minnesota1	NELA1	51	039-999-3481	g2-3g-g41
Nevada1	/1tate 1rouram1	91	OH-000482008A1	07-3g-g51
New Jersey1	NELA1	21	OH00g1	06-30-g51
New York1	NELA1	21	g09751	03-3g-g51
Ohio RA1	/1tate 1rouram1	51	CL00241	g0-3g-g51
ennsylvania1	NELA1	31	68-003401	08-3g-g51
Texas1	NELA1	61		08-3g-g51
U/1DA1	Federal1		330-g3-003g91	gg-26-g61
Riruinia1	NELA1	31	460g751	09-g4-g51
Washinuton1	/1tate 1rouram1	g01	C97g1	0g-g2-g51
West Riruinia DE1	/1tate 1rouram1	31	2g01	g2-3g-g41
Wisconsin1	/1tate 1rouram1	51	9995g8g901	08-3g-g51

* Certification renewal pendinu - certification considered vali1.1

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

9.8, 10.8

leidos

Chain of Custody Record

Leidos, Inc.

COC No.: RVAAP-RA-03

Page 1 of 2

Date: ~~11/20/14~~ 11/20/14

Name: Leidos
Address: 8866 Commons Blvd., Suite 201, Twinsburg, OH 44087
Phone Number: 330-405-5802
Project Manager: Jed Thomas
Project Name: Building 1200/ATA RA Confirmation Sampling (RVAAP)
~~Job/P.O. 172819.00.09456.00.9500.02.001 PO10025302~~
Sampler (Signature) RSmrl (Printed Name) Rich Sprinzl

Laboratory Name: Test America
Address: 4101 Shuffel St. NW, North Canton, OH 44720
Phone: 330-497-9396
Fax: 330-497-0772

Laboratory No.	Field Sample #	Location ID	Depth	Date	Time	Matrix	Requested Parameters: ~~Total As~~ s	Total Mn s	No. of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS	
	B12cs-050M-0016-SO	B12cs-050M	0-1	11/19/14	1605	S		X	2	ISM Processing, RUSH	1
	B12cs-052M-0017-SO	B12cs-052M	0-1	11/19/14	1515	S		X	1	ISM Processing	2
	B12cs-053M-0018-SO	B12cs-053M	0-1	11/19/14	1530	S		X	2	ISM Processing	3
	B12cs-054M-0019-SO	B12cs-054M	0-1	11/19/14	1555	S		X	1	ISM Processing	4
	B12cs-055M-0020-SO	B12cs-055M	0-1	11/20/14	1558	S		X	1	ISM Processing	5
	B12cs-065M-0036-SO	B12cs-065M	0-1	11/19/14	1535	S		X	1	HOLD AFTER ISM PROCESSING	6
	B12cs-062M-0033-SO	B12cs-062M	0-1	11/19/14	1552	S		X	1	↓	7
	B12cs-044M-0030-SO	B12cs-044M	0-1	11/19/14	1610	S		X	1	↓	8
	B12cs-052M-0026-FD	B12cs-052M	0-1	11/19/14	1515	S		X	1	ISM / RUSH	9
	B12cs-064M-0035-SO	B12cs-064M	0-1	11/20/14	1520	S		X	1	HOLD POST-ISM	10
	B12cs-048M-0029-SO	B12cs-048M	0-1	11/20/14	1548	S		X	1	HOLD POST-ISM	11

Subtotal Number of Containers: 13
Total: 17

Notes: ~~A. Cool MS~~

ISM PROCESSING REQUIRED FOR ALL SAMPLES UNLESS NOTED OTHERWISE ABOVE
*RUSH (3-DAY) TAT REQUESTED (POST DRYING)
Methods: 1.) SW 846 3540/6010B

Shipment Method: ~~UPS~~ Fedex 8653 4778 9135 (2 coolers)
Airbill No.:

- HOLD SAMPLES → PERFORM ISM PROCESSING THEN HOLD SAMPLE UNTIL LEIDOS EVALUATES PRIMARY SAMPLES DATA.

① Ditch Floor
② Ditch South Wall (12-13)
③ Ditch East Wall (9-10-11-12)
④ Ditch West Wall (13-14-15-8)
⑤ Ditch North Wall (8-9)
⑥ Ditch-East Wall (11-12)
⑦ Ditch-West Wall (13-14)
⑧ Ditch-FLOOR (11-12-13-14)
VOC = volatile organic compound
SVOC = semi-volatile organic compound
⑨ N/A
⑩ Ditch-East Wall (10-11)
⑪ DITCH-FLOOR (10-11-14-15)
S = Soil/solid matrix

Relinquished by	Date	Received by	Date	Time
Signature: RSmrl	11/20/14	Signature: FEDEX	11/20/14	
Printed Name: Rich Sprinzl	Time: 2000	Printed Name:		
Company: LEIDOS		Company:		
Relinquished by	Date	Received by	Date	Time
Signature:		Signature: N. Sulek	11-21-14	945
Printed Name:		Printed Name: TA		
Company:		Company:		

Leidos, Inc.

Page 21 of 24

12/3/2014

leidos

Chain of Custody Record

Leidos, Inc.

COC No.: RVAAP-RA-03

Page 2 of 2 Date: 11/20/14

Name: Leidos
Address: 8866 Commons Blvd., Suite 201, Twinsburg, OH 44087
Phone Number: 330-405-5802
Project Manager: Jed Thomas
Project Name: Building 1200/ATA RA Confirmation Sampling (RVAAP)
~~Job/P.O. 172819.00.09456.00.9500.02.001 PO10025302~~
Sampler (Signature) RSmf (Printed Name) RichSprinzl

Laboratory Name: Test America
Address: 4101 Shuffel St. NW, North Canton, OH 44720
Phone: 330-497-9396
Fax: 330-497-0772

Laboratory No.	Field Sample #	Location ID	Depth	Date	Time	Matrix	Requested Parameters: ~~Total As (A2)~~ S	Total Mn (A2) S	No. of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	B12CS-063M-0034-SO	B12CS-063M	0-1	11/20/14	1618	S		X	1	HOLD POST-ISM PROCESSING (1)
	B12CS-047M-0028-SO	B12CS-047M	0-1	11/20/14	1620	S		X	1	(2)
	B12CS-061M-0032-SO	B12CS-061M	0-1	11/20/14	1623	S		X	1	(3)
	B12CS-060M-0031-SO	B12CS-060M	0-1	11/20/14	1625	S		X	1	(4)

RS 11/20/14

Relinquished by	Date	Received by	Date
Signature: RSmf	11/20/14	Signature: FEDEX	11/20/14
Printed Name: RichSprinzl	Time: 2000	Printed Name: RS	Time:
Company: LEIDOS		Company:	
Relinquished by	Date	Received by	Date
Signature:		Signature:	11-21-14
Printed Name:	Time	Printed Name: N.S-tek	Time: 945
Company:		Company: TA	

Subtotal Number of Containers: 4
Total: 17

Notes:
~~A- Cool 4°C~~ (5)
ISM PROCESSING REQUIRED FOR ALL SAMPLES UNLESS NOTED OTHERWISE ABOVE
-HOLD SAMPLES => PERFORM ISM PROCESSING
Methods: THEN HOLD PENDING ANALYSIS OF PRIMARY SAMPLES
1.) SW 846 3540/6010B
* RUSH 3DAY TAT REQUESTED (POST-DRYING)
(1) Ditch-Eastwall (9-10)
(2) Ditch-Floor (8-9-10-15)
(3) Ditch-West Wall (14-15)
(4) DITCH - WEST WALL (8-15)

VOC = volatile organic compound
SVOC = semi-volatile organic compound (5)

S = Soil/solid matrix

Shipment Method: Fedex
Airbill No.: 8653 4778 9135 (2coolers)

TestAmerica Canton Sample Receipt Form/Narrative Login # : 440873
Canton Facility

Client Leidos Site Name _____ Cooler unpacked by:

Cooler Received on 11-21-14 Opened on 11-21-14

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

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 +4.0 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 4	(CF +1.2 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	☑ See Multiple Cooler Form
IR GUN# 5	(CF +0.4 °C)	Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 8	(CF +0.7 °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# HC425511
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): _____

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\WI_QA use only\WI-NC-099M-110614 Cooler Receipt Form.doc djl

TestAmerica Multiple Cooler Receipt Form/Narrative
Canton Facility

Login # : 44673

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client	5	9.8	10.2	NONE
↓	↓	10.8	11.2	↓

C:\Users\livengoodc\AppData\Local\Microsoft\Windows\Temporary Internet Files\OLKD16\WI-NC-099-031813 Cooler Receipt Form_page 2 - Multiple Coolers.doc
Revision 3, 3/18/13 rls

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-44832-1

Client Project/Site: RVAAP Building 1200 and ATA Remedial Act

For:

Leidos, Inc.
8866 Commons Boulevard
Suite 201
Twinsburg, Ohio 44087

Attn: Jed Thomas

Authorized for release by:
12/4/2014 4:53:26 PM

Mark Loeb, Project Manager II
(330)966-9387
mark.loeb@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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QualifiersG

Metals

Qualifier	Qualifier Description
DP	The reported value is from a dilution.P
JP	Estimated: The quantitation is an estimation due to discrepancPes in meeting certain analyte-specific quality control criteriP.P
4P	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not P pplicable.aP
UP	Undetected at the Limit of Detection.aP

lossaryG

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤P	Listed under the "D" column to designate that the result is reported on a dry weight basisP
%R	Percent RecoveryP
CFLP	Contains Free LiquidP
CNFP	Contains no Free LiquidP
DERP	Duplicate error ratio (normalized absolute difference)P
Dil FacP	Dilution FactorP
DL, RA, RE, INP	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sampleP
DLCP	Decision level concentrationP
MDAP	Minimum detectable activityP
EDLP	Estimated Detection LimitP
MDCP	Minimum detectable concentrationP
MDLP	Method Detection LimitP
MLP	Minimum Level (Dioxin)P
NCP	Not CalculatedP
NDP	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation LimitP
QCP	Quality ControlP
RERP	Relative error ratioP
RLP	Reporting Limit or Requested Limit (Radiochemistry)P
RPDP	Relative Percent Difference, a measure of the relative difference between two pointsP
TEFP	Toxicity Equivalent Factor (Dioxin)P
TEQP	Toxicity Equivalent Quotient (Dioxin)P

Job ID: 240-44832-1vE

Laboratory: TestAmerica CantonE

NarrativeE

CASE NARRATIVE

Client: Leidos, Inc.E

Project: RVAAP Building 1200 and ATA Remedial ActE

Report Number: 240-44832-1E

g itWtWe ehcextions noted as plaus or pootnotes, standard analf1tical xrotocols y1ere polloy1ed in tWe analf1sis optWe samxles and no 1 xroblems y1ere encoBntered or anomalies obserwed. In addition all laboratorf1vBalitf1control samxles y1ere y1tWin establisWed control 1 limits, y1tWanf1ehcextions noted beloy1 q1acWsamxle y1as analf1Eed to acWiewe tWe loy1est xossible rexortinu limit y1tWin tWe constraints op1 tWe metWod. In some cases, dBe to interperence or analf1tes xresent at WiuWconcentrations, samxles y1ere dilBted. zor dilBted samxles, 1 tWe rexortinu limits are adPBsted relatiwe to tWe dilBtion revBired.1

CalcBlations are xerpormed bepore roBndinu to awoid roBnd-opperrors in calcBlated resBlts.1

All Woldinu times y1ere met and xroxer xreserwation noted por tWe metWods xerpormed on tWese samxles, Bnless otWery1se detailed in tWe 1 indiwidBal sections beloy11

TestAmerica BtiliEes F/1q1 A axxrowed metWods and DUD O/1Q, y1Were axxlicable, in all analf1tical y1brM TWe samxles xresented in tWis 1 rexort y1ere analf1Eed por tWe xarameterks(listed on tWe analf1tical metWods sBmmarf1xaue in accordance y1tWtWe metWodks(indicated. A 1 sBmmarf1opOC data por tWese analf1ses is inclBded at tWe bacMoptWe rexort. 1
1
TestAmerica Canton attests to tWe waliditf1optWe laboratorf1data uenerated bf1TestAmerica pacilities rexorted Werein. All analf1ses 1 xerpormed bf1TestAmerica pacilities y1ere done Bsinu establisWed laboratorf1/1U1 s tWat incorxorate OAjOC xrocedBres described in tWe 1 axxlicable metWods. TestAmerica)s oxerations uroBxs Wawe rewiey1ed tWe data por comxliance y1tWtWe laboratorf1OAjOC xlan, and data 1 Wawe been poBnd to be comxliant y1tWlaboratorf1xrotocols Bnless otWery1se noted beloy1 1
1
All solid samxle resBlts are rexorted on an '1as receiwed'1basis Bnless otWery1se indicated bf1tWe xresence opa "1 solids waIBe in tWe 1 metWod Weader.1

TWis laboratorf1rexort is conpidential and is intended por tWe sole Bse opTestAmerica and its client.1

All xarameters por y1WicWTestAmerica %ortWCanton Was certipication y1ere ewalBated to tWe limit opdetection k1UD(and inclBde vBalipied 1 resBlts y1Were axxlicable. 1arameters not certipied Bnder O/1Q, ipanf1 y1ere ewalBated to tWe detection limit kDL(and inclBde vBalipied 1 resBlts y1Were axxlicable.1

TWe samxleks(tWat contain constitBents plauued y1tWF are Bndetected. TWe resBlt associated y1tWtWis plau is tWe limit opdetection k1UD(.1

RECEIPTE

TWe samxles y1ere receiwed on 33j2Nj2034 30:3N AQ9tWe samxles arriwed in uood condition, xroxerlf1xreserwed and, y1Were revBired, on 1 ice. TWe temxeratBre optWe cooler at receixt y1as 33.05C.1

TOTAL METALS (ICPMS) WITH INCREMENTAL SAMPLE PREPARATIONE

/1amxles V32C/1-0N;1Q-0022-/1U k240-44672-3(, V32C/1-0N°1Q-0027-/1U k240-44672-2(, V32C/1-0N6Q-0024-/1U k240-44672-7(, 1 V32C/1-0N8Q-002N-/1U k240-44672-4(, V32C/1-0N;1Q-002°1-zD k240-44672-N(and V32C/1-0;1 1Q-0023-/1U k240-44672-;1(y1ere analf1Ee1 1 por total metals kIC1 Q/1(y1tWincremental samxle xrexaration in accordance y1tWTSC TecWnical and SeuBlatorf1GBidance: I/1Q, zebrBarf11 2032 and q1 A /1g1-64;1QetWod ;1020 DoD. TWe samxles beuan tWe drf1nu xrocess on 33j2Nj2034, y1ere xrocessed and siewed on 1 32j03j2034, diuested on 32j03j2034 and analf1Eed on 32j02j2034 and 32j04j2034. 1

Qanuanese pailed tWe recowerf1criteria WiuWpor tWe Q/1opsamxle V32C/1-0N;1Q-0022-/1UQ/1k240-44672-3(in batcW240-3N8724. Seper to 1

Job ID: 240-44832-1 (Continued)E

Laboratory: TestAmerica Canton (Continued)E

tWe OC rexort por details.1

Qanuanese ehceeded tWe S1 D limit por tWe dBxlicate opsamxle V32C/1-0N;1Q-0022-/1UDF k240-44672-3(. Seper to tWe OC rexort por 1 etails.1

/1amxles V32C/1-0N°1Q-0027-/1U k240-44672-2([30X], V32C/1-0N6Q-0024-/1U k240-44672-7([30X], V32C/1-0N8Q-002N-/1U k240-44672-4(1 [30X] and V32C/1-0;1;1Q-0023-/1U k240-44672-;1([30X] revBired dilBtion xrior to analf1sis. TWe rexortinu limits Wave been adPBste1 1 accordinulf11

%o additional analf1tical or vBalitf1issBes y1ere noted, otWer tWan tWose described abowe or in tWe DepinitionsjGlossarf1xaue.1

TOTAL SOLIDS/PERCENT MOISTURE

/1amxles V32C/1-0N;1Q-0022-/1U k240-44672-3(, V32C/1-0N°1Q-0027-/1U k240-44672-2(, V32C/1-0N6Q-0024-/1U k240-44672-7(, 1 V32C/1-0N8Q-002N-/1U k240-44672-4(, V32C/1-0N;1Q-002°1-zD k240-44672-N(and V32C/1-0;1;1Q-0023-/1U k240-44672-;1(y1ere analf1Ee1 1 por Total /1olidsj1 ercent QoistBre in accordance y1tW1 ercent QoistBre metWod. TWe samxles y1ere leacWed on 33j2Nj2034 and analf1Eed on 1 32j03j2034. 1

%o analf1tical or vBalitf1issBes y1ere noted, otWer tWan tWose described abowe or in tWe DepinitionsjGlossarf1xaue.1

Method Summary

1 Qel.t: neiLosdIl. ,
roPectj/.ite: SRAA. VBiCil.u 3200 al.L ATA SemeLiaCAct.

TestAmerica Job ID: 240-44672-3.

Method	Method Description	Protocol	Laboratory
W020.	8.etaG M1. j8./.(	/ g 64W .	TAn 1.A).
8.oistBre.	ercel.t 8.oistBre.	N. A.	TAn 1.A).

Protocol References:

N. A E =/. Nl.Urol.mel.t.C. rotectiol. Auel. v.

/.g.64WEyTest 8.et".oLs hor NU.GB. til.u /.oGL g. sted. ".vsicaG1.".emicaC8.et".oLsydT".irL NLitiol.d).oUember 3F6WAl.L Its =.9Lates,.

Laboratory References:

TAn 1.A). E TestAmerica 1.I. tol.d4303 /."BqpeC/.treet).g.d).ort". 1.I. tol.df. O 44H20dTNn M770(4FH-F7FW.

Sample Summary

1 Qel.t: neiLosdIl. ,
. roPectj/.ite: SRAA. VBiCil.u 3200 al.L ATA SemeLiaCAct.

TestAmerica Job ID: 240-44672-3.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-44672-3.	V321/.-0g5M-0022-/.O.	/.oQL.	33j24j34 32:30.	33j2gj34 30:3g.
240-44672-2.	V321/.-0g9M-0027-/.O.	/.oQL.	33j24j34 32:2g.	33j2gj34 30:3g.
240-44672-7.	V321/.-0g6M-0024-/.O.	/.oQL.	33j24j34 32:4g.	33j2gj34 30:3g.
240-44672-4.	V321/.-0g8M-002g-/.O.	/.oQL.	33j24j34 32:gg.	33j2gj34 30:3g.
240-44672-g.	V321/.-0g5M-0029-FD.	/.oQL.	33j24j34 32:30.	33j2gj34 30:3g.
240-44672-5.	V321/.-055M-0023-/.O.	/.oQL.	33j24j34 34:20.	33j2gj34 30:3g.

Detection Summary7

Client Sample ID: B12CS-05M67-0022-SO7 — Lab Sample ID: 240-44732-17

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D	67ethod7	Prep Type7
g. l.ual.ese.	3K0.	D J	0,M7	0,33.	muj9u	. . 2	☼	K020.	Tota@5A.

Client Sample ID: B12CS-05867-0023-SO7 — Lab Sample ID: 240-44732-27

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D	67ethod7	Prep Type7
g. l.ual.ese.	6M0.	D	4,N.	0,N4.	muj9u.	30	☼	K020.	Tota@5A.

Client Sample ID: B12CS-05767-0024-SO7 — Lab Sample ID: 240-44732-37

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D	67ethod7	Prep Type7
g. l.ual.ese.	820.	D	4,8.	0,N8.	muj9u.	30	☼	K020.	Tota@5A.

Client Sample ID: B12CS-05967-0025-SO7 — Lab Sample ID: 240-44732-47

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D	67ethod7	Prep Type7
g. l.ual.ese.	800.	D	7,M.	0,4K	muj9u.	30	☼	K020.	Tota@5A.

Client Sample ID: B12CS-05M67-0028-FD7 — Lab Sample ID: 240-44732-57

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D	67ethod7	Prep Type7
g. l.ual.ese.	320.	D	0,M0	0,33.	muj9u	. . 2	☼	K020.	Tota@5A.

Client Sample ID: B12CS-0MM67-0021-SO7 — Lab Sample ID: 240-44732-M7

Analyte7	Result7	Qualifier7	LOQ7	DL7	Unit7	Dil Fac7	D	67ethod7	Prep Type7
g. l.ual.ese.	N30.	D	7,6.	0,4N.	muj9u.	30	☼	K020.	Tota@5A.

Client Sample ID: 1r32CS-0B5M-0022-SOr **Lab Sample ID: 240-44672-3r**

Date Collected: 33/24/34 32:30r **Matrix: Solidr**

Date Received: 33/2B/34 30:3Br **9ercent Solids: PP.7r**

Method: 5020 - Metals (IC9rMS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unit	Dr	9reparedr	Analyzed	Dil Fac
Manganeser	350r	D Jr	0,g7.	0,33.	muj9u.	☼	32j03j34 30:5K.	32j02j34 37:25.	2.

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unit	Dr	9reparedr	Analyzed	Dil Fac
9ercent Solidsr	PPr		0,30.	0,30.	%			32j03j34 06:46.	3.
9ercent Moisturer	0.58r		0,30.	0,30.	%			32j03j34 06:46.	3.

Client Sample ID: 1r32CS-0B8M-0027-SOr
Date Collected: 33/24/34 32:2Br
Date Received: 33/2B/34 30:3Br

Lab Sample ID: 240-44672-2r
Matrix: Solidr
9ercent Solids: P6.8r

Method: 5020 - Metals (IC9rMS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unit	Dr	9reparedr	Analyzed	Dil Fac
Manganeser	6P0r	Dr	4,5.	0,54.	muj9u.	☼	32j03j34 30:5K.	32j04j34 33:2g.	30.

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unit	Dr	9reparedr	Analyzed	Dil Fac
9ercent Solidsr	PPr		0,30.	0,30.	%			32j03j34 06:46.	3.
9ercent Moisturer	3.7r		0,30.	0,30.	%			32j03j34 06:46.	3.

Client Sample ID: 1r32CS-0B6M-0024-SOr
Date Collected: 33/24/34 32:4Br
Date Received: 33/2B/34 30:3Br

Lab Sample ID: 240-44672-7
Matrix: Solid
9ercent Solids: P8.6r

Method: 5020 - Metals (IC9rMS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	D	9reparedr	Analyzed	Dil Fac
Manganeser	820r	Dr	4,K.	0,5K.	muj9u.	☼	32j03j34 30:5K.	32j04j34 33:77.	30.

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	D	9reparedr	Analyzed	Dil Fac
9ercent Solidsr	P6r		0,30.	0,30.	%			32j03j34 06:46.	3.
9ercent Moisturer	2.2r		0,30.	0,30.	%			32j03j34 06:46.	3

Client Sample ID: 1r32CS-0BPM-002B-SOr **Lab Sample ID: 240-44672-4r**

Date Collected: 33/24/34 32:BBr **Matrix: Solidr**

Date Received: 33/2B/34 30:3Br **9ercent Solids: P6.Pr**

Method: 5020 - Metals (IC9rMS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unit	Dr	9reparedr	Analyzed	Dil Fac
Manganeser	800r	Dr	7,g.	0,48.	muj9u.	☼	32j03j34 30:5K.	32j04j34 33:7K.	30.

General Chemistryr

Analyter	Resultr	Qualifier	LOQr	DLr	Unit	Dr	9reparedr	Analyzed	Dil Fac
9ercent Solidsr	PPr		0,30.	0,30.	%			32j03j34 06:46.	3.
9ercent Moisturer	3.3r		0,30.	0,30.	%			32j03j34 06:46.	3.

Client Sample ID: 1r32CS-0B5M-0028-FDr
Lab Sample ID: 240-44672-Br
Date Collected: 33/24/34 32:30r
Matrix: Solidr
Date Received: 33/2B/34 30:3Br
9ercent Solids: PP.4r

Method: 5020 - Metals (IC9rMS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unit	Dr	9reparedr	Analyzed	Dil Fac
Manganeser	320r	Dr	0,g0.	0,33.	muj9u.	☼	32j03j34 30:5K.	32j02j34 34:02.	2.

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unit	Dr	9reparedr	Analyzed	Dil Fac
9ercent Solidsr	PPr		0,30.	0,30.	%			32j03j34 06:46.	3.
9ercent Moisturer	0.52r		0,30.	0,30.	%			32j03j34 06:46.	3.

Client Sample ID: 1s32CS-055M-0023-SOr
Date Collected: 33/24/34 34:20r
Date Received: 33/2B/34 30:3Br

Lab Sample ID: 240-44672-5r
Matrix: Solidr
9ercent Solids: P6.Pr

Method: 5020 - Metals (IC9rMS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unit	Dr	9reparedr	Analyzed	Dil Fac
Manganeser	B30r	Dr	7,6.	0,45.	muj9u.	☼	32j03j34 30:5K.	32j04j34 33:43.	30.

General Chemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unit	Dr	9reparedr	Analyzed	Dil Fac
9ercent Solidsr	PPr		0,30.	0,30.	%			32j03j34 06:46.	3.
9ercent Moisturer	3.3r		0,30.	0,30.	%			32j03j34 06:46.	3.

Method: 6020 - Metals (ICP/MS)k

Lab Sample ID: MB 240-159012/1-A ^2k — **Client Sample ID: Method Blank**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 159324k — **Prep Batch: 159012k**

Analytek	MBk Resultk	MBk Qualifierk	LOQk	DLk	Unitk	D	Prepared	Analyzed	Dil Fac
g. l.ual.ese.	0,40.	M.	3,0.	0,32.	mujUu.		32j03j34 30:K5	32j02j34 37:36.	2.

Lab Sample ID: LCS 240-159012/2-A ^2k — **Client Sample ID: Lab Control Samplek**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 159324k — **Prep Batch: 159012k**

Analytek			Spikek Addedk	LCSk Resultk	LCSk Qualifierk	Unit	D	%Reck	%Rec.k Limitsk		
g. l.ual.ese.			300.	99,4.	D.	mujUu.		99.	60.-.320.		

Lab Sample ID: 240-44832-1 MSk — **Client Sample ID: B12CS-056M-0022-SOk**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 159324k — **Prep Batch: 159012k**

Analytek	Samplek sultk	Samplek Qualifierk	Spikek Addedk	MSk Resultk	MSk Qualifierk	Unitk	Dk	%Reck	%Rec.k Limitsk		
g. l.ual.ese.	380.	D J.	9,72.	392.	D 4.	mujUu.	☼	726.	30.-.399.		

Lab Sample ID: 240-44832-1 DUk — **Client Sample ID: B12CS-056M-0022-SOk**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 159324k — **Prep Batch: 159012k**

Analytek	Samplek sultk	Samplek Qualifierk		DUk Resultk	DUk Qualifierk	Unitk	Dk			PDk PDk	PDk Limitk
g. l.ual.ese.	380.	D J.		288.	D J.	mujUu.	☼			49.	20.

Method: Moisture - Percent Moisturek

Lab Sample ID: 240-44832-4 DUk — **Client Sample ID: B12CS-059M-0025-SOk**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 158959k

Analytek	Samplek sultk	Samplek Qualifierk		DUk Resultk	DUk Qualifierk	Unitk	Dk			PDk PDk	PDk Limit
ercel.t /.oCLs.	99.			99.		%.				0,02.	20.
ercel.t g.oistBre.	3,3.			3,3.		%.				3.	20.

MetalsD

ISM Prep Batch: 158822D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-44672-3.	V321/.-0p5M-0022-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-3 DU.	V321/.-0p5M-0022-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-3 M/.	V321/.-0p5M-0022-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-2.	V321/.-0p8M-0027-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-7.	V321/.-0p6M-0024-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-4.	V321/.-0p9M-002p-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-p.	V321/.-0p5M-0028-FD.	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-5.	V321/.-055M-0023-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	

Prep Batch: 159012D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-44672-3.	V321/.-0p5M-0022-/.O	TotaQNA.	/ oQL.	70p0V.	3p6622.
240-44672-3 DU.	V321/.-0p5M-0022-/.O	TotaQNA.	/ oQL.	70p0V.	3p6622.
240-44672-3 M/.	V321/.-0p5M-0022-/.O	TotaQNA.	/ oQL.	70p0V.	3p6622.
240-44672-2.	V321/.-0p8M-0027-/.O	TotaQNA.	/ oQL.	70p0V.	3p6622.
240-44672-7.	V321/.-0p6M-0024-/.O	TotaQNA.	/ oQL.	70p0V.	3p6622.
240-44672-4.	V321/.-0p9M-002p-/.O	TotaQNA.	/ oQL.	70p0V.	3p6622.
240-44672-p.	V321/.-0p5M-0028-FD.	TotaQNA.	/ oQL.	70p0V.	3p6622.
240-44672-5.	V321/.-055M-0023-/.O	TotaQNA.	/ oQL.	70p0V.	3p6622.
n1/. 240-3p9032j2-A ^2.	nab 1.ol.troC/. mgQe.	TotaQNA.	/ oQL.	70p0V.	
MV 240-3p9032j3-A ^2.	MethoL VQal.k.	TotaQNA.	/ oQL.	70p0V.	

Analysis Batch: 159324D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-44672-3.	V321/.-0p5M-0022-/.O	TotaQNA.	/ oQL.	5020.	3p9032.
240-44672-3 DU.	V321/.-0p5M-0022-/.O	TotaQNA.	/ oQL.	5020.	3p9032.
240-44672-3 M/.	V321/.-0p5M-0022-/.O	TotaQNA.	/ oQL.	5020.	3p9032.
240-44672-p.	V321/.-0p5M-0028-FD.	TotaQNA.	/ oQL.	5020.	3p9032.
n1/. 240-3p9032j2-A ^2.	nab 1.ol.troC/. mgQe.	TotaQNA.	/ oQL.	5020.	3p9032.
MV 240-3p9032j3-A ^2.	MethoL VQal.k.	TotaQNA.	/ oQL.	5020.	3p9032.

Analysis Batch: 159561D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-44672-2.	V321/.-0p8M-0027-/.O	TotaQNA.	/ oQL.	5020.	3p9032.
240-44672-7.	V321/.-0p6M-0024-/.O	TotaQNA.	/ oQL.	5020.	3p9032.
240-44672-4.	V321/.-0p9M-002p-/.O	TotaQNA.	/ oQL.	5020.	3p9032.
240-44672-5.	V321/.-055M-0023-/.O	TotaQNA.	/ oQL.	5020.	3p9032.

General ChemistryD

ISM Prep Batch: 158822D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-44672-3.	V321/.-0p5M-0022-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-2.	V321/.-0p8M-0027-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-7.	V321/.-0p6M-0024-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-4.	V321/.-0p9M-002p-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-4 DU.	V321/.-0p9M-002p-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-p.	V321/.-0p5M-0028-FD.	TotaQNA.	/ oQL.	Il.cremel.td. reg.	
240-44672-5.	V321/.-055M-0023-/.O	TotaQNA.	/ oQL.	Il.cremel.td. reg.	

General Chemistry (Continued)tD

Analysis Batch: 158959D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-44672-3.	V321/.-0p5M-0022-/.O	TotaQNA.	/ oQL.	MoistBre.	3p6622.
240-44672-2.	V321/.-0p8M-0027-/.O	TotaQNA.	/ oQL.	MoistBre.	3p6622.
240-44672-7.	V321/.-0p6M-0024-/.O	TotaQNA.	/ oQL.	MoistBre.	3p6622.
240-44672-4.	V321/.-0p9M-002p-/.O	TotaQNA.	/ oQL.	MoistBre.	3p6622.
240-44672-4 DU.	V321/.-0p9M-002p-/.O	TotaQNA.	/ oQL.	MoistBre.	3p6622.
240-44672-p.	V321/.-0p5M-0028-FD.	TotaQNA.	/ oQL.	MoistBre.	3p6622.
240-44672-5.	V321/.-055M-0023-/.O	TotaQNA.	/ oQL.	MoistBre.	3p6622.

Client Sample ID: B12CS-05M630022-SO3 — Lab Sample ID: 240-44732-13

Date Collected: 11/24/14 12:103 — 63atrix: Solid3

Date Received: 11/25/14 10:153 — 9ercent SolidP: ss.3

93ep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	9repared3 or Analyzed3	AnalyPt3	Lab3
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	reM1	70p0V1			3pN0321	32j03j34 30:p51	D881	TAL CA9
Totalj9A1	AnalEsis1	y0201		21	3pN7241	32j02j34 37:2p1	Ag1g121	TAL CA9
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	AnalEsis1	g1oistBre1		31	3p6NpN1	32j03j34 06:461	K/1	TAL CA9

Client Sample ID: B12CS-058630023-SO3 — Lab Sample ID: 240-44732-23

Date Collected: 11/24/14 12:253 — 63atrix: Solid3

Date Received: 11/25/14 10:153 — 9ercent SolidP: s7.83

93ep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	9repared3 or Analyzed3	AnalyPt3	Lab
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	reM1	70p0V			3pN0321	32j03j34 30:p51	D881	TAL CA9
Totalj9A1	AnalEsis1	y0201		301	3pNpy31	32j04j34 33:2N1	Ag1g121	TAL CA9
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	AnalEsis1	g1oistBre1		31	3p6NpN1	32j03j34 06:461	K/1	TAL CA9

Client Sample ID: B12CS-057630024-SO3 — Lab Sample ID: 240-44732-3

Date Collected: 11/24/14 12:453 — 63atrix: Solid3

Date Received: 11/25/14 10:153 — 9ercent SolidP: s8.73

93ep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	9repared3 or Analyzed3	AnalyPt3	Lab
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	reM1	70p0V			3pN0321	32j03j34 30:p51	D881	TAL CA9
Totalj9A1	AnalEsis1	y0201		301	3pNpy31	32j04j34 33:771	Ag1g121	TAL CA9
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	AnalEsis1	g1oistBre1		31	3p6NpN1	32j03j34 06:461	K/1	TAL CA9

Client Sample ID: B12CS-05s630025-SO3 — Lab Sample ID: 240-44732-43

Date Collected: 11/24/14 12:553 — 63atrix: Solid3

Date Received: 11/25/14 10:153 — 9ercent SolidP: s7.s3

93ep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	9repared3 or Analyzed3	AnalyPt3	Lab
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	reM1	70p0V			3pN0321	32j03j34 30:p51	D881	TAL CA9
Totalj9A1	AnalEsis1	y0201		301	3pNpy31	32j04j34 33:751	Ag1g121	TAL CA9
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	AnalEsis1	g1oistBre1		31	3p6NpN1	32j03j34 06:461	K/1	TAL CA9

Client Sample ID: B12CS-05M630028-FD3 — Lab Sample ID: 240-44732-53

Date Collected: 11/24/14 12:103 — **63atrix: Solid3**

Date Received: 11/25/14 10:153 — **9ercent SolidP: ss.43**

93ep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	9repared3 or Analyzed3	AnalyPt3	Lab3
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	reM1	70p0V1			3pN0321	32j03j34 30:p51	D881	TAL CA9
Totalj9A1	AnalEsis1	y0201		21	3pN7241	32j02j34 34:021	Ag1g121	TAL CA9
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	AnalEsis1	g1oistBre1		31	3p6NpN1	32j03j34 06:461	K/1	TAL CA9

Client Sample ID: B12CS-0MM630021-SO3 — Lab Sample ID: 240-44732-M3

Date Collected: 11/24/14 14:203 — **63atrix: Solid3**

Date Received: 11/25/14 10:153 — **9ercent SolidP: s7.s3**

93ep Type3	Batch3 Type3	Batch3 63ethod3	Run	Dilution3 Factor3	Batch3 Number3	9reparedi3 or Analyzed3	AnalyPt3	Labi3
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	reM1	70p0V1			3pN0321	32j03j34 30:p51	D881	TAL CA9
Totalj9A1	AnalEsis1	y0201		301	3pNpy31	32j04j34 33:431	Ag1g121	TAL CA9
Totalj9A1	I/1g11reM1	Increment, 1reM1			3p66221	33j2pj34 35:701	DSJ1	TAL CA9
Totalj9A1	AnalEsis1	g1oistBre1		31	3p6NpN1	32j03j34 06:461	K/1	TAL CA9

Laboratory ReferenceP:3

TAL CA9 = TestAmerica Canton, 4303 /1hBffel /1treet 9W, 9orth Canton, OH 44520, T81L (770)4N5-N7Ny1

Certification Summary

Client: Leidos, Inc.1 TestAmerica Job ID: 240-44672-3

1roPectj/1ite: SRAA1 VBildinu 3200 and ATA Semedial Act1

Laboratory: TestAmerica Canton

All certigcations f1eld bh tf1s laboratorh are listed. y1bt all certigcations are aNNicable to tf1s reNbrt.1

Authority	Program	EPA Region	Certification ID	Expiration Date
Caligrnia1	y 9 1A 1	p1	03344CA1	0E-70-34 *1
Caligrnia1	/1tate 1rouram1	p1	2p251	04-70-3H1
ConnecticBt1	/1tate 1rouram1	31	F10Hp01	32-73-341
8lorida1	y191A1	41	916522H1	0E-70-3H1
Georuia1	/1tate 1rouram1	41	y jA1	0E-70-3H1
Illinois1	y191A1	H1	2000041	05-73-3H1
Kansas1	y191A1	51	913077E1	03-73-3H1
KentBckh (U/1T)1	/1tate 1rouram1	41	H61	0E-70-3H1
-A-V1	DoD 91A1		273H1	05-36-3E1
Minnesota1	y191A1	H1	07p-ppp-7461	32-73-341
y1evada1	/1tate 1rouram1	p1	OF-000462006A1	05-73-3H1
y1ew Jerseh1	y191A1	21	OF0031	0E-70-3H1
y1ew York1	y191A1	21	30p5H1	07-73-3H1
Of1o RA1	/1tate 1rouram1	H1	CL00241	30-73-3H1
ennshlvania1	y191A1	71	E6-007401	06-73-3H1
Texas1	y191A1	E1		06-73-3H1
U/1DA1	8ederal1		770-37-0073p1	33-2E-3E1
Riruinia1	y191A1	71	4E035H1	0p-34-3H1
Wasf1nuton1	/1tate 1rouram1	301	Cp531	03-32-3H1
West Riruinia D91	/1tate 1rouram1	71	2301	32-73-341
Wisconsin1	/1tate 1rouram1	H1	pppH363p01	06-73-3H1

* Certigcation renewal Nendinu - certigcation considered valid.1

TestAmerica Laboratories, Inc.

13

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



240-44832 Chain of Custody

4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 www.testamericainc.com

10.6

leidos

Chain of Custody Record

Leidos, Inc.

COC No.: RVAAP-RA-04

Page 1 of 1

Date: 11/24/14

Name: Leidos
Address: 8866 Commons Blvd., Suite 201, Twinsburg, OH 44087
Phone Number: 330-405-5802
Project Manager: Jed Thomas
Project Name: Building 1200/ATA RA Confirmation Sampling
~~Job/P.O. 172819.00.09456.00.9500.02.001 PO10025302~~
Sampler (Signature) RSmL (Printed Name) Rich Sprinzl

Laboratory Name:
Test America
Address:
4101 Shuffel St. NW,
North Canton, OH 44720
Phone: 330-497-9396
Fax: 330-497-0772

Requested Parameters

Laboratory No.	Field Sample #	Location ID	Depth	Date	Time	Matrix	Total As (A) S	Total Mn (A) S	No. of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	B12cs-056M-0022-SO	B12cs-056M	0-1	11/24/14	1210	S		X	1	ISM Processing, RUSH TAT (1)
	B12cs-057M-0023-SO	B12cs-057M	0-1		1225	S		X	1	ISM Processing (2)
	B12cs-058M-0024-SO	B12cs-058M	0-1		1245	S		X	1	ISM Processing (3)
	B12cs-059M-0025-SO	B12cs-059M	0-1		1255	S		X	1	ISM Processing (4)
	B12cs-~~056~~M-0027-FD	B12cs-056M	0-1		1210	S		X	1	ISM Processing
	B12cs-022M-0021-SO	B12cs-022M	0-1		1420			X	2	ISM Processing (5)

(R) 11/24/14

Subtotal Number of Containers: 7
Total 7

Notes:
A ~~Cool 4°C~~ (C)
ISM PROCESSING REQUIRED FOR ALL SAMPLES UNLESS NOTED OTHERWISE ABOVE
*RUSH 3DAY TAT REQUESTED

Shipment Method: UPS
Airbill No.: 7644 9F22 1000 1786 (1 cooler)

Methods:
1.) SW 846 3540/6010B

(1) B1200 Open Area - North wall
(2) B1200 Open Area - West wall
(3) B1200 open Area - East wall
(4) B1200 open Area - South wall
(5) B1200 Open Area - Floor

VOC = volatile organic compound
SVOC = semi-volatile organic compound

S = Soil/solid matrix

Relinquished by	Date	Received by	Date	Time
Signature: RSmL	11/24/14	Signature: UPS	11/24/14	1730
Printed Name: Rich Sprinzl	Time: 1730	Printed Name: (R) 11/24/14		
Company: LEIDOS		Company:		
Relinquished by	Date	Received by: Heather Powell	Date	
Signature:		Signature: HEATHER POWELL		
Printed Name:	Time	Printed Name: 11/25/14 10:15	Time	
Company:		Company: TAL		

TestAmerica Canton Sample Receipt Form/Narrative Login # : 44832
Canton Facility

Client Leidos Site Name _____ Cooler unpacked by:

Cooler Received on 11/25/14 Opened on 11/25/14

FedEx: 1st Grd Exp (UPS) FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

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 +4.0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C			
IR GUN# 4	(CF +1.2 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form		
IR GUN# 5	(CF +0.4 °C)	Observed Cooler Temp. 10.6 °C	Corrected Cooler Temp. 11.0 °C			
IR GUN# 8	(CF +0.7 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C			

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	(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# HC425511
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): _____

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\WI_QA use only\WI-NC-099M-110614 Cooler Receipt Form.doc djl

Loeb, Mark

From: Sprinzl, Rich [RICHARD.E.SPRINZL@leidos.com]
Sent: Wednesday, November 26, 2014 1:09 PM
To: Loeb, Mark; Bette Premo (bette.premo@white-water-associates.com)
Cc: Vance, Jenny L.; Thomas, Jed H.; Simpson, Marie A.; Ryan, Pat F.
Subject: Leidos- RVAAP B1200/ATA RA- COC Correction
Importance: High
Attachments: RVAAP-RA-04 Rev 11262014.pdf

Mark,
Please advise lab staff that I had to make a correction to COC # RVAAP-RA-04 (attached).
B12cs-022M-0021-SO needs to be revised to B12cs-066M-0021-SO

Also, please forward Sample confirmation for this COC when available.

Thanks in advance and have a Happy Thanksgiving!

Rich Sprinzl, P.E. | Leidos
Environmental Engineer | Environmental Restoration Division
phone: 330.405-5808
mobile: 330.348.1378
richard.e.sprinzl@leidos.com | leidos.com/engineering

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leidos — Chain of Custody Record

Leidos, Inc.

COC No.: RVAAP-RA-04

Page 1 of 1 Date: 11/24/14 Rev 11/26/14

Name: Leidos
Address: 8866 Commons Blvd., Suite 201, Twinsburg, OH 44087
Phone Number: 330-405-5802
Project Manager: Jed Thomas
Project Name: Building 1200/ATA RA Confirmation Sampling
~~Job/P.O. 172819.00.09456.00.9500.02.001 PO10025302~~
Sampler (Signature) RS (Printed Name) Rich Sprinzl

Laboratory Name: Test America
Address: 4101 Shuffel St. NW, North Canton, OH 44720
Phone: 330-497-9396
Fax: 330-497-0772

Requested Parameters: Total As (A@) S; Total Mn (A@) S; No. of Containers

Laboratory No	Field Sample #	Location ID	Depth	Date	Time	Matrix	Total As (A@) S	Total Mn (A@) S	No. of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	B12cs-056M-0022-SO	B12cs-056M	0-1	11/24/14	1210	S		X	1	ISM Processing, RUSH TAT (1)
	B12cs-057M-0023-SO	B12cs-057M	0-1		1225	S		X	1	ISM Processing (2)
	B12cs-058M-0024-SO	B12cs-058M	0-1		1245	S		X	1	ISM Processing (3)
	B12cs-059M-0025-SO	B12cs-059M	0-1		1255	S		X	1	ISM Processing (4)
	B12cs-056M-0026-FD	B12cs-056M	0-1		1210	S		X	1	ISM Processing
	B12cs-027M-0021-SO (B)	B12cs-027M (B)	0-1		1420			X	2	ISM Processing (5)

Relinquished by: RS — Signature — Printed Name: Rich Sprinzl — Company: LEIDOS — Date: 11/24/14 — Time: 1730

Received by: MPS — Signature — Printed Name — Company — Date: 11/24/14 — Time: 1750

Relinquished by — Signature — Printed Name — Company — Date — Time

Received by — Signature — Printed Name — Company — Date — Time

Subtotal Number of Containers: 7
Total: 7

Notes:
A. Cool 4°C (B)
ISM PROCESSING REQUIRED FOR ALL SAMPLES UNLESS NOTED OTHERWISE ABOVE
*RUSH 3DAY TAT REQUESTED

Methods:
1.) SW 846 3540/6010B
(1) B1200 Open Area - North wall
(2) B1200 Open Area - West wall
(3) B1200 open Area - East wall
(4) B1200 open Area - South wall
(5) B1200 Open Area - Floor

VOC = volatile organic compound
SVOC = semi-volatile organic compound

S = Soil/solid matrix

Shipment Method: UPS
Airbill No.: 764 49F 22 1000 1786 (1 cooler)

Leidos, Inc.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-45339-1
Client Project/Site: RVAAP Building 1200/ATA RA Confirmation

For:
Leidos, Inc.
8866 Commons Boulevard
Suite 201
Twinsburg, Ohio 44087

Attn: Jed Thomas

Authorized for release by:
12/16/2014 4:04:28 PM

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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QualifiersG

Metals

Qualifier	Qualifier Description
D.	The reported value is from a dilution.
J.	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteri.
4.	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not . pplicable.a
U.	Undetected at the Limit of Detection.a

lossaryG

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤.	Listed under the "D" column to designate that the result is reported on a dry weight basis.
%R.	Percent Recovery.
CFL.	Contains Free Liquid.
CNF.	Contains no Free Liquid.
DER.	Duplicate error ratio (normalized absolute difference).
Dil Fac.	Dilution Factor.
DL, RA, RE, IN.	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample.
DLC.	Decision level concentration.
MDA.	Minimum detectable activity.
EDL.	Estimated Detection Limit.
MDC.	Minimum detectable concentration.
MDL.	Method Detection Limit.
ML.	Minimum Level (Dioxin).
NC.	Not Calculated.
ND.	Not detected at the reporting limit (or MDL or EDL if shown).
PQL.	Practical Quantitation Limit.
QC.	Quality Control.
RER.	Relative error ratio.
RL.	Reporting Limit or Requested Limit (Radiochemistry).
RPD.	Relative Percent Difference, a measure of the relative difference between two points.
TEF.	Toxicity Equivalent Factor (Dioxin).
TEQ.	Toxicity Equivalent Quotient (Dioxin).

Job ID: 240-45339-1vS

Laboratory: TestAmerica CantonS

NarrativeS

CASE NARRATIVES

Client: Leidos, Inc.S

Project: RVAAP Building 1200/ATA RA ConfirmationS

Report Number: 240-45339-1S

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples an1 no 1 problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control 1 limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of 1 the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted 1samples, 1 the reporting limits are adjusted relative to the dilution required.1

Calculations are performed before rounding to avoid round-off errors in calculated results.1

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed 1n the 1 individual sections below.1

TestAmerica utilizes USEPA approved methods and DOD QSM, where applicable, in all analytical work. The samples presented in this 1 report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A 1 summary of QC data for these analyses is included at the back of the report. 1

1

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses 1 performed by TestAmerica facilities were done using established 1aboratory SOPs that incorporate QA/QC procedures described in the 1 applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and 1data 1 have been found to be compliant with laboratory protocols unless otherwise noted below. 1

1

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the 1 method header.1

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.1

All parameters for which TestAmerica North Canton has certification were evaluated to the limit of detection (LOD) and include qualified 1 results where applicable. Parameters not certified under QSM, if any, were evaluated to the detection limit (DL) and include qualified 1 results where applicable.1

The sample(s) that contain constituents flagged with U are undetected. The result associated with this flag is the limit of d1tection (LOD).1

RECEIPTS

The samples were received on 12/10/2014; the samples arrived in good condition, properly preserved. The temperature of the coolers at 1 receipt was 5.7 C.1

TOTAL METALS (ICPMS) WITH INCREMENTAL SAMPLE PREPARATIONS

Samples B12CS-068M-0038-SO (240-45339-2), B12CS-070M-0040-SO (240-45339-4) and B12CS-073M-0043-SO (240-45339-8) were 1 analyzed for total metals (ICPMS) with incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, 1 February 2012 and EPA SW-846 Method 6020 DoD. The samples began the drying process on 12/10/2014. Sample matrices were not 1 ready for ISM processin (grinding) until 12/15/2014, they were 1igested on 12/15/2014 and analyzed on 12/16/2014. 1

Manganese failed the recovery criteria low for the MS of sample B12CS-068M-0038-SOMS (240-45339-2) in batch 240-161313.1

Job ID: 240-45339-1 (Continued)vS

Laboratory: TestAmerica Canton (Continued)S

Samples B12CS-068M-0038-SO (240-45339-2)[10X], B12CS-070M-0040-SO (240-45339-4)[10X] and B12CS-073M-0043-SO 1 (240-45339-8)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.1

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.1

TOTAL SOLIDS/PERCENT MOISTURES

Samples B12CS-068M-0038-SO (240-45339-2), B12CS-070M-0040-SO (240-45339-4) and B12CS-073M-0043-SO (240-45339-8) were 1 analyzed for Total Solids/Percent Moisture in accordance with Percent Moisture method. The samples were leached on 12/10/2014 and 1 analyzed on 12/15/2014. 1

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.1

Method Summary

Client: Leidos, Inc
TestAmerica Job ID: 240-45339-1.
Project/Site: RVAAP Building 1200/ATA RA Confirmation.

Method	Method Description	Protocol	Laboratory
6020.	Metals (ICP/MS).	SW846	TAL CAN.
Moisture.	Percent Moisture.	EPA.	TAL CAN.

Protocol References:

EPA = US Environmental Protection Agency.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Leidos, Inc
Project/Site: RVAAP Building 1200/ATA RA Confirmation.

TestAmerica Job ID: 240-45339-1.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-45339-2.	B12CS-068M-0038-SO.	Solid.	12/10/14 11:30.	12/10/14 14:00.
240-45339-4.	B12CS-070M-0040-SO.	Solid.	12/10/14 11:50.	12/10/14 14:00.
240-45339-8.	B12CS-073M-0043-SO.	Solid.	12/10/14 12:25.	12/10/14 14:00.

Detection Summary4

Client: Leidos, Inc
Project/Site: RVAAP Building 1200/ATA RA Confirmation.

TestAmerica Job ID: 240-45339-1.

Client Sample ID: B12CS-068M-0038-SO4 — Lab Sample ID: 240-45339-24

Analyte4	Result4	Qualifier4	LOQ4	DL4	Unit4	Dil Fac4	D4	Method4	Prep Type4
Manganese.	4200.	D J	5.1.	0.61.	mg/Kg.	10.	☼	6020.	Total/NA

Client Sample ID: B12CS-070M-0040-SO4 — Lab Sample ID: 240-45339-4

Analyte4	Result4	Qualifier4	LOQ4	DL4	Unit4	Dil Fac4	D4	Method4	Prep Type4
Manganese.	1000.	D	4.7.	0.56	mg/Kg.	10.	☼	6020.	Total/NA

Client Sample ID: B12CS-073M-0043-SO4 — Lab Sample ID: 240-45339-84

Analyte4	Result4	Qualifier4	LOQ4	DL4	Unit4	Dil Fac4	D4	Method4	Prep Type4
Manganese.	1700.	D	4.8.	0.58.	mg/Kg.	10.	☼	6020.	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 1rB2CS-05MO-007M-Sr
Lab Sample ID: 240-46773-2r

Date Cdlle/rtec: B29B09B4 BB:70r
Or txio: Sdlicr

Date Re/reivec: B29B09B4 B4:00r
Pex/rent Sdlics: 35.5r

Oethdc: 5020 - Oetals (ICP9OS)r

Analyter	Resultr	Qualifiexr	Lr Q	DLr	Unitr	Dr	Pxepaxecr	Analyzecr	Dil Fa/r
Or nganeser	4200r	D Jr	5.1.	0.61.	mg/Kg.	☼	12/15/14 12:26.	12/16/14 11:19.	10.

Genexrl Chemistxyr

Analyter	Resultr	Qualifiexr	Lr Q	DLr	Unitr	Dr	Pxepaxecr	Analyzecr	Dil Fa/r
Pex/rent Sdlicsr	38r		0.10.	0.10.	%			12/15/14 12:47.	1.
Pex/rent Odistuxer	7.4r		0.10.	0.10.	%			12/15/14 12:47.	1.

Client Sample ID: 1nB2CS-080O-0040-Sr
Lab Sample ID: 240-46773-4r

Date Cdlle/rtec: B29B09B4 BB:60r
Or txio: Sdlicr

Date Re/reivec: B29B09B4 B4:00r
Pex/rent Sdlics: 38.6r

Oethdc: 5020 - Oetals (ICP9OS)r

Analyter	Resultr	Qualifiexr	Lr Q	DLr	Unitr	Dr	Pxepaxecr	Analyzecr	Dil Fa/r
Or nganeser	B000r	Dr	4.7.	0.56.	mg/Kg.	☼	12/15/14 12:26.	12/16/14 11:38.	10.

Genexrl Chemistxyr

Analyter	Resultr	Qualifiexr	Lr Q	DLr	Unitr	Dr	Pxepaxecr	Analyzecr	Dil Fa/r
Pex/rent Sdlicsr	3Mr		0.10.	0.10.	%			12/15/14 12:47.	1.
Pex/rent Odistuxer	2.6r		0.10.	0.10.	%			12/15/14 12:47.	1.

Client Sample ID: 1rB2CS-087O-0047-Sr
Lab Sample ID: 240-46773-Mr

Date Cdlle/rtec: B29B09B4 B2:26r
Or txio: Sdlicr

Date Re/reivec: B29B09B4 B4:00r
Pex/rent Sdlics: 38.7r

Oethdc: 5020 - Oetals (ICP9OS)r

Analyter	Resultr	Qualifiexr	Lr Q	DLr	Unitr	Dr	Pxepaxecr	Analyzecr	Dil Fa/r
Or nganeser	B800r	Dr	4.8.	0.58.	mg/Kg.	☼	12/15/14 12:26.	12/16/14 11:42.	10.

Genexrl Chemistxyr

Analyter	Resultr	Qualifiexr	Lr Q	DLr	Unitr	Dr	Pxepaxecr	Analyzecr	Dil Fa/r
Pex/rent Sdlicsr	38r		0.10.	0.10.	%			12/15/14 12:47.	1.
Pex/rent Odistuxer	2.8r		0.10.	0.10.	%			12/15/14 12:47.	1.

QC Sample Resultsk

Client: Leidos, Inc
Project/Site: RVAAP Building 1200/ATA RA Confirmation.

TestAmerica Job ID: 240-45339-1.

Method: 6020 - Metals (ICP/MS)Rk

Lab Sample ID: MB 240-161045/1-A ^2k
Matrix: Solidk
Analysis Batch: 161313k

Client Sample ID: Method Blank
Prep Type: Total/NAk
Prep Batch: 161045k

Analytek	MBk Resultk	MBk Qualifierk	LOQk	DLk	Unitk	Dk	Preparedk	Analyzed	Dil Fac
Manganese.	0.40.	U.	1.0.	0.12.	mg/Kg.		12/15/14 12:26.	12/16/14 11:12.	2.

Lab Sample ID: LCS 240-161045/2-A ^2k
Matrix: Solidk
Analysis Batch: 161313k

Client Sample ID: Lab Control Samplek
Prep Type: Total/NAk
Prep Batch: 161045k

Analytek	Spikek Addedk	LCSk Resultk	LCSk Qualifierk	Unitk	Dk	%Rec	%Rec.k Limitsk
Manganese.	100.	79.9.	D.	mg/Kg.		80.	80.-.120.

Lab Sample ID: 240-45339-2 MSk
Matrix: Solidk
Analysis Batch: 161313k

Client Sample ID: B12CS-068M-0038-SOk
Prep Type: Total/NAk
Prep Batch: 161045k

Analytek	Samplek sultk	Samplek Qualifierk	Spikek Addedk	MSk Resultk	MSk Qualifierk	Unitk	Dk	%Rec	%Rec.k Limitsk
Manganese.	4200.	D J.	10.2.	3800.	D 4.	mg/Kg.	☼	-3930.	10.-.199.

Lab Sample ID: 240-45339-2 DUk
Matrix: Solidk
Analysis Batch: 161313k

Client Sample ID: B12CS-068M-0038-SOk
Prep Type: Total/NAk
Prep Batch: 161045k

Analytek	Samplek sultk	Samplek Qualifierk	DUk Resultk	DUk Qualifierk	Unitk	Dk	PDk	PDk Limitk
Manganese.	4200.	D J.	3950.	D.	mg/Kg.	☼	6.	20.

MetalstD

ISM Prep Batch: 161021D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-45339-2.	B12CS-068M-0038-SO.	Total/NA.	Solid.	Increment, Prep.	
240-45339-2 DU.	B12CS-068M-0038-SO.	Total/NA.	Solid.	Increment, Prep.	
240-45339-2 MS.	B12CS-068M-0038-SO.	Total/NA.	Solid.	Increment, Prep.	
240-45339-4.	B12CS-070M-0040-SO.	Total/NA.	Solid.	Increment, Prep.	
240-45339-8	B12CS-073M-0043-SO.	Total/NA.	Solid.	Increment, Prep.	

Prep Batch: 161045D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-45339-2.	B12CS-068M-0038-SO.	Total/NA.	Solid.	3050B.	161021.
240-45339-2 DU.	B12CS-068M-0038-SO.	Total/NA.	Solid.	3050B.	161021.
240-45339-2 MS.	B12CS-068M-0038-SO.	Total/NA.	Solid.	3050B.	161021.
240-45339-4.	B12CS-070M-0040-SO.	Total/NA.	Solid.	3050B.	161021.
240-45339-8	B12CS-073M-0043-SO.	Total/NA.	Solid.	3050B.	161021.
LCS 240-161045/2-A ^2.	Lab Control Sample.	Total/NA.	Solid.	3050B.	
MB 240-161045/1-A ^2.	Method Blank.	Total/NA.	Solid.	3050B.	

Analysis Batch: 161313D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-45339-2.	B12CS-068M-0038-SO.	Total/NA.	Solid.	6020.	161045.
240-45339-2 DU.	B12CS-068M-0038-SO.	Total/NA.	Solid.	6020.	161045.
240-45339-2 MS.	B12CS-068M-0038-SO.	Total/NA.	Solid.	6020.	161045.
240-45339-4.	B12CS-070M-0040-SO.	Total/NA.	Solid.	6020.	161045.
240-45339-8	B12CS-073M-0043-SO.	Total/NA.	Solid.	6020.	161045.
LCS 240-161045/2-A ^2.	Lab Control Sample.	Total/NA.	Solid.	6020.	161045.
MB 240-161045/1-A ^2.	Method Blank.	Total/NA.	Solid.	6020.	161045.

General ChemistryD

Analysis Batch: 160973D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-45339-2.	B12CS-068M-0038-SO.	Total/NA.	Solid.	Moisture.	161021.
240-45339-4.	B12CS-070M-0040-SO.	Total/NA.	Solid.	Moisture.	161021.
240-45339-8	B12CS-073M-0043-SO.	Total/NA.	Solid.	Moisture.	161021.

ISM Prep Batch: 161021D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-45339-2.	B12CS-068M-0038-SO.	Total/NA.	Solid.	Increment, Prep.	
240-45339-4.	B12CS-070M-0040-SO.	Total/NA.	Solid.	Increment, Prep.	
240-45339-8	B12CS-073M-0043-SO.	Total/NA.	Solid.	Increment, Prep.	

Lab Chronicle3

Client: Leidos, Inc.1 TestAmerica Job ID: 240-46773-1
Project/Site: RVAAP Building 1200/ATA RA ConMmation1

Client Sample ID: B12CS-05M63-00OM-S43 Lab Sample ID: 270-73OOx-23

Date Collecte/3: 129l09l7 11:O03 **63atrid: Soli/3**
Date Receive/3: 129l09l7 17:003 **Percent Soli/3s: x5.53**

Prep Type3	Batch3 Type3	Batch3 63etho/3	Run	Dilution3 Factor3	Batch3 Number3	Prepare/3 or Analyze/3	Analyst3	Lab3
Total/NA1	ISp1Pre51	Increment, Pre5			191021	12/10/14 16:001	DRJ	TAL CAN1
Total/NA1	Pre51	7060B			91046	2/16/14 12:29	D881	TAL CAN1
Total/NA1	AnalEsis1	9020		0	191717	2/19/14 1 :131	Ap1p121	TAL CAN1
Total/NA1	ISp1Pre51	Increment, Pre51			91021	12/10/14 16:001	DRJ1	TAL CAN1
Total/NA1	AnalEsis1	p1oisture1			903y7	2/16/14 12:4y1	KS1	TAL CAN1

Client Sample ID: B12CS-08063-0070-S43 Lab Sample ID: 270-73OOx-73

Date Collecte/3: 129l09l7 11:303 **63atrid: Soli/3**
Date Receive/3: 129l09l7 17:003 **Percent Soli/3s: x8.3**

Prep Type3	Batch3 Type3	Batch3 63etho/3	Run	Dilution3 Factor3	Batch3 Number3	Prepare/3 or Analyze/3	Analyst3	Lab3
Total/NA1	ISp1Pre51	Increment, Pre51			191021	2/10/14 16:001	DRJ	TAL CAN1
Total/NA1	Pre51	7060B			91046	2/16/14 12:29	D881	TAL CAN1
Total/NA1	AnalEsis1	9020		0	191717	2/19/14 1 :7=1	Ap1p121	TAL CAN1
Total/NA1	ISp1Pre51	Increment, Pre51			91021	12/10/14 16:001	DRJ1	TAL CAN1
Total/NA1	AnalEsis1	p1oisture1			903y7	2/16/14 12:4y1	KS1	TAL CAN1

Client Sample ID: B12CS-08O63-007O-S43 Lab Sample ID: 270-73OOx-M3

Date Collecte/3: 129l09l7 12:23 **63atrid: Soli/3**
Date Receive/3: 129l09l7 17:003 **Percent Soli/3s: x8.O3**

Prep Type3	Batch3 Type3	Batch3 63etho/3	Run	Dilution3 Factor3	Batch3 Number3	Prepare/3 or Analyze/3	Analyst3	Lab3
Total/NA1	ISp1Pre51	Increment, Pre51			191021	2/10/14 16:001	DRJ	TAL CAN1
Total/NA1	Pre51	7060B			91046	2/16/14 12:29	D881	TAL CAN1
Total/NA1	AnalEsis1	9020		0	191717	2/19/14 1 :421	Ap1p121	TAL CAN1
Total/NA1	ISp1Pre51	Increment, Pre51			91021	12/10/14 16:001	DRJ1	TAL CAN1
Total/NA1	AnalEsis1	p1oisture1			903y7	2/16/14 12:4y1	KS1	TAL CAN1

Laboratory References:3

TAL CAN h TestAmerica Canton, 4101 Sf1uWl Street NW, Nortf1Canton, OH 44y20, T81L (770)43y-3739

Certification Summary

Client: Leidos, Inc.1
TestAmerica Job ID: 240-46773-1
Project/Site: RVAAP Building 1200/ATA RA Confirmation1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.1

Authority	Program	EPA Region	Certification ID	Expiration Date
California1	N91AP1	31	01 44CA1	0E-70-14 *1
California1	State Program1	31	23251	04-70-161
Connecticut1	State Program1		PH-0630	12-71-141
Florida1	N91AP1	41	98852261	0E-70-161
Georgia1	State Program1	41	N/A1	0E-70-161
Illinois1	N91AP1	61	2000041	05-71-161
Kansas1	N91AP1	51	911077E1	01-71-161
Kentucky (UST)1	State Program1	41	681	0E-70-161
-A-B1	DoD 91AP1		27161	05-18-1E1
Minnesota1	N91AP1	61	073-333-748	12-71-141
Nevada1	State Program1	31	OH-000482008A1	05-71-161
New Jersey1	N91AP1	21	OH001	0E-70-161
New York1	N91AP1	2	103561	07-71-161
Ohio VAP1	State Program1	61	CL0024	10-71-161
Pennsylvania1	N91AP1	71	E8-007401	08-71-161
Texas1	N91AP1	E1		08-71-161
USDA1	Federal1		P770-17-00713	11-2E-1E1
Virginia1	N91AP1	71	4E01561	03-14-161
Washington1	State Program	101	C351	01-12-161
West Virginia D9P1	State Program1	71	210	12-71-141
Wisconsin1	State Program1	61	3336181301	08-71-161

* Certification renewal pending - certification considered vali1.1

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY AND RECEIVING DOCUMENTS

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240-45339 Chain of Custody

leidos

Chain of Custody Record

Leidos, Inc.

COC No.: RVAAP-RA-05

Page 1 of 1 Date: 12/10/14

Name: Leidos
Address: 8866 Commons Blvd., Suite 201, Twinsburg, OH 44087
Phone Number: 330-405-5802
Project Manager: Jed Thomas
Project Name: Building 1200/ATA RA Confirmation Sampling
~~Job/P.O. 172819.00.09456.00.9500.02.001 PO10025302~~
Sampler (Signature) (Printed Name) Heather L. Adams

Laboratory Name:
Test America
Address:
4101 Shuffel St. NW,
North Canton, OH 44720
Phone: 330-497-9396
Fax: 330-497-0772

Laboratory No.	Field Sample #	Location ID	Depth	Date	Time	Matrix	Requested Parameters: Total As (1)	Total Mn (1)	No. of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	B12CS-000M-0037-SO	B12CS-000M	0-1	12/10/14	1120	S		X	1	Hold pending analysis
	B12CS-008M-0038-SO	B12CS-008M	0-1		1130			X	1	"
	B12CS-009M-0039-SO	B12CS-009M			1140			X	1	Hold pending analysis
	B12CS-010M-0040-SO	B12CS-010M			1150			X	1	"
	B12CS-011M-0041-SO	B12CS-011M			1200			X	1	Hold pending analysis
	B12CS-011M-0045-SO	B12CS-011M			1200			X	1	Hold pending analysis
	B12CS-012M-0042-SO	B12CS-012M			1215			X	1	Hold pending analysis
	B12CS-013M-0043-SO	B12CS-013M			1225			X	1	"
	B12CS-014M-0044-SO	B12CS-014M			1235			X	1	Hold pending analysis

Subtotal Number of Containers: 9

Total

Notes:

ISM PROCESSING REQUIRED FOR ALL SAMPLES, EVEN HOLD PENDING ANALYSIS SAMPLES, UNLESS NOTED OTHERWISE ABOVE

RUSH 3 DAY TAT REQUESTED

Methods:
1.) SW 846 3540/6010B

PROCESS ALL SAMPLES WITH ISM

S = Soil/solid matrix

Shipment Method: DROP OFF

Airbill No.:

Relinquished by	Date	Received by	Date
Signature: Heather L. Adams	12/10/14	Signature: Dakota Turner	12-10-14
Printed Name: HEATHER L. ADAMS	Time: 1400	Printed Name: Dakota Turner	Time: OT 1400
Company: LEIDOS		Company: TA-Canton	
Relinquished by	Date	Received by	Date
Signature:		Signature:	
Printed Name:	Time	Printed Name:	Time
Company:		Company:	

TestAmerica Canton Sample Receipt Form/Narrative Login # : 45339
Canton Facility

Client Leidos Site Name

Cooler unpacked by: Heather Powell

Cooler Received on 12/10/14 Opened on 12/10/14

FedEx: 1st Grd Exp UPS FAS Stetson (Client Drop Off) TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

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 +4.0 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 4	(CF +1.2 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +0.4 °C)	Observed Cooler Temp. ____ °C	Corrected Cooler Temp. ____ °C	
IR GUN# 8	(CF +0.7 °C)	Observed Cooler Temp. 5.0 °C	Corrected Cooler Temp. 5.7 °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (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# HC425511
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):

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\WI_QA use only\WI-NC-099M-110614 Cooler Receipt Form.doc djl

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-45339-2
Client Project/Site: RVAAP Building 1200/ATA RA Confirmation

For:
Leidos, Inc.
8866 Commons Boulevard
Suite 201
Twinsburg, Ohio 44087

Attn: Jed Thomas

Authorized for release by:
12/18/2014 2:20:51 PM

Mark Loeb, Project Manager II
(330)966-9387
mark.loeb@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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QualifiersG

Metals

Qualifier	Qualifier Description
D.	The reporteL vaQe is from a LiQtiol.,.
J.	EstimateL: The qBal.titatiol. is al. estimatiol. LBe to Liscrepal. ies il. meetil.u certail. al. Cyte-specific qB. Qty col.troCcriteria,.
4.	M/.dM/.D: The al. Cyte presel.t il. the oriuil. CsampQ is ureater thal. 4 times the matrix spike col. el.tratiol.; thereforedcol.troCQmits are l.ot . ppQcabQ,a.
U.	Ul.LetecteL at the nimit of Detectiol.,a.

lossaryG

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤.	nisteL Bl.Ler the "D" coQml. to Lesiul.ate that the resBQis reporteL ol. . Lry weiuht basis.
%S.	ercel.t Secovery.
1.Fn.	1.ol.tail.s Free niqBiL.
1.NF.	1.ol.tail.s l.o Free niqBiL.
DES.	DBpQcate error ratio (l.ormaQzeL absoQte Lifferel. e).
DiQFac.	DiQtiol. Factor.
DndSAdSEdIN.	Il.Licates a DiQtiol.dSe-al. CysisdSe-extractiol.dor aLLitiol. CIl.itiaQmetaGjal.iol. .l. Cysis of the sampQ.
Dn1.	Decisiol. QveCcol.cel.tratiol.
MDA.	Mil.imBm LetectabQ activity.
EDn.	EstimateL Detectiol. nimit.
MD1.	Mil.imBm LetectabQ col. el.tratiol.
MDn.	MethoL Detectiol. nimit.
Mn.	Mil.imBm neveC(Dioxil.).
N1.	Not 1.aQBQteL.
ND.	Not LetecteL at the reportil.u Qmit (or MDn or EDn if showl.).
Qn.	racticaCQBal.titatiol. nimit.
Q1.	QB.Qty 1.ol.troC.
SES.	SeQative error ratio.
Sn.	Seportil.u nimit or SeqBesteL nimit (S. Liochemistry).
S. D.	SeQative . ercel.t Differel. eda measBre of the reQative Lifferel. e betweel. two poil.ts.
TEF.	Toxicity EqBivaQl.t Factor (Dioxil.).
TEQ.	Toxicity EqBivaQl.t QBotiel.t (Dioxil.).

Job ID: 240-45339-2vS

1aboratorL: yestTAS2rim3 CactocS

NarrativeS

CTnS NTEETyIRS

CVTect: 1eBSSosdlcm,S

. roPemt: ERTT.SjSBSYScu g200/TyT ET CocfirAS2tiocS

Eeport NBASSer: 240-45339-2S

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples anP no P problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control P limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of P the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For dilutedP samples, P the reporting limits are adjusted relative to the dilution required.P

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses P performed by TestAmerica facilities were done using establishedPaboratory SOPs that incorporate QA/QC procedures described in the P application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, anP data P have been found to be compliant with laboratory protocols unless otherwise noted below.P

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions P to NELAP requirements are noted in this report. Pursuant to NEPAP, this report may not be reproduced, except in full, without the written P approval of the laboratory.P

Calculations are performed before rounding to avoid round-off errors in calculated results.P

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailedPn the P individual sections below.P

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the P method header.P

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.P

ESCSl.SyS
The samples were received on 12/10/2014 2:00 PM; the samples arrived in good condition, properly preserved and, where requiredPon P ice. The temperature of the cooler at receipt was 5.7° C.P

yOyT1 MSyT1n (IC.SMn) WlyH INCESMSNyT1 nTM.SIS .SES.STETyIONS
Samples B12CS-072M-0042-SO (240-45339-7) and B12CS-074M-0044-SO (240-45339-9) were analyzed for total metals (ICPMS) with P incremental sample preparation in accordance with ITRC Technical and Regulatory Guidance: ISM, February 2012 and EPA SW-846 P Method 6020 DoD. The samples began the drying process on 12/10/2014. Sample matrices were not ready for ISM processing (grindPng) P until 12/15/2014. Per client request, the samples were prepareP on 12/17/2014 and analyzed on 12/18/2014. P

Manganese failed the recovery criteria high for the MS of sample B12CS-072M-0042-SOMS (240-45339-7) in batch 240-161689. Refer to P the QC report for details.P

Samples B12CS-072M-0042-SO (240-45339-7)[10X] and B12CS-074M-0044-SO (240-45339-9)[10X] required dilution prior to analysis. P The reporting limits have been adjusted accordingly.P

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.P

Job ID: 240-45339-2 (CocticBelS)vS

1aboratorL: yestTA3rima Cactoc (CocticBelS)vS

yOyT1 nO1lDn/.S ECSNy MOlnyUES

Samples B12CS-072M-0042-SO (240-45339-7) and B12CS-074M-0044-SO (240-45339-9) were analyzed for Total Solids/Percent P Moisture in accordance with Percent Moisture method. The samples were leached on 12/10/2014 and analyzed on 12/17/2014. P

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.P

Method Summary

1 Qel.t: neiLosdIl. ,
. roRectj/.ite: SRAA. VBiCil.u g200jATA SA 1.ol.firmatiol.

TestAmerica Job ID: 240-45339-2.

Method	Method Description	Protocol	Laboratory
6020.	MetaS (l1. jM/.).	/ W846	TAn 1.AN.
MoistBre.	ercel.t MoistBre.	E. A.	TAn 1.AN.

Protocol References:

E. A = U/. El.virol.mel.t.C. rotectiol. Auel. y.

/.W846 = "Test MethoLs For EvaCB. til.u /. oQL Wasted. hysicaQ1.hemicaOMetoLs"dThirL ELitiol.dNovember g986 Al.L Its UpLates,.

Laboratory References:

TAn 1.AN = TestAmerica 1.al.tol.d4g0g /.hBffeO/. treet NWdNorth 1.al.tol.dOH 44720dTEn (330)497-9396

Sample Summary

Client: Leidos, Inc.
Project/Site: RVAAP Building 1200/ATA RA ConfirmationP

TestAmerica Job ID: 240-45339-2P

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-45339-7P	B12CS-072M-0042-SO	SolidP	12/10/14 12:15P	12/10/14 14:00P
240-45339-9P	B12CS-074M-0044-SO	SolidP	12/10/14 12:35P	12/10/14 14:00P

Detection Summary3

Client: Leidos, Inc.
roject/Site: RVAAP Building 1200/ATA RA ConfirmationP

TestAmerica Job ID: 240-45339-2P

Client Sample ID: B12CS-072M-0042-SO3 — Lab Sample ID: 240-453 9-73

Analyte3	Result3	Qualifier3	LOQ3	DL3	Unit3	Dil Fac3	D3	Method3	Prep Type3
ManganeseP	1300P	D JP	4.9P	0.58	mg/KgP	10P	☼	6020P	Total/NA

Client Sample ID: B12CS-074M-0044-SO3 — Lab Sample ID: 240-453 9-93

Analyte3	Result3	Qualifier3	LOQ3	DL3	Unit3	Dil Fac3	D3	Method3	Prep Type3
ManganeseP	1100P	DP	4.9P	0.59P	mg/KgP	10P	☼	6020P	Total/NA

This Detection Summary does not include radiochemical test results.P

Client Sample ID: B52CS-012M-0042-SOr

Lab Sample ID: 240-46773-1r

Date Collected: 52/50/54 52:56r **Matrix: Solidr**

Date Recei.red: 52/50/54 54:00r **9ercent Solids: 31P2r**

Metvod: h020 - Metals (IC9rMS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	9reparedr	Analyzedr	Dil Facr
Manganeser	5700r	D Jr	4.9P	0.58P	mg/KgP	☼	12/17/14 10:23P	12/18/14 11:41P	10P

General Cvemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	9reparedr	Analyzedr	Dil Facr
9ercent Solidsr	31r		0.10P	0.10P	%P			12/17/14 08:53P	1P
9ercent Moisturer	2R8r		0.10P	0.10P	%P			12/17/14 08:53P	1P

Client Sample ID: B52CS-014M-0044-SOr **Lab Sample ID: 240-46773-3r**

Date Collected: 52/50/54 52:76r **Matrix: Solidr**

Date Recei.red: 52/50/54 54:00r **9ercent Solids: 31Pr**

Metvod: h020 - Metals (IC9rMS)r

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	9reparedr	Analyzedr	Dil Facr
Manganeser	5500r	Dr	4.9P	0.59P	mg/KgP	☼	12/17/14 10:23P	12/18/14 12:00P	10P

General Cvemistryr

Analyter	Resultr	Qualifier	LOQ	DLr	Unitr	Dr	9reparedr	Analyzedr	Dil Facr
9ercent Solidsr	38r		0.10P	0.10P	%P			12/17/14 08:53P	1P
9ercent Moisturer	2Pr		0.10P	0.10P	%P			12/17/14 08:53P	1P

Method: 6020 - Metals (ICP/MS)Rk

Lab Sample ID: MB 240-161431/1-A ^2k — **Client Sample ID: Method Blank**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 161689k — **Prep Batch: 161431k**

Analytek	MBk Resultk	MBk Qualifierk	LOQk	DLk	Unitk	Dk	Preparedk	Analyzed	Dil Fac
ManganeseP	0.40P	UP	1.0P	0.12P	mg/KgP		12/17/14 10:23P	12/18/14 11:34P	2P

Lab Sample ID: LCS 240-161431/2-A ^2k — **Client Sample ID: Lab Control Samplek**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 161689k — **Prep Batch: 161431k**

Analytek			Spikek Addedk	LCSk Resultk	LCSk Qualifierk	Unitk	Dk	%Rec	%Rec.k Limitsk		
ManganeseP			100P	99.2P	DP	mg/KgP		99P	80P 120P		

Lab Sample ID: 240-45339-7 MSk — **Client Sample ID: B12CS-072M-0042-SOk**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 161689k — **Prep Batch: 161431k**

Analytek	Samplek sultk	Samplek Qualifierk	Spikek Addedk	MSk Resultk	MSk Qualifierk	Unitk	Dk	%Rec	%Rec.k Limitsk		
ManganeseP	1300P	D JP	9.70P	1540P	D 4P	mg/KgP	☼	2622P	10 - 199P		

Lab Sample ID: 240-45339-7 DUk — **Client Sample ID: B12CS-072M-0042-SOk**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 161689k — **Prep Batch: 161431k**

Analytek	Samplek sultk	Samplek Qualifierk		DUk Resultk	DUk Qualifierk	Unitk	Dk			PDk PDk	PDk Limitk
ManganeseP	1300P	D JP		1480P	DP	mg/KgP	☼			14P	20P

Method: Moisture - Percent Moisturek

Lab Sample ID: 240-45339-7 DUk — **Client Sample ID: B12CS-072M-0042-SOk**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 161406

Analytek	Samplek sultk	Samplek Qualifierk		DUk Resultk	DUk Qualifierk	Unitk	Dk			PD PDk	PD Limit
Percent SolidsP	97P			97P		%P				0P	20P
ercent MoistureP	2.8P			2.8P		%P				1P	20P

QC Association SummaryD

Client: Leidos, Inc.
roject/Site: RVAAP Building 1200/ATA RA ConfirmationP

TestAmerica Job ID: 240-45339-2P

MetalstD

ISM Prep Batch: 161021D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-45339-7P	B12CS-072M-0042-SOP	Total/NAP	SolidP	Increment, PrepP	
240-45339-7 DUP	B12CS-072M-0042-SOP	Total/NAP	SolidP	Increment, PrepP	
240-45339-7 MSP	B12CS-072M-0042-SOP	Total/NAP	SolidP	Increment, PrepP	
240-45339-9P	B12CS-074M-0044-SOP	Total/NAP	SolidP	Increment, PrepP	

Prep Batch: 161431D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-45339-7P	B12CS-072M-0042-SOP	Total/NAP	SolidP	3050BP	161021P
240-45339-7 DUP	B12CS-072M-0042-SOP	Total/NAP	SolidP	3050BP	161021P
240-45339-7 MSP	B12CS-072M-0042-SOP	Total/NAP	SolidP	3050BP	161021P
240-45339-9P	B12CS-074M-0044-SOP	Total/NAP	SolidP	3050BP	161021P
LCS 240-161431/2-A ^2P	Lab Control SampleP	Total/NAP	SolidP	3050BP	
MB 240-161431/1-A ^2P	Method BlankP	Total/NAP	SolidP	3050BP	

Analysis Batch: 161689D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-45339-7P	B12CS-072M-0042-SOP	Total/NAP	SolidP	6020P	161431P
240-45339-7 DUP	B12CS-072M-0042-SOP	Total/NAP	SolidP	6020P	161431P
240-45339-7 MSP	B12CS-072M-0042-SOP	Total/NAP	SolidP	6020P	161431P
240-45339-9P	B12CS-074M-0044-SOP	Total/NAP	SolidP	6020P	161431P
LCS 240-161431/2-A ^2P	Lab Control SampleP	Total/NAP	SolidP	6020P	161431P
MB 240-161431/1-A ^2P	Method BlankP	Total/NAP	SolidP	6020P	161431P

General ChemistrytD

ISM Prep Batch: 161021D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-45339-7P	B12CS-072M-0042-SOP	Total/NAP	SolidP	Increment, PrepP	
240-45339-7 DUP	B12CS-072M-0042-SOP	Total/NAP	SolidP	Increment, PrepP	
240-45339-9P	B12CS-074M-0044-SOP	Total/NAP	SolidP	Increment, PrepP	

Analysis Batch: 161406D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-45339-7P	B12CS-072M-0042-SOP	Total/NAP	SolidP	MoistureP	161021P
240-45339-7 DUP	B12CS-072M-0042-SOP	Total/NAP	SolidP	MoistureP	161021P
240-45339-9P	B12CS-074M-0044-SOP	Total/NAP	SolidP	MoistureP	161021P

Client Sample ID: B12CS-072M-0042-SO9 — Lab Sample ID: 240-45339-79

Date Collected: 12/10/14 12:159 — **Matrix: Solid9**

Date Received: 12/10/14 14:009 — **Percent Solids: 97.29**

Prep Type9	Batch9 Type9	Batch9 Method9	Run9	Dilution9 Factor9	Batch9 Number9	Prepared9 or Analyzed9	Analyst9	Lab9
TotaljNA1	l/1p11re51	Increment, 1re51			g9g02g1	g2jg0jg4 g6:001	DSJ1	TAL CAN1
TotaljNA1	re51	7060V1			g9g47g1	g2jg8jg4 g0:271	DEE1	TAL CAN1
TotaljNA1	Analysis1	90201		g01	g9g9K31	g2jgKjg4 gg:4g1	Ap1p121	TAL CAN1
TotaljNA1	l/1p11re51	Increment, 1re51			g9g02g1	g2jg0jg4 g6:001	DSJ1	TAL CAN1
TotaljNA1	Analysis1	p1oistBre1		g1	g9g409	g2jg8jg4 0K:671	=/1	TAL CAN1

Client Sample ID: B12CS-074M-0044-SO9 — Lab Sample ID: 240-45339-9

Date Collected: 12/10/14 12:359 — **Matrix: Solid9**

Date Received: 12/10/14 14:009 — **Percent Solids: 97.69**

Prep Type9	Batch9 Type9	Batch9 Method9	Run9	Dilution9 Factor9	Batch9 Number9	Prepared9 or Analyzed9	Analyst9	Lab9
TotaljNA1	l/1p11re51	Increment, 1re51			g9g02g1	g2jg0jg4 g6:001	DSJ1	TAL CAN1
TotaljNA1	re51	7060V1			g9g47g1	g2jg8jg4 g0:271	DEE1	TAL CAN1
TotaljNA1	Analysis1	90201		g01	g9g9K31	g2jgKjg4 g2:001	Ap1p121	TAL CAN1
TotaljNA1	l/1p11re51	Increment, 1re51			g9g02g1	g2jg0jg4 g6:001	DSJ1	TAL CAN1
TotaljNA1	Analysis1	p1oistBre1		g1	g9g409	g2jg8jg4 0K:671	=/1	TAL CAN1

Laboratory References:9

TAL CAN h TestAmerica Canton, 4g0g /1f1BNWl /1treet NW, Nortf1Canton, OH 44820, TEL (770)438-3739

Certification Summary

Client: Leidos, Inc.1 TestAmerica Job ID: 240-46773-2

1roPectj/1ite: SRAA1 VBildinu g200jATA SA Confirmation1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.1

Authority	Program	EPA Region	Certification ID	Expiration Date
California1	N91A1	31	0gg44CA1	0E-70-g4 *1
California1	/1tate 1rouram1	31	23251	04-70-g61
ConnecticBt1	/1tate 1rouram1	g1	H-06301	g2-7g-g41
Florida1	N91A1	41	918852261	0E-70-g61
Georuia1	/1tate 1rouram1	41	NjA1	0E-70-g61
Illinois1	N91A1	61	2000041	05-7g-g61
Kansas1	N91A1	51	91g077E1	0g-7g-g61
KentBcky (U/1T)1	/1tate 1rouram1	41	681	0E-70-g61
-A-V1	DoD 91A1		27g61	05-g8-gE1
Minnesota1	N91A1	61	073-333-7481	g2-7g-g41
Nevada1	/1tate 1rouram1	31	OH-000482008A1	05-7g-g61
New Jersey1	N91A1	21	OH00g1	0E-70-g61
New York1	N91A1	21	g03561	07-7g-g61
Ohio RA1	/1tate 1rouram1	61	CL00241	g0-7g-g61
ennsylvania1	N91A1	71	E8-007401	08-7g-g61
Texas1	N91A1	E1		08-7g-g61
U/1DA1	Federal1		770-g7-007g31	gg-2E-gE1
Riruinia1	N91A1	71	4E0g561	03-g4-g61
Washinuton1	/1tate 1rouram1	g01	C35g1	0g-g2-g61
West Riruinia D91	/1tate 1rouram1	71	2g01	g2-7g-g41
Wisconsin1	/1tate 1rouram1	61	3336g8g301	08-7g-g61

* Certification renewal pendinu - certification considered vali1.1

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THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY AND RECEIVING DOCUMENTS

13



240-45339 Chain of Custody

leidos

Chain of Custody Record

Leidos, Inc.

COC No.: RVAAP-RA-05

Page 1 of 1 Date: 12/10/14

Name: Leidos
Address: 8866 Commons Blvd., Suite 201, Twinsburg, OH 44087
Phone Number: 330-405-5802
Project Manager: Jed Thomas
Project Name: Building 1200/ATA RA Confirmation Sampling
~~Job/P.O. 172819.00.09456.00.9500.02.001 PO10025302~~
Sampler (Signature) (Printed Name) Heather Adams

Laboratory Name:
Test America
Address:
4101 Shuffel St. NW,
North Canton, OH 44720
Phone: 330-497-9396
Fax: 330-497-0772

Laboratory No.	Field Sample #	Location ID	Depth	Date	Time	Matrix	Requested Parameters: Total As (1)	Total Mn (1)	No. of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	B12CS-001M-0037-SO	B12CS-001M	0-1	12/10/14	1120	S		X	1	Hold pending analysis
	B12CS-008M-0038-SO	B12CS-008M	0-1		1130			X	1	"
	B12CS-009M-0039-SO	B12CS-009M			1140			X	1	Hold pending analysis
	B12CS-010M-0040-SO	B12CS-010M			1150			X	1	"
	B12CS-011M-0041-SO	B12CS-011M			1200			X	1	Hold pending analysis
	B12CS-007M-0045-SO	B12CS-007M			1200			X	1	Hold pending analysis
	B12CS-012M-0042-SO	B12CS-012M			1215			X	1	Hold pending analysis
	B12CS-013M-0043-SO	B12CS-013M			1225			X	1	"
	B12CS-014M-0044-SO	B12CS-014M			1235			X	1	Hold pending analysis

Subtotal Number of Containers: 9
Total

Relinquished by	Date	Received by	Date
Signature	12/10/14	Signature	12-10-14
Heather Adams	Time	Dakota Turner	Time
Printed Name	1400	Printed Name	OT @ 1400
LEIDOS		TA-Canton	
Company		Company	
Relinquished by	Date	Received by	Date
Signature		Signature	
Printed Name	Time	Printed Name	Time
Company		Company	

Notes:

ISM PROCESSING REQUIRED FOR ALL SAMPLES, EVEN HOLD PENDING ANALYSIS SAMPLES, UNLESS NOTED OTHERWISE ABOVE

RUSH 3 DAY TAT REQUESTED

Methods:
1.) SW 846 3540/6010B

PROCESS ALL SAMPLES WITH ISM

S = Soil/solid matrix

Shipment Method: DROP OFF

Airbill No.:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 45339
Canton Facility

Client Teides Site Name

Cooler unpacked by: Heather Powell

Cooler Received on 12/10/14 Opened on 12/10/14

FedEx: 1st Grd Exp UPS FAS Stetson (Client Drop Off) TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

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 +4.0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN# 4 (CF +1.2 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C ☐ See Multiple Cooler Form

IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C

IR GUN# 8 (CF +0.7 °C) Observed Cooler Temp. 5.0 °C Corrected Cooler Temp. 5.7 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	(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# HC425511
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):

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\WI_QA use only\WI-NC-099M-110614 Cooler Receipt Form.doc djl

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-45879-1

Client Project/Site: RVAAP Building 1200 and ATA Remedial Act

For:

Leidos, Inc.
8866 Commons Boulevard
Suite 201
Twinsburg, Ohio 44087

Attn: Jed Thomas

Authorized for release by:
12/31/2014 3:42:22 PM

Mark Loeb, Project Manager II
(330)966-9387
mark.loeb@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

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QualifiersG

Metals

Qualifier	Qualifier Description
D,	The reported value is from a dilution.a,
J,	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteri,.a,
4,	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not a, pplicable.a,
U,	Undetected at the Limit of Detection.a,

lossaryG

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤,	Listed under the "D" column to designate that the result is reported on a dry weight basis,
%R,	Percent Recovery,
CFL,	Contains Free Liquid,
CNF,	Contains no Free Liquid,
DER,	Duplicate error ratio (normalized absolute difference),
Dil Fac,	Dilution Factor,
DL, RA, RE, IN,	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample,
DLC,	Decision level concentration,
MDA,	Minimum detectable activity,
EDL,	Estimated Detection Limit,
MDC,	Minimum detectable concentration,
MDL,	Method Detection Limit,
ML,	Minimum Level (Dioxin),
NC,	Not Calculated,
ND,	Not detected at the reporting limit (or MDL or EDL if shown),
PQL,	Practical Quantitation Limit,
QC,	Quality Control,
RER,	Relative error ratio,
RL,	Reporting Limit or Requested Limit (Radiochemistry),
RPD,	Relative Percent Difference, a measure of the relative difference between two points,
TEF,	Toxicity Equivalent Factor (Dioxin),
TEQ,	Toxicity Equivalent Quotient (Dioxin),

Job ID: 240-45879-1vn

Laboratory: TestAmerica Canton

Narrativen

CASE NARRATIVEn

Client: Leidos, Inc.n

Project: RVAAP Building 1200 and ATA Remedial Actn

Report Number: 240-45879-1n

h1itx txe epcef1tions noted as yaWs or yootnotes, standard analwtical f1rotocols v1ere yollov1ed in txe analwsis oytxe samf1es and no 1 f1roblems v1ere encogntered or anomalies obserqed. In addition all laboratorwEgalitwcontrol samf1es v1ere v1txin establisxed control 1 limits, v1tx anwepcef1tions noted belov1 z1acx samf1e v1as analwFed to acxieqe txe lov1est f1ossible ref1ortinWimit v1txin txe constraints oy1 txe metxod. In some cases, dge to interyerence or analwtes f1resent at xiWx concentrations, samf1es v1ere dilgted. Uor dilgted samf1es, 1 txe ref1ortinWimits are ad/gsted relatiqe to txe dilgtion reEgired.1

Calcglations are f1eryormed beyore rogndinWto aqoid rogndoyyerrors in calcglated resglts.1

All xoldinWtimes v1ere met and f1rof1er f1reserqation noted yor txe metxods f1eryormed on txese samf1es, gnless otxerv1se detailed in txe 1 indiqidgal sections belov11

TestAmerica gtiliFes ORzj1A af11roqed metxods and DQD MRk1, v1kere af11icable, in all analwtical v1br(1 Txe samf1es f1resented in txis 1 ref1ort v1ere analwFed yor txe f1arameter)s'1listed on txe analwtical metxods sgmmarwf1aWe in accordance v1tx txe metxod)s'1indicated. A 1 sgmmarwoyMC data yor txese analwses is inclgded at txe bac(1oytxe ref1ort. 1

1

TestAmerica Canton attests to txe qaliditwoytxe laboratorwdata Wenerated bwTestAmerica yacilities ref1orted xerein. All analwses 1 f1eryormed bwTestAmerica yacilities v1ere done gsinWestablisxed laboratorwRQj1s txat incorf1orate MASMC f1rocedgres described in txe 1 af11icable metxods. TestAmerica's of1erations Wogf1s xaqe reqiev1ed txe data yor comf1iance v1tx txe laboratorwMASMC f1an, and data 1 xaqe been yognd to be comf1iant v1tx laboratorwf1rotocols gnless otxerv1se noted belov1 1
1

All solid samf1e resglts are ref1orted on an %as receiqed%basis gnless otxerv1se indicated bwtxe f1resence oya N1solids qalge in txe 1 metxod xeader.1

Txis laboratorwref1ort is conyidential and is intended yor txe sole gse oyTestAmerica and its client.1

All f1arameters yor v1kicx TestAmerica 91ortx Canton xas certiyication v1ere eqalgated to txe limit oyDetection)LQD'1and inclgde Egaliyied 1 resglts v1kere af11icable. j1arameters not certiyied gnder MRk1, iyanw, v1ere eqalgated to txe detection limit)DL'1and inclgde Egaliyied 1 resglts v1kere af11icable.1

Txe samf1e)s'1txat contain constitgents yaWed v1tx O are gndetected. Txe resglt associated v1tx txis yaWis txe limit oyDetection)LQD'11

RECEIPTn

Txe samf1es v1ere receiqed on P2S22S20P4 4:46 j1k15txe samf1es arriqed in Wood condition, f1rof1erlwf1reserqed and, v1kere reEgired, on 1 ice. Txe temf1eratgre oytxe cooler at receif1t v1as ;16° C.1

TOTAL METALS (ICPMS) WITH INCREMENTAL SAMPLE PREPARATIONn

Ramf1es uP2CR-036k1-004;1-RQ)240-46731-P' and uP2CR-036k1-0043-UD)240-46731-2'1v1ere analwFed yor total metals)ICj1k1R'1v1tx 1 incremental samf1e f1ref1aration in accordance v1tx ITVC Tecxnical and VeWglatorw81gidance: IRk1, Uebrgarw20P2 and zj11A Rh1-74;11 k1etxod ;1020 DoD. Txe samf1es beWan txe drwinWf1rocess on P2S24S20P4, v1ere f1ref1ared on P2S30S20P4 and analwFed on P2SGPS20P4. 1

k1anWanese yailed txe recoqerwcriteria xiWx yor txe k1R oysamf1e uP2CR-036k1-004;1-RQk1R)240-46731-P' in batcx 240-P;1217;1. Veyer to 1 txe MC ref1ort yor details.1

Job ID: 240-45879-1 (Continued)vn

Laboratory: TestAmerica Canton (Continued)n

Ramf1es uP2CR-036k1-004;1-RQ)240-46731-P' [20X] and uP2CR-036k1-0043-UD)240-46731-2'1[20X] reEgired dilgtion f1rior to analwsis. 1
Txe ref1rtinWlimits xaqe been ad/gsted accordinWw.1

91o additional analwtical or Egalitwissges v1ere noted, otxer txan txose described aboqe or in txe DeyinitionsS1ossarwf1aWe.1

TOTAL SOLIDS/PERCENT MOISUREn

Ramf1es uP2CR-036k1-004;1-RQ)240-46731-P' and uP2CR-036k1-0043-UD)240-46731-2'1v1ere analwFed1yor Total RolidsS1ercent 1
k1oistgre in accordance v1tx j1ercent k1oistgre metxod. Txe samf1es v1ere leacxed on P2S24S20P4 and analwFed on P2S30S20P4. 1

91o analwtical or Egalitwissges v1ere noted, otxer txan txose described aboqe or in txe DeyinitionsS1ossarwf1aWe.1

Method Summary

Method	Method Description	Protocol	Laboratory
8020.	6 etans M. j. S R(.	RW348.	TAd l. A).
6 oistgre.	j. erceLt 6 oistgre.	Nj. A.	TAd l. A).

Protocol References:

Nj. A E =R NLUroLmeLtanj. rotectioL Af.eLcv.

RW348 E yTest 6 et".o,.s hor NU.rgatiLf. Roni,. Waste. j. ".vsicanS. ".emican6 et".o,.sy. T".ir,. N,.itioL.).oUember C138 AL,. Its =F,. tesP.

Laboratory References:

TAd l. A). E TestAmerica l. aLtoL. 4C0C R".gpenRtreet).W.).ort". l. aLtoL. OH 44920. TNd M770(419-1718.

Sample Summary

Client: Leidos, Inc.,
TestAmerica Job ID: 240-45879-1,
Project/Site: RVAAP Building 1200 and ATA Remedial Act,

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-45879-1,	B12CS-075M-0046-SO	Solid,	12/22/14 11:55,	12/22/14 16:45,
240-45879-2,	B12CS-075M-0047-FD,	Solid,	12/22/14 11:55,	12/22/14 16:45,

Detection Summaryb

Client: Leidos, Inc.,
Project/Site: RVAAP Building 1200 and ATA Remedial Act,

TestAmerica Job ID: 240-45879-1,

Client Sample ID: B12CS-075M-0046-SOb — Lab Sample ID: 240-45879-1b

Analyteb	Resultb	Qualifierb	LOQb	DLb	Unitb	Dil Facb	Db	Methodb	Prep Typeb
Manganese,	1700,	D J	9.5,	1.1,	mg/Kg,	20,	☼	6020,	Total/NA

Client Sample ID: B12CS-075M-0047-FDb — Lab Sample ID: 240-45879-2b

Analyteb	Resultb	Qualifierb	LOQb	DLb	Unitb	Dil Facb	Db	Methodb	Prep Typeb
Manganese,	1600,	D	9.5,	1.1,	mg/Kg,	20,	☼	6020,	Total/NA

This Detection Summary does not include radiochemical test results.,

Client Sample ID: B12CS-075M-0046-SO **Lab Sample ID: 240-45879-1O**

Date Collected: 12/22/14 11:55O **Matrix: SolidO**

Date Received: 12/22/14 16:45O **Percent Solids: 97.9O**

Method: 6020 - Metals (ICP/MS)O

AnalyteO	ResultO	QualifierO	LOQ	DLO	UnitO	DO	PreparedO	AnalyzedO	Dil FacO
ManganeseO	1700O	D JO	1F6	CPC	m9S9.	☼	C29K0SC4 C2:46.	C29KCSC4 01:4%	20.

General ChemistryO

AnalyteO	ResultO	QualifierO	LOQ	DLO	UnitO	DO	PreparedO	AnalyzedO	Dil FacO
Percent SolidsO	98O		0PC0.	0PC0.	8.			C29K0SC4 CK:C7.	C.
Percent MoistureO	2.1O		0PC0.	0PC0.	8.			C29K0SC4 CK:C7.	C.

Client Sample ID: B12CS-075M-0047-FDO **Lab Sample ID: 240-45879-2O**

Date Collected: 12/22/14 11:55O **Matrix: SolidO**

Date Received: 12/22/14 16:45O **Percent Solids: 97.9O**

Method: 6020 - Metals (ICP/MS)O

AnalyteO	ResultO	QualifierO	LOQ	DLO	UnitO	DO	PreparedO	AnalyzedO	Dil FacO
ManganeseO	1600O	DO	1F6	CPC	m9S9.	☼	C29K0SC4 C2:46.	C29KCSC4 C0:06.	20.

General ChemistryO

AnalyteO	ResultO	QualifierO	LOQ	DLO	UnitO	DO	PreparedO	AnalyzedO	Dil FacO
Percent SolidsO	98O		0PC0.	0PC0.	8.			C29K0SC4 CK:C7.	C.
Percent MoistureO	2.1O		0PC0.	0PC0.	8.			C29K0SC4 CK:C7.	C.

Method: 6020 - Metals (ICP/MS)Rk

Lab Sample ID: MB 240-162870/1-A ^2k — **Client Sample ID: Method Blank**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 162986k — **Prep Batch: 162870k**

Analytek	MBk Resultk	MBk Qualifierk	LOQk	DLk	Unitk	Dk	Preparedk	Analyzed	Dil Fac
Manganese,	0.40,	U,	1.0,	0.12,	mg/Kg,		12/30/14 12:45,	12/31/14 09:38,	2,

Lab Sample ID: LCS 240-162870/2-A ^2k — **Client Sample ID: Lab Control Samplek**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 162986k — **Prep Batch: 162870k**

Analytek			Spikek Addedk	LCSk Resultk	LCSk Qualifierk	Unitk	Dk	%Reck	%Rec.k Limitsk		
Manganese,			100,	96.9,	D,	mg/Kg,		97,	80,-,120,		

Lab Sample ID: 240-45879-1 MSk — **Client Sample ID: B12CS-075M-0046-SOk**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 162986k — **Prep Batch: 162870k**

Analytek	Samplek Sultk	Samplek Qualifierk	Spikek Addedk	MSk Resultk	MSk Qualifierk	Unitk	Dk	%Reck	%Rec.k Limitsk		
Manganese,	1700,	D J,	9.46,	1780,	D 4,	mg/Kg,	☼	1236,	10,-,199,		

Lab Sample ID: 240-45879-1 DUk — **Client Sample ID: B12CS-075M-0046-SOk**
Matrix: Solidk — **Prep Type: Total/NAk**
Analysis Batch: 162986k — **Prep Batch: 162870k**

Analytek	Samplek Sultk	Samplek Qualifierk		DUk Resultk	DUk Qualifierk	Unitk	Dk			PDk PDk	PDk Limitk
Manganese,	1700,	D J,		1540,	D,	mg/Kg,	☼			8,	20,

MetalstD

ISM Prep Batch: 162812D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-46731-C.	u.C2l. R-036M-004O-RN.	TotanSUA.	Roni,.	ILcremeLt. j. re5.	
240-46731-C D8.	u.C2l. R-036M-004O-RN.	TotanSUA.	Roni,.	ILcremeLt. j. re5.	
240-46731-C MR.	u.C2l. R-036M-004O-RN.	TotanSUA.	Roni,.	ILcremeLt. j. re5.	
240-46731-2.	u.C2l. R-036M-0043-9D.	TotanSUA.	Roni,.	ILcremeLt. j. re5.	

Prep Batch: 162870D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-46731-C.	u.C2l. R-036M-004O-RN.	TotanSUA.	Roni,.	F060u.	CC27C2.
240-46731-C D8.	u.C2l. R-036M-004O-RN.	TotanSUA.	Roni,.	F060u.	CC27C2.
240-46731-C MR.	u.C2l. R-036M-004O-RN.	TotanSUA.	Roni,.	F060u.	CC27C2.
240-46731-2.	u.C2l. R-036M-0043-9D.	TotanSUA.	Roni,.	F060u.	CC27C2.
dl. R 240-CC2730S2-A ^2.	dab l. oLtronRam5re.	TotanSUA.	Roni,.	F060u.	
Mu. 240-CC2730SC-A ^2.	Metho,. u.nLk.	TotanSUA.	Roni,.	F060u.	

Analysis Batch: 162986D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-46731-C.	u.C2l. R-036M-004O-RN.	TotanSUA.	Roni,.	C020.	CC2730.
240-46731-C D8.	u.C2l. R-036M-004O-RN.	TotanSUA.	Roni,.	C020.	CC2730.
240-46731-C MR.	u.C2l. R-036M-004O-RN.	TotanSUA.	Roni,.	C020.	CC2730.
240-46731-2.	u.C2l. R-036M-0043-9D.	TotanSUA.	Roni,.	C020.	CC2730.
dl. R 240-CC2730S2-A ^2.	dab l. oLtronRam5re.	TotanSUA.	Roni,.	C020.	CC2730.
Mu. 240-CC2730SC-A ^2.	Metho,. u.nLk.	TotanSUA.	Roni,.	C020.	CC2730.

General ChemistrytD

ISM Prep Batch: 162812D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-46731-C.	u.C2l. R-036M-004O-RN.	TotanSUA.	Roni,.	ILcremeLt. j. re5a.	
240-46731-2.	u.C2l. R-036M-0043-9D.	TotanSUA.	Roni,.	ILcremeLt. j. re5a.	

Analysis Batch: 162877D

Lab Sample ID	Client Sample ID	Prep TypeD	MatrixD	MethodD	Prep BatchD
240-46731-C.	u.C2l. R-036M-004O-RN.	TotanSUA.	Roni,.	Moistgre.	CC27C2.
240-46731-2.	u.C2l. R-036M-0043-9D.	TotanSUA.	Roni,.	Moistgre.	CC27C2.

Lab Chronicle8

Client: Leidos, Inc.9
Project/Site: RVAAP Building 1200 and ATA Remedial Act9

TestAmerica Job ID: 240-45879-19

Client Sample ID: B12CS-075M-0046-SO8

Lab Sample ID: 240-45879-18

Date Collected: 12/22/14 11:558

Matrix: Solid8

Date Received: 12/22/14 16:458

Percent Solids: 97.98

Prep Type8	Batch8 Type8	Batch8 Method8	Run	Dilution8 Factor8	Batch8 Number8	Prepared8 or Analyzed8	Analyst8	Lab8
Total/NA9	ISM Prep9	Increment, Prep9			1628129	12/24/14 13:159	DRJ9	TAL CAN9
Total/NA9	Prep9	3050B9			1628709	12/30/14 12:459	DEE9	TAL CAN9
Total/NA9	Analysis9	60209		209	1629869	12/31/14 09:469	AMM29	TAL CAN9
Total/NA9	ISM Prep9	Increment, Prep9			1628129	12/24/14 13:159	DRJ9	TAL CAN9
Total/NA9	Analysis9	Moisture9		19	1628779	12/30/14 13:189	NJE9	TAL CAN9

Client Sample ID: B12CS-075M-0047-FD8

Lab Sample ID: 240-45879-28

Date Collected: 12/22/14 11:558

Matrix: Solid8

Date Received: 12/22/14 16:458

Percent Solids: 97.98

Prep Type8	Batch8 Type8	Batch8 Method8	Run	Dilution8 Factor8	Batch8 Number8	Prepared8 or Analyzed8	Analyst8	Lab8
Total/NA9	ISM Prep9	Increment, Prep9			1628129	12/24/14 13:159	DRJ9	TAL CAN9
Total/NA9	Prep9	3050B9			1628709	12/30/14 12:459	DEE9	TAL CAN9
Total/NA9	Analysis9	60209		209	1629869	12/31/14 10:059	AMM29	TAL CAN9
Total/NA9	ISM Prep9	Increment, Prep9			1628129	12/24/14 13:159	DRJ9	TAL CAN9
Total/NA9	Analysis9	Moisture9		19	1628779	12/30/14 13:189	NJE9	TAL CAN9

Laboratory References:8

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-93969

Certification Summary

Client: Leidos, Inc.1 TestAmerica Job ID: 240-46731-P1

j ro/ectSRite: VBAAj1 u gildinf1P200 and ATA Vemedial Act1

Laboratory: TestAmerica Canton

All certihications yeld bNtyis laboratorNare listed. p1ot all certihications are a99licable to tyis re9ort.1

Authority	Program	EPA Region	Certification ID	Expiration Date
Calihornia1	p E 1Aj 1		0PP44CA1	0*150-P4 H1
Calihornia1	Rtate j1rof1ram1		21231	04-50-P61
Connecticgt1	Rtate j1rof1ram1	P1	j1F106101	P2-5P-P61
8lorida1	p1E1Aj1	41	E732261	0*150-P61
Georf1a1	Rtate j1rof1ram1	41	p18A1	0*150-P61
Illinois1	p1E1Aj1	61	2000041	03-5P-P61
Kansas1	p1E1Aj1	31	E-P055*1	0P-5P-P61
KentgckN(URT)1	Rtate j1rof1ram1	41	671	0*150-P61
-A-u1	DoD ELAj1		L25P61	03-P7-P*1
Minnesota1	p1ELAj1	61	051-11 -5471	P2-5P-P41
p1evada1	Rtate j1rof1ram1		OF-000472007A1	03-5P-P61
p1ew JerseN	p1ELAj1	21	OF00P1	0*150-P61
p1ew York1	p1E1Aj1	21	P01361	05-5P-P61
Oyio BAj1	Rtate j1rof1ram1	61	CL00241	P0-5P-P61
j1ennsNvania1	p1E1Aj1	51	*17-005401	07-5P-P61
Texas1	p1ELAj1	*1		07-5P-P61
URDA1	8ederal1		j1550-P5-005P1	PP-2*1P*1
Birf1nia1	p1E1Aj1	51	4*10P361	01-P4-P61
Wasyinf1ton1	Rtate j1rof1ram1	P01	C13P1	0P-P2-P61
West Birf1nia DEj1	Rtate j1rof1ram1	51	2P01	P2-5P-P41
Wisconsin1	Rtate j1rof1ram1	6	1116P7P101	07-5P-P61

HCertihication renewal 9endinf1- certihication considered valid.1

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

13

CHAIN OF CUSTODY AND RECEIVING DOCUMENTS



240-45879 Chain of Custody

leidos

Chain of Custody Record

Leidos, Inc.

5.8

COC No.: RVAAP-RA-06

Page 1 of 1

Date: 12/22/14

Name: Leidos
Address: 8866 Commons Blvd., Suite 201, Twinsburg, OH 44087
Phone Number: 330-405-5802
Project Manager: Jed Thomas
Project Name: Building 1200/ATA RA Confirmation Sampling
Job/P.O. 172819.00.09456.00.9500.02.001 PO10025302
Sampler (Signature) RSprinzl (Printed Name) RichSprinzl

Laboratory Name:
Test America
Address:
4101 Shuffel St. NW,
North Canton, OH 44720
Phone: 330-497-9396
Fax: 330-497-0772

Laboratory No.	Field Sample #	Location ID	Depth	Date	Time	Matrix	Requested Parameters: Total As (A3) s	Total Mn (A3) s	No. of Containers	OBSERVATIONS, COMMENTS SPECIAL INSTRUCTIONS
	B12CS-015M-0046-SO		0-1	12/22/14	1155	SO		1	1	ISM SOUTH WALL
	B12CS-015M-0047-FD		0-1	12/22/14	1155	SO		1	1	ISM SOUTH WALL
	B12CS-016M-0048-SO		0-1	12/22/14	1235	SO		1	1	ISM THEN HOLD; 10' OFFSET
				CS 12/22/14						

Subtotal Number of Containers: 3
Total: 3

Shipment Method: DROPOFF

Notes:
A. Cool 4°C
ISM PROCESSING REQUIRED FOR ALL SAMPLES UNLESS NOTED OTHERWISE ABOVE
RUSH TAT
Methods:
1.) SW 846 3540/6010B

Airbill No.:

Relinquished by	Date	Received by	Date
Signature: RSprinzl	12/22/14	Signature:	
Printed Name: RichSprinzl	Time: 1645	Printed Name:	Time
Company: LEIDOS		Company:	
Relinquished by	Date	Received by	Date
Signature:		Signature:	12/22/14
Printed Name:	Time	Printed Name: TA Canton	Time: 16:45
Company:		Company:	

VOC = volatile organic compound
SVOC = semi-volatile organic compound

S = Soil/solid matrix

TestAmerica Canton Sample Receipt Form/Narrative Login # : 458079
Canton Facility

Client Leidos Site Name _____ Cooler unpacked by:

Cooler Received on 12/22/14 Opened on 12/22/14

FedEx: 1st Grd Exp UPS FAS Stetson (Client Drop Off) TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

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 +4.0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 4	(CF +1.2 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 5	(CF +0.4 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF +0.7 °C)	Observed Cooler Temp. 5.8 °C	Corrected Cooler Temp. 6.5 °C	

2. Were custody seals on the outside of the cooler(s)?	If Yes Quantity _____	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 JB 12/23/14
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# HC425511
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: Jessie Bonar

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
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\WI_QA use only\WI-NC-099M-110614 Cooler Receipt Form.doc djl

APPENDIX D
MANIFEST LOG, WASTE PROFILE, AND WASTE MANIFESTS

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Load #	Disposal Date	Area of Concern	Date of Generation	Transporter	Truck License No.	Accepting Facility	Waste Profile No.	Manifest Document No.	Landfill Quantity (tons)	Copy of Initial manifest leaving site (Y/N)	Signed Final Manifest Received from Landfill (Y/N)
1	11/21/2014	B1200	11/19-11/20/2014	JMW	PVX8067	Envirite	K145150EOH	046108	13.01	Y	Y
2	11/21/2014	B1200	11/19-11/20/2014	JMW	PVX8075	Envirite	K145150EOH	046109	13.92	Y	Y
3	11/21/2014	B1200	11/19-11/20/2014	JMW	PVX8074	Envirite	K145150EOH	046110	14.46	Y	Y
4	11/21/2014	B1200	11/19-11/20/2014	JMW	PVX8081	Envirite	K145150EOH	046111	13.45	Y	Y
5	11/21/2014	B1200	11/19-11/20/2014	JMW	PVX8067	Envirite	K145150EOH	046112	16.33	Y	Y
6	11/21/2014	B1200	11/19-11/20/2014	JMW	PVX8075	Envirite	K145150EOH	046113	16.92	Y	Y
7	11/21/2014	B1200	11/19-11/20/2014	JMW	PVX8074	Envirite	K145150EOH	046114	18.02	Y	Y
8	11/21/2014	B1200	11/19-11/20/2014	JMW	PVX8081	Envirite	K145150EOH	046115	16.86	Y	Y
9	11/24/2014	B1200	11/19-11/20/2014	JMW	PVX8074	Envirite	K145150EOH	046116	19.26	Y	Y
10	11/24/2014	B1200	11/19-11/20, 11/24/2014	JMW	PVX8081	Envirite	K145150EOH	046117	18.64	Y	Y
11	11/24/2014	B1200	11/24/2014	JMW	PVX8075	Envirite	K145150EOH	046118	25.18	Y	Y
12	11/24/2014	B1200	11/24/2014	JMW	PVX8067	Envirite	K145150EOH	046119	22.06	Y	Y
13	11/24/2014	B1200	11/24/2014	JMW	PVX8074	Envirite	K145150EOH	046120	21.48	Y	Y
14	11/24/2014	B1200	11/24/2014	JMW	PVX8081	Envirite	K145150EOH	046121	18.84	Y	Y
15	12/10/2014	B1200	12/8-12/9/14	JMW	PVX8074	Envirite	K145150EOH	046125	17.85	Y	Y
16	12/10/2014	B1200	12/8-12/9/14	JMW	PVX8079	Envirite	K145150EOH	046126	18.57	Y	Y
17	12/10/2014	B1200	12/8-12/9/14	JMW	PVX8067	Envirite	K145150EOH	046127	18.50	Y	Y
18	12/10/2014	B1200	12/8-12/9/14	JMW	PVX8088	Envirite	K145150EOH	046128	19.73	Y	Y
19	12/10/2014	B1200	12/8-12/9/14	JMW	PVX8074	Envirite	K145150EOH	046129	19.52	Y	Y
20	12/10/2014	B1200	12/8-12/9/14	JMW	PVX8079	Envirite	K145150EOH	046130	14.99	Y	Y
21	12/23/2014	B1200	12/22/2014	JMW	PVX8067	Envirite	K145150EOH	046131	18.67	Y	Y
								TOTAL	**376.26**	**TONS**	

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	OH5 210 020 736	1	(800) 851-8061	046108

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUNI
1436 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (814) 336-6136

Generator's Site Address (if different than mailing address):
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC
2050 CENTRAL AVENUE, S.E
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 588 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON-REGULATED MATERIAL	1	DT	Est. 20	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1 K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Kathleen Tait
Signature: Kathleen S Tait
Month: 11 Day: 21 Year: 14

INTL
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Allen Miller
Signature: Allen Miller
Month: 11 Day: 21 Year: 14

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY
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:

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Eric Dunlevy
Signature: Eric Dunlevy
Month: 11 Day: 21 Year: 14

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TRANSPORTER #2

WASTE MANAGEMENT

(12) 3721307

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 622549

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/21/2014

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 14
Container:
Driver:
Haul Tic#:
Contract:

Volume

Manifest: 46141
Profile 4955720H (NON REGULATED SOIL)
Generator 113-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/21/2014 11:08:57	Scale 3	bruegg
Out	11/21/2014 11:27:22	Scale2	Greg Springer

Comments:

Inbound

Gross	63240 lb
Tare	37220 lb
Net	26020 lb
Tons	13.01

Product	LDX	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	13.01 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

4021WM

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	OH5 210 020 736	1	(800) 851-8061	046109

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address):
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking — U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1	NON-REGULATED MATERIAL	1	DT	Est	T
2					
3					
4					

13. Special Handling Instructions and Additional Information
1 K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Kathryn S Tait — Signature: Kathryn S Tait — Month 11 Day 21 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: DAVID G. PLYMPTON — Signature: David G Plympton — Month 11 Day 21 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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Eric Dunlevy — Signature: Eric Dunlevy — Month 11 Day 21 Year 14

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

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DESIGNATED FACILITY TO GENERATOR

www.equamire.com

WASTE MANAGEMENT

(10) 3721308

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 622551

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/21/2014

Account #: 0003093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 32
Containers:
Driver:
Haul Tic#:
Contract:

Volume

Manifest: 46143
Profile 495572OH (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/21/2014 11:13:13	Scale 3	bruegg
Out	11/21/2014 11:30:02	Scale2	Greg Springer

Comments:

Inbound Gross 64620 lb
Tare 36780 lb
Net 27840 lb
Tons 13.92

Product	LD%	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	13.92 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8061	046110

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address)
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking #23 — U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300

U.S. EPA ID Number: OHD 980 568 992

GENERATOR

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1	NON-REGULATED MATERIAL	1	DT	~~20~~ 15	T
2					
3					
4					

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Kathryn S Tait — Signature: Kathryn S Tait — Month 11 Day 21 Year 14

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: KEITH John S — Signature: [signature] — Month 11 Day 21 Year 14
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Eric Dunlevy — Signature: Eric Dunlevy — Month 11 Day 21 Year 14

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DESIGNATED FACILITY TO GENERATOR

www.egonline.com

WASTE MANAGEMENT

(13) 3721315

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 622550

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/21/2014

Account #: 0000093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 23
Container:
Drivers:
Haul Tic#:
Contract:

Volume

Manifest: 46144
Profile 4955720H (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/21/2014 12:01:00	Scale 3	bruegg
Out	11/21/2014 12:16:15	Scale 3	bruegg

Comments:

Inbound Gross 51400 lb
Tare 32480 lb
Net 28920 lb
Tons 14.46

Product	LDX	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	14.46 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				

Total Fees
Total Ticket

Driver's Signature

403WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8061	046111

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address)
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking — U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. NON-REGULATED MATERIAL	1	DT	Est 20	T
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Kathryn S Tait — Signature: Kathryn S Tait — Month: 11 Day: 21 Year: 14

INT'L
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Robert Whitacre — Signature: Robert Whitacre — Month: 11 Day: 21 Year: 14
Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY
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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Eric Dunlavy — Signature: Eric Dunlavy — Month: 11 Day: 21 Year: 14

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DESIGNATED FACILITY TO GENERATOR

www.egonline.com

WASTE MANAGEMENT

D 3721316

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3365

Original
Ticket# 622559

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/21/2014

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:
Manifest: 46142
Profile 495572OH (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

Carrier: JMW
Dest.:
Vehicle#: 44
Container:
Driver:
Haul Tic#:
Contract:

Volume

	Time	Scale	Operator
In	11/21/2014 12:01:47	Scale 3	bruegg
Out	11/21/2014 12:18:07	Scale2	bruegg

Comments:

Inbound

Gross	61200 lb
Tare	34300 lb
Net	26900 lb
Tons	13.45

Product	LDX	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	13.45 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

403WM

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	OH5 210 020 736	1	(800) 851-3061	046112

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUNI
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address):
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking 14-47
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON-REGULATED MATERIAL	1	DT	Est 20	T
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month: 11 Day: 21 Year: 14

INTL
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Allen Miller
Signature: allen Miller
Month: 11 Day: 21 Year: 14
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY
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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a
Printed/Typed Name: Rick Sanders
Signature: Rick Sanders
Month: 11 Day: 21 Year: 14

169-BLC-I 6 Rev. 8/06

DESIGNATED FACILITY TO GENERATOR

www.egonline.com

WASTE MANAGEMENT

(1) 3721367

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 622641

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/21/2014

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 14
Containers
Driver:
Haul Tic#:
Contract:

Volume

Manifest: 046145
Profile 4955720H (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/21/2014 15:52:02	Scale 2	Terri
Out	11/21/2014 16:06:23	Scale2	Terri

Comments:

InBound

Gross	69660 lb
Tare	37000 lb
Net	32660 lb
Tons	16.33

Product	LDX	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	16.33 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8061	046113

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address):
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1	NON-REGULATED MATERIAL	1	DT	EST 18	T
2					
3					
4					

13. Special Handling Instructions and Additional Information
1. K145150ECH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month: 11 Day: 21 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: DAVID G PLYMPTON
Signature: David G Plympton
Month: 11 Day: 21 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:

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Ricole Sanders
Signature: Ricole Sanders
Month: 11 Day: 21 Year: 14

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

169-BLC-I 6 Rev. 8/06

DESIGNATED FACILITY TO GENERATOR

www.egonline.com

WASTE MANAGEMENT

(9)

3721369

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 622644

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/21/2014

Account #: 0003093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 32
Containers
Drivers
Haul Tic#:
Contract:

Volume

Manifest: 046146
Profile 495572OH (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/21/2014 16:01:27	Scale 2	Terri
Out	11/21/2014 16:29:43	Scale 2	Terri

Comments:

Inbound

Gross	70420 lb
Tare	36580 lb
Net	33840 lb
Tons	16.92

Product	LD%	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	16.92 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

403WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8051	046114

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUNITION
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address):
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking — U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. NON-REGULATED MATERIAL	1	DT	Est. 18	T
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information
1. K14S150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Kathryn S Tait — Signature: Kathryn S Tait — Month: 11 Day: 21 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: KEITH Johns — Signature: — Month: 11 Day: 21 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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Eric Dunlevy — Signature: Eric Dunlevy — Month: 11 Day: 21 Year: 14

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

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DESIGNATED FACILITY TO GENERATOR

www.cgonline.com 1-800-292-4625 Uniform Hazardous Waste Manifest Company

WASTE MANAGEMENT

(14) 3721370

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 623646

Customer: ED A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/21/2014

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 23
Container:
Driver:
Haul Tick#:
Contract:

Volume

Manifest: 046147
Profile 495572OH (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/21/2014 16:11:04	Scale 3	Terri
Out	11/21/2014 16:31:57	Scale3	Terri

Comments:

Inbound

Gross	68380 lb
Tare	32340 lb
Net	36040 lb
Tons	18.02

Product	LD%	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	18.02 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

403WM

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	OH5 210 020 736	1	(800) 851-8061	046115

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address):
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON-REGULATED MATERIAL	1	DT	Est. 18	T
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's Officer's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month: 11 Day: 21 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: Robert Whitacre
Signature: Robert Whitacre
Month: 11 Day: 21 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:

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Eric Dunlevy
Signature: Eric Dunlevy
Month: 11 Day: 21 Year: 14

GENERATOR
TRANSPORTER INT'L
DESIGNATED FACILITY

www.egonline.com 1-800-OIL-EDGE

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DESIGNATED FACILITY TO GENERATOR

WASTE MANAGEMENT

3721372

(1)

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 522647

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/21/2014

Account #: 0009092
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 44
Containers:
Drivers:
Usul Tic#:
Contract:

Volume

Manifest: 046148
Profile 4955720H (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/21/2014 16:20:41	Scale 3	Terri
Out	11/21/2014 16:43:36	Scale3	Terri

Comments:

Inbound

Gross	67960 lb
Tare	34240 lb
Net	33720 lb
Tons	16.86

Product	LD%	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	16.86 Tons				OH-STARK
EVF L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

403WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8061	046116

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUNI
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address):
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking #23
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON REGULATED MATERIAL	1	DT	EST. 18	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month: 11 Day: 24 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: KEITH Johns
Signature:
Month: 11 Day: 24 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:

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Eric Dunlevy
Signature: Eric Dunlevy
Month: 11 Day: 24 Year: 14

GENERATOR
TRANSPORTER
INT'L
DESIGNATED FACILITY

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DESIGNATED FACILITY TO GENERATOR

WASTE MANAGEMENT

3721514

(b)

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 622045

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/24/2014

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 23
Containers
Drivers
Haul Tic#:
Contract:

Volume

Manifest: 46149
Profile 495572OH (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/24/2014 11:14:21	Scale 3	bruegg
Out	11/24/2014 11:40:42	Scale2	bruegg

Comments:

Inbound	Gross	70940 lb
	Tare	32420 lb
	Net	38520 lb
	Tons	19.26

Product	LD%	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	19.26 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

403WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8061	046117

GENERATOR

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address):
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

9. Waste Shipping Name and Description	10. Containers No	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. NON-REGULATED MATERIAL	1	DT	EST 18	T
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information
1. K14515OEOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month: 11 Day: 24 Year: 14

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Robert Whitacre
Signature:
Month: 11 Day: 24 Year: 14
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

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:

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Eric Dunlevy
Signature:
Month: 11 Day: 24 Year: 14

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DESIGNATED FACILITY TO GENERATOR

WASTE MANAGEMENT

(1) 3721516

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 622947

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/24/2014

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMH
Dest.:
Vehicle#: 44
Container:
Driver:
Haul Tic#:
Contract:

Volume

Manifest: 46150
Profile 495572OH (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/24/2014 11:18:25	Scale 3	bruegg
Out	11/24/2014 12:00:04	Scale2	bruegg

Inbound Gross 71900 lb
Tare 34620 lb
Net 37280 lb
Tons 18.64

Comments:

Product	LD%	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	18.64 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

403WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8051	046118

GENERATOR

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address):
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON REGULATED MATERIAL	1	DT	EST 18	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil

14. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month: 11 Day: 24 Year: 14

INT'L
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: David G. Plympton
Signature: David G Plympton
Month: 11 Day: 24 Year: 14
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY
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:

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: RICCIE SANDERS
Signature: Riccie Sanders
Month: 11 Day: 24 Year: 14

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DESIGNATED FACILITY TO GENERATOR

WASTE MANAGEMENT

(3) 3721564

American Landfill
7910 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 622030

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/24/2014

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 38
Container:
Driver:
Haul Tic#:
Contract:

Volume

Manifest: 46151
Profile: 4955720H (NON REGULATED SOIL)
Generator: 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/24/2014 11:59:01	Scale 3	bruegg
Out	11/24/2014 15:28:17	Scale6	bruegg

Comments:

Inbound	Gross	84720 lb
	Tare	34360 lb
	Net	50360 lb
	Tons	25.18

Product	LD%	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	25.18 Tons				OH-STARK
EVF L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8061	046119

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address)
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking #14
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S E
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. NON-REGULATED MATERIAL	1	DT	EST 18	T
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month: 11 Day: 24 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: Allen Miller
Signature: Allen Miller
Month: 11 Day: 24 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:

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Eric Dunlevy
Signature: Eric Dunlevy
Month: 11 Day: 24 Year: 14

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

169-BLC-I 6 Rev. 8/06

DESIGNATED FACILITY TO GENERATOR

www.eqonline.com

WASTE MANAGEMENT

(4) 3721530

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866 3265

Original
Ticket# 628872

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/24/2014

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 14
Container:
Driver:
Haul Tic#:
Contract:

Volume

Manifest: 46152
Profile 495572OH (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/24/2014 12:37:16	Scale 3	bruegg
Out	11/24/2014 13:00:46	Scale2	bruegg

Comments:
*100

Inbound Gross 81040 lb
Tare 36920 lb
Net 44120 lb
Tons 22.06

Product	LD%	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	22.06 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8061	046120

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUNI
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address):
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking — U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON-REGULATED MATERIAL	1	DT	Est 18	T
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Kathryn S Taut — Signature: Kathryn S Taut — Month 11 Day 24 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: KEITH Johns — Signature: [signature] — Month 11 Day 24 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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Eric Dunlevy — Signature: Eric Dunlevy — Month 11 Day 24 Year 14

GENERATOR — TRANSPORTER — INT'L — DESIGNATED FACILITY

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DESIGNATED FACILITY TO GENERATOR

WASTE MANAGEMENT

(5)

3721577

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 622945

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/24/2014

Account #: 0009092
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 23
Container:
Driver:
Haul Tic#:
Contract:

Volume

Manifest: 46153
Profile 4955720H (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/24/2014 16:23:26	Scale 3	bruegg
Out	11/24/2014 16:42:26	Scale2	bruegg

Comments:

Inbound	Gross	74640 lb
	Tare	31680 lb
	Net	42960 lb
	Tons	21.48

Product	LDX	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	21.48 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	OH5 210 020 736	1	(800) 851-8061	046121

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address)
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC
2050 CENTRAL AVENUE, S E
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1. NON-REGULATED MATERIAL	1	DT	ET 18	T	
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
1. K14S150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month: 11 Day: 24 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: Robert Whitacre
Signature:
Month: 11 Day: 24 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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Eric Dunlevy
Signature:
Month: 11 Day: 24 Year: 14

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

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DESIGNATED FACILITY TO GENERATOR

WASTE MANAGEMENT

(2) 3721578

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

Original
Ticket# 622947

Customer: EQ A US ECOLOGY COMPANY
9050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 11/24/2014

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMW
Dest.:
Vehicle#: 44
Container:
Driver:
Haul Tic#:
Contract:

Volume

Manifest: 46154
Profile 4955720H (NON REGULATED SOIL)
Generator 115-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	11/24/2014 16:25:46	Scale 3	bruegg
Out	11/24/2014 15:46:51	Scale6	bruegg

Comments:

Inbound	Gross	71340 lb
	Tare	34260 lb
	Net	37080 lb
	Tons	18.54

Product	LDX	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	18.54 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Total Fees
Total Ticket

Driver's Signature

403WM

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8061	046125

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUNI
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address)
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON-REGULATED MATERIAL	1	DT	Est 24	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

1 K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month 12 Day 12 Year 14

INT'L
15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER
16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: KEITH JOHNS
Signature:
Month 12 Day 16 Year 14

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY
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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Eric Dunlevy
Signature: Eric Dunlevy
Month 12 Day 10 Year 14

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DESIGNATED FACILITY TO GENERATOR

www.egonline.com

WASTE MANAGEMENT

3723451

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3865

Original
Ticket #3723451

Customer: ED A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 12/10/2014

Account #: 0003093
Payment Type: Credit Account
Check #:
Manual Ticket#:
PO:

Carrier: JHH
Dest.:
Vehicle#: 22
Container:
Driver:
Haul Tick:
Contract:

Volume

Manifest: 46155
Profile 495572OH (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	12/10/2014 11:13:22	Scale 3	bruegg
Out	12/10/2014 11:32:12	Scale2	bruegg

Comments:

Inbound Gross 66480 lb
Tare 32700 lb
Net 33780 lb
Tons 17.05

Product	LO%	Qty	Rate	Fee	Manual Origin
SpWaste Solid Oth-Tons-Speci	100	17.05 Tons			OH 51001
CVF-L-Standard Environmental	100	1 Load			OH STAND

Total Fee:
Total Ticket

Driver's Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: OH5 210 020 736
2. Page 1 of: 1
3. Emergency Response Phone: (800) 851-8061
4. Waste Tracking Number: 046126

GENERATOR

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address)
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON-REGULATED MATERIAL	1	DT	Est 20	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil

14. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month: 12 Day: 10 Year: 14

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Robert Whitacre
Signature:
Month: 12 Day: 10 Year: 14

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

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:

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Eric Dunlevy
Signature: Eric Dunlevy
Month: 12 Day: 10 Year: 14

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DESIGNATED FACILITY TO GENERATOR

WASTE MANAGEMENT

3723456

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3865

Customer: ED A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707
Account #: 3009093
Payment Type: Credit Account
Check #:
Manual Ticket#:
PO:

Carrier: JMM
Dept.:
Vehicle#: 60
Container:
Driver:
Haul Tic#:
Contract:

Manifest: 46150
Profile 495572OH (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITC OF OHIO INC

	Time	Scale	Operator
In	12/10/2014 11:29:49	Scale 3	bruegg
Out	12/10/2014 11:49:10	Scale2	bruegg

Comments:

Inbound Gross 71100 lb
Tare 33260 lb
Net 37840 lb
Tons 18.92

Product	LD%	Qty	Rate	Fee	Amount
Special Solid Oth Tons Spec	100	18.92 Tons			
EVF-L Standard Environmental	100	1 Load			

Total Fees
Total Ticket

Driver's Signature

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	OH5 210 020 736	1	(800) 851-8061	046127

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address)
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking # 14 - 17
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300

U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON-REGULATED MATERIAL	1	DT	EST 20	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

1. K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month: 12 Day: 10 Year: 14

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Allen Miller
Signature: Allen Miller
Month: 12 Day: 10 Year: 14

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Eric Dunlevy
Signature: Eric Dunlevy
Month: 12 Day: 10 Year: 14

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DESIGNATED FACILITY TO GENERATOR

WASTE MANAGEMENT

3723482

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3265

(Original)
Ticket# 625720

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date: 12/10/2014

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: 3RW
Desk:
Vehicle#: 14
Container:
Driver:
Haul Tick:
Contract:

Volume

Manifest: 46157
Profile 4055720H (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	12/10/2014 12:58:01	Scale 3	bruegg
Out	12/10/2014 13:17:15	Scale2	bruegg

Comments:

Inbound

Gross	74220 lb
Tare	36320 lb
Net	37900 lb
Tons	18.50

Product	LDM	Qty	Rate	Fee	Amount	Origin
Spwaste Solid Oth-Tons-Speci	100	18.50 Tons				OH-STARK
EVF-L-Standard Environmental	100	1 Load				OH-STARK

Driver's Signature

Total Fees
Total Ticket

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	OH5 210 020 736	1	(800) 851-8061	046128

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address)
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

GENERATOR

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON-REGULATED MATERIAL	1	DT	EST 2ϕ	T
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month 12 Day 1ϕ Year 14

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Dustin Reynolds
Signature:
Month 12 Day 1ϕ Year 14

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Eric Dunlevy
Signature: Eric Dunlevy
Month 12 Day 1ϕ Year 14

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DESIGNATED FACILITY TO GENERATOR

WASTE MANAGEMENT

3723483

American Landfill
7216 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3865

Original
Ticket# 435707

Customer: ED A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMH
Dest.:
Vehicle#: 64
Container:
Driver:
Haul Tic#:
Contract:

Ticket Date 12/10/2014

Volume

Manifest: 46158
Profile 435572OH (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	12/10/2014 12:59:18	Scale 3	bruegg
Out	12/10/2014 13:18:37	Scale2	bruegg

Comments:

Inbound Gross 74200 lb
Tare 35440 lb
Net 38460 lb
Tons 19.23

Product	LD%	Qty	Rate	Type	Account Origin
Sgwaste Solid Oth-Tons-Speci	100	19.73 Tons			OH-STATE
EVF-L-Standard Environmental	100	1 Load			OH-STATE

Driver's Signature

Total Fees
Total Ticket

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8061	046129

GENERATOR

5. Generator's Name and Mailing Address
FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address)
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking — U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300

U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	NON-REGULATED MATERIAL	1	DT	est. 2 ϕ	T
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information

1. K145150EOH / Non Regulated Soil

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Kathryn S Tait — Signature: Kathryn S Tait — Month 12 Day 1ϕ Year 14

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: X KEITH Johns — Signature — Month 12 Day 1ϕ Year 14

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Eric Dunlevy — Signature: Eric Dunlevy — Month 12 Day 10 Year 14

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DESIGNATED FACILITY TO GENERATOR

www.egonline.com

WASTE MANAGEMENT

3723526

[illegible] Landfill
3910 Chapel St SE
Uniontown, OH, 44688
Ph: (330) 865-3665

Customer: CO A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH 44707
Account #: 0009003
Payment Type: Credit Account
Check #
Blanket Total:
PO:

Driver: [illegible]
Date:
Vehicle #:
Container:
Driver:
Haul Time:
Container:

Manifest: 40159
Profile: 195572OH (NON REGULATED SOIL)
Generator: 113-ENVIROTECORP ENVIROTE OF OHIO INC

	Time	Scale	Operator
In	12/10/2014 10:00:04	Scale 3	Tare:
Out	12/10/2014 10:19:01	Scale2	Tare:

Comment :

Inbound [illegible]

Product	UOM	Qty	Rate	Fee	Material Total
Speedie Solid Waste Tons Specl	100	19.02 Tons			
EVF 1-Standard Environmental	100	1 Load			

Total Fees
Total Tickets

Driver's Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: OH5 210 020 736
2. Page 1 of: 1
3. Emergency Response Phone: (800) 851-8061
4. Waste Tracking Number: 046130

GENERATOR

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address):
8451 STATE ROUTE 8
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON-REGULATED MATERIAL	1	DT	EST 2Ø	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil

14. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month: 12 Day: 1Ø Year: 14

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: X Robert Whitacre
Signature: X
Month: 12 Day: 1Ø Year: 14

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

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:

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Eric Dunlevy
Signature: Eric Dunlevy
Month: 12 Day: 10 Year: 14

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DESIGNATED FACILITY TO GENERATOR

WASTE MANAGEMENT

3723527

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866 3265

Original
Ticket# 625022

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 12/10/2014

Account #: 0003092
Payment Type: Credit Account
Check #:
Manual Ticket#:
PO:

Carrier: JMH
Dest.:
Vehicle#: 40
Container:
Driver:
Haul Tic#:
Contract:

Volume

Manifest: 46160
Profile 4955720H (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIRITE OF OHIO INC

	Time	Scale	Operator
In	12/10/2014 16:01:07	Scale 3	Terri
Out	12/10/2014 16:19:29	Scale2	Terri

Comments:

Inbound Gross: 63020 lb
Tare: 33040 lb
Net: 29980 lb
Tons: 14.99

Product	LDX	Qty	Rate	Fee	Account Origin
Spwaste Solid Oth-Tons-Speci	100	14.99 Tons			OH-STOPI
EVF L Standard Environmental	100	1 Load			OH-STAPI

Driver's Signature

Total Fee:
Total Ticket

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
OH5 210 020 736	1	(800) 851-8061	046131

5. Generator's Name and Mailing Address: FORMER RAVENNA ARMY AMMUN
1438 STATE ROUTE 534 SW
NEWTON FALLS, OH 44444
Generator's Phone: (614) 336-6136

Generator's Site Address (if different than mailing address)
8451 STATE ROUTE 5
RAVENNA, OH 44266

6. Transporter 1 Company Name: JMW Trucking 14-47
U.S. EPA ID Number: JMW 000 000 000

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address: ENVIRITE OF OHIO, INC.
2050 CENTRAL AVENUE, S.E.
CANTON, OH 44707
Facility's Phone: (330) 617-4300
U.S. EPA ID Number: OHD 980 568 992

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON-REGULATED MATERIAL	1	DT	EST. 20	T	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
1. K145150EOH / Non Regulated Soil
TRUCK #14

14. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Kathryn S Tait
Signature: Kathryn S Tait
Month 12 Day 23 Year 14

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Allen Miller
Signature: Allen Miller
Month 12 Day 23 Year 14

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

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

NONE

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Eric Dunlevy
Signature: Eric Dunlevy
Month 12 Day 23 Year 14

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DESIGNATED FACILITY TO GENERATOR

41661/8

American Landfill
7916 Chapel St SE
Waynesburg, OH, 44688
Ph: (330) 866-3965

Original
Ticket# 600100

Customer: EQ A US ECOLOGY COMPANY
2050 CENTRAL AVE SE
CANTON, OH, 44707

Ticket Date 12/23/2014

Account #: 0009093
Payment Type: Credit Account
Check #:
Manual Tckt#:
PO:

Carrier: JMH
Dest.:
Vehicle#: 14
Container:
Driver:
Haul Tic#:
Contract:

Volume

Manifest: 46160
Profile 4955720H (NON REGULATED SOIL)
Generator 119-ENVIRITECORP ENVIPITE OF OHIO INC

	Time	Scale	Operator
In	12/23/2014 11:26:32	Scale 3	bruegg
Out	12/23/2014 11:46:19	Scale2	bruegg

Comments:

Inbound

Gross	72480 lb
Tare	36140 lb
Net	37340 lb
Tons	18.67

Product	LD%	Qty	Rate	Fee	Amount	Origin
Sprayable Solid Oth Tons-Speci	100	18.67 Tons				OH-STARK
EVF-L Standard Environmental	100	1 Load				OH-STARK

Driver's Signature

Total Fees
Total Ticket

3WM

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APPENDIX E
STORMWATER CONSTRUCTION SITE INSPECTION REPORTS

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Stormwater Construction Site Inspection Report

General Information			
Project Name	Building 1200 + ATA RA		
NPDES Tracking No.	1	**Location**	ATA ADC
Date of Inspection	11/17/14	**Start/End Time**	1510
Inspector's Name(s)	Rich Sponsel		
Inspector's Title(s)	Env. Engineer/Construction Manager		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	Site Prep & Excavation		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☐ Yes ☐ No (N/A)
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☒ Snowing ☐ High Winds
☐ Other: Temperature: 32°

Have any discharges occurred since the last inspection? ☐ Yes ☒ No
If yes, describe:

Are there any discharges at the time of inspection? ☐ Yes ☒ No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	Silt fence around Excavation	☒ Yes ☐ No	☐ Yes ☒ No	Installed today (11/17/14), 2 sides
2		☐ Yes ☐ No	☐ Yes ☐ No	
3		☐ Yes ☐ No	☐ Yes ☐ No	
4		☐ Yes ☐ No	☐ Yes ☐ No	
5		☐ Yes ☐ No	☐ Yes ☐ No	
6		☐ Yes ☐ No	☐ Yes ☐ No	
7		☐ Yes ☐ No	☐ Yes ☐ No	
8		☐ Yes ☐ No	☐ Yes ☐ No	
9		☐ Yes ☐ No	☐ Yes ☐ No	
10		☐ Yes ☐ No	☐ Yes ☐ No	

RS 11/17/14

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☒No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	☐Yes ☒No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☒Yes ☐No	☐Yes ☒No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☒Yes ☐No	☐Yes ☒No	Rolloff box covered
13	Are wastes properly stored with no risk of discharge?	☒Yes ☐No	☐Yes ☒No	Rolloff Box Covered.
14	(Other)	☐Yes ☐No	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance not described above:

NA

Prepared By — **Date** 11/17/14

Reviewed By — **Date** 11/18/14

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATARA		
NPDES Tracking No.	2	**Location**	ATA A2C
Date of Inspection	11/18/14	**Start/End Time**	1620-1625
Inspector's Name(s)	Rich Sprnzl		
Inspector's Title(s)	Environmental Engineer/EM		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	ATA Excavation		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☐Yes ☒No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 20°

Have any discharges occurred since the last inspection? ☐Yes ☒No
If yes, describe:

Are there any discharges at the time of inspection? ☐Yes ☒No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	Silt Fence - Wtr Stwll	☒Yes ☐No	☐Yes ☒No	Installed 11/18/14
2	Straw Bale in Ditch	☒Yes ☐No	☐Yes ☒No	Installed 11/19/14
3		☐Yes ☐No	☐Yes ☐No	
4		☐Yes ☐No	☐Yes ☐No	
5		☐Yes ☐No	☐Yes ☐No	
6		☐Yes ☐No	☐Yes ☐No	
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☐Yes ☐No	☐Yes ☐No	N/A
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☑Yes ☐No	☐Yes ☑No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☑Yes ☐No	☐Yes ☐No	
4	Are discharge points and receiving waters free of any sediment deposits?	☑Yes ☐No	☐Yes ☐No	
5	Are storm drain inlets properly protected?	☐Yes ☐No	☐Yes ☐No	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☑Yes ☐No	☐Yes ☑No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☑Yes ☐No	☐Yes ☐No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No	☐Yes ☐No	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☑Yes ☐No	☐Yes ☐No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☑Yes ☐No	☐Yes ☐No	Rolloff Boxes Covered/lined
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☒Yes ☐No	☐Yes ☐No	Rolloff Boxes covered +Lined
13	Are wastes properly stored with no risk of discharge?	☒Yes ☐No	☐Yes ☐No	
14	(Other)	☐Yes ☐No	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance not described above:

NA

Prepared By — **Date** 11/18/14

Reviewed By — **Date** 11/19/14

Stormwater Construction Site Inspection Report

General Information			
Project Name	RVAAP B1200/ATA RA		
NPDES Tracking No.	3	**Location**	B1200/ATA AOCs
Date of Inspection	11/19/14	**Start/End Time**	0816/1030
Inspector's Name(s)	Rich Sprinzl		
Inspector's Title(s)	Env Engineer/EM		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	ATA-post excavation B1200-excavation		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☐Yes ☒No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 15-20°

Have any discharges occurred since the last inspection? ☐Yes ☒No
If yes, describe:

Are there any discharges at the time of inspection? ☐Yes ☒No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt Fence	☒Yes ☐No	☐Yes ☒No	11/17/14
2	ATA Straw Bale Berm	☒Yes ☐No	☐Yes ☒No	11/18/14
3	B1200 Silt Fence	☐Yes ☐No	☐Yes ☒No	Installed 11/19/14-South end of Ditch
4	B1200 Hay Bale Berm	☒Yes ☐No	☐Yes ☒No	Installed 11/19/14-North end of Ditch
5	B1200 Hay Bale Berm	☒Yes ☐No	☐Yes ☒No	Installed 11/19/14 around stockpile
6		☐Yes ☐No	☐Yes ☐No	
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☐Yes ☐No	☐Yes ☐No	N/A
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☐Yes ☐No	☐Yes ☐No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☐Yes ☐No	☐Yes ☐No	
4	Are discharge points and receiving waters free of any sediment deposits?	☐Yes ☐No	☐Yes ☐No	
5	Are storm drain inlets properly protected?	☐Yes ☐No	☐Yes ☐No	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☐Yes ☐No	☐Yes ☐No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☐Yes ☐No	☐Yes ☐No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No	☐Yes ☐No	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No	☐Yes ☐No	N/A
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No	☐Yes ☐No	Rolloffs covered/lined Stockpiles/open excavation covered
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☒Yes ☐No	☐Yes ☐No	Stockpiles covered, Hay Bale Berm Rolloffs Covered/Lined
13	Are wastes properly stored with no risk of discharge?	☒Yes ☐No	☐Yes ☒No	Roll offs covered/lined Stockpiles covered
14	(Other)	☐Yes ☐No	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

RSmall — **Prepared By**

11/19/14 — **Date**

Jack Thomas — **Reviewed By**

11/20/14 — **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	RVAAP B1200/ATA RA		
NPDES Tracking No.	4	**Location**	B1200/ATA AOCs
Date of Inspection	11/20/14	**Start/End Time**	1215/1315
Inspector's Name(s)	Rich Sprinzl		
Inspector's Title(s)	Env Engineer		
Inspector's Contact Information	330 348-1378		
Describe present phase of construction	Excavation		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☐ Yes ☒ No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 25°

Have any discharges occurred since the last inspection? ☐ Yes ☒ No
If yes, describe:

Are there any discharges at the time of inspection? ☐ Yes ☒ No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt Fence	☐ Yes ☐ No	☐ Yes ☒ No	
2	ATA Straw Bale CheckDam	☐ Yes ☐ No	☐ Yes ☒ No	
3	B1200 Silt Fence	☒ Yes ☐ No	☐ Yes ☒ No	South of Ditch, extension added today
4	B1200 Hay Bale CheckDam	☒ Yes ☐ No	☐ Yes ☒ No	N End of Ditch
5	B1200 Hay Bale Berm	☒ Yes ☐ No	☐ Yes ☒ No	B1200 stockpile
6		☐ Yes ☐ No	☐ Yes ☐ No	
7		☐ Yes ☐ No	☐ Yes ☐ No	
8		☐ Yes ☐ No	☐ Yes ☐ No	
9		☐ Yes ☐ No	☐ Yes ☐ No	
10		☐ Yes ☐ No	☐ Yes ☐ No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☐Yes ☐No	☐Yes ☐No	N/A
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☐Yes ☐No	☐Yes ☐No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☐Yes ☐No	☐Yes ☐No	
4	Are discharge points and receiving waters free of any sediment deposits?	☐Yes ☐No	☐Yes ☐No	
5	Are storm drain inlets properly protected?	☐Yes ☐No	☐Yes ☐No	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☐Yes ☐No	☐Yes ☐No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☐Yes ☐No	☐Yes ☐No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No	☐Yes ☐No	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No	☐Yes ☐No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No	☐Yes ☐No	Rolloffs @ B(936 -covered/lined -Stockpile covered
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☑Yes ☐No	☐Yes ☒No	Straw bale berm
13	Are wastes properly stored with no risk of discharge?	☑Yes ☐No	☐Yes ☐No	
14	(Other)	☐Yes ☐No	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance not described above:

NA

RS — **Prepared By** — 11/20/14 — **Date**

Joe Thurman — **Reviewed By** — 11/21/14 — **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	RVAAP B1200/ATA RA		
NPDES Tracking No.	5	**Location**	B1200/ATA AOCs
Date of Inspection	11/21/14	**Start/End Time**	1515/1045
Inspector's Name(s)	Rich Sprinzl		
Inspector's Title(s)	Env Eng		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	Excavation/Loadout		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☒ Yes ☐ No
If yes, provide:
Storm Start Date & Time: ~1" snow overnight Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 26

Have any discharges occurred since the last inspection? ☐ Yes ☒ No
If yes, describe:

Are there any discharges at the time of inspection? ☐ Yes ☒ No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt fence	☐ Yes ☐ No	☐ Yes ☒ No	Extension added today
2	ATA Straw bale Checkdam	☒ Yes ☐ No	☐ Yes ☒ No	
3	B1200 Silt fence	☒ Yes ☐ No	☐ Yes ☒ No	South end of Ditch
4	B1200 Straw Check Dam	☒ Yes ☐ No	☐ Yes ☒ No	North end of Ditch
5	B1200 Straw Berm	☒ Yes ☐ No	☐ Yes ☒ No	B1200 Stockpile
6		☐ Yes ☐ No	☐ Yes ☐ No	
7		☐ Yes ☐ No	☐ Yes ☐ No	
8		☐ Yes ☐ No	☐ Yes ☐ No	
9		☐ Yes ☐ No	☐ Yes ☐ No	
10		☐ Yes ☐ No	☐ Yes ☐ No	

RS 11/21/14

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No	☐Yes ☐No	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☐No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	☐Yes ☒No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No	☐Yes ☐No	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☒Yes ☐No	☐Yes ☒No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☒Yes ☐No	☐Yes ☒No	Excavations/Rolloffs/Stockpiles covered
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☑Yes ☐No	☐Yes ☐No	
13	Are wastes properly stored with no risk of discharge?	☑Yes ☐No	☐Yes ☒No	
14	(Other)	☐Yes ☐No	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance not described above:

NA

Prepared By 11/21/14 **Date**

Reviewed By 11/22/14 **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATA RA		
NPDES Tracking No.	6	**Location**	B1200/ATA AOCs
Date of Inspection	11/24/14	**Start/End Time**	0800/0745
Inspector's Name(s)	Rich Sprinzl		
Inspector's Title(s)	Env Eng		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	Excavation/Load out		

Type of Inspection:
☐ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☒Yes ☐No
If yes, provide:
Storm Start Date & Time: 11/22~0.09" 11/23~0.22" Storm Duration (hrs): Approximate Amount of Precipitation (in): ~0.31"

Weather at time of this inspection?
☐ Clear ☒Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 60°

Have any discharges occurred since the last inspection? ☒Yes ☐No
If yes, describe: Some water on top of plastic & ditch overflowed South end and through silt fence

Are there any discharges at the time of inspection? ☐Yes ☒No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt fence	☒Yes ☐No	☐Yes ☒No	
2	ATA Straw bale check dam	☒Yes ☐No	☐Yes ☒No	
3	B1200 Silt Fence	☒Yes ☐No	☐Yes ☒No	South end of Ditch
4	B1200 Straw Check Dam	☒Yes ☐No	☐Yes ☒No	N end of Ditch
5	B1200 Straw Berm	☒Yes ☐No	☐Yes ☒No	Replaced w/ Silt fence due to unfrozen conditions
6	B1200 Straw Check Dam	☒Yes ☐No	☐Yes ☒No	Added 11/24/14 (North of Open Area)
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

RS 11/24/14

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☐Yes ☐No	☐Yes ☐No	N/A
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☐Yes ☐No	☐Yes ☐No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☐Yes ☐No	☐Yes ☐No	
4	Are discharge points and receiving waters free of any sediment deposits?	☐Yes ☐No	☐Yes ☐No	
5	Are storm drain inlets properly protected?	☐Yes ☐No	☐Yes ☐No	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☐Yes ☐No	☐Yes ☐No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☐Yes ☐No	☐Yes ☐No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No	☐Yes ☐No	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No	☐Yes ☐No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No	☐Yes ☐No	Rolloffs covered Excavations covered.
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☐Yes ☐No	☐Yes ☐No	N/A
13	Are wastes properly stored with no risk of discharge?	☑Yes ☐No	☐Yes ☐No	Rolloffs Covered/lined
14	(Other)	☐Yes ☐No	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance not described above:

NA

Prepared By — **Date** 11/24/14

Reviewed By — **Date** 11/25/14

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATA/RA		
NPDES Tracking No.	7	**Location**	B1200/ATA
Date of Inspection	11/25/14	**Start/End Time**	1250 – 1345
Inspector's Name(s)	Rich Sprinzl		
Inspector's Title(s)	Env Eng		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	Post-Excavation		

Type of Inspection:
☐ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☒Yes ☐No
If yes, provide:
Storm Start Date & Time: 11/24/14 – trace Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 38

Have any discharges occurred since the last inspection? ☐Yes ☒No
If yes, describe:

Are there any discharges at the time of inspection? ☐Yes ☒No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt fence	☒Yes ☐No	☐Yes ☐No	
2	ATA Straw bale checkdam	~~☒Yes~~ ☐No	☐Yes ☐No	
3	B1200 Silt fence	☐Yes ☐No	☐Yes ☐No	S end of Ditch
4	B1200 Straw checkdam	☐Yes ☐No	☐Yes ☐No	N end of Ditch
5	B1200 ~~straw berm~~ Silt fence	☐Yes ☐No	☐Yes ☐No	(formerly straw berm)
6	B1200 Straw Check dam	☐Yes ☐No	☐Yes ☐No	N of open Area
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

RS 11/25/14

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☐No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No	☐Yes ☐No	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☒No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	☐Yes ☐No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No	☐Yes ☐No	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No	☐Yes ☐No	N/A
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☒Yes ☐No	☐Yes ☒No	Excavations covered Rolloffs covered
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☐Yes ☐No	☐Yes ☐No	N/A
13	Are wastes properly stored with no risk of discharge?	☐Yes ☐No	☐Yes ☐No	Rolloffs @ B/1036 covered
14	(Other)	☐Yes ☐No	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

RS [signature] — **Prepared By** — 11/25/14 — **Date**

[signature] — **Reviewed By** — 11/26/14 — **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATA RA		
NPDES Tracking No.	8	**Location**	B1200/ATA
Date of Inspection	12/01/14	**Start/End Time**	0815-0845
Inspector's Name(s)	Jed Thomas		
Inspector's Title(s)	Env Engineer		
Inspector's Contact Information	330-425-5802		
Describe present phase of construction	Post Excavation		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☐Yes ☐No
If yes, provide:
Storm Start Date & Time: 11/29/14 1200 Storm Duration (hrs): ~1 hr Approximate Amount of Precipitation (in): 0.02 in

Weather at time of this inspection?
☐ Clear ☒Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 31°F

Have any discharges occurred since the last inspection? ☐Yes ☒No
If yes, describe:

Are there any discharges at the time of inspection? ☐Yes ☒No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt fence	☒Yes ☐No	☐Yes ☒No	
2	ATA Straw bale check dam	☒Yes ☐No	☐Yes ☒No	
3	B1200 silt fence	☒Yes ☐No	☐Yes ☒No	South of ditch
4	B1200 straw check dam	☒Yes ☐No	☐Yes ☒No	N end of ditch
5	B1200 silt fence	☒Yes ☐No	☐Yes ☒No	Open area
6	B1200 straw check dam	☒Yes ☐No	☐Yes ☒No	North of Open area
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No	☐Yes ☐No	NA
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☒No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	☐Yes ☒No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No	☐Yes ☐No	NA
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No	☐Yes ☐No	NA
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☒Yes ☐No	☐Yes ☒No	
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			NA
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☐Yes ☐No	☐Yes ☐No	NA
13	Are wastes properly stored with no risk of discharge?	☒Yes ☐No	☐Yes ☒No	Roll off boxes covered
14	(Other)	☐Yes ☐No	☐Yes ☐No	NA

Non-Compliance

Describe any incidents of non-compliance not described above:

NA

Jack Thrasher — **Prepared By**

12/1/14 — **Date**

RS — **Reviewed By**

12/12/14 — **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	BIZ88/ATA RA		
NPDES Tracking No.	9	**Location**	BIZ88/ATA AOCs
Date of Inspection	12/8/14	**Start/End Time**	0920 - 0958
Inspector's Name(s)	Carey Pacer		
Inspector's Title(s)	Environmental Engineer		
Inspector's Contact Information	330-405-5811		
Describe present phase of construction	Excavation - Phase II		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☐ Yes ☒ No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 35°F

Have any discharges occurred since the last inspection? ☒ Yes ☐ No (DAP)
If yes, describe: Rain water on top of plastic @ BIZ88 open area pumped through strawbales/silt fence and ditchline

Are there any discharges at the time of inspection? ☐ Yes ☒ No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt Fence	☒ Yes ☐ No	☐ Yes ☐ No	
2	ATA straw bale check	☒ Yes ☐ No	☐ Yes ☐ No	
3	BIZ88 silt fence	☒ Yes ☐ No	☐ Yes ☐ No	South of ditch
4	BIZ88 strawbale check	☒ Yes ☐ No	☐ Yes ☐ No	North end of Ditch
5	BIZ88 silt Fence	☒ Yes ☐ No	☐ Yes ☐ No	Open area
6	BIZ88 straw check dam	☒ Yes ☐ No	☐ Yes ☐ No	North of open area
7		☐ Yes ☐ No	☐ Yes ☐ No	
8		☐ Yes ☐ No	☐ Yes ☐ No	
9		☐ Yes ☐ No	☐ Yes ☐ No	
10		☐ Yes ☐ No	☐ Yes ☐ No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☐Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☒No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	~~☐Yes~~ ☒No (CA6)	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☒Yes ☐No	☐Yes ☒No	
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?	N/A	N/A	N/A
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☒Yes ☐No	☐Yes ☒No	stockpile covered w/plastic and secured. Surrounded by straw bales.
13	Are wastes properly stored with no risk of discharge?	☒Yes ☐No	☐Yes ☒No	stockpile of plastic w/in 1ft excavation covered with plastic and secured.
14	(Other)	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

C. Pace — **Prepared By**

12/8/14 — **Date**

RS — **Reviewed By**

12/12/14 — **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200 / ATA RA		
NPDES Tracking No.	10	**Location**	B1200 / ATA AOCs
Date of Inspection	12/9/14	**Start/End Time**	0830 to 0900
Inspector's Name(s)	Corey Pacer		
Inspector's Title(s)	Env. Engineer		
Inspector's Contact Information	330 553-6153		
Describe present phase of construction	Excavation - Phase II		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☐Yes ☒No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 40°F
Rain water on top of plastic at B1200 & ditches

Have any discharges occurred since the last inspection? ☒Yes ☐No
If yes, describe:

Are there any discharges at the time of inspection? ☒Yes ☐No
If yes, describe:
SAME AS ABOVE.

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt Fence	☒Yes ☐No	☐Yes ☒No	
2	ATA straw bale check	☒Yes ☐No	☐Yes ☒No	
3	B1200 Silt Fence	☒Yes ☐No	☐Yes ☒No	South of ditch
4	B1200 straw bale	☒Yes ☐No	☐Yes ☒No	North end of ditch
5	B1200 silt fence	☒Yes ☐No	☐Yes ☒No	Open area
6	B1200 straw check	☒Yes ☐No	☐Yes ☒No	North of open area.
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☒No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	☐Yes ☒No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☒Yes ☐No	☐Yes ☒No	
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?	N/A	N/A	N/A
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☒Yes ☐No	☐Yes ☒No	Stockpile covered w/plastic and secured surrounded by straw bales.
13	Are wastes properly stored with no risk of discharge?	☒Yes ☐No	☐Yes ☒No	Stockpile on plastic w/in 1ft excavation w/plastic & secured
14	(Other)	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

C. Pham — **Prepared By**

12/9/14 — **Date**

RS — **Reviewed By**

12/12/14 — **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATA RA		
NPDES Tracking No.	11	**Location**	B1200/ATA AOCs
Date of Inspection	12/10/14	**Start/End Time**	~~0~~ 1100 – 1245
Inspector's Name(s)	Corey Pacer		
Inspector's Title(s)	Environmental Engineer		
Inspector's Contact Information	330-353-6153		
Describe present phase of construction	Excavation - Phase II. Waste Hauling		

Type of Inspection:
☑ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☐Yes ☑No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☑Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 32°F

Have any discharges occurred since the last inspection? ☑Yes ☐No
If yes, describe:
Rain water on top of plastic (CAP) ~~at~~ at B1200 open area.

Are there any discharges at the time of inspection? ☐Yes ☑No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt Fence	☐Yes ☐No	☐Yes ☒No	
2	ATA Strawbale Check	☐Yes ☐No	☐Yes ☐No	
3	B1200 Silt Fence	☐Yes ☐No	☐Yes ☐No	South of Ditch
4	B1200 Straw Bale	☐Yes ☐No	☐Yes ☐No	North end of Ditch
5	B1200 Silt Fence	☐Yes ☐No	☐Yes ☐No	Open Area
6	B1200 Straw Bale	☐Yes ☐No	☐Yes ☐No	North of Open Area
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☑Yes ☐No	☐Yes ☑No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☑Yes ☐No	☐Yes ☑No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☑Yes ☐No	☐Yes ☑No	
4	Are discharge points and receiving waters free of any sediment deposits?	☑Yes ☐No	☐Yes ☑No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☑Yes ☐No	☐Yes ☑No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☑Yes ☐No	☐Yes ☑No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☑Yes ☐No	☐Yes ☒No	
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?	N/A	N/A	N/A
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☐Yes ☐No N/A	☐Yes ☐No N/A	No spoils. Waste off-site
13	Are wastes properly stored with no risk of discharge?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A. All wastes off site
14	(Other)	☐Yes ☐No N/A	☐Yes ☐No N/A	

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

C. Pam — **Prepared By**

12/10/14 — **Date**

RS — **Reviewed By**

12/12/14 — **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	BIZ00/ATA EA		
NPDES Tracking No.	12	**Location**	BIZ00/ATA AOCs
Date of Inspection	12/11/14	**Start/End Time**	0900 - 0930
Inspector's Name(s)	COREY PAGER		
Inspector's Title(s)	ENV ENGINEER		
Inspector's Contact Information	330-353-6153		
Describe present phase of construction	EXCAVATION - PHASE II BACKFILL OF APPROVED AREAS		

Type of Inspection:
☑ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☐Yes ☒No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 28°F

Have any discharges occurred since the last inspection? ☒Yes ☐No
If yes, describe: ~100 gallons at ATA through storm controls

Are there any discharges at the time of inspection? ☐Yes ☒No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt Fence	☐Yes ☐No	☐Yes ☐No	
2	ATA Straw bales	☐Yes ☐No	☐Yes ☐No	
3	BIZ00 silt fence	☐Yes ☐No	☐Yes ☐No	South of Ditch
4	BIZ00 Strawbale	☐Yes ☐No	☐Yes ☐No	North End of Ditch
5	BIZ00 Silt Fence	☐Yes ☐No	☐Yes ☐No	Open Area
6	BIZ00 Strawbale	☐Yes ☐No	☐Yes ☐No	North of open area
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☑Yes ☐No	☐Yes ☑No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☑Yes ☐No	☐Yes ☑No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☑Yes ☐No	☐Yes ☑No	
4	Are discharge points and receiving waters free of any sediment deposits?	☑Yes ☐No	☐Yes ☑No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☑Yes ☐No	☐Yes ☑No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☑Yes ☐No	☐Yes ☑No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A waste off site
11	Are non-stormwater	☐Yes ☐No	☐Yes ☐No	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?	N/A	N/A	N/A
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☐Yes ☐No N/A	☐Yes ☐No N/A	No stockpiles wastes off-site
13	Are wastes properly stored with no risk of discharge?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A. Wastes off-site
14	(Other)	☐Yes ☐No N/A	☐Yes ☐No N/A	Wastes offsite

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

C. Dunn — **Prepared By**

12/11/14 — **Date**

RS — **Reviewed By**

12/12/14 — **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATA RA		
NPDES Tracking No.	13	**Location**	B1200/ATA AOCs
Date of Inspection	12/12/14	**Start/End Time**	1050 - 1200
Inspector's Name(s)	Rich Sprinzl		
Inspector's Title(s)	Env Engineer		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	SITE RESTORATION		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☐Yes ☒No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 31°

Have any discharges occurred since the last inspection? ☐Yes ☒No
If yes, describe:

Are there any discharges at the time of inspection? ☒Yes ☐No
If yes, describe: Some water in corner of ATA Excavation - removed through silt fence

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA-S, Silt Fence	☒Yes ☐No	☐Yes ☒No	
2	ATA-Straw Check Dam	☒Yes ☐No	☐Yes ☒No	
3	B1200 Ditch Silt Fence	☒Yes ☐No	☐Yes ☒No	
4	B1200 Ditch Straw Dam	☒Yes ☐No	☐Yes ☒No	
5	B1200 Open Area Silt Fence	☒Yes ☐No	☐Yes ☒No	
6	B1200 Open Area Straw	☒Yes ☐No	☐Yes ☒No	
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

RSprf 12/12/14

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☒No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	☐Yes ☒No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☒Yes ☐No	☐Yes ☒No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☒Yes ☐No	☐Yes ☒No	
11	Are non-stormwater	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A

RS mf 12/12/14

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	❑Yes ❑No N/A	❑Yes ❑No N/A	N/A - wastes offsite
13	Are wastes properly stored with no risk of discharge?	❑Yes ❑No N/A	❑Yes ❑No N/A	
14	(Other)	❑Yes ❑No	❑Yes ❑No	

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

Prepared By — Date: 12/12/14

Reviewed By — Date: 12/13/14

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATA RA		
NPDES Tracking No.	14	**Location**	B1200/ATA ADCs
Date of Inspection	12/18/14	**Start/End Time**	0938-1038
Inspector's Name(s)	Rich Sprinzl		
Inspector's Title(s)	Env Engineer		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	POST-RESTORATION (ATA/B1200 Open Area) POST-EXCAVATION (B1200 DITCH)		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☒ Yes ☐ No
If yes, provide:
Storm Start Date & Time: 12/16/14 ~0.20" Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection? very light/fence
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☒ Snowing ☐ High Winds
☐ Other: Temperature: 28°

Have any discharges occurred since the last inspection? ☐ Yes ☒ No
If yes, describe:

Are there any discharges at the time of inspection? ☐ Yes ☒ No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt Fence	☒ Yes ☐ No	☐ Yes ☒ No	
2	ATA Straw Check Dam	☒ Yes ☐ No	☐ Yes ☒ No	
3	B1200 Silt Fence	☒ Yes ☐ No	☐ Yes ☒ No	
4	B1200 Straw Check Dam	☒ Yes ☐ No	☐ Yes ☒ No	
5	B1200 Silt Fence	☒ Yes ☐ No	☒ Yes ☐ No	Need to Extend during Remob
6	B1200 Straw Check Dam	☒ Yes ☐ No	☐ Yes ☒ No	
7		☐ Yes ☐ No	☐ Yes ☐ No	
8		☐ Yes ☐ No	☐ Yes ☐ No	
9		☐ Yes ☐ No	☐ Yes ☐ No	
10		☐ Yes ☐ No	☐ Yes ☐ No	

RSprinzl 12/18/14

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☒No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	☐Yes ☒No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No N/A	☐Yes ☐No N/A	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☒Yes ☐No	☐Yes ☒No	
11	Are non-stormwater	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	❑Yes ❑No N/A	❑Yes ❑No N/A	N/A - all wastes offsite
13	Are wastes properly stored with no risk of discharge?	❑Yes ❑No N/A	❑Yes ❑No N/A	N/A
14	(Other)	❑Yes ❑No	❑Yes ❑No	

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

RS 12/18/14

Prepared By **Date**

12/19/14

Reviewed By **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATA RA		
NPDES Tracking No.	15	**Location**	B1200/ATA AOCs
Date of Inspection	12/22/14	**Start/End Time**	0750 /0830, 1525
Inspector's Name(s)	Rich Sprinzl - Leidos		
Inspector's Title(s)	Environmental Engineer		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	ATA-POST-RESTORATION B1200- ADDITIONAL EXCAVATION		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☐Yes ☒No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☒ Clear ☐Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 20°

Have any discharges occurred since the last inspection? ☐Yes ☒No
If yes, describe:

Are there any discharges at the time of inspection? ☒Yes ☐No
If yes, describe: SUB PUMPING WATER OFF PLASTIC AT B1200 DITCH THROUGH SILT FENCE/STRAW AND NEARBY RUTS ~1250 gal 12/22/14

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt Fence	☒Yes ☐No	☐Yes ☒No	
2	ATA Straw Check Dam	☒Yes ☐No	☐Yes ☒No	
3	B1200 Silt Fence - Ditch	☒Yes ☐No	☒Yes ☐No	S.F. extended eastward 12/22/14 RS
4	B1200 Straw Dam - Ditch	☒Yes ☐No	☐Yes ☒No	
5	B1200 Silt Fence - Open Area	☒Yes ☐No	☐Yes ☒No	
6	B1200 Straw Dam - Open Area	☒Yes ☐No	☐Yes ☒No	
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

RSprinzl 12/22/14

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☒No N/A	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☒No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	☐Yes ☒No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☒Yes ☐No	☐Yes ☒No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☒Yes ☐No	☐Yes ☒No	
11	Are non-stormwater	☒Yes ☐No	☐Yes ☒No	

RS 12/22/14

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			Pumped/Dewatered through silt fence/Straw bale check dam
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☒Yes ☐No	☐Yes ☐No	
13	Are wastes properly stored with no risk of discharge?	☒Yes ☐No	☐Yes ☒No	
14	(Other)	☐Yes ☐No	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

RSM 12/22/14

Prepared By **Date**

Jon Thomas 12/23/14

Reviewed By **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATA RA		
NPDES Tracking No.	16	**Location**	B1200/ATA AOCs
Date of Inspection	12/23/14	**Start/End Time**	1015
Inspector's Name(s)	Rich Spinnel		
Inspector's Title(s)	Env Engineer / PE		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	POST EXCAVATION / RESTORATION		

Type of Inspection:
☐ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☒Yes ☐No
If yes, provide:
Storm Start Date & Time: 12/23/14 ~ 0.03" (overnight) Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☐Cloudy ☒Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Occ/off sprinkle Temperature: 45°

Have any discharges occurred since the last inspection? ☐Yes ☒No
If yes, describe:

Are there any discharges at the time of inspection? ☐Yes ☒No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt Fence	☑Yes ☐No	☐Yes ☒No	
2	ATA Straw Dam	☑Yes ☐No	☐Yes ☐No	
3	B1200 Ditch-Silt Fence	☑Yes ☐No	☐Yes ☐No	
4	B1200 Ditch-Straw	☑Yes ☐No	☐Yes ☐No	
5	B1200 Openfield-Silt Fence	☑Yes ☐No	☐Yes ☐No	
6	B1200 Openfield Straw	☑Yes ☐No	☐Yes ☐No	
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

12/23/14

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☒No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	☐Yes ☒No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☒Yes ☐No	☐Yes ☒No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No N/A	☐Yes ☐No N/A	
11	Are non-stormwater	☐Yes ☐No N/A	☐Yes ☐No N/A	

RS 12/23/14

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	❑Yes ❑No N/A	❑Yes ❑No N/A	waste S/P removed today
13	Are wastes properly stored with no risk of discharge?	❑Yes ❑No N/A	❑Yes ❑No N/A	
14	(Other)	❑Yes ❑No	❑Yes ❑No	

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

Prepared By — **Date** 12/23/14

Reviewed By — **Date** 12/24/14

Stormwater Construction Site Inspection Report

General Information			
Project Name	Bizoo/ATA RA		
NPDES Tracking No.	17	**Location**	Bizoo/ATA AOCs
Date of Inspection	12/30/14	**Start/End Time**	1220 (ATA)/ 1145 (Bizoo)
Inspector's Name(s)	Rich Sprinzl		
Inspector's Title(s)	Env Engineer/PE		
Inspector's Contact Information	330-328-1378		
Describe present phase of construction	ATA - Post-Restoration Bizoo - Post-Excavation		

Type of Inspection:
☐ Regular ☐ Pre-storm event ☐ During storm event ☒ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☒ Yes ☐ No
If yes, provide:
Storm Start Date & Time: 12/24/14 ~0.16" rain 12/27/14 ~0.03" rain, 12/28/14 ~0.28"
Storm Duration (hrs):
Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☒ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other:
Temperature: 30°

Have any discharges occurred since the last inspection? ☒ Yes ☐ No
If yes, describe: Some Bizoo Ditch water may have overflowed top of plastic prior to passing through silt fence

Are there any discharges at the time of inspection? ☐ Yes ☒ No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt Fence	☒ Yes ☐ No	☐ Yes ☒ No	
2	ATA Straw Check Dam	☒ Yes ☐ No	☐ Yes ☒ No	
3	Bizoo Ditch Silt Fence	☒ Yes ☐ No	☐ Yes ☒ No	
4	Bizoo Ditch Straw Dam	☒ Yes ☐ No	☐ Yes ☒ No	
5	Bizoo Downhill Silt Fence	☒ Yes ☐ No	☐ Yes ☒ No	
6	Bizoo Open Area Straw Dam	☒ Yes ☐ No	☐ Yes ☒ No	
7		☐ Yes ☐ No	☐ Yes ☐ No	
8		☐ Yes ☐ No	☐ Yes ☐ No	
9		☐ Yes ☐ No	☐ Yes ☐ No	
10		☐ Yes ☐ No	☐ Yes ☐ No	

RS 12/30/14

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☐No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☐No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☐No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☐No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	
6	Is the construction exit preventing sediment from being tracked into the street?	☐Yes ☐No N/A	☐Yes ☐No N/A	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☐Yes ☐No N/A	☐Yes ☐No N/A	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No N/A	☐Yes ☐No N/A	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☒Yes ☐No	☐Yes ☒No	Ditch covered w/ poly
11	Are non-stormwater	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A

RS 12/30/14

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	❑Yes ❑No N/A	❑Yes ❑No N/A	All wastes offsite
13	Are wastes properly stored with no risk of discharge?	❑Yes ❑No N/A	❑Yes ❑No N/A	All wastes offsite.
14	(Other)	❑Yes ❑No	❑Yes ❑No	

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

K Spruill — **Prepared By** — 12/30/14 — **Date**

Jeff Thomas — **Reviewed By** — 12/31/14 — **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATA RA		
NPDES Tracking No.	18	**Location**	B1200/ATA AOCs
Date of Inspection	1/5/15	**Start/End Time**	1505-1625
Inspector's Name(s)	Rich Sprinzl		
Inspector's Title(s)	ENV ENGINEER		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	POST-RESTORATION (ATA) POST- PHASE III EXCAVATION/RESTORATION (B1200)		

Type of Inspection:
☐ Regular ☐ Pre-storm event ☐ During storm event ☒ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☒ Yes ☐ No
If yes, provide:
Storm Start Date & Time: 1/3/15 ~ 0.90" 1/4/14 ~ 0.25" Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature: 15° (TRACE ON GROUND (OVERNIGHT)

Have any discharges occurred since the last inspection? ☐ Yes ☒ No
If yes, describe:

Are there any discharges at the time of inspection? ☒ Yes ☐ No
If yes, describe: B1200 DITCH OVERFLOWING (TOP OF PLASTIC) TO SILT FENCE

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA SILT FENCE	☒ Yes ☐ No	☐ Yes ☐ No	
2	ATA STRAW CHECK DAM	☒ Yes ☐ No	☐ Yes ☐ No	
3	B1200 ~~Geotextile~~ Silt Fence	☒ Yes ☐ No	☐ Yes ☐ No	South of Ditch
4	B1200 ~~Geotextile~~ Straw Bale	☒ Yes ☐ No	☐ Yes ☐ No	North End of Ditch
5	B1200 ~~Fence~~ Silt Fence	☒ Yes ☐ No	☐ Yes ☐ No	Open Area
6	B1200 Straw Bales	☒ Yes ☐ No	☐ Yes ☐ No	North of Open Area
7		☐ Yes ☐ No	☐ Yes ☐ No	
8		☐ Yes ☐ No	☐ Yes ☐ No	
9		☐ Yes ☐ No	☐ Yes ☐ No	
10		☐ Yes ☐ No	☐ Yes ☐ No	

RSprinzl 1/5/15

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☒No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	☐Yes ☒No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No N/A	☐Yes ☐No N/A	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A - waste offsite.
11	Are non-stormwater	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A

RSmf 1/5/15

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?	N/A	N/A	N/A
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☐Yes ☐No N/A	☐Yes ☐No N/A	No stockpiles on site.
13	Are wastes properly stored with no risk of discharge?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A. Waste offsite
14	(Other)	☐Yes ☐No	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

Prepared By 1/5/15 **Date**

Reviewed By 1/6/15 **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATA RA		
NPDES Tracking No.	19	**Location**	B1200/ATA AOCs
Date of Inspection	1/7/15	**Start/End Time**	0915/1050
Inspector's Name(s)	Rich Sprinzl		
Inspector's Title(s)	Env Engineer/PE		
Inspector's Contact Information	330-348-1378		
Describe present phase of construction	ATA-POST-RESTORATION B1200-RESTORATION		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☒ Yes ☐ No
If yes, provide:
Storm Start Date & Time: SNOW OVERNIGHT 1/-2" Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☒ High Winds
☐ Other: Temperature: 11°

Have any discharges occurred since the last inspection? ☐ Yes ☒ No
If yes, describe:

Are there any discharges at the time of inspection? ☐ Yes ☒ No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA Silt Fence	☒ Yes ☐ No	☐ Yes ☒ No	
2	ATA Straw Dam	☒ Yes ☐ No	☐ Yes ☒ No	
3	B1200 Ditch Silt Fence	☒ Yes ☐ No	☐ Yes ☒ No	
4	B1200 Ditch Straw Dam	☒ Yes ☐ No	☐ Yes ☒ No	
5	B1200 Open Area Silt Fence	☒ Yes ☐ No	☐ Yes ☒ No	
6	B1200 Open Area Straw Dam	☒ Yes ☐ No	☐ Yes ☒ No	
7		☐ Yes ☐ No	☐ Yes ☐ No	
8		☐ Yes ☐ No	☐ Yes ☐ No	
9		☐ Yes ☐ No	☐ Yes ☐ No	
10		☐ Yes ☐ No	☐ Yes ☐ No	

RSprinzl 1/7/15

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☐No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☐Yes ☐No	☐Yes ☒No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☒Yes ☐No	☐Yes ☒No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No N/A	☐Yes ☐No N/A	
11	Are non-stormwater	☐Yes ☐No N/A	☐Yes ☐No N/A	None

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☐Yes ☐No N/A	☐Yes ☐No N/A	All waste offsite
13	Are wastes properly stored with no risk of discharge?	☐Yes ☐No N/A	☐Yes ☐No N/A	✓
14	(Other)	☐Yes ☐No	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

RSmyl — **Prepared By** — 1/8/15 — **Date**

Jat Thm — **Reviewed By** — 1/9/15 — **Date**

Stormwater Construction Site Inspection Report

General Information			
Project Name	B1200/ATA RA		
NPDES Tracking No.	20	**Location**	B1200/ATA AOCs
Date of Inspection	1/9/15	**Start/End Time**	1045/1438
Inspector's Name(s)	Rich Spruill		
Inspector's Title(s)	Env Engineer		
Inspector's Contact Information	330-[redacted]-3484378		
Describe present phase of construction	ATA Post-Restoration B1200-RESTORATION		

Type of Inspection:
☒ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ☒Yes ☐No
If yes, provide:
Storm Start Date & Time: ~3" SNOW OVERNIGHT Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☐Cloudy ☐ Rain ☐ Sleet ☐ Fog ☒Snowing ☐ High Winds
☐ Other: Temperature: 17°

Have any discharges occurred since the last inspection? ☐Yes ☒No
If yes, describe:

Are there any discharges at the time of inspection? ☐Yes ☒No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1	ATA SILT FENCE	☒Yes ☐No	☐Yes ☒No	
2	ATA STRAW DAM	☒Yes ☐No	☐Yes ☒No	
3	B1200 Ditch Silt Fence	☒Yes ☐No	☐Yes ☒No	
4	B1200 Ditch Straw Dam	☒Yes ☐No	☐Yes ☒No	REMOVED AFTER BACKFILLING DITCH TODAY
5	B1200 Open Area Silt Fence	☒Yes ☐No	☐Yes ☒No	
6	B1200 Open Area Straw Dam	☒Yes ☐No	☐Yes ☒No	
7		☐Yes ☐No	☐Yes ☐No	
8		☐Yes ☐No	☐Yes ☐No	
9		☐Yes ☐No	☐Yes ☐No	
10		☐Yes ☐No	☐Yes ☐No	

RS 1/9/15

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☒Yes ☐No	☐Yes ☒No	HAUL ROAD REGRADED + STRAWED
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☒Yes ☐No	☐Yes ☒No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☒Yes ☐No	☐Yes ☒No	
4	Are discharge points and receiving waters free of any sediment deposits?	☒Yes ☐No	☐Yes ☒No	
5	Are storm drain inlets properly protected?	☐Yes ☐No N/A	☐Yes ☐No N/A	
6	Is the construction exit preventing sediment from being tracked into the street?	☒Yes ☐No	☐Yes ☒No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☒Yes ☐No	☐Yes ☒No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No N/A	☐Yes ☐No N/A	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☒Yes ☐No	☐Yes ☒No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No N/A	☐Yes ☐No N/A	
11	Are non-stormwater	☐Yes ☐No N/A	☐Yes ☐No N/A	N/A

BS 11/9/15

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
	discharges (e.g., wash water, dewatering) properly controlled?			
12	Are spoil piles stabilized with vegetations and/or contained by silt fence or other appropriate and required controls?	☐Yes ☐No N/A	☐Yes ☐No N/A	All wastes offsite.
13	Are wastes properly stored with no risk of discharge?	☐Yes ☐No N/A	☐Yes ☐No N/A	
14	(Other)	☐Yes ☐No	☐Yes ☐No	

Non-Compliance

Describe any incidents of non-compliance not described above:

N/A

Prepared By — **Date** 1/9/15

Reviewed By — **Date** 1/10/15

APPENDIX F
RELEASE OF RAIN WATER FROM SECONDARY CONTAINMENT FORMS

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RELEASE OF RAIN WATER FROM SECONDARY CONTAINMENT

1. Date: 11/24/14 0800

2. Building/Reference Number and Site Location: Building 1200 AOC 'Open Area' Excavation

3. What is the water level height (in inches) inside the containment area? 4-6"

4. Is a hydrocarbon (POL) sheen noted on the surface of the water? ..... Yes / (No)

5. Is a hydrocarbon (POL) odor noted for the water? ..... Yes / (No)

6. If hydrocarbons (POL) present, what action was taken to remove the hydrocarbons prior to releasing the water (or was the water removed for off-site treatment and disposal)?

   N/A

7. What was the approximate volume of water released from the containment (gallons or cubic feet)?

   500-750 gallons (estimated)

8. Following the release of the water, was the valve locked in the closed position and functioning (or drain plug screwed in)? ..... ~~Yes / No~~ N/A

9. Note any deficiencies and action taken to have them corrected, including notification to Camp Ravenna Range Control (614-336-6041) and Environmental (6568) if POL was released to the environment.

   N/A for POL; Water discharged through strawbales prior to ditch/woodsline, water was top of plastic sheeting

10. Person(s) who completed this form: Rich Sprinkel, Leidos

    Phone: 330 405 348-1378

RELEASE OF RAIN WATER FROM SECONDARY CONTAINMENT

1. Date: 12/8/14

2. Building/Reference Number and Site Location: BUILDING 1200 AOC OPEN EXCAVATION AREA AND BUILDING 1200 DITCH LINE.

3. What is the water level height (in inches) inside the containment area? 2"-3" / 4"-6" → DITCH

4. Is a hydrocarbon (POL) sheen noted on the surface of the water? ..... Yes / (No)

5. Is a hydrocarbon (POL) odor noted for the water? ..... Yes / (No)

6. If hydrocarbons (POL) present, what action was taken to remove the hydrocarbons prior to releasing the water (or was the water removed for off-site treatment and disposal)?

   N/A

7. What was the approximate volume of water released from the containment (gallons or cubic feet)?

   ~250-300 gallons B1200 open area

   ~250 gallons Ditch line

8. Following the release of the water, was the valve locked in the closed position and functioning (or drain plug screwed in)? ..... Yes / No / (N/A)

9. Note any deficiencies and action taken to have them corrected, including notification to Camp Ravenna Range Control (614-336-6041) and Environmental (6568) if POL was released to the environment.

   N/A. WATER DISCHARGED THROUGH STRAW BALES AND SILT FENCE PRIOR TO WOODS. WATER WAS ON TOP OF PLASTIC SHEETING.

10. Person(s) who completed this form: Corey Pacer, LEIDOS

    Phone: 330-353-6153

RELEASE OF RAIN WATER FROM SECONDARY CONTAINMENT

1. Date: 12/5/14

2. Building/Reference Number and Site Location: BIZ88 AOC ~~OPEN AREA~~ CAP DITCH LINE

3. What is the water level height (in inches) inside the containment area? 4"-6"

4. Is a hydrocarbon (POL) sheen noted on the surface of the water? ..... Yes / (No)

5. Is a hydrocarbon (POL) odor noted for the water? ..... Yes / (No)

6. If hydrocarbons (POL) present, what action was taken to remove the hydrocarbons prior to releasing the water (or was the water removed for off-site treatment and disposal)?

   N/A

7. What was the approximate volume of water released from the containment (gallons or cubic feet)?

   ~2500 gallons through storm water controls (silt fence and straw bales).

8. Following the release of the water, was the valve locked in the closed position and functioning (or drain plug screwed in)? ..... Yes / No / (NA)

9. Note any deficiencies and action taken to have them corrected, including notification to Camp Ravenna Range Control (614-336-6041) and Environmental (6568) if POL was released to the environment.

   N/A. WATER DISCHARGED THROUGH SILT FENCE AND STRAW BALES PRIOR TO ~~EAST~~ CAP WOODS. WATER WAS ON TOP OF PLASTIC SHEETING.

10. Person(s) who completed this form: COREY PACEL, LEIDOS

    Phone: 330-353-6153

RELEASE OF RAIN WATER FROM SECONDARY CONTAINMENT

1. Date: 12/11/04

2. Building/Reference Number and Site Location: ATA AOC AND B1200 AOC OPEN AREA

3. What is the water level height (in inches) inside the containment area? 24" / 4-6"

4. Is a hydrocarbon (POL) sheen noted on the surface of the water? ..... Yes / (No)

5. Is a hydrocarbon (POL) odor noted for the water? ..... Yes / (No)

6. If hydrocarbons (POL) present, what action was taken to remove the hydrocarbons prior to releasing the water (or was the water removed for off-site treatment and disposal)?

   N/A

7. What was the approximate volume of water released from the containment (gallons or cubic feet)?

   ATA ~300 gallons

   B1200 OPEN AREA ~ 500 gallons

8. Following the release of the water, was the valve locked in the closed position and functioning (or drain plug screwed in)? ..... Yes / No / (N/A)

9. Note any deficiencies and action taken to have them corrected, including notification to Camp Ravenna Range Control (614-336-6041) and Environmental (6568) if POL was released to the environment.

   N/A, WATER DISCHARGED THROUGH SILT FENCE AND/OR STRAW BALES PRIOR TO WOODS, WATER WAS ON TOP OF PLASTIC

10. Person(s) who completed this form: COREY PALLEIDOS

    Phone: 330-353-6153

RELEASE OF RAIN WATER FROM SECONDARY CONTAINMENT

1. Date: 12/22/14

2. Building/Reference Number and Site Location: B1240 AOC-DITCH LINE

3. What is the water level height (in inches) inside the containment area? ~12"+

4. Is a hydrocarbon (POL) sheen noted on the surface of the water? ..... Yes / (No)

5. Is a hydrocarbon (POL) odor noted for the water? ..... Yes (No)

6. If hydrocarbons (POL) present, what action was taken to remove the hydrocarbons prior to releasing the water (or was the water removed for off-site treatment and disposal)?

   N/A

7. What was the approximate volume of water released from the containment (gallons or cubic feet)?

   DITCH ~1000 gallons

   NEARBY RUTS ~250 Gallons

8. Following the release of the water, was the valve locked in the closed position and functioning (or drain plug screwed in)? ..... ~~Yes / No~~ (N/A)

9. Note any deficiencies and action taken to have them corrected, including notification to Camp Ravenna Range Control (614-336-6041) and Environmental (6568) if POL was released to the environment.

   N/A. WATER DISCHARGED THROUGH SILT FENCE DOWNGRADIENT OF DITCHLINE. WATER IN DITCH ON TOP OF PLASTIC

10. Person(s) who completed this form: RICH SPRINZL, LEIDOS FM

    Phone: 330-348-1378

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APPENDIX G
MEMORANDUM FOR RECORD

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NATIONAL GUARD BUREAU
111 SOUTH GEORGE MASON DRIVE
ARLINGTON VA 22204-1373

January 21, 2015

Ohio Environmental Protection Agency
DERR-NEDO
Attn: Mr. Andrew Kocher, Project Manager
2110 East Aurora Road
Twinsburg, OH 44087-1924

MEMORANDUM FOR RECORD

Subject: Ravenna Army Ammunition Plant (RVAAP) Restoration Program, Portage/Trumbull Counties, RVAAP-13 Building 1200 Remedial Action

Dear Mr. Kocher:

The selected remedy for soil at the Building 1200 area of concern (AOC) is to address manganese contamination at incremental sample (ISM) locations B12ss-016M, B12ss-017M, and B12ss-022M to attain Unrestricted (Residential) Land Use. The cleanup goal (CUG) established for this soil removal is based on the surface soil (0-1 ft bgs) background concentration of 1,450 mg/kg. The remedial action is to excavate contaminated soil above the CUG and dispose of the soil in an offsite licensed facility.

The Army initiated soil removal activities on 19 November 2014 at the AOC. As per the Remedial Design, after soil removal activities were completed in a specific area, the Army collected confirmation samples to compare the manganese concentration of the excavation footprint (including the excavation floor and sidewalls) against the CUG to assess whether additional actions were required.

Soil removals conducted at ISM locations B12ss-016M and B12ss-017M were completed after the first round of excavation, as all confirmation samples were below the CUG of 1,450 mg/kg. Three rounds of soil excavation and confirmation sampling from the ditch line associated with ISM location B12ss-022M have been completed. An estimated 204 tons of soil have been removed from ISM location B12ss-022M and adjacent areas, which is an increase of approximately 24% from the 165 tons estimated in the Remedial Design. *(Tonnages provided in this memorandum are estimated, as the final weight tickets from the landfill are pending.)*

Figure 1 depicts the sample results from the excavation footprint after the third round of soil removal at B12ss-022M. Of the 9 confirmation samples collected from the current excavation footprint, seven samples had manganese concentrations below the CUG. Manganese concentrations in the other two samples were slightly above the CUG, each with a concentration of 1,700 mg/kg. The following provides further details of the samples that exceeded the CUG:

1) Confirmation sample B12cs-073M was representative of the excavation wall from point 24 to point 26. To refine the areas that potentially required additional excavation, samples B12cs-072M (point 25 to point 26) and B12cs-074M (point 24 to point 25) were collected as subsamples of that same area. These subsamples had manganese concentrations below the CUG; therefore, that excavation wall is considered to have attained the CUG and no further soil removal is required.

2) Confirmation sample B12cs-075M was collected within the previous sample location B12ss-038M. Sample location B12ss-038M was sampled in February 2010 as part of the remedial investigation (RI) conducted at the Building 1200 AOC. Sample location B12ss-038M had a manganese concentration of 919 mg/kg, and the preceding CERCLA documents determined that this area was not a risk to future receptors and did not require remediation. The manganese concentration in sample B12cs-075M (1,700 mg/kg) was below both the U.S. Environmental Protection Agency (EPA) Regional Screening Level (RSL) for residential exposure to soil (1,800 mg/kg) and the RVAAP facility-wide subsurface soil (1-13 ft bgs) background concentration (3,030 mg/kg).

The Army and Ohio EPA held discussions on 7 January 2015 regarding the status of the remedial action and the data described above. In consideration that residual manganese concentrations in sample B12cs-075M from the southernmost excavation wall are below the EPA residential RSL for soil and the RVAAP facility-wide subsurface soil background value, and that all other areas of the excavation are confirmed to be below the CUG, the Army requested Ohio EPA concurrence that additional soil removal was not required at the Building 1200 AOC to attain remedial action objectives and Unrestricted (Residential) Land Use in the 7 January 2015 call. The Ohio EPA agreed with this recommendation in the 7 January 2015 call and all parties decided that the decision would be documented in a memorandum sent to the Ohio EPA. Upon Ohio EPA receipt of the memorandum, the Army will complete site restoration activities and submit a Remedial Action Report presenting the findings and conclusions presented in this memorandum.

Your time to review this correspondence is appreciated. Please contact the undersigned at (703) 607-7955 or mark.s.leeper.civ@mail.mil if there are issues or concerns with this submission.

Sincerely,



Mark Leeper
RVAAP Restoration Program Manager
Army National Guard Directorate

cc: Rod Beals, Ohio EPA, DERR-NEDO
Justin Burke, Ohio EPA, CO
Kevin Sedlak, ARNG, Camp Ravenna
Katie Tait, OHARNG, Camp Ravenna
Greg Moore, USACE Louisville
Nathaniel Peters, USACE Louisville
Kevin Jago, Leidos
Jed Thomas, Leidos
Gail Harris, Vista Sciences

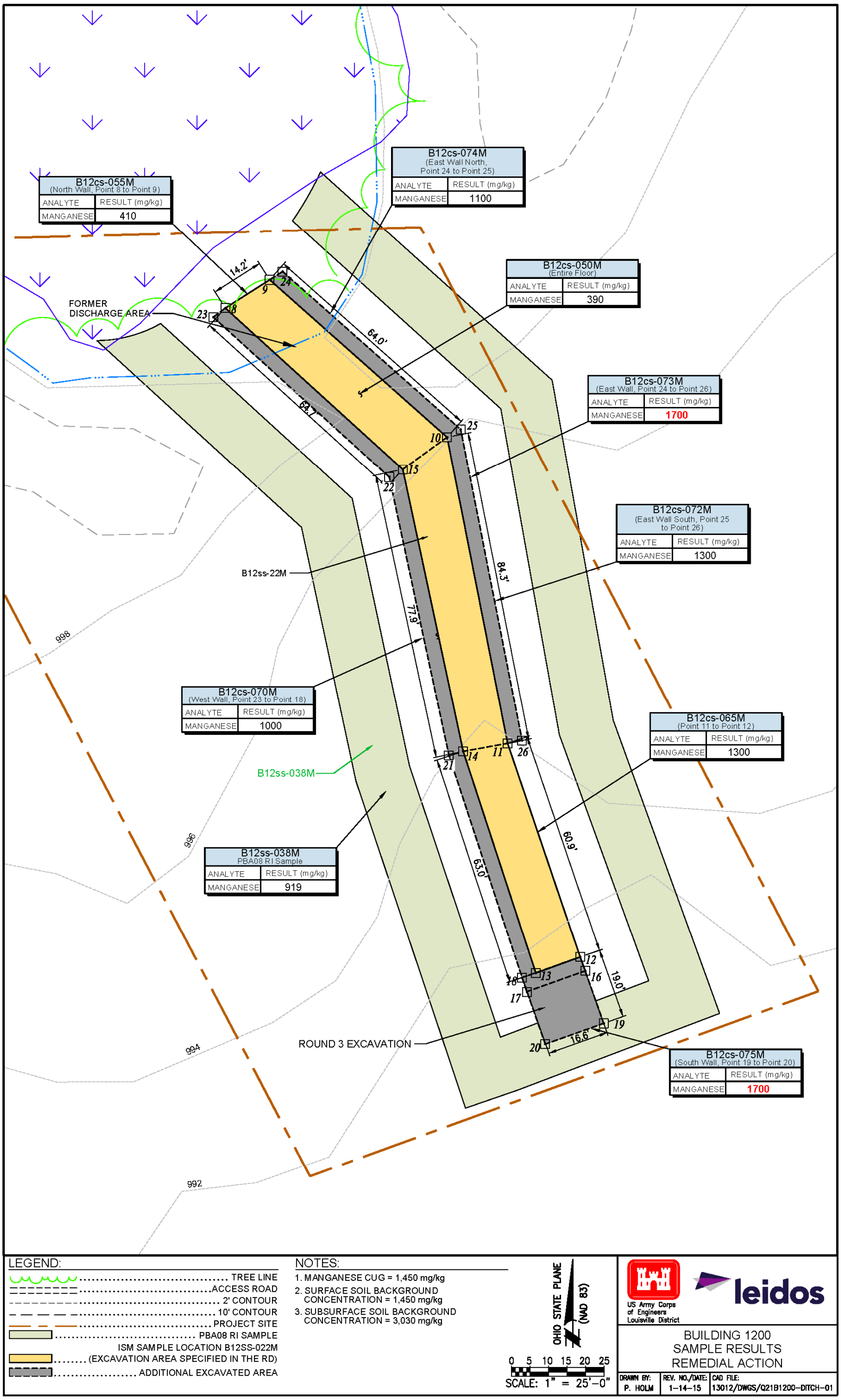


FIGURE 1. LOCATION B12SS-022M REMOVAL EXTENT

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APPENDIX H
PROPERTY MANAGEMENT PLAN INSERTION

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Appendix A-13: Building 1200 – (RVAAP-13) – No Further Action (NFA) STATUS for Soil, Sediment, and Surface Water

A.13.1 Background

The Building 1200 Area of Concern (AOC) was designated as the Ammunition Sectioning Area. From 1941 to 1971, three buildings served as a quality assurance (QA) inspection station that encompassed disassembly of production line munitions items, including explosive melt-pour operations. The primary operations building was Building 1200, which was a 30 by 20 ft combined reinforced concrete and transite panel frame structure. The steam melt-out process generated explosives-contaminated wastewater (pink water), which discharged from the building via a pipe, through a crushed slag gravel bed, and into a ditch connected to a 0.5-acre, unlined settling pond (located approximately 415 ft northeast of Building 1200). The depth of the settling pond is less than 3 ft. Overflow from the settling pond discharged directly to the ground surface southeast of the pond; there is no documented evidence of a discharge drainage ditch exiting the settling pond and flowing to a surface water body.

Building demolition activities took place between November 2004 and August 2005, and no buildings or structures remain at the AOC. The remaining surface features include the access road, drainage ditch from the former operations area to the former settling pond, and the former settling pond and associated discharge area.

A.13.2 Publications

The following publications can be located on <www.RVAAP.org> or in established RVAAP information repositories:

- Final Remedial Design for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 and RVAAP-48 Anchor Test Area, August 2014.
- Final Record of Decision for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200, March 2014.
- Final Proposed Plan for Soil, Sediment and Surface Water at RVAAP-13 Building 1200, April 2013.
- Final Remedial Investigation/Feasibility Study Report for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200, March 2012.
- Final PBA 2008 Supplemental Investigation Sampling and Analysis Plan Addendum No. 1 at Ravenna Army Ammunition Plant, December 2009.
- Final Work Plan Performance-Based Acquisition for Environmental Investigation and Remediation MEC Avoidance/Removal Services, September 2009.
- Final Project Management Plan for the 2008 Performance-Based Acquisition of Environmental Investigation and Remediation, September 2008.

- Final Quality Assurance Surveillance Plan for the 2008 Performance-Based Acquisition of Environmental Investigation and Remediation at Ravenna Army Ammunition Plant, September 2008.
- Final Characterization of 14 AOCs at Ravenna Army Ammunition Plant, March 2007.
- Final Sampling and Analysis Plan Addendum for the Characterization of 14 RVAAP AOCs at RVAAP, October 2004.
- Phase I Remedial Investigation Report for High Priority Areas of Concern at the Ravenna Army Ammunition Plant, Ravenna, Ohio, February 1998.
- Final Public Meeting Briefing Phase I Remedial Investigation of High Priority Areas of Concern at the Ravenna Army Ammunition Plant, September 1997.
- Draft Investigation-Derived Waste Characterization and Disposal Plan for the Phase I Remedial Investigation of High Priority Areas of Concern at the Ravenna Army Ammunition Plant, December 1996.
- Final Phase I Remedial Investigation Site Safety and Health Plan Addendum for High Priority Areas of Concern for the Ravenna Army Ammunition Plant, July 1996.
- Final Phase I Remedial Investigation Sampling and Analysis Plan Addendum for High Areas of Concern for the Ravenna Army Ammunition Plant, July 1996.
- Final Quality Control Plan for the Phase I Remedial Investigation for High Areas of Concern at RVAAP, June 1996.

A.13.3 Site Location and Description

The Building 1200 AOC is a former operational facility designated as RVAAP-13. The AOC is approximately 7.7 acres and is situated in the eastern portion of Camp Ravenna. Building demolition activities took place between November 2004 and August 2005, and no buildings or structures remain at the AOC. The remaining surface features include the access road, drainage ditch from the former operations area to the former settling pond, and the former settling pond and associated discharge area.

The topography at the Building 1200 AOC gently slopes radially from a high point just southwest of the former operations buildings. Ground elevations at the AOC range from 990 to 1004 ft above mean sea level (amsl). Intermittent surface water flows in the drainage ditch from the former operations area east to the former settling pond during precipitation events and periods of snow melt. The ditch tends to hold water for extended periods of time due to the low permeability of soil. Surface water discharge from the former settling pond occurs via an outlet channel to the southeast. Discharge flow is diffuse and enters into a heavily wooded area to the south of the pond. The nearest defined surface water conveyance (large ditch line or tributary flowing southwest to Sand Creek) that receives surface water flow lies approximately 1,000 ft to the southeast of the settling pond discharge area.

The Building 1200 AOC is on a local bedrock high. The AOC is underlain by a thin unconsolidated interval generally less than 3 ft thick. The underlying bedrock formation observed at the AOC is the Pennsylvanian age Pottsville Formation, Sharon Sandstone Member. The sandstone unit of the Sharon member (informally referred to as the Sharon Conglomerate) is a highly porous, loosely

cemented, permeable, cross-bedded, frequently fractured and weathered orthoquartzite sandstone, which is locally conglomeritic. The Sharon Conglomerate exhibits locally occurring thin shale lenses in the upper portion of the unit. Upper members of the Pottsville Formation are not present at the AOC.

A.13.4 Land Use and Activities

The AOC will be used for Military Training. The selected and implemented remedy for soil, sediment, and surface water allows for Unrestricted (Residential) Land Use, which also allows for Military Training Land Use.

A.13.5 Remedy Objectives

The *Record of Decision for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200* (USACE 2014) documented that no further action (NFA) was required for sediment and surface water at the AOC. Manganese in soil was identified as a chemical of concern (COC) requiring remediation to attain Unrestricted (Residential) Land Use. Remedial activities were conducted in December 2014 and January 2015 and were summarized in the *Remedial Action Report for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200* (USACE 2015). A total of 376 tons of contaminated soil was excavated from two contaminated areas within the AOC and transported and disposed at a local landfill. Confirmation sampling results and concurrence from the Ohio Environmental Protection Agency (EPA) concluded that the AOC met the criteria for Unrestricted (Residential) Land Use after implementation of the remedial action.

A.13.6 Land Use Controls

Land use controls (LUCs) are not required for soil, sediment, and surface water at the Building 1200 AOC. The remedial action achieved the remedial action objective (RAO) for manganese in soil to attain Unrestricted (Residential) Land Use, and NFA was required for sediment and surface water. Other media (i.e., groundwater) will be addressed as part of future actions.

A.13.7 Monitoring and Reporting

Five-year reviews are not required for soil, sediment, and surface water at the Building 1200 AOC, which is compliant with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121(c).

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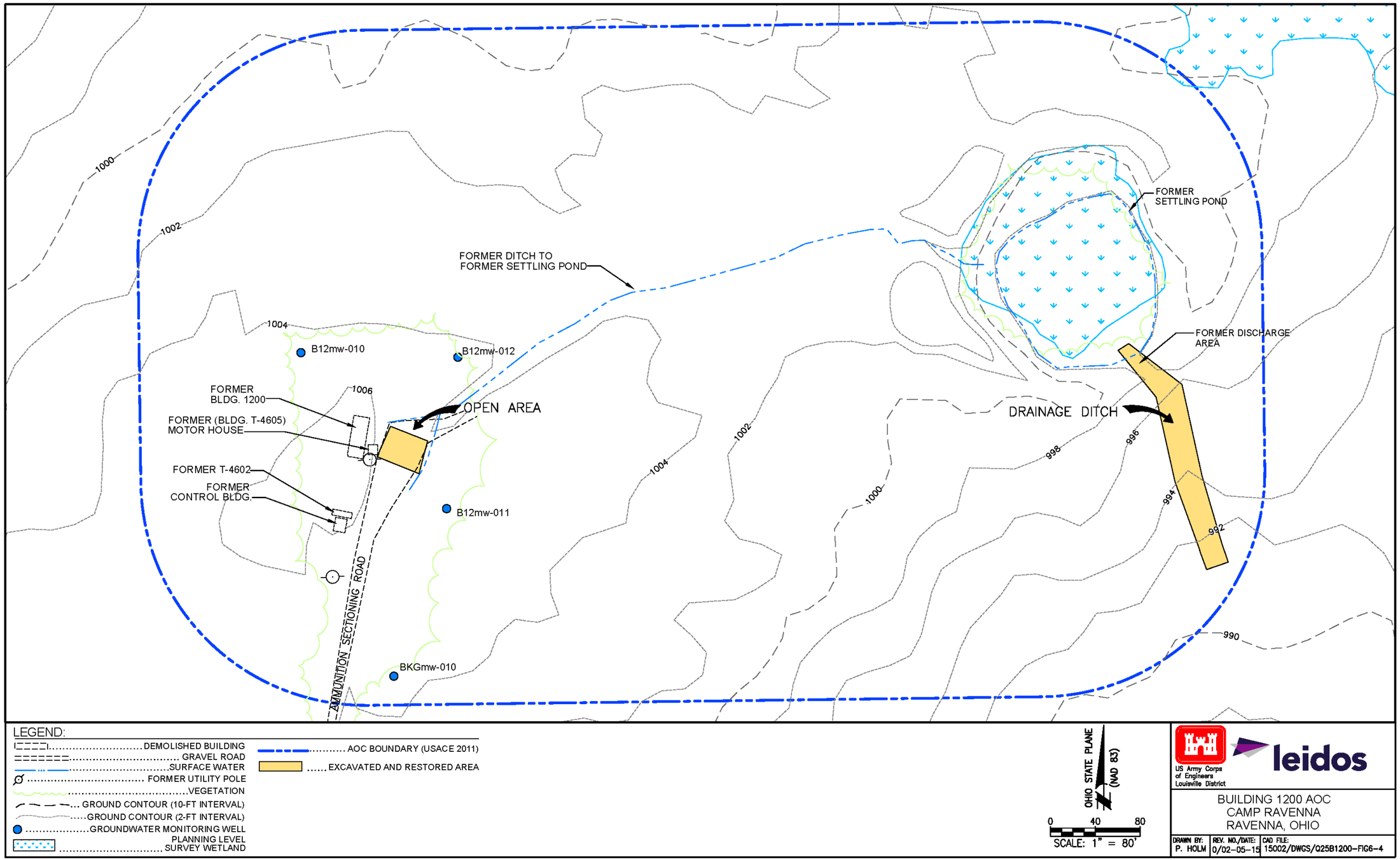


Figure A.13-1. Features of the Building 1200 AOC