DEPARTMENT OF THE AIR FORCE AIR FORCE CIVIL ENGINEER CENTER



September 12, 2013

MEMORANDUM FOR: NYSDEC ATTN: MR. DANIEL EATON Bureau of Eastern Remedial Action 625 Broadway, 12th Floor

FROM: AFCEC/CIBE Plattsburgh 8 Colorado Street, Suite 121 Plattsburgh, NY 12903

SUBJECT: Site SS-041 Contamination Delineation Report and Excavation Plan Former Plattsburgh Air Force Base, Plattsburgh, New York

Albany, NY 12233-7015

Attached for your review is the Site SS-041 Contamination Delineation Report and Excavation Plan. This report describes the results of soil sampling conducted to evaluate the extent of metals contamination in the wetland south of Building 2612. It also contains an excavation plan that addresses site remediation and restoration activities. Please provide comments or approval as soon as possible, but no later than October 11, 2013.

If you have any questions, please contact me at 518-563-2871 or <u>david.farnsworth@us.af.mil</u>.

DAVID S. FARNSWORTH Program Manager/BRAC Environmental Coordinator BRAC Program Execution Branch

Attachment:

SS-041 Contamination Delineation Report and Excavation Plan (CD)

cc: USEPA, Reg 2 (Mr. Robert Morse) (Atch under sep cover) NYSDEC, Reg 5 (Mr. Russell Huyck) (1 CD) NYSDOH (Ms. Wendy Kuehner) (1 CD) AFCEC/CIBE (Mr. Sean Eldredge) (CD)



United States Air Force Base Installation Restoration Program

Site SS-041 Contamination Delineation Report and Excavation Plan

Former Plattsburgh Air Force Base Plattsburgh, New York

September 2013

SITE SS-041 CONTAMINATION DELINEATION REPORT AND EXCAVATION PLAN

FORMER PLATTSBURGH AIR FORCE BASE PLATTSBURGH, NEW YORK

CONTRACT NO. FA4890-06-D-0006-0005

Prepared for:

Air Force Civil Engineer Center

Prepared by:

URS Group, Inc.

September 2013

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ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
D&H	Delaware and Hudson
ESCP	Erosion and Sedimentation Control Plan
FT-002/IA	Fire Training Area/Industrial Area
GPS	Global Positioning System
HASP	Health and Safety Plan
ICBM	Intercontinental Ballistic Missile
IRP	Installation Restoration Program
mg/kg	milligrams per kilogram
NYSDEC	New York State Department of Environmental Conservation
NWP	Nationwide Permit
PARC	Plattsburgh Airbase Redevelopment Corporation
PCN	pre-construction notification
ROD	Record of Decision
URS	URS Group, Inc.
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency

1.0 INTRODUCTION

This report describes the results of soil sampling conducted to evaluate the extent of metals contamination in a wetland area on a parcel of land located on the former Plattsburgh Air Force Base (AFB) in Plattsburgh, New York. The parcel is located south of Building 2612 and is bounded by Idaho Avenue, Arizona Avenue and a railroad right-of-way. (Figures 1 and 2).

This parcel is also the site of the United States Air Force (Air Force) Installation Restoration Program (IRP) site SS-041. A Record of Decision (ROD) for site SS-041 was finalized in September 2012 (FPM 2012) and the selected remedy for site SS-041 is to remove contaminated sediments that were identified to be present in a wetland the parcel that also includes site SS-041. This approximately 0.7-acre wetland, shown on Figure 2, was delineated in 1994 (URS 1994), but, because the delineation occurred more than five years ago, the wetland was re-delineated as part of this project (see Section 3.1). The SS-041 ROD also included a requirement that contamination in the wetland be re-delineated.

An excavation plan is also included in this report that addresses site remediation and restoration activities.

2.0 SITE BACKGROUND

Plattsburgh AFB was closed on September 30, 1995 as part of the third round of base closures mandated by the Defense Base Closure and Realignment Act of 1993. The Air Force IRP involves investigation and cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The IRP at the former Plattsburgh AFB was implemented according to a Federal Facilities Agreement, Docket No.: II-CERCLA-FFA-10201, signed on July 10, 1991 by the Air Force, the United States Environmental Protection Agency (USEPA), and the New York State Department of Environmental Conservation (NYSDEC). Plattsburgh AFB was placed on the National Priorities List in 1989 and cleanup is being funded by the Air Force.

Building 2612 is located in the central-eastern portion of the former Plattsburgh AFB on the east side of Arizona Avenue approximately 600 feet north of the intersection of Arizona and Idaho Avenues (Figure 2). Site SS-041 consists of Building 2612, the adjacent areas including the wetlands to the south, and the area between Buildings 2612 and 2616. Building 2612 was used in the early 1960's in support of the Atlas Intercontinental Ballistic Missile (ICBM) program. Thereafter, from 1970 until Base closure in i:/11176211/11176891-SS-041 Project Folder/SS041.Delineation.Rpt-Excavation Plan.Rev-2.docx

1995, the building was used as an unheated base equipment and supply warehouse. Its use as an unheated warehouse continues under its current owner. The wetland located south of Building 2612 (Figure 2) contains sediments with concentrations of cadmium and chromium that present an unacceptable potential ecological risk to terrestrial receptors (land dwelling animals). The metals contamination appears to have originated at a storm sewer discharge point in the wetland, and the contamination follows depression contours within the low-lying wetland area. Floor drains and sink drains from the building discharged into this storm sewer. Surface water is not considered a media of concern for Site SS-041 because there is no consistent, long-term standing surface water at the site.

The SS-041ROD (FPM, 2012) selected removal of the contaminated wetlands soils/sediments as the remedy for this site to mitigate the risk to ecological receptors and be protective of human health for residential use. The remedial action objective for Site SS-041 is intended to reduce cadmium and chromium concentrations in the wetland sediments to the following remediation goals:

Contaminant	Maximum Allowable Concentration for Ecological Receptors (mg/kg)	6 NYCRR Part 375 Residential Use Soil Cleanup Objectives (mg/kg)
Cadmium	2.5	2.5
Chromium - total	150	NA
Chromium – Hexavalent	NA	22
Chromium - Trivalent	NA	36

REMEDIATION GOALS

NA = Not Applicable mg/kg = milligrams per kilogram

The remediation goals for ecological receptors were developed during the remedial investigation of Site SS-041 (URS, 2008). The residential use remediation goals were added later when the SS-041 ROD was finalized. Because the remedial investigation only considered total chromium in samples collected in the wetland, the final remedy selected in the ROD also included delineating hexavalent and trivalent chromium levels at the site.

Achieving the specified remediation goals for trivalent and hexavalent chromium and/or cadmium will qualify the Site SS-041 area for residential use in the future and will achieve an acceptable level of risk for ecological receptors. Achieving the remediation goals will also render unnecessary any additional use restrictions or associated land use controls/institutional controls for the Site SS-041 soil and sediment operable unit. Groundwater contamination at Site SS-041 is being addressed by remedial actions, including use restrictions that are part of the Fire Training Area/Industrial Area (FT-002/IA) Groundwater Operational Unit.

3.0 FIELD ACTIVITIES

In accordance with the *Final Work Plan for Contamination Delineation and Wetland Delineation at Site SS-041* (Work Plan) (URS, 2013a), URS performed field activities at the site in May and June 2013 to delineate the extent of the wetlands and also to delineate contaminated soil/sediment at concentrations above the ROD remediation goals. These activities are described below.

3.1 <u>Wetland Delineation</u>

As noted in Section 1.0, an approximately 0.7-acre wetland, shown on Figure 2, was delineated at this site in 1994 (URS, 1994). However, because the delineation occurred more than five years ago, it was necessary to re-delineate the wetland before the remediation begins. The re-delineation was required to define the boundaries of the wetland avoid and/or minimize impacts from the contaminated soil removal and to identify areas where the wetland will need to be restored.

The new wetland delineation was conducted by a URS biologist on May 14, 2013. Results of the delineation were presented in the *Wetland Delineation Report Site SS-041* (URS, 2013b). The wetland is now about 1.1 acres in size, about 0.4 acres larger than the original delineation in 1994 (Figure 3). Based on field examination and review of aerial imagery, topographic maps, and hydrologic data, the wetland appears to have an intermittent hydrologic connection to unnamed tributaries of Lake Champlain (URS 2013b).

3.2 <u>Contamination Delineation</u>

Prior to any site work, DigSafelyNewYork, Inc. was contacted to locate and mark underground utilities within the work area. The soil sampling grid of 53 initial sampling locations proposed in the Work Plan (URS 2013a) was staked in the field on May 6, 2013 (Figure 4) using a hand-held global positioning system (GPS) device. The sample locations were later surveyed (see Section 3.3). Some of the proposed locations were modified slightly based on field conditions encountered (e.g., trees, utilities, etc.). The initial sampling grid spacing was approximately 30 feet between borings with the grid covering the entire area of the wetland. Also, a single line of borings was located at approximately 50-foot intervals at the south end of the drainage swale trending along Idaho Avenue.

The Work Plan (URS 2013a) called for first sampling 53 sample locations, called initial sample locations on Figure 4. If cadmium and/or chromium were detected in any of the southern-most 18 initial sample locations (shown in red on Figure 4) at concentrations exceeding the ROD remediation goals, then samples were to be collected as needed from an additional 18 contingency sample locations (shown in yellow on Figure 4) and at other locations determined in the field to fully define the extent of the contamination requiring removal.

The initial 53 grid locations were sampled between May 7 and May 16, 2013. Based on the results from these samples, additional sample locations were added adjacent to those locations where exceedances of the ROD remediation goals occurred. This included sampling at some of the contingency sample locations. The final samples locations are shown on Drawing 1.

The samples were collected between June 4 and June 6 and between June 12 and June 13, 2013. Eleven of the original contingency sample locations (SB-55, SB-56, SB-58, SB-59, SB-61, SB-62, SB-63, SB-65, SB-66, SB-69, and SB-70) were not sampled because adjacent sample locations did not exhibit exceedances of the ROD remediation goals.

The majority of the samples were collected using either a 3-foot long or a 5-foot long, slide hammer-driven Geoprobe[®] Macro-core[®] sampler with a disposable acetate liner; a stainless steel hand auger was also used to collect samples at a few locations. Continuous soil samples were generally obtained to three feet below ground surface (bgs) and then samples for laboratory analysis were selected from the 0-1 foot, 1-2 feet, and 2-3 feet bgs depth intervals within the continuous sample. Continuous samples were collected to four feet bgs at locations SB-26, SB-30B, and SB-74 and five feet bgs at i;/11176211/11176891-SS-041 Project Folder/SS041.Delineation.Rpt-Excavation Plan.Rev-2.docx

location SB-24A. The soils encountered were generally dark brown to brown to gray fine sand with silt, medium sand and traces of organic material. The upper three to six inches of the samples at locations within the wetland contained more organic material.

All equipment and tools used to collect soil/sediment were decontaminated as specified in the Work Plan (URS 2013a) prior to work on site, between each sample location, and prior to removal from the site. Used acetate liners were disposed of as municipal waste. Macro-core samplers, hand augers, and other equipment that came in direct contact with samples were decontaminated after sampling at each location using laboratory-grade non-phosphate detergent and potable water followed by a dilute nitric acid rinse, with the rinsate allowed to infiltrate at the ground surface.

After collecting the soil samples, the boreholes were backfilled with the soil cuttings and the ground surface was restored to near original conditions.

3.3 Locational Survey

On May 14, 2013, URS surveyors obtained coordinates of the wetland delineation boundaries and the 53 initial contamination delineation soil sampling locations. Any locations sampled after the survey were located by measuring (tape) from previously surveyed points. The surveyors also performed a topographic survey to enable generation of a topographic contour map of the site depicting contours at a 1-foot interval to be used 1) as an aid in developing a drainage plan for the wetland restoration design and 2) as a baseline for determining the volume of material removed during excavation. Topographic contours are shown on Drawings 1 and 2.

4.0 SAMPLING RESULTS

4.1 <u>Analytical Protocol and Quality Assurance</u>

Soil samples collected during the site investigations were shipped under proper chain-of-custody to Test America Laboratories, Inc. in North Canton, Ohio, a New York State Department of Health and Department of Defense certified laboratory, for analysis. Each soil sample was analyzed for cadmium (USEPA SW-846 Method 6010B), total chromium (USEPA SW-846 Method 6010B), and hexavalent chromium (USEPA SW-846 Method 7196A). Trivalent chromium concentrations were calculated by subtracting the hexavalent chromium concentrations from the total chromium concentrations. Field

quality assurance/quality control samples consisted of field duplicates, matrix spikes and matrix spike duplicates (collected at a frequency of 1 per 20 samples), and field equipment rinse blanks (collected at a frequency of 1 per day per sample apparatus). The URS project chemist validated the analytical results in accordance with the Air Force Center for Environmental Excellence Quality Assurance Project Plan, Final Version 4.0.02, May 2006 (AFCEE 2006). The results of the data validation are documented in the Data Assessment Summary included as Appendix A. Note the Air Force Center for Environmental Excellence is now known as the Air Force Civil Engineer Center.

4.2 Data Summary

A summary of the soil delineation sampling analytical results is presented in Table 1. For duplicate analyses, the highest detected values are reported. Complete soil delineation sampling analytical results with method detection limits and data validation qualifiers are included in Appendix A.

Only concentrations of trivalent chromium and total chromium exceeded their respective ROD remediation goals; none of the detected cadmium or hexavalent chromium concentrations exceeded their respective ROD remediation goals. Trivalent chromium remediation goal exceedances occurred primarily in samples collected from 0-1 foot and 1-2 feet (Table 1). Total chromium exceedances were co-located with the trivalent chromium exceedances, but there were more exceedances for trivalent chromium. Therefore the extent of contamination at the site is being defined by the sample locations with exceedances of the ROD remediation goal for trivalent chromium. The sample locations and concentrations of trivalent chromium that exceeded the ROD remediation goals are shown on Drawing 2.

The exceedances of ROD remediation goals primarily occurred within the ditch that runs at the base of the railroad embankment on the east side of the site and then along the north side of Idaho Avenue where it goes under the road through a culvert near the intersection of Arizona Avenue. There were no exceedances in the ditch adjacent to the culvert on the north or south sides of Idaho Avenue. The contamination from the site does not extend into the golf course.

There were also some exceedances of the ROD remediation goal for trivalent chromium at several locations from samples collected from 2-3 feet. These exceedances were in the same general area originally proposed for excavation in the SS-041 ROD (FPM 2012), although the proposed excavation limits are much larger in this area.

5.0 EXCAVATION PLAN

Drawing 2 also shows the proposed areas to be excavated and the excavation depths based on the locations where trivalent chromium exceeded its ROD remediation goal. The anticipated volume of chromium contaminated soil to be excavated for offsite disposal is approximately 2,500 cubic yards. The outer boundaries of the excavations were conservatively drawn so that confirmation samples collected following excavation will have a greater probability of not exceeding the ROD remediation goals.

This Excavation Plan provides an overview of the planned remediation of the contaminated soil/sediment including site access and control, clearing and grubbing, excavation and disposal of contaminated soil, confirmatory soil sampling, clean soil replacement, and site restoration. Subcontractors to URS will be used for these activities. Prior to the start of work at the site, the excavation subcontractor is required to submit the following to URS:

- Health and Safety Plan (HASP) URS review
- Erosion and Sedimentation Control Plan (ESCP) URS review and NYSDEC approval
- Proposed sources for soil backfill URS approval
- Proposed dewatering scheme URS review and NYSDEC approval

The subcontractor submittals will be provided to the Air Force for review and copies of the approved documents will be maintained on site during construction activities. Further discussion of these items is provided in the subsections that follow.

5.1 Joint Application for Permit

It should be noted that before construction activities can commence in the wetland area, a Joint Application for Permit must be submitted to NYSDEC and USEPA, and a Preconstruction Notification (PCN) must be subsequently submitted to the United States Army Corps of Engineers (USACE). The requirements are briefly outlined below.

In accordance with the Code of Federal Regulations (CFR) Title 33 Part 330: *The Nationwide Permit Program*, per Nationwide Permit #38 (NWP 38): *Cleanup of Hazardous and Toxic Waste Sites*, "...specific activities required to effect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered or sponsored by a government agency with established legal or regulatory authority," are permitted by the United States Army Corps of Engineers (USACE 2012).

However, as also stated in NWP 38, activities undertaken entirely on a CERCLA site are not required to obtain permits from the USACE under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act, but a pre-construction notification (PCN) must still be submitted to the USACE prior to commencing the activities (USACE 2012).

Under Section 401 of the Clean Water Act, NYSDEC has the responsibility for issuing Water Quality Certifications in New York State for work conducted under NWP 38. Consequently, any party conducting the activities authorized by NWP 38 must apply for and obtain an individual Section 401 Water Quality Certification from NYSDEC.

URS will prepare and submit what is called a Joint Application for Permit to NYSDEC on the Air Force's behalf to request a Water Quality Certification. This Joint Application for Permit will also serve as the package needed to submit as the PCN to the USACE. A restoration plan for the area of the wetland disturbed by the remediation is part of the submittal. Following review by the Air Force and the property owner, the Joint Application for Permit/PCN will be submitted to NYSDEC, USEPA (for informational purposes), and the USACE, which will include the following attachments:

- Site location and topographic map
- US Fish and Wildlife Service National Wetland Inventory map
- NYSDEC Freshwater Wetlands map
- New York State streams map including the New York State streams classification
- US Department of Agriculture Natural Resources Conservation Service Soil Survey map
- Map showing the delineated wetland boundaries
- Project drawings showing the proposed wetland restoration design (i.e. grading & planting plans).

5.2 <u>Site Access and Control</u>

The portion of the site that will be remediated is located on two parcels: the major portion of the site owned by CCC&V and an elevated embankment along the east side of the site that is owned by the

Plattsburgh Airbase Redevelopment Corporation (PARC). The railroad on this embankment is operated by the Delaware and Hudson Railway Company, Inc. (D&H) under an Industry Track Agreement with PARC. Ownership of this strip of land is scheduled to be transferred by PARC to Clinton County, but Clinton County records show that the transfer has not yet occurred. A written access agreement between URS and CCC&V has been obtained and URS and its subcontractors will comply with the terms of this agreement. Also, the Industry Track Agreement between PARC and D&H, governing activity on the track area, was obtained, but it does not cover site remediation activities. URS will inform PARC and D&H of the remediation activities before starting work to determine if there are additional requirements for work adjacent to the railroad. These agreements are included in Appendix A of the Work Plan (URS, 2013a).

Subcontractors will be responsible for the security of their equipment and personnel and will provide signage, as necessary, to protect potential site visitors and workers. All subcontractor personnel on site must be trained to comply with Occupational Safety and Health Administration training requirements found in 29 CFR 1910.120(e) (OSHA 2013). Subcontractors will be required to submit to URS a HASP that addresses the hazards that are associated with their remedial efforts at Site SS-041 and their personnel must adhere to the health and safety protocols outlined in the HASP. Orange safety fencing will be placed around open excavations until backfilling is completed.

5.3 Site Clearing and Grubbing

The limits of the proposed excavation work areas will be marked-out and DigSafelyNewYork, Inc. will be contacted regarding underground utilities within the proposed work areas. An ESCP, that meets the substantive requirements of a NYSDEC SPDES General Permit GP-0-10-001 for Stormwater Discharges from Construction Activity Stormwater Pollution Prevention Plan, will be submitted for review by URS and approval by NYSDEC before construction activities commence. The excavation subcontractor will clear and grub the proposed excavation work areas sufficiently to permit heavy equipment access. Site clearing refers to removing trees and shrubs at the site and grubbing refers to removing stumps and roots. The property owner will be given an opportunity to remove trees that may be economically valuable, if any, prior to mobilization. Any remaining trees can be salvaged or disposed of upon removal by the subcontractor. Care will be taken during grubbing to remove potentially contaminated soil from roots and stumps prior to disposal.

5.4 Excavation and Disposal of Contaminated Soil

As noted in Section 4.2, only concentrations of trivalent chromium and total chromium exceeded their respective ROD remediation goals. Total chromium exceedances were co-located with the trivalent chromium exceedances, but there were more exceedances for trivalent chromium. Therefore, the extent of contamination at the site is being defined by the sample locations with exceedances of the ROD remediation goal for trivalent chromium. Trivalent chromium remediation goal exceedances occurred primarily in samples collected from 0-1 foot and 1-2 feet, although some exceedances of the ROD remediation goal for trivalent chromium occurred in several samples collected from 2-3 feet depth at the northern end of the site (Table 1 and Drawing 2). The proposed excavations were designed to remove contaminated soils from known locations where trivalent chromium concentrations exceeded ROD remediation goals and from areas where analytical data indicated that ROD remediation goals might be exceeded in confirmatory samples.

Contaminated soils will be excavated from the proposed excavation areas to the identified target depths (Drawing 2). The soil may be live loaded into trucks and transported directly to the disposal facility or otherwise transported to a contaminated soil staging area. Soil staging areas will be determined in advance in coordination with the property owner and will require preparation, that includes installing erosion/sedimentation controls at any contaminated soil staging areas and/or clean backfill staging areas according to the subcontractor's approved ESCP.

The subcontractor will determine the off-site disposal location for all contaminated soil excavated from the site and the subcontractor will transport the contaminated soil to the disposal location. The subcontractor's proposed disposal site will be approved by URS prior to the start of excavation activities. The Air Force, NYSDEC, and USEPA will be informed of the disposal location.

Prior to leaving the site, the subcontractor's trucks and other equipment that may have come in contact with contaminated soil will be decontaminated. Details of the decontamination procedures will be provided in the subcontractor's ESCP.

The subcontractor's HASP will define work zone air monitoring and personnel air monitoring requirements, if needed. The subcontractor will be responsible for performing air monitoring in their work zone for their employees; URS will perform perimeter air monitoring, if necessary.

Dewatering of the excavation may be required to be performed during heavy rainfall or during periods of spring thaw depending on when the fieldwork is performed. In accordance with the subcontractor's proposed dewatering scheme, collected water may be allowed to infiltrate in a separate portion of the excavation with prior approval of NYSDEC, or disposed of off-site, provided that disposal is done in a manner consistent with all local and State laws and all necessary permissions and permits are in-place.

The subcontractor will be required to sweep soil from paved areas and apply water to disturbed areas as necessary to keep down dust and maintain good housekeeping. Daily sweeping/cleaning may be required. Potable water necessary for the operations will be sourced in a manner consistent with all local and State laws and all necessary permissions and permits will be obtained.

As the excavation progresses, URS will collect side wall and bottom wall samples for laboratory cadmium (USEPA SW-846 Method 6010B), total chromium (USEPA SW-846 Method 6010B), and hexavalent chromium (USEPA SW-846 Method 7196A) analyses to confirm that remediation goals have been achieved. One sample will be collected approximately every 50 feet along the sidewalls of the excavation and one sample will be collected for approximately every 900 square feet from the bottom of the excavation. Results will be available within 72-hours from the time of collection. The excavation will be expanded until sampling confirms that remediation goals have been achieved. URS will perform a post-excavation topographic survey, for comparison to the May 2013 baseline topographic survey, to estimate the soil volume that was removed.

5.5 <u>Site Restoration</u>

After it is determined that remediation goals have been met, the excavations will be backfilled with soils from local sources that approximately visually match the grain size characteristics of the soils removed, which will most likely be a silty medium to fine sand. No soil will be placed until it is approved by URS and only soils from approved sources will be used.

Samples of soils proposed for backfilling will be analyzed for volatile organic compounds, semivolatile organic compounds, pesticides, polychlorinated biphenyls, and metals. The analytical results will be compared to the residential use soil cleanup objectives for protection of the public health that are listed in Table 375-6.8(b) of 6 NYCRR Part 375 (NYSDEC 2006). The sampling frequency will be one per 1,000 cubic yards of soil, with a minimum of one sample for each borrow source. i;/11176211/11176891 – SS-041 Project Folder/SS041.Delineation.Rpt-Excavation Plan.Rev-2.docx The silty medium to fine sand will be placed in the excavation in maximum 12-inch thick lifts to within six inches of the final grade. The soil will be lightly compacted by several passes of the placement equipment to minimize future settlement and to prevent rapid infiltration of rainwater through the sand. The top six inches will be uncompacted topsoil.

The site will be re-graded to approximate the ground surface contours and drainage features that existed prior to the soil removal, with the exception of some wetland pools and hummocks that will improve the wetland functionality. Fine grading is not necessary as uneven micro-topography is a desired finished condition in constructed wetlands.

The areas of the wetland disturbed by the remediation activities, as well as areas outside of the wetland that were disturbed, will be reseeded. Trees and shrubs will be planted so that the site is restored to approximate the pre-remediation conditions.

Upon completion of remediation and restoration activities, the paved and unpaved areas where work or staging was performed will be cleared of soil/debris, as well as any sediment and temporary fencing. A Remedial Action Completion Report will be prepared when remedial activities at the site have been completed.

Upon completion of the restoration operations, the excavation subcontractor must ensure that all paved and unpaved areas where work or staging was performed are free of soil/debris and all sediment controls and temporary fencing are removed. A Remedial Action Completion Report will be prepared when remedial activities at the site have been completed.

REFERENCES

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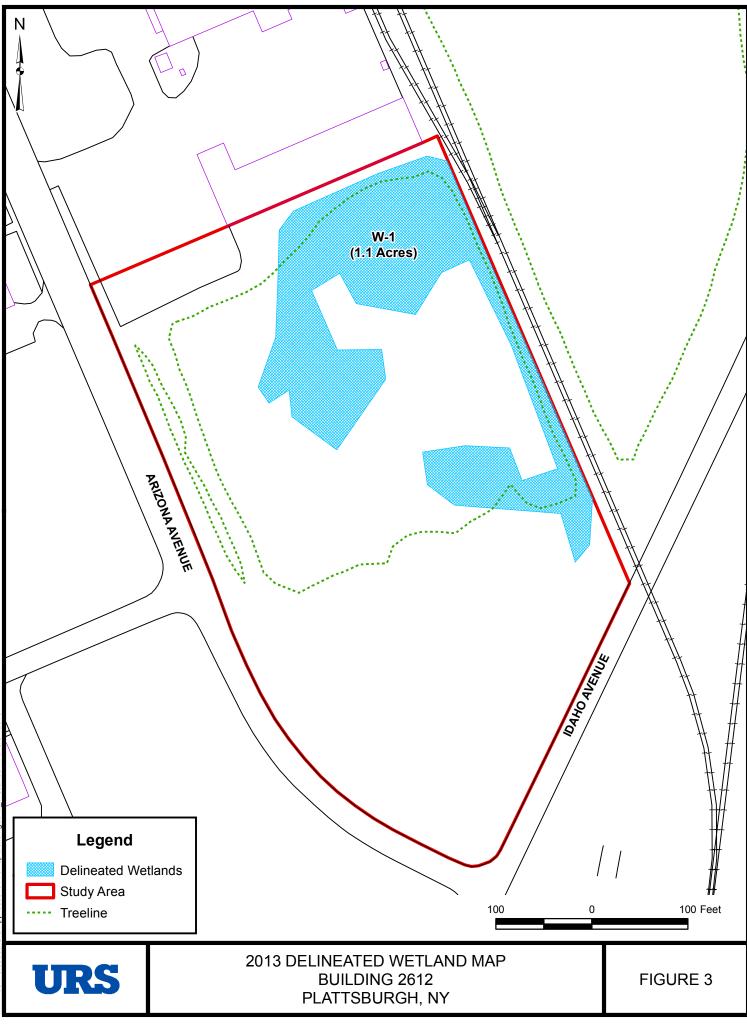
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FIGURES

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TABLES

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TABLE 1 SITE SS-041 BUILDING 2612 SUMMARY OF MAY-JUNE 2013 CONTAMINATION DELINEATION SOIL SAMPLE RESULTS

2-3 0-1 SB-01B 1-2 2-3 0-1 SB-02 1-2 2-3 0-1 SB-03 1-2 0-1 SB-03A	ation -0.5 -0.5 -0.5 -0.1 1-2 2-3 0-1 1-2 2-3 0-1 1-2 2-3 0-1 1-2 2-3 0-1 1-2 2-3	(mg/Kg) 2.5 1.5 0.16	Total 150 8.2 3.5 130 29 4.8 37 3.0 3.7	Hexavalent 22 0.33 4.0 0.33	36 7.8 3.5 130 25	ID ROD Rer Ge SB-07A		(mg/Kg) 2.5	Total 150	Hexavalent	Trivalent 36	ID ROD Ren	(ft) nediation	(mg/Kg)	Total	Hexavalent	Trivalent
Goal GC-01 0-0. GC-02 0-0. GC-03 0-1 SB-01 1-2 SB-01A 1-2 SB-01A 1-2 SB-01A 1-2 SB-01B 1-2 SB-01B 1-2 SB-01B 1-2 SB-01B 1-2 SB-01B 1-2 SB-01B 1-2 SB-02 1-2 SB-03 1-2 SB-03 1-2	-0.5 -0.5 -0.5 -1 1-2 2-3 -1 1-2 2-3 -1 1-2 2-3 -1 1-2 2-3	1.5	8.2 3.5 130 29 4.8 37 3.0	4.0	7.8 3.5 130 25	Ge	0-1	2.5		22	36	ROD Ren	nediation				
GC-02 0-0. SB-01 1-2 2-3 0-1 SB-01A 1-2 2-3 0-1 SB-01A 1-2 2-3 0-1 SB-01B 1-2 2-3 0-1 SB-01B 1-2 2-3 0-1 SB-02 1-2 SB-03 1-2 SB-03A 1-2	-0.5 D-1 1-2 2-3 D-1 1-2 2-3 D-1 1-2 2-3 D-1 1-2 2-3		3.5 130 29 4.8 37 3.0	4.0	3.5 130 25	SB-07A					50	Ga		2.5	150	22	36
0-1 SB-01 1-2 2-3 0-1 SB-01A 1-2 2-3 0-1 SB-01B 1-2 2-3 0-1 SB-01B 1-2 2-3 0-1 SB-01B 1-2 2-3 0-1 SB-02 1-2 2-3 0-1 SB-03 1-2 SB-03A 1-2	D-1 1-2 2-3 D-1 1-2 2-3 D-1 1-2 2-3 D-1 1-2 2-3 D-1 2-3		130 29 4.8 37 3.0		130 25	SB-07A	1-2		36	1.3	35		0-1	0.14	23		23
SB-01 1-2 2-3 0-1 SB-01A 1-2 2-3 0-1 SB-01B 1-2 2-3 0-1 SB-01B 1-2 2-3 0-1 SB-02 1-2 2-3 0-1 SB-03 1-2 SB-03A 1-2	1-2 2-3 D-1 1-2 2-3 D-1 1-2 2-3 D-1 2-3		29 4.8 37 3.0		25				38	2.6	36	SB-13A	1-2	0.073	7.0	0.38	6.6
2-3 0-1 SB-01A 1-2 2-3 0-1 SB-01B 1-2 2-3 0-1 SB-01B 1-2 2-3 0-1 SB-02 1-2 2-3 0-1 SB-03 1-2 SB-03A	2-3)-1 1-2 2-3)-1 1-2 2-3	0.16	4.8 37 3.0		and a second		2-3		2.5	0.44	2.1		2-3		7.8		7.8
0-1 SB-01A 1-2 2-3 0-1 SB-01B 1-2 2-3 0-1 SB-02 1-2 2-3 0-1 SB-03 1-2 SB-03A 1-2	D-1 1-2 2-3 D-1 1-2 2-3		37 3.0	0.33			0-1		3.4	0.84	2.5		0-1	0.059	23	3.1	20
SB-01A 1-2 2-3 0-1 SB-01B 1-2 2-3 0-1 SB-02 1-2 2-3 0-1 SB-03 1-2 SB-03A 1-2	1-2 2-3 0-1 1-2 2-3		3.0		4.4	SB-07B	1-2		2.2		2.2	SB-14	1-2		3.2		3.2
2-3 0-1 SB-01B 1-2 2-3 0-1 SB-02 1-2 2-3 0-1 SB-03 1-2 0-1 SB-03A	2-3 D-1 1-2 2-3				37		2-3		4.4	0.57	3.9		2-3		5.4		5.4
0-1 SB-01B 1-2 2-3 0-1 SB-02 1-2 2-3 0-1 SB-03 1-2 SB-03A 1-2)-1 1-2 2-3		3.7		3.0		0-1	0.035	3.8	0.74	3.0		0-1	0.081	29	1.9	27
SB-01B 1-2 2-3 0-1 SB-02 1-2 2-3 0-1 SB-03 1-2 2-3 0-1 SB-03 1-2 SB-03A 1-2	1-2 2-3				3.7	SB-08	1-2		2.1		2.1	SB-15	1-2		5.9	0.64	5.3
2-3 0-1 SB-02 1-2 2-3 0-1 SB-03 1-2 2-3 0-1 SB-03A 1-2	2-3		8.3		8.3		2-3	0.50	2.4	0.32	2.0		2-3	0.15	5.3	2.9	5.3
0-1 SB-02 1-2 2-3 0-1 SB-03 1-2 2-3 0-1 SB-03A 1-2			9.4		9.4	SD 00	0-1	0.50	88	1.8	86	SD 16	0-1	0.15	84	2.3	81
SB-02 1-2 2-3 0-1 SB-03 1-2 2-3 0-1 SB-03A 1-2	N I	0.000	4.9	7.2	4.9	SB-09	1-2	0.067	10	0.22	10	SB-16	1-2	0.041	5.4	0.89	4.5
2-3 0-1 SB-03 1-2 2-3 0-1 SB-03A 1-2		0.088	2.4	7.2 9.3			<u>2-3</u> 0-1		4.0	0.33	3.7 77		<u>2-3</u> 0-1	0.052	3.2 5.1	0.44	2.8 5.1
O-1 SB-03 1-2 2-3 0-1 SB-03A 1-2		0.055	2.3	0.59	1.7	SB-09A	1-2		4.2	0.33	3.9	SB-16A	1-2	0.032	6.4		6.4
SB-03 1-2 2-3 0-1 SB-03A 1-2		0.24	100	3.5	97	3D-09A	2-3		3.4	0.55	3.4	SD-10A	2-3	0.13	10		10
2-3 0-1 SB-03A 1-2		0.12	180	3.8	2.1		0-1		3.4		3.4		0-1	0.12	8.9		8.9
0-1 SB-03A 1-2		0.12	5.2	0.91	4.3	SB-09B	1-2		3.2	0.62	2.6	SB-16B	1-2		12		12
SB-03A 1-2		0.085	74	1.3	72	50 050	2-3		3.4	1.4	2.0	SD 10D	2-3		3.5		3.5
		0.005	4.1	1.5	4.1		0-1	0.10	5.7	1.1	5.7		0-1	1.1	1,100	9.4	1,091
1 2-3	2-3		3.0		3.0	SB-10	1-2	0110	4.0		4.0	SB-17	1-2		3.8		3.8
0-1			5.8	0.51	5.3		2-3		2.7		2.7		2-3		4.2		4.2
SB-03B 1-2		0.076	22	0.35	22		0-1	1.2	150		150		0-1	0.14	8.2		8.2
2-3	2-3		12	0.65	11	SB-11	1-2	0.21	46		46	SB-17A	1-2	0.21	12		12
0-1)-1	0.14	8.0	7.8	0.2		2-3		5.2		5.2		2-3		4.1		4.1
SB-04 1-2	1-2		4.4	1.5	2.9		0-1		47		47		0-1	0.11	5.9	0.91	5.0
2-3	2-3		3.1	0.41	3.1	SB-11A	1-2		19		19	SB-17B	1-2		3.2		3.2
0-1)-1	0.61	74	9.6	64		2-3		4.9	0.96	4.0		2-3		4.0		4.0
SB-05 1-2	1-2	0.1	30	2.3	28		0-1		3.1	0.52	2.6		0-1	0.065	11		11
2-3			4.3	0.37	3.9	SB-11B	1-2		3.7		3.7	SB-17C	1-2		8.2		8.2
0-1			17	1.6	16		2-3		2.3		2.3		2-3		6.1		6.1
SB-05A 1-2			3.9	0.45	3.5		0-1		3.3	0.40	2.9		0-1		4.3		4.3
2-3			2.9		2.9	SB-12	1-2		3.5	0.70	2.8	SB-17D	1-2		12	0.52	12
0-1			18		18	-	2-3	0.049	5.9		5.9		2-3		9.0		9.0
SB-05B 1-2			6.1		6.1		0-1	1.4	200	0.70	200		0-1	0.18	130	2.7	127
2-3		0.0(1	43	1.5	42	SB-12A	1-2	0.083	13	0.70	13	SB-18	1-2	0.041	38	0.78	37
SP 06 1.2		0.061	3.7	5.8	4.0		2-3	0.067	12	0.42	11		2-3	0.12	4.2	ļ	4.2
SB-06 1-2			4.0		4.0	CD 10D	0-1		56		56	CD 10A	0-1	0.13	12	 	12 4.4
2-3		0.68	<u>3.4</u> 110		3.4	SB-12B	<u>1-2</u> 2-3		<u>6.1</u> 7.1		6.1 7.1	SB-18A	<u>1-2</u> 2-3		4.4	┟─────┦	3.9
SB-07 1-2		0.08	9.6	0.52	<u>110</u> 9.1		0-1	0.10	22	3.5	18		0-1	0.066	<u> </u>		7.9
2-3			3.7	0.32	3.7	SB-13	1-2	0.10	2.8	0.67	2.1	SB-18B	1-2	0.000	5.7	0.36	5.3
2-3	-5		5.1		5.1	50-15	2-3		6.3	0.85	5.5	30-100	2-3		3.9	0.50	3.9

Blanks indicate that the analyte was not detected above the reported method detection limit (Appendix A).

TABLE 1 (Continued) SITE SS-041 BUILDING 2612 SUMMARY OF MAY-JUNE 2013 CONTAMINATION DELINEATION SOIL SAMPLE RESULTS

Sample	Depth	Cadmium	Cł	nromium (mg/	Kg)	Sample	Depth	Cadmium	Ch	romium (mg/	Kg)	Sample	Depth	Cadmium	Ch	romium (mg/	/Kg)
ID	(ft)	(mg/Kg)	Total	Hexavalent	Trivalent	ID	(ft)	(mg/Kg)	Total	Hexavalent	Trivalent	ID	(ft)	(mg/Kg)	Total	Hexavalent	Trivalent
ROD Ren Go		2.5	150	22	36	ROD Rer Go		2.5	150	22	36	ROD Rer Go		2.5	150	22	36
	0-1	0.42	83	1.2	81		0-1		4.3		4.3		0-1	İ İ	9.3	2.1	7.3
SB-18C	1-2	0.046	18	0.76	17		1-2		2.6		2.6	SB-35	1-2		3.0	0.57	2.4
	2-3		5.3		5.3	SB-24A	2-3	0.041	4.0		4.0		2-3	1 1	3.5		3.5
	0-1	0.061	7.2		7.2		3-4	1 1	8.9		8.9		0-1	0.55	74		74
SB-18D	1-2		2.8		2.8		4-5	0.075	13		13	SB-36	1-2	0.039	3.9	0.59	3.3
	2-3		5.5		5.5		0-1		420		420		2-3		3.2		3.2
	0-1	1.0	57		57	SB-25	1-2	2.1	260		260		0-1		3.9		3.9
SB-19	1-2	0.4	170	1.9	160		2-3	0.83	110		110	SB-36A	1-2		3.1		3.1
	2-3	0.12	6.6		6.6		0-1	1.4	130		130		2-3		3.2		3.2
	0-1		5.6		5.6		1-2		7.7		7.7		0-1		4.9		4.9
SB-19A	1-2		2.5	0.40	2.1	SB-26	2-3	1 1	51		51	SB-36B	1-2	1	4.4		4.4
	2-3	0.55	18		18		3-4		3.0		3.0		2-3		2.8		2.8
	0-1	0100	4.4		4.4		0-1		42		42		0-1	0.065	2.4		2.4
SB-19B	1-2		7.0		7.0	SB-27	1-2	łł	2.6		2.6	SB-37	1-2	0.002	2.0	0.76	1.3
52 172	2-3	0.069	13		13	50 27	2-3		5.3		5.3	52 57	2-3		2.5	1.5	1.0
	0-1	0.92	23	21	2.1		0-1		30		30		0-1	0.082	5.7	1.5	5.7
SB-20	1-2	0.72	8.0	21	8.0	SB-28	1-2		4.1	0.44	3.7	SB-38	1-2	0.032	2.9		2.9
00 20	2-3		3.6	0.51	3.1	5D 20	2-3		3.9	0.44	3.9	50-50	2-3	0.053	2.7		2.7
	0-1		11	0.51	11		0-1		14		14		0-1	0.13	19	2.1	17
SB-20A	1-2		4.6		4.6	SB-29	1-2		4.1	0.36	3.7	SB-39	1-2	0.15	2.2	0.44	1.8
5D 2011	2-3		4.6		4.6	5D 27	2-3		3.2	0.50	3.2	50 37	2-3		2.7	0.44	2.7
	0-1		12	3.0	9.3		0-1	0.44	5.2		55		0-1	0.11	5.8		5.8
SB-21	1-2		3.4	5.0	3.4	SB-30	1-2	0.12	25		25	SB-40	1-2	0.11	2.5		2.5
50 21	2-3		2.8	0.41	2.4	50-50	2-3	0.029	52		52	3D-40	2-3	++	3.1	0.51	2.6
	0-1	0.90	46	8.9	37		0-1	0.029	4.8		4.8		0-1	++	9.7	0.51	9.7
SB-21A	1-2	0.90	3.0	0.56	2.5		1-2		7.0		7.0	SB-41	1-2	++	3.1		3.1
50 217	2-3		2.7	0.63	2.0	SB-30B	2-3	0.041	19		19	50-41	2-3	0.040	3.8		3.8
	0-1		13	0.03	13		3-4	0.041	25		25		0-1	0.040	<u> </u>		<u> </u>
SB-22	1-2		3.7		3.7		0-1		1.7		1.7	SB-42	1-2	0.78	75	0.85	74
3D-22	2-3		3.4		3.4	SB-31	1-2		2.7		2.7	5D-42	2-3	0.20	3.3	0.39	2.9
	0-1		9.9		9.9	50-51	2-3		2.7		2.7		0-1	<u> </u>	45	0.39	45
SB-22A	1-2		3.7	0.52	3.2		0-1		83		83	SB-42A	1-2	<u> </u>	3.4	0.57	3.4
SD-22A	2-3		3.7		2.9	SB-32						3D-42A		<u> </u>			
				0.77		SD-32	1-2		4.9		4.9		2-3		3.6		3.6
SB-23	0-1 1-2		<u> 18 </u>	0.65	18		2-3		3.7		3.7	CD 40D	0-1	├	3.7		3.7
SD-25				0.65	2.6	SB-33	0-1		6.3	0.41	6.3	SB-42B	1-2	┼───┤	3.7		
	2-3	0.20	3.4	0.24	3.4	58-33	1-2		3.1	0.41	2.7		2-3	0.0(2	6.9		6.9
SD 24	0-1	0.39	79	0.34	79		2-3		3.4		3.4	SD 42	0-1	0.063	5.1		5.1
SB-24	1-2	0.085	81	0.82	81	CD 24	0-1	├	7.8		7.8	SB-43	1-2	───	2.4	0.65	2.4
	2-3	0.13	46	0.37	46	SB-34	1-2	├ ────┤	2.9		2.9		2-3	0.10	2.3	0.65	1.7
							2-3		3.5		3.5		0-1	0.12	2.9		2.9
												SB-44	1-2	0.058	3.2		3.2
													2-3	0.047	2.3		2.3

Blanks indicate that the analyte was not detected above the reported method detection limit (Appendix A).

TABLE 1 (Continued) SITE SS-041 BUILDING 2612 SUMMARY OF MAY-JUNE 2013 CONTAMINATION DELINEATION SOIL SAMPLE RESULTS

Sample	Depth	Cadmium	Ch	romium (mg/	Kg)
ID	(ft)	(mg/Kg)	Total	Hexavalent	Trivalent
ROD Ren Go		2.5	150	22	36
	0-1	0.085	2.4		2.4
SB-45	1-2		3.2	0.38	2.8
	2-3		1.9		1.9
	0-1	0.096	2.2		2.2
SB-46	1-2		1.3		1.3
	2-3		1.8		1.8
	0-1	0.091	5.9		5.9
SB-47	1-2		2.5		2.5
	2-3		4.5		4.5
	0-1	0.54	89	1.9	87
SB-48	1-2	0.050	8.4	0.53	7.9
	2-3		4.8	0.36	4.4
	0-1		25		25
SB-48A	1-2		39	0.68	38
	2-3		3.1		3.1
	0-1		2.5		2.1
SB-48B	1-2		3.3		3.3
	2-3		2.8		2.8
	0-1	0.067	4.3		4.3
SB-49	1-2		1.9	0.50	1.4
	2-3		2.7	0.42	2.3
	0-1	0.053	4.2		4.2
SB-50	1-2		5.0	0.83	5.0
	2-3		2.3		2.3
	0-1	0.11	6.4		6.4
SB-51	1-2		2.4		2.4
	2-3		3.2		87 7.9 4.4 25 38 3.1 2.1 3.3 2.8 4.3 1.4 2.3 6.4 2.4 3.2 3.7 2.2 1.5 2.3 3.1 5.1 3.7 1.5
	0-1	0.093	3.7		3.7
SB-52	1-2		2.2		2.2
	2-3		1.5		1.5
	0-1	0.048	2.5	3.8	
SB-53	1-2	0.029	2.3		2.3
	2-3	0.030	3.1		3.1
	0-1		5.1		5.1
SB-54	1-2		4.1	0.41	3.7
	2-3		15		15
	0-1		5.3		5.3
SB-57	1-2		4.4	0.92	3.5
	2-3		8.7	0.45	8.3

Sample	Depth	Cadmium	Chromium (mg/Kg)						
ID	(ft)	(mg/Kg)	Total	Hexavalent	Trivalent				
ROD Ren Go		2.5	150	22	36				
	0-1	0.063	5.0		5.0				
SB-60	1-2		3.2		3.2				
	2-3		3.3		3.3				
	0-1	0.084	11		11				
SB-64	1-2		29	0.86	28				
	2-3		3.8		3.8				
	0-1	0.034	3.4		3.4				
SB-67	1-2	0.032	7.5		7.5				
	2-3	0.039	9.9	0.78	9.1				
	0-1	0.072	4.5		4.5				
SB-68	1-2		2.7		2.7				
	2-3		4.2		4.2				
	0-1		37		37				
SB-71	1-2		5.0		5.0				
	2-3		3.8		3.8				
	0-1		8.0		8.0				
SB-71A	1-2		3.9		3.9				
SB-71A	2-3		4.6		4.6				
	0-1	0.055	5.9	0.44	5.5				
SB-71B	1-2	0.047	4.8		4.8				
	2-3		4.5		4.5				
	0-1		37		37				
SB-72	1-2		3.9		3.9				
	2-3		5.5		5.5				
	0-1		8.3		8.3				
SB-72A	1-2		4.0		4.0				
	2-3		4.4		4.4				
	0-1	0.16	72		72				
SB-72B	1-2		9.8		9.8				
	2-3		4.4		4.4				
SD 72	0-1		15		15				
SB-73	0-3		5.7		5.7				
	0-1		24		24				
SB-73A	1-2		12		12				
	2-3		2.9		2.9				
	0-1		3.7		3.7				
SD 74	1-2		3.5		3.5				
SB-74	2-3		3.5		3.5				
	3-4		3.2		3.2				

Concentration exceeds ROD Remediation Goal

Blanks indicate that the analyte was not detected above the reported method detection limit (Appendix A).

APPENDIX A

DATA ASSESSMENT SUMMARY

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DATA ASSESSMENT SUMMARY PLATTSBURGH AIR FORCE BASE SS-041 INITIAL DELINEATION

Three hundred twenty-four (324) soil samples, fifteen (15) matrix spike/matrix spike duplicate (MS/MSD) pairs, seventeen (17) field duplicates, and eleven (11) equipment rinse blanks were collected on May 7, 2013 - June 13, 2013 at the Plattsburgh Air Force Base (PAFB) SS-041 site. The samples were sent to Test America Laboratories (North Canton, OH) for analysis, and were received at the laboratory intact, properly preserved, and under proper chain-of-custody.

The samples were analyzed for total cadmium (Cd) and chromium (Cr) by United States Environmental Protection Agency (USEPA) Method SW6010B, hexavalent chromium by USEPA Method 7196A, and trivalent chromium by calculation.

The data were reviewed for compliance with the referenced methods and the *Air Force Center for Environmental Excellence (AFCEE) Quality Assurance Project Plan (QAPP), Version 4.0.02* (May 2006). The validated analytical results are presented on Tables 1 and 2. The concentration of trivalent chromium, which was calculated from the total Cr and hexavalent chromium, is also reported on Table 1. Data review checklists for each analytical fraction, laboratory report case narratives, and reporting forms that support the qualification of data (where applicable) are presented in Attachment A. Validated copies of the laboratory sample reporting forms are presented in Attachment B. Chain-of-custody records are presented in Attachment C. Definitions of AFCEE data qualifiers are presented at the end of this summary. As defined by AFCEE, the allowable final data qualifiers for definitive data and their hierarchy (listed in order of the most severe through the least severe) are R, M, J, F, B, U, and UJ. When data have been affected by multiple qualifiers, the final qualifier reflects the most severe qualifier.

The trivalent chromium is a calculated value which is determined by subtracting the hexavalent chromium result from the total Cr result. In those cases where the calculation yields a negative number (i.e., hexavalent Cr > total Cr) the laboratory has reported the trivalent chromium result as non-detect.

Total Metals

The percent recoveries (%Rs) of Cd were below the lower QC limits in the MS/MSD performed on sample SB-13A (2-3) and SB-21 (0-1). The results for Cd for all samples in WO#s 240-24223-1 (sample date 5/9/13) and 240-24468-1 (sample date 5/15/13) have been qualified 'M' or 'UM'.

The %Rs of total Cr were outside of the QC limits in the MS and/or MSD performed on samples SB-14 (0-1), SB-16B (1-2), SB-18C (2-3), SB-48 (0-1), and SB-48A (1-2). The results for total Cr for all samples in WO#s 240-24119-1 (sample date 5/7/13), 240-24369-1 (sample date 5/14/13), 240-25457-1 (sample date 6/5/13), and 240-25647-1 (sample date 6/12/13) have been qualified 'M'. Since the trivalent chromium is calculated from the Cr, the results for trivalent chromium have also been qualified 'M'.

The relative percent difference (RPD) between the concentration of total Cr and/or trivalent chromium in sample SB-12A (1-2) and the respective concentrations in field duplicate SB-12A (1-2) Dup exceeded the QC limit of 30%. Since other field duplicates associated with this sampling event were acceptable, only the results in the samples listed above were qualified 'J'.

The RPD between the concentration of total Cr and trivalent chromium in samples SB-15 (2-3) and SB-50 (1-2) and the respective concentrations in field duplicates SB-15 (2-3) Dup and SB-50 (1-2) Dup exceeded the QC limit of 30%. Since, these samples were previously qualified 'M' due to the MS/MSD outliers ('M' qualifier has a higher hierarchy than the 'J' qualifier) no further qualification was added to the sample results.

Total Cr was detected in some of the equipment rinse blanks (EB). Since the results for total Cr in the associated

samples were greater than five times the results detected in the EB, no qualification has been added to the sample results.

Some of the trivalent chromium results have been manually corrected on the Form Is to compensate for the rounding done by the laboratory's software.

All other data are usable as reported.

Hexavalent Chromium

The rinse blank samples associated with lab WO# 240-25457-1 (sampled on 6/5/13 and 6/6/13) were analyzed outside of the holding time. The results for hexavalent chromium in these samples have been qualified 'UJ'. Other rinse blanks associated with the sampling event were analyzed within holding time and exhibited similar results (i.e., non-detect).

All other data are usable as reported.

	St	R	
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DEFINITIONS OF AFCEE DATA QUALIFIERS

- U Undetected: The analyte was analyzed for, but not detected.
- J Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
- UJ The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
- F- Found: The analyte was positively identified but the associated concentration is an estimation above the MDL and below the RL.
- R The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
- B- Blank contamination: The analyte was found in an associated blank above $\frac{1}{2}$ the RL, as well as in the sample.
- M Matrix effect: The concentration is estimated due to a matrix effect.

DEFINITIONS OF AFCEE DATA QUALIFIERS

- U- Undetected: The analyte was analyzed for, but not detected.
- J- Estimated: The analyte was positively identified, the quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
- UJ The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
- F Found: The analyte was positively identified but the associated concentration is an estimation above the MDL and below the RL.
- R The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
- B- Blank contamination: The analyte was found in an associated blank above ½ the RL, as well as in the sample.
- M- Matrix effect: The concentration is estimated due to a matrix effect.

TABLE 1 VALIDATED SAMPLE ANALYTICAL RESULTS SS-041 INITIAL DELINEATION PLATTSBURGH AIR FORCE BASE

Location ID		GC-01	GC-02	SB-01	SB-01	SB-01
Sample ID		GC-01	GC-02	SB-01 0-1'	SB-01 1-2'	SB-01 2-3'
Matrix		Soil Soil Soil Soil		Soil Soil	Soil	
Depth Interval (ft)		0.0-0.5	0.0-0.5	0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		06/05/13	06/05/13	05/08/13	05/08/13	05/08/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.030 U	0.036 U	1.5	0.16 F	0.033 U
Chromium	MG/KG	8.2 M	3.5 M	130	29	4.8
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 F	0.35 U	2.4 U	4.0	0.33 F
Percent Solids	%	83	77	56	76	83
Trivalent Chromium	MG/KG	7.8 M	3.5 M	130	25	4.4

Flags assigned during chemistry validation are shown.

Made By: AMK 8/7/13 Checked By: PRF 8/7/13

TABLE 1 VALIDATED SAMPLE ANALYTICAL RESULTS SS-041 INITIAL DELINEATION PLATTSBURGH AIR FORCE BASE

Location ID		SB-01A	SB-01A	SB-01A	SB-01A	SB-01B
Sample ID		SB-01A 0-1	SB-01A 1-2	SB-01A 2-3	SB-01A 2-3 DUP	SB-01B 0-1
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		0.0-1.0	1.0-2.0	2.0-3.0	2.0-3.0	0.0-1.0
Date Sampled		06/05/13	06/05/13	06/05/13	06/05/13	06/05/13
Parameter	Units				Field Duplicate (1-1)	
Total Metals						
Cadmium	MG/KG	0.036 U	0.029 U	0.033 U	0.035 U	0.027 U
Chromium	MG/KG	37 M	3.0 M	3.7 M	3.3 M	8.3 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.35 U	0.33 U	0.34 U	0.35 U	0.32 U
Percent Solids	%	78	83	79	77	85
Trivalent Chromium	MG/KG	37 M	3.0 M	3.7 M	3.3 M	8.3 M

Flags assigned during chemistry validation are shown.

Made By: AMK 8/7/13 Checked By: PRF 8/7/13

TABLE 1 VALIDATED SAMPLE ANALYTICAL RESULTS SS-041 INITIAL DELINEATION PLATTSBURGH AIR FORCE BASE

Location ID		SB-01B	SB-01B	SB-02	SB-02	SB-02
Sample ID		SB-01B 1-2	SB-01B 2-3	SB-02 0-1'	SB-02 1-2'	SB-02 2-3'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		06/05/13	06/05/13	05/08/13	05/08/13	05/08/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.027 U	0.032 U	0.088 F	0.035 F	0.030 U
Chromium	MG/KG	9.4 M	4.9 M	2.4	3.1	2.3
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.32 U	0.32 U	7.2 F	9.3	0.59 F
Percent Solids	%	84	84	84	85	84
Trivalent Chromium	MG/KG	9.4 M	4.9 M	0.15 U	0.15 U	1.7 F

Flags assigned during chemistry validation are shown.

Made By: AMK 8/7/13 Checked By: PRF 8/7/13

Location ID		SB-03	SB-03	SB-03	SB-03A	SB-03A
Sample ID		SB-03 0-1'	SB-03 1-2'	SB-03 2-3'	SB-03A 0-1	SB-03A 1-2
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft) Date Sampled		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
		05/08/13	05/08/13	05/08/13	06/05/13	06/05/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.24 F	0.12 F	0.025 U	0.085 F	0.032 U
Chromium	MG/KG	100	180	5.2	74 M	4.1 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	3.5 F	3.8	0.91 F	1.3	0.32 U
Percent Solids	%	78	79	83	90	85
Trivalent Chromium	MG/KG	97	170	4.3	72 M	4.1 M

Flags assigned during chemistry validation are shown.

Location ID		SB-03A	SB-03B	SB-03B	SB-03B	SB-04
Sample ID Matrix Depth Interval (ft) Date Sampled		SB-03A 2-3	SB-03B 0-1 Soil	SB-03B 1-2	SB-03B 2-3	SB-04 0-1'
		Soil		Soil	Soil	Soil
		2.0-3.0 06/05/13	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
			06/05/13	06/05/13	06/05/13	05/08/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.033 U	0.031 U	0.076 F	0.032 U	0.14 F
Chromium	MG/KG	3.0 M	5.8 M	22 M	12 M	8.0
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.32 U	0.51 F	0.35 F	0.65 F	7.8 F
Percent Solids	%	84	88	83	80	77
Trivalent Chromium	MG/KG	3.0 M	5.3 M	22 M	11 M	0.2 F

Flags assigned during chemistry validation are shown.

Location ID		SB-04	SB-04	SB-04	SB-05	SB-05
Sample ID		SB-04 1-2'	SB-04 2-3'	SB-04 2-3' (DUP)	SB-05 0-1	SB-05 1-2
Matrix		Soil	Soil 2.0-3.0	Soil	Soil	Soil
Depth Interval (ft)		1.0-2.0		2.0-3.0	0.0-1.0	1.0-2.0
Date Sampled		05/08/13	05/08/13	05/08/13	05/08/13	05/08/13
Parameter	Units			Field Duplicate (1-1)		
Total Metals						
Cadmium	MG/KG	0.028 U	0.031 U	0.033 U	0.61	0.10 F
Chromium	MG/KG	4.4	3.1	2.7	74	30
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	1.5	0.32 U	0.41 F	9.6	2.3
Percent Solids	%	83	84	84	69	79
Frivalent Chromium	MG/KG	2.9	3.1	2.3 F	64	28

Flags assigned during chemistry validation are shown.

Location ID		SB-05	SB-05A	SB-05A	SB-05A	SB-05B
Sample ID Matrix Depth Interval (ft) Date Sampled		SB-05 2-3	SB-05A 0-1	SB-05A 1-2	SB-05A 2-3	SB-05B 0-1
		Soil	Soil	Soil	Soil	Soil
		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
		05/08/13	06/05/13	06/05/13	06/05/13	06/05/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.030 U	0.034 U	0.034 U	0.035 U	0.038 U
Chromium	MG/KG	4.3	17 M	3.9 M	2.9 M	18 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.37 F	1.6	0.45 F	0.33 U	1.9 U
Percent Solids	%	83	82	80	81	71
Trivalent Chromium	MG/KG	3.9	16 M	3.5 M	2.9 M	18 M

Flags assigned during chemistry validation are shown.

Location ID		SB-05B	SB-05B	SB-05B	SB-06	SB-06
Sample ID		\$B-05B 1-2	SB-05B 2-3	SB-05B 2-3 DUP	SB-06 0-1	SB-06 1-2
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft) Date Sampled		1.0-2.0 06/05/13	2.0-3.0 06/05/13	2.0-3.0	0.0-1.0	1.0-2.0
				06/05/13	05/08/13	05/08/13
Parameter	Units			Field Duplicate (1-1)		
Total Metals						
Cadmium	MG/KG	0.032 U	0.035 U	0.035 U	0.061 F	0.031 U
Chromium	MG/KG	6.1 M	36 M	43 M	3.7	4.0
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	1.5	0.99 F	5.8	0.32 U
Percent Solids	%	82	78	78	83	84
Trivalent Chromium	MG/KG	6.1 M	35 M	42 M	0.16 U	4.0

Flags assigned during chemistry validation are shown.

Location ID		SB-06	SB-07	SB-07	SB-07	SB-07A
Sample ID	j j	SB-06 2-3	SB-07 0-1	SB-07 1-2	SB-07 2-3	SB-07A 0-1
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft) Date Sampled		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
		05/08/13	05/08/13	05/08/13	05/08/13	06/05/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.034 U	0.68 F	0.034 U	0.029 U	0.033 U
Chromium	MG/KG	3.4	110	9.6	3.7	36 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	2.3 U	0.52 F	0.32 U	1.3
Percent Solids	%	82	58	83	83	84
Trivalent Chromium	MG/KG	3.4	110	9.1	3.7	35 M

Flags assigned during chemistry validation are shown.

Location ID	i	SB-07A	SB-07A	SB-07B	SB-07B	SB-07B
Sample ID		SB-07A 1-2	SB-07A 2-3	SB-07B-0-1'	SB-07B-1-2'	SB-07B-2-3'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft) Date Sampled		1.0-2.0	2.0-3.0 06/05/13	0.0-1.0	1.0-2.0	2.0-3.0
		06/05/13		06/04/13	06/04/13	06/04/13
Parameter	Units					
Total Metals	_					
Cadmium	MG/KG	0.034 U	0.034 U	0.024 U	0.031 U	0.033 U
Chromium	MG/KG	38 M	2.5 M	3.4	2.2	4.4
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	2.6	0.44 F	0.84 F	0.31 U	0.57 F
Percent Solids	%	73	79	90.0	86.0	84.0
Trivalent Chromium	MG/KG	36 M	2.1 M	2.5	2.2 F	3.9

Flags assigned during chemistry validation are shown

Location ID		SB-08	SB-08	SB-08	SB-09	SB-09
Sample ID		SB-08 0-1	SB-08 1-2	SB-08 2-3	SB-09 0-1	SB-09 1-2
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft) Date Sampled		0.0-1.0 05/08/13	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
			05/08/13	05/08/13	05/08/13	05/08/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.035 F	0.033 U	0.034 U	0.50 F	0.067 F
Chromium	MG/KG	3.8	2.1	2.4	88	10
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.74 F	0.32 U	0.32 F	1.8	0.34 U
Percent Solids	%	83	83	84	69	81
Frivalent Chromium	MG/KG	3.0	2.1 F	2.0 F	86	10

Flags assigned during chemistry validation are shown.

Location ID		SB-09	SB-09A	SB-09A	SB-09A	SB-09B
Sample ID Matrix Depth Interval (ft) Date Sampled		SB-09 2-3	SB-09A 0-1	SB-09A 1-2	SB-09A 2-3	SB-09B-0-1'
		Soil	Soil	Soil	Soil	Soil
		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
		05/08/13	06/05/13	06/05/13	06/05/13	06/04/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.034 U	0.038 U	0.035 U	0.032 U	0.027 U
Chromium	MG/KG	4.0	77 M	4.2 M	3.4 M	3.4
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 F	2.0 U	0.33 F	0.34 U	0.30 U
Percent Solids	%	81	66	83	78	89.0
Trivalent Chromium	MG/KG	3.7	77 M	3.9 M	3.4 M	3.4

Flags assigned during chemistry validation are shown.

Location ID		SB-09B	SB-09B	SB-10	SB-10	SB-10
Sample ID		SB-09B-1-2'	SB-09B-2-3'	SB-10 0-1	SB-10 1-2	SB-10 2-3
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft) Date Sampled		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0
		06/04/13	06/04/13	05/08/13	05/08/13	05/08/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.029 U	0.033 U	0.10 F	0.032 U	0.035 U
Chromium	MG/KG	3.2	3.4	5.7	4.0	2.7
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.62 F	1.40	1.8 U	0.33 U	0.32 U
Percent Solids	%	85.0	82.0	77	81	83
Trivalent Chromium	MG/KG	2.6	2.0 F	5.7	4.0	2.7

Flags assigned during chemistry validation are shown.

Location ID		SB-11	SB-11	SB-11	SB-11A	SB-11A
Sample ID		SB-011 0-1	SB-011 1-2	SB-011 2-3	SB-11A 0-1	SB-11A 1-2
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft) Date Sampled		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
		05/08/13	05/08/13	05/08/13	06/05/13	06/05/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	1.2	0.21 F	0.029 U	0.042 U	0.038 U
Chromium	MG/KG	150	46	5.2	47 M	19 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	2.9 U	0.35 U	0.33 U	2.1 U	0.38 U
Percent Solids	%	47	78	83	63	72
Trivalent Chromium	MG/KG	150	46	5.2	47 M	19 M

Flags assigned during chemistry validation are shown.

Location ID Sample ID		SB-11A	SB-11B	SB-11B	SB-11B	SB-12
		SB-11A 2-3	SB-11B-0-1'	SB-11B-1-2'	SB-11B-2-3'	SB-12 0-1
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
Date Sampled		06/05/13	06/04/13	06/04/13	06/04/13	05/07/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.031 U	0.026 U	0.029 U	0.033 U	0.029 U
Chromium	MG/KG	4.9 M	3.1	3.7	2,3	3.3 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.96 F	0.52 F	0.31 U	0.31 U	0.40 F
Percent Solids	%	80	89.0	86.0	86.0	88
Frivalent Chromium	MG/KG	4.0 M	2.6	3.7	2.3	2.9 M

Flags assigned during chemistry validation are shown.

Location ID		SB-12	SB-12	SB-12A	SB-12A	SB-12A
Sample ID		SB-12 1-2	SB-12 2-3	SB-12A 0-1	SB-12A 1-2	SB-12A 1-2 DUP
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft) Date Sampled		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	1.0-2.0
		05/07/13	05/07/13	05/09/13	05/09/13	05/09/13
Parameter	Units					Field Duplicate (1-1)
Total Metals						
Cadmium	MG/KG	0.031 U	0.049 F	1.4 M	0.083 M	0.038 M
Chromium	MG/KG	3.5 M	5.9 M	200	13 F	4.7 F
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.70 F	1.7 U	2,4 U	0.36 U	0.70 F
Percent Solids	%	87	80	56	75	85
Trivalent Chromium	MG/KG	2.8 M	5.9 M	200	13 F	4.0 F

Flags assigned during chemistry validation are shown.

Location ID Sample ID Matrix		SB-12A	SB-12B	SB-12B	SB-12B	SB-13
		SB-12A 2-3	SB-12B 0-1	SB-12B 1-2	SB-12B 2-3	SB-13 0-1'
		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
Date Sampled		05/09/13	06/05/13	06/05/13	06/05/13	05/07/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.067 M	0.039 U	0.033 U	0.030 U	0.10 F
Chromium	MG/KG	12	56 M	6.1 M	7.1 M	22 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.42 F	2.0 U	0.34 U	0.33 U	3.5
Percent Solids	%	79	68	81	83	83
Trivalent Chromium	MG/KG	11	56 M	6.1 M	7.1 M	18 M

Flags assigned during chemistry validation are shown.

Location ID		SB-13	SB-13	SB-13A	SB-13A	SB-13A
Sample ID		SB-13 1-2'	SB-13 2-3'	SB-13A 0-1	SB-13A 1-2	SB-13A 2-3
Matrix		Soil	Soil	Soil	Soil	Soil
Depth interval (ft)		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		05/07/13	05/07/13	05/09/13	05/09/13	05/09/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.027 U	0.031 U	0.14 M	0.073 M	0.034 UM
Chromium	MG/KG	2.8 M	6.3 M	23	7.0	7.8
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.67 F	0.85 F	0.32 U	0.38 F	0.34 U
Percent Solids	%	90	82	85	88	79
Trivalent Chromium	MG/KG	2.1 M	5.5 M	23	6.6	7.8

Flags assigned during chemistry validation are shown.

Location ID		SB-14	SB-14	SB-14	SB-15	SB-15
Sample ID		SB-14 0-1'	SB-14 1-2'	SB-14 2-3	SB-15 0-1	SB-15 1-2
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
Date Sampled		05/07/13	05/07/13	05/07/13	05/07/13	05/07/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.059 F	0.031 U	0.030 U	0.081 F	0.026 U
Chromium	MG/KG	23 M	3.2 M	5.4 M	29 M	5.9 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	3.1	0.32 U	1.6 U	1.9	0.64 F
Percent Solids	%	87	85	86	88	89
Trivalent Chromium	MG/KG	20 M	3.2 M	5.4 M	27 M	5.3 M

Flags assigned during chemistry validation are shown.

Location ID		SB-15	SB-15	SB-16	SB-16	SB-16
Sample ID		SB-15 (DUP) 2-3	SB-15 2-3	SB-16 0-1	SB-16 1-2	SB-16 2-3
Matrix		Soil	Soil 2.0-3.0	Soil	Soil	Soil
Depth Interval (ft)		2.0-3.0		0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		05/07/13	05/07/13	05/07/13	05/07/13	05/07/13
Parameter	Units	Field Duplicate (1-1)				
Total Metals						
Cadmium	MG/KG	0.031 U	0.032 U	0.15 F	0.041 F	0.027 U
Chromium	MG/KG	4.2 M	5.3 M	84 M	5.4 M	3.2 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	2.9 F	0.33 U	2.3 F	0.89 F	0.44 F
Percent Solids	%	83	82	81	85	84
Trivalent Chromium	MG/KG	1.3 M	5.3 M	81 M	4.5 M	2.8 M

Flags assigned during chemistry validation are shown.

Location ID		SB-16A	SB-16A	SB-16A	SB-16B	SB-16B
Sample ID		SB-16A 0-1'	SB-16A 1-2'	SB-16A 2-3'	SB-16B 0-1'	SB-16B 1-2
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
Date Sampled		06/12/13	06/12/13	06/12/13	06/12/13	06/12/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.052 F	0.13 F	0.12 F	0.030 U	0.033 U
Chromium	MG/KG	5.1 M	6.4 M	10 M	8.9 M	12 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	0.34 U	0.36 U	0.32 U	0.33 U
Percent Solids	%	82	80	75	84	83
Trivalent Chromium	MG/KG	5.1 M	6.4 M	10 M	8.9 M	12 M

Flags assigned during chemistry validation are shown.

Location ID		SB-16B	SB-17	SB-17	SB-17	SB-17A
Sample ID		\$B-16B 2-3'	SB-17 0-1	SB-17 1-2	SB-17 2-3	SB-17A 0-1'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
Date Sampled		06/12/13	05/07/13	05/07/13	05/07/13	06/12/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.032 U	1.1	0.028 U	0.033 U	0.14 F
Chromium	MG/KG	3.5 M	1,100 M	3.8 M	4.2 M	8.2 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	9.4	0.31 U	0.32 U	0.36 U
Percent Solids	%	83	69	87	84	74
Trivalent Chromium	MG/KG	3.5 M	1,091 M	3.8 M	4.2 M	8.2 M

Flags assigned during chemistry validation are shown.

Location ID		SB-17A	SB-17A	SB-17B	SB-17B	SB-17B
Sample ID		SB-17A 1-2'	SB-17A 2-3'	SB-17B 0-1'	SB-17B 1-2'	SB-17B 2-3'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		06/12/13	06/12/13	06/12/13	06/12/13	06/12/13
Parameter	Units					
Total Metals			· · · · · · · · · · · · · · · · · · ·			
Cadmium	MG/KG	0.21 F	0.032 U	0.11 F	0.035 U	0.033 U
Chromium	MG/KG	12 M	4.1 M	5.9 M	3.2 M	4.0 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.35 U	0.33 U	0.91 F	0.33 U	0.33 U
Percent Solids	%	78	82	77	83	82
Trivalent Chromium	MG/KG	12 M	4.1 M	5.0 M	3.2 M	4.0 M

Flags assigned during chemistry validation are shown.

Location ID		SB-17C	SB-17C	SB-17C	SB-17D	SB-17D
Sample ID		SB-17C 0-1'	SB-17C 1-2'	SB-17C 2-3'	SB-17D 0-1	SB-17D 1-2'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
Date Sampled		06/12/13	06/12/13	06/12/13	06/12/13	06/12/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.065 F	0.032 U	0.031 U	0.030 U	0.032 U
Chromium	MG/KG	11 M	8.2 M	6.1 M	4.3 M	12 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	0.33 U	0.34 U	0.30 U	0.52 F
Percent Solids	%	82	81	80	92	86
Trivalent Chromium	MG/KG	1 1 M	8.2 M	6.1 M	4.3 M	12 M

Flags assigned during chemistry validation are shown.

Location ID		SB-17D	SB-17D	SB-18	SB-18	SB-18
Sample ID		SB-17D 1-2'DUP	SB-17D 2-3'	SB-18 0-1'	SB-18 1-2'	SB-18 2-3'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		06/12/13	06/12/13	05/07/13	05/07/13	05/07/13
Parameter	Units	Field Duplicate (1-1)				
Total Metals						
Cadmium	MG/KG	0.033 U	0.032 U	0.18 F	0.041 F	0.029 U
Chromium	MG/KG	12 M	9.0 M	130 M	38 M	4.2 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.32 U	0.32 U	2.7 F	0.78 F	0.32 U
Percent Solids	%	85	84	68	84	83
Trivalent Chromium	MG/KG	12 M	9.0 M	127.3 M	37 M	4.2 M

Flags assigned during chemistry validation are shown.

Location ID		SB-18A	SB-18A	SB-18A	SB-18B	SB-18B
Sample ID		SB-18A 0-1'	SB-18A 1-2'	SB-18A 2-3'	SB-18B 0-1'	SB-18B 1-2'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
Date Sampled		06/12/13	06/12/13	06/12/13	06/12/13	06/12/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.13 F	0.032 U	0.032 U	0,066 F	0.031 U
Chromium	MG/KG	12 M	4.4 M	3.9 M	7.9 M	5.7 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.34 U	0.33 U	0.33 U	0.33 U	0.36 F
Percent Solids	%	81	83	83	81	83
Trivalent Chromium	MG/KG	12 M	4.4 M	3.9 M	7.9 M	5.3 M

Flags assigned during chemistry validation are shown.

Location ID		SB-18B	SB-18C	SB-18C	SB-18C	SB-18D
Sample ID		SB-18B 2-3'	SB-18C 0-1'	SB-18C 1-2'	SB-18C 2-3'	SB-18D 0-1'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
Date Sampled		06/12/13	06/12/13	06/12/13	06/12/13	06/12/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.031 U	0.42 F	0.046 F	0.034 U	0.061 F
Chromium	MG/KG	3.9 M	83 M	18 M	5,3 M	7.2 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	1.2 F	0.76 F	0.34 U	0.31 U
Percent Solids	%	82	64	84	79	87
Trivalent Chromium	MG/KG	3.9 M	81 M	17 M	5.3 M	7.2 M

Flags assigned during chemistry validation are shown.

Location ID		SB-18D	SB-18D	SB-18D	SB-19	SB-19
Sample ID		SB-18D 1-2'	SB-18D 2-3'	SB-18D 2-3'DUP	SB-19(0-1)	SB-19(1-2)
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		1.0-2.0	2.0-3.0	2.0-3.0	0.0-1.0	1.0-2.0
Date Sampled		06/12/13	06/12/13	06/12/13	05/14/13	05/14/13
Parameter	Units			Field Duplicate (1-1)		
Total Metals						
Cadmium	MG/KG	0.029 U	0.034 U	0,025 U	1.0	0.40 F
Chromium	MG/KG	2.8 M	5.5 M	5.3 M	57 M	170 M
Miscellaneous Parameters			-			
Hexavalent Chromium	MG/KG	0.31 U	0.33 U	0.33 U	1.8 U	1.9 F
Percent Solids	%	88	81	81	73	73
Trivalent Chromium	MG/KG	2.8 M	5.5 M	5.3 M	57 M	160 M

Flags assigned during chemistry validation are shown.

Location ID		SB-19	SB-19A	SB-19A	SB-19A	SB-19B
Sample ID		SB-19(2-3)	SB-19A 0-1	SB-19A 1-2	SB-19A 2-3	SB-19B 0-1'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
Date Sampled		05/14/13	05/16/13	05/16/13	05/16/13	06/13/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.12 F	0.034 U	0.028 U	0.55 F	0.031 U
Chromium	MG/KG	6.6 M	5.6	2.5	18	4.4
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.34 U	3.5 U	0.40 F	9.7 U	0.35 U
Percent Solids	%	79	76	89	28	78
Trivalent Chromium	MG/KG	6.6 M	5.6	2.1 F	18	4.4

Flags assigned during chemistry validation are shown.

Location ID		SB-19B	SB-19B	SB-20	SB-20	SB-20
Sample ID		SB-19B 1-2'	SB-19B 2-3'	SB-20(0-1)	SB-20(1-2)	SB-20(2-3)
Matrix		Soil	Soil 2.0-3.0	Soil	Soil	Soil
Depth Interval (ft)		1.0-2.0		0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		06/13/13	06/13/13	05/14/13	05/14/13	05/14/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.042 U	0.069 F	0.92 F	0.034 U	0.031 U
Chromium	MG/KG	7.0	13	23 M	8.0 M	3.6 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.40 U	4.4 U	21 F	4.0 U	0.51 F
Percent Solids	%	67	61	28	67	82
Trivalent Chromium	MG/KG	7.0	13	2.1 M	8.0 M	3.1 M

Flags assigned during chemistry validation are shown.

Location ID		SB-20A	SB-20A	SB-20A	SB-21	SB-21
Sample ID		SB-20A 0-1	SB-20A 1-2	SB-20A 2-3	SB-21 0-1	SB-21 1-2
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
Date Sampled		05/16/13	05/16/13	05/16/13	05/15/13	05/15/13
Parameter	Units					
Total Metals			2			
Cadmium	MG/KG	0.045 U	0.033 U	0.029 U	0.052 UM	0.029 UM
Chromium	MG/KG	11	4.6	4.6	12	3.4
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	4.5 U	0.34 U	0.33 U	3.0 F	0.33 U
Percent Solids	%	61	80	82	52	83
Trivalent Chromium	MG/KG	11	4.6	4.6	9.3	3.4

Flags assigned during chemistry validation are shown.

Location ID		SB-21	SB-21A	SB-21A	SB-21A	SB-22
Sample ID		SB-21 2-3	SB-21A 0-1	SB-21A 1-2	SB-21A 2-3	SB-22 0-1
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
Date Sampled		05/15/13	05/16/13	05/16/13	05/16/13	05/15/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.034 UM	0.80 F	0.035 U	0.033 U	0.043 UM
Chromium	MG/KG	2.8	46	3.0	2.7	13
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.41 F	8.9 F	0.56 F	0.63 F	2.2 U
Percent Solids	%	80	35	79	79	62
Trivalent Chromium	MG/KG	2.4 F	37	2.5	2.0 F	13

Flags assigned during chemistry validation are shown.

Location ID		SB-22	SB-22	SB-22A	SB-22A	SB-22A
Sample ID		SB-22 1-2	SB-22 2-3	SB-22A 0-1	SB-22A 1-2	SB-22A 2-3
Matrix		Soil	Soil 2.0-3.0	Soil	Soil	Soil
Depth Interval (ft)		1.0-2.0		0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		05/15/13	05/15/13	05/16/13	05/16/13	05/16/13
Parameter	Units					
Total Metais						
Cadmium	MG/KG	0.033 UM	0.027 UM	0.045 U	0.032 U	0.029 U
Chromium	MG/KG	3.7	3.4	9.9	3.7	3.7
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	0.33 U	4.1 U	0.52 F	0.77 F
Percent Solids	%	82	82	65	83	83
Trivalent Chromium	MG/KG	3.7	3.4	9.9	3.2	2.9

Flags assigned during chemistry validation are shown.

Location ID		SB-23	SB-23	SB-23	SB-24	SB-24
Sample ID		SB-23 0-1	SB-23 1-2	SB-23 2-3	SB-24(0-1)	SB-24(1-2)
Matrix		Soil	Soil 1.0-2.0	Soil	Soil	Soil
Depth Interval (ft)		0.0-1.0		2.0-3.0	0.0-1.0	1.0-2.0
Date Sampled		05/16/13	05/16/13	05/16/13	05/14/13	05/14/13
Parameter	Units				7j	
Total Metals						
Cadmium	MG/KG	0.042 U	0.032 U	0.025 U	0.39 F	0.061 F
Chromium	MG/KG	18	3.2	3.4	79 M	81 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	4.6 U	0.65 F	0.33 U	0.34 F	0.59 F
Percent Solids	%	59	82	82	79	82
Trivalent Chromium	MG/KG	18	2.6	3.4	79 M	81 M

Flags assigned during chemistry validation are shown.

Location ID Sample ID		SB-24	SB-24	SB-24A	SB-24A	SB-24A
		SB-24(1-2)DUP	SB-24(2-3)	SB-24A 0-1'	SB-24A 1-2'	SB-24A 2-3'
Matrix		Soil	Soil 2.0-3.0	Soil	Soil	Soil
Depth Interval (ft)		1.0-2.0		0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		05/14/13	05/14/13	06/13/13	06/13/13	06/13/13
Parameter	Units	Field Duplicate (1-1)				
Total Metals						
Cadmium	MG/KG	0.085 F	0.13 F	0.032 U	0.029 U	0.041 F
Chromium	MG/KG	76 M	46 M	4.3	2.6	4.0
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.82 F	0.37 F	0.31 U	0.31 U	0.38 U
Percent Solids	%	81	83	88	86	71
Trivalent Chromium	MG/KG	75 M	46 M	4.3	2.6	4.0

Flags assigned during chemistry validation are shown.

Location ID		SB-24A	SB-24A	SB-25	SB-25	SB-25
Sample ID		SB-24A 3-4'	SB-24A 4-5'	SB-25 0-1	SB-25 1-2	SB-25 2-3
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		3.0-4.0	4.0-5.0	0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		06/13/13	06/13/13	05/15/13	05/15/13	05/15/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.029 U	0.075 F	0.11 UM	2.1 M	0.83 M
Chromium	MG/KG	8.9	13	420	260	110
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	0.33 U	10 U	15 U	17 U
Percent Solids	%	82	82	26	18	16
Trivalent Chromium	MG/KG	8.9	13	420	260	110

Flags assigned during chemistry validation are shown.

Location ID Sample ID		SB-26	SB-26	SB-26	SB-26	SB-26
		SB-26 0-1	SB-26 1-2	SB-26 2-3	\$B-26 1-2'	SB-26 2-3'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		0.0-1.0	1.0-2.0	2.0-3.0	1.0-2.0	2.0-3.0
Date Sampled		05/15/13	05/15/13	05/15/13	06/13/13	06/13/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	1.4 M	0.041 UM	0.10 UM	0.031 U	0.026 U
Chromium	MG/KG	130	7.7	51	3.3	2.3
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	9.7 U	2.2 U	4.9 U	0.32 U	0.32 U
Percent Solids	%	28	62	28	83	84
Trivalent Chromium	MG/KG	130	7.7	51	3.3	2.3 F

Flags assigned during chemistry validation are shown.

Location ID		SB-26	SB-27	SB-27	SB-27	SB-28
Sample ID		SB-26 3-4'	SB-27 0-1	SB-27 1-2	SB-27 2-3	SB-28 0-1
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		3.0-4.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
Date Sampled		06/13/13	05/15/13	05/15/13	05/15/13	05/15/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.031 U	0,29 UM	0.032 UM	0.034 UM	0.22 UM
Chromium	MG/KG	3.0	42	2.6	5.3	30
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.32 U	6.3 U	0.32 U	0.33 U	2.3 U
Percent Solids	%	85	47	83	82	59
Trivalent Chromium	MG/KG	3.0	42	2.6	5.3	30

Flags assigned during chemistry validation are shown.

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Location ID		SB-28	SB-28	SB-29	SB-29	SB-29
Sample ID		SB-28 1-2	SB-28 2-3	SB-29 0-1	\$B-29 1-2	\$B-29 2-3
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		05/15/13	05/15/13	05/15/13	05/15/13	05/15/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.032 UM	0.031 UM	0.038 UM	0.028 UM	0.033 UM
Chromium	MG/KG	4.1	3.9	14	4.1	3.2
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.44 F	0.32 U	2.0 U	0.36 F	0.33 U
Percent Solids	%	82	83	67	80	81
Trivalent Chromium	MG/KG	3.7	3.9	14	3.7	3.2

Flags assigned during chemistry validation are shown.

Location ID		SB-30	SB-30	SB-30	SB-30B	SB-30B
Sample ID Matrix Depth Interval (ft) Date Sampled		SB-30(0-1)	SB-30(1-2)	SB-30(2-3)	SB-30B 0-1	SB-30B 1-2
		Soil	Soil	Soil	Soil	Soil
		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
		05/14/13	05/14/13	05/14/13	06/05/13	06/05/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.44 F	0.12 F	0.029 U	0.037 U	0.028 U
Chromium	MG/KG	55 M	25 M	52 M	4.8 M	7.0 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	2.1 U	0,33 U	0.33 U	0.36 U	0.33 U
Percent Solids	%	63	81	82	75	81
Trivalent Chromium	MG/KG	55 M	25 M	52 M	4.8 M	7.0 M

Flags assigned during chemistry validation are shown.

Location ID		\$B-30B	SB-30B	SB-31	SB-31	SB-31
Sample ID		SB-30B 2-3	SB-30B 3-4	SB-31 0-1	SB-31 1-2	SB-31 2-3
Matrix Depth Interval (ft) Date Sampled		Soil	Soil	Soil	Soil	Soil
		2.0-3.0	3.0-4.0	0.0-1.0	1.0-2.0	2.0-3.0
		06/05/13	06/05/13	05/15/13	05/15/13	05/15/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.041 F	0.035 U	0,030 UM	0.031 UM	0.034 UM
Chromium	MG/KG	19 M	25 M	1.7	2.7	2.7
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	0.33 U	3.2 U	0.32 U	0.32 U
Percent Solids	%	82	82	84	83	83
Trivalent Chromium	MG/KG	19 M	25 M	1.7 F	2.7	2.7

Flags assigned during chemistry validation are shown.

Location ID		SB-32	SB-32	SB-32	SB-32	SB-33
Sample ID Matrix Depth Interval (ft)		SB-32 0-1	SB-32 1-2	SB-32 1-2(DUP)	SB-32 2-3	SB-33 0-1
		Soil	Soil 1.0-2.0	Soil	Soil	Soil
		0.0-1.0		1.0-2.0	2.0-3.0	0.0-1.0
Date Sampled		05/15/13	05/15/13	05/15/13	05/15/13	05/15/13
Parameter	Units			Field Duplicate (1-1)		
Total Metals						
Cadmium	MG/KG	0.041 UM	0.032 UM	0.029 UM	0.031 UM	0.031 UM
Chromium	MG/KG	83	4.9	4.4	3.7	6.3
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	2.0 U	0.33 U	0.32 U	0.33 U	1.8 U
Percent Solids	%	67	83	83	83	74
Trivalent Chromium	MG/KG	83	4.9	4.4	3.7	6.3

Flags assigned during chemistry validation are shown.

Location ID		SB-33	SB-33	SB-34	SB-34	SB-34
Sample ID		SB-33 1-2	SB-33 2-3	SB-34 0-1	SB-34 1-2	SB-34 2-3
Matrix Depth Interval (ft) Date Sampled		Soil	Soil	Soil	Soil	Soil
		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0
		05/15/13	05/15/13	05/15/13	05/15/13	05/15/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.029 UM	0.030 UM	0.034 UM	0.031 UM	0.032 UM
Chromium	MG/KG	3,1	3.4	7.8	2.9	3.5
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.41 F	0.33 U	1.8 U	0.32 U	0.33 U
Percent Solids	%	85	82	76	84	82
Trivalent Chromium	MG/KG	2.7	3.4	7.8	2.9	3.5

Flags assigned during chemistry validation are shown.

Location ID	1	SB-35	SB-35	SB-35	SB-36	SB-36
Sample ID Matrix Depth Interval (ft) Date Sampled		SB-35 0-1	SB-35 1-2	SB-35 2-3	SB-36(0-1)	SB-36(1-2)
		Soil	Soil 1.0-2.0 05/15/13	Soil	Soil	Soil
		0.0-1.0		2.0-3.0	0.0-1.0	1.0-2.0
		05/15/13		05/15/13	05/14/13	05/14/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.038 UM	0.030 UM	0.026 UM	0.55 F	0.039 F
Chromium	MG/KG	9.3	3.0	3.5	74 M	3,9 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	2.1 F	0.57 F	0.33 U	2.1 U	0.59 F
Percent Solids	%	73	83	83	63	82
Trivalent Chromium	MG/KG	7.3	2.4	3.5	74 M	3.3 M

Flags assigned during chemistry validation are shown.

Location ID		SB-36	SB-36A	SB-36A	SB-36A	SB-36B
Sample ID Matrix Depth Interval (ft) Date Sampled		SB-36(2-3)	SB-36A 0-1	SB-36A 1-2	SB-36A 2-3	SB-36B 0-1
		Soil	Soil	Soil	Soil	Soil
		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
		05/14/13	06/05/13	06/05/13	06/05/13	06/05/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.036 U	0.034 U	0.030 U	0.032 U	0.031 U
Chromium	MG/KG	3,2 M	3.9 M	3.1 M	3.2 M	4.9 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.34 U	1.9 U	0.32 U	0.33 U	0.30 U
Percent Solids	%	80	73	84	83	89
Trivalent Chromium	MG/KG	3.2 M	3.9 M	3.1 M	3.2 M	4.9 M

Flags assigned during chemistry validation are shown.

Location ID Sample ID		SB-36B	SB-36B	SB-36B	SB-37	SB-37
		SB-36B 0-1 DUP	SB-36B 1-2	SB-36B 2-3	SB-37(0-1)	\$B-37(1-2)
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
Date Sampled		06/05/13	06/05/13	06/05/13	05/14/13	05/14/13
Parameter	Units	Field Duplicate (1-1)				
Total Metals						
Cadmium	MG/KG	0.032 U	0.032 U	0.031 U	0.065 F	0.031 U
Chromium	MG/KG	4.1 M	4.4 M	2,8 M	2.4 M	2.0 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.31 U	0.33 U	0.33 U	1.7 U	0.76 F
Percent Solids	%	88	82	81	79	83
Frivalent Chromium	MG/KG	4.1 M	4.4 M	2.8 M	2.4 M	1.3 M

Flags assigned during chemistry validation are shown.

Location ID		SB-37	SB-38	SB-38	SB-38	SB-39
Sample ID Matrix Depth Interval (ft) Date Sampled		SB-37(2-3)	SB-38(0-1)	SB-38(1-2)	SB-38(2-3)	SB-39 0-1
		Soil	Soil	Soil	Soil	Soil
		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
		05/14/13	05/14/13	05/14/13	05/14/13	05/09/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.032 U	0.082 F	0.032 F	0.053 F	0.13 M
Chromium	MG/KG	2.5 M	5.7 M	2.9 M	2.7 M	19
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	1.5	1.7 U	0.32 U	0.33 U	2.1 F
Percent Solids	%	83	78	85	82	67
Trivalent Chromium	MG/KG	1.0 M	5.7 M	2.9 M	2.7 M	16.9

Flags assigned during chemistry validation are shown.

Location ID		SB-39	SB-39	SB-40	SB-40	SB-40
Sample ID	Sample ID		SB-39 2-3	SB-40 0-1	SB-40 1-2	SB-40 2-3
Matrix Depth Interval (ft) Date Sampled		Soil	Soil 2.0-3.0 05/09/13	Soil	Soil	Soil
		1.0-2.0		0.0-1.0	1.0-2.0	2.0-3.0
		05/09/13		05/09/13	05/09/13	05/09/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.032 UM	0.030 UM	0.11 M	0.029 UM	0.034 UM
Chromium	MG/KG	2.2	2.7	5.8	2.5	3.1
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.44 F	0.33 U	2.0 U	0.33 U	0.51 F
Percent Solids	%	83	81	66	82	82
Trivalent Chromium	MG/KG	1.8 F	2.7	5.8	2.5	2.6

Flags assigned during chemistry validation are shown.

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Location ID		SB-41	SB-41	SB-41	SB-42	SB-42
Sample ID		SB-41 0-1	SB-41 1-2	SB-41 2-3	SB-42(0-1)	SB-42(1-2)
Matrix Depth Interval (ft) Date Sampled		Soil	Soil	Soil	Soil	Soil
		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
		05/09/13	05/09/13	05/09/13	05/14/13	05/14/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.033 UM	0.033 UM	0.040 M	0.78 F	0.26 F
Chromium	MG/KG	9.7	3.1	3.8	69 M	75 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	1.8 U	0.32 U	0.33 U	2.5 U	0.85 F
Percent Solids	%	73	84	82	54	79
Trivalent Chromium	MG/KG	9.7	3.1	3.8	69 M	74 M

Flags assigned during chemistry validation are shown.

Location ID		SB-42	SB-42A	SB-42A	SB-42A	SB-42B
Sample ID		SB-42(2-3)	SB-42A 0-1	SB-42A 1-2	SB-42A 2-3	SB-42B 0-1
Matrix Depth Interval (ft) Date Sampled		Soil	Soil	Soil	Soil	Soil
		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
		05/14/13	06/05/13	06/05/13	06/05/13	06/05/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.033 U	0.034 U	0.034 U	0.035 U	0.035 U
Chromium	MG/KG	3.3 M	45 M	3.4 M	3.6 M	3.7 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.39 F	0.37 F	0.34 U	0.34 U	0.33 U
Percent Solids	%	83	77	80	79	82
Trivalent Chromium	MG/KG	2.9 M	44.6 M	3.4 M	3.6 M	3.7 M

Flags assigned during chemistry validation are shown.

Location ID		SB-42B	SB-42B	SB-43	SB-43	SB-43
Sample ID Matrix Depth Interval (ft) Date Sampled		SB-42B 1-2	SB-42B 2-3	SB-43(0-1)	SB-43(0-1)DUP	SB-43(1-2)
		Soil	Soil 2.0-3.0 06/05/13	Soil	Soil	Soil
		1.0-2.0		0.0-1.0	0.0-1.0	1.0-2.0
		06/05/13		05/14/13	05/14/13	05/14/13
Parameter	Units				Field Duplicate (1-1)	
Total Metals						
Cadmium	MG/KG	0.028 U	0.027 U	0.063 F	0.037 F	0.033 U
Chromium	MG/KG	3.7 M	6.9 M	5.0 M	5.1 M	2.4 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.32 U	0.33 U	1.9 U	1.8 U	0.32 U
Percent Solids	%	84	82	71	73	84
Trivalent Chromium	MG/KG	3.7 M	6.9 M	5.0 M	5.1 M	2.4 M

Flags assigned during chemistry validation are shown.

Location ID		SB-43	SB-44	SB-44	SB-44	SB-45
Sample ID		SB-43(2-3)	SB-44(0-1)	SB-44(1-2)	SB-44(2-3)	SB-45 0-1
Matrix Depth Interval (ft) Date Sampled		Soil	Soil	Soil	Soil	Soil
		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
		05/14/13	05/14/13	05/14/13	05/14/13	05/09/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.030 U	0.12 F	0.058 F	0.047 F	0.085 M
Chromium	MG/KG	2.3 M	2.9 M	3.2 M	2.3 M	2.4
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.65 F	1.7 U	1.6 U	0.32 U	1.6 U
Percent Solids	%	81	81	83	85	86
Frivalent Chromium	MG/KG	1.7 M	2.9 M	3.2 M	2.3 M	2.4

Flags assigned during chemistry validation are shown

Location ID		SB-45	SB-45	SB-46	SB-46	SB-46
Sample ID		SB-45 1-2	SB-45 2-3	SB-46 0-1	SB-46 DUP 0-1	SB-46 1-2
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		1.0-2.0	2.0-3.0	0.0-1.0	0.0-1.0	1.0-2.0
Date Sampled		05/09/13	05/09/13	05/09/13	05/09/13	05/09/13
Parameter	Units				Field Duplicate (1-1)	
Total Metals						
Cadmium	MG/KG	0.030 UM	0.030 UM	0.096 M	0.070 M	0.033 UM
Chromium	MG/KG	3.2	1.9	2.1	2.2	1.3
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.38 F	0.32 U	1.7 U	1.7 U	0.32 U
Percent Solids	%	91	85	79	79	85
Frivalent Chromium	MG/KG	2.8	1.9 F	2.1 F	2.2 F	1.3 F

Flags assigned during chemistry validation are shown.

Location ID		SB-46	SB-47	SB-47	SB-47	SB-47
Sample ID		SB-46 2-3	SB-47 0-1	SB-47 1-2	SB-47 DUP 1-2	SB-47 2-3
Matrix Depth Interval (ft) Date Sampled		Soil	Soil 0.0-1.0 05/09/13	Soil	Soil	Soil
		2.0-3.0		1.0-2.0	1.0-2.0	2.0-3.0
		05/09/13		05/09/13	05/09/13	05/09/13
Parameter	Units				Field Duplicate (1-1)	
Total Metals						
Cadmium	MG/KG	0.033 UM	0.091 M	0.034 UM	0.026 UM	0.031 UM
Chromium	MG/KG	1.8	5.9	2.1	2.5	4.5
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	1.8 U	0.32 U	0.32 U	0.34 U
Percent Solids	%	82	75	83	84	79
Frivalent Chromium	MG/KG	1.8 F	5.9	2.1 F	2.5	4.5

Flags assigned during chemistry validation are shown.

Location ID		SB-48	SB-48	SB-48	SB-48A	SB-48A
Sample ID		SB-48(0-1)	SB-48(1-2)	SB-48(2-3)	SB-48A 0-1	SB-48A1-2
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
Date Sampled		05/14/13	05/14/13	05/14/13	06/05/13	06/05/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.54 F	0.050 F	0,035 U	0.031 U	0.034 U
Chromium	MG/KG	89 M	8.4 M	4.8 M	25 M	39 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	1.9 F	0.53 F	0.36 F	0.35 U	0.68 F
Percent Solids	%	70	83	81	77	81
Trivalent Chromium	MG/KG	87 M	7.9 M	4.4 M	25 M	38 M

Flags assigned during chemistry validation are shown.

Location ID		SB-48A	SB-48B	SB-48B	SB-48B	SB-49
Sample ID		SB-48A 2-3	SB-48B 0-1	SB-48B 1-2	SB-48B 2-3	SB-49(0-1)
Matrix	İ	Soil	Soil	Soil	Soil	Soil
Depth Interval (ft) Date Sampled		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
		06/05/13	06/05/13	06/05/13	06/05/13	05/14/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.033 U	0.031 U	0.030 U	0.034 U	0.067 F
Chromium	MG/KG	3.1 M	2.5 M	3.3 M	2.8 M	4.3 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.34 U	0.31 U	0.32 U	0.32 U	1.7 U
Percent Solids	%	78	87	84	84	81
Trivalent Chromium	MG/KG	3.1 M	2.5 M	3.3 M	2.8 M	4.3 M

Flags assigned during chemistry validation are shown.

Location ID		SB-49	SB-49	SB-50	SB-50	SB-50
Sample ID		SB-49(1-2)	SB-49(2-3)	SB-50(0-1)	SB-50(1-2)	SB-50(1-2)DUP
Matrix Depth Interval (ft) Date Sampled		Soil	Soil	Soil	Soil	Soil
		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	1.0-2.0
		05/14/13	05/14/13	05/14/13	05/14/13	05/14/13
Parameter	Units					Field Duplicate (1-1)
Total Metals						
Cadmium	MG/KG	0.033 U	0.032 U	0.053 F	0.031 U	0.029 U
Chromium	MG/KG	1.9 M	2.7 M	4.2 M	3.6 M	5.0 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.50 F	0.42 F	1.6 U	0.83 F	0.32 U
Percent Solids	%	84	81	83	84	84
Trivalent Chromium	MG/KG	1.4 M	2.3 M	4.2 M	2.7 M	5.0 M

Flags assigned during chemistry validation are shown.

Location ID		SB-50	SB-51	SB-51	SB-51	SB-51
Sample ID		\$B-50(2-3)	SB-51 0-1	SB-51 1-2	SB-51 2-3	SB-51 2-3 DUP
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	2.0-3.0
Date Sampled		05/14/13	05/09/13	05/09/13	05/09/13	05/09/13
Parameter	Units					Field Duplicate (1-1)
Total Metals						
Cadmium	MG/KG	0.032 U	0.11 M	0.030 UM	0.034 UM	0.037 M
Chromium	MG/KG	2.3 M	6.4	2.4	3.2	3.0
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	1.8 U	0.33 U	0.34 U	0.34 U
Percent Solids	%	81	75	82	79	80
Trivalent Chromium	MG/KG	2.3 M	6.4	2.4	3.2	3.0

Flags assigned during chemistry validation are shown.

Location ID		SB-52	SB-52	SB-52	SB-53	SB-53
Sample ID Matrix Depth Interval (ft) Date Sampled		SB-52 0-1	SB-52 1-2	SB-52 2-3	SB-53 0-1	SB-53 1-2
		Soil	Soil	Soil	Soil	Soil
		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
		05/09/13	05/09/13	05/09/13	05/09/13	05/09/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.093 M	0.026 UM	0.030 UM	0.048 M	0.029 M
Chromium	MG/KG	3.7	2.2	1.5	2,5	2.3
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.31 U	0.30 U	0.33 U	3.8 F	0.31 U
Percent Solids	%	87	90	83	85	86
Frivalent Chromium	MG/KG	3.7	2.2	1.5 F	0.15 U	2.3

Flags assigned during chemistry validation are shown.

Location ID		SB-53	SB-54	SB-54	SB-54	SB-57
Sample ID		SB-53 2-3	SB-54 0-1	SB-54 1-2	SB-54 2-3	\$B-57 0-1
Matrix Depth Interval (ft) Date Sampled		Soil	Soil	Soil	Soil	Soil
		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
		05/09/13	06/05/13	06/05/13	06/05/13	06/05/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.030 M	0.034 U	0.033 U	0.038 U	0.030 U
Chromium	MG/KG	3.1	5.1 M	4.1 M	15 M	5.3 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	1.7 U	0.41 F	1.9 U	0.32 U
Percent Solids	%	83	82	81	71	83
Trivalent Chromium	MG/KG	3.1	5.1 M	3.7 M	15 M	5.3 M

Flags assigned during chemistry validation are shown.

Location ID		SB-57	SB-57	SB-60	SB-60	SB-60
Sample ID Matrix Depth Interval (ft) Date Sampled		SB-57 1-2	SB-57 2-3	SB-60 0-1'	SB-60 1-2'	SB-60 2-3'
		Soil	Soil	Soil	Soil	Soil
		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0
		06/05/13	06/05/13	06/12/13	06/12/13	06/12/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.032 U	0.039 U	0.063 F	0.030 U	0.030 U
Chromium	MG/KG	4.4 M	8.7 M	5.0 M	3.2 M	3.3 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.92 F	0.45 F	0.30 U	0.31 U	0,32 U
Percent Solids	%	81	73	89	87	85
Trivalent Chromium	MG/KG	3.5 M	8.3 M	5.0 M	3.2 M	3.3 M

Flags assigned during chemistry validation are shown.

Location ID		SB-64	SB-64	SB-64	SB-67	SB-67
Sample ID		SB-64 0-1'	SB-64 1-2'	SB-64 2-3'	SB-67 0-1'	SB-67 1-2'
Matrix Depth Interval (ft) Date Sampled		Soil	Soil	Soil	Soil	Soil
		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
		06/12/13	06/12/13	06/12/13	06/12/13	06/12/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.084 F	0.22 U	0.033 U	0.034 F	0.032 F
Chromium	MG/KG	11 M	29 M	3.8 M	3.4 M	7.5 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.36 U	0.86 F	0.33 U	0.30 U	0.30 U
Percent Solids	%	75	62	81	90	90
Trivalent Chromium	MG/KG	11 M	28 M	3.8 M	3.4 M	7.5 M

Flags assigned during chemistry validation are shown.

Location ID		SB-67	SB-68	SB-68	SB-68	SB-71
Sample ID Matrix		SB-67 2-3'	SB-68 0-1'	SB-68 1-2'	SB-68 2-3'	SB-71 0-1
		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0
Date Sampled		06/12/13	06/12/13	06/12/13	06/12/13	06/05/13
Parameter	Units					
Total Metals				·		
Cadmium	MG/KG	0.039 F	0.072 F	0.028 U	0.027 U	0.032 U
Chromium	MG/KG	9.9 M	4.5 M	2.7 M	4.2 M	37 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.78 F	0.33 U	0,32 U	0.32 U	0.36 U
Percent Solids	%	84	82	84	83	76
Frivalent Chromium	MG/KG	9.1 M	4.5 M	2.7 M	4.2 M	37 M

Flags assigned during chemistry validation are shown-

Location ID Sample ID Matrix Depth Interval (ft) Date Sampled		SB-71	SB-71	SB-71A	SB-71A	SB-71A
		SB-71 1-2	SB-71 2-3	SB-71A 0-1	SB-71A 1-2	SB-71A 2-3
		Soil	Soil	Soil	Soil	Soil
		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0
		06/05/13	06/05/13	06/05/13	06/05/13	06/05/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.026 U	0.027 U	0.034 U	0.028 U	0.034 U
Chromium	MG/KG	5.0 M	3.8 M	8.0 M	3.9 M	4.6 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	0.33 U	0.35 U	0.33 U	0.34 U
Percent Solids	%	83	82	78	83	80
Trivalent Chromium	MG/KG	5.0 M	3.8 M	8.0 M	3.9 M	4.6 M

Flags assigned during chemistry validation are shown.

Location ID Sample ID Matrix Depth Interval (ft) Date Sampled		SB-71B	SB-71B	SB-71B	SB-72	SB-72
		SB-71B 0-1'	SB-71B 1-2' Soil	SB-71B 2-3'	SB-72 0-1	SB-72 0-1 DUP
		Soil		Soil	Soil	Soil
		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	0.0-1.0
		06/12/13	06/12/13	06/12/13	06/05/13	06/05/13
Parameter	Units					Field Duplicate (1-1)
Total Metals						
Cadmium	MG/KG	0.055 F	0.047 F	0.034 U	0.037 U	0.034 U
Chromium	MG/KG	5.9 M	4.8 M	4.5 M	37 M	29 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.44 F	0.32 U	0.34 U	0.36 U	0.36 U
Percent Solids	%	83	84	80	75	75
Trivalent Chromium	MG/KG	5.5 M	4.8 M	4.5 M	37 M	29 M

Flags assigned during chemistry validation are shown.

Location ID Sample ID		SB-72	SB-72 SB-72 2-3	SB-72A	SB-72A	SB-72A
		SB-72 1-2		SB-72A 0-1'	SB-72A 1-2'	SB-72A 2-3'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)		1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0	2.0-3.0
Date Sampled		06/05/13	06/05/13	06/12/13	06/12/13	06/12/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.034 U	0.028 U	0.032 U	0.036 U	0.027 U
Chromium	MG/KG	3.9 M	5.5 M	8.3 M	4.0 M	4.4 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.35 U	0.33 U	0.35 U	0.33 U	0.33 U
Percent Solids	%	78	82	77	82	82
Trivalent Chromium	MG/KG	3.9 M	5,5 M	8.3 M	4.0 M	4.4 M

Flags assigned during chemistry validation are shown.

Location ID Sample ID Matrix Depth Interval (ft) Date Sampled		SB-72B	SB-72B	SB-72B	SB-73	SB-73
		SB-72B 0-1'	SB-72B 1-2' Soil	SB-72B 2-3	SB-73 GRAB	SB-73 0-3 Soil
		Soil		Soil	Soil	
		0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	0.0-3.0
		06/12/13	06/12/13	06/12/13	06/05/13	06/05/13
Parameter	Units					
Total Metals						
Cadmium	MG/KG	0.16 F	0.033 U	0.030 U	0.032 U	0,031 U
Chromium	MG/KG	72 M	9.8 M	4.4 M	15 M	5.7 M
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	0.33 U	0.34 U	0.33 U	0.32 U	0.34 U
Percent Solids	%	83	81	82	84	80
Trivalent Chromium	MG/KG	72 M	9,8 M	4.4 M	15 M	5.7 M

Flags assigned during chemistry validation are shown.

Location ID Sample ID		SB-73A	SB-73A SB-73A 1-2'	SB-73A	SB-74 SB-74 0-1'	SB-74
		SB-73A 0-1'		SB-73A 2-3'		SB-74 1-2'
Matrix		Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)	1	0.0-1.0	1.0-2.0	2.0-3.0	0.0-1.0	1.0-2.0
Date Sampled		06/12/13	06/12/13	06/12/13	06/13/13	06/13/13
Parameter	Units					
Total Metals			· · · · · · · · · · · · · · · · · · ·			
Cadmium	MG/KG	0.027 U	0.030 U	0.029 U	0.033 U	0.033 U
Chromium	MG/KG	24 M	12 M	2.9 M	3.7	3.5
Miscellaneous Parameters						
Hexavalent Chromium	MG/KG	1.7 U	0.33 U	0.34 U	0.33 U	0.33 U
Percent Solids	%	79	83	80	81	82
Trivalent Chromium	MG/KG	24 M	12 M	2.9 M	3.7	3.5

Flags assigned during chemistry validation are shown.

Location ID	1	SB-74	SB-74	SB-74
Sample ID	SB-74 2-3' Soil 2.0-3.0	SB-74 2-3' DUP	SB-74 3-4'	
Matrix		Soil	Soil	
Depth Interval (ft)		2.0-3.0	3.0-4.0	
Date Sampled	06/13/13	06/13/13	06/13/13	
Parameter	Units		Field Duplicate (1-1)	
Total Metals				
Cadmium	MG/KG	0.029 U	0.036 U	0.031 U
Chromium	MG/KG	3.5	2.9	3.2
Miscellaneous Parameters				
Hexavalent Chromium	MG/KG	0.33 U	0.35 U	0.34 U
Percent Solids	%	81	76	80
Trivalent Chromium	MG/KG	3.5	2.9	3.2

Flags assigned during chemistry validation are shown.

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID Matrix		RB-050713	RB050913 Water Quality	RB051413(1)	RB051413(2)	RB051513
		Water Quality		Water Quality	Water Quality	Water Quality
Depth Interval (ft)		(*)	•			
Date Sampled		05/07/13	05/09/13	05/14/13	05/14/13	05/15/13
Parameter	Units	Equipment Blank (1-1)	Equipment Blank (1-1)	Equipment Blank (1-1)	Equipment Blank (2-2)	Equipment Blank (2-2)
Total Metals						
Cadmium	UG/L	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
Chromium	UG/L	6.7 F	1,4 U	2,6 F	3.8 F	1.4 F
Miscellaneous Parameters						
Hexavalent Chromium	MG/L	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020 U
Trivalent Chromium	MG/L	0.0067 F	0.0050 U	0.0050 U	0.0050 U	0.0050 U

Flags assigned during chemistry validation are shown.

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID Matrix		RB051513	RB06-04-13 Water Quality	RB-06-05-13 Water Quality	RB-06-06-13	RB-06-12-13
		Water Quality			Water Quality	Groundwater
Depth Interval (ft)					2002	
Date Sampled		05/15/13	06/04/13	06/05/13	06/06/13	06/12/13
Parameter	Units	Equipment Blank (1-1)	Equipment Blank (1-1)	Equipment Blank (1-1)	Equipment Blank (2-2)	Equipment Blank (1-1)
Total Metals						
Cadmium	UG/L	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
Chromium	UG/L	1.4 U	3.9 F	7.0	1.4 U	1.4 U
Miscellaneous Parameters						
Hexavalent Chromium	MG/L	0.0020 U	0.0020 U	0.0020 UJ	0.0020 UJ	0.0020 U
Trivalent Chromium	MG/L	0.0050 U	0.0050 U	0.0070 F	0.0050 U	0.0050 U

Flags assigned during chemistry validation are shown.

Detection Limits shown are MDL

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TABLE 2 VALIDATED FIELD QC SAMPLE RESULTS SS-041 INITIAL DELINEATION PLATTSBURGH AIR FORCE BASE

Location ID	FIELDQC	
Sample ID	RB-06-13-13	
Matrix		Water Quality
Depth Interval (ft)		· · · · · · · · · · · · · · · · · · ·
Date Sampled		06/13/13
Parameter	Units	Equipment Blank (1-1)
Total Metals		
Cadmium	UG/L	0.39 U
Chromium	UG/L	1.4 U
Miscellaneous Parameters		
Hexavalent Chromium	MG/L	0.0020 U
Trivalent Chromium	MG/L	0.0050 U

Flags assigned during chemistry validation are shown.

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DRAWINGS

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