LANL rec'd FY94

Be sure SWAB knows this is available
Kathy

Department of Energy
Albuquerque Operations Office
Los Alamos Area Office
Los Alamos, New Mexico 87544

MAR 1 1994

Ms. Kathleen Sisneros
New Mexico Environment Department
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, New Mexico 87502

Dear Ms. Sisneros:

Enclosed is a copy of the Phase Report 1C for the Resource Conservation and Recovery Act Facility Investigation (RFI) Work Plan for Operable Unit (OU) 1106 at the Los Alamos National Laboratory. This is the third Phase Report to be submitted for this OU. As discussed with Barbara Driscoll of the EPA, this Phase Report does not contain all of the information originally scheduled for delivery. This is due to unavoidable delays in receiving analytical results from laboratories. The delayed information will be included in a Phase Report Addendum, which will be submitted to your office by December 31, 1994, as arranged with Ms. Driscoll.

If you have any questions about this matter, please call Court Fesmire of my staff at 665-4718.

Sincerely,

Joseph Vozella

Joseph Vozella, Chief
Environmental, Safety and Health Branch

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Phase Report 1C

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10173

Los Alamos
NATIONAL LABORATORY

ENVIRONMENTAL RESTORATION PROGRAM

Fact Sheet for Operable Unit 1106 Resource Conservation and Recovery Act Facility Investigation Work Plan

September 1993

Acronyms

EPA
US Environmental Protection Agency

ER
Environmental Restoration (Program)

OU
Operable unit

PRS
Potential release site

RCRA
Resource Conservation and Recovery Act

RFI
RCRA facility investigation

TA
Technical area

This fact sheet provides information specific to OU 1106. General information on the environmental setting of the Laboratory, past cleanup efforts, and ER Program requirements is provided in a separate fact sheet.

The Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) work plan is a document that addresses the site characterization activities for all potential release sites (PRSs). The work plan for Operable Unit (OU) 1106 (TA-21) was submitted to the Environmental Protection Agency (EPA) in May 1991 and was approved in January 1992. The primary purpose of this work plan is to describe the site characterization activities that address potential contaminant releases from OU 1106. The work plan for OU 1106 is available for public review at the environmental restoration reading room located at 1450 Central Avenue, Suite 101, in Los Alamos and at the repositories (public libraries) in Los Alamos, Española, and Santa Fe.

Background

OU 1106 (TA-21) is centered on DP Mesa immediately east-southeast of the Los Alamos townsite and extends to the stream channels of DP Canyon to the north and Los Alamos Canyon to the south. This area lies entirely within the jurisdiction of the Department of Energy. OU 1106 comprises approximately 320 acres and includes about 140 PRSs. Between 1945 and 1978, TA-21 was used for research on and production of plutonium metal and other radioactive materials. Subsequently, other research activities were conducted at this site. Because the major industrial activity was related to radioactive materials, the major wastes disposed at this site contained radioactive contaminants. The PRSs at TA-21 fall into four categories:

- seepage pits and absorption beds into which plutonium-bearing liquids were discharged, which may have subsequently resulted in subsurface liquid releases;
- septic systems from which near-surface releases of liquid industrial wastes may have occurred;
- subsurface solid waste disposal sites, such as material disposal areas, where contaminated industrial materials, stabilized process residues, and other solid or hazardous wastes were buried; and
- contaminated surface areas, where limited quantities of contaminants, such as fallout from stack releases and surface spills, may have occurred.

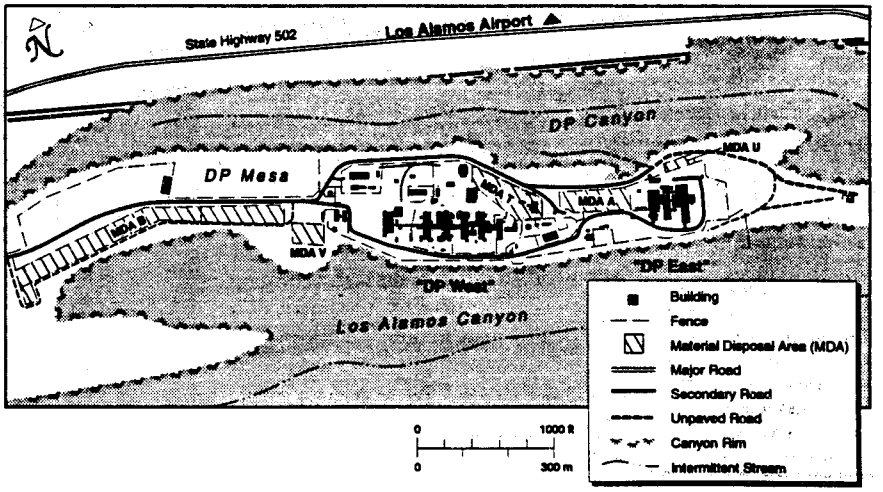

Figure 1. Location of Operable Unit 1106.

September 1993
LALP-93-12

Past Cleanup Activities

In 1945, at the close of the Manhattan Project, plutonium purification activities were transferred to TA-21. Operations continued at that location until the new plutonium facility at TA-55 was opened in 1977. Shortly thereafter, cleanup of the old process lines began. Contaminated equipment and materials from several buildings were removed. The filter houses at DP West and DP East were decontaminated and decommissioned between 1970 and 1972, and the interiors of many buildings were extensively decontaminated in the 1970s.

Contaminants and Pathways of Concern

The principal contaminants of concern at OU 1106 are radiological; however, sampling that occurred before the beginning of the ER Program was not adequate to fully assess the site. Known contaminants are plutonium, tritium, uranium, metals, organic compounds (at a limited number of sites), and polychlorinated biphenyls (at one site). Consequently, relatively broad-spectrum analyses are being conducted for samples across TA-21.

Potential environmental pathways include surface run-off, sediment transport, and resuspension. Under current land use patterns, no significant exposures to site workers or offsite receptors are expected from these pathways. If current access restrictions are removed, allowing parts of TA-21 to be developed for non-Laboratory purposes, additional pathways related to intrusion in buried wastes will be needed. Because of the great depth to the water table, neither transport in the unsaturated zone nor the groundwater pathway is of immediate concern.

Site-Specific Approach to Characterization

The approximately 140 PRSs in TA-21 are grouped as surface units, outfalls and associated septic systems, material disposal areas, subsurface units, and units to be investigated during building decontamination and decommissioning. Characterization of the PRSs focuses on identifying contaminants and the nature and extent of contaminant migration.

In addition to investigating individual PRSs, broader surface and subsurface investigations are being conducted throughout the operable unit. These investigations address general environmental characteristics related to potential contaminant transport and background levels of contaminants. The studies yield data that provide a context within which PRS-specific contaminant data can be evaluated.

Schedule

During 1992, surface sampling was completed following a regular grid pattern. Samples were also taken at the sites of former filter buildings and outfalls. Approximately 700 samples from 400 locations were collected for analysis. In addition, extensive geologic characterization of the operable unit was conducted. In the summer of 1993, Phase Report IB on site hydrogeological investigations was submitted to EPA. In addition, about 270 additional samples were collected, and drilling of investigation boreholes LADP 3 and LADP 4 began in September 1993. The results of these investigations are being evaluated and will be reported in subsequent reports. Preliminary assessment of the raw data available to date shows no significant departures from the expectations on which the work plan was based.

Site characterization is expected to continue through 1999. The initial investigation involves drilling about 7,800 linear feet and collecting a total of 3,400 samples. For subsequent investigations that may be required, it is estimated that equivalent amounts of drilling and sampling will be needed.

Investigation of the surface soil is the first priority because this source presents the greatest potential for dispersal of contaminants in the near term. Second priority is given to characterizing subsurface locations at which sources of contamination are known to be present. Although investigations at these sites are likely to require subsequent investigations, potential health risks from these PRSs are considered to be limited.

Interim corrective measures will be started at any time that a short-term solution is considered necessary to protect human health and the environment.

Additional information on OU 1106 and on the entire ER Program may be obtained from

Environmental Restoration Program
Los Alamos National Laboratory
Box 1663, Mail Stop M773
Los Alamos, NM 87545
(505) 665-7112

Volume 1 of 1

PHASE REPORT IC

TA-21 OPERABLE UNIT RCRA FACILITY INVESTIGATION

OUTFALLS INVESTIGATION

28 February 1994

ENVIRONMENTAL RESTORATION PROGRAM
LOS ALAMOS NATIONAL LABORATORY

Los Alamos
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LA-UR-94-228

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94-A07

EXECUTIVE SUMMARY

Phase Report 1C – Outfalls Investigation

RCRA Field Investigation

Technical Area 21 Operable Unit (OU 1106)

Los Alamos National Laboratory

This phase report summarizes the results of field investigations conducted in 1992 at Technical Area 21 of Los Alamos National Laboratory, as prescribed by the RCRA Facility Investigation work plan for the Technical Area 21 operable unit (also known as OU 1106). This phase report is the last part of a three-part phase report describing the results of field work conducted in 1992 at this operable unit. Phase Report 1A, issued on 14 June 1993, summarized site geologic characterization activities. Phase report 1B, issued on 28 January 1994, included an assessment of site-wide surface soil background, airborne emissions deposition, and contamination in the locations of two former air filtration buildings.

The investigations assessed in Phase Report 1C include field radiation surveys and surface and near-surface sampling to characterize potential contamination at 25 outfalls and septic systems listed as SWMUs in the RFI work plan. Based on the RFI data, it is recommended that no further action is warranted for 8 SWMUs and further action is recommended for 3 SWMUs addressed in this phase report. For 14 SWMUs which represent no immediate threat to human health or environment, deferral of further action/no further action decisions is recommended until outstanding analytical data are received, sampling of adjacent SWMUs is completed, or decisions are made about the baseline risk assessment approach.

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CLP SOW	Contract Laboratory Program Statement of Work
EPA	(U. S.) Environmental Protection Agency
ER	Environmental Restoration
FIMAD	Facility for Information Management, Analysis, and Display
GC	Gas Chromatograph
HSWA	Hazardous and Solid Waste Amendments
ICPES	Inductively Coupled Plasma Emission Spectrometry
ICPMS	Inductively Coupled Plasma Mass Spectroscopy
ID	Identification
IWP	Installation Work Plan
LANL	Los Alamos National Laboratory (the Laboratory)
MDA	Material Disposal Area
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NFA	No Further Action
NPDES	National Pollution Discharge Elimination System
OU	Operable Unit
PARCC	Precision, Accuracy, Representativeness, Completeness, and Comparability
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
RfD	Reference Dose
RFI	RCRA Field Investigation
RPD	Relative Percent Difference
SAL	Screening Action Level
SCF	Sample Coordination Facility
SRS	Site Ranking Score
SWMU	Solid Waste Management Unit
TA	Technical Area

CHAPTER 1

INVESTIGATION OVERVIEW

1.0 INVESTIGATION OVERVIEW

This document, Phase Report 1C, reports the results of 1992 field investigations conducted according to the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Work Plan for Environmental Restoration for the Technical Area (TA)-21 Operable Unit (OU) (LANL 1991a), as amended by an addendum and approved by Region 6 of the U.S. Environmental Protection Agency (EPA) (LANL 1991b; EPA 1992). This work was conducted as part of the Environmental Restoration (ER) Program of the Los Alamos National Laboratory (the Laboratory). The TA-21 OU is referred to interchangeably in this report as OU 1106. The work plan was prepared as required by the Hazardous and Solid Waste Amendment (HSWA) Module VIII of the RCRA Operating Permit for the Laboratory (EPA 1990).

Phase Report 1C is the last part of an initial three-part RFI phase report to be issued for the TA-21 RFI. The first part (Phase Report 1A), issued on June 14, 1993, included the results of studies of the site geology, fractures, stratigraphy, petrography, mineralogy, and geomorphology (LANL 1993a). The second part (Phase Report 1B), issued on 28 January 1994, assessed results from soil sampling activities conducted in 1992, which could not be reported earlier because of delays in receiving analytical results (LANL 1994). Included in Phase Report 1B are results from investigations of site-wide background, airborne emissions deposition and possible contamination of two former filter building locations. In all, 18 potential release sites listed as Solid Waste Management Units (SWMUs) in the RFI work plan were addressed in full or in part by the investigations reported in Phase Report 1B. This third document, Phase Report 1C, addresses 25 outfalls and septic systems listed as SWMUs in the RFI work plan. Aspects of the work reported in this phase report have been reported in quarterly technical progress reports presented to EPA Region 6 (LANL 1993a).

1.1 Operable Unit Background Information

1.1.1 Operable Unit Description

Figures 1.1-1 and 1.1-2 show the location of Technical Area (TA)-21 regionally and in relation to other operable units of the Laboratory. Technical Area-21 is located on the northern edge of the Laboratory and has a mesa-top elevation of about 7,000 ft. The site is centrally located on the Pajarito Plateau, roughly midway between the steep flanks of the Jemez Mountains to the west and White Rock Canyon of the Rio Grande to the east. The bedrock throughout the operable unit is the Bandelier Tuff, which consists locally of approximately 800 ft of volcanic ash deposits. Groundwater lies within the underlying Puye Formation at a depth of approximately 1,150 ft below the mesa top. Shallow alluvial and perched aquifers have been identified in Los Alamos Canyon. The RFI Work Plan, the ER Program's Installation Work Plan (IWP) (LANL 1993), and TA-21 Phase Report 1A contain additional details of the geologic setting of TA-21.

TA-21 occupies 311 acres and is centered on DP Mesa, immediately east-southeast of the Los Alamos townsite. The operable unit area extends from the mesa top to the stream channels in the adjacent canyons, DP Canyon to the north and Los Alamos Canyon to the south. Additional information relevant to general site conditions of TA-21 and vicinity is presented in the RFI work plan.

1.1.2 Site History

TA-21 was used primarily for plutonium research and metal production and related activities from 1945 to 1978. Subsequent unrelated office and small scale research activities have continued at the site to the present time. Because the major industrial activities at TA-21 were related to plutonium

production, the major waste disposal activities were plutonium related. Hazardous and radioactive constituents are likely to have been present in many waste streams as a result of the process chemistry.

The RFI work plan lists 29 SWMUs for the OU, subdivided into 112 SWMU subunits, which resulted from these activities. Of these 112 SWMUs, 68 were listed in Table A of the original Laboratory HSWA Module VIII. Table B of the HSWA Module lists 37 of these 112 SWMUs as "priority" SWMUs. This phase report addresses 1 SWMU from Table B, 13 SWMUs from Table A, and 2 SWMUs which were not cited in the original HSWA module. Nine units listed in the RFI work plan, but not in the original HSWA module, were added recently to the revised SWMU list. SWMUs on the revised list are referred to as "January 94" SWMUs to reflect the date of the last proposed revision. An additional 2 SWMUs were addressed in this report which are not HSWA or proposed HSWA SWMUs. These are referred to either as RCRA SWMUs or "work plan SWMUs." A "work plan SWMU" is defined as a unit not appearing in the HSWA module but called a SWMU in the work plan. A summary of the SWMUs addressed in Phase Reports 1A, 1B, and 1C is given in Table 1.1-1.

The SWMUs at TA-21 may be placed into the following four conceptual categories:

- deep liquid releases, such as seepage pits and absorption beds into which plutonium-bearing liquids were discharged (these include Material Disposal Areas (MDAs) T, U and V);

- near-surface liquid releases, such as discharges from septic systems, that may have contained industrial liquid wastes;

- subsurface solid waste disposal areas, such as MDAs A and B, where contaminated equipment, industrial materials, stabilized process residues, and solid radioactive or hazardous wastes were buried in shallow trenches or isolated shafts; and

- surface contamination areas, such as outfalls, stack emissions fallout, and surface spills, where limited quantities of contaminants were released to the land surface.

Outfall SWMUs are categorized in the RFI work plan as follows:

- SWMU 21-004, Aboveground Tanks and Drain Lines
- SWMU 21-006, Underground Seepage Pits
- SWMU 21-011, New Industrial Waste Treatment Plant
- SWMU 21-022, Acid Waste Lines and Sumps
- SWMU 21-023, Decommissioned Septic Systems
- SWMU 21-024, Inactive Septic Systems/Outfalls
- SWMU 21-026, Wastewater Treatment Plan, and
- SWMU 21-027, Surface Discharge

Table 1.1-2 summarizes the outfalls at TA-21. Figures 1.1-3 and 1.1-4 show the locations of TA-21 outfalls, centered around the western and eastern sections of the industrial area of TA-21 (referred to as DP West and DP East, respectively). Map 1 provides additional detail on the locations of TA-21 outfalls.

Detailed historical data regarding TA-21 are presented in RFI work plan Chapter 3, TA-21 Operable Unit Background Information. Information on environmental setting, geology, and surface and groundwater

hydrology for the Pajarito Plateau and TA-21 was summarized in RFI work plan Chapter 4, Environmental Setting. Additional relevant information is contained in the IWP and Phase Reports 1A and 1B. The grouping of TA-21 SWMUs into conceptual categories and a discussion of potential migration pathways of importance for each type of SWMU are presented in RFI work plan Chapter 5, Potential Contaminant Migration Pathways. Surface run-off, infiltration, and vapor-phase movement were identified as pathways of potential concern for outfalls.

1.1.3 Previous Investigations

The studies described in Phase Reports 1A and 1B were the first TA-21 RFI field activities formally reported, other than quarterly technical progress reports. Extensive environmental and operational monitoring has been conducted at TA-21 in the past. These studies are highly relevant to the RFI and are summarized in RFI work plan Chapter 4, Environmental Setting, and in Chapters 13 through 20 that detail the current knowledge for each SWMU. Specifically, Chapter 15 summarizes prior data for outfalls. In addition, preliminary TA-21 RFI field data is reported on a continuing basis in ER quarterly technical progress reports submitted to EPA Region 6. Relevant information from previous investigations supplements the outfalls investigations in Chapters 2 through 10 of this report.

1.2 Investigation Status

The updated TA-21 RFI schedule is summarized in Figure 1.2-1. Together, Phase Reports 1A, 1B, and 1C cover the activities identified as investigation Sequence 2 in this figure. The Sequence 2 investigation covers the portions of the RFI work plan listed in Table 1.1-2 of Phase Report 1C. Delays in receiving analytical reports, which led to the splitting of the first phase report into three parts, have been documented in quarterly technical progress reports to EPA (LANL 1992b, LANL 1993b, LANL

1993c). Notice of the need to split the report also was documented in correspondence to EPA (DOE 1993). Some data are outstanding from borehole analyses conducted as part of the outfalls investigation. When these data are received and assessed, they will be reported in an addendum to this phase report.

1.3 Regulatory Relevance

Investigations described in this phase report were specified in the amended TA-21 OU RFI work plan, as approved by EPA Region 6. The investigations satisfy requirements of the HSWA Module VIII of the Laboratory's RCRA Operating Permit. The data assessments and conclusions reached in Phase Report 1B and this report only address the regulatory status of the SWMUs listed in Table 1.1-1 of this chapter.

Table 1.1-1 SWMUs Addressed in Phase Reports 1A, 1B, and 1C

Phase Report	Submission Date	Work Plan Section	SWMU Designation	SWMU Description	Table A	Table B	Jan. 94 SWMU	Non-HSWA SWMU
1A	6/14/93	12.3	N.A.	Geologic Mapping	N.A.	N.A.	N.A.	N.A.
			N.A.	Fractures/Faulting	N.A.	N.A.	N.A.	N.A.
			N.A.	Geomorphology	N.A.	N.A.	N.A.	N.A.
			N.A.	Stratigraphy/ Mineralogy	N.A.	N.A.	N.A.	N.A.
1B	1/28/94	12.4	N.A.	OU-wide Surface Soils	N.A.	N.A.	N.A.	N.A.
		13.2	21-020(a)	Filter Building 21-12				1
			21-020(b)	Filter Building 21-153				1
			21-007	Salamanders	1			
			21-008	Incinerators				1
			21-019(a-m)	Filter House/ Exhaust Stacks				13
			21-021	Airborne Emissions	1			
				Subtotal	2	0	0	16
1C	2/28/94	15.2	21-023(c)	Outfalls of Undetermined Locations	1			
			21-024(a,g,l)		3			
			21-027(c, d)			2		
		15.3	21-024(b-e,i)	Outfalls w/Septic Systems	5			
		15.4	21-011(k)	Discharge Direct Outfalls		1		
			21-022(h)		1			
			21-024(n,o)			2		
			21-026(d)					1
		15.5	21-027(a)	Surface Drainage So. of Bldg. TA-21-3			1	
		15.6	21-024(j,k)	Septic Tanks	2			
		15.7	21-024(m)	Surface Drainage So. of Bldg. TA-21-155			1	
			21-027(b)				1	
		15.8	21-004(d)	Surface Drainage No. of Bldg. TA-21-155				1
			21-024(h)		1			
		15.9	21-006(b)	Special Cases		1		
			21-024(f)		1			
				Subtotal	14	2	7	2
				TOTAL	**16**	**2**	**7**	**18**

Table A SWMU - Listed in Table A of the original HSWA Module
Table B SWMU - Listed in Table B (Priority SWMUs) of the original HSWA Module.
Table B SWMUs are also listed in Table A.
Jan. 94 SWMU - Included in the proposed "January 1994" revised SWMU list.
Non-HSWA SWMU - SWMU or SWMU subunit listed in the RFI work plan which is not listed or proposed as a HSWA SWMU
N.A. - Not applicable
The term ""work plan SWMU"" includes all units referred to as SWMUs in the RFI work plan. In general this includes all SWMU categories listed in the table.
8 SWMUs recommended for No Further Action
3 SWMUs recommended for Further Action
14 SWMUs recommended for Deferred Decision

Table 1.1-2 TA-21 Outfall Systems

Work Plan Section	SWMU No.	CEARP Identifier	Associated Facilities	Previously Sampled
15.8	21-004(d)	TA-21-3n	SUMP 223	1
15.9	21-006(b)	TA-21-3u	Pit 118/Bldg 2	1
15.4	21-011(k)	TA-21-3o,NPDES EPA 050050	Bldg 257	2
	21-022(h)	TA-21-3a, NDPES EPA 03A032	Bldg 150	
15.2	21-023(c)	TA-21-3y	Tank 62/Bldg 33	1
	21-024(a)	TA-21-3m	Tank 53/Bldg 9	
15.3	21-024(b)	TA-21-3g	Tank 55/Bldg 17	1
	21-024(c)	TA-21-3h	Tank 56/Bldg 54	1
	21-024(d)	TA-21-3f	Tank 106/Bldg 1	1
	21-024(e)	TA-21-3e	Tank 123/Bldg 20	1
15.9	21-024(f)	TA-21-3k	Tank 124/Bldg 45	1
15.2	21-024(g)	TA-21-3l	Tank 125/Bldgs 7 & 31	1
15.8	21-024(h)	TA-21-3i	Tank 56/Bldg 54	1
15.3	21-024(i)	TA-21-3j	Tank 181/Bldg 152	1
15.6	21-024(j)	No CEARP identifier	Tank 194/Bldg 155	
15.7	21-024(k)	No CEARP identifier	Tank 219/Bldg 209	
15.4	21-024(l)	TA-21-3x	Bldg 21	1
	21-024(m)	TA-21-3z	Bldg 209	
	21-024(n)	TA-21-3aa	Bldg 155	1
15.5	21-024(o)	TA-21-3ab	Bldg 46	1
	21-026(d)	TA-21-3w, NPDES EPA SSS05S	Bldg 227	
	21-027(a)	TA-21-3d	Bldg 3	1, 2
		TA-21-3p, NDPES EPA 03A031	Cooling Tower 143	1
		TA-21-3ae	Bldg 3	1
		TA-21-3af	Bldg 3/Cooling Tower 143	
15.7	21-027(b)	TA-21-3q	Bldg 152	
		TA-21-3r, NPDES EPA 03A034	Cooling Towers 166 & 167	
15.2	21-027(c)	TA-21-3c	Bldg 6	
	21-027(d)	No CEARP Identifier	Tank 47	

1 – 1988 Reconnaissance Sampling
2 – DOE Headquarters Environmental Survey Problem Sampling

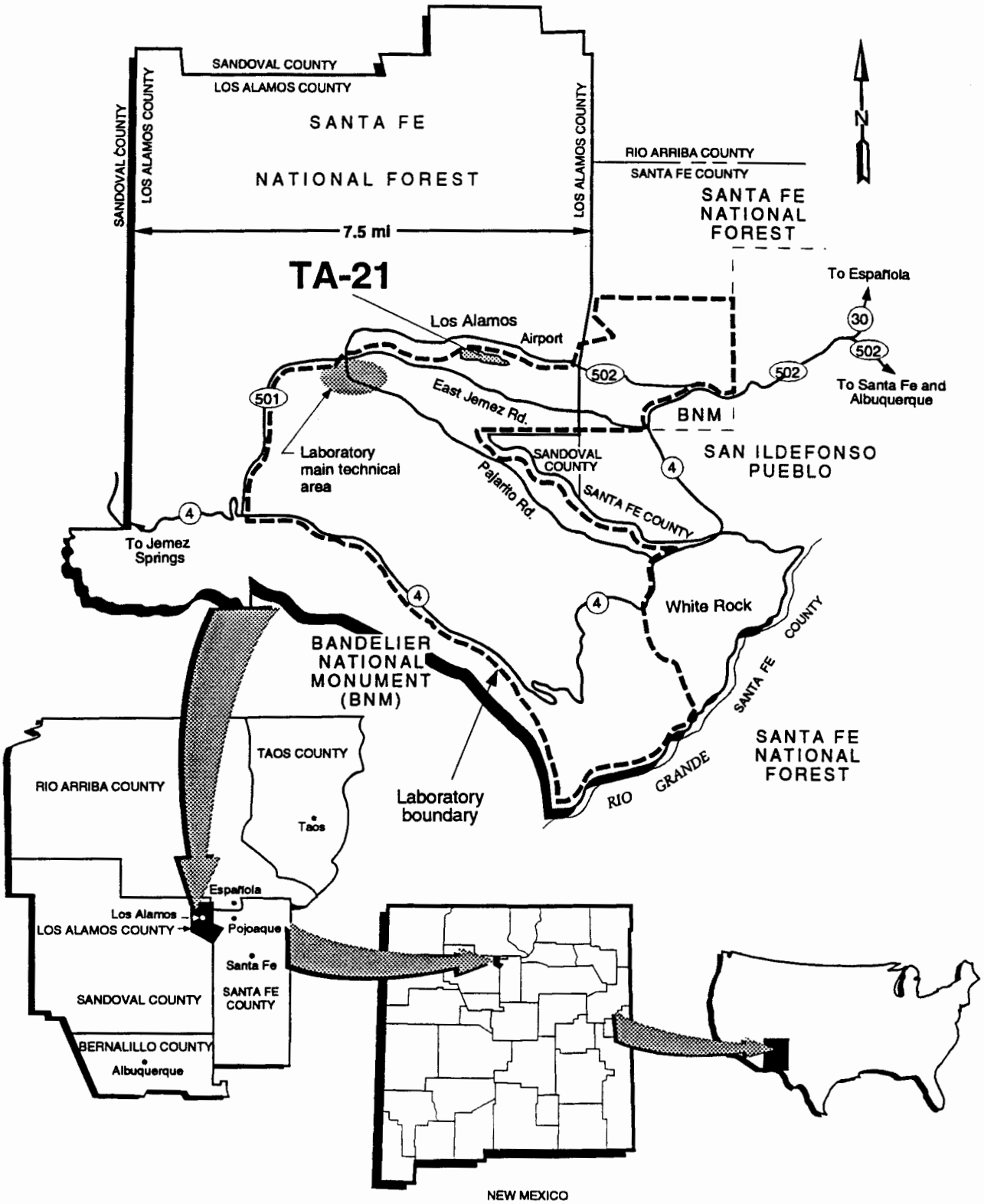


Figure 1.1-1 Regional location of the TA-21 Operable Unit.

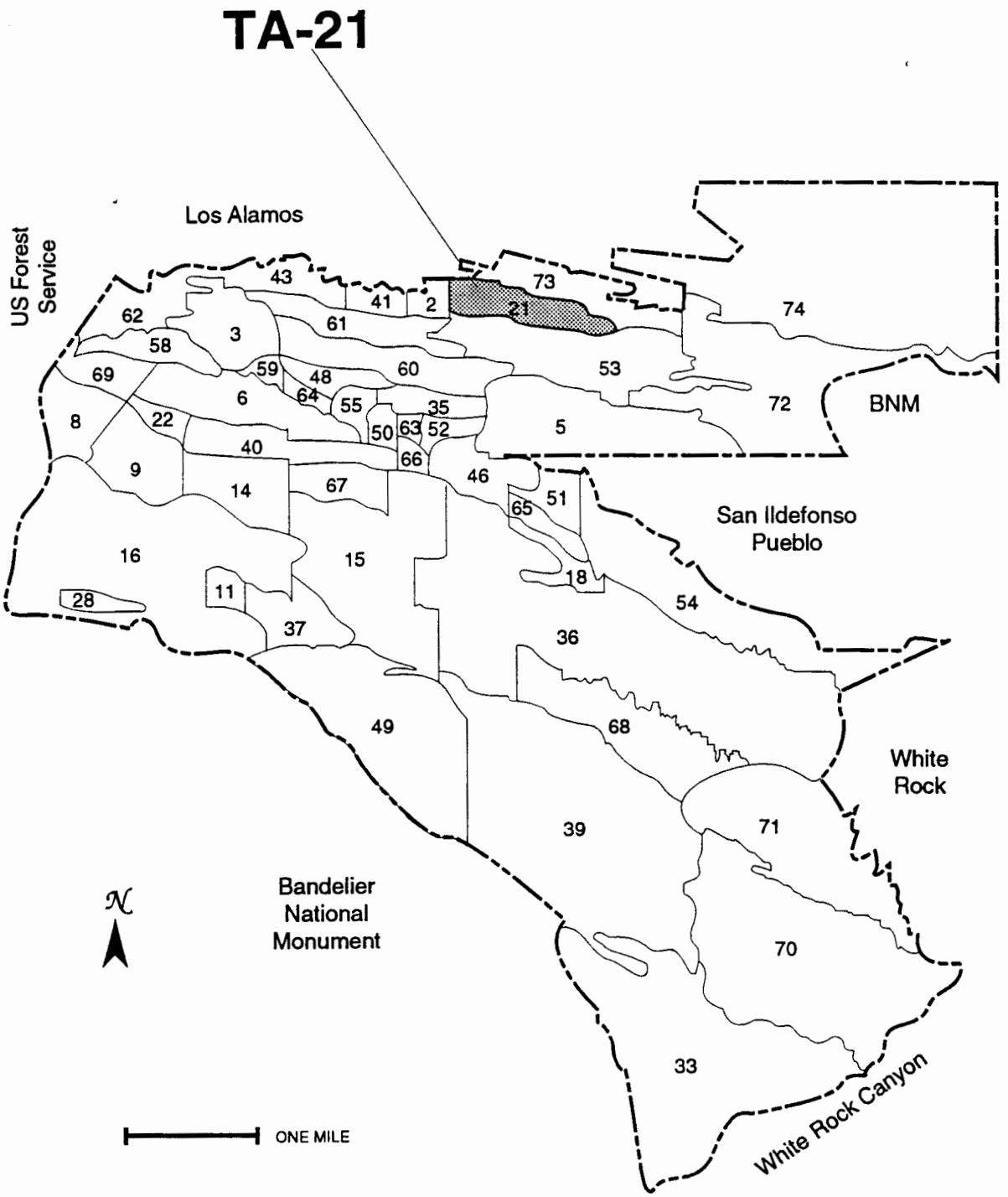


Figure 1.1-2 Relation of Technical Area (TA)-21 and other TAs of Los Alamos National Laboratory to surrounding landholdings.

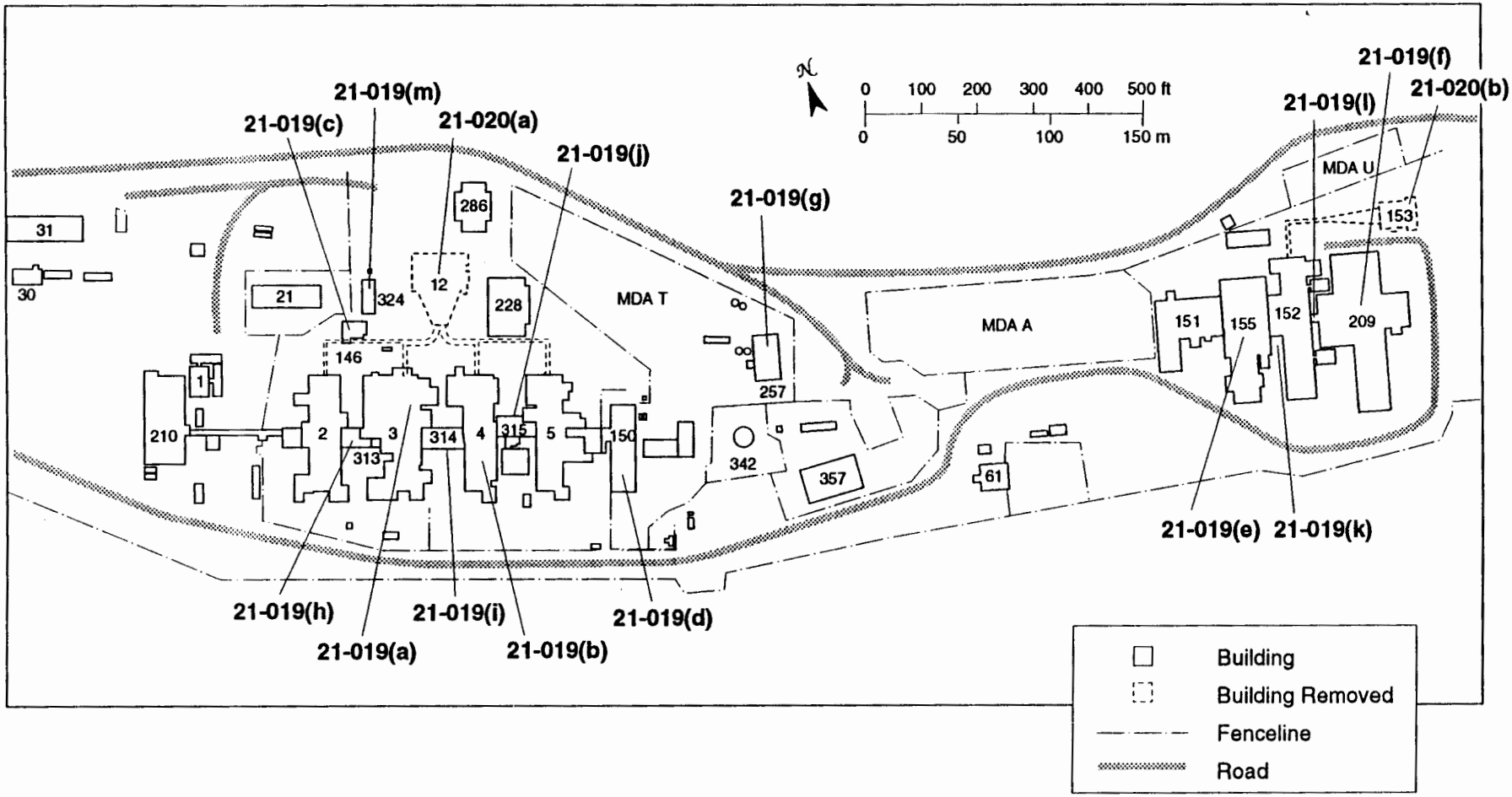


Figure 1.1-3 Location of SWMUs associated with airborne emissions at TA-21. Not shown are SWMUs 21-007 (salamander incinerators, not all locations known), 21-008 (former incinerators in Buildings 2 and 3), and 21-021 (general stack emissions throughout the OU).

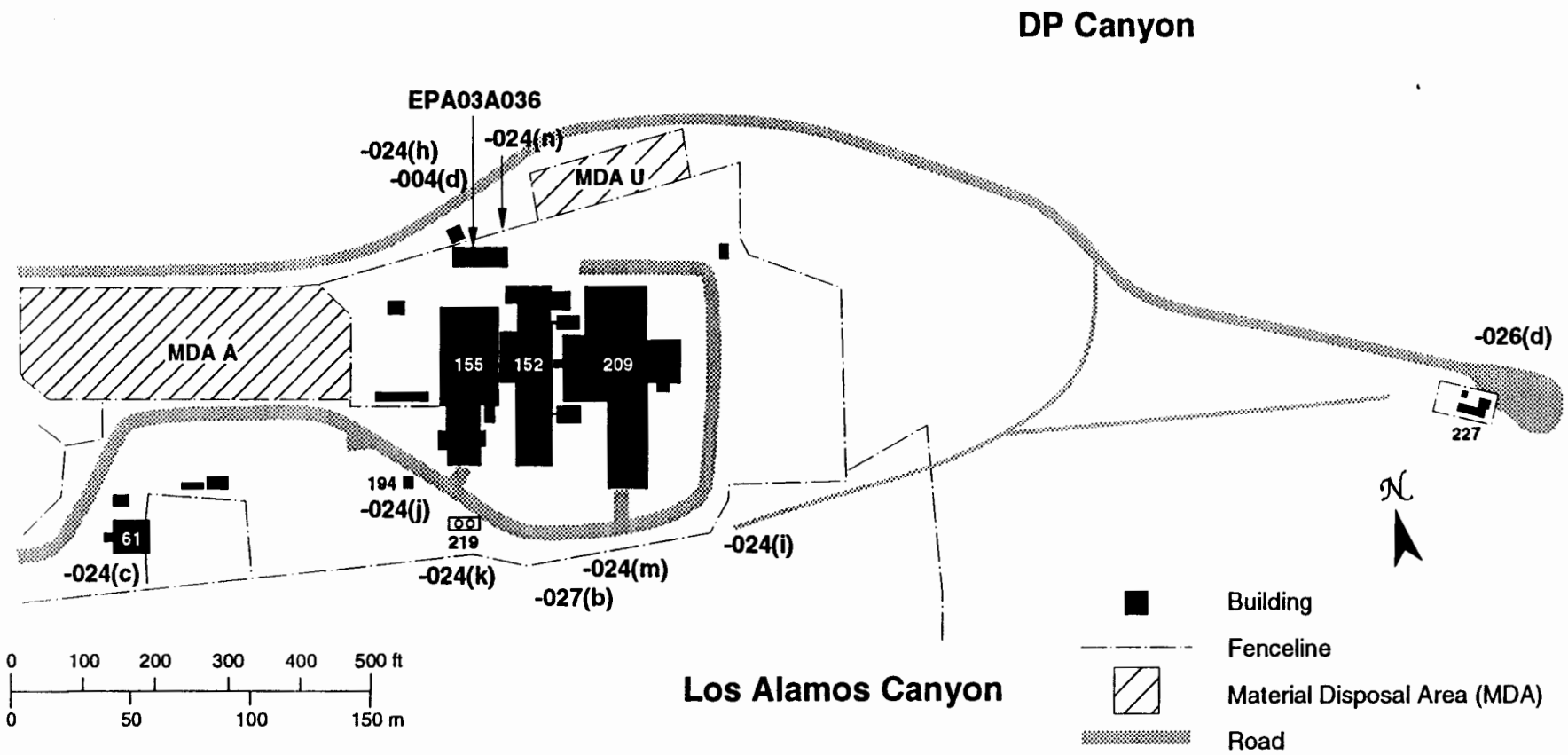
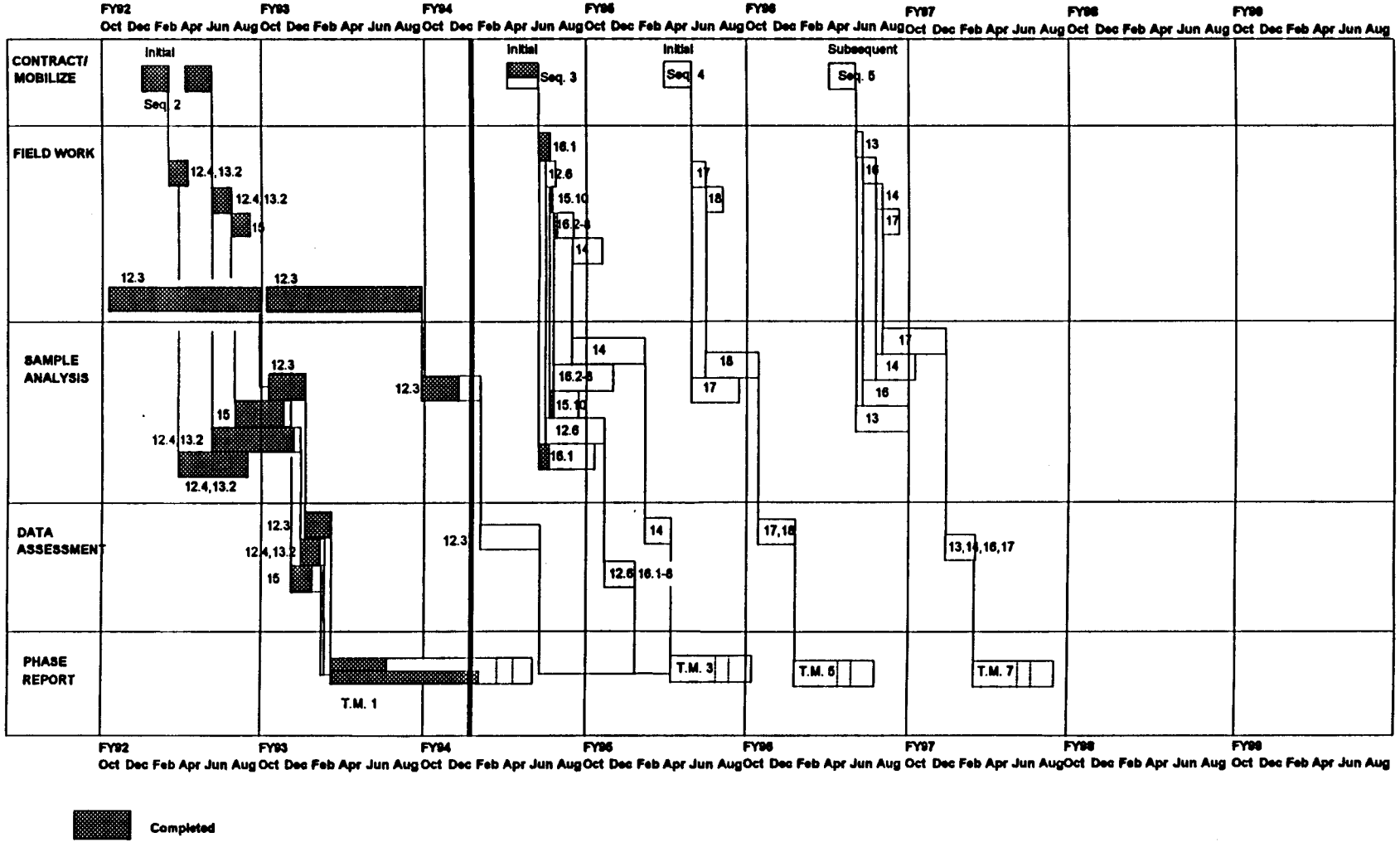


Figure 1.1-4 Locations of outfalls at DP East. EPA xxxxx denotes a permitted NPDES outfall. -xxx(y) denotes an outfall SWMU number.

Figure 1.2-1 TA-21 OU RFI Progress: near-surface investigations (updated 1/14/94). Numbers XX.Y denote RFI work plan sections. "T.M." denotes "tech memo", now referred to as "phase report".



Notes: Sample analysis tasks 12.4, 13.2 and 15 are behind schedule due to slow return of laboratory results.

CHAPTER 2

OUTFALLS INVESTIGATION ASSESSMENT

2.0 OUTFALLS INVESTIGATION ASSESSMENT

2.1 INTRODUCTION

The general purpose of the outfalls investigation assessed in this document is to characterize contamination at 25 outfall and septic system units listed as SWMUs in the RFI work plan. Of these 25 units, 13 are listed in Table A of the Laboratory's original HSWA Module VIII and one is listed in Table B (priority SWMUs) of the Module, and two were not cited in the original HSWA module. Nine additional units were added to the "January 1994" LANL SWMU list revision. Two units identified as non-HSWA SWMUs are listed in the RFI work plan. These 25 units are referred to in this phase report as "non-HSWA SWMUs" or "work plan SWMUs." Outfall-specific sampling plans are given in Chapter 15 of the TA-21 RFI work plan. Table 2.1-1 lists SWMU categories, phase report sections, individual SWMUs, and associated RFI work plan subsections.

Analytical laboratory data (1993 samples) have not been received for 14 of the SWMUs addressed in this phase report. Recommendations will be deferred for these SWMUs until the outstanding data are received and assessed. These data will be summarized in an addendum to this phase report. Table 2.1-2 presents a summary of the status of each SWMU, including eight recommended for no further action (NFA), fourteen for deferred decision, one for follow-on sampling, and two for corrective action.

Table 2.1-2 also contains the site ranking score (SRS) associated with each SWMU. The SRS for each SWMU was developed by LANL based on the potential source term, exposure pathways, receptor locations, and resulting risk. The ranking system was put in place to determine which SWMUs might

pose an immediate concern for human health and environment and would be potential candidates for expedited corrective action.

2.1.1 Description of the Investigation

General site background information is given in Chapter 1 of this phase report and in the RFI work plan. In this report, details of the field sampling conducted in 1992 and 1993, and the subsequent data assessment of the 1992 samples, are given. Map 1 at the end of this phase report illustrates the outfall locations across the operable unit.

Field surveys; surface, near-surface, and subsurface sampling; and laboratory analyses were performed as a part of this investigation in 1992 and 1993. Table 2.1-3 summarizes the number of samples collected versus the number planned. The analytical laboratory data from the 1992 outfall investigations are assessed in this report. Analytical laboratory data from the 1993 investigations have not been received and validated in time for inclusion in this phase report. These data will be reported in an addendum to this phase report.

2.1.2 Field Activities

The outfalls investigation included surface radiation surveys for gross alpha and low-energy gamma count rates. If elevated levels were detected, radiation surveys also were conducted for gamma exposure rate and total gamma. All equipment maintenance, calibration, and surveys were performed to the specifications of ER Program Standard Operating Procedures.

These surveys were used to bias sampling locations according to the rationale laid out in the RFI work plan. One of three soil sampling strategies (A, B, or C) was used at each of the sampled outfalls.

Strategy A If a drainage pattern was identified by the field radiological survey, surface, or near-surface soil samples (0-6 in. or at other depth intervals as specified in the SWMU-specific field sampling plans) were taken from the contaminated areas that define the pattern.

Strategy B If no pattern of contamination was found using Strategy A, two groups of three surface soil samples were taken downgradient from the best identified location of the outfall. For each group, three sampling points were spaced at nominal 5-ft intervals in a line across the probable drainage path. These three sample groups were placed at roughly 15-ft intervals down the flow path between the outfall and the mesa edge. The spacing between these sample groups varied depending on the proximity to the mesa edge, the need to sample a bench (relatively flat geologic outcrop along the canyon wall) below the mesa edge, and other factors.

Strategy C If no pattern of contamination was found using Strategy A for drainages with well-defined channels (assumed to be stable channels), surface soil sampling was done in the channel. In general, one sample location was located at the point of discharge and at least one additional location was sampled in a pooling area or likely sedimentation point 15 to 50 ft from the discharge point.

Field sampling included the collection of 0-6 in. surface samples, near-surface samples on 6 in. intervals to a maximum depth of 18 in., and shallow borehole samples to 20 ft. The samples were subject to the following measurements in a field screening laboratory: gross alpha, gross beta, total gamma, and gamma spectrometry. Not all samples were subject to the full suite of field laboratory parameters. A limitation in field screening laboratory data use was the qualitative reporting of gamma-emitting radionuclide levels from gamma spectrometry. This limitation particularly impacts low-level cesium-137 analyses, which were done only by gamma spectrometry.

Analyses were carried out by laboratories both external and internal to the Laboratory. The laboratory analyses fell into four categories: radionuclides, inorganics, volatile organics, and semi-volatile organics. Specific analytes for each outfall investigation are defined in Chapter 15 of the RFI work plan.

2.1.3 Data Assessment Methodology

The four primary categories of outfalls data are 1) field survey, 2) field laboratory, 3) analytical laboratory, and 4) quality assurance/quality control (QA/QC). Individual SWMU discussions present tables of all reported analyte concentrations from reconnaissance sampling as reported in the RFI work plan. Analytical laboratory data from 1992 samples are condensed into tabular form showing only those analyte concentrations exceeding the 95.5 percentile of applicable baseline categories, as developed in Phase Report 1B (LANL 1994). A description of these baseline categories and the basis of comparison to SWMU data are described in following sections. Analyte concentrations are also compared to screening action levels (SALs), as specified in Appendix J of the Installation Work Plan

(LANL 1993). Data tables also will be available on the Laboratory's Facility for Information Management and Display (FIMAD) database.

Comparison to Expected Contaminants

Where possible, historical sampling data and process knowledge were reviewed to develop a target group of analytes for the outfalls. If a reported analyte did not appear to be related to the historical process, it was discussed in the outfall section with respect to other sources.

Identification of Contamination Trends

Data were addressed to identify contamination trends. In the case of outfall SWMUs 21-011(k) and 21-024(i), isopleth maps were prepared (Maps 2 and 3). Analytical data were assessed for expected ratios of analytes, upgradient concentrations of contaminants, analyte concentration changes with depth and lateral distance from suspected sources, and impacts from man-made soil disturbances.

Underground lines are considered part of outfall SWMUs, although they were not specifically investigated as part of the SWMU. The following assumptions used in the characterization of the outfall SWMUs apply to underground lines.

- Contamination not present at either the outfall mouth or associated tank – the line is assumed to be clean.

- Contamination present at the outfall mouth or associated tank – the line is assumed to be contaminated.

- Contamination not present at the outfall mouth, but an associated tank has not been investigated – the line has not been characterized.

Comparison to Baseline Analyte Concentrations, Regional Background, and SALs

As discussed in detail in Appendix A of Phase Report 1B (LANL 1994) and shown on Map 1, distributions for inorganics and radionuclides fall into four baseline areas: non-process area, process area, and two special impact areas. The non-process area is located outside the industrial area of TA-21. The process area is approximately coincident with the industrial area and has been impacted by general operations at TA-21. The two special impact areas have been impacted by distinct processes, including operation of the Tritium Systems Test Assembly (TSTA – special impact area 2), and transport of contaminants downgradient from Material Disposal Areas (MDA) A and T (special impact area 1).

The means and 95.5 percentiles for the four baseline distributions, as developed in Phase Report 1B, are presented in Tables 2.1-4 – 2.1-6. While both normal and lognormal distribution parameters are presented for analytes within each baseline category, only the normal 95.5 percentile is used in the assessment of outfall data. Because the lognormal 95.5 percentile generally exceeds the normal 95.5 percentile, it is more conservative to make comparisons to the normal distribution 95.5 percentile (EPA 1992a).

The applicable baselines first were identified for each outfall. Individual analyte concentrations from discrete samples then were compared to the mean and 95.5 percentile of applicable baseline distributions. If an outfall had sample concentrations less than the applicable 95.5 percentiles, analyte concentrations were assumed not to be impacted by the outfall. Outfalls with multiple analyte concentrations exceeding the applicable 95.5 percentiles were assumed to be contaminated by outfall processes and were compared to SALs. A summary of outfall data exceeding applicable 95.5 percentiles is presented in Appendix B, while Appendix C presents all sample data reported above laboratory detection limits.

SALs are defined in Appendix J of the IWP for chemical class A and B carcinogens, chemical class C carcinogens, non-carcinogenic toxic chemicals, and radionuclides. SALs were developed by the Laboratory based on a set of residential exposure pathways and the assumption that the contaminant in question was the only contaminant present. The target risk or dose for each of these categories is:

Class A and B carcinogens	–	10^{-6} risk
Class C	–	10^{-5} risk
Non-carcinogenic, toxic	–	reference dose (RfD)
Radionuclides	–	10 mrem annual incremental dose

When data are compared to SALs, the presence of multiple contaminants must be considered. In general, the contaminant to SAL ratios are summed for all contaminants. If the sum of the ratios is less than one, target doses and risks are assumed not to be exceeded. Outfalls for which SAL ratio sums are below one and the contamination nature and extent is adequately characterized are recommended for no NFA. Two aspects of the SAL comparisons should be noted: 1) the most

conservative SAL was used for chromium (chromium VI – 400 ug/g) and 2) because SALs for beryllium and arsenic are lower than regional background levels, the applicable 95.5 percentile baseline was used in determining whether soil contamination is present.

No Further Action

If all SWMU analyte concentrations were found to be within the applicable baseline and decreasing lateral and vertical concentration gradients were decreasing, the outfall was recommended for NFA. For outfalls with analyte concentrations above the 95.5 percentile of applicable baseline categories, analytes were compared to risk-based SALs, as summarized in Table 2.1-7.

Analyte comparisons to baselines were performed only for radionuclides and inorganics. As outlined in Appendix A of Phase Report 1B, organic baselines were not developed because organic constituent levels at TA-21 are not of concern.

Organics detected at outfall SWMUs were assessed with respect to potential on-site and off-site sources, including analytical laboratory contaminants.

A supplemental statistical treatment and graphical presentation of outfalls data are presented in Appendix A. Conclusions from this higher level study are consistent with the assessment given in chapters 2–10 of this report.

Recommendations for Further Action

Further action recommendations include additional surface, near-surface, or borehole sampling, radiological field surveys, and interim corrective actions, such as fencing. Where follow-on sampling is recommended in this phase report, procedures described in Appendix A of the RFI work plan, or their equivalents, will be used unless noted otherwise. A general exception to the QAPjP is that detection limits will be revised upwards to correlate more reasonably with decision levels discussed in the IWP, i.e., SALs.

Deferred Decision

Analytical data from sampling performed in 1993 of some SWMUs has not been received in its entirety. Recommendations for these SWMUs are deferred until outstanding data is received and assessed. In a few cases, decisions are deferred pending baseline risk assessment. A recommendation for disposition of these SWMUs will be made in an addendum to this phase report.

2.1.4 Data Quality Assessment

2.1.4.1 Data Quality

This section summarizes data quality assessments for the data resulting from the outfalls investigation reported in this phase report. The overall requirements for data quality assurance were specified in the Laboratory's Generic Quality Assurance Project Plan (QAPjP), as presented in the Installation Work Plan (LANL 1993c). The QAPjP specifies quality assurance requirements for field sampling, field

measurements, and analytical laboratory data. Quality assurance objectives for precision, accuracy, analytical sensitivity, representativeness, completeness, and comparability (PARCC) are defined in the QAPjP. Appendix A of the TA-21 RFI Work Plan summarizes the specific objectives for the TA-21 operable unit.

For ease in presentation, this data quality summary is organized around the PARCC parameters. Within that organization, the data from each investigation are discussed as appropriate. Some problems were encountered in completing the data quality assessment. The primary issues were related to the batching of QA samples with field samples and the ability to relate samples to batches and QA results within the existing electronic data management system. The issues are explained and evaluated further in appropriate sections of this chapter.

In summary, despite these problems, the data acquired in the FY92 investigations and presented in this phase report are acceptable and usable for all purposes intended.

2.1.4.2 Overview of Data Management

The data management system, from collection of samples through reporting of results, is reviewed in this section. The purpose is to identify the important stages in the process and the problematic parts of the process which may impact data quality or the ability to assess data quality.

2.1.4.2.1 Data Management Process Description

The data collection and management process used for the TA-21 RFI is briefly summarized below.

Collection

The collection of field samples is accompanied by the collection of field QA samples: trip blanks, equipment rinsate blanks, field reagent blanks, and field duplicates. The number of field QA samples added is a percentage of the number of planned field samples, typically 5% to 10%. Each day of sampling, the field team delivered its samples to the ER Program's Sample Coordination Facility (SCF). It was recognized that the number and type of field QA samples submitted on any given day would vary. However, it was intended that all field samples and field QA samples submitted in a single day remain intact as a batch during laboratory analysis.

Distribution

Upon delivery to the SCF, field sample sets sometimes were combined and usually were supplemented with additional performance assessment QA samples, but were always maintained intact and submitted to the appropriate analytical laboratory as a batch. The SCF identified the batches by assigning a unique analytical request number, which was documented on an analytical service agreement. This document identified the sample number assigned by the field team, the sample number assigned by the SCF, the analyses to be performed, and any quality assurance samples associated with the request. The request number generally is used to track and retrieve sample information. Table 2.1-8 summarizes laboratory request numbers associated with each suite of analytes requested for each investigation.

Analysis

Sample batches were submitted to analytical laboratories based on laboratory capabilities and capacity. The several different types of analytical suites (radiological and inorganic) for an individual sample were often conducted by different laboratories. Sample aliquots were collected in the field in separate

sample containers for each type of analysis. The analytical methods employed by the laboratories are detailed in the QAPjP.

Reporting

Upon completion of sample analyses, analytical reports were prepared by the SCF. Each report was assigned a unique report number and referenced the request number. The analytical reports identify the analytical results for field samples and associated QA samples, the analytical methods, the analyst, and the laboratory performing the analyses. Data review is documented by the reviewer's initials on the final page of the report.

Data Management

Analytical results were entered into the FIMAD data management system to provide a means for reviewing the large volume of data and for accessing the results for data assessment including statistical analysis. Each of the samples addressed in this phase report was analyzed for one or more of the following categories of analytes: radiological, inorganics, semi-volatiles, and volatiles. Each category includes from five to 66 individual analytes, resulting in a large data set to be managed.

2.1.4.2.2 Data Management Issues

Issues impacting data quality or the ability to assess data quality are identified below for each stage in the data collection and management process.

Collection issues

Field collection of samples and submission of QA samples was conducted as planned for the TA-21 RFI.

Distribution issues

Distribution of samples to analytical laboratories was conducted as planned for the TA-21 RFI.

Analysis issues

In some cases, sample batches sent to an analytical laboratory were split (i.e., rebatched) at the contract laboratory to expedite analyses. Rebatching was not realized by the operable unit team until after much of the data had been received and entered into FIMAD. In some cases, quality assurance samples were batched separately from the corresponding field samples.

Each laboratory batch was addressed in one analytical report. Thus, a single request number (indicating the intended batch) may have resulted in more than one report number (indicating actual batches) if the laboratory split a batch. This problem did not become evident to the operable unit team until most data had been entered into FIMAD without inclusion of the report number as a separate field. Subsequently, new data have been entered into FIMAD with inclusion of the report number. In addition, some data were resubmitted to FIMAD with the report number. At present, some records in FIMAD include the report number and others do not. This inconsistency currently makes it impossible to efficiently correlate field samples with their associated quality assurance samples. Manual review of hard copy reports is ongoing.

Reporting issues

Multiple reporting. When errors were detected in data reports, a new analytical report was issued by the SCF. Depending on the severity of the error and the amount of data that changed, the new report sometimes carried a new report number. This created a situation where two reports with different report numbers provided sometimes different results for the same sample analysis. Whether or not a new report number was issued, all revised data were entered into FIMAD. To avoid loss of older data in the database, no data were overwritten, and multiple data records for individual samples have resulted. During use of the information in the FIMAD database, care must be taken to ensure that the correct value is chosen from multiple entries.

Data management issues

Incomplete information in the database. Early in the RFI, most data were entered into FIMAD without inclusion of the report number as a separate field, as discussed above. Some records in FIMAD include the report number and others do not. This inconsistency currently makes it impossible to efficiently correlate field samples with their associated quality assurance samples. For specific assessments, manual access to hard copy data reports must be employed.

It has been determined that insufficient information is available at this time to electronically verify the intactness of the batches of samples and assess their association with QA/QC samples. This assessment should be possible when the FIMAD database is revised.

At present, data qualifiers are not uploaded to FIMAD, resulting in the lack of that information within the electronic database. The result is a need to refer to hard copy analytical reports to complete some data assessment activities.

In the near future, the FIMAD database will be purged and all analytical data will be resubmitted to eliminate duplicate reporting and to supply report numbers for all data. The new data will be verified prior to release to other users and should allow a complete assessment of data quality, especially measures of precision and accuracy. Due to the difficulties described above, evaluation of data precision and accuracy was performed as if each SWMU dataset was a laboratory batch.

2.1.4.3 Data Quality Summary

2.1.4.3.1 Representativeness

The RFI work plan provides the primary guidance to ensure that collected samples are representative of the environment being assessed. If the samples are collected as specified in the work plan, and if conditions at the sampling locations are as expected, the samples are considered to be suitably representative. However, outfall sampling usually was biased to the location of the suspected outfall drainage. The samples collected were representative of soils in the outfall drainage. In some cases, areas with elevated instrument readings, or areas where runoff was expected to accumulate, were sampled to ensure the highest probability of sampling the most highly contaminated soil.

2.1.4.3.2 Completeness

Completeness will be assessed in this phase report as the percentage of usable analytical results reported, based on the number planned for the investigation. This is a less stringent definition of completeness than for some investigations. The decision to use this definition is explained in the following paragraphs.

For all the outfalls investigation reported in this phase report, the number of samples submitted to the laboratory for analysis and reported to the operable unit team was in excellent agreement with the sampling plan. The percentage of results reported is very high, as shown in Table 2.1-9.

Other aspects of the assessment of completeness include:

- The processing of matrix spike and matrix spike duplicate QA samples with each analytical batch by the analytical laboratory to document analytical recovery and provide a measure of analytical precision.

- The submission for analysis of field QA samples to document inadvertent contamination of samples and to provide a measure of sample variability. The frequency specification and the actual frequency achieved is summarized in Table 2.1-10 for all 1992 RFI investigations combined.

These measures of completeness are less rigorous than in other assessments which include analytical laboratory compliance with the exact analytical technique specified in the QAPjP or assessment of every sample batch with its associated quality assurance samples. There are two facets to acceptance of a less stringent definition for completeness. First, the FIMAD database does not currently include all of the information needed to relate samples to their analytical batches and associated quality assurance samples. In addition, it is known that in some cases the submitted batches were split and that the associated analytical results cannot be correlated with specific QA samples. However, in all cases where the assessments have been made, the judgment is that the sample analysis results are acceptable and usable for all intended purposes of this investigation. In addition, the less stringent

completion criteria are reasonable for investigations such as these where the purpose is to determine whether any contaminant release occurred.

In addition, inconsistencies in analytical techniques occurred relative to the QAPjP. If use of the prescribed analytical technique is a strict criterion for judging acceptability, some analyses for these investigations would be unusable and the completeness measure would be much lower. In reviewing the data and analysis information, however, it has been judged that the analyses done by the various techniques are usable, even if they differ slightly from those specified in the QAPjP.

2.1.4.3.3 Analytical Sensitivity

A review of all of the 1992 RFI analytical data (including outfalls, grid, and filter buildings) available on FIMAD was conducted to determine consistency of reported instrument detection limits with practical quantitative limits (PQLs) prescribed in the QAPjP. Reported detection limits for sample are displayed in FIMAD data records as a value preceded by the symbol "< or "–".

All detection limits for radiological analyses complied with the PQLs in the QAPjP, with the exception of analyses performed by gamma spectrometry. The gamma spectrometry americium-241 detection limit (0.2 pCi/g) exceeded the PQL, but remains far below any decision level for these investigations. This departure from the QAPjP has no practical impact on the RFI objectives or data useability.

The QAPjP did not provide inorganic PQLs for soil samples. For this reason, detection limits for the PQLs were those associated with quality assurance samples. A large portion of the inorganic soil sample results were reported as ug/L, most likely due to data transcription errors. This issue is under

investigation and will be addressed in an addendum to this phase report. The percentage of data reported in ug/L varied from 4% for antimony to 82% for iron, and most frequently were between 25% and 45% for the entire 1992 RFI investigation. Reported sample detection limits for beryllium and magnesium (between 1 and 10 ug/L for beryllium and between 1 and 100 ug/L for magnesium) always exceeded the PQLs. Aluminum and arsenic complied with the PQL requirement 4% and 9% of the time respectively for the entire 1992 RFI investigation. All other inorganic analyte detection limits fell below the PQLs from 20-66% of the time. Ranges of values varied widely from 1-10 ug/L to 2-10 mg/L. Because the range of detection limits were far below decision levels for target analytes of the investigation, data useability was unaffected by deviations from the PQLs.

Except for one sample where the reported detection limit for each volatile organic analyte exceeded the PQL by a factor of 50, all reported detection limits for volatile organic compounds were very near the PQLs. Reported detection limits for semi-volatile organic compounds ranged from 330-3300 ug/kg for all analytes. These detection limits met or were better than PQL requirements for 37% of the analytes for the entire 1992 RFI investigation. Detection limits for the remaining analytes were above the PQL. Again, deviations from the PQLs do not significantly impact data useability for the purposes of these investigations.

2.1.4.3.4 Precision

Assessment of the compliance for the 1992 RFI data with PARCC precision objectives described below was done with the assumption that the samples collected at each SWMU made up a laboratory batch.

Analytical precision is calculated by expressing, as a percentage, the difference between the results of analysis of duplicate samples relative to the average of those results for a given analyte. Precision is expressed as a relative percent difference (RPD). The quality assurance objectives for inorganic and radionuclide analyses are different from those of organic analysis.

Inorganics Analysis

The quality assurance objective for precision for metals analysis is + or – 20 % RPD for sample values greater than 10 times the instrument detection limit. This RPD is for replicate analyses, as specified by Method 6010, Inductively Coupled Plasma-Atomic Emission Spectroscopy in U.S. EPA SW-846.

Organic Analysis

Analytical precision for organic analysis (GS/MS), under the criteria of U.S. EPA SW-846, is measured by comparing the recovery of a select number of target analytes in duplicate samples or blanks (e.g., matrix spike/matrix spike duplicate). The quality assurance objectives for precision of organic analysis (expressed by the RPD for analysis of matrix spike and matrix spike duplicate samples) are presented in Table V.11 of the QAPjP. In some instances, MS/MSD recoveries are reported in ug/g due to data transcription errors. This issue is under investigation and will be assessed in an addendum to this phase report.

Radionuclide Analysis

For the purpose of evaluating data discussed in this report, radionuclide precision criteria will be the sample as the inorganic criteria specified in the QAPjP; + or – 20% RPD for sample values greater than ten times the instrument detection limit.

2.1.4.3.5 Accuracy

Assessment of the compliance of 1992 RFI outfalls data with PARCC accuracy objectives described below was done with the assumption that each SWMU dataset comprised a laboratory batch.

Analytical accuracy was calculated by expressing, as a percent, the recovery of a standard reference material or analyte that had been added to the sample (or standard matrix) at a known concentration before analysis. The spiked (fortified) concentration used was specified by laboratory quality control requirements as detailed in the applicable U.S. EPA SW-846 method.

Inorganic Analysis

Analytical accuracy for metals is measured from analysis of a spiked replicate sample and a sample spiked with the analyte of interest (analyte spike). The quality assurance objectives for accuracy in metals analysis, for these quality control samples, are taken from the U.S. EPA SW-846 Method 6010 and are summarized below.

Sample	Recovery %
Spike replicate	80-120
Analyte spike	75-125

In some instances MS/MSD recoveries are reported as 0% due to data transcription errors. This issue is under investigation and will be assessed in an addendum to this phase report.

Organic Analysis

For organic analysis (gas chromatography (GC) and GC/Mass Spectrometry (MS)), analytical accuracy is obtained from the surrogate recovery measured in each sample and blank or from the analysis of samples or blanks spiked with a select number of target analytes.

The U.S. EPA SW-846 quality assurance objectives for accuracy for organic surrogate spike recovery are summarized in Table V.12 of the QAPjP. The U.S. EPA SW-846 quality assurance objectives for precision and accuracy of matrix spike analyses are given in Table V.11 of the QAPjP. In some instances, MS/MSD recoveries are reported in ug/g due to data transcription errors. This issue is under investigation and will be assessed in an addendum to this phase report.

2.1.4.4 Special Concerns and Issues

The following issues are not directly related to PARCC requirements, but do represent deviations from the planned analytical program and potentially impact data quality.

2.1.4.4.1 Gamma Spectroscopy

Gamma spectroscopy was performed on all samples collected in the investigations described in this phase report. Preliminary gamma scans were performed in the field laboratory. These data were used primarily as screening information prior to sample shipping. More sensitive gamma spectroscopy analysis also were performed in an analytical laboratory on all samples submitted for laboratory analysis. In a deviation from the QAPjP, the performing laboratory reported non-quantitative gamma spectroscopy data, where the intent was quantitative analyses.

The gamma spectrometry data were intended primarily to address the presence of cesium-137 in the outfalls soil investigation. This need can be fulfilled in a qualitative sense using the reported gamma spectroscopy data. A further check which reduces the need for quantitative gamma spectral analysis is provided by the gross gamma measurements made on all samples in the field laboratory. For cesium-137, this technique has a detection limit of approximately 4 pCi/g. For the outfalls investigation, gross gamma levels were rarely reported above the detection limit, and then only marginally so.

2.1.4.5 Geodetic Survey Data

Specific attention has been given to verifying the accuracy of the coordinate data representing the locations of sampling points, as determined by geodetic surveys and reported in a final survey report. The geodetic survey coordinates were checked for validity prior to final entry into FIMAD. A total of 89 sampling locations were surveyed for the outfalls investigation reported in this phase report.

Survey coordinates initially provided in a draft survey report were loaded into a temporary FIMAD file and plotted on a base map for review to screen for major discrepancies. The planned locations for sampling were also displayed on the base map for ease of comparison. Errors resulting primarily from data entry were corrected and revised coordinates were entered into a temporary FIMAD file.

Subsequently, a point by point comparison was made to identify points which deviated from the planned locations, and to identify the group of points which were placed based on field information (for which no planned location was available). Based on field notes, the plotted location of each of these points was verified to confirm that the deviations from planned locations were appropriate and that the field-placed locations were correct.

Following the validity check described above, the temporary FIMAD data file was plotted and rechecked prior to approval for the permanent download into FIMAD.

2.1.4.6 Conclusions

Difficulties in accessing data through the FIMAD data management system have prevented a complete data quality assessment at this time. Quality related issues include the breaking of analytical batches by the analytical laboratories, resulting in the separation of field samples from their associated QA samples, transcription errors, and a general inability to efficiently relate samples to their analytical batches and QA samples within the existing electronic data management system.

This assessment of data quality for the TA-21 RFI is specific to the intended purposes of the outfalls investigation reported in this phase report. The purposes of the investigation focus on identifying whether contaminants are present, determining whether contaminants were released, and determining requirements if any, for further action. With consideration of those investigation objectives, the data acquired in the FY92 investigations and presented in this phase report are determined to be acceptable and usable for all intended purposes, even though not all measures of quality can be assessed at this time.

Table 2.1-1 TA-21 Outfall Solid Waste Management Unit Listing

SWMU GROUP/DESCRIPTION	Phase Report Chapter	SWMU No.	WORK PLAN SECTION/TITLE
21-004 - Above Ground Tanks and Drain Lines	3.1	21-004(d)[4]	15.8 - Surface Drainage North of TA-21-155
21-006 - Underground Seepage Pits	4.1	21-006(b)[2]	15.9 - Special Cases
21-011 - New Industrial Waste Treatment Plant	5.1	21-011(k)[3]	15.4 - Direct Discharge Outfalls
21-022 - Acid Waste Lines and Sumps	6.1	21-022(h)[1]	15.4 - Direct Discharge Outfalls
21-023 - Decommissioned Septic Systems	7.1	21-023(c)[1]	15.2 - Outfalls with Undetermined Locations
21-024 - Inactive Septic Systems/Outfalls	8.1	21-024(a)[1]	15.2 - Outfalls with Undetermined Locations
		21-024(b-e)[1]	15.3 - Outfalls with Septic Tanks
		21-024(f)[1]	15.9 - Special Cases
		21-024(g)[1]	15.2 - Outfalls with Undetermined Locations
		21-024(h)[1]	15.8 - Surface Drainage North of TA-21-155
		21-024(i)[1]	15.3 - Outfalls with Septic Tanks
		21-024(j,k)[1]	15.6 - Septic Tanks
		21-024(l)[3]	15.2 - Outfalls with Undetermined Locations
		21-024(m)[3]	15.7 - Surface Drainage South of TA-21-155
		21-024(n,o)[3]	15.4 - Direct Discharge Outfalls
21-026 - Wastewater Treatment Plant	9.1	21-026(d)[4]	15.4 - Direct Discharge Outfalls
21-027 - Surface Discharge	10.1	21-027(a)[3]	15.5 - Surface Drainage South of TA-21-3
		21-027(b)[3]	15.7 - Surface Drainage South of TA-21-155
		21-027(c,d)[3]	15.2 - Outfalls with Undetermined Locations

[1] Listed in Table A of the original HSWA module.
[2] Listed in Table B (priority SWMUs) of the original HSWA module.
[3] Added to official LANL SWMU list in January 1994.
[4] Non-HSWA SWMU.

		1992 SAMPLES						1993 SAMPLES					
		Surface and Near-Surface Soil Samples		Borehole Core Samples[1]		QA Samples		Surface and Near-Surface Soil Samples		Borehole Core Samples		QA Samples	
Work Plan Chapter/Section	SWMU No.	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected
15.5 Drainage South of TA-21-3	21-027(a)	14	14	8	0	4	3	8	8	8	8	1	1
15.6 Septic Tanks	21-024(j)	0	0	4	0	0	0	0	0	4	4	0	3
	21-024(k)	0	0	12	0	5	0	0	0	12	12	5	4
15.7 Drainage South of TA-21-155	21-024(m)	3	3	0	0	4		0	0	0	0	0	0
	21-027(b)	3	3		0	4	3						
15.8 Drainage North of TA-21-155	21-004(d)	21	18	0	0	7	5	0	0	4		3	
	21-024(h)	9	8	4	0	4	1	0	0	4	4	2	2
15.9 Special Cases	21-006(b)	6	6	0	0	0	1	0	0	0	0	0	0
	21-024(f)	9	9	8	0	7	1	0	0	8	8	4	3
	TOTALS	181	175	68	0	53	43	121	121	68	68	47	47

[1] Borehole samples planned for collection in 1992 were delayed until 1993 because of NESHAPS compliance issues.

Table 2.1-2 Outfall recommendation summary.

SRS Score	SWMU	Extent of Contamination Adequately Characterized	All Levels Below Applicable Baseline	All Levels Below SALs	Data Outstanding	NFA Recom-mendation	Further Investi-gation	Deferred Decision
21	21-004(d)	No	No	Yes	No	5	5	Yes
36	21-006(b)	Yes	Yes	Yes	No	5	5	Yes
67	21-011(k)[2]	No	No	No	Yes	No	Yes	No
22	21-022(h)	Yes	No	Yes[1]	No	5	5	Yes
35	21-023(c)	3	No	No	Yes	3	3	Yes
39	21-024(a)	3	No	Yes	Yes	3	3	Yes
39	21-024(b)	3	No	No	Yes	3	3	Yes
39	21-024(c)	3	No	No	Yes	3	3	Yes
39	21-024(d)	3	No	No	Yes	3	3	Yes
39	21-024(e)	3	No	No	Yes	3	3	Yes
35	21-024(f)	3	No	Yes	Yes	3	3	Yes
35	21-024(g)	3	No	Yes	Yes	3	3	Yes
35	21-024(h)	3	No	No	Yes	3	3	Yes
53	21-024(i)[2]	3	No	No	Yes	No	Yes	No
39	21-024(j)	3	N/A	N/A	Yes	3	3	Yes
39	21-024(k)	3	N/A	N/A	Yes	3	3	Yes
35	21-024(l)	Yes	No	Yes	No	Yes	No	No
42	21-024(m)/ 21-027(b)	Yes Yes	Yes Yes	Yes Yes	No No	Yes Yes	No No	No No
35	21-024(n)	Yes	No	Yes	No	Yes	No	No
39	21-024(o)	Yes	Yes	Yes	No	Yes	No	No
	21-026(d)	Yes	No	Yes	No	Yes	No	No
54	21-027(a)	3	No	No	Yes	No	Yes	No
39	21-027(c)	4	No	No	4	3	4	Yes
35	21-027(d)	Yes	No	Yes	No	Yes	No	No

[1] Sum of all SAL fractions above one. Individual analyte fractions below one.
[2] Interim fencing is recommended. Phase 2 sampling plan will be developed.
3 Decision deferred until outstanding sample analyses are received and assessed.
4 Decision deferred until assessment of vicinity or related SWMUs are assessed.
5 Decision deferred until the remainder of the SWMU subunit is assessed.
N/A – Not available at this time.

Table 2.1-4 Radionuclide/Inorganic Baseline Parameters for Non-Process Areas (0 to 6 in. Sample Depth).

		Normal Distribution		Lognormal Distribution					
Radionuclide	**SAL (ug/g)**	**Mean**	**95.5 Percentile**	**Mean**	**95.5 Percentile**	**No. of samples**	**Min**	**Max**	**Dist. Type**
Am-241	22	0.031	0.129	0.0194	0.13	61	0.001	0.37	LN
H-3	1.50E+04	1630	4590	1100	7790	97	50	8100	LN
Pu-238	27	0.019	0.239	0.00499	0.05	104	0.001	1.05	LN
Pu-239	24	0.58	2.04	0.247	4.31	103	0.002	3.26	LN
Sr-90	8.9	0.23	0.73	0.135	1.22	114	0.02	1.8	X
Th-228	NA	1.55	2.05	1.52	2.05	24	1.1	2.3	LN
Th-230	10	1.38	1.82	1.36	1.84	24	0.96	1.9	LN,N
Th-232	0.88	1.5	1.98	1.48	1.99	24	1.05	2.1	X
U total	66.3	4.66	7.42	4.53	7.46	113	2.48	14.2	X
U-234	86	1.51	2.03	1.49	2.05	24	1.2	2.29	LN,N
U-235	18	0.081	0.153	0.0742	0.18	24	0.038	0.19	LN,N
U-238	59	1.59	2.19	1.57	2.25	24	1.18	2.45	N,LN
Note: All values in pCi/g except for U (ppm), H-3 (nCi/l soil moisture)									
Analyte									
As	0.4	1.93	3.67	1.79	3.90	56	0	4.9	X
Ag	400	0.97	2.33	0.835	2.32	109	0.32	5	X
Al	NA	60300	74900	59300	75900	56	37100	83500	N,LN
Ba	5600	192	498	126	934	109	18.9	618	X
Be	0.16	1.73	4.23	1.26	6.75	110	0.14	5.1	X
Ca	NA	5320	13880	4580	11700	56	2000	31700	LN
Cd	80	0.69	1.17	0.657	1.32	109	0.3	1	X
Co	NA	3.67	7.99	3.03	10.9	109	1.05	11	X
Cu	3000	6.52	18.9	5.1	20.3	109	1	57.4	LN
Cr	400	8.73	21	6.55	34.5	110	1	28.1	X
Fe	NA	14000	23200	13200	26100	56	4200	27900	N,LN
K	NA	ND	ND	ND	ND	ND	ND	ND	ND
Li	NA	ND	ND	ND	ND	ND	ND	ND	ND
Mg	NA	2480	4760	2230	6060	56	430	6200	LN
Mn	8000	301	485	287	534	108	123	639	N,LN
Mo	NA	ND	ND	ND	ND	ND	ND	ND	ND
Na	NA	20600	29600	20100	31900	56	10700	31200	N,LN
Ni	1600	5.87	11.9	5.31	13.1	110	1.5	18	X
Pb	500	18.9	41.1	16.1	50.4	108	5.5	61	LN

Table 2.1-3 Sampling summary for the outfalls investigation.

		1992 SAMPLES						1993 SAMPLES					
		Surface and Near-Surface Soil Samples		Borehole Core Samples[1]		QA Samples		Surface and Near-Surface Soil Samples		Borehole Core Samples		QA Samples	
Work Plan Chapter/Section	SWMU No.	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected	Planned	Collected
15.2 Outfalls w/undetermined Locations	21-023(c)	6	6	4	0	2	2	14	14	4	4	3	5
	21-024(a)	18	18	4	0	5	4	0	0	4	4	1	
	21-024(g)	12	14	4	0	3	1	0	0	4	4	2	2
	21-024(l)	6	6	0	0	0	0	0	0	0	0	0	0
	21-027(c)	6	6	0	0	4	5	0	0	0	0	0	0
	21-027(d)	6	6	0	0	1	1	0	0	0	0	0	0
15.3 Outfalls with Septic Tanks	21-024(b)	9	9	4	0	1	2	0	0	4	4	2	1
	21-024(c)	4	4	4	0	3	4	0	0	4	4	0	3
	21-024(d)	4	4	4	0	0	1	0	0	4	4	1	3
	21-024(e)	4	3	4	0	3	3	0	0	4	4	2	0
	21-024(i)	6	6	4	0	4	0	14	14	4	4	4	2
15.4 Direct Discharge Outfalls	21-011(k)	5	5	0	0	0	0	14	14	0	0	2	2
	21-022(h)	9	8	0	0	1	1	0	0	0	0	0	0
	21-024(n)	9	9	0	0	2	3	0	0	0	0	0	0
	21-024(o)	6	6	0	0	1	1	0	0	0	0	0	0
	21-026(d)	6	6	0	0	3	3	0	0	0	0	0	0

		Normal Distribution		Lognormal Distribution					
Radionuclide	**SAL (ug/g)**	**Mean**	**95.5 Percentile**	**Mean**	**95.5 Percentile**	**No. of samples**	**Min**	**Max**	**Dist. Type**
Analyte									
Se	400	0.15	0.37	0.129	0.41	58	0.05	0.60	LN
Sr	NA	83	151	75.9	179	52	25	184	N,LN
Tl	6.4	ND	ND	ND	ND	ND	ND	ND	ND
V	560	17	41	13.5	60.3	110	1.2	58.6	X
Zn	24000	39	69	36.6	73.7	108	14.3	130	X

Note: All values in ug/g

ND = Not determined
NA = Not available
N = Normal distribution
LN = Log normal distribution
X = Does not fit either distribution

Table 2.1-5 Process Area Baseline Parameters.

		Normal Distribution		Log-Normal Distribution				
Analyte	**SAL**	**Mean**	**95.5 Percentile**	**Mean**	**95.5 Percentile**	**No. of Samples**	**Min.**	**Max.**
As	0.4	2	3.44	1.89	3.75	42	0.8	4.4
Ag	400	0.63	1.55	0.532	1.56	41	0.305	2.2
Al	NA	59300	68700	59900	69500	29	49700	70000
Ba	5600	347	513	337	565	29	190	527
Be	0.16	1.99	4.05	1.56	8.38	41	0.14	3.8
Ca	NA	4880	7500	4720	7680	29	2000	31700
Cd	80	0.96	2.14	0.799	2.91	41	0.3	3
Co	NA	4.82	8.5	4.44	10.6	42	1.1	9
Cu	3000	11.8	50.8	8.67	29.3	41	3.2	131
Cr	400	8.73	18	11.7	26.4	41	3.7	24
Fe	NA	12.6	9210	13200	26100	56	4200	27900
K	NA	ND	ND	ND	ND	ND	ND	ND
Li	NA	ND	ND	ND	ND	ND	ND	ND
Mg	NA	2200	3990	2000	5200	43	460	4200
Mn	8000	358	592	340	687	41	129	696
Mo	NA	ND	ND	1.00	ND	ND	ND	ND
Na	NA	20400	27300	20100	28300	29	14300	28000
Ni	1600	7.1	13.6	6.42	16.4	41	1.5	19
Pb	500	25.9	56.5	22.2	68	41	7.5	82
Se	400	0.15	0.268	0.141	0.289	42	0.1	0.33
Sr	NA	95	146	90.9	166	29	43	151
Tl	6.4	ND	ND	1.00	ND	ND	ND	ND
V	560	24.4	43.4	22.4	53.4	41	7.5	48
Zn	24000	70.8	210	58.6	169	42	26.1	466
Note: All values in ug/g								
Radionuclide								
Am-241	22	0.15	0.526	0.103	0.56	21	0.015	0.912
H-3	1.50E+04	2870	7850	2160	9920	41	300	12500
Pu-238	27	0.53	6.21	0.0282	1.03	43	0.002	18.7
Pu-239	24	2.33	9.41	0.835	20.1	40	0.034	14.7
Sr-90	8.9	0.21	0.688	0.149	0.934	41	0	1
Th-228	NA	1.34	1.78	1.32	1.91	12	0.86	1.62
Th-230	10	1.38	1.82	1.36	1.84	42	0.96	1.9
Th-232	0.88	1.33	1.71	1.31	1.8	12	0.89	1.52
U total	66.3	4.67	7.51	4.53	7.6	12	2.5	10.7

		Normal Distribution		Log-Normal Distribution				
Analyte	**SAL**	**Mean**	**95.5 Percentile**	**Mean**	**95.5 Percentile**	**No. of Samples**	**Min.**	**Max.**
Radionuclide								
U-234	86	1.49	1.95	1.47	2.00	11	1.19	1.8
U-235	18	0.073	0.1	0.0714	0.105	11	0.095	0.5
U-238	59	1.38	1.94	1.35	2.14	11	0.785	1.77
Note: All values in pCi/g except for U (ppm) and H-3 (nCi/l soil moisture)								
ND = Not determined NA = Not available								

Table 2.1-6 Radionuclide and inorganic baseline parameters for special impact areas.

Radionuclide	Special Impact Area	SAL (ug/g)	Mean	95.5 Percentile	Mean	95.5 Percentile
Am-241 (pCi/g)	1	22	0.202	0.673	0.136	0.759
Pu-238 (pCi/g)	1	27	0.0435	0.155	0.0257	0.192
Pu-239 (pCi/g)	1	24	3.32	12.5	1.5	21.6
H-3 (nCi/l)	2	1.5E+04	4.63	11	3.84	12.8

Table 2.1-7 Screening action levels (SALs) for baseline radionuclide and inorganic analytes, as given in Appendix J of the IWP.

CHEMICALS	SOIL SCREENING ACTION LEVEL ug/g
Inorganics	
Aluminum	*
Antimony	32
Arsenic	0.40
Barium	5,500
Beryllium	0.16
Cadmium	80
Calcium	*
Chromium VI	400
Cobalt	*
Copper	3,000
Iron	*
Lead	500
Magnesium	*
Manganese	8,000
Mercury	24
Nickel	1,600
Potassium	*
Selenium	400
Silver	400
Sodium	*
Thallium	6.4
Uranium	240
Vanadium	560
Zinc	24,000
RADIONUCLIDES	**Soil Screening Action Level (pCi/g dry soil)**
Americium-241	22.0
Cesium-137	4.0
Plutonium-238	27.0
Plutonium-239	24.0
Strontium-90	8.90
Thorium-230	10.0
Tritium	1.5×10^4 (nCi/l)
Uranium-234	86.0
Uranium-235	18.9

RADIONUCLIDES	Soil Screening Action Level (pCi/g dry soil)
Uranium-238	59.0
Natural Uranium	66.3
*Non-carcinogenic component.	

Table 2.1-8 Laboratory request numbers for the outfalls investigation samples.

Radiological Request Number	Organics Request Number	Inorganics Request Number
13099	13100	13194
13105	13104	13211
13117	13116	13219
13158	13157	13245
13165	13160	13101
13175	13164	13103
13179	13173	13115
13187	13180	13156
13196	13186	13163
13213	13195	13174
13221	13212	13176
13247	13217	13185
13272	13220	13270
	13246	
	13271	
	13301	

Table 2.1-9 Percent of 1992 Data Received

Analysis Requested	Number of Samples Submitted	Number of Samples Received	Percentage of Data Received
Amercium-241	202	202	100%
Gamma Spectroscopy	202	202	100%
Plutonium-238	202	202	100%
Plutonium-239	202	202	100%
Strontium-90	202	202	100%
Thorium-228	98	98	100%
Thorium-230	98	98	100%
Thorium-232	98	98	100%
Tritium (in soil moisture)	202	202	100%
Uranium (total)	202	202	100%
Metals (SW-6010)	213	213	100%
Semivolatiles (SW-8270)	215	215	100%
Volatiles (SW-8240)	224	224	100%

Table 2.1-10 QAPjP Field QA Frequency Requirements versus Actual Frequency

QA type	QAPjP requirement	Actual QA sampling
Field reagent blanks	1 per 20 field samples	1 per 16 samples
Field rinsate blanks	1 per 20 field samples	1 per 16 samples
Field duplicates	1 per 20 field samples	1 per 18 samples (duplicates)
Field trip blanks	1 per shipping container (VOA analysis only)	1 per shipping container

CHAPTER 3

ABOVE-GROUND TANKS AND DRAIN LINES

3.0 ABOVE-GROUND TANKS AND DRAIN LINES

SWMUs 21-004(a–c) are underground tanks which will be addressed in future investigations as described in Section 14.3 of the RFI work plan. SWMU 21-004(d) is the drain line from these tanks.

3.1 SWMU 21-004(d)

This outfall is addressed in Section 15.8, Surface Drainage North of Building TA-21-155, of the RFI work plan. SWMU 21-004(d) falls within the process baseline area and the two special impact baseline areas. The outfall and sampling locations at SWMU 21-004(d) are shown on Figure 3.1-1. The assessment of the RFI data for SWMU 21-004(d) leads to a recommendation for no further action.

3.1.1 Site Process and Sampling History

This outfall received overflow discharges from an acid waste pumping station, structure TA-21-223, that carried waste from DP East to DP West for treatment at the new liquid radioactive waste treatment facility (Building TA-21-257). Based on past activities at DP East, this outfall may have received discharges of diluted laboratory and chilled water system waste liquids. These discharges may have contained mercury, tritium, polonium, actinium, and plutonium-239/240. Over time, the outfall release configuration has changed. The initial release point was located just north of the perimeter road at a concrete bulkhead. In later years, the outfall pipe was extended approximately 60 ft from the bulkhead in a northwestern downgradient direction into DP Canyon. Later, the outfall was connected to two tanks that were installed for containment of treatment facility overflow which was released previously at 21-004(d).

One sample was collected at SWMU 21-004(d) about 2 ft downslope of the bulkhead during 1988 reconnaissance sampling. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics and pesticides/PCBs, and target analyte list metals. Standard analytical procedures of commercial laboratories were used for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium. Mercury, plutonium-239/240, and tritium were previously reported above regional background levels in the sample collected in 1988 (see approximate location on Figure 3.1-1). Low levels of oil and grease also were reported for this sample (LANL 1991a). Analytical results of the 1988 reconnaissance sampling are shown in Table 3.1-1.

3.1.2 RFI Activities and Data Presentation

The characterization of SWMU 21-004(d) was performed in 1992 as presented in the RFI work plan, except for the addition of americium-241 analysis.

The 1992 work consisted of a radiological field survey and the collection of soil samples from six locations according to sampling Strategy B. As originally planned, one surface (0-6 in.) and two near-surface (6-12 in. and 12-18 in.) samples were collected at each location. The approximate location of the outfall, its drainage pathway, and the SWMU sample locations are shown on Figure 3.1-1. The radiation survey identified in the figure was expanded to include the area where samples were collected.

Sampling location 21-1415 is in the area where SWMUs 21-024(h) and 21-004(d) drainages meet. Sample results for this location are discussed in Section 8.8 with SWMU 21-024(h) investigation results.

Table 3.1-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

3.1.3 Data Assessment

No inorganic analytes were detected above the applicable baseline 95.5 percentile.

The radiological field survey activities indicated background levels of alpha, gamma, and low-energy gamma emitters.

As indicated in Table 3.1-2, several radionuclides were detected above the 95.5 percentile of applicable baseline category. Tritium concentrations as high as 1,700 nCi/l were detected, which is approximately one-tenth the SAL, 1.5×10^4 nCi/l. Tritium concentrations increase with depth at locations 21-1408 and 21-1409. The lateral extent of tritium contamination is judged to be reasonably defined, with lower concentrations at downgradient locations 21-1410, 21-1411, and 21-1472.

Thorium-228 and strontium-90 were reported marginally above the applicable baseline 95.5 percentile at locations 21-1409 and 21-1408, respectively. Based on the low levels and knowledge of processes that fed this outfall, these concentrations do not indicate contamination from the outfall releases.

Acetone and methylene chloride (common laboratory contaminants) were the only volatile organics detected in the samples collected at SWMU 21-004(d). Acetone was detected in all soil samples analyzed for volatile organics in concentrations up to 88 ug/g and also in all three blanks at concentrations up to 62 ug/l. Methylene chloride was detected in relatively low concentrations, all below 14 ug/g. These concentrations are not judged to be indicative of organic site contamination.

3.1.4 Conclusions and Recommendations

It is judged that the investigation adequately characterized the nature and extent of contamination at SWMU 21-004(d). All contaminant levels (including tritium) were shown to be far below SALs. Therefore, it is recommended that no further action is warranted for this SWMU.

3.1.5 QA/QC Sample Summary

Analytes detected in blanks associated with SWMU 21-004(d) are listed in Table 3.1-4. No semi-volatile organics were detected in field rinsate and field reagent blanks collected at this SWMU. The field rinsate blank associated with this SWMU indicated no radionuclide contamination. The results of the field rinsate and field reagent blanks associated with this SWMU showed no detectable concentrations for 24 of the 25 inorganic analytes and 61 of the 62 volatile organics. The field trip blank associated with this SWMU showed no detectable concentrations for 61 of the 62 volatile organics.

Two laboratory duplicate analyses for radionuclides were performed. In the first duplicate, four of the seven radionuclide analytes from the 12-18 in. sample collected at location 21-1407 met the precision criteria specified in section 2.1.4 of this report. In the second duplicate, three of the six (no duplicate tritium analysis was performed) analytes from the 0-6 in. sample collected from location 21-1411 met the precision criteria specified in section 2.1.4 of this report. Three additional tritium laboratory duplicate analyses were performed on the samples collected from SWMU 21-004(d). One of these analyses met the precision criteria specified in section 2.1.4 of this report.

One inorganic MS/MSD analysis (0 to 6 in. sample collected from location 21-1407) was performed on the samples collected from SWMU 21-004(d). All recoveries were reported in FIMAD as 0%. Therefore, the accuracy criteria for these analytes, as specified in the QAPjP, could not be evaluated at this time.

Table 3.1-3 lists analytes that did not meet the precision criteria specified in the QAPjP.

Recoveries for organic MS/MSD analyses performed on the 0 to 6 in. and 12 to 18 in. samples collected from location 21-1408, and the 0 to 6 in. samples collected from location 21-1407 were reported in FIMAD in ug/g rather than percent recoveries. Therefore, precision and accuracy criteria could not be evaluated at this time.

Analytes detected in blanks associated with SWMU 21-004(d) are listed in Table 3.1-4.

Table 3.1-1 1988 outfall reconnaissance sampling – SWMU 21-004(d).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
Inorganics			
Aluminum	7790	31	ug/g
Barium	95.5	31	ug/g
Calcium	2760	777	ug/g
Chromium	6.1	2.0	ug/g
Copper	7.0	4.0	ug/g
Iron	7330	16	ug/g
Lead	13.1	10	ug/g
Magnesium	1400	777	ug/g
Manganese	246	2.0	ug/g
Mercury	0.17	0	ug/g
Nickel	6.6	6.0	ug/g
Oil & Grease	596	54	ug/g
Potassium	1200	777	ug/g
Silver	2.1	2.0	ug/g
Vanadium	14.2	8.0	ug/g
Zinc	35.1	4.0	ug/g
Radionuclides			
Cesium-137	0.3	0.1	pCi/g
Plutonium-239	3.5	0.3	pCi/g
Radium-226	1.3	0.2	pCi/g
Thorium-232	0.9	0.3	pCi/g
Tritium	260	10	nCi/l
Uranium-234	1.4	0.2	pCi/g
Uranium-238	0.7	0.2	pCi/g

Table 3.1-2 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-004(d).

ANALYTE	LOCATION ID	APPLICABLE BASELINE AREA	APPLICABLE 95.5 PERCENTILE*	SAL*	SURFACE (0-6 in.)*	NEAR-SURFACE (6-12 in.)*	NEAR-SURFACE (12-18 in.)*
H-3	21-1407	SI-2	11	15000	B	152.6	115.3
	21-1408	SI-2	11	15000	B	248.3	1,700
	21-1409	SI-2	11	15000	B	B	622.7
Pu-238	21-1410	SI-1	0.155	27.0	0.432	B	B
	21-1412	SI-1	0.155	27.0	B	0.371	B
Sr-90	21-1408	NP	0.73	8.9	1.14	B	B
Th-228	21-1409	NP	2.05	NA	B	B	2.99

* – Units are in pCi/g, except for H3 which is in nCi/l soil moisture
SI-1 – Special Impact Area 1
SI-2 – Special Impact Area 2
NP – Non-process Area Baseline
B – Below Baseline 95.5 percentile
NA – Not Available

Table 3.1-3 QA/QC sample summary - radionuclide and inorganic data precision at SWMU 21-004(d).

Analyte	Location ID	Sample Depth	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Americium-241	21-1407	0-6 in.	0 pCi/g	0.0449 pCi/g	-200
Plutonium-238	21-1407	12-18 in.	0.0502 pCi/g	0.516 pCi/g	-165
Plutonium-239	21-1407	12-18 in.	0.0619 pCi/g	0.12 pCi/g	-64
Thorium-232	21-1407	12-18 in.	1.78 pCi/g	1.4 pCi/g	24
Tritium	21-1408	0-6 in.	54.1 nCi/l	81 nCi/l	-40
Tritium	21-1409	0-6 in.	19 nCi/l	11.1 nCi/g	52
Plutonium-238	21-1411	0-6 in.	0.0737 pCi/g	0.0555 pCi/g	28
Plutonium-239	21-1411	0-6 in.	0.388 pCi/g	0.0437 pCi/g	159
Thorium-230	21-1411	0-6 in.	1.45 pCi/g	0.898 pCi/g	47
Cobalt	21-1407	0-6 in.	4.8 ug/g	3.9 ug/g	-21

Table 3.1-4 QA/QC sample summary for field blanks – SWMU 21-004(d).

Analyte	Location ID	Sample Concentration	Sample Type
Sodium	21-1412	48.3 ug/g	FE
Arsenic	21-1412	6.3 ug/g	FR
Acetone	21-1407	56 ug/l	FB
Acetone	21-1412	62 ug/l	FE
Acetone	21-1412	38 ug/l	FR

FE-field rinsate blank; FR-field reagent blank; FB-field trip blank.

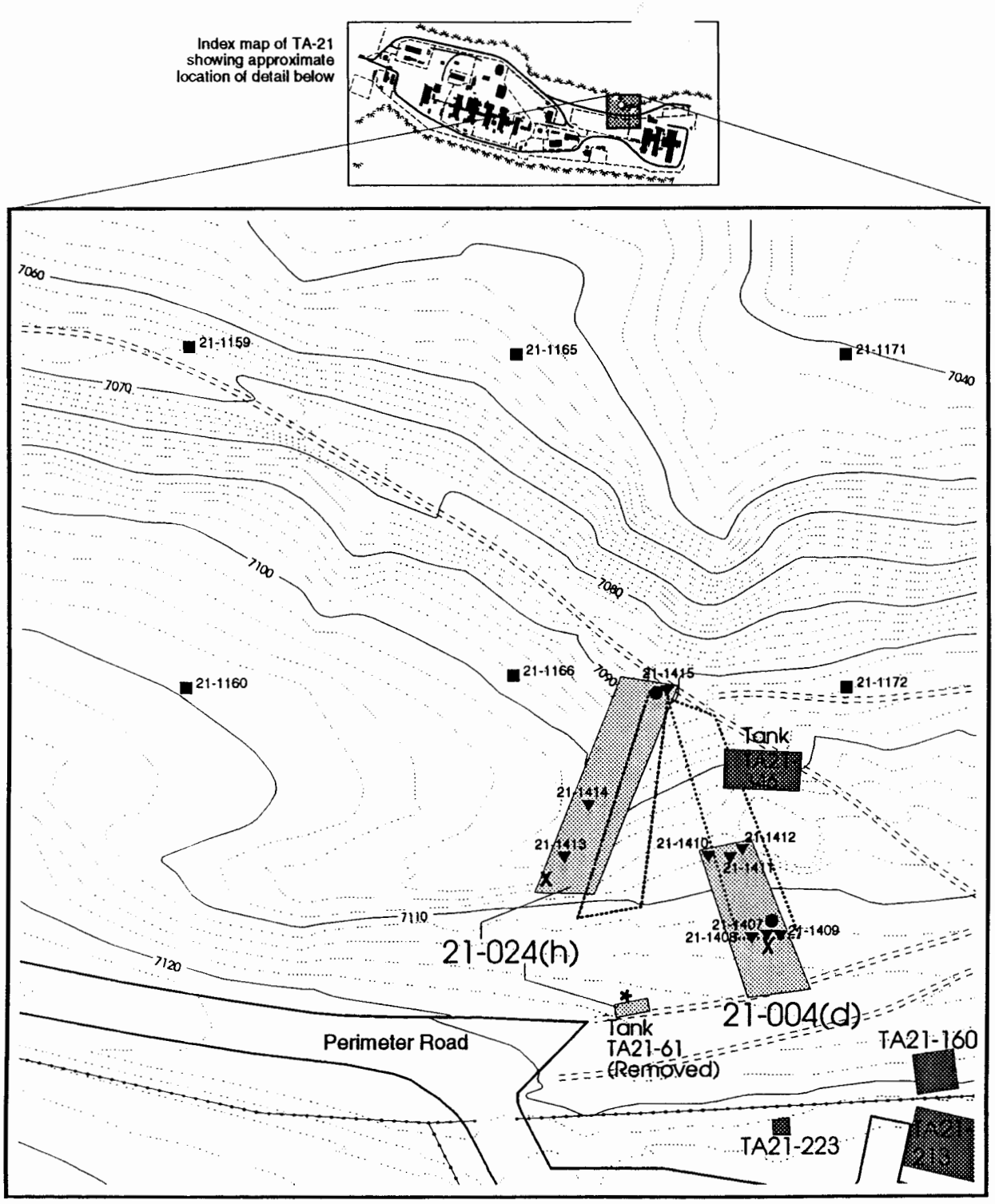


Figure 3.1-1
SWMU 21-004(d)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101696

Modified by: David Dander 2/22/94

CHAPTER 4

UNDERGROUND SEEPAGE PITS

4.0 UNDERGROUND SEEPAGE PITS

SWMUs 21-006(a–f) are seepage pits which will be addressed in future investigations as described in Sections 17.2 and 18.3 of the RFI work plan. SWMU 21-006(b) was the only seepage pit with a known drain line.

4.1 SWMU 21-006(b)

The outfall portion of SWMU 21-006(b) is addressed in Section 15.9 of the RFI work plan and is located within the process baseline area. The outfall and sampling locations at SWMU 21-006(b) are shown on Figure 4.1-1. Because only a portion of SWMU 21-006(b) has been investigated, this SWMU is recommended for a deferred decision. However, the assessment of the available RFI data will likely lead to a recommendation of no further action.

4.1.1 Site Process and Sampling History

This outfall consists of a 3-in drain line which received acid wastes from building TA-21-2. The line passes southward through sump TA-21-118 and then to Los Alamos Canyon. The discharge point is approximately eight feet above the bench, immediately below the canyon edge. The system was built to accept waste from the ethyl ether extraction process, which was part of an early plutonium purification process at TA-21.

One sample was collected at SWMU 21-006(b) during 1988 reconnaissance sampling at the approximate location indicated on Figure 4.1-1. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics, pesticides/PCBs, and target

analyte list metals. Standard analyses were used for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium. The reported tritium concentration of 31 nCi/l was well above regional background levels. Lead, cesium-137, and plutonium-239/240 were reported slightly above regional background levels. Toluene also was reported above the detection limit in this sample. Analytical results are shown in Table 4.1-1.

4.1.2 RFI Activities and Data Presentation

Characterization of SWMU 21-006(b) was performed as prescribed in the RFI work plan, except at location 21-1358. The RFI work plan called for a 0-6 in. sample to be collected at location 21-1358, but refusal was encountered at 4 in. due to bedrock. Americium-241 was added to the analyte list for all samples.

The 1992 investigation consisted of a radiological field survey and the collection of surface (0-6 in.) samples from six locations according to sampling Strategy B.

4.1.3 Data Assessment

No inorganic analytes were detected above the applicable baseline 95.5 percentile.

Americium-241 was the only analyte detected above the non-process area baseline 95.5 percentile, at a concentration of 0.104 pCi/g at location 21-1360. This concentration did not exceed the process area baseline 95.5 percentile and is well below the SAL of 22 pCi/g. Thus, americium-241 is not of concern for SWMU 21-006(b).

Cesium-137 was reported at a concentration of 1.5 pCi/g in the 1988 reconnaissance sample. Because analytical laboratory gamma spectrometry was not performed on the 1992 samples, a lower detection limit for cesium-137 (4 pCi/g) was set by the field laboratory. Because gross gamma results were all reported below the lower detection limit, it is unlikely that cesium-137 levels exist at SWMU 21-006(b) above the SAL of 4 pCi/g.

The field survey indicated background levels of alpha and gamma emitters and slightly elevated levels of low-energy gamma emitters.

No semi-volatile or volatile organics were detected in the RFI samples collected from SWMU 21-006(b). No inorganics were detected above the non-process area baseline 95.5 percentile.

4.1.4 Conclusions and Recommendations

A decision on the disposition of this SWMU will be deferred until the seepage pit investigation has been completed. However, all analyte levels at the outfall were within the process area baseline 95.5 percentile and below SALs. Also, it is judged that the nature and extent of contamination has been characterized adequately. It is likely that a recommendation for no further action will be made after investigation of the seepage pit.

4.1.5 QA/QC Sample Summary

Because of the limited number of samples collected at this outfall and the frequency at which QA/QC samples are collected, no field reagent, field rinsate, or field trip blanks were associated with SWMU 21-006(b).

All laboratory duplicate radionuclide analyses met the precision criteria specified in the QAPjP. Inorganic precision criteria, as specified in section 2.1.4 of this report, were met for 10 of the 25 analytes. Twenty-four of the 25 MS recoveries and 23 of the 25 MSD recoveries met the inorganic accuracy criteria, as specified in the QAPjP, for the 0-6 in. sample collected from location 21-1355. Table 4.1-2 lists inorganics that did not meet the precision criteria specified in the QAPjP.

An organic MS/MSD analysis also was performed on the samples collected from 0-6 in. at location 21-1355. Because all organic MS/MSD recoveries were reported in FIMAD in ug/g, organic precision and accuracy criteria could not be evaluated at this time. The MS and MSD recoveries for manganese were 51% and 55.6%, respectively. The MS and MSD recoveries for lead were 139.7 and 194.7%, respectively, which exceed the inorganic accuracy criteria specified in the QAPjP.

Table 4.1-1 1988 outfall reconnaissance sampling – SWMU 21-006(b).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNIT
Metals			
Aluminum	3990	37	ug/g
Barium	48.8	37	ug/g
Calcium	1340	932	ug/g
Chromium	6.2	2.0	ug/g
Copper	7.1	6.0	ug/g
Iron	3560	19	ug/g
Lead	191	93	ug/g
Manganese	137	4.0	ug/g
Nickel	9.1	8.0	ug/g
Zinc	44.8	4.0	ug/g
RADIONUCLIDES			
Cesium-137	1.5	0.2	pCi/g
Plutonium-239/240	1.3	0.3	pCi/g
Radium-226	1.2	0.2	pCi/g
Thorium-232	1.0	0.2	pCi/g
Tritium	31	3.0	nCi/l
Uranium-234	1.8	0.3	pCi/g
Uranium-238	1.0	0.2	pCi/g
VOLATILE ORGANICS			
Toluene	9.9	6	ug/g

Table 4.1-2 QA/QC sample summary – inorganic data not meeting precision criteria at SWMU 21-006(b).

Analyte	Location ID	Sample Depth	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Aluminum	21-1355	0-6 in.	2250 ug/g	5180 ug/g	-79
Barium	21-1355	0-6 in.	22.8 ug/g	49.3 ug/g	-74
Calcium	21-1355	0-6 in.	1090 ug/g	2400 ug/g	-75
Cadmium	21-1355	0-6 in.	0.69 ug/g	1.04 ug/g	-40
Chromium	21-1355	0-6 in.	3.7 ug/g	7 ug/g	-62
Copper	21-1355	0-6 in.	3.9 ug/g	6.2 ug/g	-46
Iron	21-1355	0-6 in.	3000 ug/g	6510 ug/g	-74
Potassium	21-1355	0-6 in.	405 ug/g	755 ug/g	-60
Magnesium	21-1355	0-6 in.	454 ug/g	1070 ug/g	-81
Manganese	21-1355	0-6 in.	125 ug/g	266 ug/g	-72
Sodium	21-1355	0-6 in.	47.4 ug/g	106 ug/g	-76
Strontium	21-1355	0-6 in.	4.4 ug/g	9.8 ug/g	-76
Vanadium	21-1355	0-6 in.	3.9 ug/g	8.4 ug/g	-73
Zinc	21-1355	0-6 in.	20.4 ug/g	42.7 ug/g	-71
Lithium	21-1355	0-6 in.	3 ug/g	6.6 ug/g	-75

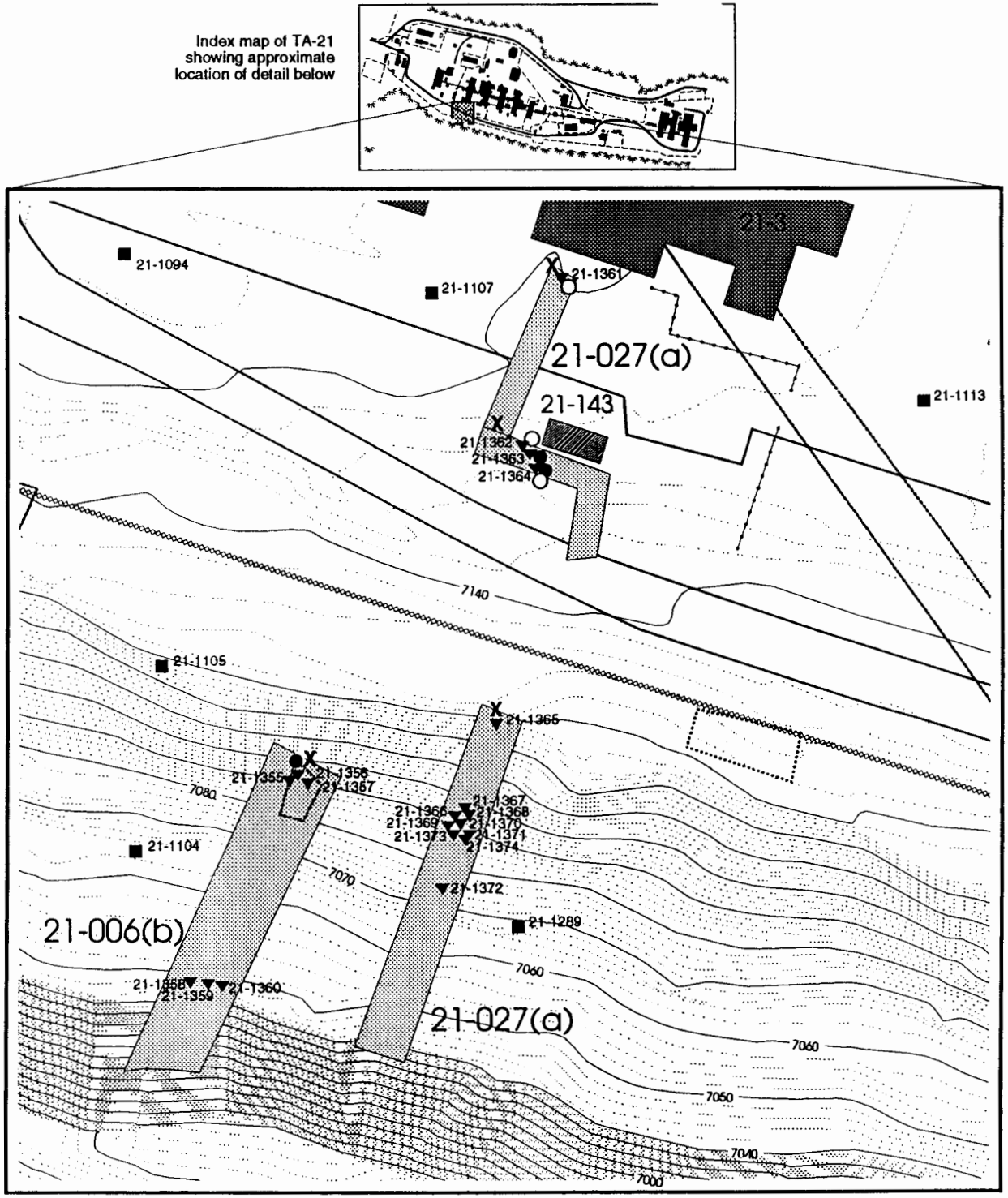


Figure 4.1-1
SWMU 21-006(b)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- Environmental Survey Problem #19 Sample Locations
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101780

Modified by: David Dander 2/22/94

CHAPTER 5

NEW INDUSTRIAL WASTE TREATMENT PLANT

5.0 NEW INDUSTRIAL WASTE TREATMENT PLANT

This chapter addresses an outfall associated with the new industrial waste treatment plant and is described in Section 15.4 of the RFI work plan.

5.1 SWMU 21-011(k)

SWMU 21-011(k) falls within special impact area 1, as shown on Map 1. The outfall and sampling locations at SWMU 21-011(k) are shown on Figure 5.1-1. SWMU 21-011(k) contains multiple contaminants above SALs and is recommended for interim fencing and further investigation.

5.1.1 Site Process and Sampling History

The outfall discharge line carried industrial waste water from the new industrial waste treatment plant (building TA-21-257) through two holding tanks to a discharge point on the south slope of DP Canyon. The wastes were liquids remaining after treatment of plutonium extraction process effluents and probably contained a variety of radioactive and chemical constituents. Untreated wastes from Building TA-21-35 (old industrial waste treatment plant) were also discharged in the vicinity of the outfall. Although this outfall is no longer active, it is identified by National Pollution Discharge Elimination System (NPDES) No. EPA050050. A 4-in. pipe ending about 55 ft north of the perimeter road is presumed to be the discharge point. A gently sloping, rocky surface extends from the outfall pipe approximately 30 ft to the canyon rim.

SWMU 21-011(k) was sampled as part of a DOE Headquarters Environmental Survey at the Laboratory. One surface (0-3 in.) sample was collected from each of three locations, as shown (approximate

location) on Figure 5.1-1. Sample LA30201 was collected 23 ft from the end of the outfall pipe. Samples LA30202 and LA30203 were collected from the canyon rim, approximately 35 ft from LA30201. Analytical results are given in Table 5.1-1. Cadmium, copper, nickel, uranium-235, uranium-238, plutonium-238, plutonium-239/240, thorium-230/232, americium-241, strontium-90, potassium-40, cesium-137, and protactinium-233 were detected in concentrations above regional background. Levels of plutonium, cesium-137, and strontium-90 were especially pronounced.

5.1.2 RFI Activities and Data Presentation

Characterization of SWMU 21-011(k) was performed as originally prescribed in the RFI work plan, except for location 21-1416. The RFI work plan called for 0-6 in. and 6-12 in. samples to be collected at location 21-1416, but refusal was encountered at 5 in. due to bedrock. Follow-on work was conducted in 1993, as discussed below, because of the elevated radioactivity levels noted in the 1992 investigation.

The 1992 investigation consisted of a radiological field survey and the collection of soil samples at three locations according to sampling Strategy A. With the exception noted above, one surface (0-6 in.) and two near-surface (6-12 in. and 12-18 in.) samples were collected at each location.

A 1993 follow-on characterization of SWMU 21-011(k) included a radiological survey with direct reading instruments to further delineate the contamination extent and to provide a rationale for the selection of follow-on soil sampling locations. Eight additional sampling locations, shown on Figure 5.1-1, were selected based on the radiological survey, which extended to the bottom of DP Canyon including small drainage channels leading from the discharge point. Surface (0-6 in.) samples were collected at all locations and near-surface (6-12 in. and 12-18 in.) samples were collected at three

locations. Analytical data from 1993 samples were not available for inclusion in this phase report, but will be presented in an addendum to this phase report.

In addition to the locations specifically selected for characterization of 21-011(k), one grid location (21-1142) sampled in the 1992 surface soil investigation fell within the immediate area of this outfall. The data from this grid location were included in the assessment for this SWMU.

Table 5.1-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile in the 1992 samples.

5.1.3 Data Assessment

Consistent with earlier sampling of this outfall, slightly elevated levels of cadmium, copper, nickel, lead, silver, zinc, and uranium were detected in the RFI investigation. The levels of these constituents all exceed the process area baseline but individually are well below SALs. The sum of inorganic SAL fractions approaches one.

Direct alpha readings were generally near background levels, except for one location that was approximately 20 times greater than background. The highest levels of alpha-emitting radionuclides were detected in samples collected from location 21-1416, which is the sample location nearest the discharge point. The limited number of elevated alpha survey readings indicates that contamination is slightly below the surface, out of detector range. Beta-gamma, gamma, and low-energy gamma readings exceeded background.

A summary of the radiological surveys performed in 1992 and 1993 are given in Table 5.1-3. Map 2 consists of an isopleth map based on the 1993 gamma exposure rate data. The 1992 characterization of SWMU 21-011(k) was performed over a 20-ft by 60-ft area around the discharge point and drainage channel.

Levels of americium-241, plutonium-238, plutonium-239/240, and strontium-90 were detected far above SALs. Elevated tritium levels were also detected, but the levels were below screening action levels. The soil samples collected in 1992 were analyzed using gamma spectrometry. The laboratory results were reported in such a fashion that it was impossible to determine analyte concentrations quantitatively from the gamma spectrometry data.

The highest reported gross gamma level was 3000 pCi/g, which limits the maximum cesium-137 concentration for SWMU 21-011(k) samples analyzed in 1992 and 1993. This radionuclide is probably the most significant contributor to the overall gamma exposure rate, with lessor contributions from americium-241 and strontium-90. Elevated beta-gamma survey results in Table 5.1-3 are corroborated by the elevated strontium-90 concentrations. The elevated gross alpha and low-energy gamma survey data are consistent with the elevated concentrations of americium-241, plutonium-238, and plutonium-239/240 detected in laboratory analyses.

In every case presented in Table 5.1-2, subsurface contaminant levels are much lower than in the surface layer, consistent with strong retardation of downward contaminant movement. In addition, levels decrease rapidly downgradient from the assumed discharge point. However, even these reduced values were observed to exceed SALs in some cases.

Grid location 21-1142, which is approximately 80 ft east and crossgradient of the outfall mouth, shows only uranium slightly exceeding the 95.5 percentile of applicable baseline.

A mound of dirt of unknown origin containing various forms of apparent excavation debris exhibited elevated gamma and low-energy gamma readings. This dirt pile was sampled in 1993 to a depth of 18". Analytical results for these samples were not available for inclusion in this phase report but will be presented in an addendum to this phase report.

No volatile organics were detected in five samples collected at this SWMU. Volatile organic analyses were not performed on five samples because holding times were missed. Five new samples taken from the same locations were resubmitted for analyses in 1993. Di-n-butyl phthalate, a common laboratory contaminant, was detected in the 6-12 in. sample collected at location 21-1418 at a concentration of 600 ug/kg, and bis(2-ethylhexyl) phthalate, another common laboratory contaminant, was detected in the 12-18 in. sample collected at location 21-1418 at a concentration of 340 ug/kg. The available data suggests that organic site contamination, if any, is not at a level of concern at SWMU 21-011(k).

5.1.4 Conclusions and Recommendations

While the concentrations summarized in Table 5.1-2 indicate decreasing concentrations with depth and distance from the discharge point, a number of analytes were detected in the deepest samples at concentrations that exceed SALs. When received, analytical data from 1993 samples will be used to further define the vertical and lateral extent of contamination. It is expected that further sampling will be needed to more adequately characterize the depth of contamination. A Phase 2 sampling plan will

be designed based on characterization activities performed to date and will take into account local drainage features. This sampling plan will be presented in an addendum to this phase report.

As an interim action, the area in the vicinity of SWMU 21-011(k) with exposure rates above 50 micro-R per hour (as shown on Map 2) will be fenced. The selection of this exposure rate was based on a plausible site exposure scenario leading to a maximum annual incremental dose of 10 mR. Fencing of this area is scheduled for completion in March, 1994, weather permitting. The fence will remain in place until remedial actions have been selected and completed.

5.1.5 QA/QC Sample Summary

An inorganic MS/MSD analysis was performed on the 0 to 6 in. sample collected from location 21-1135. Inorganic accuracy criteria, as specified in the QAPjP, were met for 22 of the 25 analytes for both MS and MSD analyses. Two additional MS recoveries also fell within the inorganic accuracy criteria. Table 5.1-4 lists analytes that did not meet the accuracy criteria specified in the QAPjP.

Because laboratory duplicate inorganic analyses were not reported, inorganic precision criteria, as specified in the QAPjP, could not be evaluated.

Most volatile organic analyses were not performed because holding times were missed. The only MS/MSD recoveries reported for volatile organics were for 1,4-dichlorobenzene. Because volatile and

semi-volatile organic recoveries were listed in FIMAD in ug/kg, accuracy and precision criteria, as specified in the QAPjP, could not be evaluated at this time.

Table 5.1-1 DOE Headquarters Data.

ANALYTE	LA30201	LA30202	LA30203
Inorganics (ug/g)			
Antimony	--	--	--
Arsenic	--	--	--
Barium	33.3[1]	41.4[1]	69.1
Beryllium	1.2	--	--
Cadmium	24.7	--	--
Chromium	8.8	--	--
Copper	45.8	--	--
Lead	26.1	6.2	10.1
Mercury	--	--	--
Nickel	64.3	--	--
Selenium	--	--	--
Silver	--	--	--
Thallium	--	--	--
Zinc	60.5	22.4	20.3
Radionuclides (pCi/g)[2]			
Alpha emitters			
Thorium-230	1.2	1.8	1.0
Thorium-232[3]	<16.2	<16.9	<12.1
Uranium-235	1.66	0.211	0.064
Uranium-238[b]	<14.3	<16.4	<11.7
Total uranium	8.0	9.0	12.0
Plutonium-238	105	0.336	0.046
Plutonium-239/240	377	1.88	0.247
Americium-241	1.44	2.56	0.52
Beta Emitters			
Strontium-90	414	17	<1.1
Protactinium-233	0.34	--	--
Gamma Emitters			
Potassium-40	27	30.7	22.6
Cesium-137	0.144	51.8	1.08

[1] - Detected in associated blank.
[2] - Total uranium is reported in ug/g.
[3] - Total unbroken chain activity in equilibrium.

Table 5.1-2 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-011(k).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL	Surface (0-6 in.)	Near-Surface (6-12 in.)
Am-241	21-1416	NP	0.129	22.0	2600	NS
	21-1417	NP	0.129	22.0	289	38
	21-1418	NP	0.129	22.0	29.8	29.8
H-3	21-1416	NP	4.59	15000	237.1	NS
	21-1417	NP	4.59	15000	200	9.7
	21-1418	NP	4.59	15000	5.5	9.3
PU-238	21-1416	NP	0.239	27.0	2200	NS
	21-1417	NP	0.239	27.0	15	2.2
	21-1418	NP	0.239	27.0	2.8	0.77
PU-239 /240	21-1416	SI1	12.47	24.0	46000	NS
	21-1417	SI1	12.47	24.0	390	53
	21-1418	SI1	12.47	24.0	49	14
Sr-90	21-1416	NP	0.73	8.9	1800	NS
	21-1417	NP	0.73	8.9	600	220
	21-1418	NP	0.73	8.9	170	180
U (Total)	21-1416	NP	7.42	66.3	54.2	NS
	21-1417	NP	7.42	66.3	B	B
	21-1418	NP	7.42	66.3	B	B
Ag	21-1416	NP	2.33	400	20.6	NS
As	21-1416	NP	3.67	0.4	3.9	NS
Cd	21-1416	NP	1.17	80	52	NS
	21-1417	NP	1.17	80	9.6	B
Cu	21-1416	NP	18.88	3000	132.2	NS
Ni	21-1416	NP	11.85	1600	224.4	NS
	21-1417	NP	11.85	1600	44.4	21.4
	21-1418	NP	11.85	1600	25.1	18.7
Pb	21-1416	NP	41.4	500	50.4	NS
Sr	21-1416	NP	151	NA	157	NS
Zn	21-1416	NP	69	24000	196.6	NS

* - Units for radiological analyte values are in pCi/g except for H3 which are in nCi/l soil moisture, and U which are in ppm.
- Units for inorganic analyte values are in ug/g
SI1 - Special Impact Area 1 Baseline
NP - Non-Process Area Baseline
B - Below Baseline
NS - No sample taken at this depth

Table 5.1-3 Summary of 1992–1993 radiological surveys – SWMU 21-011(k).

Type of Survey	Background Response Range	1992 Survey Range	1993 Survey Range
Gross alpha	5–18 cpm	10–339 cpm	0–75 cpm
Beta-gamma	80–115 cpm	220–4600 cpm	80–15K cpm
Total gamma	16–18K cpm	103K–>999K cpm	16K–927K cpm
Low-energy gamma	12–16K cpm	100K–>500K cpm	12K–>500K cpm
Exposure Rate[1]	15–18 μR/hr	60–1100 μR/hr	20–2500 μR/hr

[1]Micro R and gamma scintillator reading ranges were selected based on both surface and 1 meter readings.
[2]cpm – counts per minute.

Table 5.1-4 QA/QC sample summary - inorganic data accuracy – SWMU 21-011(k).

Analyte	MS Recovery	MSD Recovery
Magnesium	94% (within criteria)	139%
Thallium	83% (within criteria)	75%
Copper	72%	73%

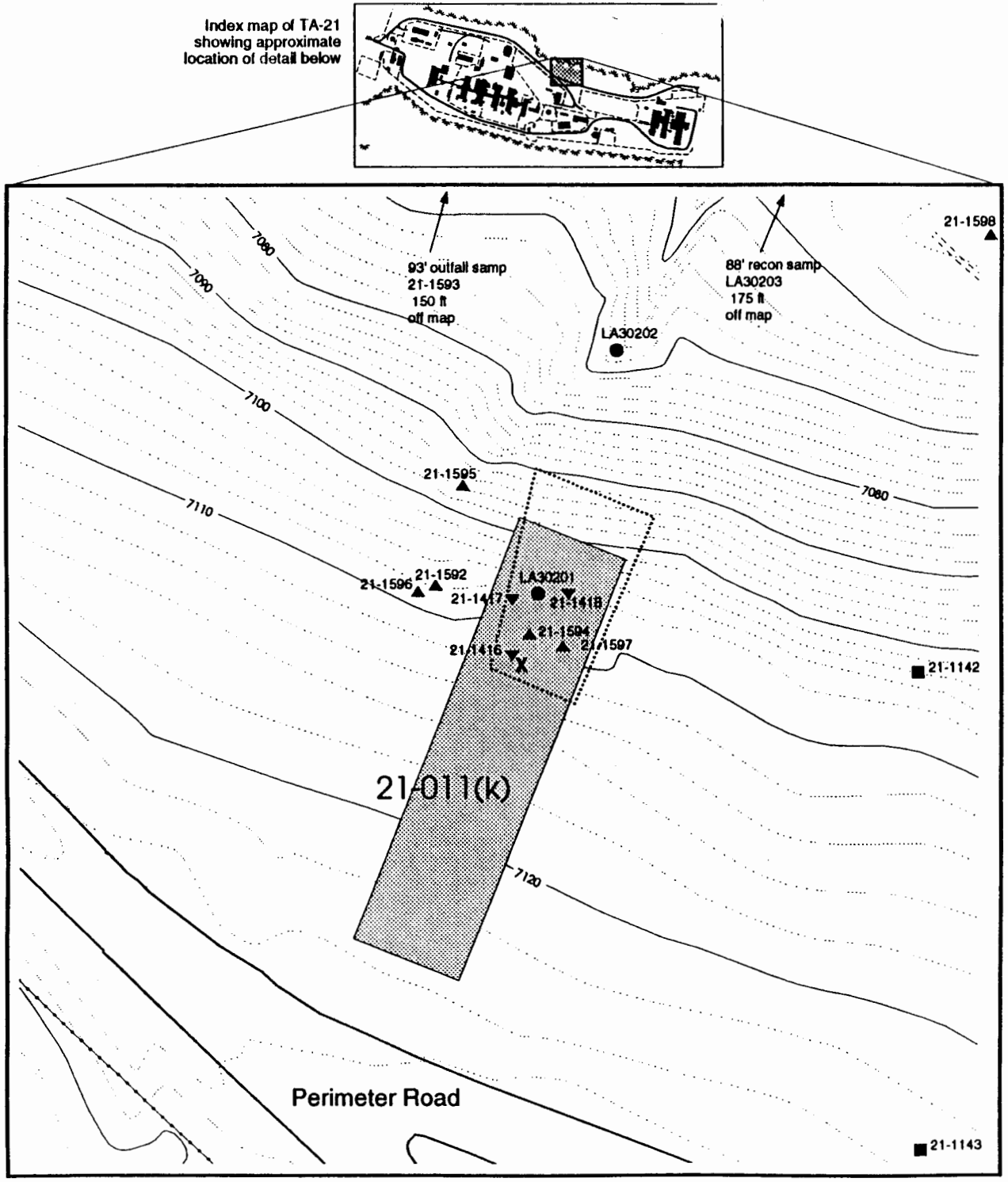


Figure 5.1-1
SWMU 21-011(k)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Solid waste Management Unit
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1993 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- X Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 16.6 50
FEET

N

Based on FIMAD Map: G101697

Modified by: David Dander 2/24/94

CHAPTER 6

ACID WASTE LINES AND SUMPS

6.0 ACID WASTE LINES AND SUMPS

SWMUs 21-022(a–h) are acid waste lines and sumps which will be addressed in future investigations. SWMUs 21-022(b–e) and (g) are lines that drain acid sumps covered in section 18.8 of the RFI work plan. SWMUs 21-022(a,f,h) are acid sumps covered in section 17.5 of the RFI work plan.

6.1 SWMU 21-022(h)

Outfall SWMU 21-022(h) is addressed in Section 15.4 of the RFI work plan and falls within the process baseline area. Details of the outfall and associated sampling locations at SWMU 21-022(h) are shown on Figure 6.1-1. The data assessment in this section indicates that the nature and extent of contamination at SWMU 21-022(h) has been defined. However, some analyte levels are above SALs are thus the SWMU may be a candidate for baseline risk assessment. Additionally, the sump associated with this outfall has not been characterized. This leads to the recommendation that the disposition of this outfall be deferred until the investigation is completed.

6.1.1 Site Process and Sampling History

SWMU 21-022(h) is associated with NPDES outfall No. EPA03A032 and currently discharges treated cooling water. The outfall previously discharged industrial wastewater and received discharge from the basement floor and roof drains of Building TA-21-150, formerly referred to as the plutonium fuel service building. The existing line is a 24-in. corrugated metal pipe which extends south to the edge of Los Alamos Canyon. Below the discharge area is a broad, gently sloping area with no well defined channel.

No previous sampling data is available. However, based on process knowledge, potential contaminants include plutonium, uranium, mercury, lead, organics, and various acids (LANL 1991).

6.1.2 RFI Activities and Data Presentation

Sampling at SWMU 21-022(h) was executed as specified in the RFI work plan, except at location 21-1382. The RFI work plan called for 0-6 in., 6-12 in., and 12-18 in. samples to be collected at location 21-1382, but refusal was encountered at 12 in. due to bedrock. Americium-241 was added to the analyte list and isotopic thorium analyses were not performed.

The 1992 investigation activities performed at SWMU 21-022(h) consisted of a radiological field survey and the collection of samples from three locations according to sampling Strategy C. One surface (0-6 in.) and two near-surface (6-12 in. and 12-18 in.) samples were collected at location 21-1380 and 21-1381. One surface (0-6 in.) and one near-surface (6-12 in.) sample were collected from location 21-1382. Grid sample location 21-1125 is approximately 15 ft northeast of location 21-1380, upgradient of the drainage channel and outfall mouth of SWMU 21-022(h). This grid sample was included in the data assessment of this SWMU.

Table 6.1-1 presents a summary of RFI analyte concentrations detected above the applicable baseline 95.5 percentile.

6.1.3 Data Assessment

Copper and lead were reported at concentrations exceeding the process area baseline. The maximum copper concentration is approximately 2% of its SAL, and the maximum lead concentration is approximately 25% of its SAL.

Levels of plutonium-238 and plutonium-239/240 were substantially above the process area baseline, but individually were below SALs. The ratio of plutonium-238 to plutonium-239/240 differs markedly from the ratio observed for grid samples and other outfalls. The maximum plutonium-238 concentration is approximately 33% of its SAL, while the maximum plutonium 239/240 concentration is approximately 55% of its SAL. Americium-241 is the only radionuclide detected above the process area 95.5 percentile (0.549 pCi/g) in the neighboring grid sample at location 21-1125.

Field radiological surveys performed in 1992 indicated background levels of alpha emitters and slightly elevated levels of gamma emitters and low-energy gamma emitters.

Acetone and toluene were the only volatile organics detected in the soil samples collected from SWMU 21-022(h). Acetone was reported in all three surface samples at concentrations up to 37 ug/kg and in two near-surface samples at concentrations up to 53 ug/kg. Toluene was reported in one surface sample at a concentration of 14 ug/kg and in one near-surface sample at a concentration of 5.8 ug/kg. Since both toluene and acetone are common laboratory contaminants, and were detected in relatively low concentrations in the samples, these results are not considered to be indicative of significant site organic contamination.

Six semi-volatile organics were detected at low levels in surface samples collected from SWMU 21-022(h), as shown in Table 6.1-2. The presence of four of these compounds was confirmed with a field duplicate sample. The maximum benzo[b]fluoranthene concentration at location 21-1380 slightly exceeded the SAL. However, all detected semi-volatiles are either widespread environmental contaminants (pthalates) or polyaromatic hydrocarbons typical of paving materials. The detected organic concentrations are judged not to be indicative of significant organic contamination at the SWMU.

Contamination at this SWMU decreases markedly with depth and with one exception, the maximum analyte concentrations observed are well below SALs. The lateral extent of contamination appears to be defined adequately, with the highest concentrations identified at location 21-1380, near the assumed discharge point.

6.1.4 Conclusions and Recommendations

Because the nature and extent of contamination is judged to be adequately defined by the RFI investigation, it is recommended that no further field investigation associated with the outfall portion of SWMU 21-022(h) be performed. Since one analyte exceeds the SAL and the sum of the remaining SAL fractions is 55%, this SWMU may be a candidate for future risk assessment. This SWMU has not been fully characterized because the associated sump will be investigated at a later time. Therefore, it is recommended that a decision on the disposition of this SWMU be deferred.

6.1.5 QA/QC Sample Summary

Because of the limited number of samples collected at this outfall, the frequency at which QA/QC samples were collected, and the batching strategy, no field rinsate, field reagent, or field trip blanks collected in 1992 were directly associated with SWMU 21-022(h) samples.

A radionuclide laboratory duplicate was performed on the 0-6 in. sample collected at location 21-1382. Only selected members of the radionuclide suite were chosen in the laboratory for duplicate analysis. Radionuclide precision criteria, as specified in the QAPjP, were met for all four sets of results. Because no inorganic laboratory duplicates were performed on QA samples batched with SWMU 21-022(h) samples, inorganic precision criteria could not be evaluated.

Similarly, because no MS/MSD analyses were performed, organic accuracy and precision criteria and inorganic accuracy criteria could not be evaluated directly.

Table 6.1-1 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-022(h).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*	Near-Surface (6-12 in.)*	Near-Surface (12-18 in.)*
Am-241	21-1380	P	0.526	22	1.41	0.684	B
H-3	21-1381	P	7.85	15000	75.2	B	B
H-3	21-1382	P	7.85	15000	14.7	8.1	NS
Pu-238	21-1380	P	6.21	27	9.29	B	B
Pu-239 /240	21-1380	P	9.41	24	14.77	B	B
Cu	21-1380	P	50.8	3000	72	B	B
Pb	21-1380	P	56.5	500	128	B	B

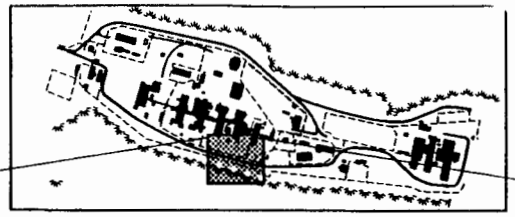
* - Units for radiological analyte values are in pCi/g except for H3 which are in nCi/l.
- Units for inorganic analyte values are in ug/g
P - Process Area Baseline
B - Below Baseline
NS - No sample taken at this depth

Table 6.1-2 Semi-volatile organics detected in samples collected from SWMU 21-022(h).

Analyte	Depth	Location ID	Detected Concentration
Anthracene	0-6 in.	21-1382	340 ug/kg
Benzo(b)fluoranthene	0-6 in.	21-1380	710 ug/kg
Bis(2-ethylhexyl)phthalate	0-6 in.	21-1380	1,800 ug/kg
Bis(2-ethylhexyl)phthalate	0-6 in.	21-1380(FD)	2,200 ug/kg
Fluoranthene	0-6 in.	21-1380	1,100 ug/kg
Fluoranthene	0-6 in.	21-1380(FD)	740 ug/kg
Fluoranthene	0-6 in.	21-1382	340 ug/kg
Phenanthrene	0-6 in.	21-1380	1,400 ug/kg
Phenanthrene	0-6 in.	21-1380(FD)	1,800 ug/kg
Pyrene	0-6 in.	21-1380	1,200 ug/kg
Pyrene	0-6 in.	21-1380(FD)	2,200 ug/kg
Pyrene	0-6 in.	21-1382	550 ug/kg

FD – field duplicate

Index map of TA-21 showing approximate location of detail below



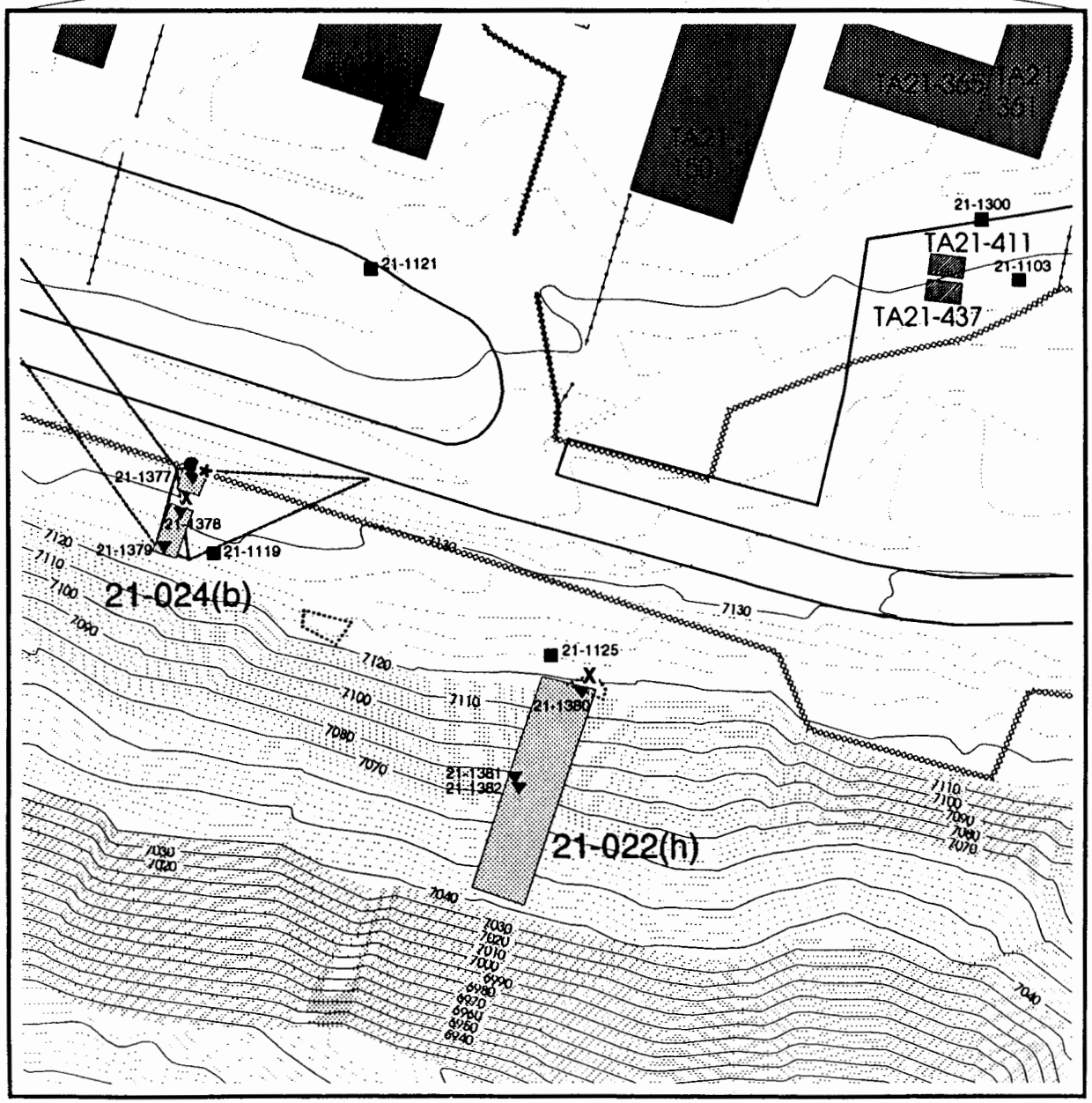


Figure 6.1-1
SWMU 21-022(h)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101782

Modified by: David Dander 2/22/94

CHAPTER 7

DECOMMISSIONED SEPTIC SYSTEMS

7.0 DECOMMISSIONED SEPTIC SYSTEMS

SWMUs 21-023(a,b,d) are decommissioned septic systems which will be addressed during decontamination and decommissioning activities as described in the RFI work plan Section 18.3. SWMU 21-023(c) is the only decommissioned septic system with a drain line to the environment and is discussed below.

7.1 SWMU 21-023(c)

Outfall SWMU 21-023(c) is addressed in Section 15.2 of the RFI work plan and is located within the non-process baseline area. The outfall and sampling locations at SWMU 21-023(c) are shown on Figure 7.1-1. The assessment of the available RFI data for SWMU 21-023(c) indicates that additional samples may be needed in the pooling area below the outfall mouth to define the extent of contamination. However, a decision for further sampling at this SWMU will be deferred until outstanding data are received and assessed.

7.1.1 Site Process and Sampling History

This septic system previously received sewage from building TA-21-33, the former waste treatment laboratory where research into the recovery of plutonium from liquid process wastes was performed. The precise location of the septic tank and discharge point was unknown at the outset of the investigation. A concrete tank associated with the septic system was removed in 1965.

Liquid waste streams from the septic system may have contained small quantities of organics such as hexane, pentaether, and tri-n-butyl phosphate. Other possible contaminants include nitrates, chlorides, mercury, americium, plutonium, tritium, cobalt, uranium, and zirconium.

One sample was collected from the presumed discharge point during 1988 reconnaissance sampling. Because the outfall location was unknown at the time of reconnaissance sampling, the sampling was done approximately 35 ft upgradient of the true outfall mouth. The outfall mouth was identified during the 1992 RFI sampling. Reported analytes from the 1988 reconnaissance sampling are shown in Table 7.1-1. The approximate location of the 1988 reconnaissance sample is shown on Figure 7.1-1. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics, pesticides/PCBs, and target analyte list metals. Standard commercial laboratory procedures were used for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium. Plutonium-239/240 and tritium were reported slightly above regional background levels. Low levels of oil and grease also were reported (LANL 1991a).

7.1.2 RFI Activities and Data Presentation

Sampling at SWMU 21-023(c) was executed as specified in the RFI work plan, with two exceptions. Americium-241 analyses were added for all samples and the shallow borehole samples were analyzed for isotopic uranium rather than total uranium. All follow-on surface and near-surface samples collected in 1993 were in addition to those specified in the RFI work plan.

The 1992 investigation at SWMU 21-023(c) included a radiological field survey and the collection of six surface soil samples according to sampling Strategy A. Two surface samples were not collected

to the specified depth of 6 in. because bedrock was encountered. A 0-3 in. sample was collected at location 21-1339 and a 0-4 in. sample was collected at location 21-1335.

Table 7.1-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile. With the exceptions noted above, the sampling interval was 0-6 in.

Because of the elevated radionuclide levels identified in the 1992 RFI data, follow-on sampling was conducted in the 1993 field season. Follow-on sampling activities included collection of 0-6 in. soil samples from eight locations. Near-surface (6-12 in. and 12-18 in.) samples were collected from three of these eight locations. A 20-ft borehole was drilled and sampled in 5 ft intervals, downgradient of tank TA-21-62 to determine if leakage occurred. Radiological field survey activities performed in 1993 identified a contaminated pooling area below the mesa rim. A surface soil sample (0-6 in.) and two near-surface samples (6-12 in. and 12-18 in.) were collected from this pooling area, as part of the follow-on sampling. Analytical results for this sampling were unavailable for inclusion in this phase report and will be reported in an addendum to this phase report.

7.1.3 Data Assessment

The radiological survey indicated background levels of alpha and gamma emitters and slightly elevated (1.5 times background) levels of low-energy gamma emitters. Contaminant levels appear to decrease downgradient from the pooling area.

Arsenic, cadmium, chromium, copper, nickel, lead, and zinc exceeded the applicable baseline 95.5 percentile. Maximum chromium concentrations were approximately 80% of the hexavalent chromium SAL. In general, maximum inorganic concentrations are noted at locations 21-1336 and 21-1337.

Significantly elevated americium-241 and plutonium-239/240 levels were detected in the 1992 RFI samples. Concentrations of americium-241, plutonium-238, plutonium-239/240, strontium-90, and uranium exceeded the applicable baseline 95.5 percentile. Previous sampling results did not indicate that these analytes should be present in elevated concentrations at the outfall. Maximum americium-241 and plutonium-239 concentrations exceeded their respective SALs by more than a factor of 10. Radionuclide concentrations generally increase at the furthest downgradient sampling locations (21-1330 and 21-1340).

No volatile organics were detected in the samples collected from SWMU 21-023(c). Benzoic acid, the only semi-volatile organic detected, was reported at a concentration of 360 ug/kg from sample location 21-1388.

7.1.4 Conclusions and Recommendations

Analysis of 1993 samples will determine whether the downgradient extent of contamination has been adequately characterized and may determine the requirement for additional lateral sampling across the drainage area. Shallow borehole samples collected in 1993 will provide information to evaluate downward migration of these contaminants near the former tank location.

Radiological survey data from 1993 indicates additional sampling may be required in the pooling area. Because multiple analyte concentrations well above SALs were detected, some form of remedial action may be required for this SWMU, following baseline risk assessment. However, a decision on whether further sampling will be required at SWMU 21-023(c) will be deferred until outstanding data are received and assessed.

7.1.5 QA/QC Sample Summary

No volatile or semi-volatile analytes were detected in the field reagent or field rinsate blanks associated with SWMU 21-023(c). The field rinsate blank associated with this SWMU indicated no radionuclide contamination, and no detectable concentrations for 19 of the 25 inorganic analytes.

Laboratory duplicate analyses for americium-241, plutonium-238, and plutonium-239/240 were run on three samples. All analyses met the precision criteria specified in the QAPjP.

Laboratory duplicate analyses were performed on a field rinsate blank associated with location 21-1338, on the 0-6 in. sample collected at location 21-1335, and on the 0-6 in. sample collected at location 21-1337. Inorganic precision criteria, as specified in the QAPjP, were met for 23 of the 25 analytes for the field rinsate blank, for 22 of the 25 analytes for the sample from location 21-1335, and all of the analytes for the sample from location 21-1337.

Table 7.1-3 lists the analytes detected in a rinsate sample collected at SWMU 21-023(c). No radionuclides were detected in blanks at concentrations above ten times the detection limit.

Inorganic and organic MS/MSD analyses were run on the sample collected from location 21-1337. Because organic recoveries were listed in FIMAD in ug/kg, organic precision and accuracy criteria, as specified in the QAPjP, could not be evaluated at this time. An MS/MSD analysis also was run for inorganics on the sample collected from location 21-1338. Because recoveries for both inorganic MS/MSD analyses were listed in FIMAD as 0%, inorganic accuracy criteria, as specified in the QAPjP, could not be assessed at this time.

Inorganic analytes that did not meet the precision criteria, as specified in the QAPjP, are listed in Table 7.1-4.

Table 7.1-1 1988 outfall reconnaissance sampling – SWMU 21-023(c).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
Inorganics			
Aluminum	3370	33	ug/g
Barium	50.8	33	ug/g
Calcium	869	826	ug/g
Chromium	3.0	2.0	ug/g
Copper	4.7	4.0	ug/g
Iron	3610	17	ug/g
Lead	53.8	8.0	ug/g
Manganese	157	4.0	ug/g
Oil and grease	244	49.8	ug/g
Zinc	18.9	4.0	ug/g
Radionuclides			
Plutonium-239	0.2	0.1	pCi/g
Radium-226	1.0	0.1	pCi/g
Thorium-232	1.1	0.2	pCi/g
Tritium	5	.002	nCi/l
Uranium-234	1.0	0.2	pCi/g
Uranium-238	0.7	0.1	pCi/g

Table 7.1-2 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-023(c).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL	Surface (0-6 in.)*
Am-241	21-1335	NP	0.129	22	154
	21-1336	NP	0.129	22	140
	21-1337	NP	0.129	22	14.25
	21-1338	NP	0.129	22	344
	21-1339	NP	0.129	22	213.4
	21-1340	NP	0.129	22	15.79
Pu-238	21-1335	NP	0.239	27	1.8
	21-1336	NP	0.239	27	0.27
	21-1337	NP	0.239	27	0.24
	21-1338	NP	0.239	27	1.7
	21-1339	NP	0.239	27	0.56
Pu-239 /240	21-1335	NP	2.04	24	300
	21-1336	NP	2.04	24	37
	21-1337	NP	2.04	24	34.34
	21-1338	NP	2.04	24	260
	21-1339	NP	2.04	24	107.5
	21-1340	NP	2.04	24	28.85
Sr-90	21-1335	NP	0.73	8.9	0.9
	21-1336	NP	0.73	8.9	0.8
	21-1338	NP	0.73	8.9	0.9
U total	21-1335	NP	7.42	66.3	7.9
	21-1336	NP	7.42	66.3	7.7
	21-1338	NP	7.42	66.3	8.6
	21-1339	NP	7.42	66.3	7.7
As	21-1335	NP	3.67	0.4	6.9
	21-1336	NP	3.67	0.4	9.1
	21-1338	NP	3.67	0.4	7.7
	21-1339	NP	3.67	0.4	5.5
Cd	21-1339	NP	1.17	80	1.3
	21-1340	NP	1.17	80	1.2
Cr	21-1335	NP	20.95	400	213.2
	21-1336	NP	20.95	400	109.6
	21-1337	NP	20.95	400	50.2
	21-1338	NP	20.95	400	328
	21-1339	NP	20.95	400	158
	21-1340	NP	20.95	400	48.1

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL	Surface (0-6 in.)*
Cu	21-1336	NP	18.88	3000	21.4
	21-1338	NP	18.88	3000	20
Ni	21-1335	NP	11.85	1600	37.4
	21-1336	NP	11.85	1600	151.6
	21-1338	NP	11.85	1600	33.7
Pb	21-1335	NP	41.1	500	87.8
	21-1336	NP	41.1	500	90.2
	21-1337	NP	41.1	500	51.9
	21-1338	NP	41.1	500	171.3
	21-1339	NP	41.1	500	97.4
Zn	21-1336	NP	69.00	24000	305

* - Units for radiological analyte values are in pCi/g except for H3 which are in nCi/l soil moisture, and U which are in ppm
- Units for inorganic analyte values are in ug/g
NP - Nonprocess

Table 7.1-3 QA/QC sample summary – SWMU 21-023(c).

Analyte	Location ID	Sample Concentration	Duplicate Concentration
Calcium	21-1338	389 ug/l	494 ug/l
Iron	21-1338	13.5 ug/l	ND
Magnesium	21-1338	55.9 ug/l	ND
Sodium	21-1338	1040 ug/l	104 ug/l
Strontium	21-1338	5.6 ug/l	5.5 ug/l
Zinc	21-1338	16.7 ug/l	16.9 ug/l

ND – Not detected

Table 7.1-4 QA/QC sample summary – inorganic data precision SWMU 21-023(c).

Analyte	Location ID	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Copper	21-1335	12	127	-165
Iron	21-1338	13.5	10	-30
Strontium	21-1335	24.5	75	-102
Zinc	21-1335	42.3	417	-163

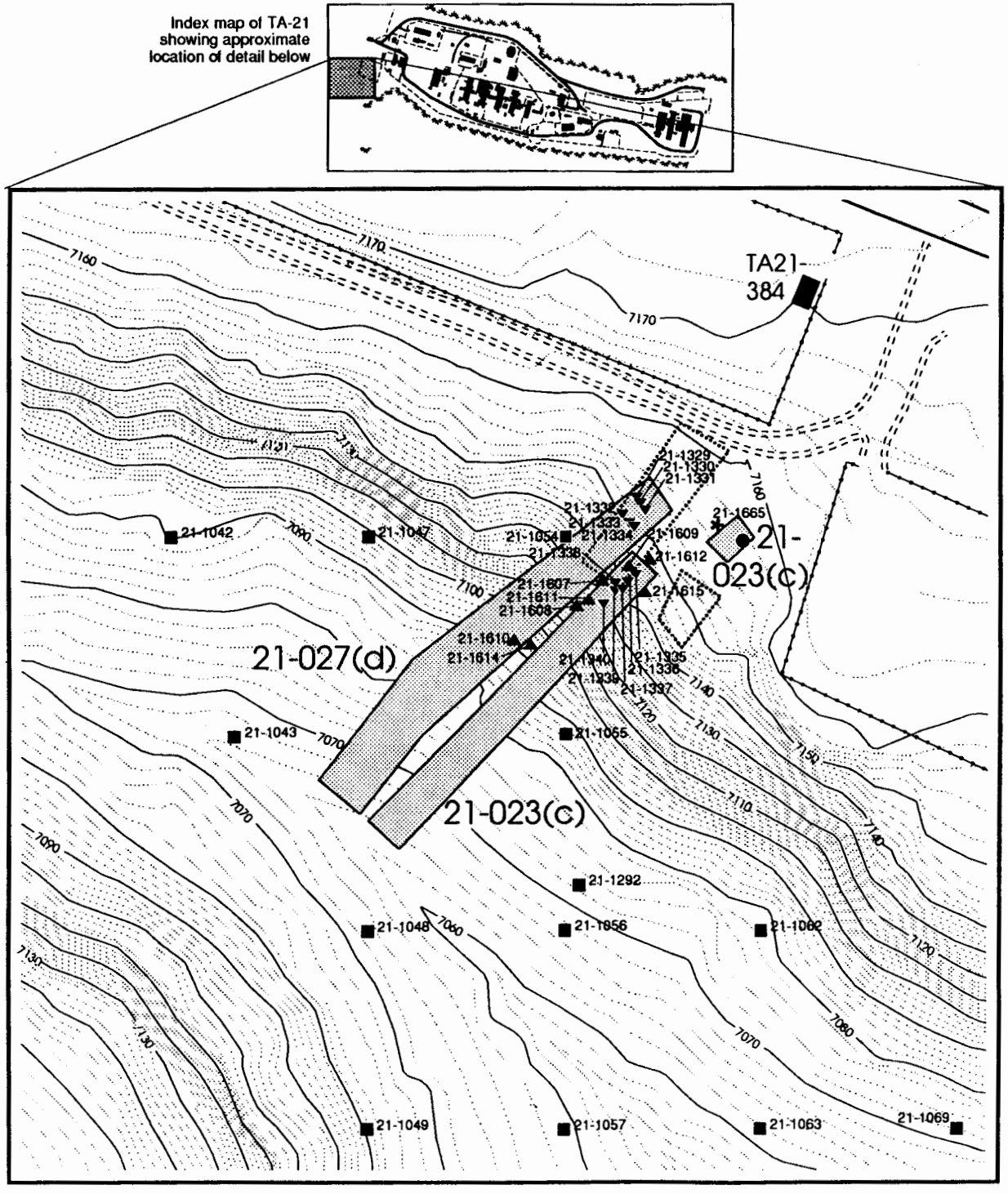


Figure 7.1-1
SWMU 21-023(c)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1993 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location

Exact Discharge Point Unknown

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 66.6 200
FEET

N

Based on FIMAD Map: G101673

Modified by: David Dander 2/22/94

CHAPTER 8

INACTIVE SEPTIC SYSTEMS/OUTFALLS

8.0 INACTIVE SEPTIC SYSTEMS/OUTFALLS

8.1 SWMU 21-024(a)

Outfall SWMU 21-024(a) is addressed in Section 15.2 of the RFI work plan and is located within the process area and special impact area 1. The outfall and sampling locations at SWMU 21-024(a) are shown on Figure 8.1-1. A decision on the final status of SWMU 21-024(a) will be deferred until analytical laboratory data from samples submitted in 1993 are received and assessed.

8.1.1 Site Process and Sampling History

This septic system routed sewage from Building TA-21-9 (old steam plant) through a concrete septic tank (abandoned in place) to the surface on the north rim of Los Alamos Canyon. A portion of the line and septic tank TA-21-53, south of the perimeter road and Building TA-21-9, were removed.

The RFI work plan indicates that the outfall may contain fuel oil from the boiler and blowdown constituents such as sulfite and copper salts. Releases from blowdown lines which are not part of SWMU 21-024(a) may commingle with releases from this SWMU. Liquid wastes received from the old steam plant may have contained elevated concentrations of cadmium, chromium, copper, iron, lead, nickel, and zinc.

No previous environmental data are available for SWMU 21-024(a).

8.1.2 RFI Activities and Data Presentation

Sampling at SWMU 21-024(a) was executed as specified in the RFI work plan, except that americium-241 was added to the analyte list and the borehole samples were analyzed for isotopic uranium rather than total uranium.

The 1992 investigation consisted of a radiological field survey and collection of samples from six locations according to sampling Strategy B. One surface (0-6 in.) and two near-surface (6-12 in. and 12-18 in.) samples were collected at each location. In addition to the locations specifically selected for characterization of SWMU 21-024(a), one grid location (21-1144) sampled in the surface soil investigation fell within the immediate area and was included in the data assessment for this SWMU.

Table 8.1-1 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile. Surface soil concentrations were significantly higher than those concentrations detected in near-surface soils.

The 1993 sampling activities performed at SWMU 21-024(a) included the placement of a shallow borehole downgradient of tank TA-21-53 to determine if leakage occurred. Analytical results for this sampling were unavailable for inclusion in this phase report and will be included in an addendum to this phase report.

8.1.3 Data Assessment

Copper, lead, and zinc concentrations exceeded the applicable baseline 95.5 percentile but are well below SALs. Chromium and nickel concentrations increased with depth at location 21-1390 and the maximum lead concentration was approximately 40% of SAL.

Uranium and strontium-90 concentrations exceeded the applicable baseline 95.5 percentile. The maximum uranium concentration was approximately 33% of its SAL, while strontium-90 marginally exceeded the applicable baseline 95.5 percentile. The radionuclide concentrations decreased with depth.

The radiological survey indicated background levels of alpha, gamma, and low-energy gamma emitters. At grid location 21-1144, lead and copper concentrations were slightly above the 95.5 percentile of baseline. Copper was reported at 4.5 and 2.5 times the 95.5 percentile for the 0-1 in. and 0-6 in samples, respectively. All other analytes from this sample were below the applicable baseline.

Acetone and toluene were reported at levels ranging from 9.9 ug/kg to 55 ug/kg in samples collected at SWMU 21-024(a). Acetone also was reported for three associated blank samples at concentrations up to 42 ug/l. Bis(2-ethylhexyl)phthalate and diethyl phthalate were reported for concentrations of 890 and 680 ug/kg, respectively. These analytes are common laboratory and environmental contaminants and the reported levels are judged not to be indicative of significant site contamination.

8.1.4 Conclusions and Recommendations

Analyte levels were not detected in concentrations above the SALs and the extent of contamination at the discharge point was judged to be adequately characterized, pending assessment of the analytical results of the borehole sampled in 1993. A recommendation on the disposition of SWMU 21-024(a) will be deferred until outstanding borehole analyses are assessed. Based on information to date, it is expected that no further action will be recommended for this SWMU.

8.1.5 QA/QC Sample Summary

No detectable inorganic or semi-volatile organic contamination was reported in a field reagent blank associated with this SWMU.

No detectable semi-volatile organic contamination was reported in a field rinsate blank associated with this SWMU. No detectable volatile contamination was reported for 61 of the 62 analytes in field reagent, field rinsate, or field trip blanks associated with this SWMU.

The field rinsate blank associated with this SWMU indicated no radionuclide contamination and no detectable concentrations for 24 of the 25 inorganic analytes. Cobalt was reported at a concentration of 10.5 ug/l in this blank.

Laboratory duplicate analyses for inorganics showed excellent internal agreement. Nickel was the only inorganic analyte that did not meet the precision criteria defined in the QAPjP. In this case, the RPD was 31%. Laboratory duplicate analyses for radionuclides were in excellent agreement, with the exception of plutonium-239/240 and plutonium-238, which had RPDs of 56% and –31%, respectively.

Acetone was reported for one field blank, one trip blank, and one rinsate blank at levels of 38, 24, and 42 ug/l, respectively.

An MS/MSD was run on the 6 to 12 in. sample collected at location 21-1389. Benzene, chlorobenzene, 1-1-dichlorethene, toluene, and trichlorethene were reported in both the MS/MSD and soil sample from this location. Since these analytes are routinely spiked in the MS/MSD samples, it is reasonable to assume that some residue associated with MS/MSD analysis was left in analytical equipment, thus contaminating the soil sample analysis. No other volatile organics were reported in the sample.

Because MS/MSD values in the inorganic data set were listed in FIMAD as 0%, precision criteria for these analytes could not be evaluated. However, analytical data appear to yield reasonable values in comparison to other outfall data sets.

All volatile organic MS/MSD recoveries were listed in FIMAD in ug/l or ug/kg and no MS/MSD analyses were performed on semi-volatile organic analytes. Therefore, organic precision and accuracy criteria could not be evaluated at this time.

Table 8.1-1 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-024(a).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*	Near-Surface (6-12 in.)*	Near-Surface (12-18 in.)*
Sr-90	21-1388	NP	0.73	8.9	0.8	B	B
	21-1389	NP	0.73	8.9	0.9	B	B
U Total	21-1386	P	7.51	66.3	15.5	B	B
	21-1388	P	7.51	66.3	14.3	9.1	B
	21-1389	P	7.51	66.3	22.2	9.6	B
As	21-1385	NP	3.67	0.4	4.4	B	B
	21-1386	NP	3.67	0.4	6.6	3.8	B
	21-1388	NP	3.67	0.4	4.7	3.8	B
As	21-1389	NP	3.67	0.4	7.5	4.4	B
Ca	21-1388	NP	13880	NA	15500	B	B
	21-1389	NP	13880	NA	20100	B	20800
Cd	21-1385	P	2.14	80	2.2	B	B
	21-1386	P	2.14	80	2.3	2.3	B
	21-1388	P	2.14	80	2.7	B	B
	21-1389	P	2.14	80	4.5	2.5	B
Cu	21-1385	P	50.8	3000	141	60.1	B
	21-1386	P	50.8	3000	301	249	B
	21-1387	P	50.8	3000	84.3	B	B
	21-1388	P	50.8	3000	265	152	58.3
	21-1389	P	50.8	3000	424	174	78.6
	21-1390	P	50.8	3000	65.7	B	B
Cr	21-1386	NP	20.95	400	27.4	26.5	B
	21-1389	NP	20.95	400	31.8	B	B
	21-1390	NP	20.95	400	B	B	131
Fe	21-1389	NP	23200	NA	24000	B	B
Ni	21-1390	P	13.62	1600	B	B	73.6
Pb	21-1386	P	56.5	500	204	102	B
	21-1387	P	56.5	500	85.3	B	B
	21-1388	P	56.5	500	109	64.3	B
	21-1389	P	56.5	500	183	B	B
Sr	21-1388	NP	151	NA	165	B	B
	21-1389	NP	151	NA	265	B	B

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*	Near-Surface (6-12 in.)*	Near-Surface (12-18 in.)*
Zn	21-1386	P	210.4	24000	268	218	B
	21-1388	P	210.4	24000	228	B	B
	21-1389	P	210.4	24000	362	B	B

* - Units for radiological analyte values are in pCi/g
- Units for inorganic analyte values are in ug/g
P - Process Area Baseline
NP - Non-Process Area Baseline
B - Below Baseline
NA – Not available

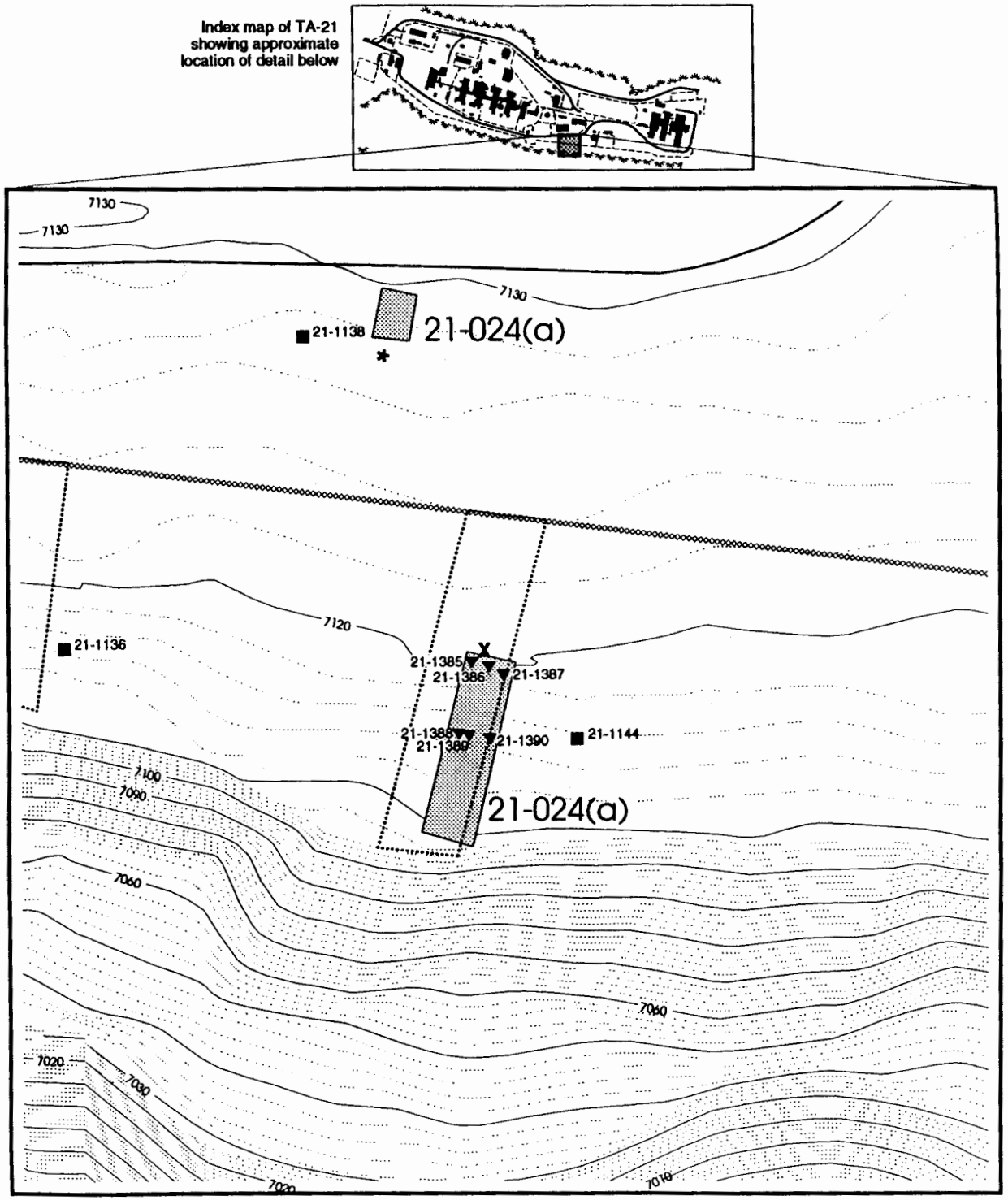


Figure 8.1-1
SWMU 21-024(a)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Solid waste Management Unit
- Grid Sample Locations
- 1992 Outfall Sample Locations
- RFI Borehole Location
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101683

Modified by: David Dander 2/22/94

8.2 SWMU 21-024(b)

This septic system is addressed in Section 15.3 of the RFI work plan and falls within the process baseline area. The outfall and sampling locations at SWMU 21-024(b) are shown on Figure 8.2-1. SWMU 21-024(b) has analyte levels exceeding SALs, an undefined extent of contamination, and outstanding borehole data. A decision on the need for a follow-on sampling plan will be deferred until shallow borehole data are received and assessed.

8.2.1 Site Process and Sampling History

This septic system routed sewage from Building TA-21-17 through a concrete septic tank to a discharge point on the surface south of Building TA-21-5. The outfall currently consists of cast iron pipe that emerges from backfill inside the industrial fence and discharges on a gentle slope. No clearly defined drainage channel exists.

One sample was collected at the discharge point of SWMU 21-024(b) during 1988 reconnaissance sampling at the approximate location shown on Figure 8.2-1. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics, pesticides/PCBs, and target analyte list metals. Standard commercial laboratory procedures were used for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium.

Americium-241, plutonium-239/240, tritium, and lead were reported above regional background levels. Low levels of oil, grease, and methylene chloride (a common laboratory reagent) also were reported. Analytical results of the 1988 reconnaissance sampling are shown in Table 8.2-1.

8.2.2 RFI Activities and Data Presentation

The 1992 RFI activities consisted of a radiological field survey and the collection of soil samples from three locations according to sampling Strategy C. One surface (0-6 in.) and two near-surface (6-12 in. and 12-18 in.) samples were collected at each location.

Sampling at SWMU 21-024(b) was executed as specified in the RFI work plan, with the exception of shallow borehole sampling intervals and analyses performed during 1993. Borehole samples were collected at depths of 2 ft, 4 ft, 6 ft, and 8 ft instead of at 5-ft intervals to 20 ft. This modification was implemented because the tank was partially exposed at the ground surface and assessing lateral contaminant dispersion from the tank was achievable with shallower sampling. Americium-241 was added to the analyte list for all samples collected in 1992 and 1993, and the shallow borehole samples were analyzed for isotopic uranium rather than total uranium. No isotopic thorium analyses were performed on the 6-12 in. sample collected from location 21-1379.

Table 8.2-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

The 1993 sampling activities performed at SWMU 21-024(b) included the placement of a shallow borehole near the suspected location of the septic tank. Analytical results for this sampling were unavailable prior to preparation of Phase Report 1C and will be included in an addendum to this phase report. In addition to the locations specifically selected for characterization of SWMU 21-024(b), one grid location (21-1119) sampled in the 1992 surface soil investigation fell approximately 15 ft crossgradient from outfall location 21-1379. The grid data from this location were included in the assessment for this SWMU.

8.2.3 Data Assessment

Arsenic, chromium, nickel, selenium, and zinc exhibit maximum concentrations slightly above the applicable baseline 95.5 percentile. All maximum inorganic concentrations are less than 6% of the SALs.

Americium-241, plutonium-239/240, tritium, and uranium concentrations were reported above the applicable baseline 95.5 percentile in several samples. For the 0-6 in. sample at location 21-1379, the plutonium-239/240 concentrations exceeded the SAL by slightly more than an order of magnitude. Elevated americium-241 and plutonium-239/240 concentrations also were noted in near-surface samples, but decreased significantly with depth.

Both americium-241 and plutonium-239/240 at grid location 21-1119 were slightly above the 95.5 percentile of the applicable baseline, indicating that this location is outside or near the lateral extent of contamination.

The radiological survey indicated background levels of alpha and low-energy gamma emitters and slightly elevated levels of gamma emitters (up to 1.5 times background).

Acetone and toluene were the only volatile organics reported for samples collected from SWMU 21-024(b). Acetone was reported for a near surface sample at a concentration of 22 ug/kg, and toluene was reported in near surface samples at concentrations of 17 and 18 ug/kg. Since both toluene and acetone are common laboratory contaminants and were detected in relatively low concentrations, the reported levels are not likely to be indicative of significant site contamination.

Several semi-volatile organics which are frequently found in the environment were reported at low levels for the 6-12 in. sample collected from location 21-1379, as listed in Table 8.2-3. The levels are far below SALs and are unlikely to be indicative of site contamination.

For most analytes, highest levels were reported for the 0-6 in. sample at the furthest downgradient sample location.

8.2.4 Conclusions and Recommendations

Because the maximum plutonium 239/240 concentration greatly exceeds its SAL for one sample, further downgradient sampling may be needed to adequately characterize the lateral extent of contamination at this SWMU. However, a decision for follow-on investigation will be deferred to an addendum to this phase report, after the outstanding laboratory data from the 1993 borehole sample have been received and assessed.

8.2.5 QA/QC Sample Summary

No detectable volatile organic contamination was reported for 61 of the 62 analytes in the field trip blank associated with this SWMU. Acetone was reported in one field trip blank at a concentration of 44 ug/l.

An inorganic laboratory duplicate was performed on the 0-6 in. sample collected at location 21-1377. Sixteen of the 25 analytes met the precision criteria specified in the QAPjP. Radionuclide laboratory duplicate analyses were performed on samples collected at locations 21-1377, 21-1378, and 21-1379.

Only selected members of the radionuclide suite were chosen in the laboratory for duplicate analysis. Eight of the nine sets of results met the precision criteria as specified in section 2.1.4 of the report.

Table 8.2-4 lists the radionuclides and inorganics that did not meet the precision criteria as specified in the QAPjP.

An inorganic MS/MSD analysis was performed on the 0-6 in. sample collected from location 21-1377. Because recoveries were listed in FIMAD as 0%, inorganic accuracy criteria could not be evaluated at this time.

A semi-volatile organic and 1,4-dichlorobenzene (one of the six analytes in a standard VOA MS/MSD analysis) MS/MSD analysis was performed on the 6 to 12 in. samples collected from location 21-1378. Because recoveries were listed in FIMAD in ug/g instead of percent, organic precision and accuracy criteria could not be evaluated at this time.

Table 8.2-1 1988 outfall reconnaissance sampling – SWMU 21-024(b).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
Inorganics			
Potassium	1240	846	ug/g
Vanadium	15.3	8.5	ug/g
Zinc	58.8	3.4	ug/g
Aluminum	7890	33.8	ug/g
Barium	91.5	33.8	ug/g
Calcium	2450	846	ug/g
Chromium	6.4	1.7	ug/g
Copper	7.9	4.2	ug/g
Iron	6900	16.9	ug/g
Lead	31.8	16.9	ug/g
Magnesium	1290	846	ug/g
Manganese	208	2.5	ug/g
Oil and grease	818	49.3	ug/g
Radionuclides			
Americium	0.5	0.1	pCi/g
Cesium-137	0.2	0.1	pCi/g
Plutonium-239/240	6.1	0.3	pCi/g
Radium-226	0.8	0.1	pCi/g
Strontium-90	0.5	0.3	pCi/g
Thorium-232	0.9	0.2	pCi/g
Tritium	13	2	nCi/l
Uranium-234	1.2	0.2	pCi/g
Uranium-238	0.8	0.2	pCi/g
Volatile organics			
Methylene chloride	69	52	ug/kg

Table 8.2-2 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-024(b).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*	Near-Surface (6-12 in.)*	Near-Surface (12-18 in.)*
Am-241	21-1377	P	0.526	22	0.905	B	B
	21-1378	P	0.526	22	1.69	B	B
	21-1379	P	0.526	22	15.06	9.47	3.69
H-3	21-1379	P	7.85	15000	37	B	B
Pu-239 /240	21-1377	P	9.41	27	22.01	B	B
	21-1378	P	9.41	27	36.32	B	B
	21-1379	P	9.41	27	324	145	83.63
U Total	21-1378	P	7.51	66.3	7.8	B	B
	21-1379	P	7.51	66.3	21	11.9	10.7
As	21-1379	NP	3.67	0.4	3.8	B	B
Cr	21-1379	NP	20.95	400	27.1	B	23.6
Ni	21-1379	P	13.62	1600	B	24.3	B
Se	21-1379	NP	0.37	400	0.72	B	B
Zn	21-1379	P	210.4	24000	246	B	B

* - Units for radiological analyte values are in pCi/g except for H3 which are in nCi/l soil moisture and U which are in ppm.
- Units for inorganic analyte values are in ug/g
P - Process Area Baseline
NP - Non-Process Area Baseline
B - Below Baseline

Table 8.2-3 Semi-volatile organics detected in samples collected from SWMU 21-024(b).

Analyte	Concentration
Chrysene	2,300 ug/kg
Di-n-butyl-phthalate	430 ug/kg
Fluoranthene	2,300 ug/kg
Phenanthrene	840 ug/kg
Pyrene	3,000 ug/kg

Table 8.2-4 QA/QC sample summary – inorganic radionuclide data precision – SWMU 21-024(b).

Analyte	Location ID	Sample Depth	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Plutonium-238	21-1378	0-6 in.	0.25 pCi/g	0.462 pCi/g	54
Aluminum	21-1377	0-6 in.	7,150 ug/g	9,810 ug/g	73
Beryllium	21-1377	0-6 in.	0.71 ug/g	0.94 ug/g	76
Cadmium	21-1377	0-6 in.	0.7 ug/g	1.2 ug/g	58
Chromium	21-1377	0-6 in.	6.1 ug/g	7.9 ug/g	77
Iron	21-1377	0-6 in.	7,140 ug/g	10,400 ug/g	69
Potassium	21-1377	0-6 in.	1,110 ug/g	1,480 ug/g	79
Magnesium	21-1377	0-6 in.	1,170 ug/g	1,540 ug/g	76
Sodium	21-1377	0-6 in.	64.6 ug/g	89.6 ug/g	72
Nickel	21-1377	0-6 in.	4.1 ug/g	5.2 ug/g	79

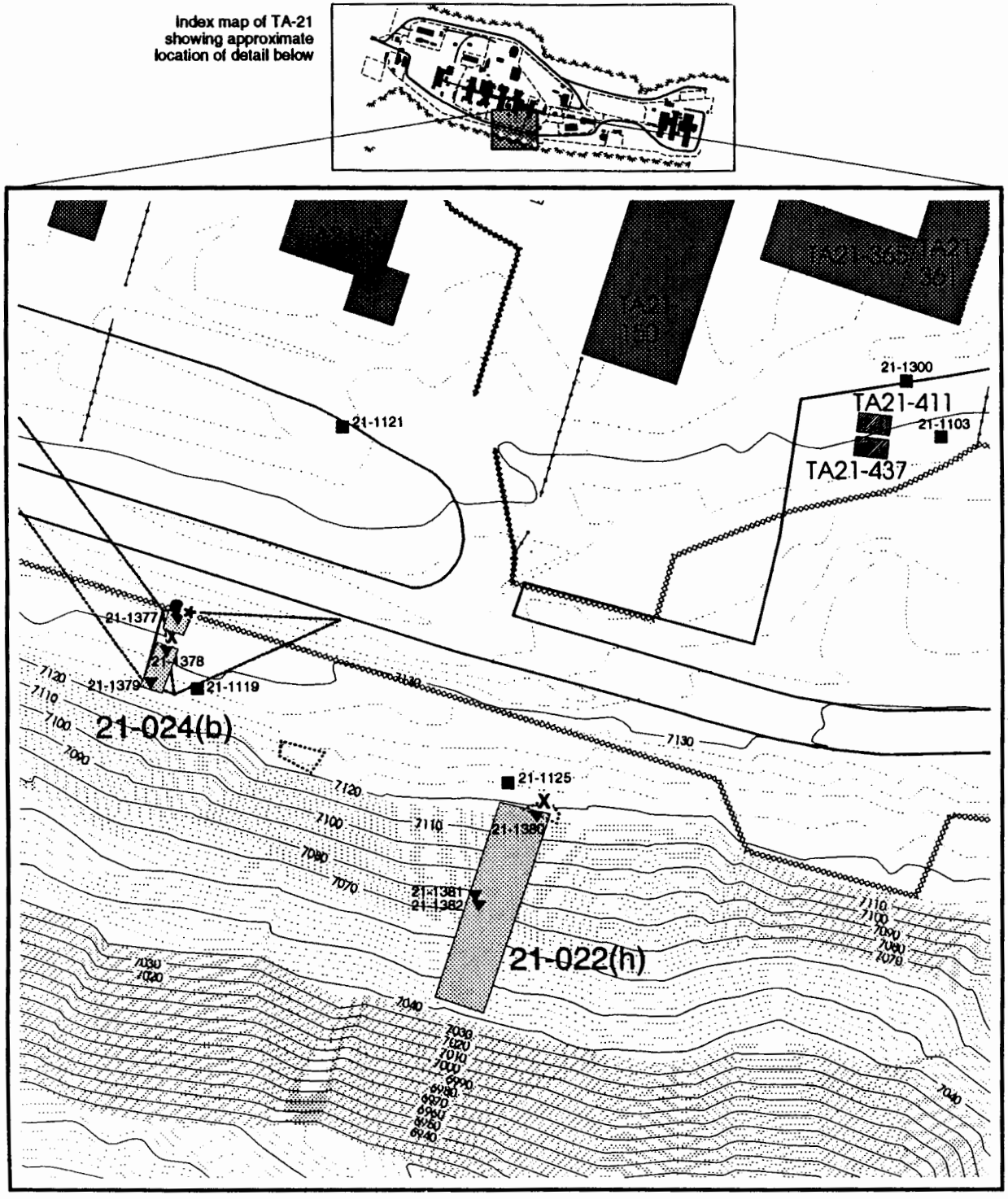


Figure 8.2-1
SWMU 21-024(b)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101782

Modified by: David Dander 2/22/94

8.3 SWMU 21-024(c)

Outfall SWMU 21-024(c) is addressed in Section 15.3 of the RFI work plan and is located within the process area and special impact area 1. The location of the outfall, its drainage pathway, and sampling locations are shown on Figure 8.3-1. Because borehole analytical data have not yet been received, a decision on the disposition of this SWMU will be deferred. Current data indicate that this SWMU has multiple analytes exceeding SALs and thus is a candidate for baseline risk assessment.

8.3.1 Site Process and Sampling History

SWMU 21-024(c) consists of a septic tank and associated outfall that routed sewage from Building TA-21-54 (now removed) through a concrete septic tank to the surface on the north rim of Los Alamos Canyon. The septic tank is located south of the PCB storage area and the outfall line surfaces above a gentle slope approximately 15 ft from the canyon edge in a vaguely defined channel.

One sample was collected in the outfall channel 8 ft from the end of the outfall pipe during 1988 reconnaissance sampling at the approximate location shown on Figure 8.3-1. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics and pesticides/PCBs, and target analyte list metals. Standard commercial laboratory procedures were used for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium. Zinc, copper, lead, mercury, americium-241, plutonium-238 and 239/240, tritium, and uranium isotopes were reported above regional background.

Analytical results of the 1988 reconnaissance sampling are shown in Table 8.3-1.

8.3.2 RFI Activities and Data Presentation

Sampling at SWMU 21-024(c) was executed as prescribed in the RFI work plan, except that americium-241 was added to the analyte list for all samples. Although PCB analysis was identified in the RFI work plan for this SWMU, these analyses were not performed for any of the samples because PCBs are associated with upgradient SWMU 21-003. Borehole samples were analyzed for isotopic uranium, rather than total uranium. Sample results from SWMU 21-003 will be used to assess the requirement for further PCB sampling at this SWMU.

The 1992 investigation consisted of a radiological field survey and the collection of soil samples from two locations according to sampling Strategy C. One surface (0-6 in.) and one near-surface (6-12 in.) sample were collected from each location.

Table 8.3-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

Follow-on sampling investigations in 1993 consisted of a radiological field survey and the placement of a 20-ft borehole in the suspected vicinity of the septic tank. One sample was collected from each 5-ft interval of the borehole. Analytical data for these samples were not available for inclusion in this phase report but will be included in an addendum to this phase report.

8.3.3 Data Assessment

Silver, arsenic, cadmium, chromium, copper, nickel, lead, and vanadium were detected at concentrations in excess of the applicable area baseline 95.5 percentile. Arsenic, chromium, and lead

were reported above SALs at location 21-1391. Inorganic contaminants show a marked concentration decrease from the 0-6 in. sample to the 6-12 in. sample, indicating that downward migration has been restricted. The maximum reported inorganic concentrations generally were higher than those reported in the 1988 reconnaissance sample.

Americium-241, tritium, plutonium-239/240, strontium, and uranium were reported in concentrations substantially greater than the applicable baseline 95.5 percentile. Tritium concentrations ranged from 437 to 7,100 nCi/l in the 0-6 in. samples and ranged from 99 to 1,300 nCi/l in the associated 6-12 in. samples. Uranium was the only radionuclide analyte that exceeded its SAL (0-6 in. sample from location 21-1391).

Inorganic and radionuclide concentrations were higher in the 0-6 in. samples than in the 6-12 in. samples, and were markedly lower in the downgradient sample. The radiological field survey indicated background levels of alpha, gamma, and low-energy gamma emitters.

Low levels of organics listed in Table 8.3-4 were reported for samples collected at SWMU 21-024(c). Acetone was reported in the field blank collected at the outfall. All of these analytes are common laboratory or environmental contaminants, and their detection at low levels is not likely to be indicative of significant site organic contamination.

8.3.4 Conclusions and Recommendations

A decision on the recommended disposition of SWMU 21-024(c) will be deferred until outstanding analytical data are received. Current data indicate that this SWMU may be a candidate for baseline risk assessment.

8.3.5 QA/QC Sample Summary

The field rinsate blank associated with this SWMU indicated no radionuclide contamination, and no detectable semi-volatile and volatile organic concentrations were reported. No detectable concentrations were reported for 21 of the 25 inorganics in the field rinsate blank or for 23 of the 25 inorganics in the laboratory duplicate of the field rinsate blank.

No detectable concentrations were reported for 61 of the 62 volatile organics in the field trip and field reagent blanks associated with this SWMU. No detectable inorganic concentrations were reported in the field reagent blank associated with this SWMU.

An inorganic laboratory duplicate analysis was performed on the field rinsate blank associated with this SWMU. Twenty-four of the 25 analytes met the precision criteria specified in the QAPjP.

Radionuclide laboratory duplicates were performed on samples collected at locations 21-1391, and 21-1392. Only selected members of the radionuclide suite were chosen in the laboratory for duplicate analysis. Twelve of the 16 sets of results met the precision criteria specified in section 2.1.4 of this report.

An MS/MSD analysis was performed on the 6-12 in. sample collected from location 21-1391. All inorganic recoveries met the accuracy criteria specified in the QAPjP. The only volatile organic for which MS/MSD recoveries were reported was 1,4-dichlorobenzene. Because semi-volatile organic and 1,4-dichlorobenzene recoveries are listed in FIMAD in ug/kg, precision and accuracy criteria cannot be evaluated at this time.

The analytes listed in Table 8.3-5 were detected in blanks collected at SWMU 21-024(c). No semi-volatile organics were detected in the rinsate blank.

Inorganic and radionuclide laboratory duplicates showed reasonable agreement with one another. Analytes not meeting the precision criteria, as specified in the QAPjP, are listed in Table 8.3-6.

Table 8.3-1 1988 outfall reconnaissance sampling – SWMU 21-024(c).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
Inorganics			
Aluminum	5970	39.4	ug/g
Arsenic	6.0	2.0	ug/g
Calcium	1190	984	ug/g
Chromium	144	2.0	ug/g
Copper	143	4.9	ug/g
Iron	6050	19.7	ug/g
Lead	556	196	ug/g
Manganese	44.2	3.0	ug/g
Mercury	8.0	1.0	ug/g
Nickel	10.8	7.9	ug/g
Oil and grease	8350	50.3	ug/g
Silver	15.2	2.0	ug/g
Vanadium	19.0	9.8	ug/g
Zinc	90.6	3.9	ug/g
Radionuclides			
Americium	1.6	0.2	pCi/g
Cesium-137	0.2	0.1	pCi/g
Plutonium-238	0.3	0.1	pCi/g
Plutonium-239/240	17	1.0	pCi/g
Radium-226	0.8	0.1	pCi/g
Strontium-90	0.4	0.3	pCi/g
Thorium-232	1.2	0.2	pCi/g
Tritium	18	1.0	nCi/l
Uranium-234	17	1.0	pCi/g
Uranium-235	0.7	0.2	pCi/g
Uranium-238	8.1	0.8	pCi/g
Volatile organics			
Methylene chloride	69	51	ug/kg

Table 8.3-2 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-024(c).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*	Near-Surface (6-12 in.)*
Am-241	21-1391	SI1	0.673	22	3.24	B
H-3	21-1391	P	7.85	15000	7100	1300
	21-1392	P	7.85	15000	1500	128.2
Pu-239 /240	21-1391	SI1	12.47	24	13.23	B
U	21-1391	P	7.51	66.3	195.5	56.2
	21-1392	P	7.51	66.3	28.5	B
Sr-90	21-1392	NP	0.73	8.9	0.9	B
Ag	21-1391	NP	2.33	400	105	14.6
	21-1392	NP	2.33	400	5.2	B
As	21-1391	NP	3.67	0.4	8.2	10
Cd	21-1391	P	2.14	80	3.8	5.3
	21-1392	P	2.14	80	2.4	B
Cr	21-1391	NP	20.95	400	415	52.7
	21-1392	NP	20.95	400	50	B
Cu	21-1391	P	50.8	3000	1520	687
	21-1392	P	50.8	3000	122	B
Ni	21-1391	P	13.62	1600	43.7	17
Pb	21-1391	P	56.5	500	2300	571
	21-1392	P	56.5	500	320	B
V	21-1391	P	43.4	560	53.6	B

* - Units for radiological analyte values are in pCi/g except for H3 which are in nCi/l soil moisture and U which are in ppm.
- Units for inorganic analyte values are in ug/g
SI1 - Special Impact Area 1 Baseline
P - Process Area Baseline
NP - Non-Process Area Baseline
B - Below Baseline

Table 8.3-4 Semi-volatile and volatile organics detected in samples collected from SWMU 21-024(c).

Analyte	Location	Depth	Concentration
Bis(2-ethylhexyl) phthalate	21-1391	0-6 in.	2600 ug/kg
Di-n-butyl phthalate	21-1391	0-6 in.	5200 ug/kg
Di-n-butyl phthalate	21-1392	0-6 in.	610 ug/kg
Toluene	21-1391	0-6 in.	6.9 ug/kg
Acetone	21-1392	0-6 in.	32 ug/kg
Toluene	21-1392	0-6 in.	7 ug/kg

Table 8.3-5 QA/QC summary – blanks – SWMU 21-024(c).

Analyte	Location ID	Detected concentration	Blank type
Calcium	21-1391	25.2 ug/l (Dup)	FE
Calcium	21-1391	33 ug/l	FE
Cadmium	21-1391	8 ug/l	FE
Sodium	21-1391	85.5 ug/l	FE
Sodium	21-1391	89.9 ug/l (Dup)	FE
Zinc	21-1391	3.1 ug/l	FE
Carbon disulfide	21-1391	5.6 ug/l	FR
Acetone	21-1391	21 ug/l	FB

FE-field rinsate blank; FR-field reagent blank; FB-field trip blank.

Table 8.3-6 QA/QC summary – inorganic and radionuclide data precision – SWMU 21-024(c).

Analyte	Location ID	Sample Depth	Soil Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Tritium	21-1392	0-6 in.	561 nCi/l	437 nCi/l	25
Tritium	21-1392	6-12 in.	128 nCi/l	99.1 nCi/l	25
Americium-241	21-1391	0-6 in.	1.5 pCi/g	3.24 pCi/g	-69
Plutonium-239	21-1391	0-6 in.	0.211 pCi/g	0.476 pCi/g	-77
Calcium	21-1391	NA	25.2 ug/l	33 ug/l	-27
NA – Not applicable; sample is a field rinsate blank					

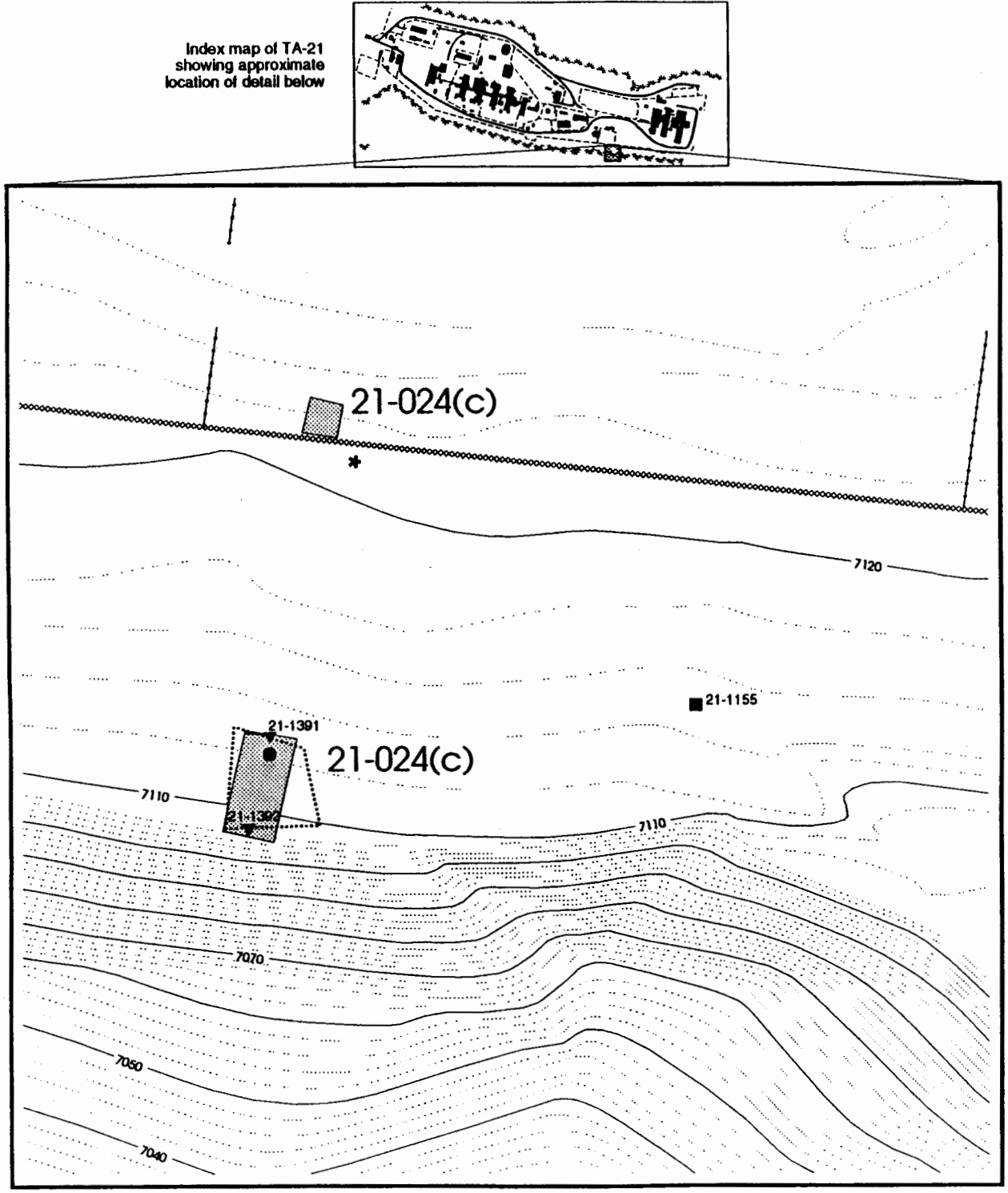


Figure 8.3-1
SWMU 21-024(c)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Solid waste Management Unit
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 16.6 50
FEET

N

Based on FIMAD Map: G101684

Modified by: David Dander 2/24/94

8.4 SWMU 21-024(d)

Outfall SWMU 21-024(d) is addressed in Section 15.3 of the RFI work plan and is located within the process area. The outfall and sampling locations at SWMU 21-024(d) are shown on Figure 8.4-1. The assessment of the available RFI data for SWMU 21-024(d) performed in this section will likely lead to a recommendation of no further action. However, that decision will be deferred until 1993 borehole data are received and assessed.

8.4.1 Site Process and Sampling History

This outfall routed sewage from Building TA-21-1 (removed in 1965) through concrete septic systems to a discharge point at the cliff on the north rim of Los Alamos Canyon.

One sample was collected 8 ft from the outfall marker during 1988 reconnaissance sampling as shown on Figure 8.4-1. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics and pesticides/PCBs, and target analyte list metals. Standard analyses also were conducted for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium. Mercury, americium-241, plutonium-238, plutonium-239/240, oil, and grease were detected at levels above regional background. A substantially elevated tritium level was found.

Analytical results of the 1988 reconnaissance sampling are shown in Table 8.4-1.

8.4.2 RFI Activities and Data Presentation

Sampling at SWMU 21-024(d) was executed as prescribed in the RFI work plan, with the exception of the sampling intervals on the shallow borehole samples and analyses that were performed. Shallow borehole samples were collected at depths of 2 ft, 4 ft, 6 ft and 8 ft rather than at 5-ft intervals to a depth of 20 ft. This change was made because the top portion of the tank was visible above ground. Therefore the sampling depth of 20 ft specified in the RFI work plan was not necessary to characterize leakage from the tanks. Americium-241 was added to the analyte list for all samples and shallow borehole samples were analyzed for isotopic uranium rather than total uranium.

The 1992 investigation included a radiological survey of the discharge area at the canyon rim and on the bench immediately below and the collection of soil samples from two locations. One surface (0-6 in.) sample was collected at the canyon rim in a small pooling area 13 ft south of the outfall discharge point. One surface (0-6 in.) sample and two near-surface (6-12 in. and 12-18 in.) samples were collected from an area where the effluent collected on the bench below the discharge point.

In addition to the locations specifically selected for characterization of 21-024(d), one grid location (21-1096) sampled in the 1992 surface soil investigation is located approximately 20 ft outside the drainage channel to the west. The analytical results from 21-1096 were included in the assessment for this SWMU.

Table 8.4-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

In 1993, an 8-ft borehole was placed in the suspected vicinity of the associated septic tank. One sample was collected from each 2-ft interval. Analytical data for these samples were not available for inclusion in this phase report, but will be reported in an addendum to this phase report.

8.4.3 Data Assessment

Silver and lead were reported slightly above the applicable baseline 95.5 percentile but were below SALs. The maximum lead concentration was identified in the 12-18 in. sample at approximately 30% of the SAL. Elevated silver concentrations were reported in the 0-6 in. and 6-12 in. samples collected from location 21-1348, decreasing to just above the non-process area baseline 95.5 percentile in the 12-18 in. sample.

Levels of americium-241 above the process area baseline were detected in both the 0-6 in. and 6-12 in. samples from the bench. Tritium concentrations above the process area baseline 95.5 percentile were detected at only one location (on the bench), but were elevated in all three samples, (0-6 in., 6-12 in., and 12-18 in.) from this sampling location. Plutonium-239/240 was detected above the process area baseline 95.5 percentile in three of four samples. Uranium was detected slightly above the process area baseline 95.5 percentile in the 0-6 in. sample collected from the bench. In general, radionuclide concentrations decreased with depth. The plutonium-239/240 concentration exceeded the SAL in the 0-6 in. sample from location 21-1348. None of the analytical data from grid location 21-1096 were above the process area baseline 95.5 percentile. The RFI data indicate that levels of contamination from this outfall are low and restricted to the discharge point area.

The radiological survey indicated background levels of alpha and gamma emitters and slightly elevated levels of low-energy gamma emitters at approximately 1.5 times background.

No semi-volatile organics were detected in the samples collected from SWMU 21-024(d). Acetone was the only volatile organic reported (33 ug/g) in the samples collected at this SWMU. However acetone also was detected in a field trip blank associated with this SWMU at 40 ug/l.

8.4.4 Conclusions and Recommendations

Because SALs were marginally exceeded for only one analyte (plutonium-239/240) of one surface sample and the contamination levels decrease with depth, no further action is likely to be necessary at this SWMU. Since the top of the concrete tank is exposed and accessible, useful information may be obtained by sampling the material in the bottom of the tank. However, a recommendation for final disposition of this SWMU will be deferred until the outstanding borehole data from the vicinity of the septic tank are received and assessed, and reported in an addendum to this phase report. If these results are consistent with the available data, the SWMU will be recommended for no further action.

8.4.5 QA/QC Sample Summary

Although the programmatic frequency of QA samples met all requirements of the QAPjP, this and several other SWMUs did not have QA/QC samples associated with their relatively limited number of RFI samples.

No detectable concentrations were reported for 61 of the 62 volatile organics in the field trip blank associated with this SWMU.

An inorganic laboratory duplicate analysis was performed on the 0-6 in. sample collected at location 21-1347. Twenty-four of the 25 analytes met the precision criteria specified in the QAPjP. Acetone was detected at a concentration of 40 ug/l in a field trip blank associated with this outfall.

An inorganic MS/MSD analysis was performed on the 0-6 in. sample collected from location 21-1347. Inorganic accuracy criteria, as specified in the QAPjP, were met for 21 of the 25 analytes for both MS and MSD analyses. Table 8.4-3 lists inorganic MS/MSD recoveries that did not meet the accuracy criteria specified in the QAPjP.

Laboratory duplicate analyses performed for inorganics met precision requirements with the exception of nickel, which had an RPD of –24%. No laboratory duplicate analyses were performed on radionuclides.

A semi-volatile organic and 1,4-dichlorobenzene (one of the six analytes in a standard semi-volatile MS/MSD analysis) MS/MSD analysis was performed on the 0-6 in. sample collected from location 21-1347. No MS/MSD analyses were performed on any other volatile organics. Because recoveries were listed in FIMAD in ug/kg, organic precision and accuracy criteria, as specified in the QAPjP, could not be evaluated at this time.

Table 8.4-1 1988 outfall reconnaissance sampling – SWMU 21-024(d).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
Inorganics			
Aluminum	3300	29	ug/g
Barium	60.3	29	ug/g
Calcium	2890	728	ug/g
Chromium	5.5	2.0	ug/g
Copper	18.4	4.0	ug/g
Iron	3290	15	ug/g
Lead	39.6	8.0	ug/g
Magnesium	735	728	ug/g
Manganese	160	2.0	ug/g
Mercury	0.19	NA	ug/g
Nickel	7.2	6.0	ug/g
Oil and grease	127	51	ug/g
Potassium	897	728	ug/g
Silver	2.[illegible]	2.0	ug/g
Vanadium	8.7	8.0	ug/g
Zinc	61.5	4.0	ug/g
Radionuclides			
Americium	1.1	0.3	pCi/g
Cesium-137	0.4	0.1	pCi/g
Plutonium-238	0.8	0.2	pCi/g
Plutonium-239/240	16	1.0	pCi/g
Radium-226	1.5	0.2	pCi/g
Thorium-232	1.0	0.2	pCi/g
Tritium	140	10	nCi/l
Uranium-234	2.1	0.2	pCi/g
Uranium-238	1.4	0.2	pCi/g

NA – Not available.

Table 8.4-2 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-024(d).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in)*	Near-Surface (6-12 in)*	Near-Surface (12-18 in)*
Am-241	21-1348	P	0.526	22	0.958	0.528	B
H-3	21-1348	P	7.85	15000	40.5	52	18.7
Pu-239	21-1347	P	9.41	24	9.71	NS	NS
/240	21-1348	P	9.41	24	33.8	16.1	B
U	21-1348	P	7.51	66.3	8	B	B
Ag	21-1348	NP	2.33	400	19.4	15.7	3
Pb	21-1348	P	56.5	500	B	B	146

* - Units for radiological analyte values are in pCi/g, except for H3 which are in nCi/l soil moisture and U which are in ppm.
- Units for inorganic analyte values are in ug/g
P - Process Area Baseline
NP - Non-Process Area Baseline
B - Below Baseline
NS- No samples were taken at this depth

Table 8.4-3 QA/QC sample summary – inorganic data accuracy – SWMU 21-024(d).

Analyte	Location	Depth	Percent of Recovery MS	Percent of Recovery MSD
Silver	21-1347	0-6 in.	293%	96.1%*
Manganese	21-1347	0-6 in.	-22.2%	54.8%
Lead	21-1347	0-6 in.	-5%	52.6%
Antimony	21-1347	0-6 in.	48.9%	64.1%
Selenium	21-1347	0-6 in.	115%*	124%

*Recovery meets accuracy criteria.

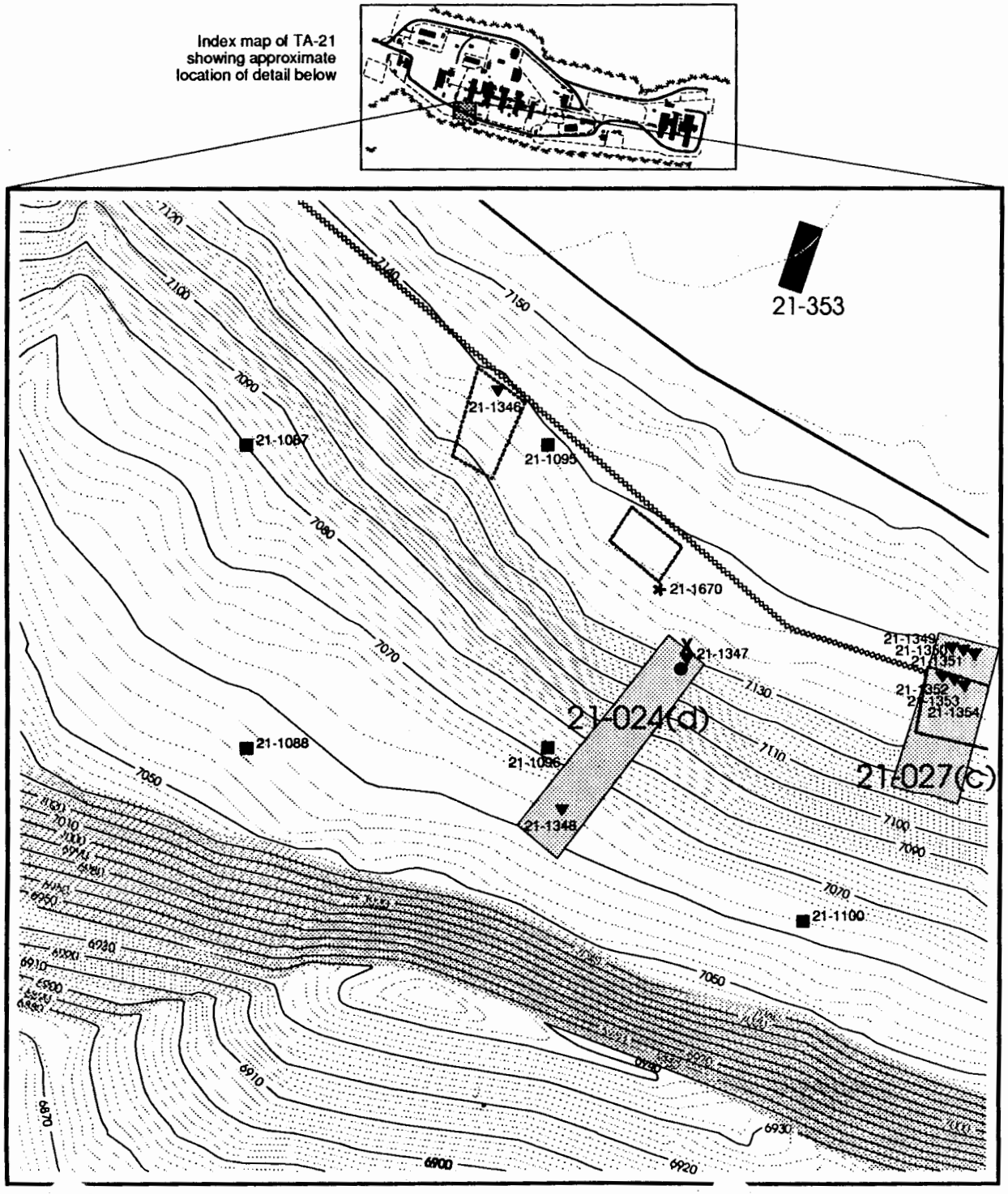


Figure 8.4-1
SWMU 21-024(d)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location
- Discharge Point

21-027(c) Exact Discharge Point Unknown

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101677

Modified by: David Dander 2/22/94

8.5 SWMU 21-024(e)

Outfall SWMU 21-024(e) is addressed in Section 15.3 of the RFI work plan and is located in the process baseline area. The outfall and sampling locations at SWMU 21-024(e) are shown on Figure 8.5-1. The assessment of the available RFI data for SWMU 21-024(d) indicates that further sampling or baseline risk assessment might be needed. However, that decision will be deferred until 1993 borehole data is received.

8.5.1 Site Process and Sampling History

SWMU 21-024(e) consists of a septic system that routed sewage from Building TA-21-20 (contaminated laundry facility removed in 1965) through a steel tank to a discharge point about 20 ft from the southern edge of DP Mesa. The septic tank and outfall are located south of MDA V. The outfall area is broad and open with a poorly defined channel.

One sample was collected from SWMU 21-024(e) during reconnaissance sampling in 1988 as shown on Figure 8.5-1. The sample was collected from the drainage pathway directly below the outfall. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics and pesticides/PCBs, and target analyte list metals. Standard analyses also were performed for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium.

Mercury, zinc, americium-241, plutonium-238, uranium-234, uranium-238, and cesium-137 were reported in concentrations slightly above regional background levels. Levels of plutonium-239/240 and

tritium substantially exceeded regional background. Analytical results are shown in Table 8.5-1 and the approximate sampling location is shown on Figure 8.5-1.

8.5.2 RFI Activities and Data Presentation

Sampling at SWMU 21-024(e) was executed as prescribed in the RFI work plan, with the exception of sampling depths for the surface and near-surface samples and the analyses performed on borehole samples. The RFI work plan called for a 0-6 in. sample and a 6-12 in. sample to be collected at each location. Refusal was encountered at 4 in. at location 21-1342, and at 11 in. at location 21-1341 because of bedrock. Americium-241 was added to the analyte list for all samples, and isotopic uranium, rather than total uranium, analyses were performed on the borehole samples.

The 1992 investigation consisted of a radiological field survey and the collection of soil samples from two locations according to sampling Strategy C. Two samples (0-6 in. and 6-11 in.) were collected from location 21-1341 and one sample (0-4 in.) was collected from location 21-1342.

In addition to the locations specifically selected for the characterization of SWMU 21-024(e), one grid location (21-1079) sampled in the 1992 surface soil investigation is located in the outfall channel. The analytical results from location 21-1079 were included in the assessment for this SWMU.

Table 8.5-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

As a part of the 1993 field investigations, a 20-ft borehole was placed in the suspected vicinity of the septic tank. One sample was collected from each 5-ft interval. Analytical data for these samples are not available for inclusion in this phase report, but will be reported in an addendum to this phase report.

8.5.3 Data Assessment

Cadmium, chromium, copper, lead, selenium, vanadium, and zinc were detected in concentrations slightly above the applicable baseline 95.5 percentile but well below SALs.

Americium-241, uranium, tritium, plutonium-238, and plutonium-239/240, were detected in concentrations well above the applicable baseline 95.5 percentile. All levels were well below SALs except for plutonium-239/240 in the 0-6 in. sample at location 21-1341. Radionuclide concentrations substantially decreased with sample depth and are substantially higher at upgradient location 21-1341. Data from grid location 21-1079 corroborate the assessment described above. The radiological field survey indicated background levels of alpha, gamma, and low-energy gamma emitters.

A low level of trichlorofluoromethane was reported in the 0-6 in. field duplicate sample collected from location 21-1341. Since this result was not confirmed in the soil sample collected from this same depth and location and the detected concentration is small, it is likely that no organic site contamination is present. No trichlorofluoromethane was detected in the QA samples at this SWMU.

All contaminant levels decrease with sample depth and distance from the discharge point. All maximum concentrations were detected in the samples collected from location 21-1341.

8.5.4 Conclusions and Recommendations

Available RFI data indicate that the extent of contamination associated with the discharge point has been characterized adequately. Because plutonium-239/240 was reported above the SAL in one sample baseline risk assessment might be required for this SWMU. However, a recommendation for disposition of this SWMU will be deferred until outstanding borehole data are reported and assessed.

8.5.5 QA/QC Sample Summary

The field rinsate blank associated with this SWMU indicated no radionuclide contamination. No volatile organics were detected in this sample. No detectable concentrations were reported for 21 of the 25 inorganics, and for 63 of the 64 semi-volatile organics.

No detectable concentrations of volatile and semi-volatile organics were reported in the field reagent sample associated with this SWMU. No detectable concentrations were reported for 22 of the 25 inorganics.

Radionuclide laboratory duplicate analyses were performed on samples collected at location 21-1341. Only selected members of the radionuclide suite were chosen in the laboratory for duplicate analysis. Three of the six sets of results met the precision criteria specified in section 2.1.4 of this report.

No MS/MSD analyses were performed on the samples collected from SWMU 21-024(e). Therefore the organic precision and accuracy criteria and inorganic accuracy criteria, as specified in the QAPjP, could not be evaluated.

The radionuclides listed in Table 8.5-3 did not meet the precision criteria specified in section 2.1.4 of this report. Because laboratory duplicate analyses were not performed on inorganics, inorganic precision criteria, as specified in the QAPjP, could not be evaluated.

The semi-volatile organics and inorganics listed in Table 8.5-4 were detected in blanks collected at SWMU 21-024(e).

Table 8.5-1 1988 outfall reconnaissance sampling – SWMU 21-024(e).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
Inorganics			
Aluminum	4300	34	ug/g
Arsenic	3.0	2.0	ug/g
Barium	121	34	ug/g
Calcium	1650	837	ug/g
Chromium	13.2	2.0	ug/g
Copper	14.5	4.0	ug/g
Iron	4180	17	ug/g
Lead	43.3	19	ug/g
Magnesium	883	837	ug/g
Manganese	227	4.0	ug/g
Mercury	0.31	NA	ug/g
Oil and grease	433	51.5	ug/g
Vanadium	19.2	8.0	ug/g
Zinc	102	4.0	ug/g
Radionuclides			
Americium	0.5	0.2	pCi/g
Cesium-137	0.7	0.1	pCi/g
Plutonium-238	0.3	0.1	pCi/g
Plutonium-239/240	17	1.0	pCi/g
Radium-226	1.3	0.1	pCi/g
Thorium-232	0.9	0.1	pCi/g
Tritium	65	3	nCi/l
Uranium-234	4.6	0.6	pCi/g
Uranium-238	3.3	0.5	pCi/g

NA – Not Available

Table 8.5-2 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-024(e).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*	Near-Surface (6-12 in.)*
Am-241	21-1341	P	0.526	22	1.53	0.614
	21-1342	P	0.526	22	0.464	NS
H-3	21-1341	P	7.85	15000	41.7	B
Pu-239 /240	21-1341	P	9.41	24	41.49	13.52
	21-1342	P	9.41	24	11.7	NS
U (Total)	21-1341	P	7.51	66.3	37.7	15
	21-1342	P	7.51	66.3	15.3	NS
As	21-1341	NP	3.67	0.4	6.6	5.6
	21-1342	NP	3.67	0.4	3.8	NS
Cd	21-1341	P	2.14	80	8.4	3.7
	21-1342	P	2.14	80	2.3	NS
Cr	21-1341	NP	20.95	400	31	B
Pb	21-1341	NP	56.5	500	92.6	B
Se	21-1341	NP	0.37	400	0.81	B
V	21-1341	P	43.4	560	50.3	B
Zn	21-1341	P	210	24000	275	B

* - Units for radiological analyte values are in pCi/g, except for H3 which are in nCi/l, soil moisture and U which are in ppm.
- Units for inorganic analyte values are in ug/g
P - Process Area Baseline
NP - Non-Process Area Baseline
B - Below Baseline
NS - No samples were taken at this depth

Table 8.5-3 QA/QC sample summary – radionuclide data precision – SWMU 21-024(e).

Analytes	Location ID	Sample Depth	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Americium-241	21-1341	0-6 in.	1.45	2.89	-66
Plutonium-238	21-1341	0-6 in.	0.182	0.622	-109
Plutonium-239	21-1341	0-6 in.	40.8	125	-102

Table 8.5-4 QA/QC sample summary – blanks – SWMU 21-024(e)

Analyte	Location	Concentration	Blank Type
Bis(2 ethylhexyl)phthalate	21-1342	18 ug/L	FE
Calcium	21-1342	651 ug/L	FE
Calcium	21-1342	397 ug/L	FR
Magnesium	21-1342	68.9 ug/L	FE
Sodium	21-1342	995 ug/L	FE
Sodium	21-1342	675 ug/L	FR
Strontium	21-1342	9 ug/L	FE
Strontium	21-1342	5 ug/L	FR

FE-Field rinsate blank; FR-Field reagent blank.

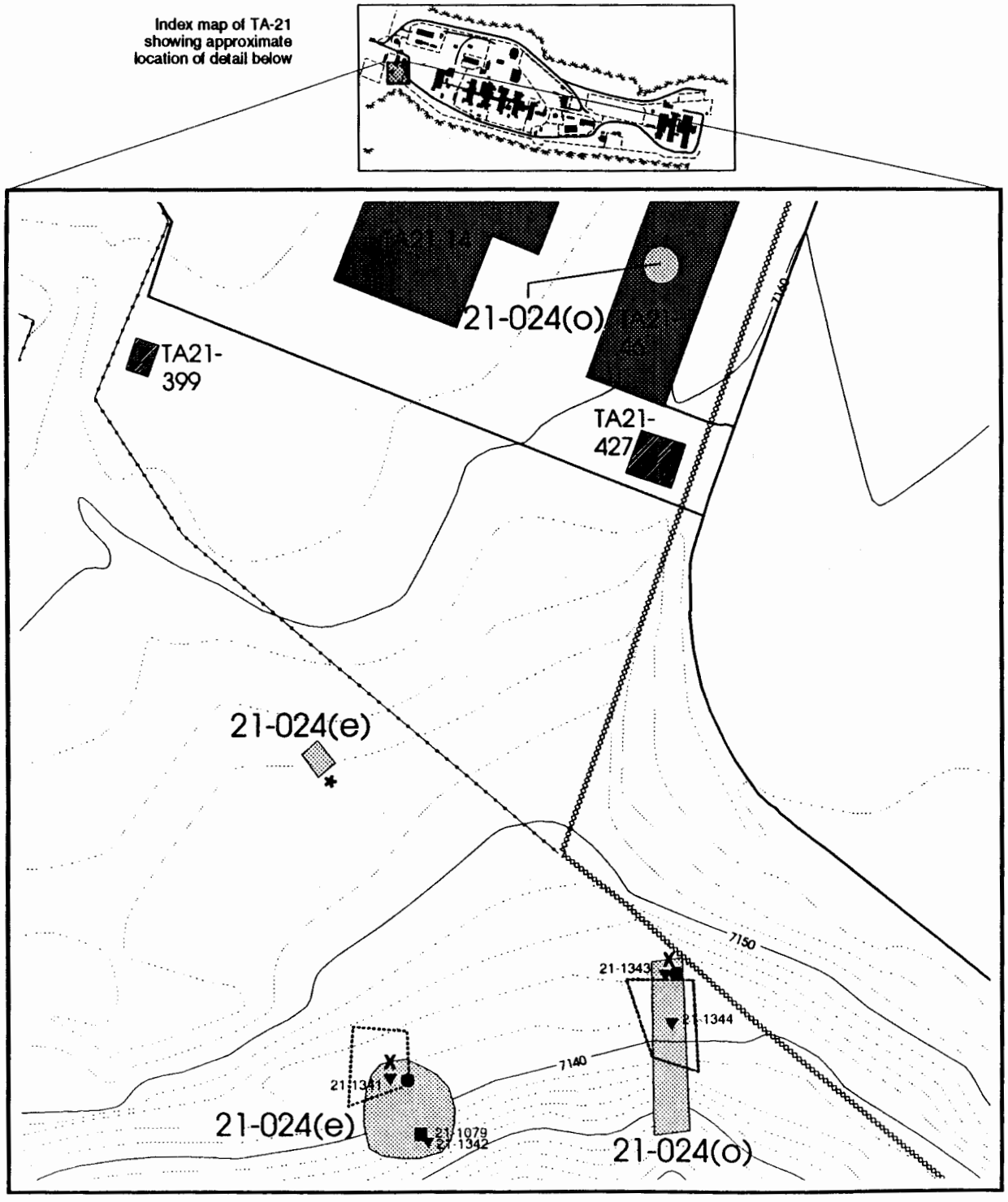


Figure 8.5-1
SWMU 21-024(e)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 16.6 50
FEET

N

Based on FIMAD Map: G101781

Modified by: David Dander 2/22/94

8.6 SWMU 21-024(f)

Outfall SWMU 21-024(f) is addressed in Section 15.9 of the RFI work plan and is located in the non-process baseline area. The outfall and sampling locations at SWMU 21-024(f) are shown on Figure 8.1-6. Because borehole analytical data are outstanding, it is recommended that a decision on the disposition of this SWMU be deferred. It is likely that no further action will be recommended when the outstanding data is received and assessed.

8.6.1 Site Process and Sampling History

SWMU 21-024(f) previously discharged sewage from Building TA-21-45 (Safety Training Building, now removed) through a steel septic tank to the surface on the north rim of DP Mesa. Currently there is no surface expression of the septic tank. Tank effluent discharged into a 3-ft by 2-ft deep pit.

One sample was collected from the center of the pit during 1988 reconnaissance sampling at the approximate location indicated on Figure 8.6-1. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics and pesticides/PCBs, and target analyte list metals. Standard analyses were used for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium.

Mercury, cesium-137, plutonium-239/240, and tritium were reported in concentrations slightly above regional background. Low levels of oil and grease also were reported. Analytical results are shown in Table 8.6-1.

8.6.2 RFI Activities and Data Presentation

Sampling at SWMU 21-024(f) was executed as prescribed in the RFI work plan, except that americium-241 was added to the analyte list for all samples and the shallow borehole samples were analyzed for isotopic uranium rather than total uranium.

In 1992 soil samples were collected from the eastern, western, and northern sides of the pit. One surface (0-6 in.), and two near-surface (6-12 in. and 12-18 in.) samples were collected from each location.

Table 8.6-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

The 1993 sampling activities at SWMU 21-024(f) consisted of a land survey and the drilling of a 10-ft shallow borehole in the pit area. Samples were collected from 2.5 ft, 5 ft, and 7.5 ft and 10 ft. A second borehole was placed in the vicinity of the tank, and sampled at 5-ft intervals to a depth of 20 ft. Analytical results for these samples were unavailable for inclusion in this phase report but will be assessed and reported in an addendum to this phase report.

8.6.3 Data Assessment

Cadmium and chromium were detected slightly above the non-process baseline 95.5 percentile, but at 5% or less of SALs.

Elevated plutonium-239/240 in the 1988 reconnaissance sample was confirmed in the 1992 sampling. No elevated tritium levels were detected in the samples collected in 1992. All analytes exhibit decreasing concentration with depth. Other reported maximum radionuclide concentrations were significantly below associated SALs, with the plutonium-239/240 concentration in the 0-6 in. sample at location 21-1432 approximately 58% of its SAL.

A radiological field survey performed throughout a 50-ft radius around the pit in 1992 indicated background levels of alpha, gamma, and low-energy gamma emitters.

No semi-volatile organics were detected in samples collected from SWMU 21-024(f). Acetone, methylene chloride, and toluene were the only volatile organics reported. Acetone was reported for two surface samples at concentrations up to 35 ug/kg, and in six near-surface samples at concentrations up to 55 ug/kg. Toluene was reported for one near-surface sample at a concentration of 8 ug/kg and methylene chloride was reported for one near-surface sample at a concentration of 7 ug/kg. Because all three of these analytes are common laboratory contaminants and were reported in low concentrations in the samples, these detections are not likely to be indicative of site contamination.

8.6.4 Conclusions and Recommendations

Because only one analyte (plutonium-239/240) approached a significant fraction (approximately 58%) of its SAL and the lateral and vertical extent of contamination is defined adequately at the discharge point, no further action is warranted for the discharge point. However, a recommendation for disposition of the SWMU will be deferred until outstanding borehole data are received, assessed and reported in an addendum to this phase report. It is likely that no further action will be recommended once the outstanding data is received and assessed.

8.6.5 QA/QC Sample Summary

Although the programmatic frequency of QA samples met all requirements of the QAPjP, this and several other SWMUs did not have QA/QC samples associated with their relatively limited number of RFI samples.

An inorganic laboratory duplicate analysis was performed on the 0-6 in. sample collected at location 21-1431. Twenty-two of the 25 analytes met the precision criteria specified in the QAPjP.

Radionuclide laboratory duplicate analyses were performed on samples collected at location 21-1341. Only selected members of the radionuclide suite were chosen in the laboratory for duplicate analysis. Two of the seven sets of results met the precision criteria specified in section 2.1.4 of this report.

Because MS/MSD analyses for organics were not performed on samples collected from SWMU 21-024(f), organic precision and accuracy criteria could not be evaluated.

An inorganic MS/MSD analysis was performed on the 0-6 in. sample collected from location 21-1431. Because recoveries were listed in FIMAD as 0%, inorganic accuracy criteria, as specified in the QAPjP, could not be evaluated at this time.

The radionuclides and inorganics listed in Table 8.6-3 did not meet the precision criteria.

Table 8.6-1 1988 outfall reconnaissance sampling – SWMU 21-024(f).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNIT
Metals			
Aluminum	9750	37	ug/g
Arsenic	2.2	2.0	ug/g
Barium	131	37	ug/g
Calcium	2130	914	ug/g
Chromium	8.9	2.0	ug/g
Copper	9.0	6.0	ug/g
Iron	9920	18	ug/g
Lead	34.5	10	ug/g
Magnesium	2150	914	ug/g
Mercury	0.22	0	ug/g
Nickel	12.4	8.0	ug/g
Oil & Grease	257	56	ug/g
Potassium	1330	914	ug/g
Vanadium	23.5	10	ug/g
Zinc	44.2	4.0	ug/g
Radionuclides			
Cesium-137	1.0	0.1	pCi/g
Plutonium-239/240	1.6	0.2	pCi/g
Radium-226	1.8	0.2	pCi/g
Thorium-232	1.0	0.4	pCi/g
Tritium	15	2.0	nCi/l
Uranium-234	1.7	0.4	pCi/g
Uranium-238	1.3	0.3	pCi/g

Table 8.6-2 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-024(f).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*	Near-Surface (6-12 in.)*	Near-Surface (12-18 in.)*
Am-241	21-1431	NP	0.129	22	0.129	B	B
	21-1432	NP	0.129	22	0.62	0.163	B
	21-1433	NP	0.129	22	0.179	B	B
Pu-239/240	21-1432	NP	2.04	24	13.9	B	B
Sr-90	21-1431	NP	0.73	8.9	B	0.736	B
Cd	21-1431	NP	1.17	80	1.6	B	B
Cr	21-1432	NP	20.95	400	21	B	B

* - Units for radiological analyte values are in pCi/g.
- Units for inorganic analyte values are in ug/g
NP - Non-Process Area Baseline
B - Below Baseline

Table 8.6-3 QA/QC sample summary – radionuclide and inorganic data precision – SWMU 21-024(f).

Analyte	Location ID	Sample Depth	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Plutonium-238	21-1431	0-6 in.	0.164	0.0464	112
Plutonium-239	21-1431	0-6 in.	1.06	0.452	80
Strontium-90	21-1431	0-6 in.	0.659	0.891	-30
Thorium-228	21-1431	0-6 in.	1.18	1.53	-26
Thorium-230	21-1431	0-6 in.	0.733	0.588	22
Aluminum	21-1431	0-6 in.	14,100	11,000	25
Magnesium	21-1431	0-6 in.	2,330	1,860	22
Thallium	21-1431	0-6 in.	0.31	0.22	34

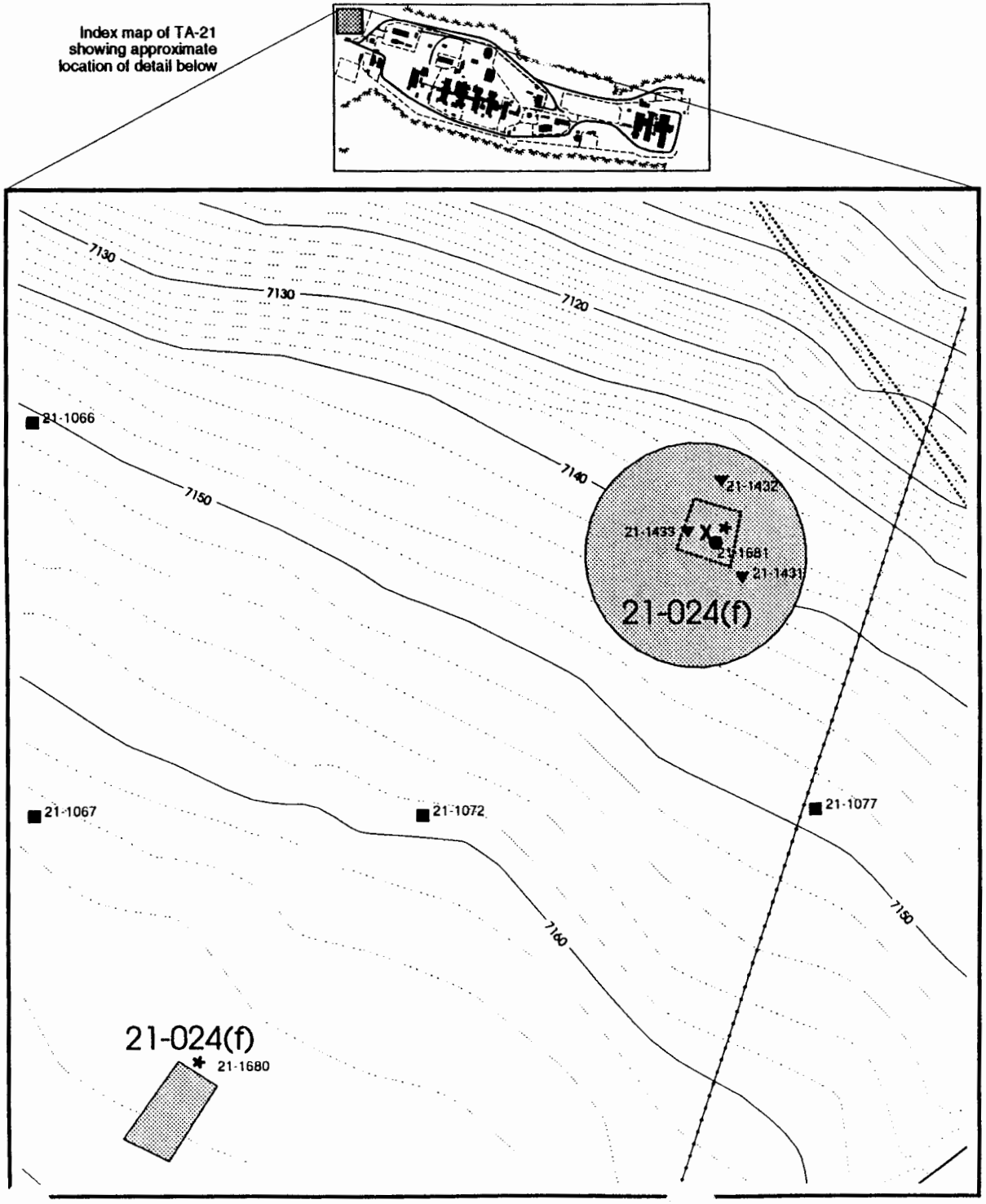


Figure 8.6-1
SWMU 21-024(f)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100

FEET

N

Based on FIMAD Map: G101700

Modified by: David Dander 2/23/94

8.7 SWMU 21-024(g)

Outfall SWMU 21-024(g) is addressed in Section 15.2 of the RFI work plan and is located in the process baseline area. The outfall and sampling locations at SWMU 21-024(g) are shown on Figure 8.7-1. It is recommended that a decision on the disposition of SWMU 21-024(g) be deferred until outstanding borehole analytical data are received and assessed.

8.7.1 Site Process and Sampling History

Outfall SWMU 21-024(g) was a septic system that routed sewage from Buildings TA-21-71 (warehouse) and TA-21-31 (electronics shop) through a concrete septic tank (abandoned in place) to the surface on the north rim of DP Canyon.

Two samples were collected at SWMU 21-024(g) during 1988 reconnaissance sampling. The samples were analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics and pesticides/PCBs, and target analyte list metals. Standard analytical methods were used for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium.

Cesium-137, plutonium-239/240, uranium-238, tetrachloroethene, cadmium, copper, lead, nickel, and mercury were reported slightly above regional background. Arsenic was reported slightly above the detection limit and well above regional background in one sample. Tritium was detected in another sample. Analytical results of the 1988 reconnaissance sampling are shown in Table 8.7-1.

8.7.2 RFI Activities and Data Presentation

Sampling at SWMU 21-024(g) was executed as prescribed in the RFI work plan, except that americium-241 was added to the analyte list for all samples and the shallow borehole samples were analyzed for isotopic uranium rather than total uranium.

The 1992 investigation consisted of a radiological field survey and collection of soil samples from six locations according to sampling Strategy B. One surface (0-6 in.) and one near-surface (6-12 in.) sample were collected from each location.

Table 8.7-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

The 1993 sampling activities performed at SWMU 21-024(g) consisted of a land survey to locate septic tank TA-21-125 and the drilling of a 20-ft shallow borehole near the downgradient side of the tank. One borehole sample was collected from each five feet interval. Analytical results for these samples were unavailable prior to preparation of this phase report and will be assessed in an addendum to this phase report.

8.7.3 Data Assessment

The inorganic constituents arsenic, cadmium, chromium, copper, manganese, nickel, lead, selenium, vanadium, and zinc were reported at concentrations above the non-process area baseline 95.5 percentile. In general, maximum inorganic concentrations range from <1% to 15% of their associated

SALs and the sum of SAL fractions is less than 50%. The presence of these inorganic contaminants is reasonable based on process knowledge.

The radionuclides americium-241, tritium, plutonium-238, plutonium-239/240, strontium, and uranium were reported in concentrations above the applicable baseline 95.5 percentile. Americium-241, plutonium-238, and strontium-90 levels only slightly exceed the 95.5 percentile, and all are less than 10% of SALs. Maximum plutonium-239/240 and uranium concentrations are approximately 80% and 30% of SALs, respectively, in surface samples.

Gamma spectrometry was requested as part of the analytical suite for samples collected at SWMU 21-024(g) to detect cesium-137. Assessment of these data has been delayed due to the reporting format, in section 2.1.4.4 of this report.

The 1992 radiological survey indicated background levels of alpha, gamma, and low-energy gamma emitters. Field laboratory analysis yielded results of 4.8 pCi/g of gross gamma emitters for one sample from location 21-1425, marginally above the detection limit of 4.0 pCi/g. Field laboratory analysis for gross alpha, gross beta, and gross gamma for all other samples were reported as less than detection limits. These gross gamma results place an upper limit of 4.8 pCi/g on the maximum cesium-137 levels that could be present.

Acetone, a common laboratory contaminant, was detected in five samples in concentrations up to 37 ug/kg. These concentrations are not indicative of significant site organic contamination.

8.7.4 Conclusions and Recommendations

Reported contaminant levels are slightly higher in the downgradient set of samples at locations 21-1428, 21-1429, 21-1430 than in the upgradient set of samples locations 21-1425, 21-1426, 21-1427. The highest concentration levels were detected in samples at the greatest perpendicular distance from the suspected flow line of the outfall (21-1425, 21-1427, 21-1428, and 21-1430). For example, copper concentrations at locations 21-1428 and 21-1430 are over twice the 21-1429 concentration. These results indicate that the lateral extent of contamination has not been completely delineated. However, all analyte levels are below SALs. Analyte concentrations decrease with depth near the discharge point.

A recommendation on the disposition of SWMU 21-024(g) will be deferred until outstanding borehole analyses are reported and assessed.

8.7.5 QA/QC Sample Summary

Although the programmatic frequency of QA samples met all requirements of the QAPjP, this and several other SWMUs did not have QA/QC samples associated with their relatively limited number of RFI samples.

Tritium laboratory duplicate analyses were performed on four samples. One of the four sets of results met the precision criteria specified in section 2.1.4 of this report. The relative percent difference for tritium laboratory duplicate analyses for the 0-6 in. sample, the 0-6 in. field duplicate sample, and the 6-12 in. sample collected from location 21-1430 were -28%, -48%, and -23%, respectively.

A volatile organic MS/MSD analysis was performed on 6-12 in. samples collected from locations 21-1427 and 21-1428. Because recoveries were listed in FIMAD in ug/kg, organic accuracy and precision criteria, as specified in QAPjP, could not be evaluated at this time.

Because inorganic laboratory duplicate or MS/MSD analyses were not performed, therefore the inorganic accuracy and precision criteria, as specified in the QAPjP, could not be evaluated.

Table 8.7-1 1988 outfall reconnaissance sampling – SWMU 21-024(g).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
Volatile Organics			
Tetrachloroethylene	13	6	ug/kg
Inorganics (sample #1)			
Aluminum	1590	27	ug/g
Barium	38.5	27	ug/g
Calcium	1460	680	ug/g
Chromium	2.9	2.0	ug/g
Iron	2820	14	ug/g
Lead	69.4	14	ug/g
Manganese	104	2.0	ug/g
Oil and grease	848	51	ug/g
Zinc	25.4	4.0	ug/g
Inorganics (Sample #2)			
Aluminum	3690	50	ug/g
Arsenic	15.4	10	ug/g
Barium	137	50	ug/g
Cadmium	4.8	2.0	ug/g
Calcium	3920	1250	ug/g
Chromium	22.6	4.0	ug/g
Copper	57.1	6.0	ug/g
Iron	5170	25	ug/g
Lead	77.2	11	ug/g
Manganese	216	4.0	ug/g
Mercury	12.2	0	ug/g
Nickel	18.9	10	ug/g
Oil and grease	2280	62	ug/g
Vanadium	52	13	ug/g
Zinc	399	6.0	ug/g
Radionuclides (Sample #1)			
Radium-226	0.9	0.1	pCi/g
Thorium-232	0.5	0.2	pCi/g
Tritium	5	2	nCi/l
Uranium-234	0.6	0.1	pCi/g
Uranium-238	0.3	0.1	pCi/g

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
Radionuclides (Sample #2)			
Cesium-137	0.8	0.1	pCi/g
Plutonium-239/240	2.7	0.4	pCi/g
Radium-226	1.1	0.1	pCi/g
Strontium-90	0.2	0.1	pCi/g
Thorium-232	0.9	0.1	pCi/g
Tritium	900	20	nCi/l
Uranium-234	8.9	0.7	pCi/g
Uranium-238	5.0	0.5	pCi/g

Table 8.7-2 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-024(g).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL	Surface (0-6 in.)*	Near-Surface (6-12 in.)*
Am-241	21-1428	NP	0.129	22	0.218	B
	21-1429	NP	0.129	22	B	0.137
	21-1430	NP	0.129	22	0.551	B
H-3	21-1428	NP	4.59	15000	792.7	136.2
	21-1429	NP	4.59	15000	46.2	87.8
	21-1430	NP	4.59	15000	201.9	338.9
Pu-238	21-1430	NP	0.239	27	0.508	B
Pu-239/240	21-1428	NP	2.04	24	4.08	B
	21-1430	NP	2.04	24	19.4	B
SR-90	21-1428	NP	0.73	8.9	0.9	B
U	21-1428	NP	7.42	66.3	16.3	B
	21-1430	NP	7.42	66.3	20	B
As	21-1428	NP	3.67	0.4	10	B
As	21-1429	NP	3.67	0.4	8.7	6.9
	21-1430	NP	3.67	0.4	9.5	B
Cd	21-1427	NP	1.17	80	1.4	B
	21-1428	NP	1.17	80	5.6	B
	21-1429	NP	1.17	80	B	1.9
	21-1430	NP	1.17	80	4.5	2.2
Cr	21-1427	NP	20.95	400	23.9	B
	21-1428	NP	20.95	400	25	B
	21-1430	NP	20.95	400	32.3	B
Cu	21-1428	NP	18.8	3000	53.5	B
	21-1429	NP	18.8	3000	24.2	B
	21-1430	NP	18.8	3000	59.3	B
Mn	21-1430	NP	485	8000	503	B
Ni	21-1427	NP	11.85	1600	19.5	B
	21-1430	NP	11.85	1600	16.2	B
Pb	21-1428	NP	41.1	500	67	B
	21-1430	NP	41.1	500	73.6	B
Se	21-1428	NP	0.37	400	0.83	B
	21-1430	NP	0.37	400	0.68	B
V	21-1428	NP	41	560	52.1	B
	21-1430	NP	41	560	47.3	B

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL	Surface (0-6 in.)*	Near-Surface (6-12 in.)*
Zn	21-1428	NP	69	24000	399	84.5
	12-1429	NP	69	24000	84.8	179
	21-1430	NP	69	24000	310	180

* - Units for radiological analyte values are in pCi/g, except for H3 which are in nCi/l soil moisture and U which are in ppm.
- Units for inorganic analyte values are in ug/g
NP - Non-Process Area Baseline
B - Below Baseline

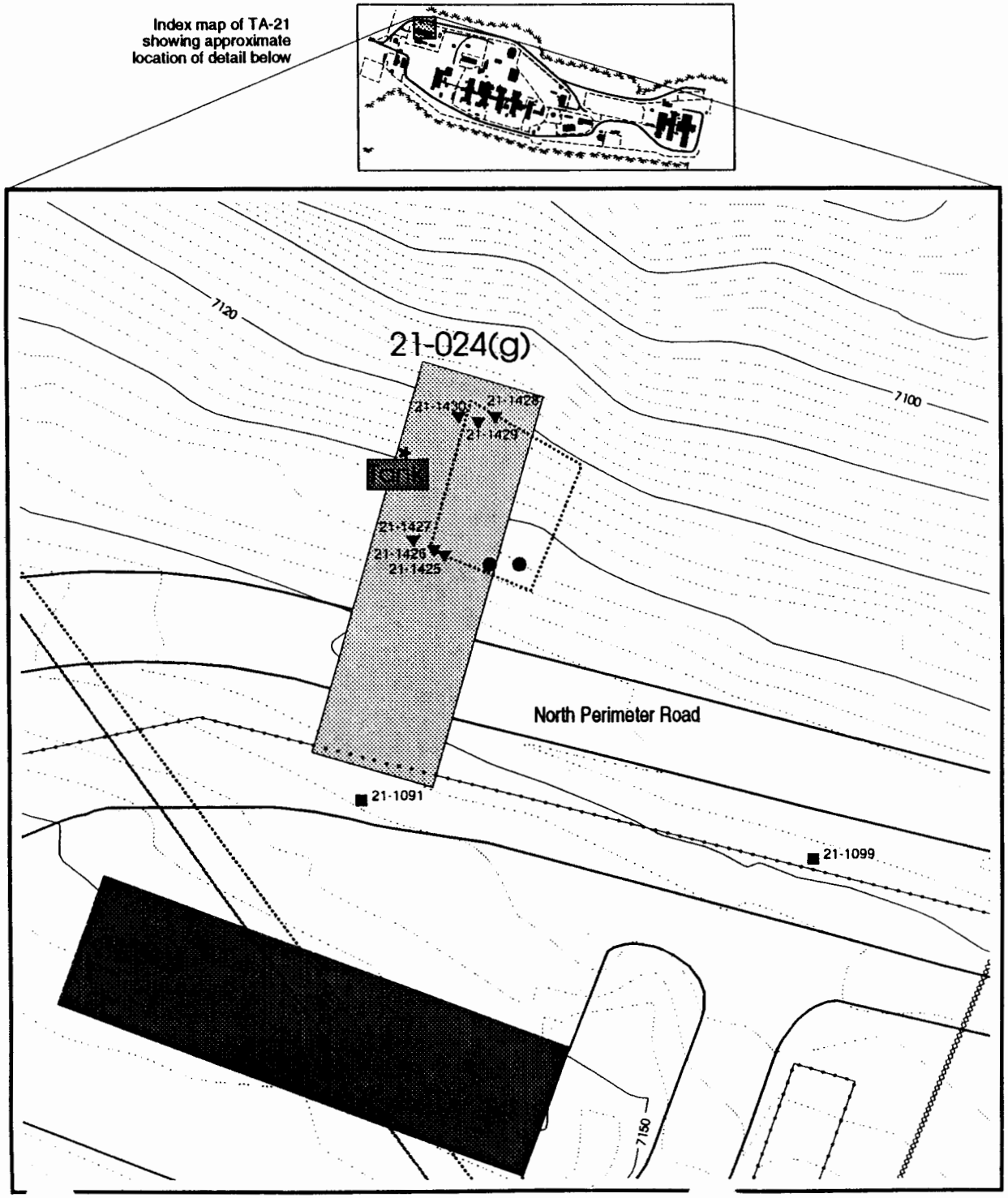


Figure 8.7-1
SWMU 21-024(g)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location

Exact Discharge Point Unknown

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101699

Modified by: David Dander 2/23/94

8.8 SWMU 21-024(h)

The outfall portion of SWMU 21-024(h) is addressed in Section 15.8 of the RFI work plan and is located within both the process area and special impact areas 1 and 2. The outfall and sampling locations at SWMU 21-024(h) are shown on Figure 8.1-8. Because borehole analytical data were not received prior to the writing of this report, it is recommended that a decision on the disposition of this SWMU be deferred. Current data indicate that baseline risk assessment may be required for SWMU 21-024(h).

8.8.1 Site Process and Sampling History

SWMU 21-024(h) discharged sewage from Building TA-21-151 through septic tank TA-21-163 to the surface on the north rim of DP Mesa. The lower drainage area of this SWMU overlaps that of SWMU 21-004(d).

One sample was collected at SWMU 21-024(h) during 1988 reconnaissance sampling at the approximate location indicated in Figure 8.8-1. The sample was analyzed according to CLP SOW protocol for the target compound list volatile organics, semi-volatile organics and pesticides/PCBs, and target analyte list metals, and by standard procedures of commercial laboratories for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium.

Americium-241, tritium, and plutonium-239/240 were reported above regional background levels. Low levels of oil and grease also were reported. Plutonium-238 was not reported as a contaminant in historical sampling data. However, process knowledge and contaminant levels at other SWMUs

associated with Building TA-21-151 suggests the possibility of plutonium-238 at SWMU 21-024(h). Analytical results of the 1988 reconnaissance sampling are shown in Table 8.8-1.

8.8.2 RFI Activities and Data Presentation

Sampling at SWMU 21-024(h) was executed as defined in the RFI work plan, with the exception of sampling depth at location 21-1414 and the analyses that were performed. The RFI work plan called for 0-6 in., 6-12 in., and 12-18 in. samples to be collected at location 21-1414, but refusal was encountered at 12 in. due to bedrock. Americium-241 was added to the analyte list and the shallow borehole samples were analyzed for isotopic uranium rather than total uranium.

The 1992 investigation consisted of a radiological field survey and the collection of samples from three locations according to Strategy C. One surface (0-6 in.) and two near-surface (6-12 in. and 12-18 in.) samples were collected from locations 21-1413 and 21-1415. One surface (0-6 in.) and one near-surface (6-12 in.) samples were collected from location 21-1414. Location 21-1415 is in the area where the drainages for SWMU 21-024(h) and SWMU 21-004(d) meet.

Table 8.8-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

During 1993, a 20-ft borehole was placed in the suspected vicinity of tank TA-21-163. One sample was collected from each 5-ft interval. Analytical results for these samples were unavailable for inclusion in this phase report but will be reported in an addendum to this phase report.

8.8.3 Data Assessment

No inorganic analytes were detected above the process area baseline 95.5 percentile.

The radionuclides americium-241, plutonium-239/240, uranium, and thorium-228 were reported in maximum concentrations above the applicable baseline 95.5 percentile. Uranium and thorium-228 exhibited increasing concentration with depth, while a maximum plutonium-239 concentration of 33 pCi/g was noted in the 6-12 in. sample at location 21-1414. This concentration exceeded the plutonium-239/240 SAL in only one sample. The maximum uranium concentration was approximately 55% of its SAL.

Although the work plan also indicated elevated tritium levels might be encountered because of the proximity to DP East, the 1992 sample results did not confirm elevated tritium concentrations.

Field survey activities performed in 1992 indicate background levels of alpha emitters and slightly elevated levels of gamma emitters and low-energy gamma emitters (1.5 times background).

Acetone and methylene chloride were the only volatile organics reported for samples collected from SWMU 21-024(h). Acetone was detected in a surface sample at a concentration of 15 ug/kg and in near-surface samples at concentrations up to 32 ug/kg. Methylene chloride was reported for a near-surface sample at a concentration of 16 ug/kg. Because both methylene chloride and acetone are common laboratory contaminants and were reported in low concentrations in the samples, these analytes do not warrant further investigation.

No semi-volatile organics were detected in the samples collected from SWMU 21-024(h).

8.8.4 Conclusions and Recommendations

Plutonium-239/240 concentrations increased in the 6-12 in. depth sample at location 21-1414, but decreased in the 12-18 in. sample at location 21-1413. This location is in the drainage channel downgradient of the outfall. Further investigations directed at identifying the lateral extent of contamination will be identified in an addendum to this phase report, upon receipt and assessment of outstanding laboratory data.

It is recommended that a decision on the disposition of this SWMU be deferred until outstanding data are received, assessed, and reported in an addendum to this phase report. Because SALs were exceeded for one sample, baseline risk assessment may be needed.

8.8.5 QA/QC Sample Summary

Although the programmatic frequency of QA samples met all requirements of the QAPjP, this and several other SWMUs did not have QA/QC samples associated with their relatively limited number of RFI samples.

An inorganic laboratory duplicate analysis was performed on the 0-6 in. sample collected at location 21-1415. Twenty-two of the 25 analytes met the precision criteria specified in the QAPjP.

Table 8.8-3 lists the radionuclides and inorganic analytes that did not meet the precision requirements specified in the QAPjP and in section 2.1.4 of this report.

An organic MS/MSD analysis was performed on the 6-12 in. sample collected from location 21-1415. Because recoveries were listed in FIMAD in ug/kg, organic accuracy and precision criteria, as specified in the QAPjP, could not be evaluated at this time.

An inorganic MS/MSD analysis was performed on the 0-6 in. sample collected from location 21-1415. Because recoveries were listed in FIMAD at 0%, inorganic accuracy criteria, as specified in the QAPjP, could not be evaluated at this time. Analytical data appear to yield reasonable values in comparison to other outfall data sets and regional background.

Table 8.8-1 1988 outfall reconnaissance sampling – SWMU 21-024(h).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNIT
Metals			
Aluminum	2230	35	ug/g
Chromium	2.4	2.0	ug/g
Iron	3170	18	ug/g
Lead	8.5	6.0	ug/g
Manganese	194	4.0	ug/g
Oil & Grease	272	53	ug/g
Zinc	26.8	4.0	ug/g
Radionuclides			
Americium	0.2	0.1	pCi/g
Plutonium-239	1.5	0.2	pCi/g
Radium-226	1.0	0.1	pCi/g
Strontium-90	0.6	0.3	pCi/g
Thorium-232	0.6	0.2	pCi/g
Tritium	7.0	2.0	nCi/l
Uranium-234	0.5	0.1	pCi/g
Uranium-238	0.3	0.1	pCi/g

Table 8.8-2 Analytes detected above the baseline 95.5 percentile of applicable categories at SWMU 21-024(h).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL	Surface (0-6 in.)*	Near-Surface (6-12 in.)*	Near-Surface (12-18 in.)*
Am-241	21-1414	SI1	0.673	22	B	0.677	NS
Pu-239	21-1414	SI1	12.47	24	B	33	NS
U	21-1413	P	7.51	66.3	B	B	38
Th-228	21-1415	NP	2.05	NA	B	2.08	2.87

* - Units for radiological analyte values are in pCi/g, except for U which are in ppm.
- Units for inorganic analyte values are in ug/g
SI1 - Special Impact Area 1 Baseline
P - Process Area Baseline
NP - Non-Process Area Baseline
B - Below Baseline
NS- No samples were taken at this depth

Table 8.8-3 QA/QC sample summary -inorganic and radionuclide data precision – SWMU 21-024(h).

Analyte	Location ID	Sample Depth	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Cadmium	21-1415	0-6 in.	1.1 pCi/g	0.8 pCi/g	138
Copper	21-1415	0-6 in.	7 pCi/g	5 pCi/g	140
Lead	21-1415	0-6 in.	9.5 pCi/g	12.9 pCi/g	74

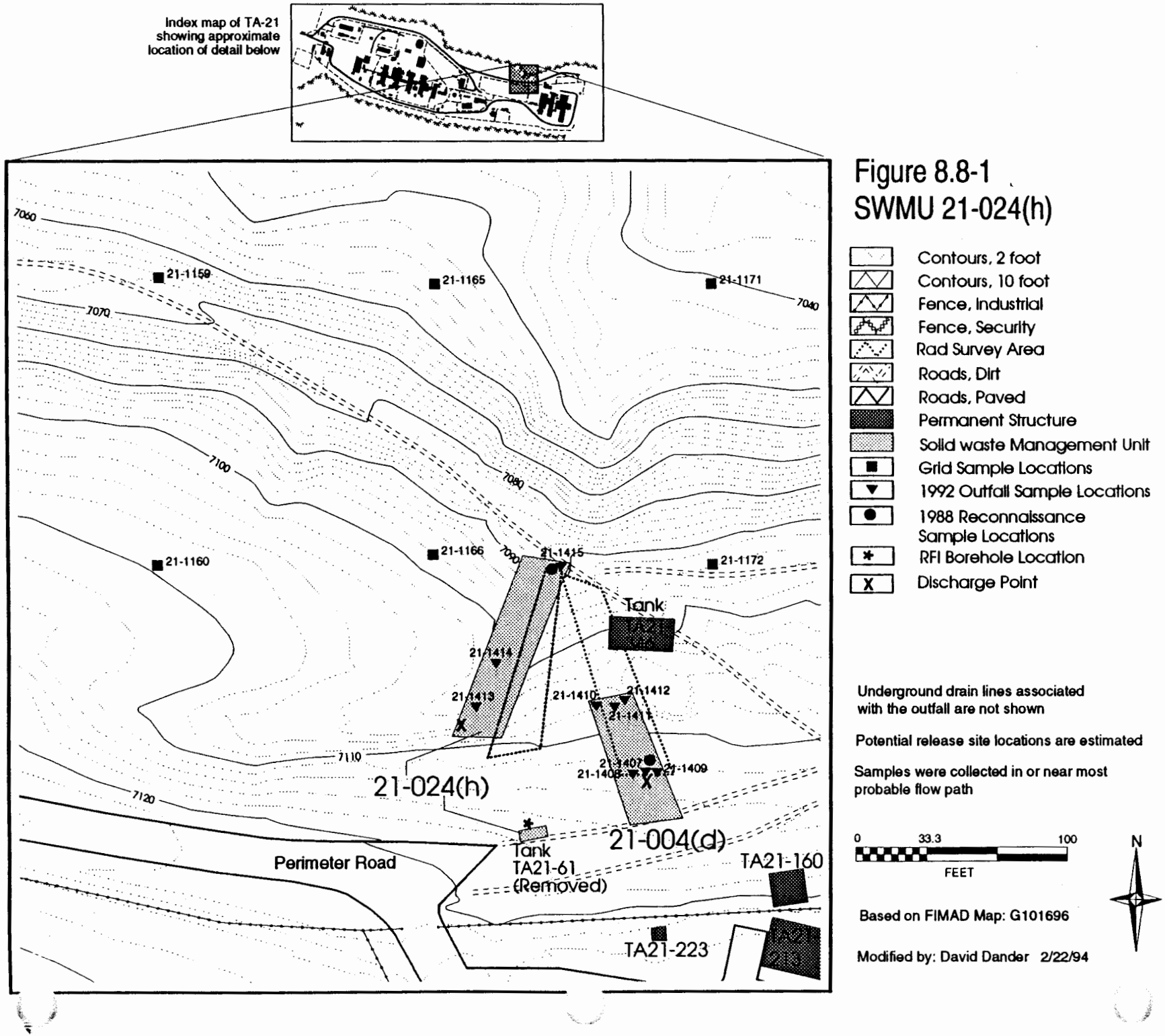


Figure 8.8-1
SWMU 21-024(h)

8.9 SWMU 21-024(i)

The outfall portion of SWMU 21-024(i) is addressed in Section 15.3 of the RFI work plan and is located within both the process area and special impact area 2. The outfall and sampling locations at SWMU 21-024(i) are shown on Figure 8.9-1. SWMU 21-024(i) contains multiple contaminants above SALs and has been selected for further investigation and possible interim fencing.

8.9.1 Site Process and Sampling History

Outfall SWMU 21-024(i) is a septic system that routed sewage from Building TA-21-152 through a concrete septic tank (abandoned in place) to the surface outside of Building TA-21-109. Cooling tower blowdown also was routed to this outfall. The system discharges through a 6-in VCP line into a broad, gentle sloping area about 30 ft from the south cliff edge of DP Mesa. Previous activities indicate that the outfall may contain low levels of laboratory organics and inorganics due to research that was conducted at Building TA-21-152.

One sample was collected from SWMU 21-024(i) during 1988 reconnaissance sampling. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics, pesticides/PCBs, and target analyte list metals. Analyses were also conducted for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium.

Barium, chromium, copper, lead, mercury, selenium, vanadium,zinc, cadmium, plutonium-238, radium-226, radium-235, and uranium-238 were reported slightly above regional background. Uranium-234

and tritium levels were substantially above regional background. Analytical results of the 1988 reconnaissance sampling are shown in Table 8.9-1.

8.9.2 RFI Activities and Data Presentation

Sampling at SWMU 21-024(i) was executed as prescribed by the RFI work plan, except that americium-241 was added to the analyte list for all samples and the borehole samples were analyzed for isotopic uranium rather than total uranium. The surface and near-surface samples collected in 1993 were supplemental to those specified in the RFI work plan.

The 1992 investigation activities performed at SWMU 21-024(i) included a radiological field survey and collection of soil samples from three locations according to Strategy A. One surface (0-6 in.) and one near-surface (6-12 in.) sample were collected from each location.

Follow-on sampling was performed at SWMU 21-024(i) because radiological field surveys performed in 1992 indicated elevated gross alpha activity. In 1993, a radiological survey was performed to better define the extent of contamination. This survey confirmed that contamination is fairly localized along the drainage pathway. Approximately 40 measurements were made in and around the drainage channel.

Eight soil sampling locations were selected based on the supplemental radiological survey performed in 1993. These samples were biased to locations of elevated radioactivity, and in most cases were located outside the drainage pathway. Surface (0-6 in.) samples were collected at all eight locations and near-surface (6-12 in. and 12-18 in.) samples were collected at three of the eight locations. A dirt pile is located at the mesa edge to the east of the drainage pathway and may be due to soil removal

from the drainage area. One 0-6 in. sample was taken from this pile. Other surface samples were taken at the edge of the contaminated area delineated in the radiological survey. Analytical data from these samples were not available for inclusion in this phase report but will be included in an addendum to this phase report. In addition to the locations specifically selected for characterization of 21-024(i), one grid location (21-1194) sampled in the 1992 surface soil investigation is approximately 10 ft east of sample location 21-1599. The analytical results from grid location 21-1194 were included in the data assessment for this SWMU.

Additional 1993 investigations included a 20-ft borehole that was drilled adjacent to inactive septic tank TA-21-181. One sample was collected from each 5-ft interval as specified in the RFI work plan. Results will be reported in an addendum to this phase report after data are received and assessed.

Table 8.9-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

8.9.3 Data Assessment

The inorganics arsenic, barium, chromium, copper, nickel, lead selenium, vanadium, and zinc were reported above the applicable baseline 95.5 percentile. Individually, none of the maximum analyte concentrations exceeds its SAL, except for arsenic. The maximum lead concentration is approximately 60% of its SAL, and the maximum chromium concentration is approximately 40% of its SAL. All inorganic analyte concentrations decrease with depth and in all cases are below the applicable baseline 95.5 percentile at a depth of 12-18 in. The detected inorganic concentrations are consistent with operations in Buildings TA-21-166 and TA-21-167 which fed the SWMU 21-024(i) outfall.

The radionuclides americium-241, tritium, strontium-90, and uranium were detected above the applicable baseline 95.5 percentile. The maximum uranium concentration at location 21-1397 (0-6 in. samples) exceeds the SAL. All other uranium concentrations in the 0-6 in. and 6-12 in. depths range from 35-80% of the SAL. The alpha-emitting radionuclide concentrations in Table 8.9-2 are lower than anticipated, given the radiological survey results in Table 8.9-3 and elevated gross alpha levels (up to 331.5 pCi/g) reported by the field laboratory.

Assessment of raw gamma spectrometry data indicated the presence of actinium-227 and progeny, which could account for the elevated field instrument readings. Further assessment of the gamma spectrometry data is proceeding. A second possibility is the presence of a thin surface layer concentrated in uranium activity, that is substantially diluted in the remainder of the 0-6 in. sample. A concentrated surface layer of uranium could result in elevated field instrument readings. For all analytes sampled in the entire soil profile (to 18 in. depth) during 1992 investigations, the highest surface concentrations were noted at the furthest downgradient location, 21-1397. All analytes from grid location 21-1194 were below the applicable baseline 95.5 percentile, indicating that contamination at SWMU 21-024(i) is isolated to the drainage channel.

The radiological survey indicated maximum alpha activity several orders of magnitude above background. Total gamma and low-energy gamma levels also were above background values. A summary of these data is presented in Table 8.9-3 and alpha count rate isopleths are shown on Map 3 .

Toluene was the only volatile organic reported and di-n-butyl phthalate was the only semi-volatile organic reported, both at low concentrations. Both compounds are common laboratory contaminants and the levels probably are not indicative of significant organic site contamination.

8.9.4 Conclusions and Recommendations

Significant levels of alpha-emitting radionuclides are present at this SWMU. When outstanding data are received and assessed with currently available data, they will be reporte an addendum to this phase report. This addendum will include any follow-on sampling plans and any plans for voluntary corrective actions. Based on data currently in hand, soil removal may be needed at SWMU 21-024(i). In the interim, temporary fencing and/or posting probably will be installed to prevent inadvertent intrusion into the most highly contaminated portion of the presently uncontrolled area.

8.9.5 QA/QC Sample Summary

Although the programmatic frequency of QA samples met all requirements of the QAPjP, this and several other SWMUs did not have QA/QC samples associated with their relatively limited number of RFI samples.

An inorganic laboratory duplicate analysis was performed on the 6-12 in. sample collected at location 21-1395. Nine of the 25 analytes met the precision criteria specified in the QAPjP. Table 8.9-4 lists the inorganics that did not meet the precision criteria specified in the QAPjP.

Because no radiological laboratory duplicates were not performed on the samples collected at SWMU 21-024(i), precision criteria, as specified in section 2.1.4 of this report, could not be evaluated. An inorganic MS analysis was performed on the 6-12 in. sample collection from location 21-1395. Because recoveries were listed in FIMAD in ug/g and no MSD recoveries accompanied these MS values, inorganic accuracy criteria, as specified in section 2.1.4 of this report, could not be evaluated at this

time. No organic MS/MSD analyses were performed on the samples collected from SWMU 21-024(i). Thus, no organic precision or accuracy criteria, as specified in the QAPjP, could be evaluated.

Table 8.9-1 1988 outfall reconnaissance sampling – SWMU 21-024(i).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
Metals			
Aluminum	5190	38.1	ug/g
Arsenic	38.9	19	ug/g
Barium	2900	38.1	ug/g
Beryllium	1.6	0.95	ug/g
Cadmium	3.6	0.95	ug/g
Calcium	2210	952	ug/g
Chromium	145	1.9	ug/g
Copper	83.4	4.8	ug/g
Iron	6450	19	ug/g
Lead	187	38.1	ug/g
Magnesium	1220	952	ug/g
Manganese	130	2.9	ug/g
Mercury	0.97	0.1	ug/g
Nickel	9.7	7.6	ug/g
Oil and grease	3520	56.5	ug/g
Selenium	0.97	0.95	ug/g
Vanadium	161	9.5	ug/g
Zinc	1530	3.8	ug/g
Radionuclides			
Plutonium-239/240	3.9	0.5	pCi/g
Radium-226	2.7	0.3	pCi/g
Thorium-232	1.0	0.2	pCi/g
Tritium	13,000	1,000	nCi/l
Uranium-234	43	2.0	pCi/g
Uranium-235	1.2	0.3	pCi/g
Uranium-238	11	1.0	pCi/g
Volatile Organics			
Methylene chloride	100	57	ug/kg

Table 8.9-2 Analytes detected above the non-process area baseline 95.5 percentile at SWMU 21-024(i).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL	Surface (0-6 in.)*	Near-Surface (6-12 in.)*
Am-241	21-1395	P	0.526	22	1.3	B
	21-1396	P	0.526	22	B	1.3
	21-1397	P	0.526	22	1.19	1.54
H-3	21-1395	SI2	110	15000	2400	2300
	21-1396	SI2	110	15000	664.6	111.3
	21-1397	SI2	110	15000	4200	791
Sr-90	21-1395	NP	0.73	8.9	1	B
U	21-1395	P	7.51	66.3	40.4	24.24
	21-1396	P	7.51	66.3	26.3	28
	21-1397	P	7.51	66.3	73	52.2
As	21-1395	NP	3.67	0.4	28	10.1
	21-1396	NP	3.67	0.4	13.9	12
	21-1397	NP	3.67	0.4	34.7	30
Ba	21-1395	P	512.8	5600	1329.3	B
	21-1396	P	512.8	5600	934.8	882.8
	21-1397	P	512.8	5600	1733.4	980.6
Cr	21-1395	NP	20.95	400	61.2	49.8
	21-1396	NP	20.95	400	40.8	39.8
	21-1397	NP	20.95	400	157.4	122
Cu	21-1395	P	50.8	3000	68.6	B
	21-1397	P	50.8	3000	71	B
Ni	21-1395	P	13.62	1600	23.7	14.6
	21-1396	P	13.62	1600	29.4	30.4
	21-1397	P	13.62	1600	34.8	28.2
Pb	21-1395	P	56.5	500	109.6	97
	21-1396	P	56.5	500	74	70.4
	21-1397	P	56.5	500	299.4	257
Se	21-1395	NP	0.37	400	0.9	0.4
	21-1396	NP	0.37	400	0.69	0.65
	21-1397	NP	0.37	400	1.28	1.06
V	21-1395	P	43.4	560	77.2	B
	21-1397	P	43.4	560	127	91.4

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL	Surface (0-6 in.)*	Near-Surface (6-12 in.)*
Zn	21-1395	P	210.4	24000	1220.5	706.4
	21-1396	P	210.4	24000	631.6	618.4
	21-1397	P	210.4	24000	1217.8	820.2

* - Units for radiological analyte values are in pCi/g, except for H3 which are in nCi/l soil moisture and U which are in ppm.
- Units for inorganic analyte values are in ug/g
SI2 - Special Impact Area 2 Baseline
P - Process Area Baseline
NP - Non-Process Area Baseline
B - Below Baseline

Table 8.9-3 Radiological survey summary - SWMU 21-024(i).

Type of Survey	Background Range	1992 Survey Range	1993 Survey Range
Gross alpha	5-18 cpm	190-1113 cpm	6-535 cpm
Beta-gamma	80-115 cpm	140-1000 cpm	80-450 cpm
Total gamma	16-18K cpm	26-68K cpm	17K-44K cpm
Low-energy gamma	12-16K cpm	28-105K cpm	12.5K-70K cpm
Gamma	15-18 μR/hr	12-35 μR/hr	14-75 μR/hr

Table 8.9-4 QA/QC sample summary – inorganic data precision – SWMU 21-024(i).

Analyte	Location ID	Sample Depth	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Arsenic	21-1395	6-12 in.	10.1 ug/g	7.2 ug/g	34
Barium	21-1395	6-12 in.	353 ug/g	533 ug/g	-41
Cobalt	21-1395	6-12 in.	2.04 ug/g	0.8 ug/g	87
Cadmium	21-1392	6-12 in.	10.2 ug/g	6.5 ug/g	44
Chromium	21-1395	6-12 in.	49.8 ug/g	24.9 ug/g	67
Copper	21-1395	6-12 in.	3.4 ug/g	17.6 ug/g	-135
Iron	21-1395	6-12 in.	5.8 ug/g	3.3 ug/g	55
Manganese	21-1395	6-12 in.	72.8 ug/g	57.4 ug/g	24
Sodium	21-1395	6-12 in.	765 ug/g	558 ug/g	31
Lead	21-1395	6-12 in.	97 ug/g	51.7 ug/g	61
Strontium	21-1395	6-12 in.	17.4 ug/g	12 ug/g	37
Vanadium	21-1395	6-12 in.	37 ug/g	20.9 ug/g	56
Zinc	21-1395	6-12 in.	706 ug/g	277 ug/g	87
Molybdenum	21-1395	6-12 in.	11.8 ug/g	7.6 ug/g	43
Antimony	21-1395	6-12 in.	11.1 ug/g	7.1 ug/g	44
Thallium	21-1395	6-12 in.	6.7 ug/g	4.3 ug/g	44

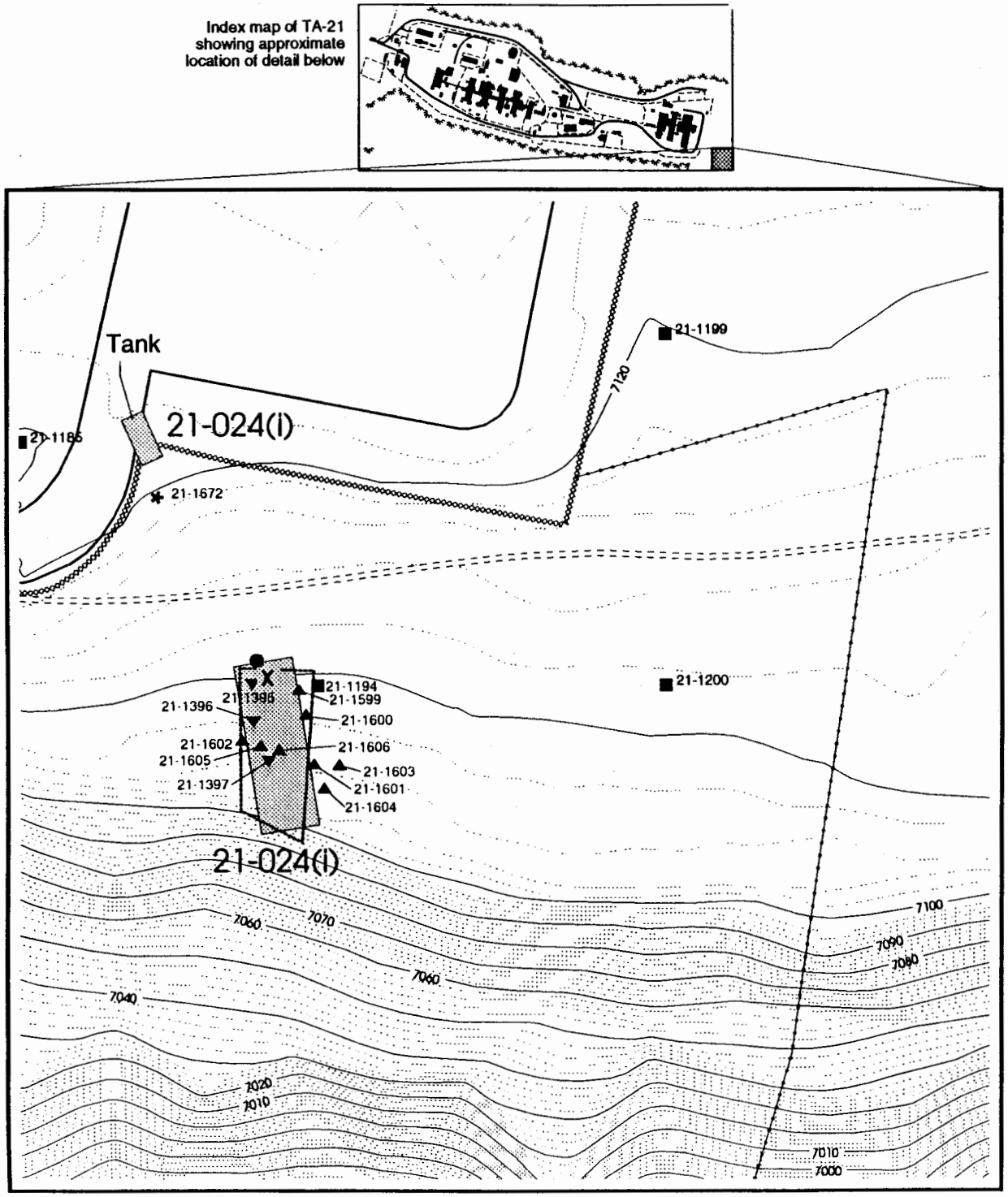


Figure 8.9-1
SWMU 21-024(i)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Solid waste Management Unit
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1993 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101692

Modified by: David Dander 2/22/94

8.10 SWMUs 21-024(j)/21-024(k)

Septic system outfall SWMUs 21-024(j,k) are addressed in Section 15.6 of the RFI work plan and are located within both the process baseline area and special impact areas 1 and 2. The outfall locations of SWMU 21-024(j,k) are shown on Figures 8.10-1 and 8.10-2, respectively.

The only RFI activities planned for these SWMUs were shallow boreholes. No surface or near-surface investigations were specified in the RFI work plan. The borehole investigation schedules for 1992 were not performed due to issues regarding the potential for radioactive airborne emissions under the National Emissions Standards for Hazardous Air Pollutants (NESHAPS). Boreholes were installed and sampled in 1993 as prescribed by the RFI work plan, except that americium-241 was added to the analyte list and the samples were analyzed for isotopic uranium rather than total uranium. The results of the investigations were not received in time for inclusion in this phase report. When the results are received and assessed, they will be reported in an addendum to this phase report.

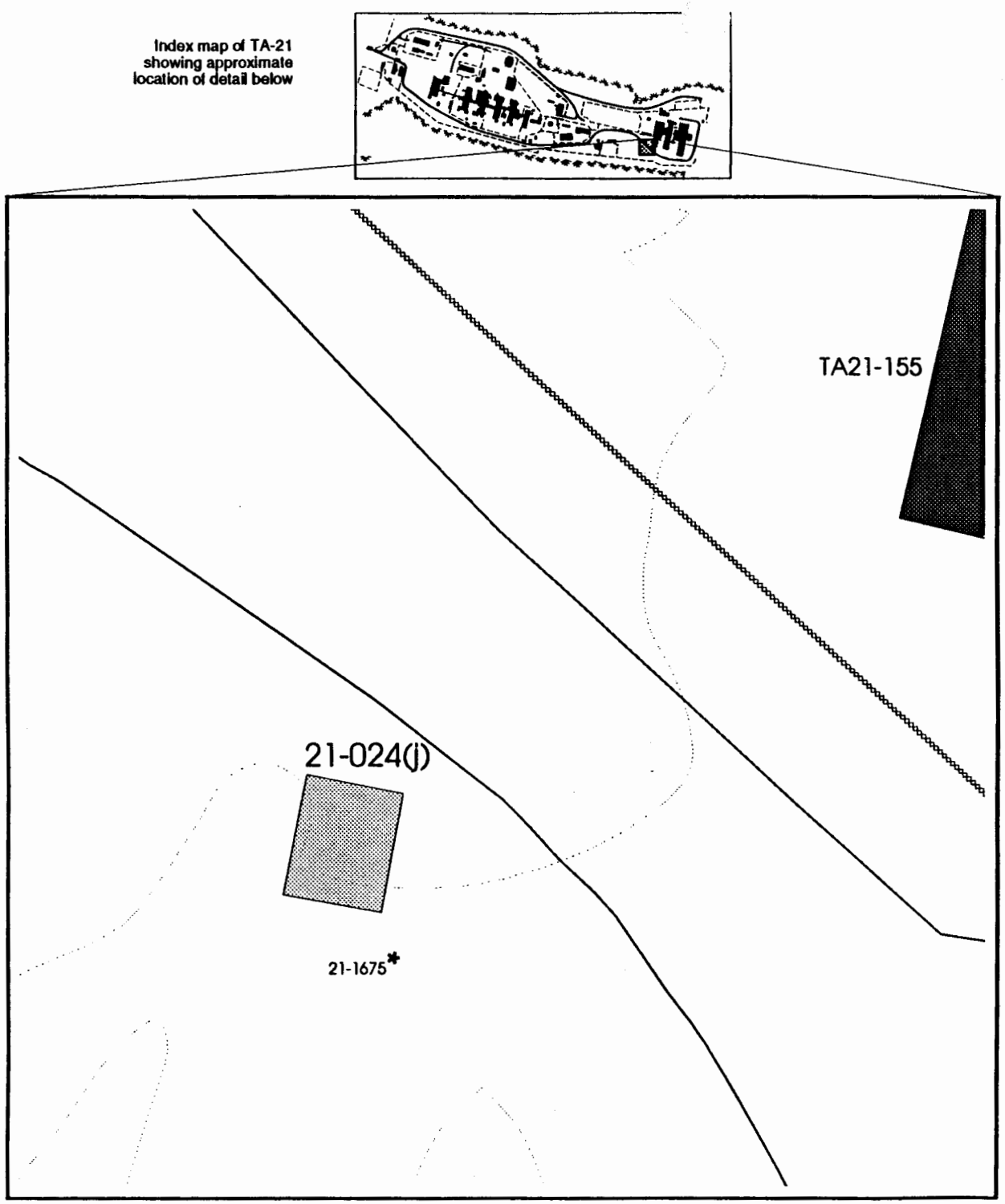


Figure 8.10-1
SWMU 21-024(j)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Security
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- RFI Borehole Location

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 8.3 25
FEET

N

Based on FIMAD Map: G101704

Modified by: David Dander 2/24/94

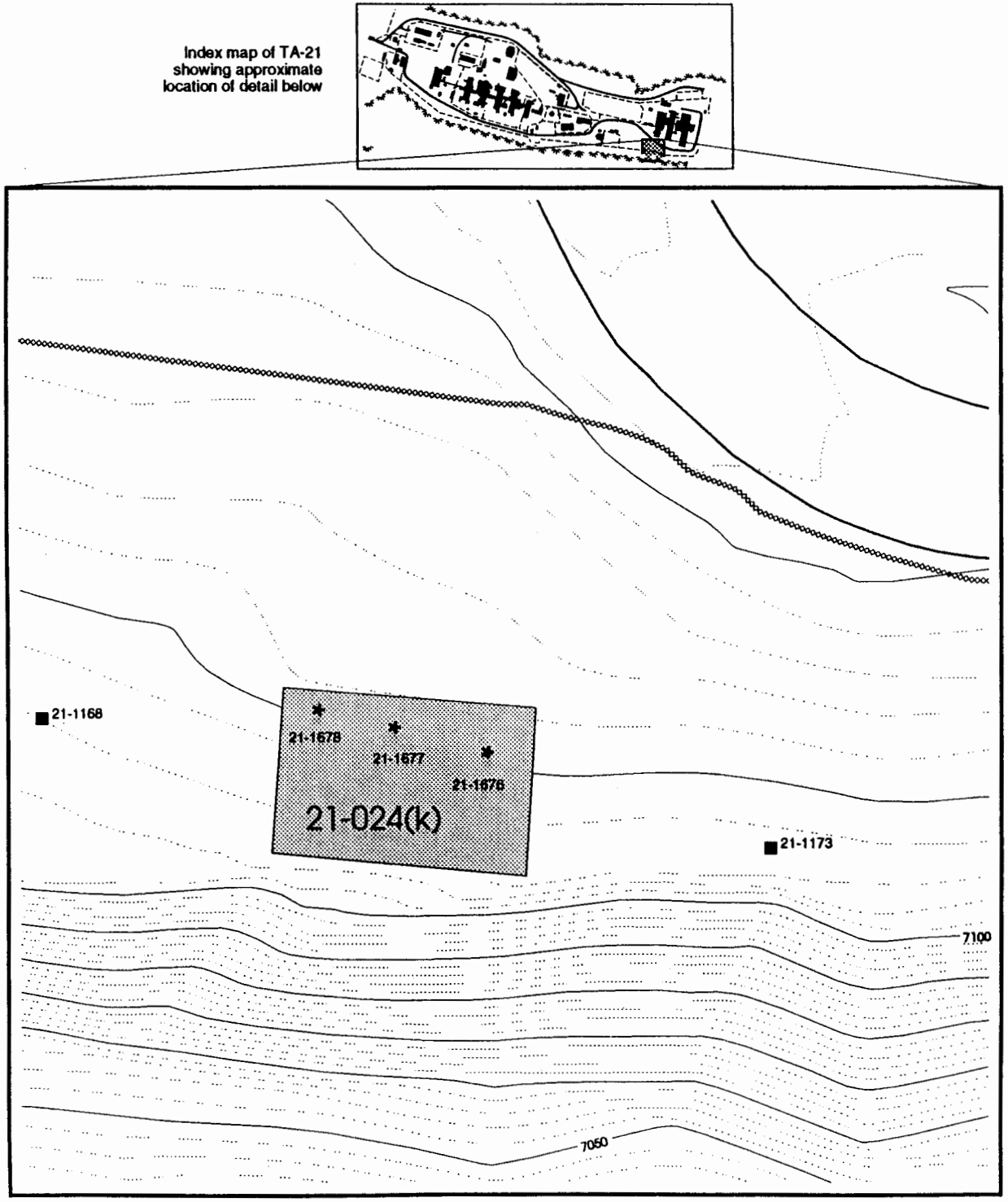


Figure 8.10-2
SWMU 21-024(k)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Security
- Roads, Dirt
- Roads, Paved
- Solid waste Management Unit
- Grid Sample Locations
- RFI Borehole Location

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 16.6 50
FEET

N

Based on FIMAD Map: G101703

Modified by: David Dander 2/23/94

8.11 SWMU 21-024(l)

The outfall portion of SWMU 21-024(l) is addressed in Section 15.2 of the RFI work plan and is located in the process baseline area. The outfall and sampling locations at SWMU 21-024(l) are shown on Figure 8.11-1. Based on the assessment in this section, the nature and extent of contamination at SWMU 21-024(l) has been adequately defined with no significantly elevated analyte concentrations. Therefore, no further action is recommended for this SWMU.

8.11.1 Site Process and Sampling History

SWMU 21-024(l) received liquid waste from the floor drain of the mechanical room, Building TA-21-21, formerly used as a vault that stored plutonium and uranium metals. The outfall line ran north toward DP Canyon, but the precise location of the outfall had not been determined before the 1992 RFI field work began.

One sample was collected at SWMU 21-024(l) during 1988 reconnaissance sampling, where indicated on Figure 8.11-1. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics, pesticides/PCBs, and target analyte list metals. Analyses also were conducted according to standard commercial laboratory procedures for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium.

Americium-241, plutonium-239/240, tritium, and zinc were reported above background. The only organic contaminants reported were low levels of methylene chloride (a common laboratory

contaminant), polynuclear aromatic hydrocarbons (common constituents of asphalt), and oil/grease. Analytical results of 1988 reconnaissance sampling are shown in Table 8.11-1.

8.11.2 RFI Activities and Data Presentation

Sampling at SWMU 21-024(l) was executed as prescribed in the RFI work plan except that americium-241 was added to the analyte list.

The 1992 investigation consisted of a geophysical field survey to locate the drain line and discharge point, a radiological field survey, and the collection of surface (0-6 in.) samples from six locations according to sampling Strategy B.

Table 8.11-2 presents a summary of analyte concentration detected above the applicable baseline 95.5 percentile.

8.11.3 Data Assessment

No inorganics were detected above the applicable baseline 95.5 percentile.

Plutonium-238 concentrations range from 0.054–0.19 pCi/g, within the applicable area baseline 95.5 percentile, except for the maximum concentration of 12.1 pCi/g in the 0-6 in. sample at location 21-1422. This value is approximately one-half the SAL.

Radiological surveys indicated background levels of alpha, gamma, and low-energy gamma emitters.

Acetone and methylene chloride were reported at concentrations of 9 ug/kg and 20 ug/kg, respectively. Both organics are common laboratory contaminants and the reported levels are not indicative of organic contamination.

Geophysical surveys located the drain line at SWMU 21-024(l), but not the precise location of the discharge point (end of drain line). The drain line is shown on Figure 8.11-1.

8.11.4 Conclusions and Recommendations

Based on the assessment in this section, the RFI sampling adequately characterized the nature and extent of contamination at SWMU 21-024(l) and showed that all analyte levels are below SALs. Therefore, it is recommended that no further action is required for this SWMU.

8.11.5 QA/QC Sample Summary

Although the programmatic frequency of QA samples met all requirements of the QAPjP, this and several other SWMUs did not have QA/QC samples associated with their relatively limited number of RFI samples.

An inorganic laboratory duplicate analysis was performed on the 0-6 in. sample collected at location 21-1422. Twenty of the 25 analytes met the precision criteria specified in the QAPjP.

Radionuclide laboratory duplicates were performed on samples collected at locations 21-1422 and 21-1424. Only selected members of the radionuclide suite were chosen in the laboratory for duplicate analysis. Two of the five sets of results met the precision criteria specified in section 2.1.4.

Table 8.11-3 lists of inorganic and radiological analytes that did not meet the precision criteria specified in the QAPjP and in section 2.1.4.

An inorganic MS/MSD analysis was performed on the 0-6 in. sample collected from location 21-1424. Because recoveries were listed in FIMAD as 0%, accuracy criteria, as specified in the QAPjP, could not be evaluated at this time. Analytical data appear to yield reasonable values in comparison to other outfall data sets and regional background.

Because organic MS/MSD analyses were not performed for samples from this SWMU, precision and accuracy criteria, as specified in the QAPjP, could not be evaluated.

Table 8.11-1 1988 outfall reconnaissance sampling - SWMU 21-024(l).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
Volatile organics			
Methylene chloride	75	55	ug/kg
Semi-volatile organics			
Benzo(a)anthracene	2200	2000	ug/kg
Benzo(a)pyrene	2500	2000	ug/kg
Benzo(b)fluoranthene	2100	2000	ug/kg
Benzo(g,h,i)perylene	2200	2000	ug/kg
Benzo(k)fluoranthene	2500	2000	ug/kg
Chrysene	2800	2000	ug/kg
Fluoranthene	5600	2000	ug/kg
Phenanthrene	4900	2000	ug/kg
Pyrene	6200	2000	ug/kg
Inorganics			
Aluminum	6210	32.4	ug/g
Barium	65.6	32.4	ug/g
Calcium	1500	811	ug/g
Chromium	5.3	1.6	ug/g
Copper	6.1	4.1	ug/g
Iron	6150	16.2	ug/g
Lead	14.6	3.7	ug/g
Magnesium	1110	811	ug/g
Manganese	160	2.4	ug/g
Oil and grease	1550	53.5	ug/g
Vanadium	12.3	8.1	ug/g
Zinc	195	3.2	ug/g
Radionuclides			
Americium	0.4	0.1	pCi/g
Cesium-137	0.4	0.1	pCi/g
Plutonium-239	3.4	0.4	pCi/g
Radium-226	1.6	0.2	pCi/g
Strontium-90	0.3	0.1	pCi/g
Thorium-232	1.2	0.2	pCi/g
Tritium	55	3	nCi/l
Uranium-234	1.1	0.2	pCi/g
Uranium-238	0.7	0.1	pCi/g

Table 8.11-2 Analytes detected above the applicable baseline 95.5 percentile – SWMU 21-024(l).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*
Pu-238	21-1422	P	6.21	27	12.1

* - Units for radiological analyte values are in pCi/g
P - Process Area Baseline

Table 8.11-3 QA/QC sample summary – inorganic and radionuclide data precision – SWMU 21-024(l).

Analyte	Location ID	Depth	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Lithium	21-1422	0-6 in.	27.7 ug/kg	7.4 ug/g	374
Magnesium	21-1422	0-6 in.	2840 ug/g	1570 ug/g	181
Manganese	21-1422	0-6 in.	379 ug/g	258 ug/g	147
Sodium	21-1422	0-6 in.	149 ug/g	78.3 ug/g	190
Lead	21-1422	0-6 in.	16.2 ug/g	28.1 ug/g	58
Plutonium-238	21-1422	0-6 in.	12.1 pCi/g	5.12 pCi/g	236
Americium-241	21-1422	0-6 in.	0.424 pCi/g	0.634 pCi/g	67
Americium-241	21-1424	0-6 in.	0.105 pCi/g	0.165 pCi/g	64

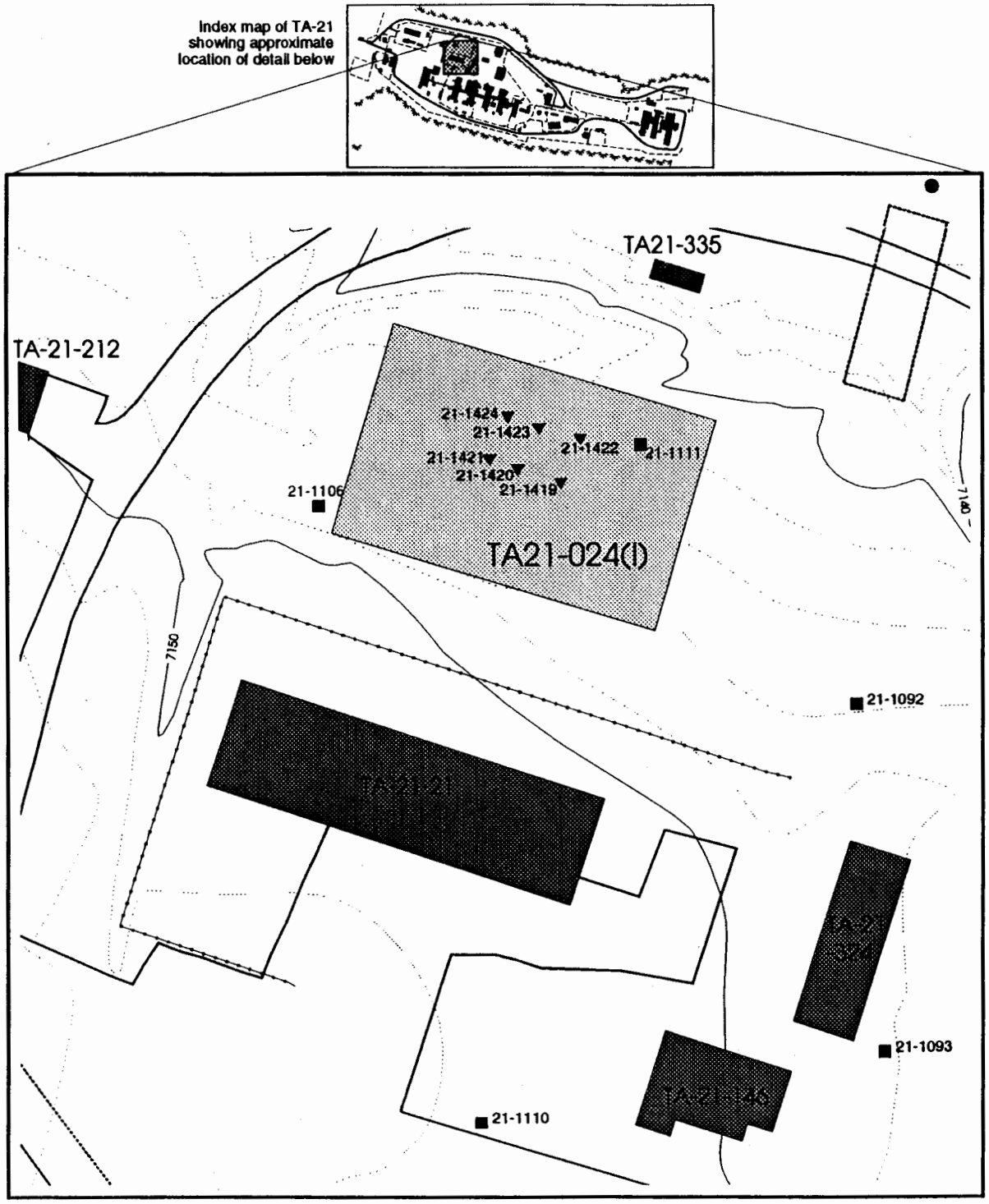


Figure 8.11-1
SWMU 21-024(I)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Rad Survey Area
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 16.6 50
FEET

N

Based on FIMAD Map: G101698

Modified by: David Dander 2/23/94

8.12 SWMUs 21-024(m)/21-027(b)

Outfall SWMUs 21-024(m) and 21-027(b) are addressed in Section 15.7 of the RFI work plan and both are located within the process area and special impact areas 1 and 2. Because these two SWMUs are co-located, they are assessed together. The outfalls and sampling locations at SWMUs 21-024(m) and 21-027(b) are shown on Figure 8.12-1. Based on the assessment in this section, the nature and extent of contamination at SWMU 21-024(m)/21-027(b) has been adequately defined and no contaminant levels of concern are present. Therefore, SWMUs 21-024(m) and 21-027(b) are recommended for no further action.

8.12.1 Site Process and Sampling History

SWMUs 21-024(m) and 21-027(b) have separate histories and origins but drain into the same area, resulting in a common sampling plan. Each SWMU's history will be discussed separately, but the investigation and resulting data assessment were conducted as a single effort. The common discharge area is on the south edge of DP Mesa, directly south of Building TA-21-207.

SWMU 21-024(m) is reported to be a vitrified clay pipe that exits Building TA-21-209, the high-temperature chemistry laboratory. The outfall was not located precisely in the field. An 8-in. corrugated metal pipe discharges water at the approximate site where the discharge point was expected to be located. This pipe appears to come from a storm drain below the lawn area of Building TA-21-209. The construction of this pipe may have destroyed the SWMU 21-024(m) outfall line. A 12-in. corrugated metal pipe with no labeling also is adjacent to the storm drain. The origin of this pipe is unknown, but it is unlikely that either of these pipes is the drain line for SWMU 21-024(m).

SWMU 21-027(b) consists of two outfall lines, one of which is an active NPDES permitted outfall No. EPA03A034. This outfall discharges treated cooling water from cooling towers TA-21-166 and TA-21-167. Formerly, these cooling towers discharged through the drain line for SWMU 21-024(i). The second outfall line associated with SWMU 21-027(b) apparently receives discharges from a cooling tower associated with Building TA-21-152. This outfall line could not be located during the RFI site reconnaissance. A LANL report on NPDES outfalls states that this outfall was eliminated.

8.12.2 RFI Activities and Data Presentation

Sampling at SWMUs 21-024(m) and 21-027(b) was executed in 1992 as prescribed in the RFI work plan, except that americium-241 was added to the analyte list.

The investigation consisted of a radiological field survey and collection of samples from two locations according to sampling Strategy C. One surface (0-6 in.) and two near-surface (6-12 in., and 12-18 in.) samples were collected from each location.

8.12.3 Data Assessment

No radionuclide or inorganic analytes were reported above their applicable baseline categories. No volatile or semi-volatile analytes were detected. No gross alpha, beta, or gamma levels were detected above detection limits by field laboratory analyses.

The field survey indicated background levels of alpha and gamma emitters and slightly elevated low-energy gamma emitters (1.5 times background at maximum reading).

8.12.4 Conclusions and Recommendations

A recommendation of no further action is proposed for SWMUs 21-024(m) and 21-027(b) because no radionuclide or inorganic analytes were detected above the applicable baseline 95.5 percentile or SALs. Although the actual drain pipe was not located, sample locations were placed in and around a well-defined drainage channel which would have received outfall releases.

8.12.5 QA/QC Sample Summary

The field rinsate blank associated with this SWMU indicated no radionuclide contamination and no detectable volatile or semi-volatile organic concentrations were reported. No detectable concentrations were reported for 22 of the 25 inorganics.

No detectable concentrations were reported for 61 of the 62 volatile organics and for 22 of the 25 inorganics in the field reagent blank associated with this SWMU. No detectable semi-volatile organic concentrations were reported in this blank.

An inorganic laboratory duplicate analysis was performed on the 0-6 in. sample collected at location 21-1394. Eighteen of the 25 analytes met the precision criteria specified in the QAPjP.

Radionuclide laboratory duplicates were performed on samples collected at location 21-1394. Only selected members of the radionuclide suite were chosen in the laboratory for duplicate analysis. Nine of the ten sets of results met the precision criteria specified in section 2.1.4. Laboratory duplicates performed for radionuclide analytes displayed generally good agreement with one another.

A list of radionuclides and inorganics that did not meet the precision criteria specified in section 2.1.4 of this report are listed in Table 8.12-1.

The inorganic analytes listed in Table 8.12-2 were detected in blanks collected at SWMU 21-024(m)/27(b). Acetone, a common laboratory contaminant, was reported in a field reagent blank at a concentration of 76 ug/l.

An inorganic MS/MSD analysis was performed on the 0-6 in. sample collected from location 21-1394. Because recoveries were listed in FIMAD as 0%, accuracy criteria as specified in the QAPjP could not be evaluated at this time. However, analytical data appear to yield reasonable value in comparison to other outfall data sets and regional background.

A semi-volatile organic and 1,4-dichlorobenzene MS/MSD analysis was performed on the 0-6 in. sampled collected from location 21-1394. Because recoveries were listed in FIMAD in ug/kg, organic accuracy and precision criteria, as specified in the QAPjP, could not be evaluated at this time.

Table 8.12-1 QA/QC sample summary – inorganic radionuclide data precision – SWMUs 21-024(m) and 21-027(b).

Analyte	Location ID	Sample Depth	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Plutonium-239	21-1394	0-6 in.	0.137 pCi/g	0.088 pCi/g	156
Arsenic	21-1394	0-6 in.	2.2 ug/g	1.3 ug/g	169
Calcium	21-1394	0-6 in.	2950 ug/g	1950 ug/g	151
Cadmium	21-1394	0-6 in.	1.1 ug/g	0.49 ug/g	224
Cobalt	21-1394	0-6 in.	2.4 ug/g	3.3 ug/g	73
Potassium	21-1394	0-6 in.	1300 ug/g	1630 ug/g	80
Nickel	21-1394	0-6 in.	4.6 ug/g	6.1 ug/g	75
Lead	21-1394	0-6 in.	21.5 ug/g	15.3 ug/g	140

Table 8.12-2 QA/QC sample summary – blanks – SWMUs 21-024(m) and 21-027(b).

Analyte	Location ID	Sample Concentration	Blank Type
Cobalt	21-1394	9.1 ug/l	FE
Cobalt	21-1394	11.1 ug/l	FR
Iron	21-1394	28 ug/l	FE
Magnesium	21-1394	5.8 ug/l	FE
Sodium	21-1394	11.6 ug/l	FR
Zinc	21-1394	61.5 ug/l	FR

FE-Field rinsate blank; FR-Field reagent blank.

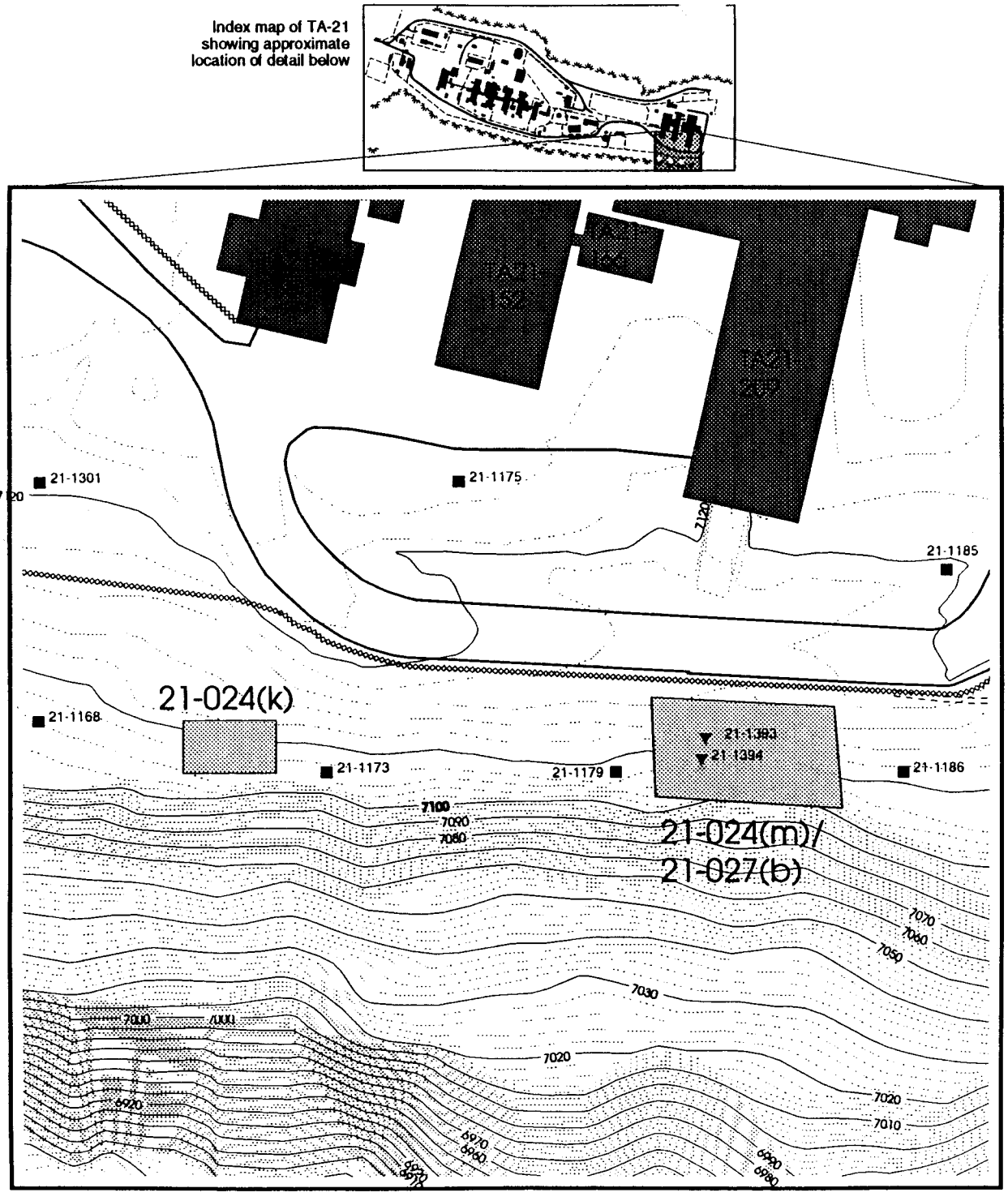


Figure 8.12-1
SWMU 21-024(m)/21-027(b)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid Waste Management Unit
- Grid Sample Locations
- 1992 Outfall Sample Locations

Exact Discharge Point Unknown

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101685

Modified by: David Dander 2/23/94

8.13 SWMU 21-024(n)

The outfall portion of SWMU 21-024(n) is addressed in Section 15.4 of the RFI work plan and is located within both the process baseline area and special impact areas 1 and 2. The outfall and sampling locations at SWMU 21-024(n) are shown on Figure 8.13-1. Assessment of the RFI data for SWMU 21-024(n) leads to a recommendation of no further action.

8.13.1 Site Process and Sampling History

SWMU 21-024(n) received liquid wastes from a drain exiting Building TA-21-155 and discharges northward into DP Canyon. This building has been a warehouse and laboratory. The drain consists of corrugated metal pipe exiting a concrete bulkhead and discharging onto a gravel road adjacent to MDA U.

One sample was collected at the discharge point during 1988 reconnaissance sampling. Analytical results of 1988 reconnaissance sampling are shown in Table 8.13-1. The approximate location of the 1988 reconnaissance sample is shown on Figure 8.13-1. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics, pesticides/PCBs, and target analyte list metals. Standard laboratory analyses also were performed for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium.

Zinc and plutonium-239/240 were reported slightly above regional background. Low levels of oil and grease also were reported (LANL 1991). Tritium was reported substantially above background but well below the SAL.

8.13.2 RFI Activities and Data Presentation

Characterization of SWMU 21-024(n) was performed in 1992 as prescribed by the RFI work plan, except that americium-241 was added to the analyte list and isotopic thorium analyses were not performed.

The investigation consisted of a radiological field survey and the collection of soil samples from three locations according to sampling Strategy C. The sampling locations were placed at the discharge point and in the ditch which carries discharges to DP Canyon. One surface (0-6 in.) and two near-surface (6-12 in. and 12-18 in.) samples were collected from each location.

Table 8.13-2 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

8.13.3 Data Assessment

Chromium was the only inorganic analyte detected above the applicable baseline 95.5 percentile. The maximum chromium concentration was approximately 10% of the SAL at location 21-1404 and levels decreased with depth.

Tritium and uranium were detected slightly above the applicable baseline 95.5 percentile and were less than 12% of their respective SALs. Tritium concentrations were consistently 11–15 nCi/l at all sampling depths and exhibited a vertical concentration gradient similar to other outfall SWMUs.

The radiological survey indicated background levels of alpha, gamma, and low-energy gamma emitters. Field laboratory screening indicated gross alpha, beta, and gamma levels below detection limits.

Acetone was detected in seven soil samples. The greatest concentration detected in soils was 34 ug/kg, but acetone also was detected in three blanks associated with this SWMU at a concentrations up to 46 ug/l. Tetrachloroethylene was tentatively identified in a sample collected from location 21-1402. It is judged that these analyte concentrations do not warrant further investigation.

8.13.4 Conclusions and Recommendations

Several analytes slightly exceed the applicable baseline 95.5 percentile, but the levels are a small fraction SALs. A minor concentration increase for all analytes was noted in the 6-12 in. depth, but in general decreased in the 12-18 in. depth. The data assessment indicates that the nature and extent of contamination was characterized adequately and no analyte level exceeded SALs. Therefore, it is recommended that no further action is warranted for SWMU 21-024(n).

8.13.5 QA/QC Sample Summary

The field rinsate blank associated with this SWMU indicated no radionuclide contamination for 5 of the 6 analytes, and no detectable semi-volatile organic concentrations were reported. No detectable concentrations were reported for 24 of the 25 inorganics or for 61 of the 62 volatile organics.

No detectable concentrations were reported for 60 of the 62 volatile organics and for 24 of the 25 inorganics in the field reagent blank associated with this SWMU. No detectable semi-volatile organic concentrations were reported in this blank.

No detectable concentrations were reported for 61 of the 62 volatile organics in the field trip blank associated with this SWMU.

A laboratory duplicate analysis was performed on the 12-18 in. sample collected at location 21-1402 for strontium-90. The reported results for this analysis meets the precision criteria specified in section 2.1.4.

The analytes listed in Table 8.13-3 were detected in blanks collected at SWMU 21-024(n).

Because inorganic laboratory duplicates or MS/MSD analyses were not performed on the samples collected from SWMU 21-024(n), inorganic accuracy and precision criteria, as specified in the QAPjP, could not be evaluated.

An organic MS/MSD analysis was performed on the 6-12 in. sample collected from locations 21-1403. Because recoveries were listed in FIMAD in ug/kg, organic accuracy and precision criteria, as specified in the QAPjP, could not be evaluated at this time.

Table 8.13-1 1988 outfall reconnaissance sampling – SWMU 21-024(n).

ANALYTES	CONCENTRATION	DETECTION LIMIT	UNITS
Metals			
Aluminum	4960	38	ug/g
Barium	81.4	38	ug/g
Calcium	1910	938	ug/g
Chromium	4.8	2.0	ug/g
Copper	12.4	6.0	ug/g
Iron	6310	19	ug/g
Lead	7.5	2.0	ug/g
Manganese	229	4.0	ug/g
Oil & Grease	1310	53	ug/g
Vanadium	12.9	10	ug/g
Zinc	95.9	4.0	ug/g
Radionuclides			
Plutonium-239	0.5	0.1	pCi/g
Radium-226	1.2	0.1	pCi/g
Strontium-90	0.4	0.2	pCi/g
Thorium-232	0.8	0.1	pCi/g
Tritium	53	3.0	nCi/l
Uranium-234	1.0	0.2	pCi/g
Uranium-238	1.0	0.2	pCi/g

Table 8.13-2 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-024(n).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL	Surface (0-6 in.)*	Near-Surface (6-12 in.)*	Near-Surface (12-18 in.)*
H-3	21-1402	SI2	11	15000	14.9	12.4	13.3
	21-1403	SI2	11	15000	B	14.5	14.3
	21-1404	SI2	11	15000	B	B	10.6
U	21-1403	P	7.51	66.3	B	8.3	B
	21-1404	P	7.51	66.3	8.8	B	B
Cr	21-1404	NP	20.95	400	34.2	37.2	B

* - Units for radiological analyte values are in pCi/g, except for H3 which are in nCi/l soil moisture.
- Units for inorganic analyte values are in ug/g
SI2 - Special Impact Area 2 Baseline
P - Process Area Baseline
NP - Non-Process Area Baseline
B - Below Baseline

Table 8.13-3 QA/QC sample summary – blanks – SWMU 21-024(n).

Analyte	Location	Sample Concentration	Blank Type
Acetone	21-1402	40 ug/l	FE
Acetone	21-1402	44 ug/l	FR
1,2-Dibromo-3-chloropropane	21-1402	17 ug/l	FR
Acetone	21-1403	46 ug/l	FB
Sodium	21-1402	188 ug/l	FE
Cobalt	21-1402	8.1 ug/l	FR
Magnesium	21-1402	70.4 ug/l	FR
Americium-241	21-1402	0.045 pCi/l	FE

FE - Field rinsate blank; FR - Field reagent blank; FB - Field trip blank.

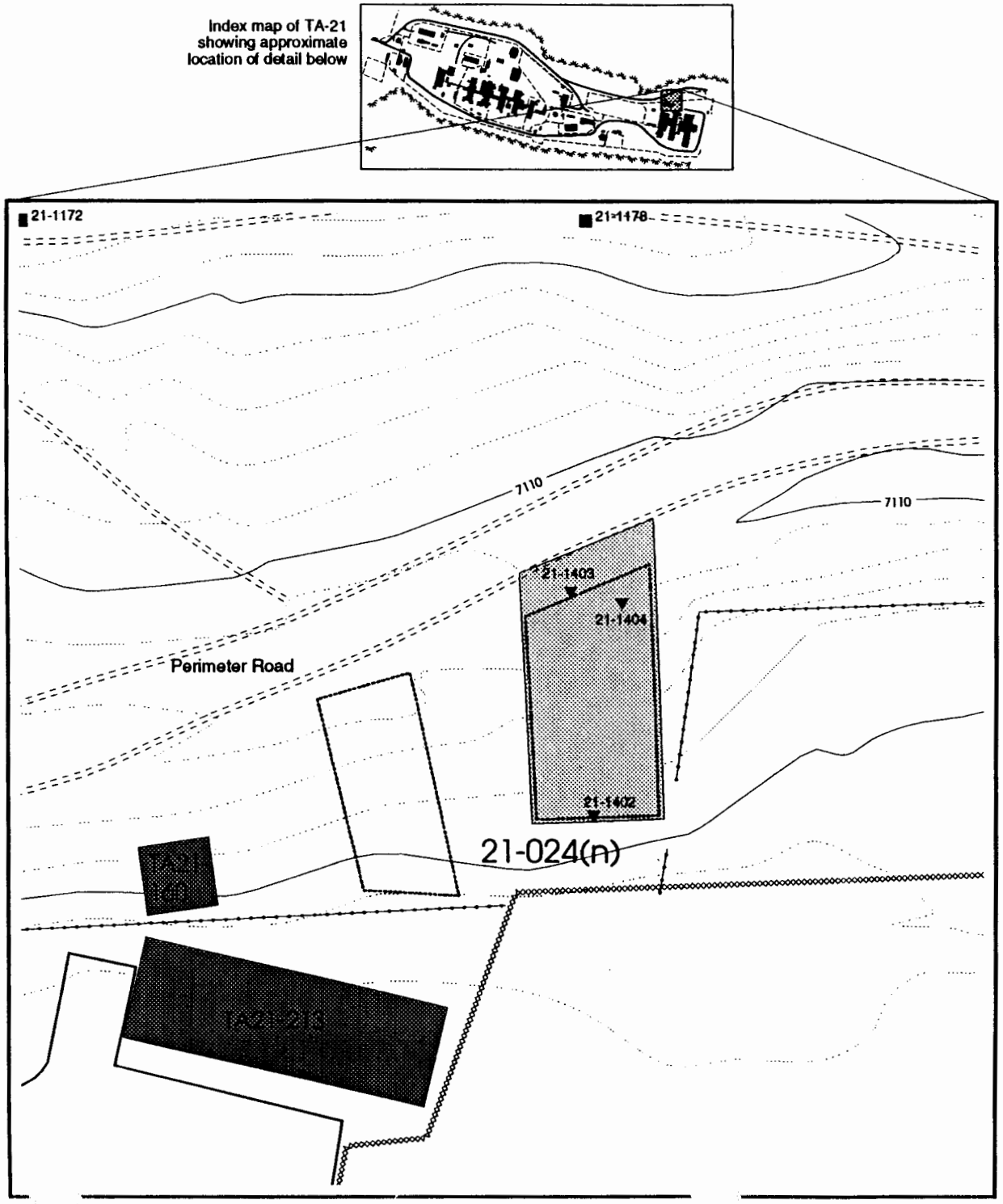


Figure 8.13-1
SWMU 21-024(n)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Grid Sample Locations
- 1992 Outfall Sample Locations

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 16.6 50
FEET

N

Based on FIMAD Map: G101694

Modified by: David Dander 2/23/94

8.14 SWMU 21-024(o)

The outfall portion of SWMU 21-024(o) is addressed in Section 15.4 of the RFI work plan and is located within the process baseline area. The outfall and sampling locations at SWMU 21-024(o) are shown on Figure 8.14-1. Based on the assessment in this section, the nature and extent of contamination have been defined adequately at SWMU 21-024(o) and no contaminant levels above SALs were identified. Therefore, no further action is recommended for this SWMU.

8.14.1 Site Process and Sampling History

SWMU 21-024(o) is a 4-in VCP drain reported to have served Building TA-21-46, an old diesel plant which later was converted to a warehouse. The drain discharges south into Los Alamos Canyon. The area around the probable discharge point is broad and gently sloping but the flow pattern is apparent.

One sample was collected within a few feet of the discharge point during 1988 reconnaissance sampling at the approximate location shown on Figure 8.14-1. The sample was analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics, pesticides/PCBs, and target analyte list metals. Standard analyses were performed for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium.

Tritium was reported slightly above regional background. Low levels of oil and grease also were reported. Analytical results of the 1988 reconnaissance sampling are shown in Table 8.14-1.

8.14.2 RFI Activities and Data Presentation

Characterization of SWMU 21-024(o) was performed in 1992 as prescribed in the RFI work plan, except that americium-241 was added to the analyte list and isotopic thorium analyses were not performed.

The investigation included a radiological field survey and collection of samples from two locations according to sampling Strategy C. One surface (0-6 in.) and two near surface (6-12 in. and 12-18 in.) samples were collected from each location.

Table 8.14-2 lists the semi-volatile organics that were detected, all at levels well below SALs. Sample locations, concentrations, depth are given for each detection.

8.14.3 Data Assessment

No inorganic or radionuclide analytes were detected above the applicable baseline 95.5 percentile.

The field survey indicated background levels of alpha, gamma, and low-energy gamma emitters. Beta measurements were not included as part of the field survey. No volatile organics were detected in the samples collected from SWMU 21-024(o).

The elevated semi-volatile organics are consistent with operation of the diesel plant. Benzo[b]fluoranthene was detected at a concentration approximately 75% of its SAL, while all other semi-volatiles were less than 10% of their SALs. Field notes also indicated asphalt pieces near the

sampling area, consistent with the detected semi-volatile compounds. These concentrations are below SALs and are not likely to be indicative of significant site contamination by organics.

8.14.4 Conclusions and Recommendations

Because the nature and extent of contamination was adequately characterized and all analyte levels were below applicable baseline 95.5 percentiles and SALs, no further action is recommended for this SWMU. Organic analytes were consistent with the components of asphalt and were noted in the sampling vicinity.

8.14.5 QA/QC Sample Summary

Although the programmatic frequency of QA samples met all requirements of the QAPjP, this and several other SWMUs did not have QA/QC samples associated with their relatively limited number of RFI samples. No MS/MSD or laboratory duplicate analyses were performed at SWMU 21-024(o).

Table 8.14-1 1988 outfall reconnaissance sampling – SWMU 21-024(o).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
Metals			
Aluminum	2340	37	ug/g
Barium	81.4	37	ug/g
Calcium	1910	914	ug/g
Iron	2970	18	ug/g
Lead	27.9	4.0	ug/g
Manganese	159	4.0	ug/g
Oil & Grease	2580	51.3	ug/g
Zinc	58	4.0	ug/g
Pesticides (PCBs)			
Aroclor-1260	250	160	ug/g
Radionuclides			
Cesium-137	0.2	0.1	pCi/g
Radium-226	0.8	0.1	pCi/g
Tritium	4.0	2.0	nCi/l
Uranium-234	0.4	0.1	pCi/g
Uranium-238	0.3	0.1	pCi/g

Table 8.14-2 Semi-volatile organics detected in samples collected from SWMU 21-024(o).

Analyte	Location ID	Sample Depth	Concentration
Benzo(b)fluoranthene	21-1344	0-6 in.	580 ug/kg
Benzoic acid	21-1343	0-6 in.	2450 ug/kg
Benzoic acid	21-1343	12-18 in.	560 ug/kg
Benzoic acid	21-1344	12-18 in.	2300 ug/kg
Diethyl phthalate	21-1343	12-18 in.	19,000 ug/kg
Fluoranthene	21-1344	0-6 in.	500 ug/kg
Phenanthrene	21-1344	0-6 in.	410 ug/kg
Phenol	21-1343	0-6 in.	955 ug/kg
Phenol	21-1343	6-12 in.	950 ug/kg
Phenol	21-1344	6-12 in.	1100 ug/kg
Phenol	21-1344	12-18 in.	1100 ug/kg
Pyrene	21-1344	0-6 in.	580 ug/kg

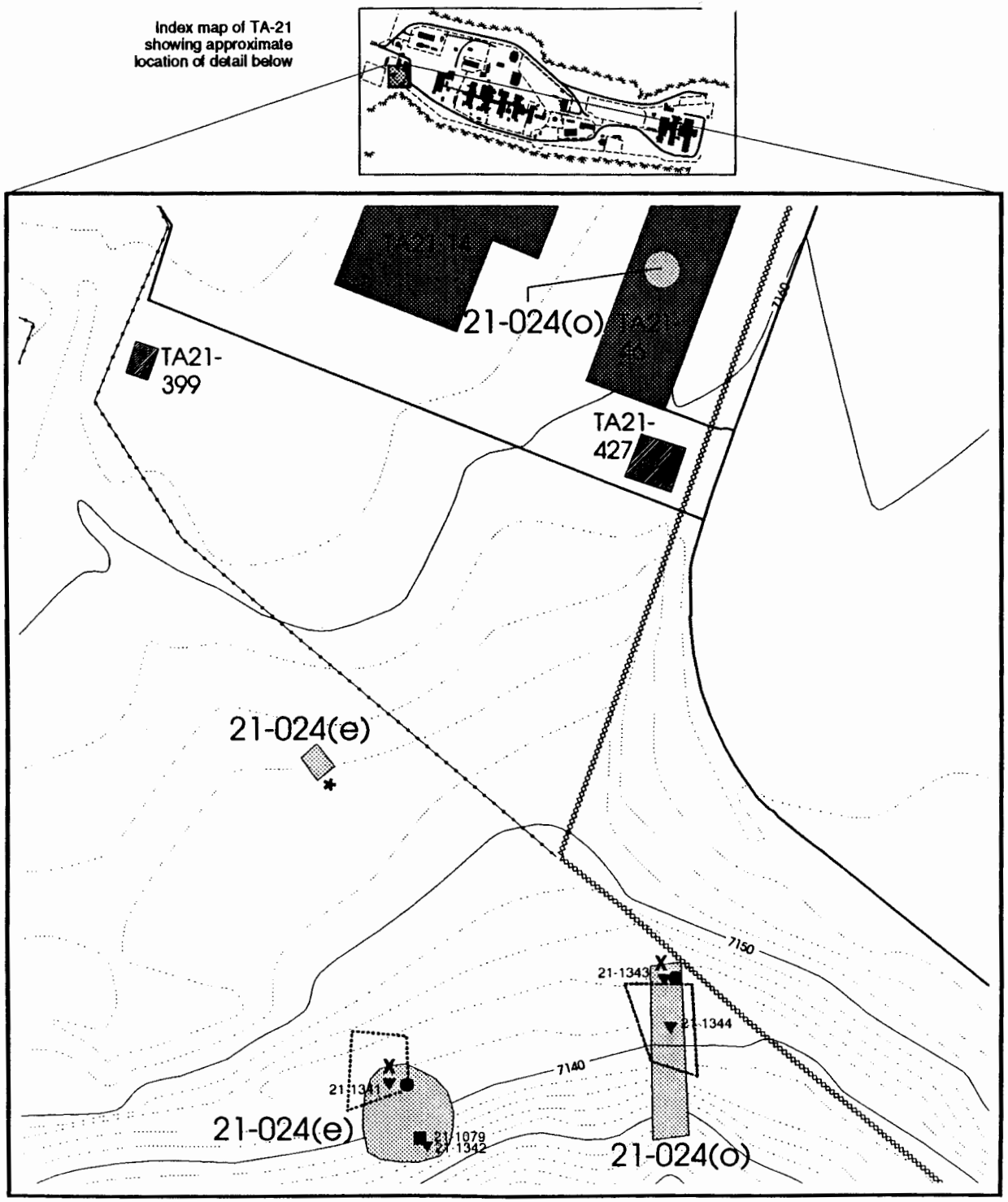


Figure 8.14-1
SWMU 21-024(o)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 16.6 50
FEET

N

Based on FIMAD Map: G101781

Modified by: David Dander 2/22/94

CHAPTER 9

WASTEWATER TREATMENT PLANT

9.0 WASTEWATER TREATMENT PLANT

This chapter addresses outfall SWMU 21-026(d), associated with the wastewater treatment plant. SWMUs 21-026(a-c) also are associated with the wastewater treatment plant and are addressed in Chapter 14 of the RFI work plan.

9.1 SWMU 21-026(d)

The outfall portion of SWMU 21-026(d) is addressed in Section 15.4 of the RFI work plan and is within the non-process baseline area. The outfall and sampling locations at SWMU 21-026(d) are shown on Figure 9.1-1. The data assessment in this chapter indicates the nature and extent of contamination were defined adequately at SWMU 21-026(d) and detected analyte concentrations were below SALs. No further action is recommended for this SWMU.

9.1.1 Site Process and Sampling History

Outfall SWMU 21-026(d) receives liquid wastes from the sewage treatment plant, Building TA-21-272. This outfall currently is permitted as NPDES outfall No. EPASSS055. Discharge flows into a concrete channel on the north edge of DP Mesa and runs down a natural drainage to a tributary of DP canyon. Prior assays of the effluent indicated the presence of gross alpha, beta, gamma, and tritium levels, but specific radionuclides were not identified. Small amounts of any TA-21 contaminants could have entered the septic system, although most would have been removed by the sewage treatment plant before being discharged at the outfall. Tritium is a notable exception to this generalization.

9.1.2 RFI Activities and Data Presentation

Characterization of SWMU 21-026(d) was conducted in 1992 as prescribed in the RFI work plan except that americium-241 was added to the analyte list and isotopic thorium analyses were not performed.

The 1992 investigation consisted of a radiological field survey and the collection of samples from four locations according to sampling Strategy C. A surface (0-6 in.) sample was collected at each location, and two near-surface (6-12 in. and 12-18 in.) samples were collected at location 21-1401.

Table 9.1-1 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

9.1.3 Data Assessment

The inorganic analytes silver, cadmium, chromium, copper, nickel, and zinc were detected above the applicable baseline 95.5 percentile in 0-6 in. surface samples. The maximum chromium concentration was approximately 45% of its SAL, while all other inorganic analytes were less than 10% of their SALs. All inorganic analyte concentrations decreased with depth.

Americium-241, tritium, and plutonium-239 were the only radionuclides detected in concentrations exceeding the applicable baseline 95.5 percentile. Maximum americium-241 and plutonium 239/240 concentrations marginally exceeded the applicable 95.5 percentile baseline and were less than 10% of their SALs. Tritium was detected at less than 1% of its SAL. All radionuclide concentrations decreased with depth.

No elevated inorganic or radionuclide concentrations were observed in near surface (6-12 in.) samples. The greatest silver and tritium concentrations were detected at location 21-1400 (the furthest downgradient sample location). The maximum concentrations of other analytes were detected at other sample locations. The maximum silver and tritium values were detected in the 0-6 in. layer, and are not indicative of concentrations that would require further investigation.

The field survey indicated background levels of alpha emitters, gamma emitters, and low-energy gamma emitters.

Acetone was detected at a concentration of 24 ug/kg in one sample collected from SWMU 21-024(d) but also was detected up to 26 ug/l in two of the blanks associated with this outfall. Numerous semi-volatile organics were detected at concentrations up to 11,900 ug/g at SWMU 21-026(d), as listed in Table 9.1-2. Of these semi-volatiles, benzo[a]anthracene, benzo[b]fluoranthene, and indeno[1,2,3-cd]pyrene were detected in maximum concentrations at least four times their SALs. Chrysene was detected at a maximum concentration approximately 50% of its SAL. The detected semi-volatile organics are characteristic of paving materials, and are not indicative of contamination requiring further investigation.

The highest concentrations of semi-volatile organics were detected in the 6-12 in. sample collected from location 21-1401. No semi-volatile organics were detected in the 12-18 in. sample collected at this location. Only small amounts of semi-volatile organics were detected in the sample collected from location 21-1400, the only sample location downgradient of 21-1401.

9.1.4 Conclusions and Recommendations

Assessment of the RFI data indicates that the nature and extent of contamination has been adequately characterized and that inorganic and radionuclide levels are well below SALs. Although some semi-volatiles were reported above SALs, they are consistent with paving materials in the area. Therefore, it is recommended that no further action is required for SWMU 21-026(d).

9.1.5 QA/QC Sample Summary

The field rinsate blank associated with this SWMU indicated no radionuclide contamination. No detectable semi-volatile organic concentrations were reported in this sample. No detectable concentrations were reported for 23 of the 25 inorganics or for 61 of the 62 volatile organics.

No detectable concentrations were reported for 61 of the 62 volatile organics or for 24 of the 25 inorganics in the field reagent blank associated with this SWMU. No detectable semi-volatile organic concentrations were reported in this blank.

No analytes were reported in the field trip blank associated with this SWMU.

An inorganic MS/MSD analysis was performed on the 0-6 in. sample collected from location 21-1399. Inorganic accuracy criteria, as specified in the QAPjP, were met for 23 of the 25 analytes for both MS and MSD analyses.

An inorganic laboratory duplicate analysis was performed on the 0-6 in. sample collected at location 21-1399. Eleven of the 25 analytes met the precision criteria specified in the QAPjP.

A radionuclide laboratory duplicate analysis was performed on the sample collected at location 21-1399. Only selected members of the radionuclide suite were chosen in the laboratory for duplicate analysis. All three sets of results met the precision criteria specified in section 2.1.4 of this report.

Table 9.1-3 lists inorganic analytes that did not meet the precision criteria as specified in the QAPjP.

An inorganic MS/MSD analysis was performed on the 0-6 in. sample collected from location 21-1399. Table 9.1-4 lists inorganic analytes that did not meet the accuracy criteria specified in the QAPjP.

An MS/MSD analysis was performed on a field trip blank associated with SWMU 21-026(d). Because recoveries were listed in FIMAD in ug/kg and ug/l, organic precision and accuracy criteria, as specified in the QAPjP, could not be evaluated at this time.

Arsenic was reported for a field reagent blank at a concentration of 5.2 ug/l and iron and magnesium were reported for field rinsate blanks at 13.7 ug/l and 61.2 ug/l, respectively.

Table 9.1-1 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-026(d).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*	Near-Surface (6-12 in.)*	Near-Surface (12-18 in.)*
Am-241	21-1399	NP	0.129	22	0.32	NS	NS
	21-1400	NP	0.129	22	1.07	NS	NS
	21-1401	NP	0.129	22	1.39	0.333	B
H-3	21-1399	NP	4.59	15000	8.1	NS	NS
	21-1400	NP	4.59	15000	108.4	NS	NS
	21-1401	NP	4.59	15000	57.4	B	B
Pu-239 /240	21-1401	NP	2.04	24	2.48	B	B
Ag	21-1400	NP	2.33	400	3.5	NS	NS
	21-1401	NP	2.33	400	2.6	B	B
Cd	21-1398	NP	1.17	80	1.3	NS	NS
	21-1399	NP	1.17	80	1.4	NS	NS
Cr	21-1398	NP	20.95	400	182	NS	NS
	21-1400	NP	20.95	400	21.5	NS	NS
	21-1401	NP	20.95	400	21.3	B	B
Cu	21-1400	NP	18.88	3000	30.7	NS	NS
	21-1401	NP	18.88	3000	41.1	B	B
Ni	21-1398	NP	11.85	1600	127	NS	NS
Zn	21-1398	NP	69	24000	99.7	NS	NS
	21-1399	NP	69	24000	97.9	NS	NS
	21-1400	NP	69	24000	128	NS	NS
	21-1401	NP	69	24000	148	B	B

* - Units for radiological analyte values are in pCi/g, except for H3 which are in nCi/l soil moisture.
- Units for inorganic analyte values are in ug/g
NP - Non-Process Area Baseline
B - Below Baseline
NS- No samples were taken at this depth

Table 9.1-2 Semi-volatile organics detected in samples collected from SWMU 21-026(d).

Analyte	Location ID	Sample Depth	Concentration
Anthracene	21-1401	6-12 in.	1,500 ug/kg
Benzo[a]anthracene	21-1400	0-6 in.	410 ug/kg
Benzo[a]anthracene	21-1401	0-6 in.	700 ug/kg
Benzo[a]anthracene	21-1401	0-6 in.	990 ug/kg
Benzo[a]anthracene	21-1401	6-12 in.	9,100 ug/kg
Benzo[a]pyrene	21-401	6-12 in.	5,200 ug/kg
Benzo[b]fluoranthene	21-1398	0-6 in.	1,200 ug/kg
Benzo[b]fluoranthene	21-1401	6-12 in.	7,800 ug/kg
Benzo[g,h,i]perylene	21-1401	6-12 in.	1,500 ug/kg
Benzo[k]fluoranthene	21-1401	6-12 in.	2,600 ug/kg
Bis(2-ethylhexyl)phthalate	21-1398	0-6 in.	640 ug/kg
Bis(2-ethylhexyl)phthalate	21-1400	0-6 in.	640 ug/kg
Bis(2-ethylhexyl)phthalate	21-1401	0-6 in.	870 ug/kg
Chrysene	21-1400	0-6 in.	390 ug/kg
Chrysene	21-1398	0-6 in.	870 ug/kg
Chrysene	21-1401	6-12 in.	1,200 ug/kg
Chrysene	21-1401	6-12 in.	11,900 ug/kg
Fluoranthene	21-1400	0-6 in.	460 ug/kg
Fluoranthene	21-1398	0-6 in.	1,200 ug/kg
Fluoranthene	21-1401	6-12 in.	9,300 ug/kg
Indeno[1,2,3-cd]pyrene	21-1401	6-12 in.	2,200 ug/kg
Phenanthrene	21-1401	6-12 in.	4,200 ug/kg
Pyrene	21-1400	0-6 in.	540 ug/kg
Pyrene	21-1401	0-6 in.	990 ug/kg
Pyrene	21-1398	0-6 in.	1,300 ug/kg
Pyrene	21-1401	6-12 in.	10,900 ug/kg

Table 9.1-3 QA/QC sample summary – inorganics data precision – SWMU 21-026(d).

Analyte	Location ID	Sample Depth	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Aluminum	21-1399	0 to 6"	8500 ug/g	4810 ug/g	55
Barium	21-1399	0 to 6"	49.8 ug/g	29.3 ug/g	52
Calcium	21-1399	0 to 6"	2110 ug/g	1230 ug/g	53
Cadmium	21-1399	0 to 6"	1.4 ug/g	.5 ug/g	95
Chromium	21-1399	0 to 6"	11.2 ug/g	183 ug/g	-177
Copper	21-1399	0 to 6"	14.5 ug/g	9 ug/g	47
Iron	21-1399	0 to 6"	8780 ug/g	5360 ug/g	48
Potassium	21-1399	0 to 6"	1280 ug/g	720 ug/g	56
Lithium	21-1399	0 to 6"	8.9 ug/g	6 ug/g	39
Magnesium	21-1399	0 to 6"	1150 ug/g	650 ug/g	56
Sodium	21-1399	0 to 6"	195 ug/g	126 ug/g	43
Nickel	21-1399	0 to 6"	4.4 ug/g	83.6 ug/g	-180
Strontium	21-1399	0 to 6"	17.3 ug/g	8.5 ug/g	68
Vanadium	21-1399	0 to 6"	14.1 ug/g	7.9 ug/g	56

Table 9.1-4 QA/QC sample summary – Inorganic data accuracy - SWMU 21-026(d).

Analyte	MS Recovery	MSD Recovery
Chromium	130%	98.7% (within criteria)
Manganese	77.1% (within criteria)	46.9%
Antimony	55.7%	41.7%

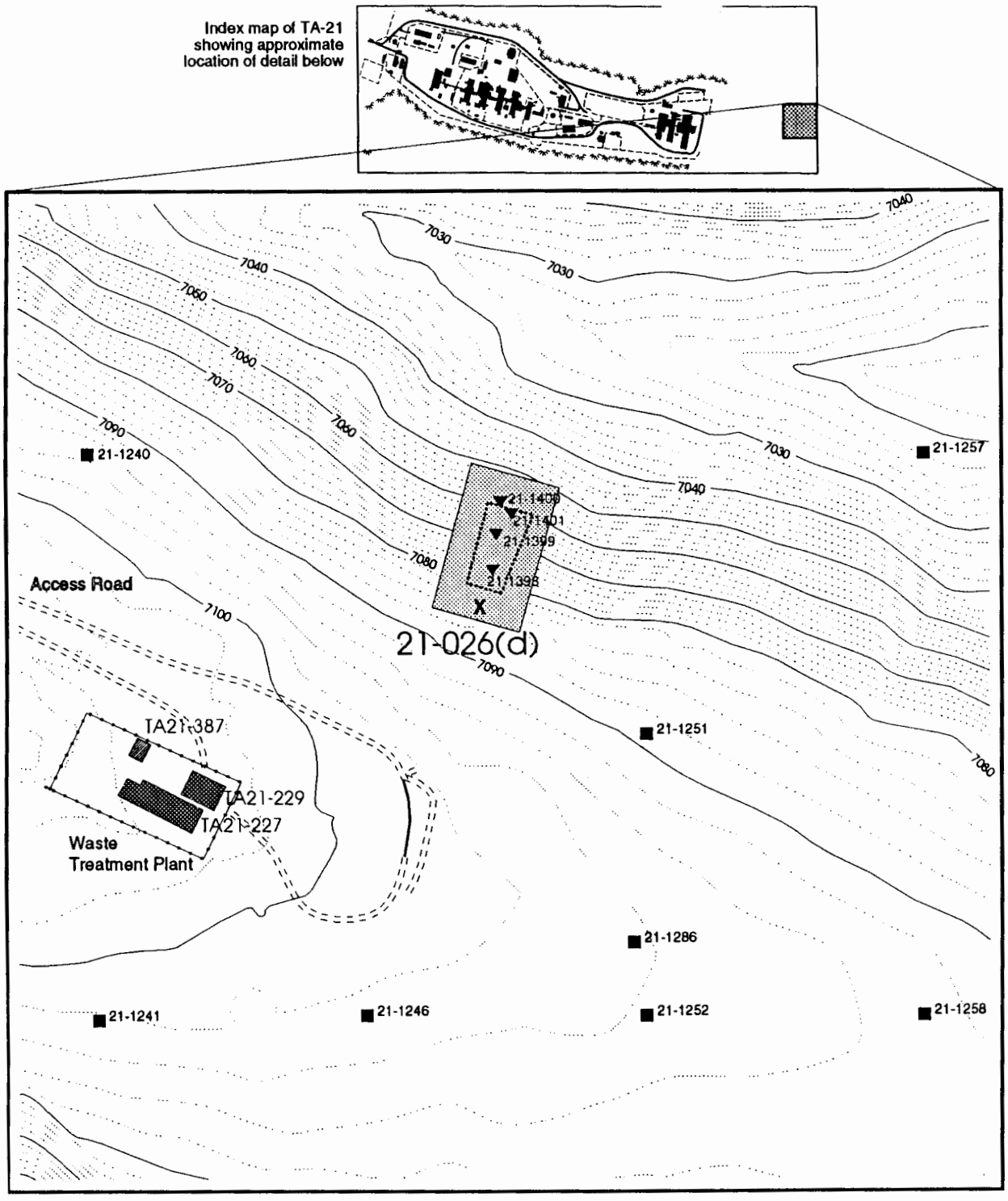


Figure 9.1-1
SWMU 21-026(d)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101693

Modified by: David Dander 2/23/94

CHAPTER 10

SURFACE DISCHARGE

10.0 SURFACE DISCHARGE

10.1 SWMU 21-027(a)

Outfall SWMU 21-027(a) is addressed in Section 15.5 of the RFI work plan and is located within the process baseline area. The outfall and sampling locations at SWMU 21-027(a) are shown on Figure 10.1-1. Assessment of the available RFI data for SWMU 21-027(a) suggests that further radiological surveys and field sampling may be necessary. However, a decision on the disposition of this SWMU will be deferred until 1993 borehole data are received and assessed.

10.1.1 Site Process and Sampling History

SWMU 21-027(a) receives liquid wastes from Building TA-21-3. The drain line extends from the southwest corner of Building TA-21-3 to the southwest corner of the cooling tower TA-21-143, where the line discharges into a ponding area. This ponding area also received NPDES-permitted discharges of treated cooling water from the cooling tower. Discharges collected in the ponding area enter a 24 in. corrugated metal pipe that releases at the mesa edge.

Two samples were collected from SWMU 21-027(a) during 1988 reconnaissance sampling. The samples were analyzed according to CLP SOW protocol for target compound list volatile organics, semi-volatile organics and pesticides/PCBs, and target analyte list metals. Standard analyses were performed for americium-241, cesium-137, plutonium-238, plutonium-239/240, radium-226, strontium-90, thorium-232, uranium-234, uranium-235, uranium-238, and tritium. Three samples were also collected from this SWMU as part of a DOE Headquarters Environmental Survey.

Cadmium, chromium, copper, lead, zinc, and mercury were detected well above regional background but generally below SALs. Americium-241, plutonium-238, plutonium-239/240, uranium-234, uranium-235, uranium-238, thorium-232, strontium-90, and cesium-137 were detected in some samples above regional background. Toluene and trichloroethane also were reported at very low levels for these samples. Polynuclear aromatics were identified in samples collected at this SWMU, but the drainage pathway leading to the outfall is lined with asphalt. Analytical results of the 1988 reconnaissance sampling are shown in Table 10.1-1. Analytical results of the DOE Environmental Survey samples are shown in Table 10.1-2. The approximate location of the 1988 reconnaissance samples and the DOE Headquarters Environmental Survey samples are shown in Figure 10.1-1.

10.1.2 RFI Activities and Data Presentation

Characterization at SWMU 21-027(a) was performed in 1992 as prescribed in the RFI work plan, with the exception of the sample locations on the bench below the mesa edge and the analyses that were performed. Bedrock at the proposed sampling locations required sampling locations to be move slightly to allow the required sample volumes to be retrieved. Americium-241 was added to the analyte list and the shallow borehole samples were analyzed for isotopic uranium rather than total uranium.

The investigation included a radiological field survey and collection of samples from five locations on the mesa top and nine locations on the bench below the mesa edge. One surface (0-6 in.) sample was collected at each location.

Table 10.1-3 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

Two 20-ft boreholes were completed in the ponding area to the south of the cooling tower during 1993. One sample was collected at each five-ft interval in the boreholes. Analytical results were not available for the inclusion in Phase Report 1C, but will be assessed in a phase report addendum. In addition to the locations specifically selected for characterization of 21-027(a), one grid location (21-1289) sampled in the 1992 surface soil investigation was approximately 30 ft east of the outfall channel on the bench. The analytical results for 12-1289 were included in the data assessment for this SWMU.

10.1.3 Data Assessment

The inorganic analytes arsenic, cadmium, chromium, copper nickel, lead, and zinc were detected above their applicable baseline 95.5 percentiles. Chromium exceeded the chromium (VI) SAL at several sampling locations, while other inorganic analytes (except arsenic) were less than 10% of their SALs.

Radionuclide analytes americium-241, tritium, plutonium-238, plutonium-239/240, and uranium were detected above applicable baseline 95.5 percentiles. With the exception of tritium, each radionuclide concentration exceeded its SAL at two or more locations. Tritium was found in concentrations substantially above the process area baseline, on the bench below the mesa edge. The tritium SAL was not exceeded in any of these samples. Field radiological surveys were not prescribed in the RFI work plan and were not carried out.

No near-surface data is currently available to determine vertical migration of contaminants. Neighboring grid location 21-1289 sample data show no analytes above the applicable 95.5 percentile baseline. This would indicate that lateral contamination from this outfall has not occurred.

Previous process knowledge and sample results indicate that enriched uranium (higher uranium-234 and uranium-235 concentrations) might be present in the soil at this SWMU. Because the 1992 RFI samples were analyzed for total uranium, a direct comparison of RFI data to previous isotopic data is not possible.

10.1.4 Conclusions and Recommendations

A recommendation on the disposition of SWMU 21-027(a) will be deferred until outstanding borehole analytical data are received and assessed. However, a follow-on radiological survey and additional near-surface and shallow borehole samples may be needed. Isotopic uranium analyses will be included in the analytical suites for these samples. In addition, isotopic uranium analyses on samples archived from the 1992 investigation have been requested. The results of these analyses will be summarized in a phase report addendum.

10.1.5 QA/QC Sample Summary

The field rinsate blank associated with this SWMU indicated no radionuclide contamination. No detectable inorganics or semi-volatile organics were detected in this blank. Analytical results for this sample were given for only three volatile organics. No detectable concentrations were reported.

No detectable concentrations were reported for 23 of the 25 inorganics in the field reagent blank associated with this SWMU. No detectable volatile or semi-volatile organic concentrations were reported in this blank.

No detectable concentrations were reported in the field trip blank associated with this SWMU.

A radionuclide laboratory duplicate was performed on the sample collected at location 21-1367. Only selected members of the radionuclide suite were chosen in the laboratory for duplicate analysis. Five of the seven sets of results met the precision criteria specified in section 2.1.4 of this report.

A volatile organic MS/MSD analysis was performed on the 0-6 in. sample collected from location 21-1370. Because recoveries were listed in FIMAD in ug/kg, organic precision and accuracy criteria, as specified in the QAPjP, could not be evaluated at this time.

Because inorganic laboratory duplicates or MS/MSD analyses were not performed, inorganic precision and accuracy criteria, as specified in the QAPjP, could not be evaluated.

Table 10.1-4 lists the radionuclides that did not meet the precision criteria specified in the QAPjP.

Table 10.1-5 lists inorganics and volatile organics that were detected in blanks collected at SWMU 21-027(a).

Table 10.1-1 1988 outfall reconnaissance sampling – SWMU 21-027(a).

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
SAMPLE #1			
Volatiles			
Methylene chloride	75	65	ug/g
Semi-Volatiles			
Fluoranthene	3000	2200	ug/g
Phenanthrene	2400	2200	ug/g
Pyrene	2300	2200	ug/g
Metals			
Aluminum	1490	39.1	ug/g
Arsenic	3.3	2.0	ug/g
Cadmium	1.1	0.98	ug/g
Calcium	1790	978	ug/g
Chromium	48.9	2.0	ug/g
Copper	35.4	4.9	ug/g
Iron	10200	19.6	ug/g
Lead	46.6	19.6	ug/g
Manganese	87.7	2.9	ug/g
Mercury	0.29	0.12	ug/g
Nickel	12.8	7.8	ug/g
Oil & Grease	4630	58.2	ug/g
Vanadium	13.5	9.8	ug/g
Zinc	226	3.9	ug/g
Radionuclides			
Americium	4.6	0.6	ug/g
Cesium-137	0.5	0.1	pCi/g
Plutonium-238	1.9	0.2	pCi/g
Plutonium-239/240	28	1.0	pCi/g
Radium-226	0.7	0.1	pCi/g
Strontium-90	0.4	0.2	pCi/g
Thorium-232	0.9	0.1	pCi/g
Tritium	1,600	100	nCi/l
Uranium-234	290	20	pCi/g
Uranium-235	10	1	pCi/g
Uranium-238	1.9	0.4	pCi/g

ANALYTE	CONCENTRATION	DETECTION LIMIT	UNITS
SAMPLE #2			
Radionuclides			
Americium	7.6	0.5	pCi/g
Cesium-137	0.3	0.1	pCi/g
Plutonium-238	8.5	0.5	pCi/g
Plutonium-239/240	6.8	2.0	pCi/g
Radium-226	1.2	0.1	pCi/g
Thorium-232	0.4	0.2	pCi/g
Tritium	68	3.0	nCi/l
Uranium-234	4.0	0.4	pCi/g
Uranium-235	0.2	0.1	pCi/g
Uranium-238	0.7	0.2	pCi/g
Metals			
Aluminum	1290	31.7	ug/g

Note: Sample #1 was from CEARP Outfall 3d; Sample #2 from 3ae.

Table 10.1-2 Environmental Problem 19 analytical data.

ANALYTE	LA30201	LA30202	LA30303
Inorganics (ug/g)			
Antimony	--	--	--
Arsenic	--	--	--
Barium	195	103	131
Beryllium	--	0.53B	0.39B
Cadmium	--	--	4.9
Chromium	16.5	38.1	90.6
Copper	50.1	110	103
Lead	63.5	52.4	77.2
Mercury	NR	NR	NR
Nickel	12.4	7.3B	10.6
Selenium	--	--	--
Silver	--	--	--
Thallium	--	--	--
Zinc	296	286	379
Radionuclides (pCi/g)[a]			
Alpha emitters			
Thorium-232[b]	<4.4	<9.22	<8.28
Uranium-234	--	--	267
Uranium-235	0.469	0.29	14.8
Uranium-238[b]	<6.51	<10	<7.79
Total uranium	2.0	5.0	6.0
Plutonium-238	4.0	86	14.4
Plutonium-239/240	22.3	216	84.5
Americium-241	4.2	27.4	9.3
Beta emitters			
Strontium-90	<0.55	<0.76	<0.84
Gamma emitters			
Potassium-40	12.3	17.8	17.7
Cesium-137	0.21	0.642	1.37
Beryllium-7	0.34	--	0.6

ANALYTE	LA30201	LA30202	LA30303
Tentatively Identified Compounds (ug/kg)			
Butyl Phenol	41J	--	--
Terpene	56J	1600J	--
Terpene	110J	110J	--
Terpene	--	2000J	--
Target Compound (ug/kg)			
Acetone	100B	260B	--
1,1,1-Trichloroethane	--	--	--
Trichloroethene	--	--	73
Toluene	--	--	44
Ethylbenzene	--	--	20J
Xylene (total)	--	--	18J
alpha-BHC	--	--	--
Endosulfan I	--	--	--
Endosulfan II	--	--	--
4,4'DDD	--	--	--
4,4'-DDT	--	--	--
Gamma-chlordane	--	--	--
Aroclor-1221	--	--	--
Aroclor-1248	--	--	--
Aroclor-1254	2600J	3200J	7700J

[a] - Total uranium is reported in ug/g.
[b] - Total unbroken chain activity in equilibrium.
B - Detected in associated blank.
J - Estimated value.
Note - Thorium-230, total uranium, plutonium-238, plutonium-239/240, and strontium-90 are reported on a dry weight basis.

Table 10.1-3 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-027(a).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*
Am-241	21-1361	P	0.526	22	14.5
	21-1362	P	0.526	22	34
	21-1363	P	0.526	22	0.784
	21-1364	P	0.526	22	8.77
	21-1365	P	0.526	22	11.2
	21-1366	P	0.526	22	12.11
	21-1367	P	0.526	22	9.96
	21-1369	P	0.526	22	15.82
	21-1370	P	0.526	22	37.1
	21-1371	P	0.526	22	13.22
	21-1372	P	0.526	22	9.79
	21-1373	P	0.526	22	8.15
	21-1374	P	0.526	22	10.59
H-3	21-1365	P	7.85	15000	9.5
	21-1366	P	7.85	15000	127.4
	21-1367	P	7.85	15000	284.7
	21-1368	P	7.85	15000	45.9
	21-1369	P	7.85	15000	304.9
	21-1370	P	7.85	15000	25.3
	21-1371	P	7.85	15000	56.8
	21-1372	P	7.85	15000	263.7
	21-1373	P	7.85	15000	2300
	21-1374	P	7.85	15000	69
Pu-238	21-1362	P	6.21	27	12.1
	21-1364	P	6.21	27	7.89
	21-1366	P	6.21	27	10.7
	21-1367	P	6.21	27	8.79
	21-1368	P	6.21	27	14.8
	21-1369	P	6.21	27	14.16
	21-1370	P	6.21	27	52
	21-1371	P	6.21	27	25.23
	21-1372	P	6.21	27	6.47
	21-1373	P	6.21	27	21.9
	21-1374	P	6.21	27	20.34
Pu-239/240	21-1361	P	9.41	24	30.4
	21-1362	P	9.41	24	193
	21-1363	P	9.41	24	16.8

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*
Pu-239/240	21-1364	P	9.41	24	43.6
	21-1365	P	9.41	24	50
	21-1366	P	9.41	24	73.29
	21-1367	P	9.41	24	67.26
	21-1368	P	9.41	24	67.08
	21-1369	P	9.41	24	75.03
	21-1370	P	9.41	24	165
	21-1371	P	9.41	24	89.6
	21-1372	P	9.41	24	59.63
	21-1373	P	9.41	24	96.23
	21-1374	P	9.41	24	64.81
U Total	21-1361	P	7.51	66.3	28.8
	21-1362	P	7.51	66.3	8.6
	21-1363	P	7.51	66.3	7.6
	21-1364	P	7.51	66.3	158.6
	21-1365	P	7.51	66.3	137
	21-1366	P	7.51	66.3	99.3
	21-1367	P	7.51	66.3	111.4
	21-1368	P	7.51	66.3	231.5
	21-1369	P	7.51	66.3	108
	21-1370	P	7.51	66.3	110.2
	21-1371	P	7.51	66.3	48.5
	21-1372	P	7.51	66.3	42
	21-1373	P	7.51	66.3	41
	21-1374	P	7.51	66.3	32.2
As	21-1364	NP	3.67	0.4	5
	21-1365	NP	3.67	0.4	4.7
	21-1366	NP	3.67	0.4	4.4
	21-1367	NP	3.67	0.4	4.2
	21-1368	NP	3.67	0.4	3.7
	21-1369	NP	3.67	0.4	4.9
	21-1370	NP	3.67	0.4	6.9
Cd	21-1362	P	2.14	80	2.2
	21-1364	P	2.14	80	4.2
	21-1366	P	2.14	80	3.9
	21-1367	P	2.14	80	3.2
	21-1368	P	2.14	80	3.3
	21-1369	P	2.14	80	3.6
	21-1371	P	2.14	80	4
	21-1373	P	2.14	80	2.3

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*
Cr	21-1374	P	2.14	80	3
	21-1362	NP	20.95	400	36.6
	21-1364	NP	20.95	400	436
	21-1365	NP	20.95	400	463.1
	21-1366	NP	20.95	400	410
	21-1367	NP	20.95	400	335
	21-1368	NP	20.95	400	461
	21-1369	NP	20.95	400	419
	21-1370	NP	20.95	400	1000.4
	21-1371	NP	20.95	400	266
	21-1372	NP	20.95	400	174
	21-1373	NP	20.95	400	131
	21-1374	NP	20.95	400	178
Cu	21-1362	P	50.8	3000	79.2
	21-1364	P	50.8	3000	198
	21-1366	P	50.8	3000	179
	21-1367	P	50.8	3000	98.3
	21-1368	P	50.8	3000	86.7
	21-1369	P	50.8	3000	136
	21-1372	P	50.8	3000	86.5
Ni	21-1364	P	13.62	1600	42.3
	21-1365	P	13.62	1600	34.7
	21-1370	P	13.62	1600	21.8
Pb	21-1364	P	56.5	500	73
	21-1366	P	56.5	500	57.8
	21-1369	P	56.5	500	62.3
Zn	21-1361	P	210.4	24000	442
	21-1362	P	210.4	24000	316
	21-1364	P	210.4	24000	512
	21-1365	P	210.4	24000	826.3
	21-1366	P	210.4	24000	497
	21-1367	P	210.4	24000	469
	21-1368	P	210.4	24000	345
	21-1369	P	210.4	24000	463
	21-1370	P	210.4	24000	240.9

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL*	Surface (0-6 in.)*
Zn	21-1371	P	210.4	24000	232
	21-1372	P	210.4	24000	216

* - Units for radiological analyte values are in pCi/g, except for H3 which are in nCi/l soil moisture and U which are in ppm.
- Units for inorganic analyte values are in ug/g
P - Process Area Baseline
NP - Non-Process Area Baseline

Table 10.1-4 QA/QC Sample Summary - Radionuclide data precision - SWMU 21-027(a).

Analyte	Location ID	Sample Depth	Sample Concentration	Laboratory Duplicate Location	Relative Percent Difference
Americium-241	21-1367	0 to 6"	9.96 pCi/g	16.7 pCi/g	60
Plutonium-239 /240	21-1367	0 to 6"	67.3 pCi/g	112 pCi/g	60

Table 10.1-5 QA/QC sample summary – blanks – SWMU 21-027(a).

Analyte	Location ID	Sample Concentration	Blank Type
Acetone	21-1361	41 ug/l	FB
Cobalt	21-1374	9.5 ug/l	FR
Sodium	21-1374	42.8 ug/l	FR

FR-Field reagent blank; FB-Field trip blank.

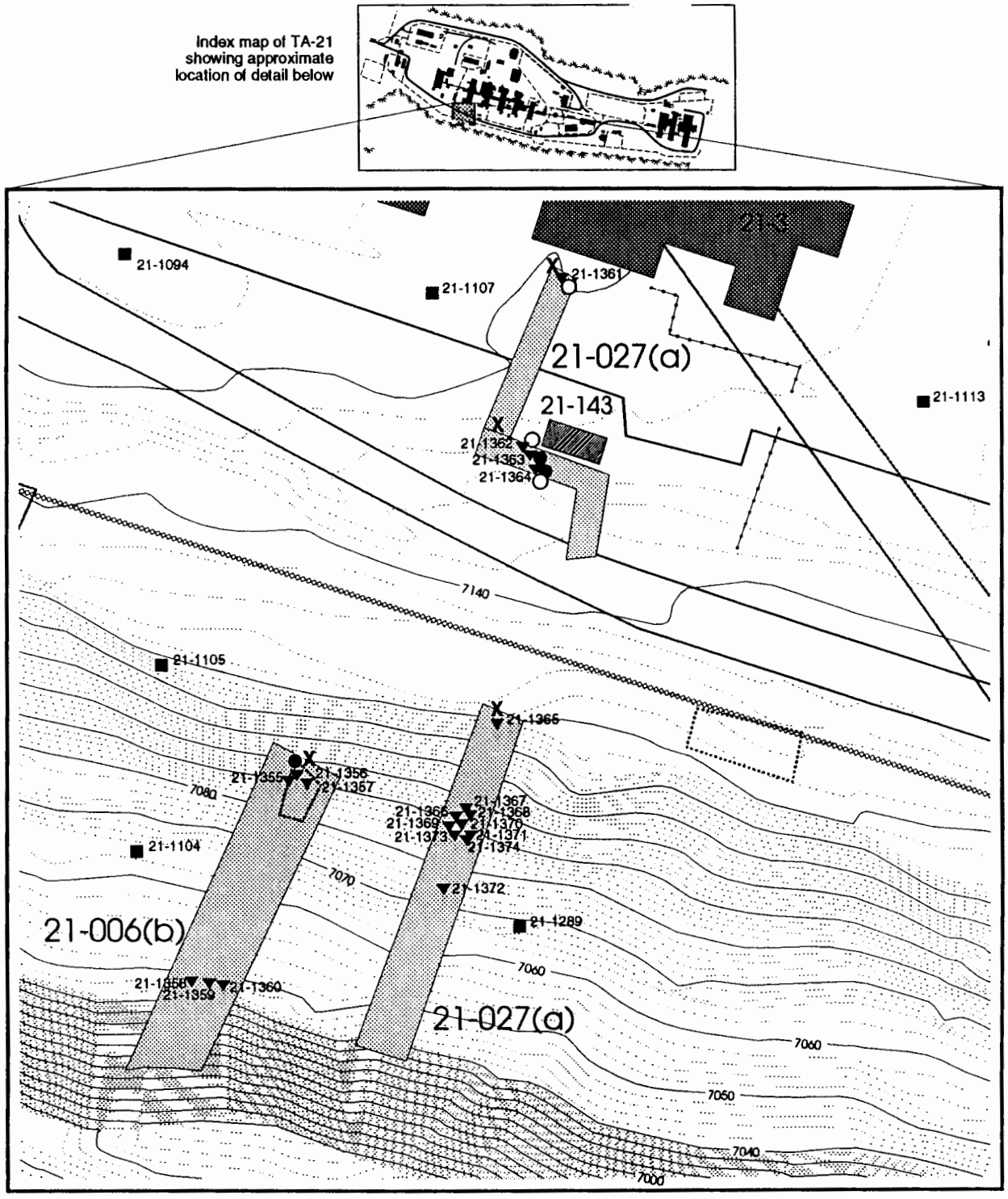


Figure 10.1-1
SWMU 21-027(a)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Permanent Structure
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- Environmental Survey Problem #19 Sample Locations
- Discharge Point

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101780

Modified by: David Dander 2/22/94

10.2 SWMU 21-027(c)

Outfall SWMU 21-027(c) is addressed in Section 15.2 of the RFI work plan and is located within the process baseline area. Details of the outfall and sampling locations at SWMU 21-027(c) are shown on Figure 10.2-1. Based on the RFI data assessment of SWMU 21-027(c) in this section, a baseline risk assessment may be necessary. A decision on the disposition of this SWMU will be deferred until neighboring SWMUs are assessed.

10.2.1 Site Process and Sampling History

SWMU 21-027(c) was reported to be a 4-in VCP line (abandoned in place) that exited former Building TA-21-6, which included a cafeteria and machine shop. The line discharged to the south on DP Mesa. Based on the known use of Building TA-21-6, only organic solvents and oils are likely to be present in this outfall. The outfall discharges 50 ft inside the perimeter fence in a broad, gently sloping area with no readily identified channel. No prior sampling data are available for this SWMU.

10.2.2 RFI Activities and Data Presentation

Sampling at SWMU 21-027(c) was executed as prescribed in the RFI work plan except that americium-241 and isotopic thorium analyses were added to the analyte list. The investigation included a radiological field survey and the collection of six surface (0-6 in.) soil samples according to sampling Strategy C.

Table 10.2-1 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

10.2.3 Data Assessment

Arsenic, and calcium were detected above their applicable area baseline 95.5 percentile. A maximum lead concentration of 103 ug/g was noted at location 21-1350, while all other lead concentrations were below the applicable area baseline.

Despite the available process knowledge which suggested no radiological contamination would be associated with this outfall, americium-241 and plutonium-239/240 were detected above the 95.5 percentile of process area baseline. It appears that the radionuclide concentrations are attributable to the outfall, since 21-1100, a neighboring grid sample, does not show elevated concentrations. The maximum plutonium-239/240 concentrations exceeded the SAL for two samples.

The radiological field survey indicated background levels of alpha, gamma, and low-energy gamma emitters.

Acetone, a common laboratory contaminant, was the only volatile organic reported for the soil samples. Semi-volatile organics were reported at low levels for a field duplicate sample collected at SWMU 21-027(c). Because semi-volatile organics were not detected in the associated sample, the detections are assumed to be due laboratory or field contamination.

10.2.4 Conclusions and Recommendations

Because some SALs were exceeded at this SWMU, a recommendation on the disposition of this SWMU will be deferred until characterization of other SWMUs in this area are completed. It is anticipated that,

at that time, the disposition of the SWMU will be determined by the outcome of a baseline risk assessment.

10.2.5 QA/QC Sample Summary

The field rinsate blank associated with this SWMU indicated no radionuclide contamination. No detectable inorganic, volatile or semi-volatile organic concentrations were reported in this sample.

No detectable concentrations were reported for 61 of the 62 volatile organics in the field reagent blank associated with this SWMU. No detectable inorganic or semi-volatile organic concentrations were reported in this blank.

No detectable concentrations were reported in the two field trip blanks associated with this SWMU.

An inorganic laboratory duplicate analysis was performed on the 0-6 in. sample collected at location 21-1353. Thirteen of the 25 analytes met the precision criteria specified in the QAPjP.

Radionuclide laboratory duplicate analyses were performed on the samples collected at locations 21-1349 and 21-1351. Only selected members of the radionuclide suite were chosen in the laboratory for duplicate analysis. All five sets of results met the precision criteria specified in section 2.1.4 of this report.

Table 10.2-2 lists inorganic analytes that did not meet the precision criteria specified in the QAPjP. All radionuclides met the precision criteria specified in the QAPjP.

Inorganic MS/MSD analyses were performed on a field rinsate blank associated with this SWMU and on the 0-6 in. sample collected from locations 21-1353. Table 10.2-2 lists inorganics that did not meet the accuracy criteria specified in the QAPjP.

Because no organic MS/MSD analyses were performed, organic accuracy and precision criteria, as specified in the QAPjP, could not be evaluated.

Acetone was reported for a field reagent blank collected at SWMU 21-027(c) at a concentration of 21 ug/l.

Table 10.2-1 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-027(c).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL	Surface (0-6 in.)*
Am-241	21-1349	P	0.526	22	0.588
	21-1350	P	0.526	22	1.75
	21-1351	P	0.526	22	3.02
Pu-239/ 240	21-1349	P	9.41	24	10.5
	21-1350	P	9.41	24	30.2
	21-1351	P	9.41	24	84.5
As	21-1350	NP	3.67	0.4	4.7
	21-1351	NP	3.67	0.4	5.6
Ca	21-1350	NP	13880	NA	14800
Pb	21-1350	P	56.5	500	103

* - Units for radiological analyte values are in pCi/g
- Units for inorganic analyte values are in ug/g
P - Process Area Baseline
NP - Non-Process Area Baseline

Table 10.2-2 QA/QC sample summary – data precision - SWMU 21-027(c).

Analyte	Location	Depth	Sample Concentration	Laboratory Duplicate Concentration	Relative Percent Difference
Aluminum	21-1353	0-6 in.	3370 ug/g	6500 ug/g	-63
Arsenic	21-1353	0-6 in.	3.3 ug/g	1.3 ug/g	87
Barium	21-1353	0-6 in.	32.4 ug/g	55.5 ug/g	-53
Chromium	21-1353	0-6 in.	6.6 ug/g	9.4 ug/g	-35
Copper	21-1353	0-6 in.	5.4 ug/g	7.2 ug/g	-29
Potassium	21-1353	0-6 in.	437 ug/g	1990 ug/g	-128
Lithium	21-1353	0-6 in.	3.2 ug/g	60.4 ug/g	-180
Magnesium	21-1353	0-6 in.	623 ug/g	2910 ug/g	-129
Sodium	21-1353	0-6 in.	79 ug/g	194 ug/g	-84
Strontium	21-1353	0-6 in.	6.7 ug/g	13.2 ug/g	-65
Vanadium	21-1353	0-6 in.	6.4 ug/g	10.6 ug/g	-49
Zinc	21-1353	0-6 in.	82.6 ug/g	178 ug/g	-73

Table 10.2-3 QA/QC sample summary – inorganic data accuracy - SWMU 21-027(c).

Analyte	Location	Depth	MS Recovery	MSD Recovery
Aluminum	21-1351	NA	142%	141%
Arsenic	21-1353	0-6 in.	54.3%	42.8%
Cadmium	21-1351	NA	80%*	79%
Manganese	21-1353	0-6 in.	57.4%	279%
Lead	21-1353	0-6 in.	363%	0%
Antimony	21-1353	0-6 in.	70.2%	72.6%
Zinc	21-1353	0-6 in.	73.1%	110%

* – Recovery met QAPjP criteria

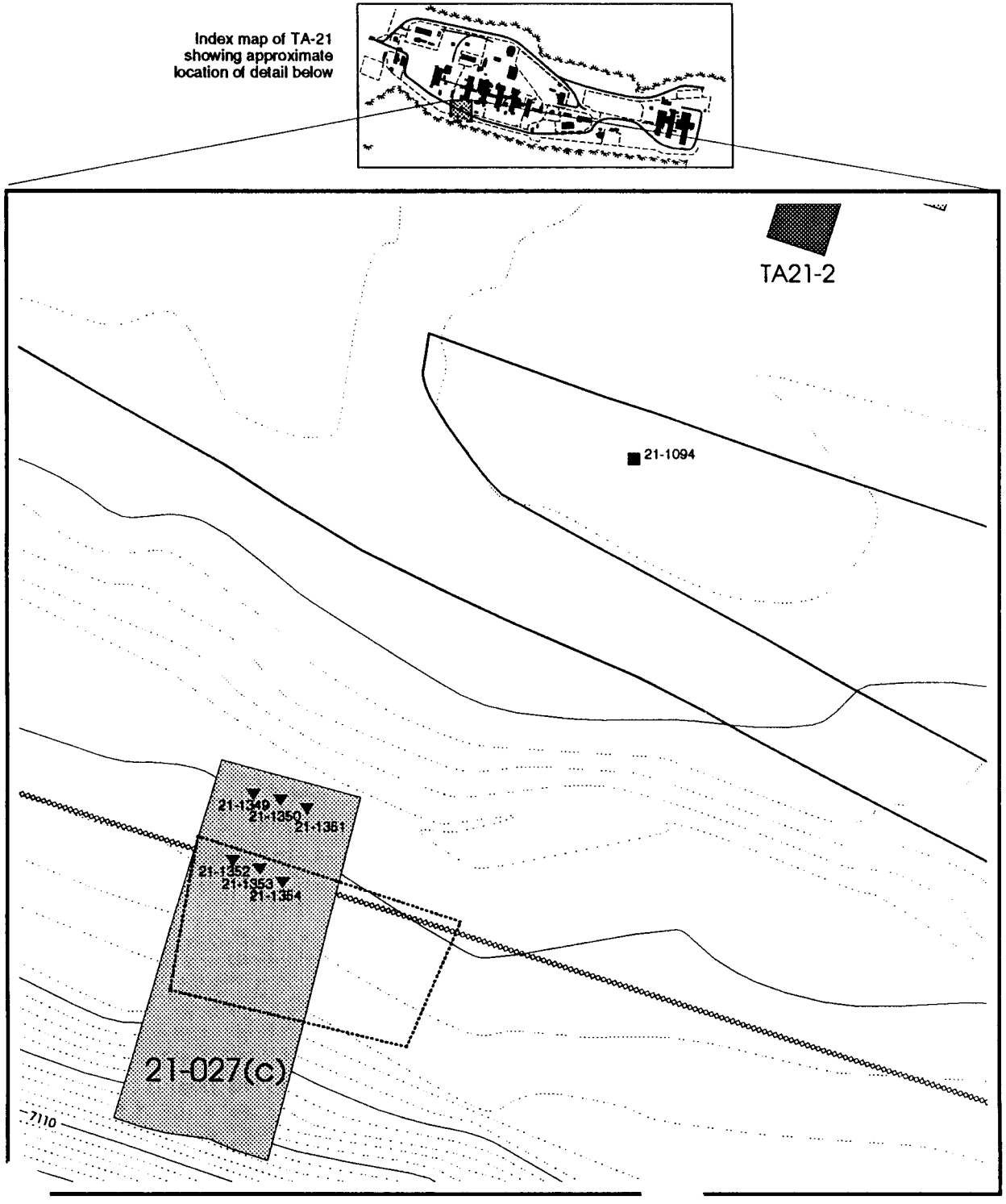


Figure 10.2-2
SWMU 21-027(c)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Solid waste Management Unit
- Grid Sample Locations
- 1992 Outfall Sample Locations

Exact Discharge Point Unknown

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 33.3 100
FEET

N

Based on FIMAD Map: G101678

Modified by: David Dander 2/24/

10.3 SWMU 21-027(d)

Outfall SWMU 21-027(d) is addressed in Section 15.2 of the RFI work plan and is located in the non-process baseline area. Details of the outfall and sampling locations at SWMU 21-027(d) are shown on Figure 10.3-1. Based on the RFI data assessment in this section, no further action is recommended for SWMU 21-027(d).

10.3.1 Site Process and Sampling History

SWMU 21-027(d) originated in the catch basin around a fuel tank and discharges over the mesa edge into Los Alamos Canyon. The drain line was removed in March 1965. No quantitative data were available on this outfall prior to the RFI investigation. The only expected contaminants are organics from petroleum products and possibly some contaminants from adjacent SWMU 21-023(c).

10.3.2 RFI Activities and Data Presentation

Characterization of SWMU 21-027(d) was performed in 1992 as prescribed by the RFI work plan except for the sampling depth at location 21-1333 and the analyses that were performed. The RFI work plan called for a 0-6 in. sample to be collected at location 21-1333, but refusal was encountered at 1 in. due to bedrock. Americium-241 and isotopic thorium were added to the analyte list.

The 1992 sampling activities performed at SWMU 21-027(d) consisted of a radiological field survey and the collection of surface {0-6 in. (5) and 0-1 in. (1)} soil samples from six locations according to sampling Strategy B.

Table 10.3-1 presents a summary of analyte concentrations detected above the applicable baseline 95.5 percentile.

10.3.3 Data Assessment

Cadmium was the only inorganic analyte reported above the non-process area baseline 95.5 percentile. All inorganic concentrations were less than 2% of the SALs. Elevated levels were noted only in upgradient sample locations 21-1329, 21-1330, and 21-1331.

Americium-241 and plutonium-239/240 were reported above the non-process area baseline 95.5 percentile at location 21-1331. The maximum plutonium concentration was approximately 25% of its SAL. As with the inorganics, radionuclides are slightly elevated in upgradient samples.

The radiological field survey indicated slightly elevated levels of low-energy gamma emitters, but sample analyses did not confirm contamination of this nature. The survey results may be due to contamination at SWMU 21-023(c), which is located within 50 ft of SWMU 21-027(d). All other instrument readings taken at this outfall were at or near background levels.

No organics were detected in the samples collected from SWMU 21-027(d).

10.3.4 Conclusions and Recommendations

The data assessment in this section indicate that the nature and extent of contamination at SWMU 21-027(d) have been adequately characterized and that levels are less than SALs. Therefore, no further action is recommended.

10.3.5 QA/QC Sample Summary

Due to the limited number of samples collected at this outfall and the frequency at which QA/QC samples are collected, none of the field trip, field reagent, or field rinsate blanks collected in 1992 were associated with SWMU 21-027(d).

Radionuclide laboratory duplicate analyses were performed on the samples collected at locations 21-1330 and 21-1334. Only selected members of the radionuclide suite were chosen in the laboratory for duplicate analysis. All four sets of results met the precision criteria specified in section 2.1.4 of this report.

Because inorganic laboratory duplicates were not performed, inorganic precision criteria could not be evaluated.

Because no MS/MSD analyses were performed at this SWMU, organic precision and accuracy criteria and inorganic precision criteria, as specified in the QAPjP, could not be evaluated.

Table 10.3-1 Analytes detected above the 95.5 percentile of applicable baseline categories at SWMU 21-027(d).

Analyte	Location ID	Applicable Category	95.5 Percentile*	SAL	Surface (0-6 in.)*
Am-241	21-1331	NP	0.129	22	0.16
Pu-239/ 240	21-1331	NP	2.04	24	4.6
Cd	21-1329	NP	1.17	80	1.2
	21-1330	NP	1.17	80	1.4
	21-1331	NP	1.17	80	1.4

* - Units for radiological analyte values are in pCi/g.
- Units for inorganic analyte values are in ug/g
NP - Non-Process Area Baseline

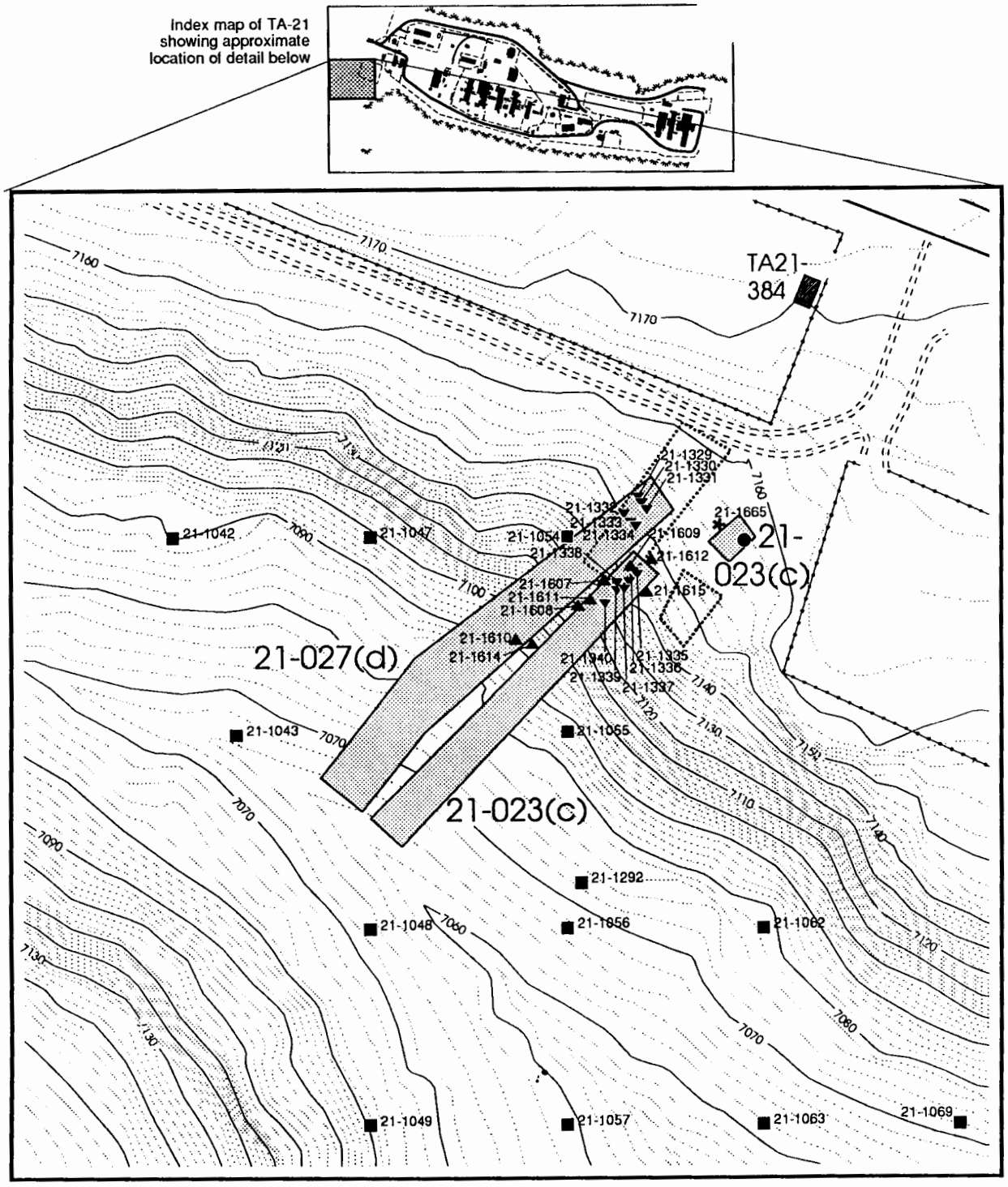


Figure 10.3-3
SWMU 21-027(d)

- Contours, 2 foot
- Contours, 10 foot
- Fence, Industrial
- Fence, Security
- Rad Survey Area
- Roads, Dirt
- Roads, Paved
- Solid waste Management Unit
- Temporary Structure
- Grid Sample Locations
- 1992 Outfall Sample Locations
- 1993 Outfall Sample Locations
- 1988 Reconnaissance Sample Locations
- RFI Borehole Location

Exact Discharge Point Unknown

Underground drain lines associated with the outfall are not shown

Potential release site locations are estimated

Samples were collected in or near most probable flow path

0 66.6 200
FEET

N

Based on FIMAD Map: G101673

Modified by: David Dander 2/22/94

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APPENDIX A

GRAPHICAL DISPLAYS AND STATISTICAL TESTS FOR OUTFALLS DATA

A.0 Graphical displays and statistical tests for outfall results

A.1 Introduction

This appendix presents figures that display the results from the outfall investigations for each radionuclide (except the isotopes of uranium and thorium, available at only some of the outfalls) and inorganic constituent. This type of presentation shows at a glance which outfalls look unusually high for a given element, and what kind of variability is found both within and between outfalls for the generally small sample sizes (only four outfalls have more than 9 observations and half have 6 or fewer).

Two statistical tests to compare observations with baseline distributions and one comparison with the upper limit of baseline distributions (as opposed to the 95.5th percentile that is used in Phase Report 1C as a cutoff level for including data in tables) were also performed. In place of the special impact area baselines used in Phase Report 1C, a spatially variable background distribution has been used for four isotopes exhibiting large variability and significant spatial trends across the site: Pu-238, Pu-239, Am-241, and tritium.

What the plots in this appendix do not show are lateral and vertical trends within each outfall. For these the reader is referred to the tables in Chapters 3 through 10, which are organized to present this information for analytes with concentrations above baseline.

A.2 Graphical Displays

Two figures are included for each analyte:

1) Side-by-side "box plots" are generated from a data set as follows: Five percentiles are estimated nonparametrically from the data for each outfall: the 5th, 25th, 50th (the median), 75th, and 95th. The central box extends from the 25th to the 75th

percentile, with a white line through the middle indicating the median. The "whiskers" are drawn out to the 5th and 95th percentiles. Finally, a detached line below the 5th percentile represents the observed sample minimum, and a detached line above the 95th percentile, the observed sample maximum. As the distributions are skewed, more nearly lognormal than normal, logarithmic y-axes are used.

2) Symbol plots of individual observations are needed to supplement the box plots, which are not very meaningful when the quantiles are based on only three to five observations, although they show the comparison between outfalls quite dramatically. Symbols represent both the analytical method used and whether the observation was above or below detection level. Open symbols in these plots correspond to above-detect measurements, and filled symbols to below-detect results, shown at 1/2 the reported detection level.

Shown for comparison on both types of plots indications of the baseline distribution and of the distribution of the nearest (procedurally comparable) neighbors from the 0-6" grid. Also shown if within a reasonable range (which is not the case for many inorganics) is the SAL. There are three choices for background:

Regional background is used only if virtually all 0-6" measurements were below detect (Antimony, Molybdenum, and Thallium.) Plots show mean and maximum for these.

OU background (the baseline distribution) is used for most elements. Plots show median and maximum of 0-6" grid samples analyzed by comparable method (Round 1 ETVAA for arsenic, selenium and silver; all methods for lead; Round 2 6010 for other inorganics; all 0-6" samples for radionuclides). The maximum is computed without outliers as shown in Table A-1 and also without the grid observation from 21-1079 in every case. (The 0-6" observation at 21-1079 has been included in these plots with the other samples from outfall PRS 21-024(e)). Where more than half of the grid

observations were below detection level, then what is shown as the median is 1/2 the median reported detection level.

Local background (a spatially varying background distribution estimated by kriging) is used for Pu238, Pu239/240, Am241 and tritium only. In these cases the plots show the median and 99.9th percentiles at each PRS as estimated by kriging and provided in Table A-2. (Ordinary kriging, as described by Cressie, 1991, is used.)

Neighbors are selected as follows, omitting outliers shown in Table E-2:

- For elements where Round 1 data are not used, the neighbors are either the six nearest 0-6" Round 2 grid points, generally within 500-600 feet of the PRS but sometimes up to 1000 feet away, or (rarely) more than six neighbors within 500 feet.

- For elements where Round 2 data are not used, the neighbors are six or seven 0-6" grid points within 400 feet of the PRS, or (rarely) six points out to larger distances, never more than 560 feet.

- Where data from both rounds are used (in particular, for all radionuclides), these are all 0-6" grid points within 400 feet, of which there are six to ten in all cases.

The plots show the median and maximum values observed at these neighboring points. The same neighbors are also used for the Wilcoxon comparison, described below. The symbols at the bottom of the box plots correspond to the results of three tests described in the following section.

A.2 Tests Comparing Outfall and Grid Sampling Results

Two statistical tests were performed using the observations from each outfall, considered as a set of independent observations from that outfall. Insofar as the observations from different depths in a single borehole may not be independent, the significance levels

associated with these tests probably require adjustment, but it is not clear in which direction.

1) Comparison with background

This is performed by comparing the number of observations above the 90th or 95th percentile of the background distribution (whether defined for the whole OU or spatially varying, as described in Section A.1.) The 90th percentile is used when there are fewer than eight observations from an outfall, and the 95th when there are eight or more, in order to achieve approximately comparable levels of significance with the small sample sizes involved, as discussed in the attachment to this appendix. Significant results are shown in the second columns of Tables A-3 through A-23.

2) Comparison with neighbors

The nonparametric Wilcoxon rank-sum test (see, for example, Lehmann, 1975) is used to compare the observations from a PRS with neighboring 0-6" grid observations. Positive results (meaning that the PRS observations appear to be significantly higher than the grid neighbors) are shown in the fourth column of Tables A-3 through A-23. "Significance" at the 5% level was required except for outfalls with only 4 or 5 observations, where significance at the 10% level was accepted.

Also shown in Tables A-3 through A-23, in the third column, is whether or not any observation exceeded the local background maximum (or, in the cases of the spatially variable local backgrounds, the 99.9th percentile of the kriged background). For this purpose (and also for the purpose of the binomial test described above), analytical method differences were scrutinized, and results were sometimes not considered significant if they appeared to be due to the use of a different method (usually ICPMS) at the PRS than on the grid. This affects results for beryllium, and occasionally for other elements.

The symbols at the bottom of the box plots correspond to these three columns of the tables. "+" means that the binomial test for being different from local background was significant. "#" means that at least one observation exceeded local background (omitting <DLs and some that seem to be entirely method problems). Finally, "*" means the Wilcoxon comparison with neighbors was significant.

The fifth column of Tables A-3 through A-23, if present, indicates that at least one SAL was exceeded at the PRS.

There were no positive results for PRS 21-027(b), hence no table.

Table A-1. Outliers Deleted for Background and Neighbor Comparisons

Analyte	Method	Loc.	Value	Units
Pu-238	RAS	21-1086	18.66	pCi/g
Tritium	LS	21-1190	152.7	nCi/l
Antimony	6010	21-1224	23.7	ppm
Arsenic	ETVAA	21-1055	9.9	ppm
Beryllium	6010	21-1017	2.5	ppm
Copper	6010	21-1006	57.4	ppm
Molybdenum	6010	21-1224	5.9	ppm
Silver	FAA	21-1030	10.8	ppm

Table A-2. Quantiles of Spatially Varying Local Background Distributions at the Outfalls (continued)

		.50	.90	.95	.999
Am241	11k	0.194	0.591	0.811	2.848
	22h	0.040	0.125	0.172	0.610
	23c	0.017	0.052	0.072	0.247
	24a	0.059	0.158	0.208	0.627
	24b	0.045	0.139	0.192	0.681
	24c	0.060	0.183	0.251	0.874
	24d	0.051	0.145	0.194	0.627
	24e	0.032	0.095	0.129	0.442
	24f	0.050	0.142	0.191	0.622
	24g	0.066	0.197	0.268	0.912
	24h	0.116	0.333	0.448	1.464
	24i	0.045	0.138	0.189	0.671
	24l	0.147	0.392	0.518	1.568
	24n	0.050	0.150	0.204	0.693
	24o	0.033	0.103	0.142	0.499
	26d	0.008	0.026	0.036	0.128
	27a	0.053	0.157	0.214	0.726
	27b	0.045	0.135	0.185	0.639
	27c	0.063	0.189	0.258	0.883
	27d	0.019	0.057	0.078	0.273
	4d	0.089	0.254	0.343	1.122
	6b	0.042	0.115	0.152	0.472
Tritium	11k	1.029	1.922	2.294	4.641
	22h	1.539	2.702	3.169	5.980
	23c	1.467	2.547	2.977	5.545
	24a	2.453	4.173	4.851	8.829
	24b	1.487	2.595	3.038	5.692
	24c	2.733	4.888	5.763	11.100
	24d	1.275	2.171	2.525	4.602
	24e	2.534	4.419	5.174	9.688
	24f	0.617	1.092	1.283	2.442
	24g	0.457	0.822	0.971	1.881
	24h	3.238	5.611	6.557	12.189
	24i	2.954	5.433	6.457	12.838
	24l	1.253	2.199	2.579	4.866
	24n	6.624	12.054	14.284	28.060
	24o	1.854	3.395	4.030	7.973
	26d	2.370	4.307	5.102	10.006
	27a	1.305	2.447	2.925	5.943
	27b	2.910	4.970	5.784	10.575
	27c	1.050	1.920	2.279	4.504
	27d	1.342	2.389	2.813	5.390
	4d	3.840	6.898	8.145	15.770
	6b	1.031	1.843	2.173	4.186

Table A-2. Quantiles of Spatially Varying Local Background Distributions at the Outfalls

		.50	.90	.95	.999
Pu238	11k	0.059	0.169	0.227	0.748
	22h	0.045	0.130	0.176	0.578
	23c	0.004	0.012	0.016	0.054
	24a	0.033	0.096	0.129	0.423
	24b	0.051	0.148	0.200	0.660
	24c	0.018	0.052	0.070	0.229
	24d	0.009	0.028	0.038	0.124
	24e	0.004	0.013	0.018	0.060
	24f	0.007	0.021	0.029	0.096
	24g	0.010	0.029	0.039	0.129
	24h	0.017	0.048	0.065	0.214
	24i	0.009	0.026	0.036	0.119
	24l	0.057	0.164	0.222	0.732
	24n	0.009	0.025	0.034	0.113
	24o	0.005	0.015	0.021	0.071
	26d	0.003	0.009	0.013	0.043
	27a	0.020	0.058	0.079	0.261
	27b	0.010	0.029	0.039	0.129
	27c	0.012	0.036	0.049	0.163
	27d	0.004	0.012	0.017	0.056
	4d	0.014	0.041	0.056	0.183
	6b	0.012	0.037	0.050	0.165
Pu239/Pu240	11k	2.248	11.081	17.415	105.229
	22h	1.000	3.966	5.861	27.718
	23c	1.069	4.250	6.285	29.805
	24a	0.757	2.804	4.065	17.798
	24b	8.195	30.719	44.677	198.274
	24c	1.347	5.923	9.012	47.872
	24d	1.790	6.925	10.161	46.719
	24e	0.425	2.203	3.510	22.412
	24f	0.999	4.391	6.681	35.477
	24g	0.364	1.681	2.594	14.559
	24h	5.277	21.268	31.575	152.070
	24i	0.131	0.616	0.954	5.436
	24l	1.907	7.485	11.027	51.528
	24n	0.485	2.246	3.469	19.541
	24o	0.419	2.291	3.708	25.176
	26d	0.248	1.157	1.790	10.167
	27a	1.562	7.713	12.128	73.425
	27b	0.327	1.247	1.823	8.255
	27c	0.949	4.483	6.961	40.087
	27d	1.336	5.518	8.249	40.838
	4d	2.699	12.070	18.454	99.946
	6b	0.979	4.004	5.968	29.207

Table A-3. Results of Tests for 21-004(d)

	loc 95th	loc max	nbrs
Pu238	+	#	•
Tritium	+	#	•
Sr90			•

Table A-4. Results of Tests for 21-006(b)

	loc 90th	loc max	nbrs
Tritium	+		•
Sr90			•

Table A-5. Results of Tests for 21-011(k)

	loc 90th	loc max	nbrs	SAL
Pu238	+	#	•	2200
Pu239	+	#	•	46000•
Am241	+	#	•	2600
Tritium	+	#	•	
Uranium		#	•	
Sr90	+	#	•	1800
Cadmium	+	#	•	
Copper		#		
Nickel	+	#	•	
Silver		#		
Zinc		#		

Table A-6. Results of Tests for 21-022(h)

	loc 95th	loc max	nbrs
Pu238	+	#	•
Am241	+	#	
Tritium	+	#	
Sr90			•
Antimony		#	
Copper	+	#	•
Zinc		#	

Table A-7. Results of Tests for 21-023(c)

	loc 90th	loc max	nbrs	SAL
Pu238	+	#	•	
Pu239	+	#	•	300
Am241	+	#	•	344
Uranium	+			
Sr90	+		•	
Arsenic	+	#	•	
Barium			•	
Chromium	+	#	•	
Copper	+	#	•	
Lead	+	#	•	
Nickel	+	#	•	
Selenium			•	
Strontium			•	
Vanadium			•	
Zinc		#	•	

Table A-8. Results of Tests for 21-024(a)

	loc 95th	loc max	nbrs
Uranium	+	#	
Arsenic	+	#	
Barium	+	#	
Beryllium	+	#	
Cadmium	+	#	
Chromium	+	#	•
Copper	+	#	•
Lead	+	#	
Lithium	+	#	•
Nickel	+	#	
Strontium	+	#	•
Zinc	+	#	

Table A-9. Results of Tests for 21-024(b)

	loc 95th	loc max	nbrs	SAL
Pu238	+	#		
Pu239	+	#	•	324
Am241	+	#	•	
Tritium	+	#		
Uranium	+	#		
Sr90			•	
Antimony		#		
Arsenic			•	
Beryllium	+			
Chromium	+	#		
Copper	+	#		
Nickel		#		
Selenium		#		
Zinc	+	#		

Table A-10. Results of Tests for 21-024(c)

	loc 90th	loc max	nbrs	SAL
Pu238	+	#	•	
Pu239			•	
Am241	+	#	•	
Tritium	+	#	•	
Uranium	+	#	•	
Antimony		#		
Arsenic	+	#		
Barium	+			
Cadmium	+	#	•	
Chromium	+	#	•	415
Copper	+	#	•	
Lead	+	#	•	2300
Molybdenum		#		
Nickel	+	#		
Silver	+	#	•	
Strontium	+		•	
Vanadium	+	#		
Zinc	+	#		

Table A-11. Results of Tests for 21-024(d)

	loc 90th	loc max	nbrs
Pu238	+	#	•
Pu239	+		
Am241	+	#	
Tritium	+	#	
Cadmium	+		
Chromium		#	
Copper	+	#	•
Lead		#	
Nickel		#	
Selenium			•
Silver	+	#	•
Zinc	+	#	•

Table A-12. Results of Tests for 21-024(e)

	loc 90th	loc max	nbrs	SAL
Pu238	+	#	•	
Pu239	+	#	•	63.5
Am241	+	#	•	
Tritium		#		
Uranium	+	#	•	
Arsenic	+	#	•	
Barium	+	#	•	
Beryllium	+		•	
Cadmium	+	#	•	
Chromium	+	#	•	
Cobalt			•	
Copper	+	#	•	
Lead	+	#		
Manganese	+		•	
Nickel	+		•	
Selenium	+	#	•	
Strontium	+		•	
Vanadium	+	#	•	
Zinc	+	#	•	

Table A-13. Results of Tests for 21-024(f)

	loc 95th	loc max	nbrs
Pu238	+	#	•
Am241			•
Tritium	+		
Sr90			•

Table A-14. Results of Tests for 21-024(g)

	loc 95th	loc max	nbrs
Pu238		#	
Tritium	+	#	•
Uranium	+	#	•
Arsenic	+	#	•
Cadmium	+	#	•
Chromium	+	#	•
Copper	+	#	
Nickel	+	#	
Selenium		#	•
Vanadium	+	#	
Zinc	+	#	

Table A-15. Results of Tests for 21-024(h)

	loc 95th	loc max	nbrs	SAL
Pu238	+	#	•	
Pu239				33
Uranium		#		

Table A-16. Results of Tests for 21-024(i)

	loc 90th	loc max	nbrs
Pu238	+		•
Pu239	+	#	•
Am241	+	#	•
Tritium	+	#	•
Uranium	+	#	•
Sr90			•
Arsenic	+	#	•
Barium	+	#	•
Chromium	+	#	•
Copper	+	#	•
Lead	+	#	•
Nickel	+	#	•
Selenium	+	#	•
Vanadium	+	#	•
Zinc	+	#	•

Table A-17. Results of Tests for 21-024(l)

	loc 90th	loc max	nbrs
Pu238		#	•
Arsenic			•

Table A-18. Results of Tests for 21-024(n)

	loc 95th	loc max	nbrs
Pu238	+	#	•
Am241			•
Tritium	+		•
Chromium	+	#	
Copper		#	
Zinc		#	

Table A-19. Results of Tests for 21-024(o)

	loc 90th	loc max	nbrs
Arsenic			•
Barium	+	#	
Cadmium	+		
Cobalt	+		•
Manganese	+		•
Nickel	+		
Zinc	+		

Table A-20. Results of Tests for 21-026(d)

	loc 90th	loc max	nbrs
Pu238	+	#	•
Pu239			•
Am241	+	#	•
Tritium	+	#	•
Chromium	+	#	•
Copper	+	#	•
Nickel	+	#	
Silver		#	
Zinc	+		•

Table A-21. Results of Tests for 21-027(a)

	loc 95th	loc max	nbrs	SAL
Pu238	+	#	•	52
Pu239	+	#	•	193
Am241	+	#	•	37.1
Tritium	+	#	•	
Uranium	+	#	•	
Arsenic	+	#	•	
Cadmium	+	#	•	
Chromium	+	#	•	1000.4
Copper	+	#	•	
Lead	+		•	
Nickel	+	#		
Strontium	+	#	•	
Vanadium			•	
Zinc	+	#	•	

Table A-22. Results of Tests for 21-027(c)

	loc 90th	loc max	nbrs	SAL
Pu238	+	#	•	
Pu239	+	#	•	79.55
Am241	+	#	•	
Arsenic		#	•	
Cadmium	+		•	
Chromium			•	
Copper	+		•	
Lead		#		
Lithium		#		
Manganese			•	
Nickel	+		•	
Zinc	+	#	•	

Table A-23. Results of Tests for 21-027(d)

	loc 90th	loc max	nbrs
Pu238			•
Pu239			•
Am241	+		•
Cadmium	+		•
Chromium			•

Attachment: Binomial Tests To Determine Whether Observations at a PRS Exceed Local Background

In order to compare small samples with a background distribution described only by its upper tail quantiles, we consider whether "too many" of the observations in the sample exceed these quantiles. The null hypothesis is that the sample of size N comes from the background distribution, in which case the probability that n of the N observations will exceed the qth quantile of that background is

$$P_q = \sum_{i=n}^{N} \binom{N}{i} (1-q)^i q^{N-i} .$$

(Of course, this use of the binomial formula assumes that the N observations are independent, which is probably not the case, as they never come from more than three boreholes, and sometimes as few as one.)

Table A-24 shows choices of n for q = .9 or .95 that result in tests with significance levels (P_q's) below 0.05, in most cases, well below, except for the fact that (*) may be too small by an undetermined amount because of correlation. The last column of Table A-24 indicates the number of outfalls with this sample size.

Table A-24. Binomial Tests

N	n	q	P_q	#PRSs
3	2	.9	0.028	
4	3	.9	0.004	2
5	3	.9	0.009	2
6	3	.9	0.016	9
7	3	.9	0.026	
8	3	.95	0.006	2
9	3	.95	0.008	3
10	3	.95	0.012	
11	3	.95	0.015	
12	3	.95	0.020	1
13	3	.95	0.025	
14	3	.95	0.030	1
15	3	.95	0.036	1
16	3	.95	0.043	
17	4	.95	0.009	
18	4	.95	0.011	2
19	4	.95	0.013	
20	4	.95	0.016	1
21	4	.95	0.019	

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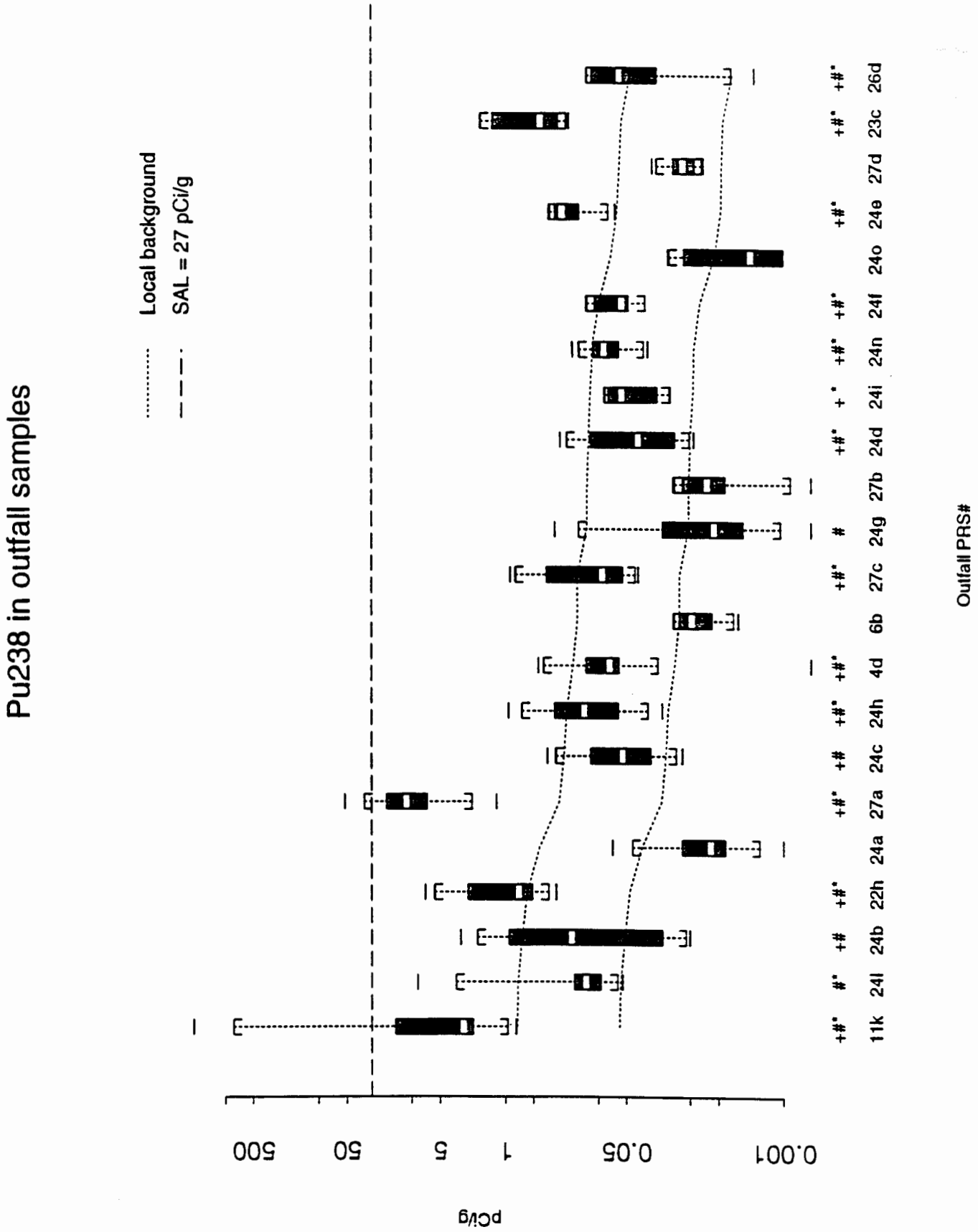
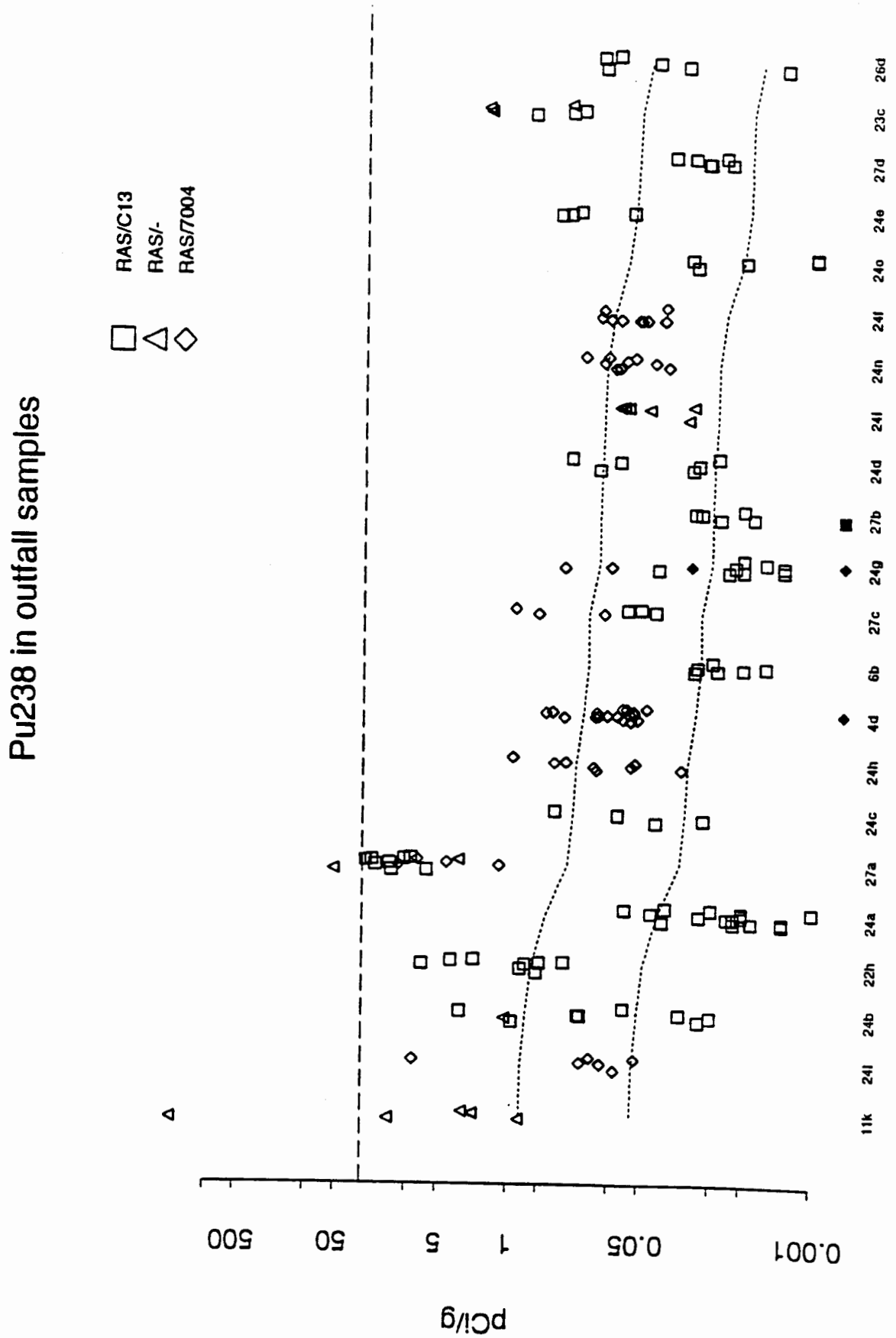
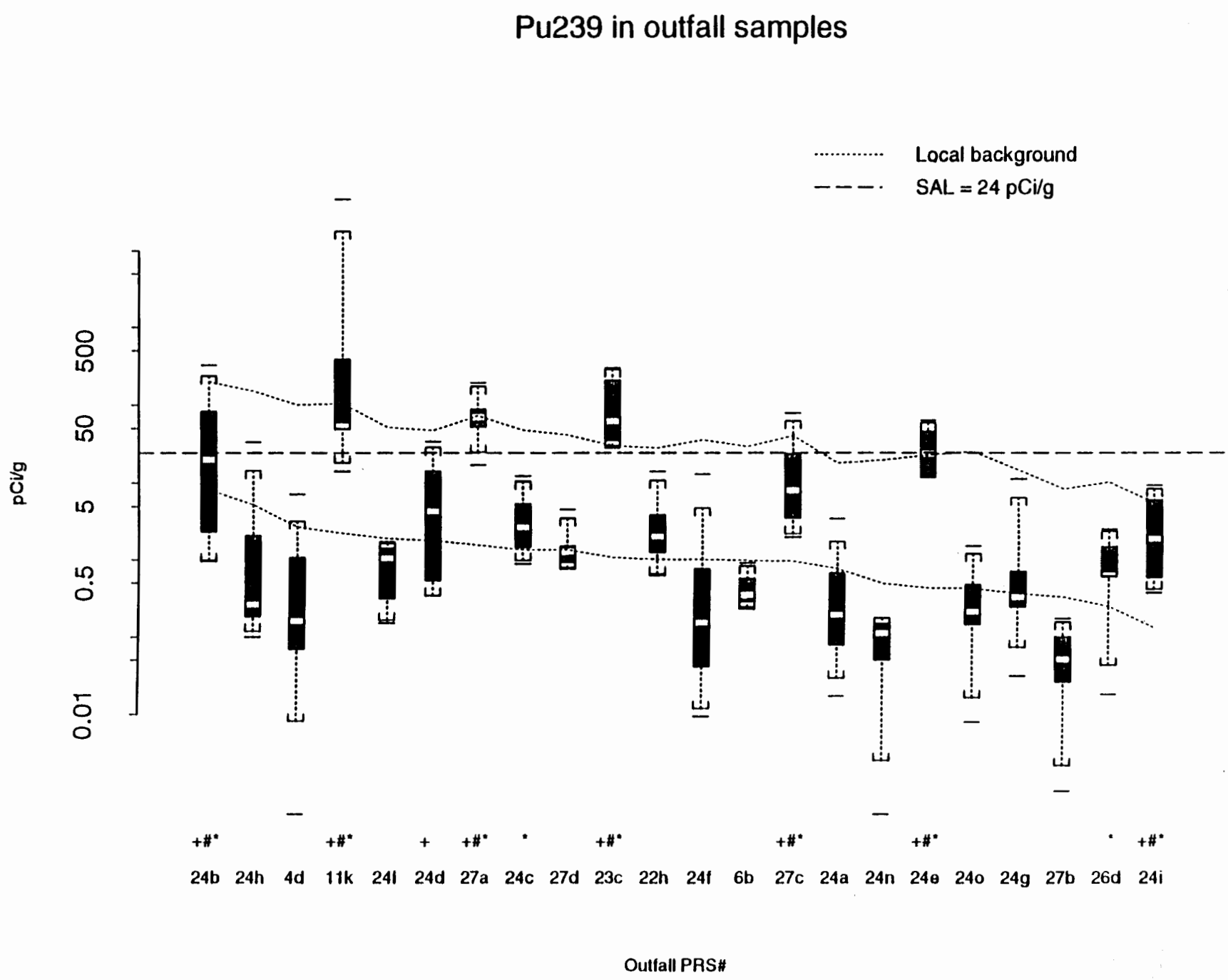
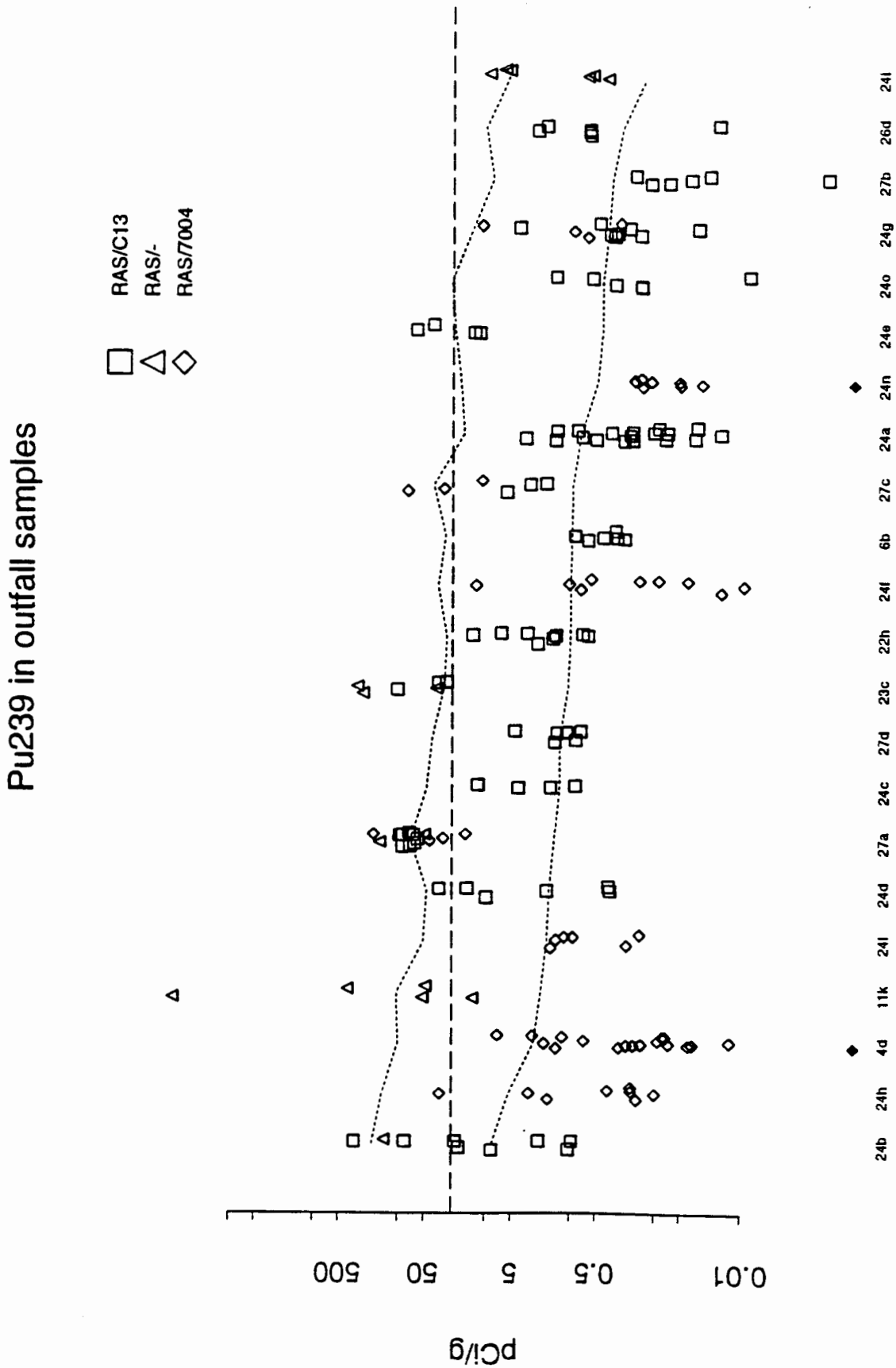
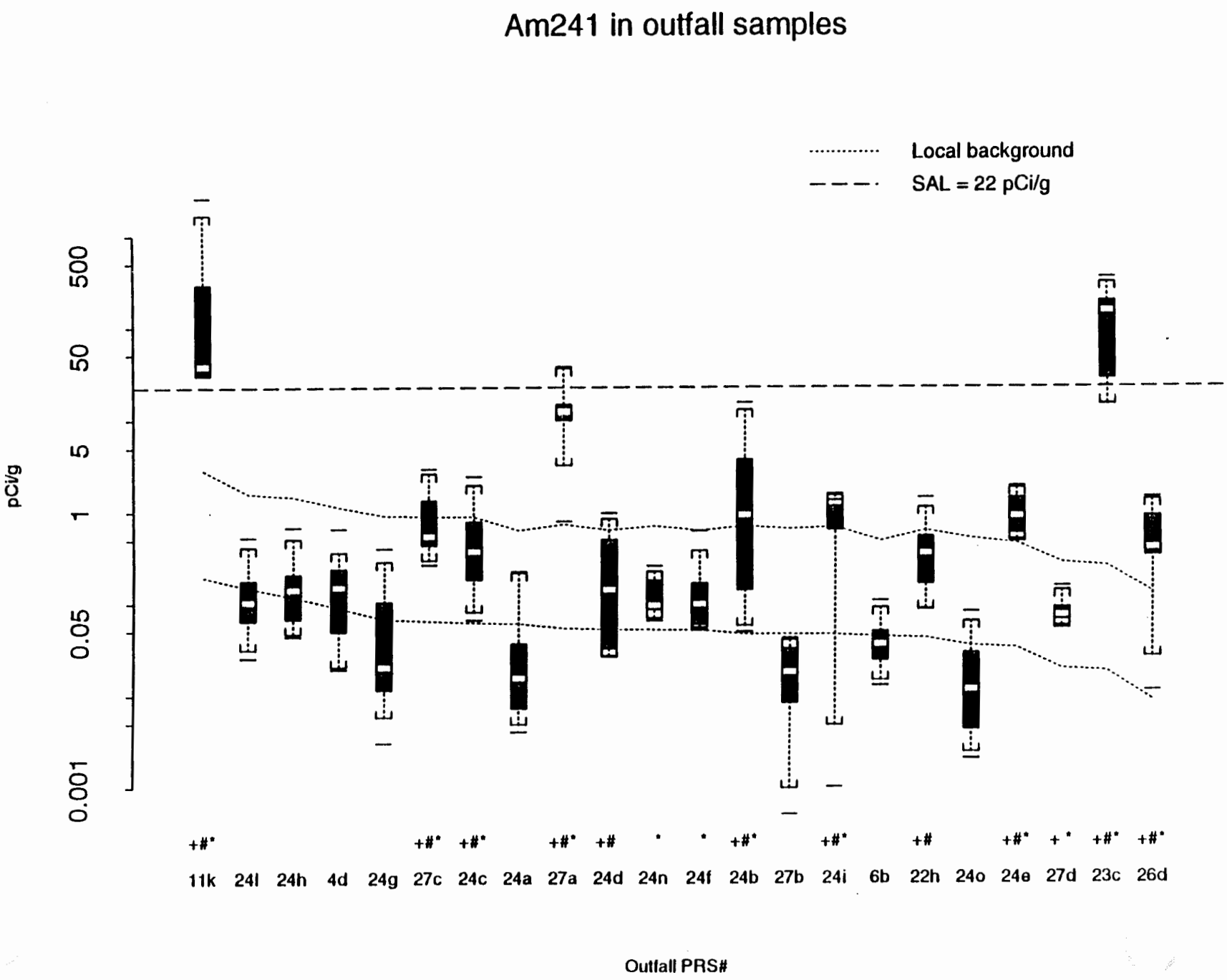
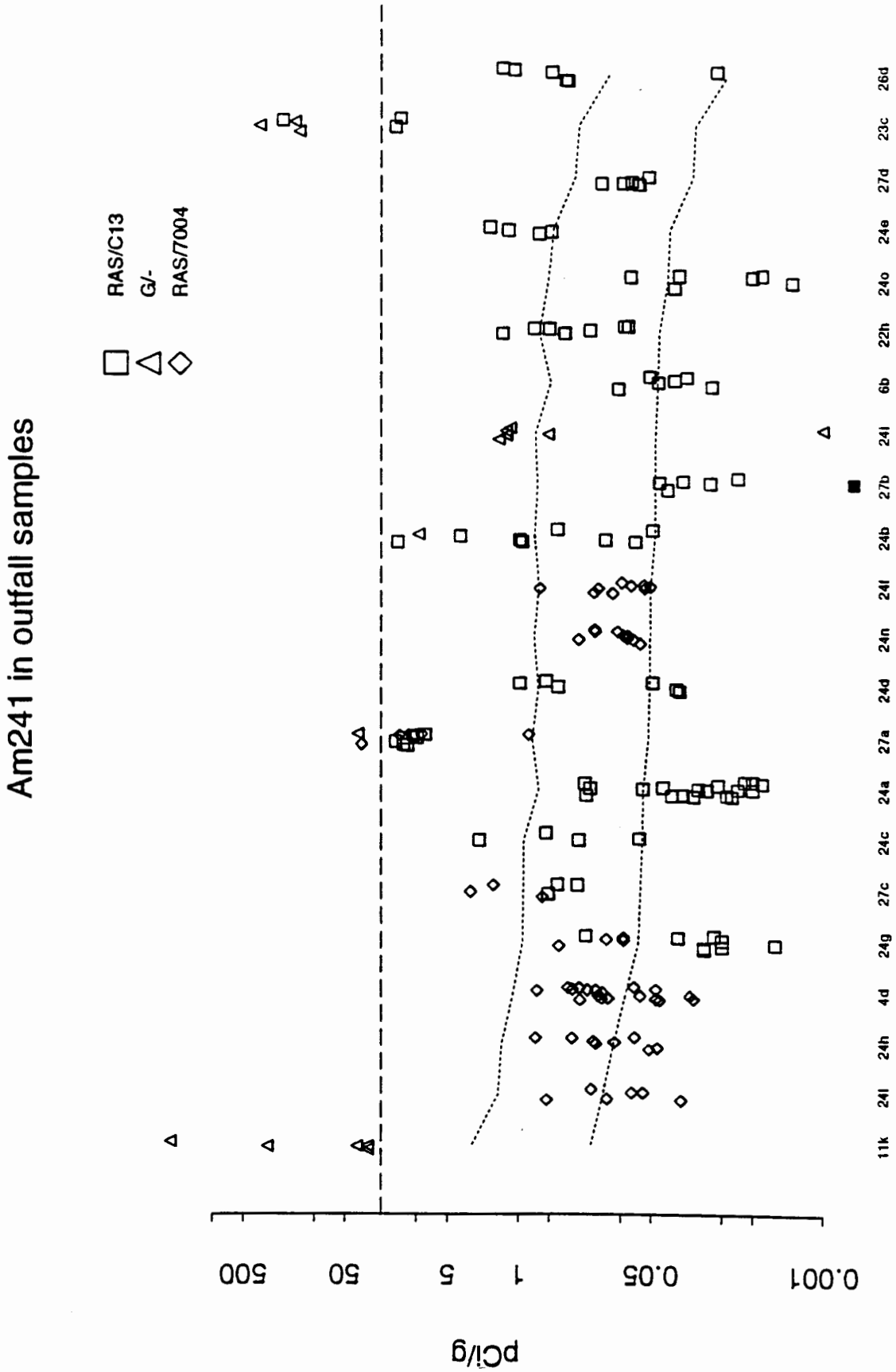

Pu238 in outfall samples
Local background
SAL = 27 pCi/g
pCi/g
500
50
5
1
0.05
0.001
Outfall PRS#
11k
24l
24b
22h
24a
27a
24c
24h
4d
6b
27c
24g
27b
24d
24i
24n
24f
24o
24e
27d
23c
26d

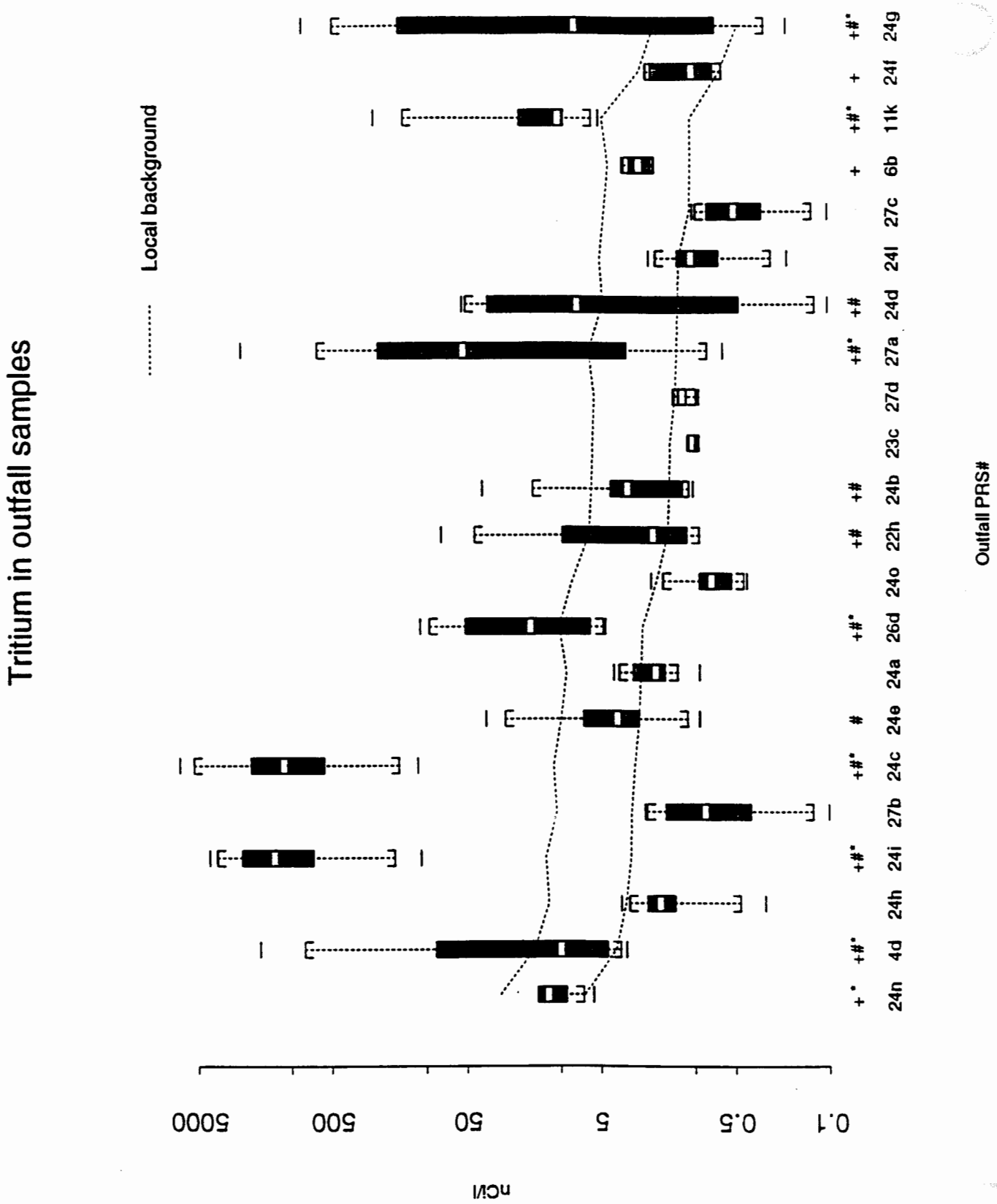

Pu238 in outfall samples
RAS/C13
RAS/-
RAS/7004
pCi/g
500
50
5
1
0.05
0.001
11k
24l
24b
22h
24a
27a
24c
24h
4d
6b
27c
24g
27b
24d
24l
24n
24f
24o
24e
27d
23c
26d

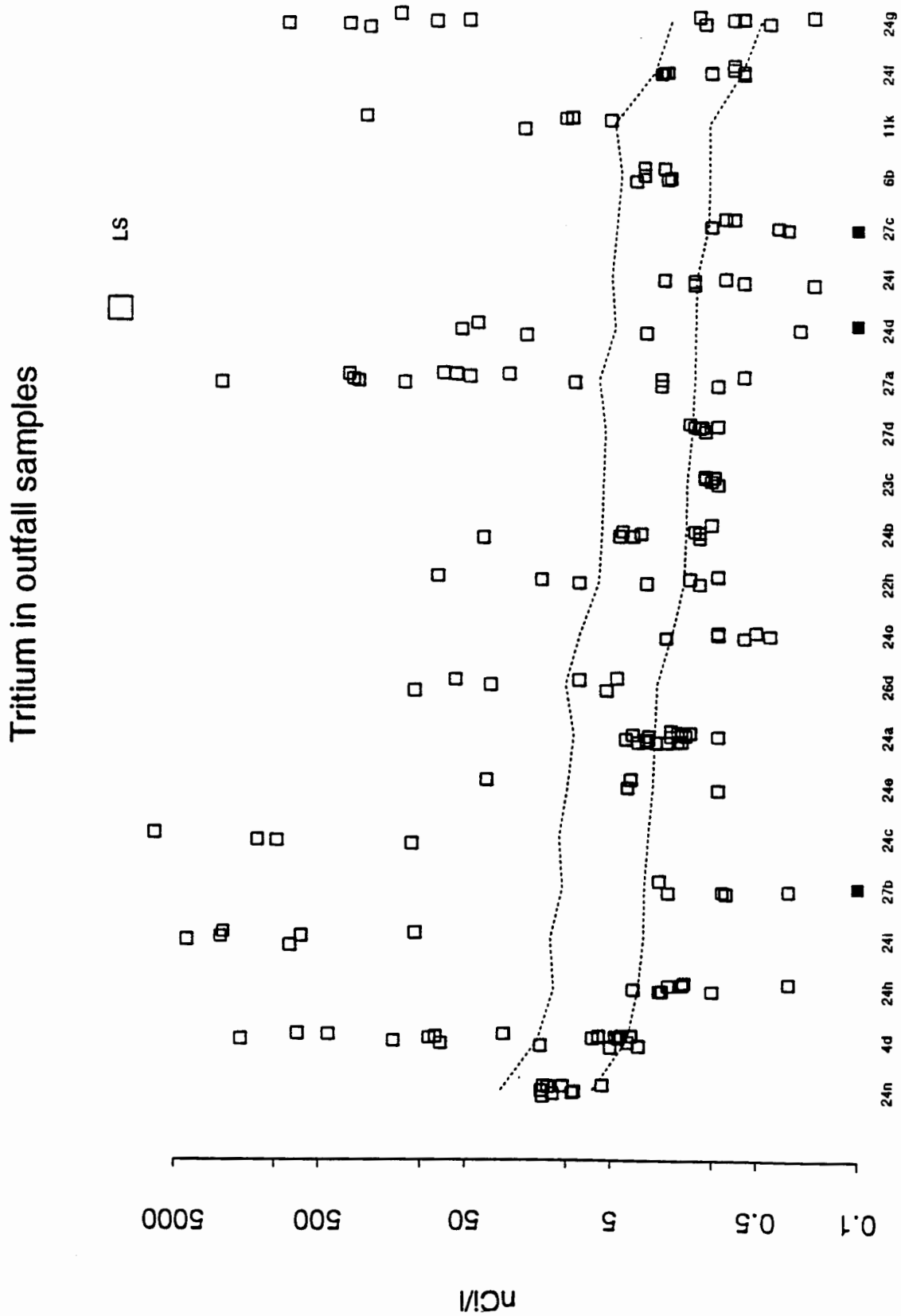

Pu239 in outfall samples
Local background
SAL = 24 pCi/g
pCi/g
500
50
5
0.5
0.01
+#*
+#*
+
+#*
*
+#*
+#*
+#*
*
+#*
24b
24h
4d
11k
24l
24d
27a
24c
27d
23c
22h
24f
6b
27c
24a
24n
24e
24o
24g
27b
26d
24i
Outfall PRS#

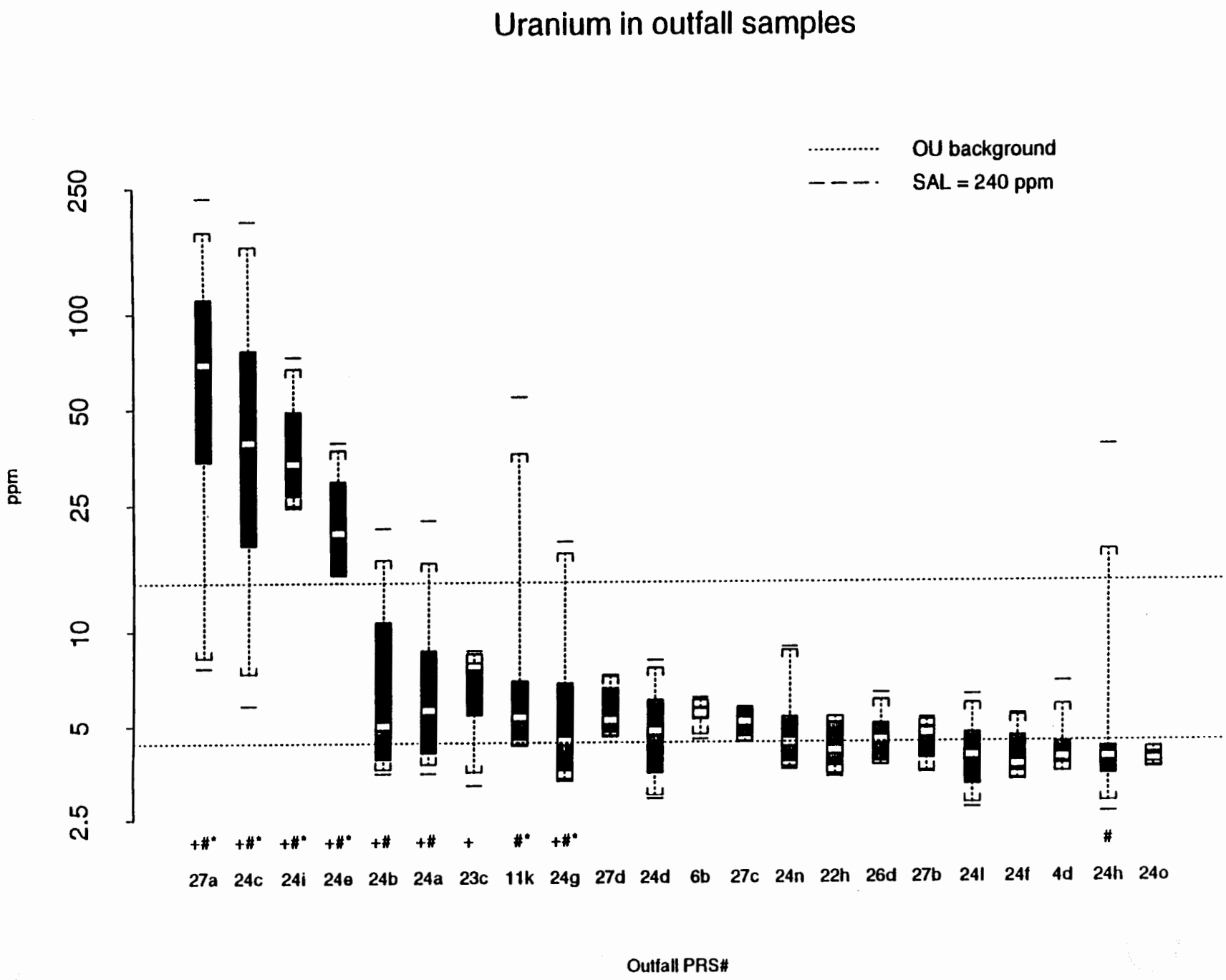

Pu239 in outfall samples
RAS/C13
RAS/-
RAS/7004
pCi/g
500
50
5
0.5
0.01
24b
24h
4d
11k
24l
24d
27a
24c
27d
23c
22h
24f
6b
27c
24a
24n
24e
24o
24g
27b
26d
24i

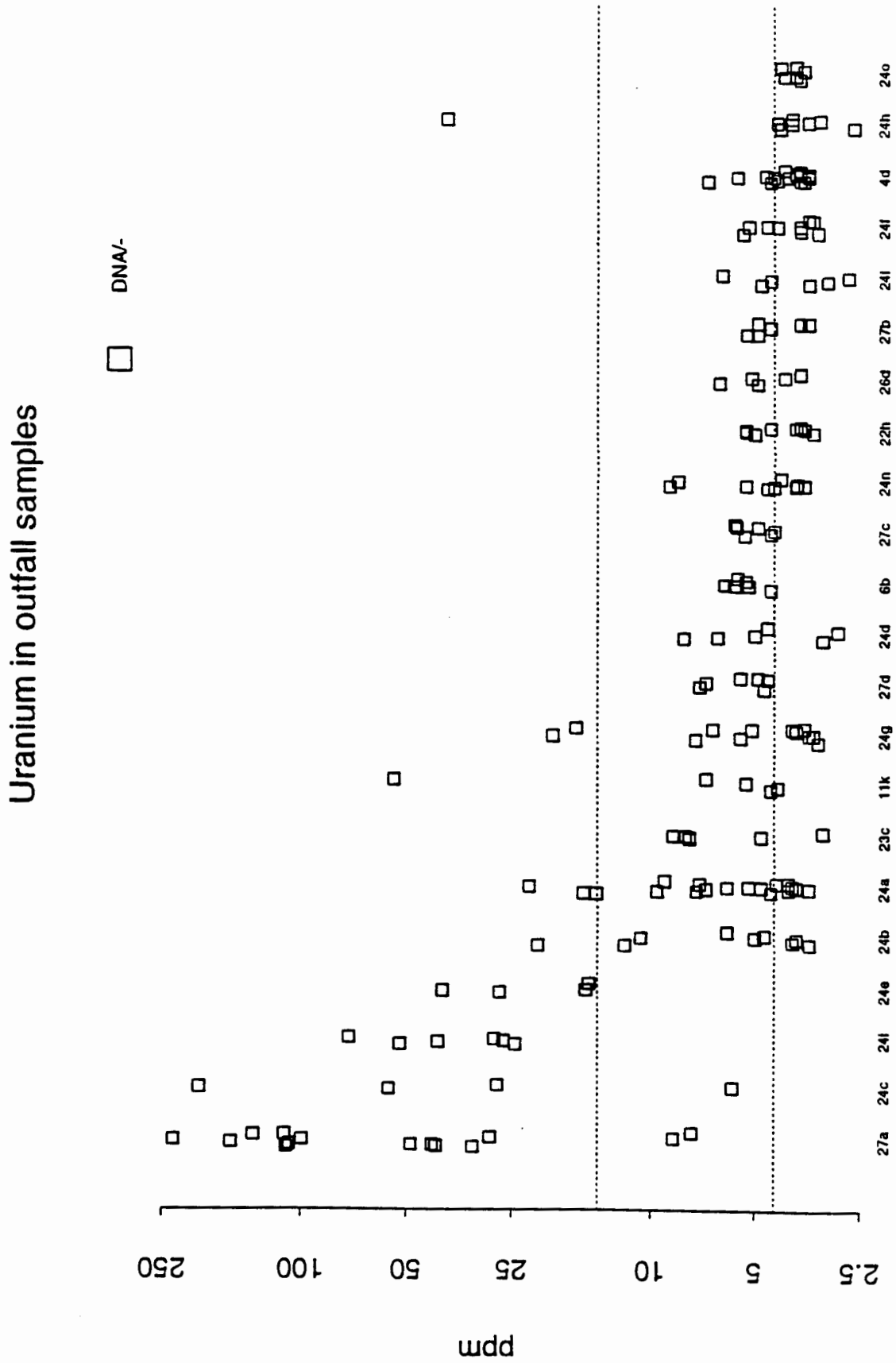

Am241 in outfall samples
Local background
SAL = 22 pCi/g
pCi/g
500
50
5
1
0.05
0.001
+#*
+#*
+#*
+#*
+#
*
*
+#*
+#*
+#
+#*
+ *
+#*
+#*
11k
24l
24h
4d
24g
27c
24c
24a
27a
24d
24n
24f
24b
27b
24i
6b
22h
24o
24e
27d
23c
26d
Outfall PRS#

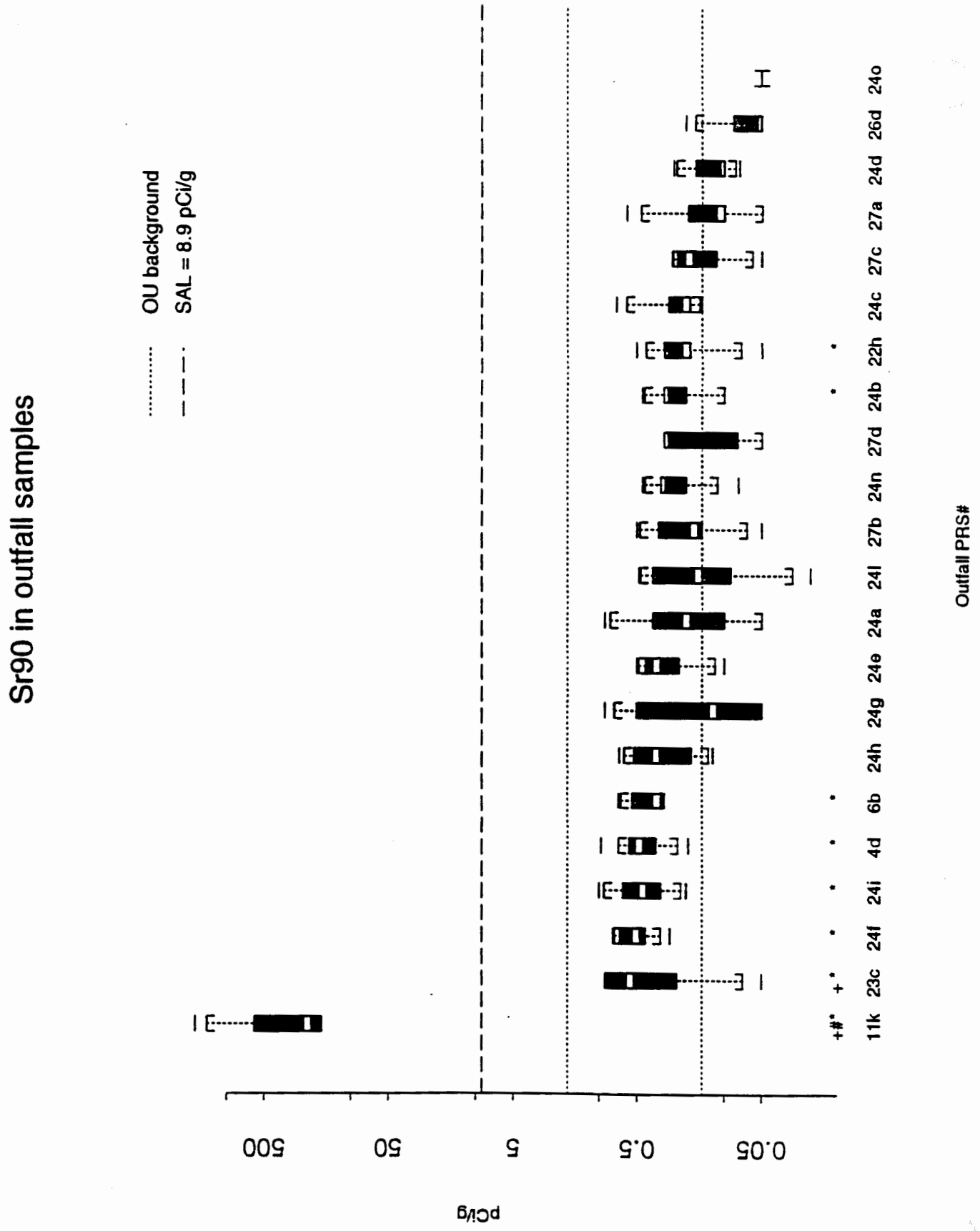

Am241 in outfall samples
RAS/C13
G/-
RAS/7004
pCi/g
500
50
5
1
0.05
0.001
11k
24l
24h
4d
24g
27c
24c
24a
27a
24d
24n
24f
24b
27b
24l
6b
22h
24o
24e
27d
23c
26d
Outfall PBS#

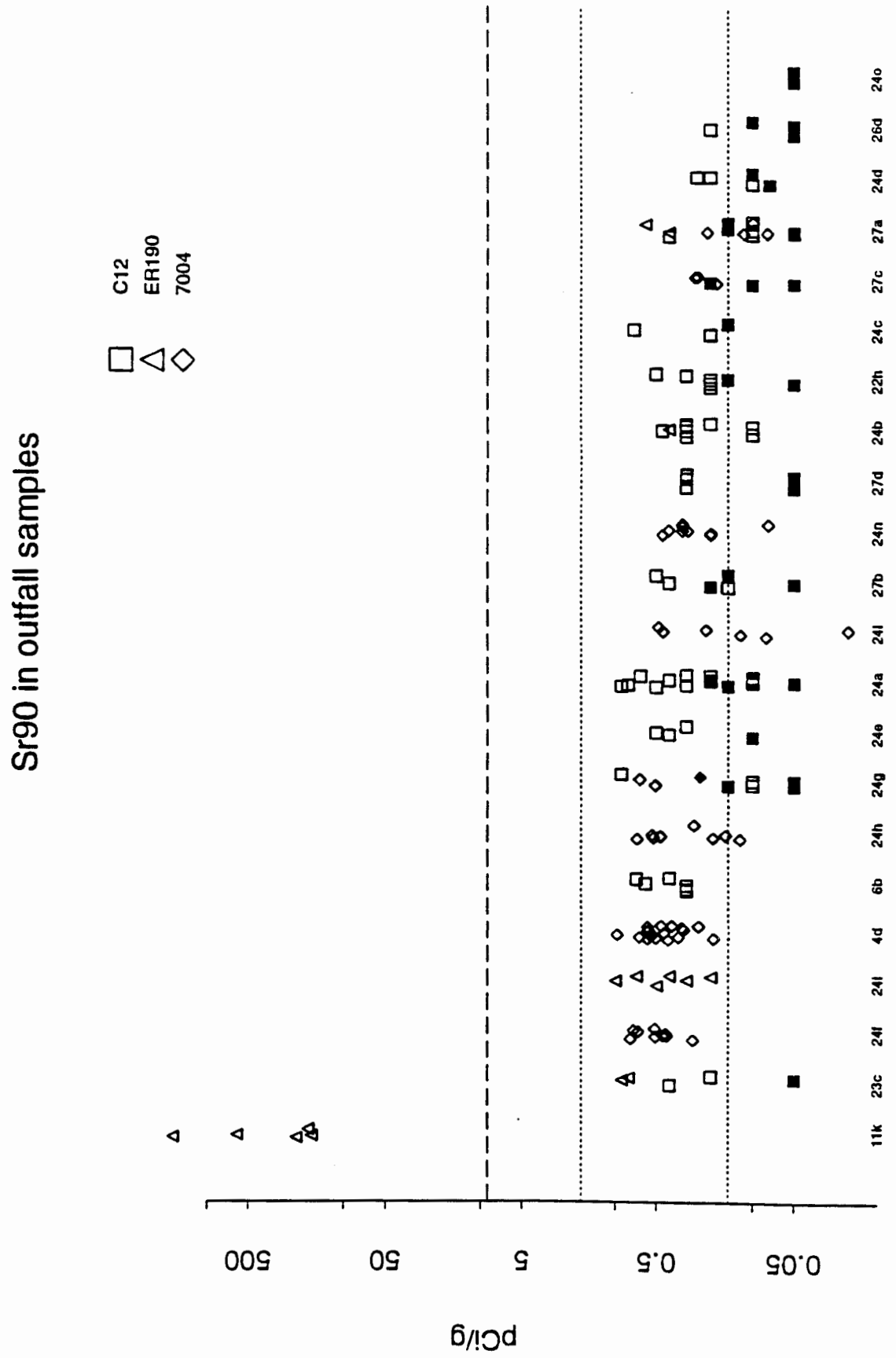

Tritium in outfall samples
Local background
pCi/l
5000
500
50
5
0.5
0.1
Outfall PRS#
24g
24f
11k
6b
27c
24l
24d
27a
27d
23c
24b
22h
24o
26d
24a
24e
24c
27b
24i
24h
4d
24n

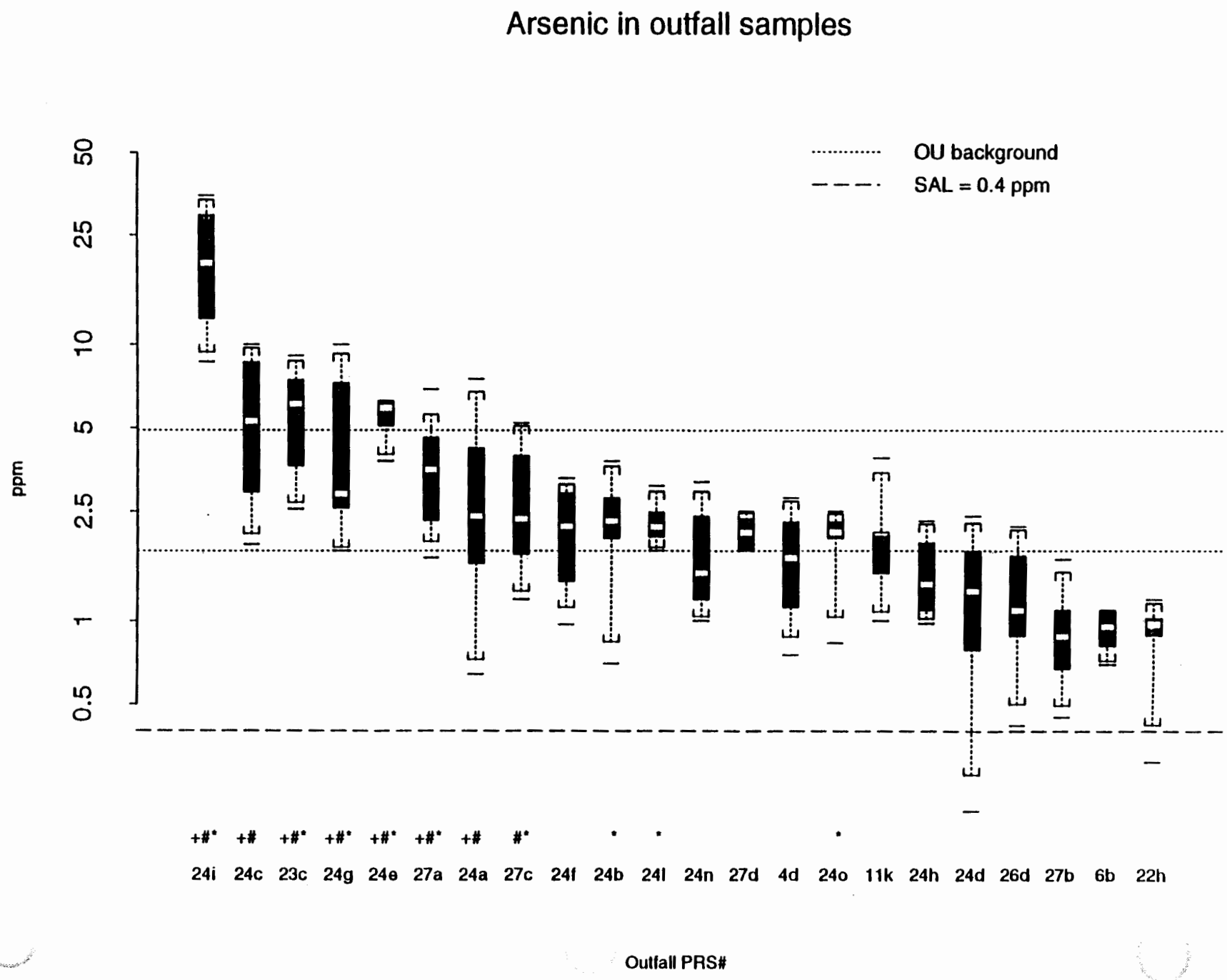

Tritium in outfall samples
LS
nCi/l
5000
500
50
5
0.5
0.1
24n
4d
24h
24i
27b
24c
24e
24a
26d
24o
22h
24b
23c
27d
27a
24d
24l
27c
6b
11k
24f
24g

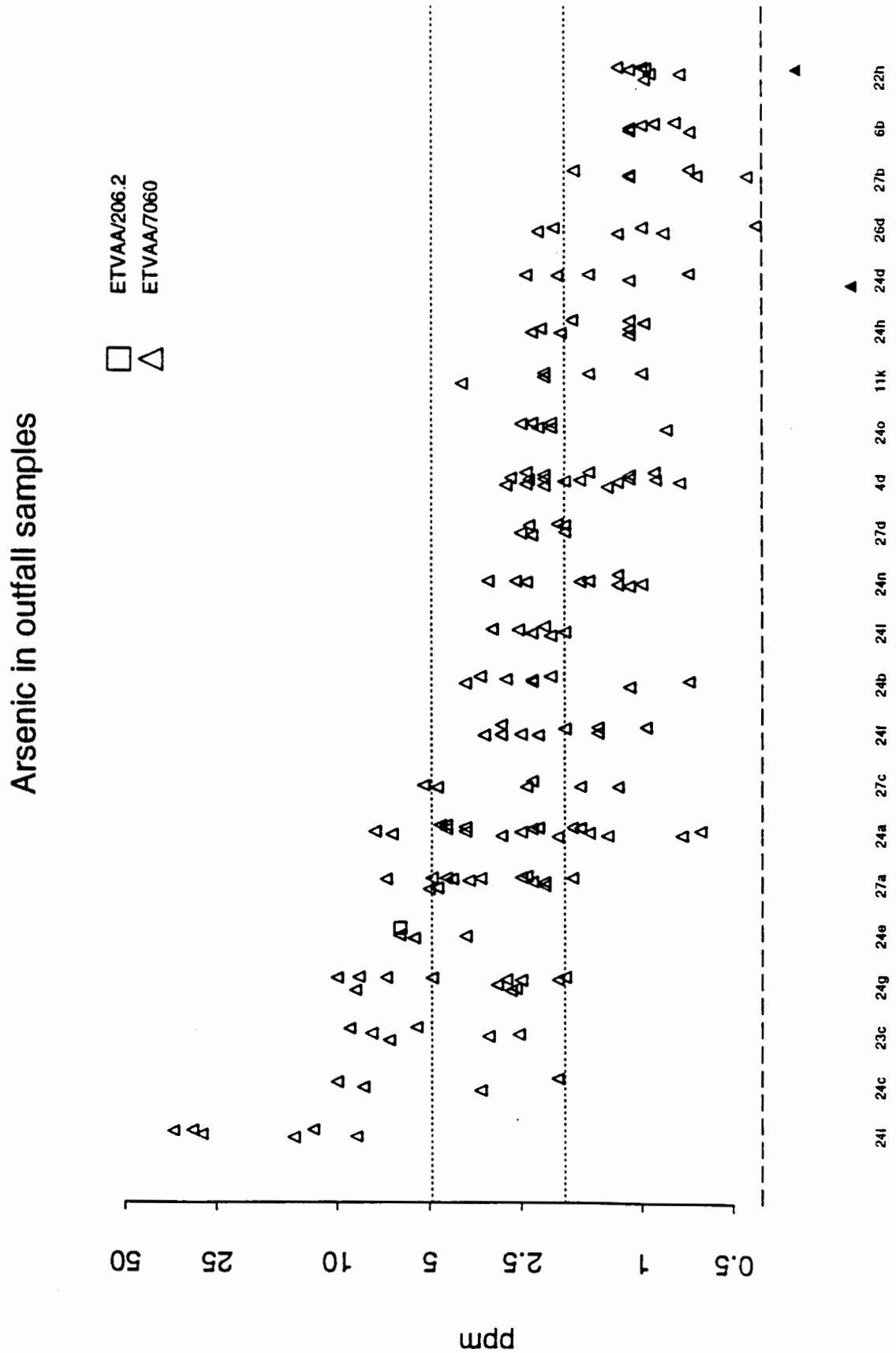

Uranium in outfall samples
OU background
SAL = 240 ppm
ppm
250
100
50
25
10
5
2.5
+#*
+#*
+#*
+#*
+#
+#
+
#*
+#*
#
27a
24c
24i
24e
24b
24a
23c
11k
24g
27d
24d
6b
27c
24n
22h
26d
27b
24l
24f
4d
24h
24o
Outfall PRS#

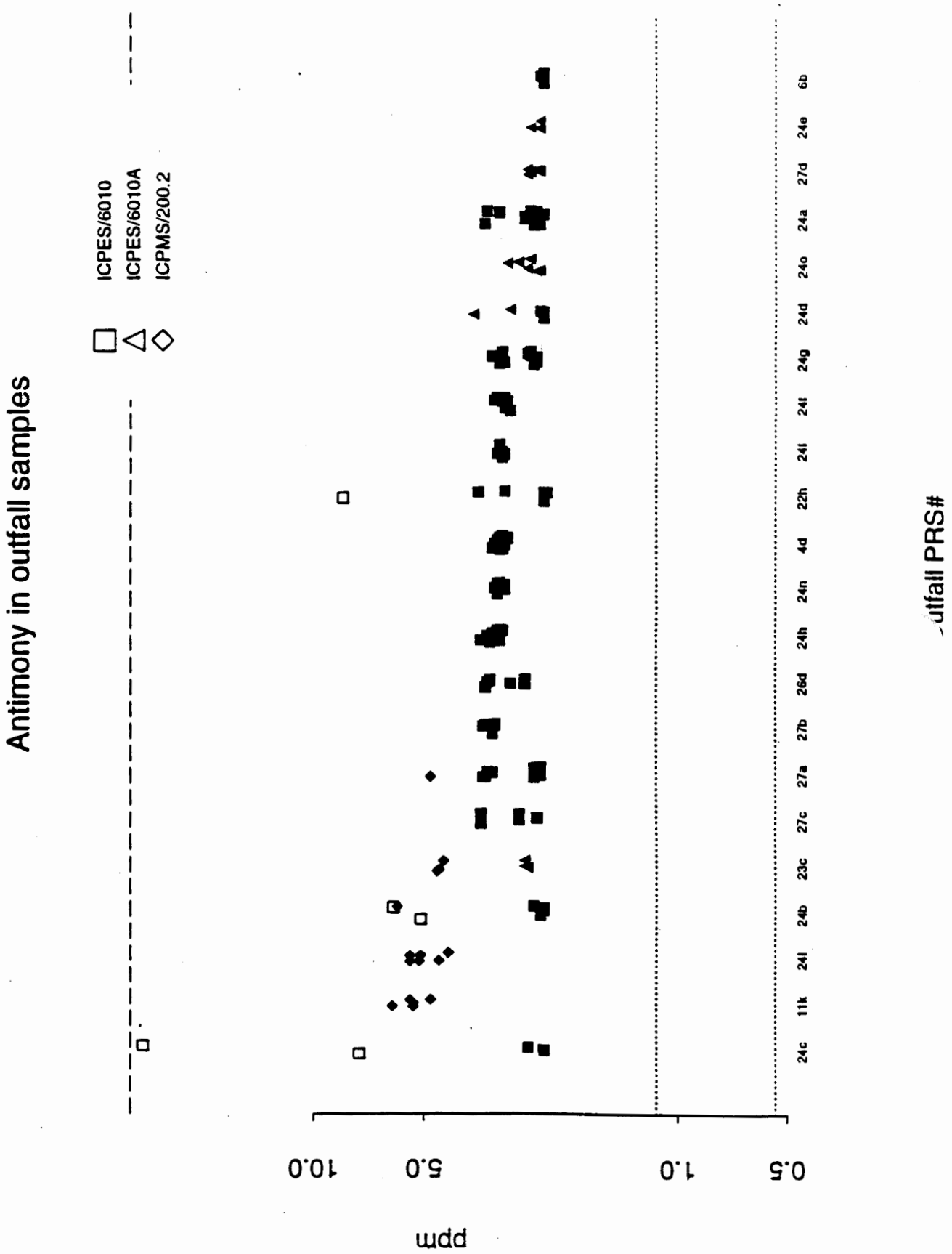

Uranium in outfall samples
DNA/-
ppm
250
100
50
25
10
5
2.5
27a
24c
24l
24e
24b
24a
23c
11k
24g
27d
24d
6b
27c
24n
22h
26d
27b
24l
24f
4d
24h
24o

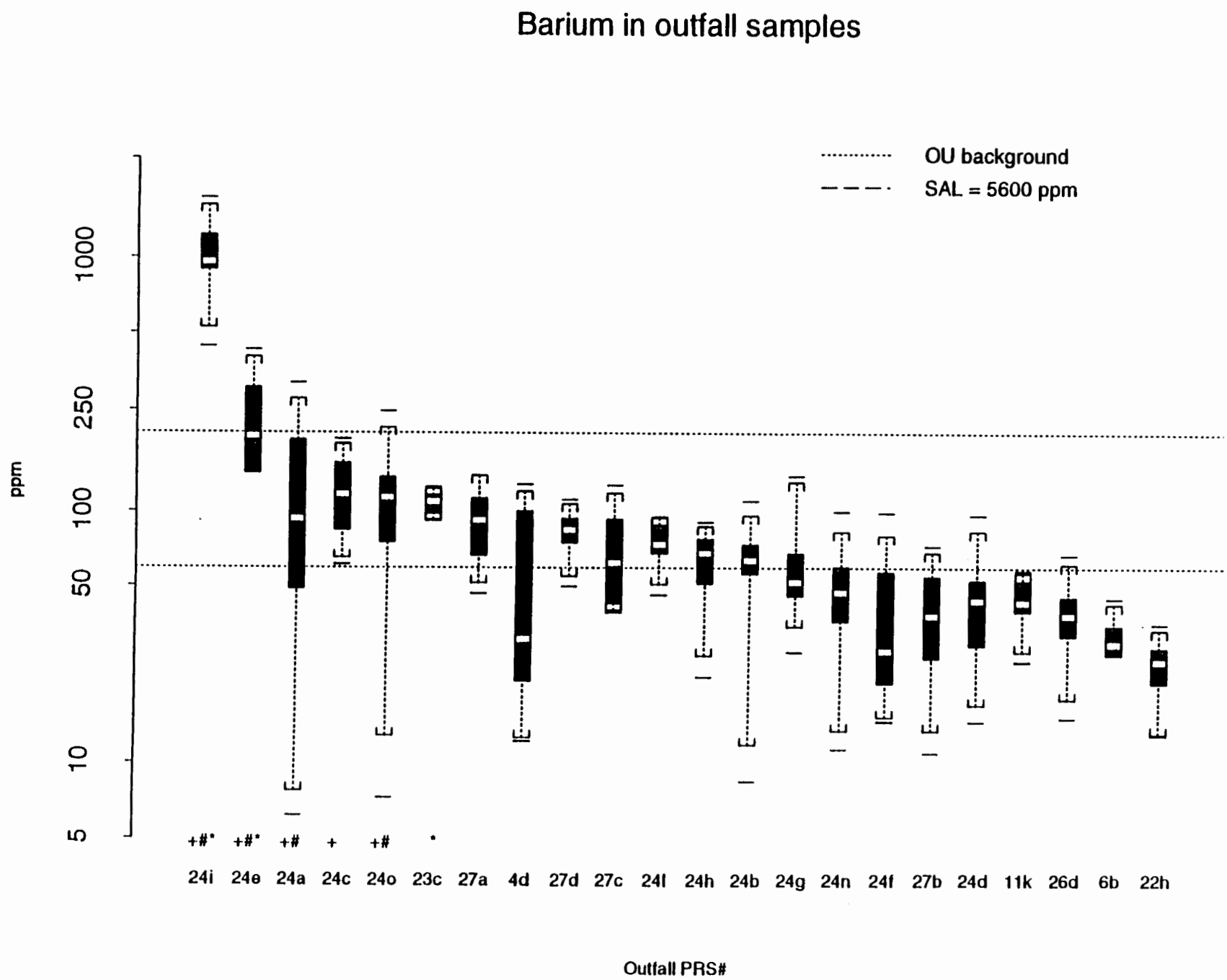

Sr90 in outfall samples
OU background
SAL = 8.9 pCi/g
pCi/g
500
50
5
0.5
0.05
11k
23c
24f
24i
4d
6b
24h
24g
24e
24a
24l
27b
24n
27d
24b
22h
24c
27c
27a
24d
26d
24o
Outfall PRS#

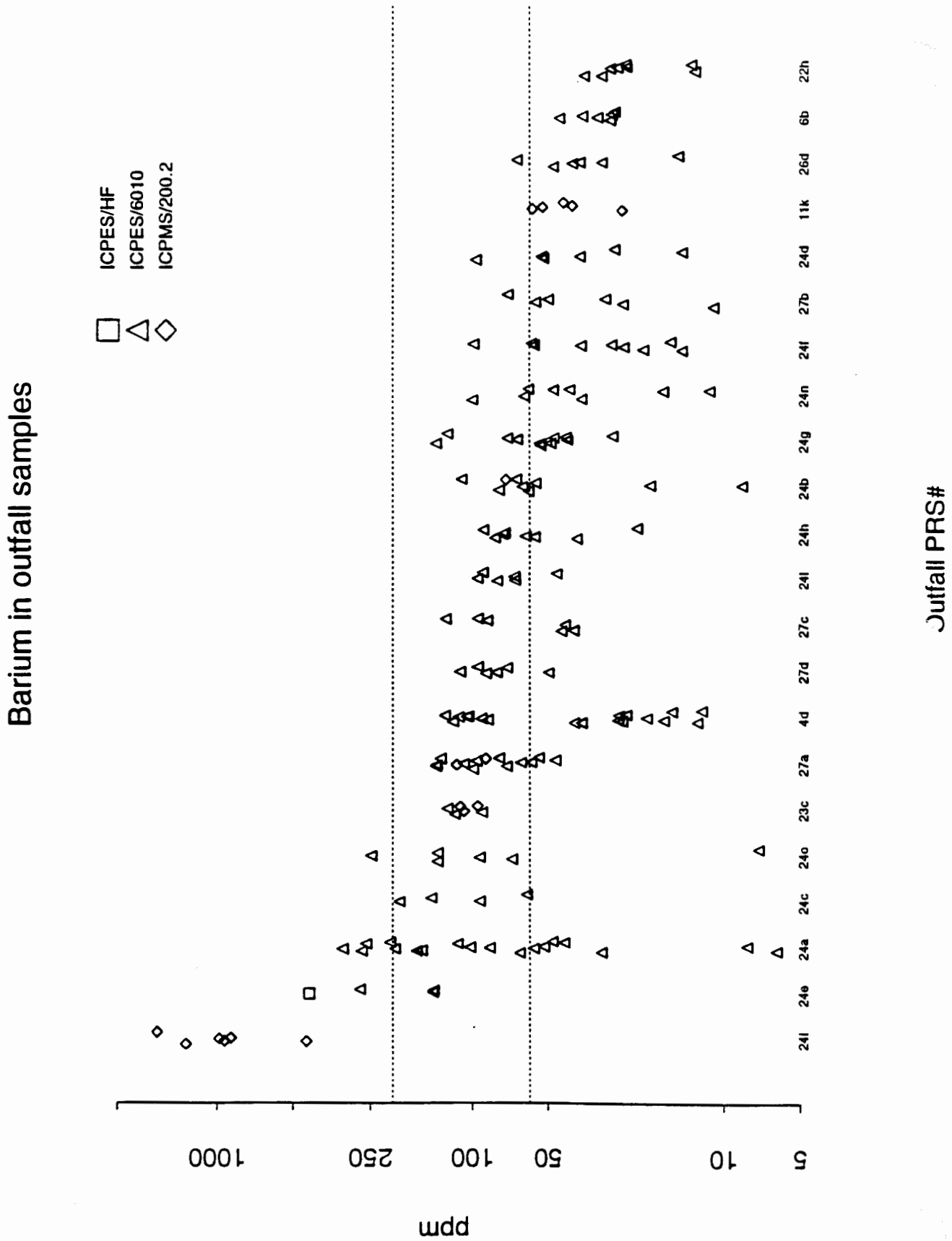

Sr90 in outfall samples
C12
ER190
7004
pCi/g
500
50
5
0.5
0.05
11k
23c
24f
24i
4d
6b
24h
24g
24e
24a
24l
27b
24n
27d
24b
22h
24c
27c
27a
24d
26d
24o
Outfall PRS#

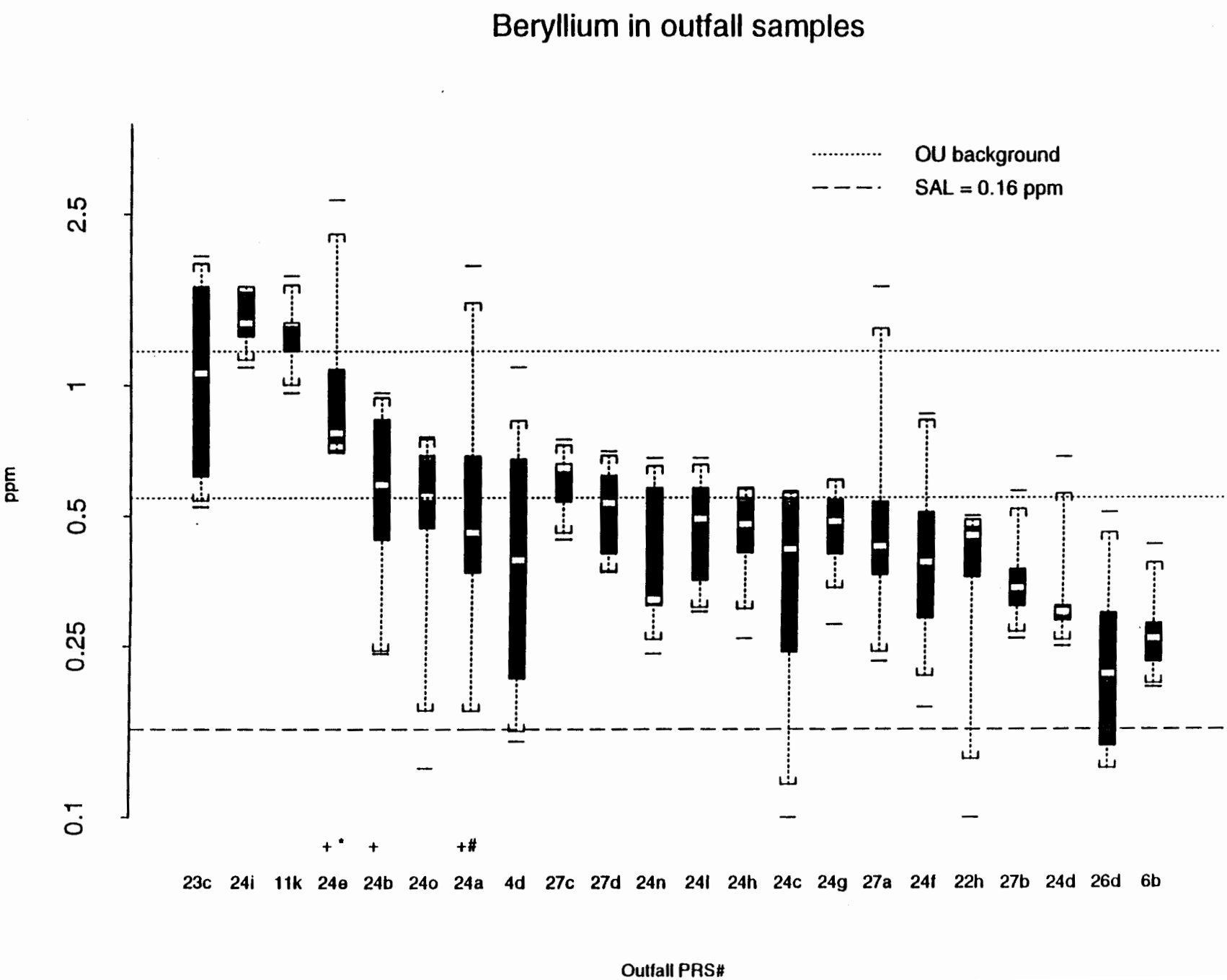

Arsenic in outfall samples
OU background
SAL = 0.4 ppm
ppm
0.5
1
2.5
5
10
25
50
+#*
+#
+#*
+#*
+#*
+#*
+#
#*
*
*
*
24i
24c
23c
24g
24e
27a
24a
27c
24f
24b
24l
24n
27d
4d
24o
11k
24h
24d
26d
27b
6b
22h
Outfall PRS#

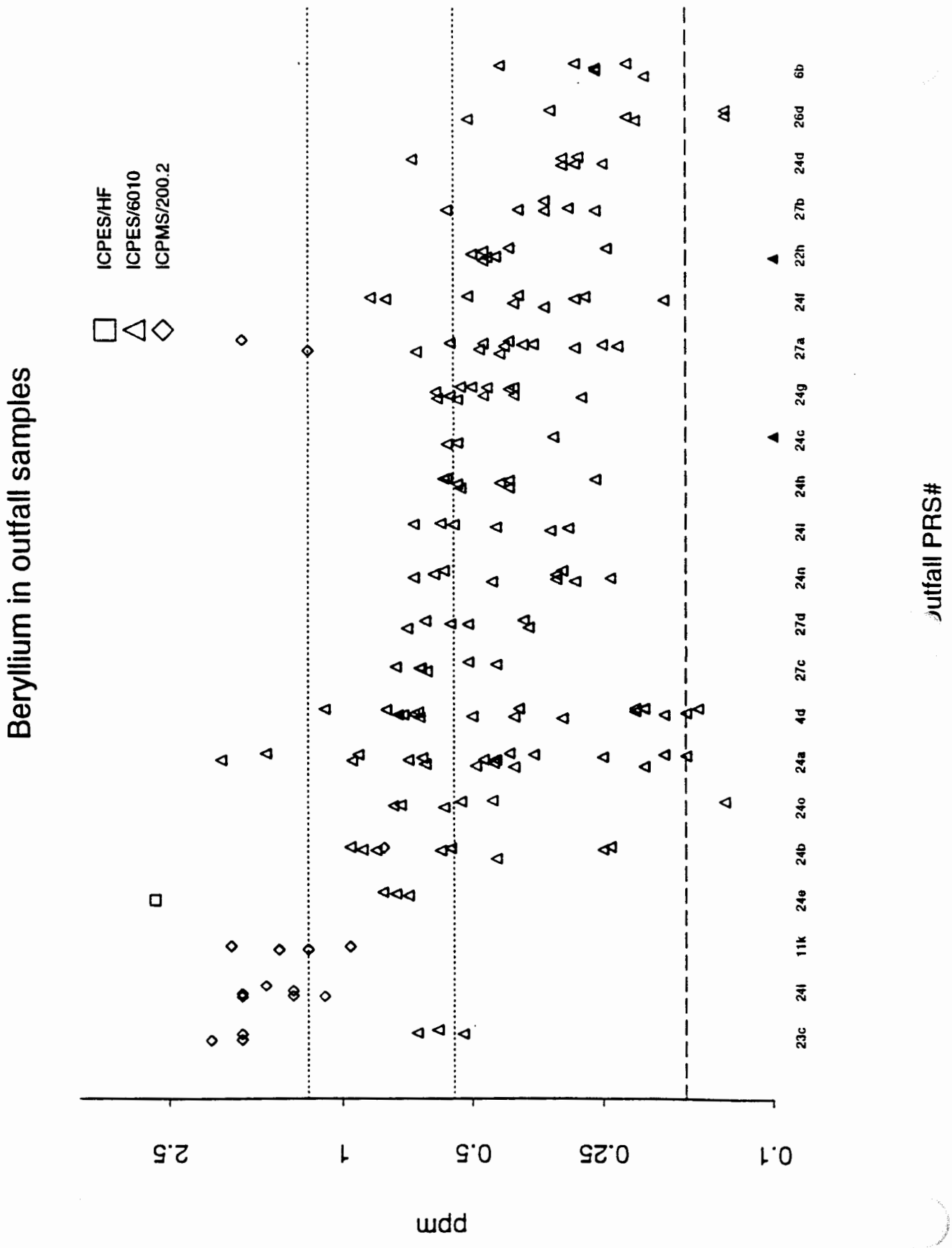

Arsenic in outfall samples
ETVAA/206.2
ETVAA/7060
ppm
50
25
10
5
2.5
1
0.5
24l
24c
23c
24g
24e
27a
24a
27c
24f
24b
24l
24n
27d
4d
24o
11k
24h
24d
26d
27b
6b
22h

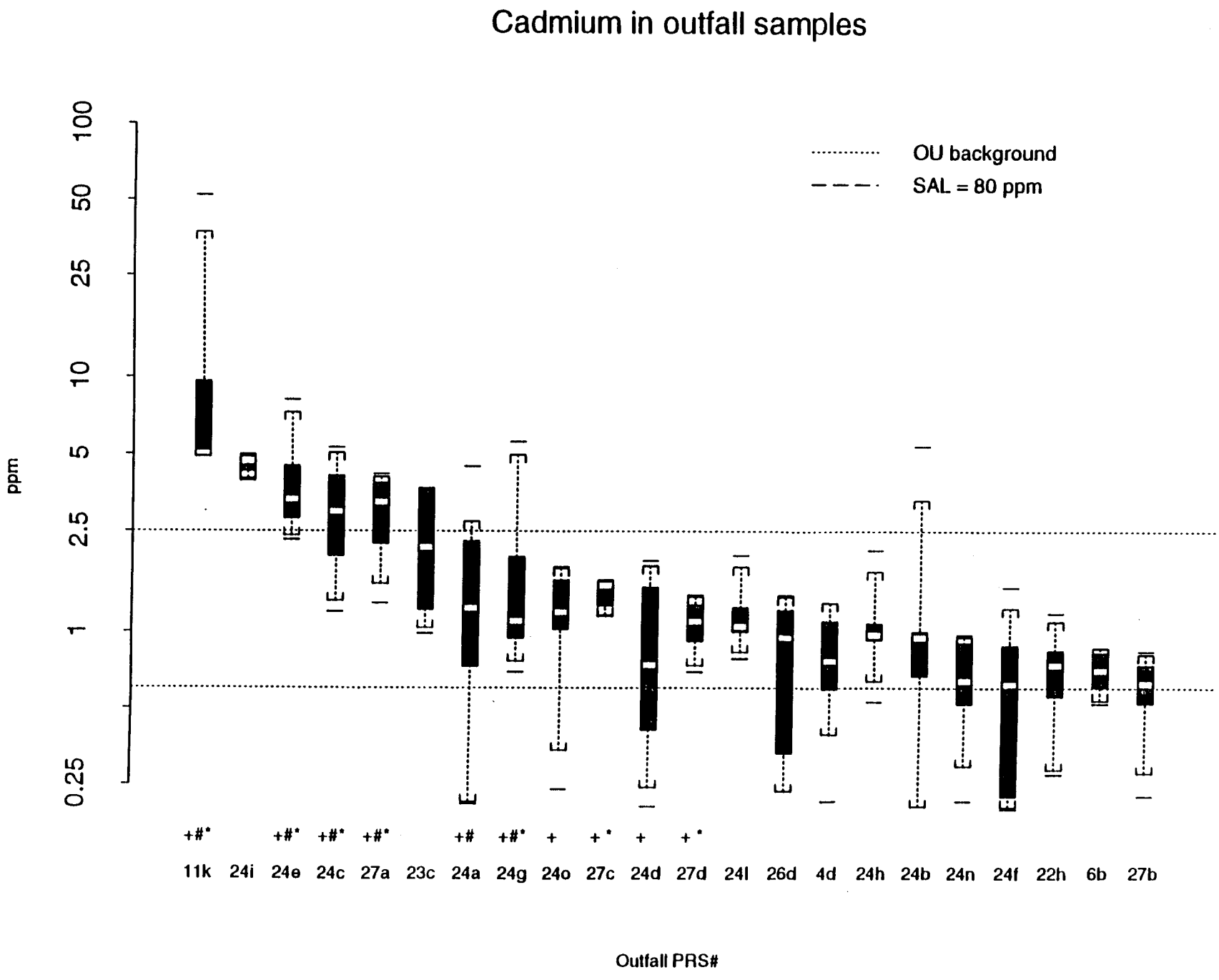

Antimony in outfall samples
ICPES/6010
ICPES/6010A
ICPMS/200.2
ppm
10.0
5.0
1.0
0.5
24c
11k
24l
24b
23c
27c
27a
27b
26d
24h
24n
4d
22h
24l
24f
24g
24d
24o
24a
27d
24e
6b
outfall PRS#

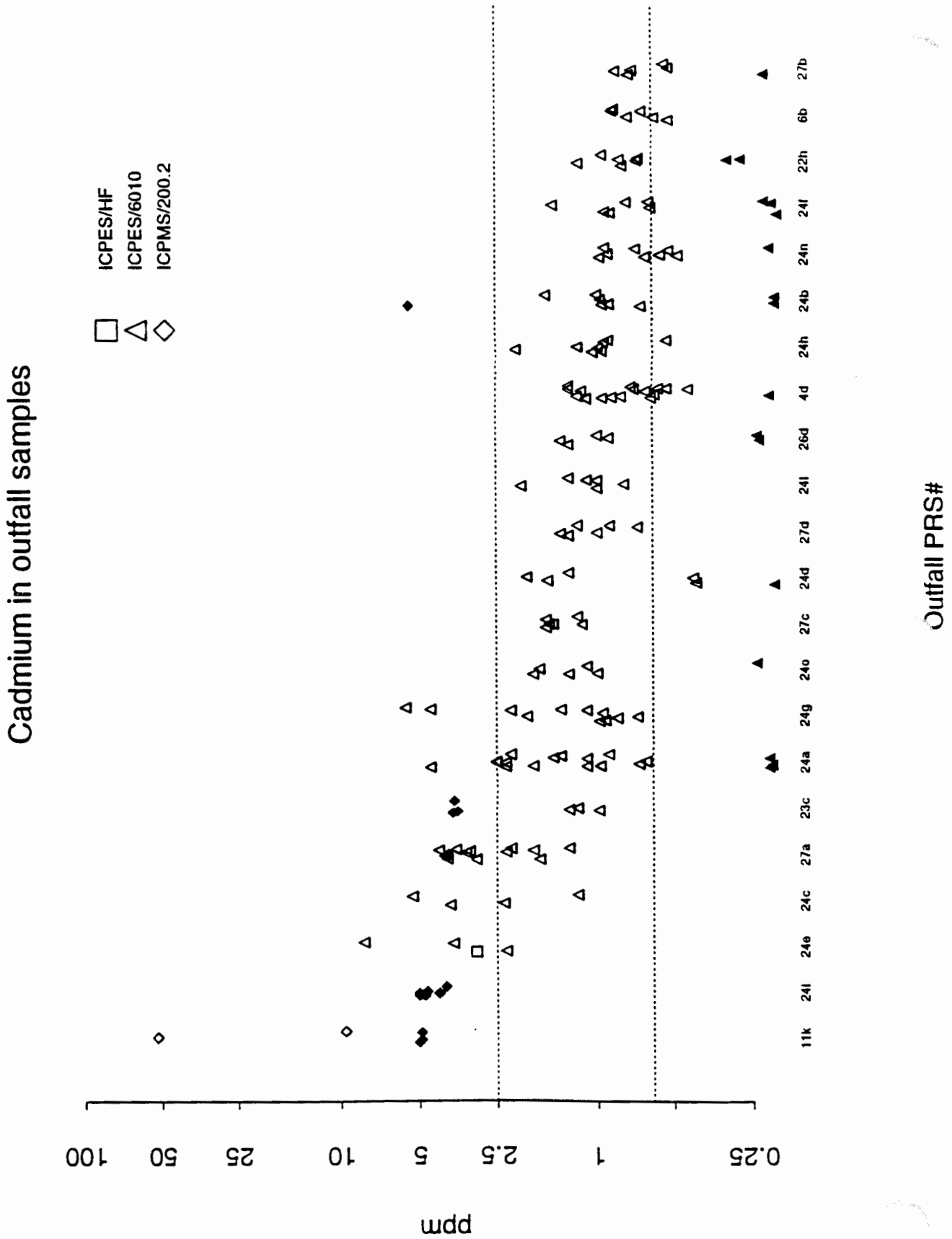

Barium in outfall samples
OU background
SAL = 5600 ppm
ppm
1000
250
100
50
10
5
+#*
+#*
+#
+
+#
*
24i
24e
24a
24c
24o
23c
27a
4d
27d
27c
24l
24h
24b
24g
24n
24f
27b
24d
11k
26d
6b
22h
Outfall PRS#

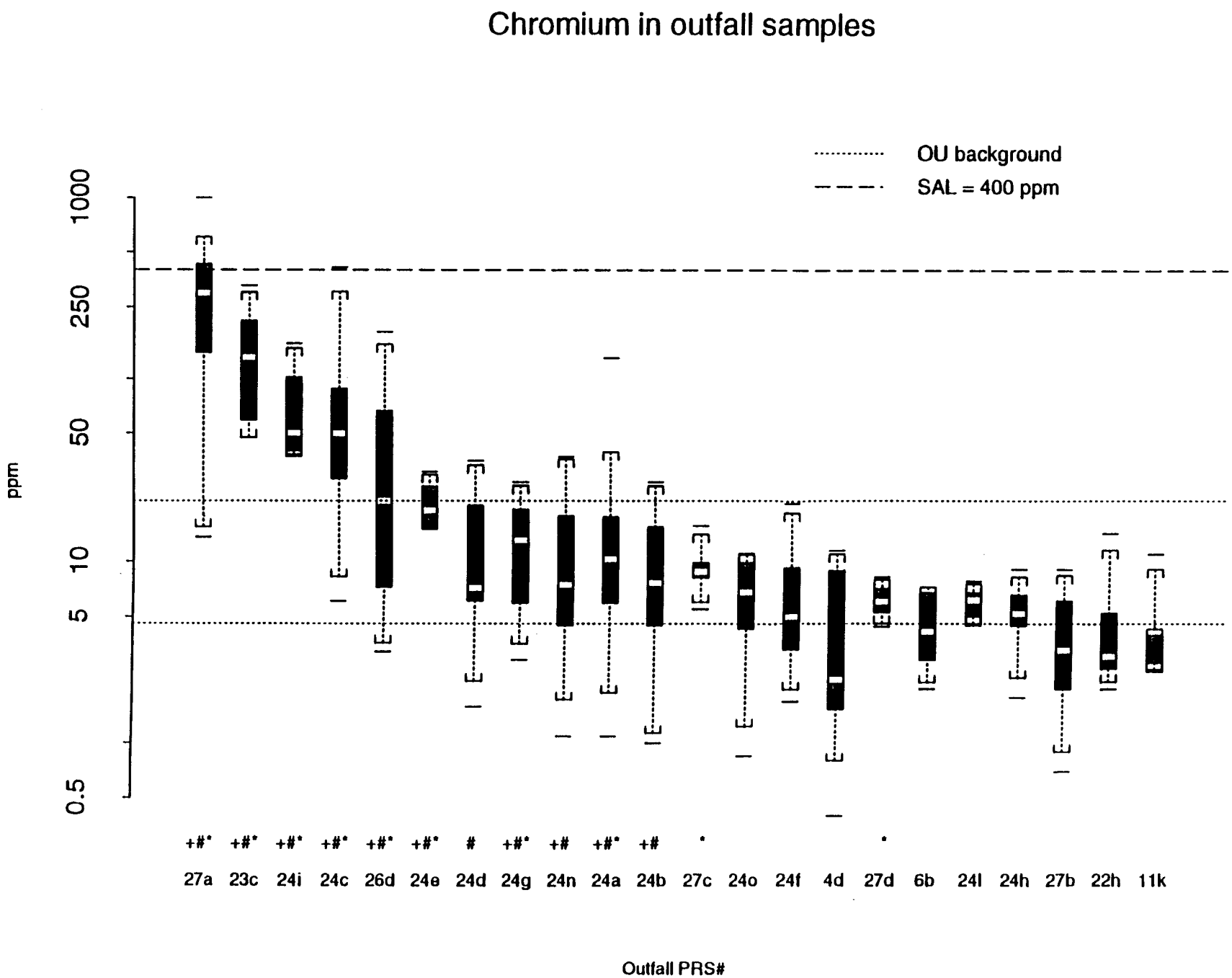

Barium in outfall samples
ICPES/HF
ICPES/6010
ICPMS/200.2
ppm
1000
250
100
50
10
5
24l
24e
24a
24c
24o
23c
27a
4d
27d
27c
24i
24h
24b
24g
24n
24f
27b
24d
11k
26d
6b
22h
Outfall PRS#

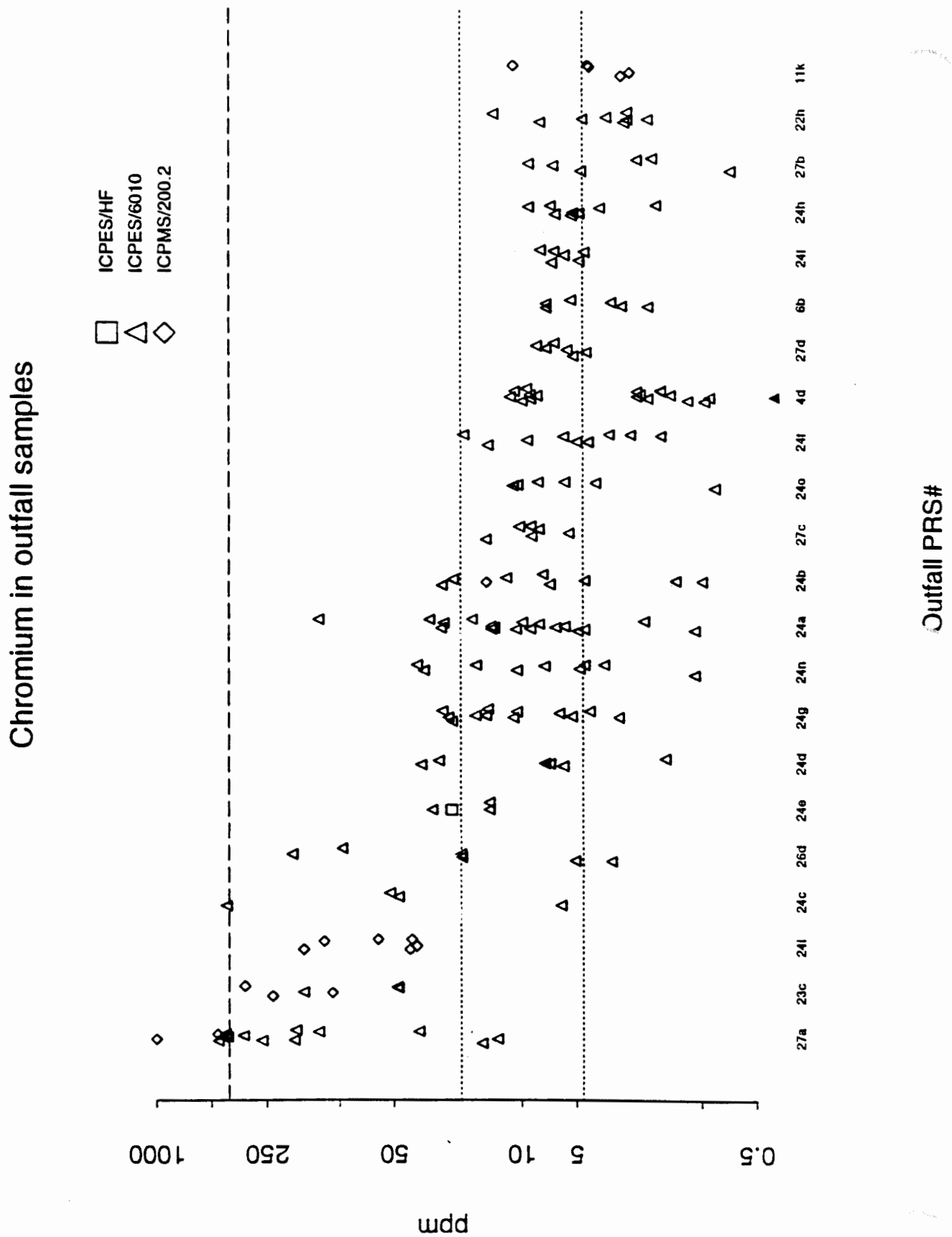

Beryllium in outfall samples
OU background
SAL = 0.16 ppm
ppm
2.5
1
0.5
0.25
0.1
+ *
+
+#
23c
24i
11k
24e
24b
24o
24a
4d
27c
27d
24n
24l
24h
24c
24g
27a
24f
22h
27b
24d
26d
6b
Outfall PRS#

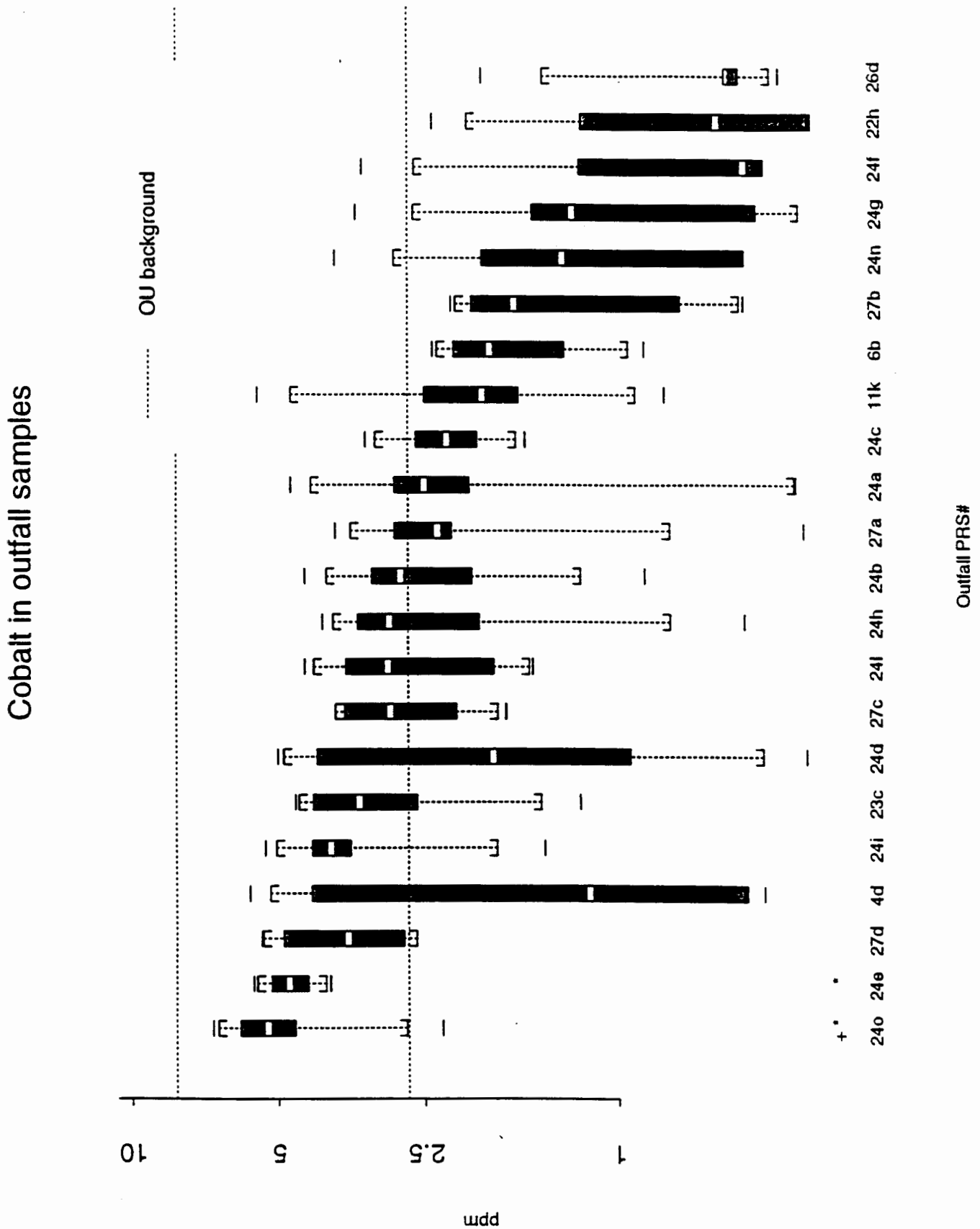

Beryllium in outfall samples
ICPES/HF
ICPES/6010
ICPMS/200.2
ppm
2.5
1
0.5
0.25
0.1
23c
24l
11k
24e
24b
24o
24a
4d
27c
27d
24n
24i
24h
24c
24g
27a
24f
22h
27b
24d
26d
6b
Outfall PRS#

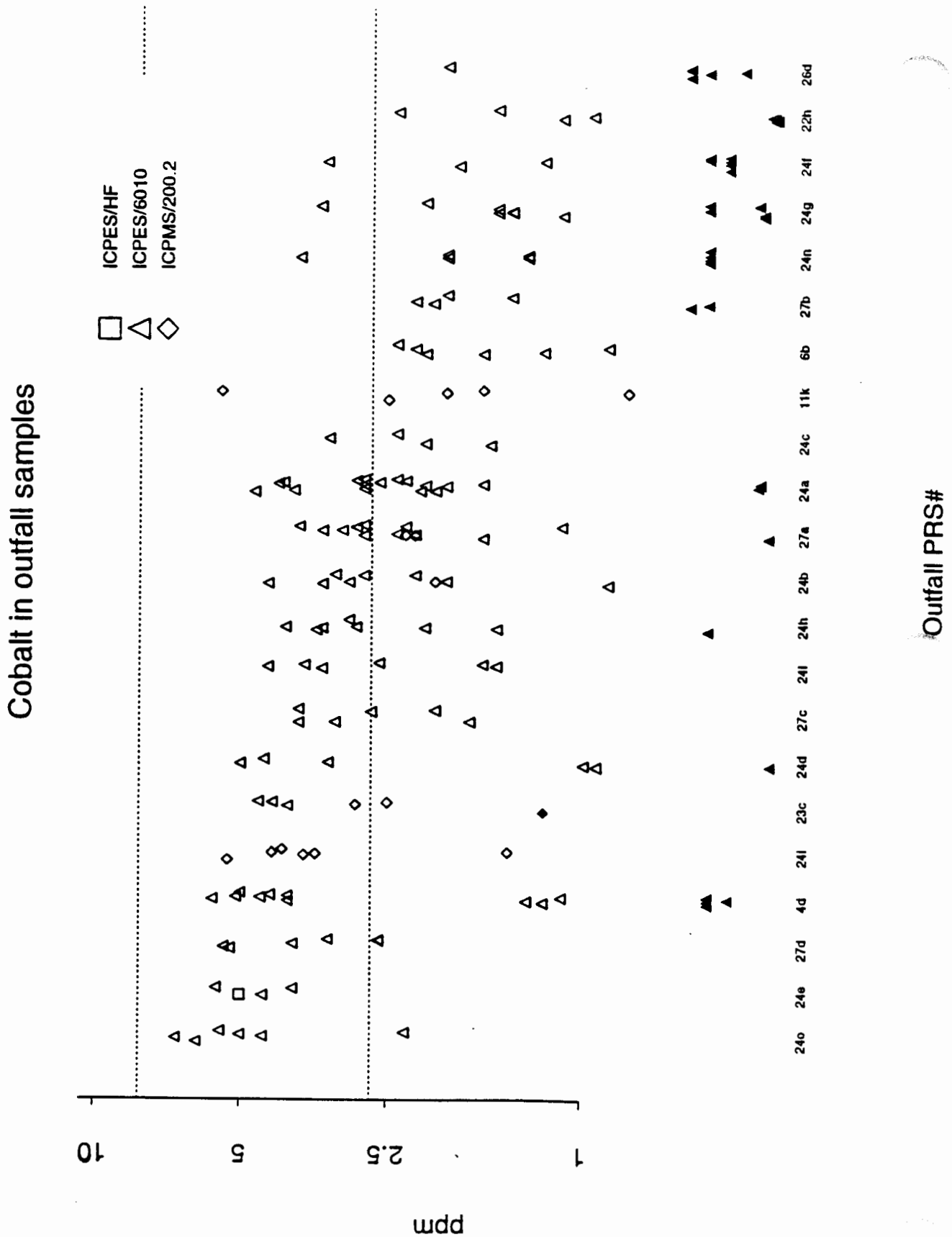

Cadmium in outfall samples
OU background
SAL = 80 ppm
ppm
100
50
25
10
5
2.5
1
0.25
+#*
+#*
+#*
+#*
+#
+#*
+
+*
+
+*
11k
24i
24e
24c
27a
23c
24a
24g
24o
27c
24d
27d
24l
26d
4d
24h
24b
24n
24f
22h
6b
27b
Outfall PRS#

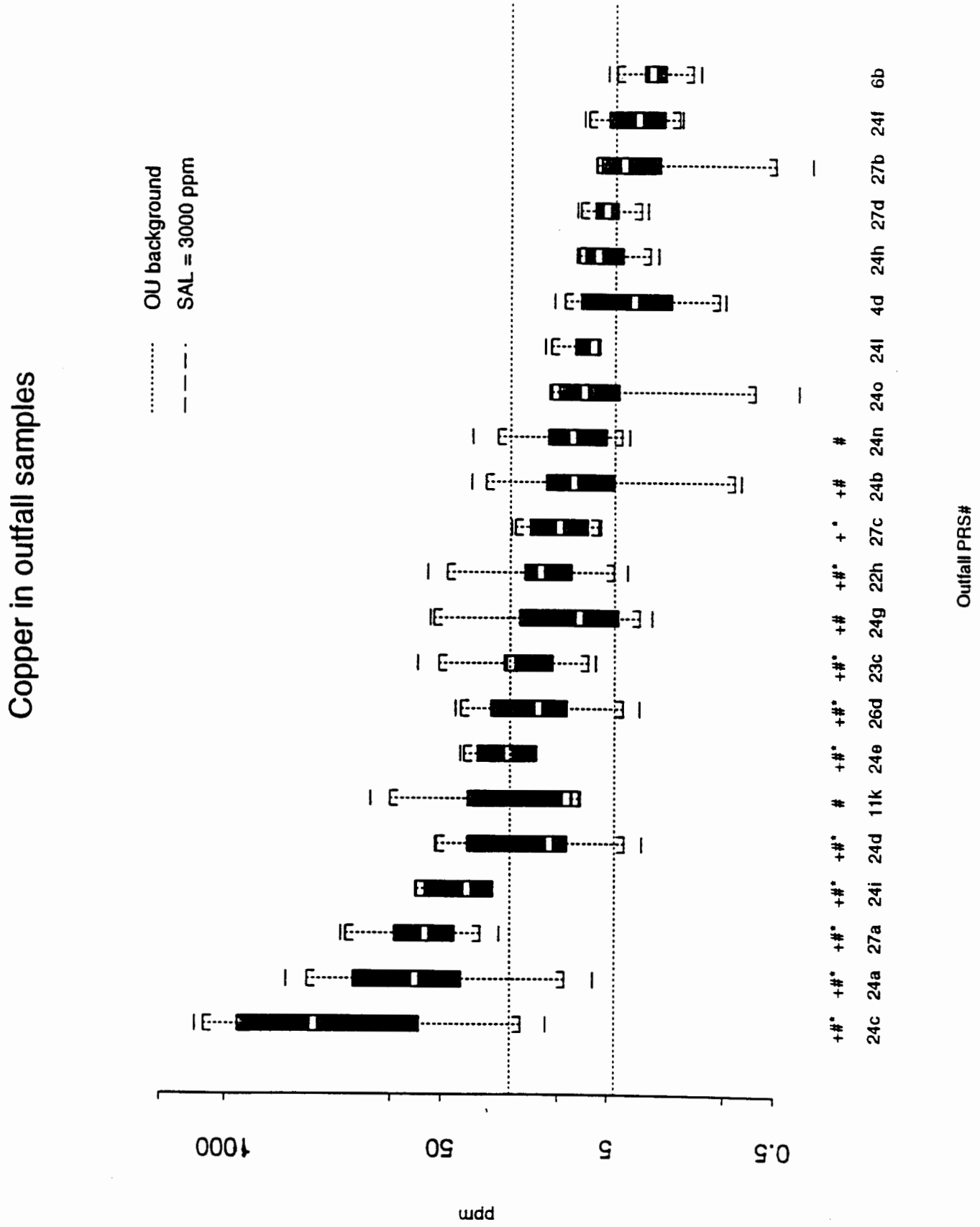

Cadmium in outfall samples
ICPES/HF
ICPES/6010
ICPMS/200.2
ppm
100
50
25
10
5
2.5
1
0.25
11k
24l
24e
24c
27a
23c
24a
24g
24o
27c
24d
27d
24l
26d
4d
24h
24b
24n
24l
22h
6b
27b
Outfall PRS#

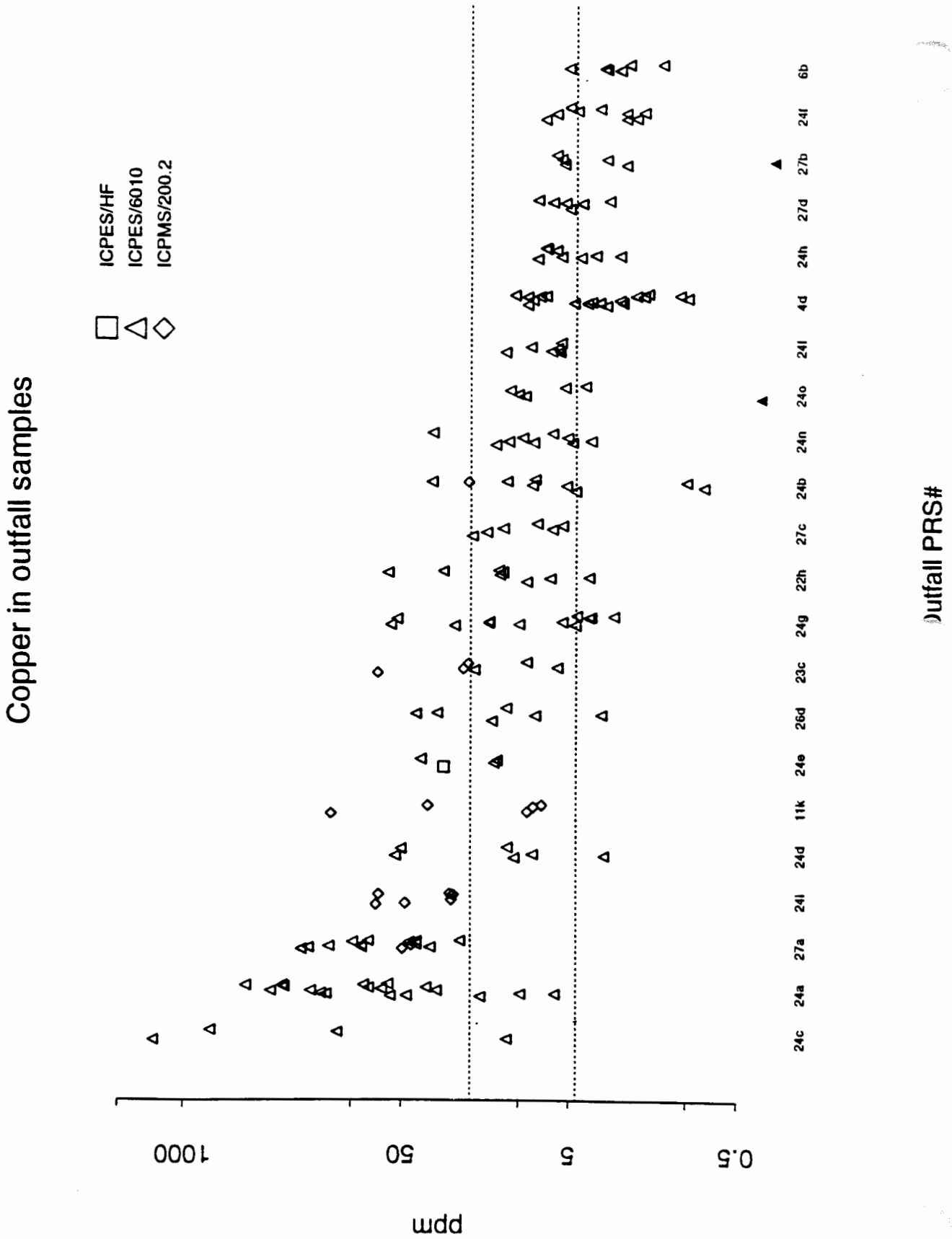

Chromium in outfall samples
OU background
SAL = 400 ppm
ppm
1000
250
50
10
5
0.5
+#*
+#*
+#*
+#*
+#*
+#*
#
+#*
+#
+#*
+#
•
•
27a
23c
24i
24c
26d
24e
24d
24g
24n
24a
24b
27c
24o
24f
4d
27d
6b
24l
24h
27b
22h
11k
Outfall PRS#

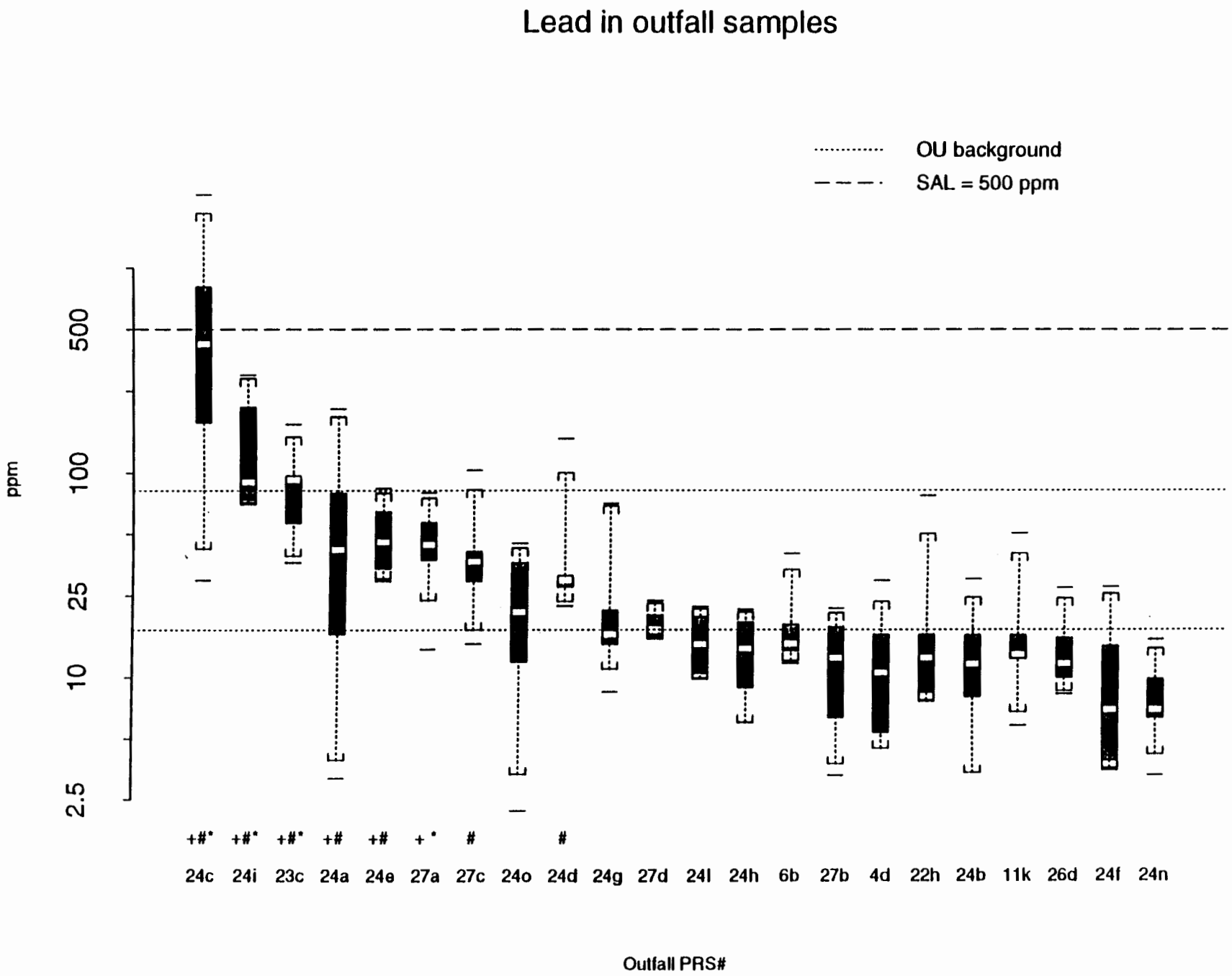

Chromium in outfall samples
ICPES/HF
ICPES/6010
ICPMS/200.2
ppm
1000
250
50
10
5
0.5
27a
23c
24l
24c
26d
24e
24d
24g
24n
24a
24b
27c
24o
24f
4d
27d
6b
24l
24h
27b
22h
11k
Outfall PRS#

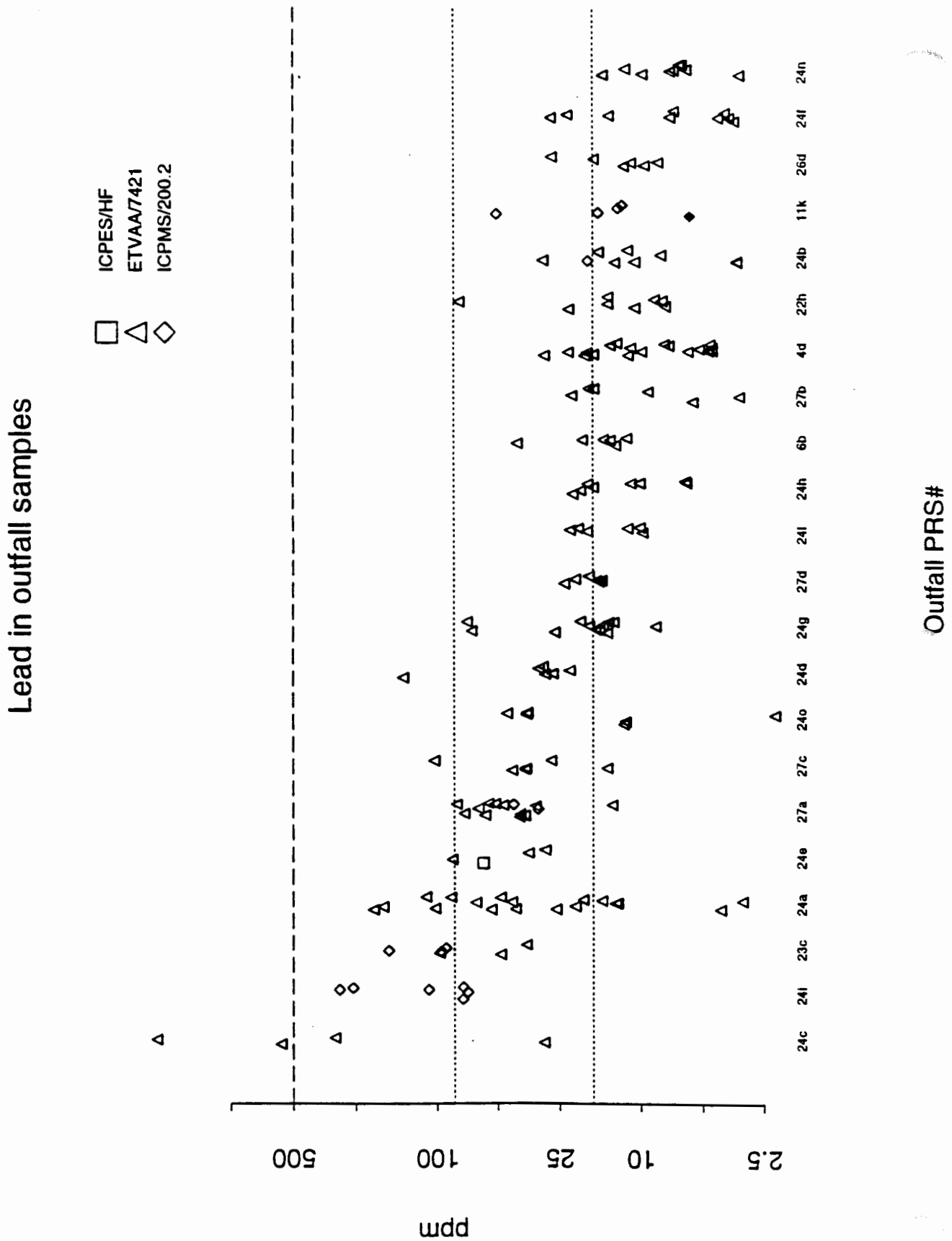

Cobalt in outfall samples
OU background
26d
22h
24f
24g
24n
27b
6b
11k
24c
24a
27a
24b
24h
24l
27c
24d
23c
24i
4d
27d
24e
24o
Outfall PRS#
1
2.5
5
10
ppm

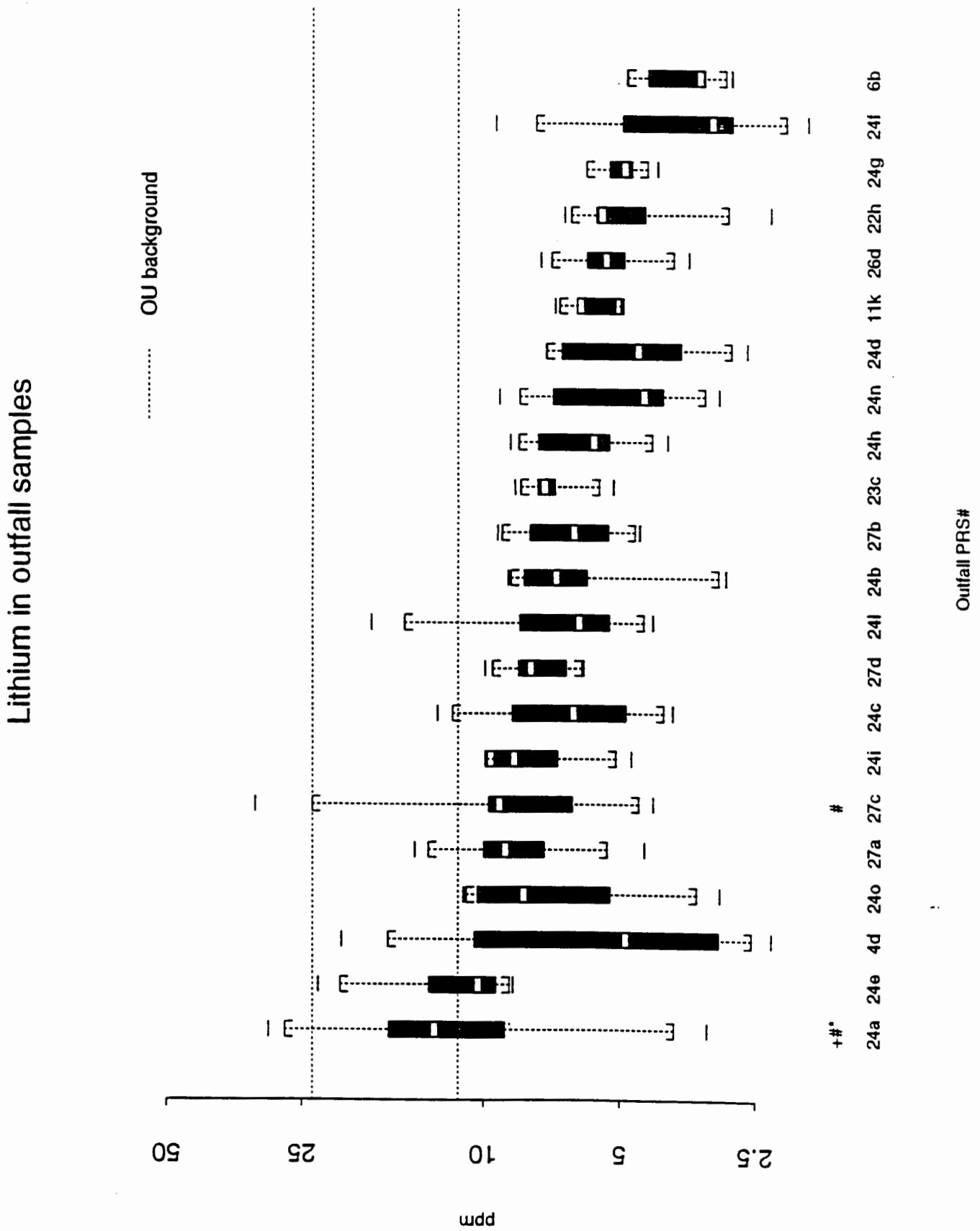

Cobalt in outfall samples
ICPES/HF
ICPES/6010
ICPMS/200.2
ppm
10
5
2.5
1
24o
24e
27d
4d
24l
23c
24d
27c
24l
24h
24b
27a
24a
24c
11k
6b
27b
24n
24g
24f
22h
26d
Outfall PRS#

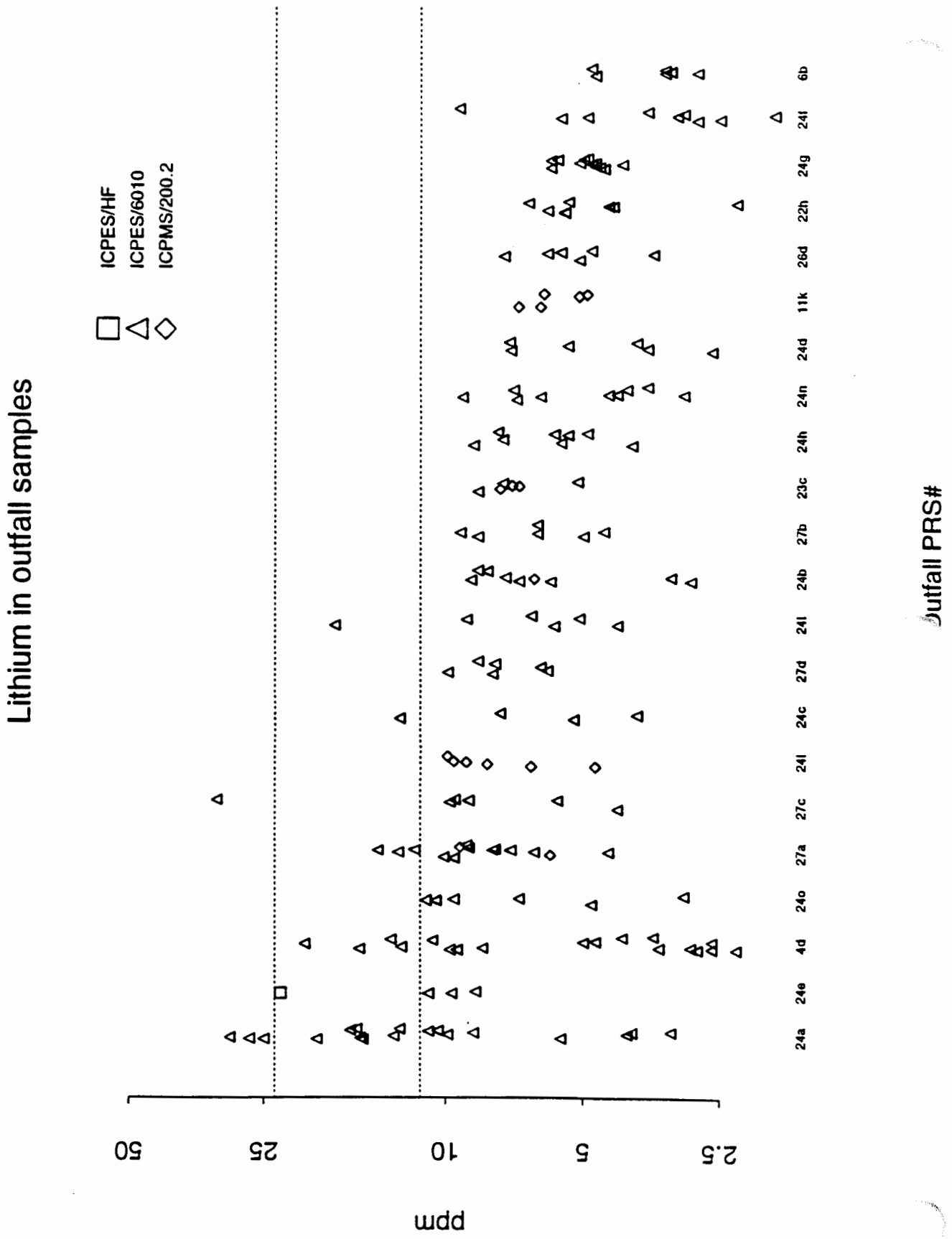

Copper in outfall samples
OU background
SAL = 3000 ppm
ppm
0.5
5
50
1000
Outfall PRS#
24c
24a
27a
24i
24d
11k
24e
26d
23c
24g
22h
27c
24b
24n
24o
24l
4d
24h
27d
27b
24f
6b

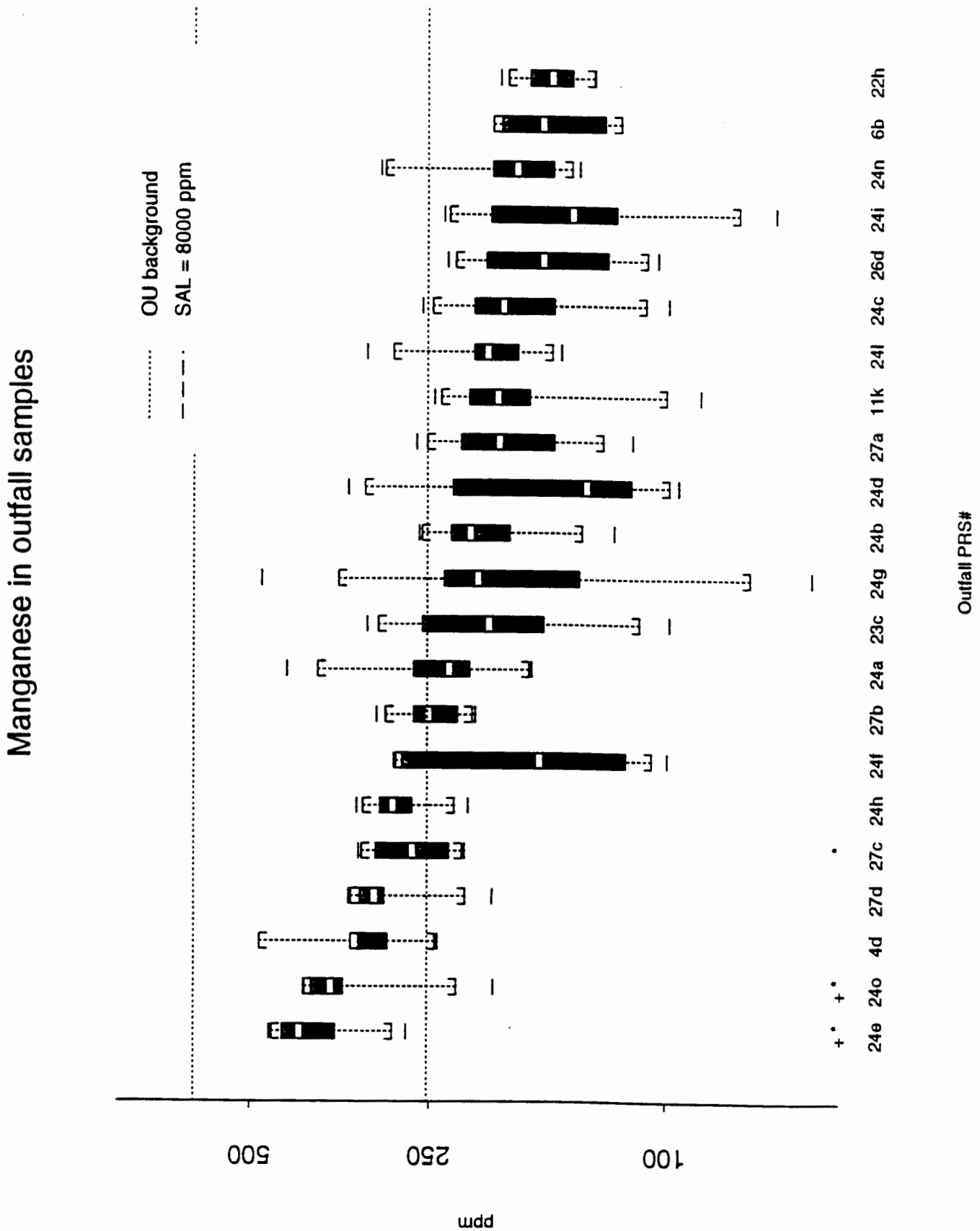

Copper in outfall samples
ICPES/HF
ICPES/6010
ICPMS/200.2
ppm
1000
50
5
0.5
24c
24a
27a
24i
24d
11k
24e
26d
23c
24g
22h
27c
24b
24n
24o
24l
4d
24h
27d
27b
24f
6b
Outfall PRS#

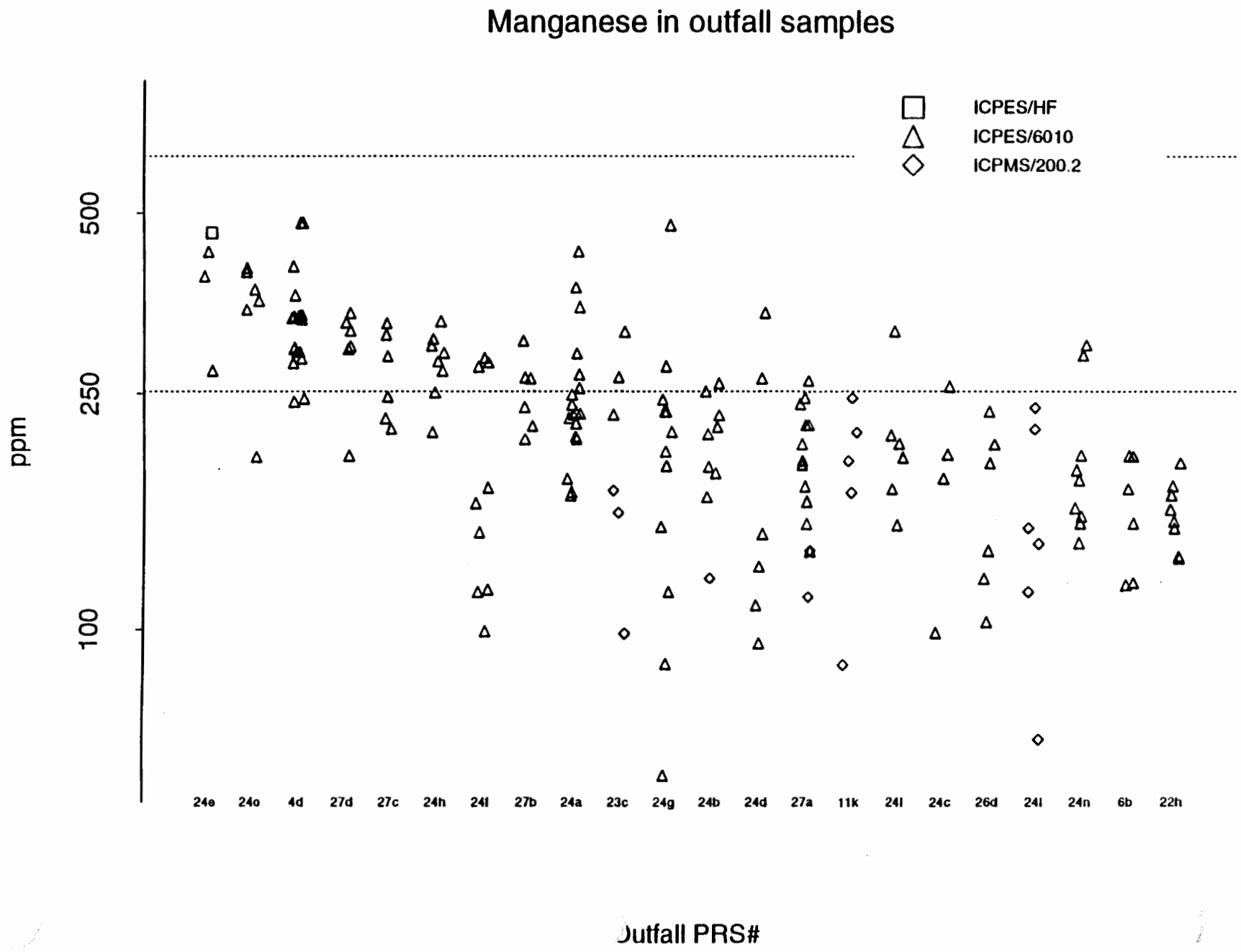

Lead in outfall samples
OU background
SAL = 500 ppm
ppm
500
100
25
10
2.5
+#*
+#*
+#*
+#
+#
+*
#
#
24c
24i
23c
24a
24e
27a
27c
24o
24d
24g
27d
24l
24h
6b
27b
4d
22h
24b
11k
26d
24f
24n
Outfall PRS#

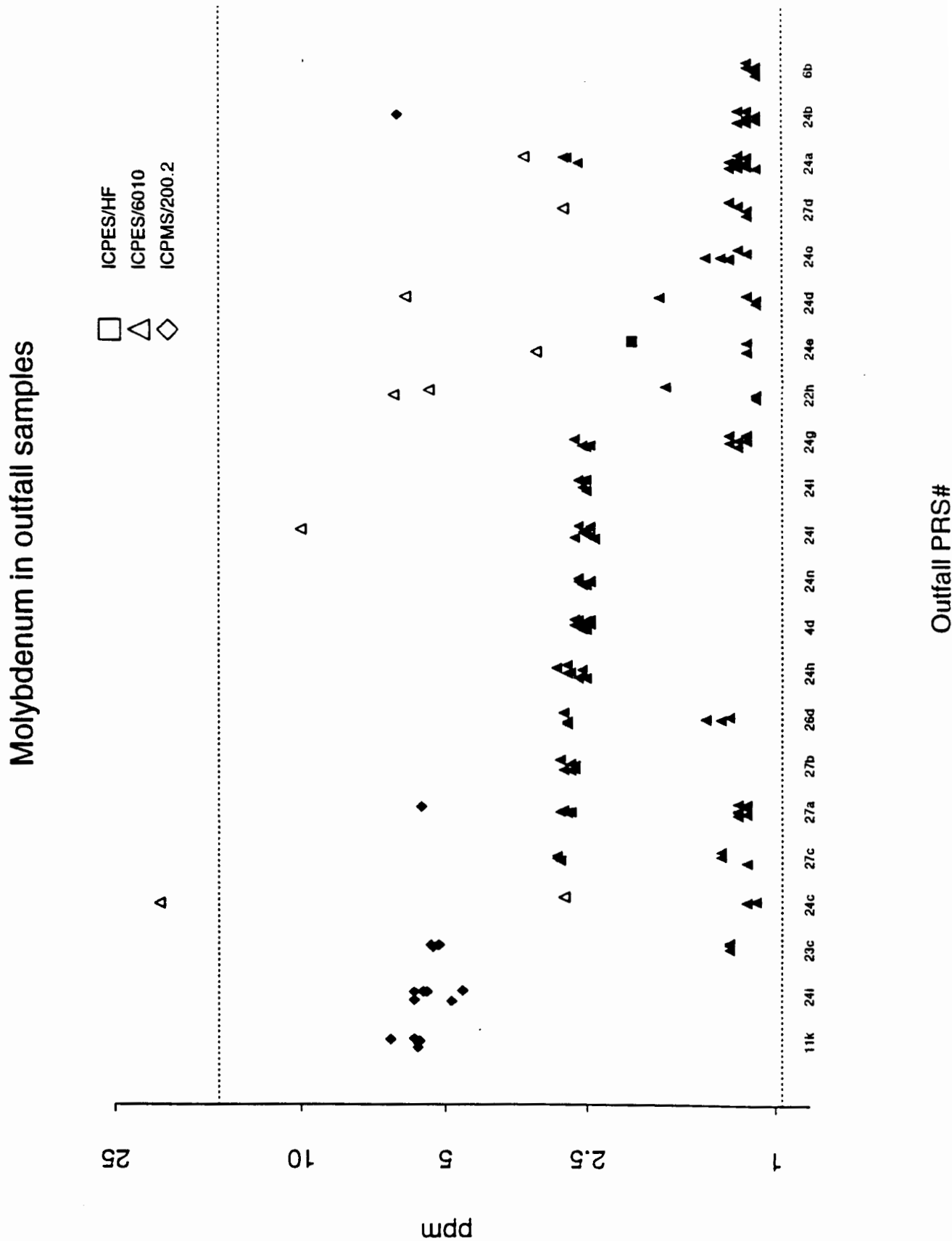

Lead in outfall samples
ICPES/HF
ETVAA/7421
ICPMS/200.2
ppm
500
100
25
10
2.5
24c
24l
23c
24a
24e
27a
27c
24o
24d
24g
27d
24i
24h
6b
27b
4d
22h
24b
11k
26d
24f
24n
Outfall PRS#


Lithium in outfall samples
OU background
ppm
50
25
10
5
2.5
24a
24e
4d
24o
27a
27c
24i
24c
27d
24l
24b
27b
23c
24h
24n
24d
11k
26d
22h
24g
24f
6b
+#*
#
Outfall PRS#


Lithium in outfall samples
ICPES/HF
ICPES/6010
ICPMS/200.2
ppm
50
25
10
5
2.5
24a
24e
4d
24o
27a
27c
24l
24c
27d
24l
24b
27b
23c
24h
24n
24d
11k
26d
22h
24g
24f
6b
Outfall PRS#


Manganese in outfall samples
OU background
SAL = 8000 ppm
22h
6b
24n
24i
26d
24c
24l
11k
27a
24d
24b
24g
23c
24a
27b
24f
24h
27c
27d
4d
24o
24e
Outfall PRS#
100
250
500
ppm


Manganese in outfall samples
ICPES/HF
ICPES/6010
ICPMS/200.2
ppm
500
250
100
24e
24o
4d
27d
27c
24h
24l
27b
24a
23c
24g
24b
24d
27a
11k
24l
24c
26d
24l
24n
6b
22h
Outfall PRS#


Molybdenum in outfall samples
ICPES/HF
ICPES/6010
ICPMS/200.2
ppm
25
10
5
2.5
1
11k
24l
23c
24c
27c
27a
27b
26d
24h
4d
24n
24f
24l
24g
22h
24e
24d
24o
27d
24a
24b
6b
Outfall PRS#

APPENDIX B

DATA TABLES FOR ANALYTES EXCEEDING THE 95.5 PERCENTILE OF THEIR RESPECTIVE BASELINE

Outfalls
Laboratory Radiological Data

The data in this appendix represent only detectable levels of organics and analytical values exceeding the 95.5 percentile of the applicable baseline data. A complete set of data is available on the Facility for Information Management and Display database.

The following table lists definitions for acrocyms used in the appendices:

FE	rinsate blank
FB	trip blank
FR	field blank
NS	near-surface soil sample
SU	surface soil sample
FD	field duplicate
ETVAA	electro thermal vapor atomic absorbtion
PTCG	photothermal gas chromotography
FAA	flame atomic absorbtion
RAS	radio alpha spectroscopy
PC	proportional counting
DNA	delayed neutron activation
GCMS	gas chromatorgraphy mass spectroscopy
ICPES	inductively-coupled plasma emmissions spectroscopy

Laboratory Radiological Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
21-027(d)	21-1331	AAA0617	0 to 6 in.	AM-241	13099	18014	SU	RAS	.141 PCI/G
		AAA0617	0 to 6 in.	PU-239	13099	18016	SU	RAS	4.46 PCI/G
		AAA0618	0 to 6 in.	AM-241	13099	18014	FD	RAS	.16 PCI/G
		AAA0618	0 to 6 in.	PU-239	13099	18016	FD	RAS	4.6 PCI/G
21-023(c)	21-1335	AAA0622	0-4 in.	AM-241	13117		SU	G	154 PCI/G
		AAA0622	0-4 in.	PU-238	13117		SU	RAS	1.8 PCI/G
		AAA0622	0-4 in.	PU-239	13117		SU	RAS	300 PCI/G
		AAA0622	0-4 in.	SR-90	13117		SU	PC	.9 PCI/G
		AAA0622	0-4 in.	U	13117		SU	DNA	7.9 UG/G
	21-1336	AAA0623	0 to 6 in.	AM 241	13117		SU	G	140 PCI/G
		AAA0623	0 to 6 in.	PU-238	13117		SU	RAS	.27 PCI/G
		AAA0623	0 to 6 in.	PU-239	13117		SU	RAS	37 PCI/G
		AAA0623	0 to 6 in.	SR-90	13117		SU	PC	.8 PCI/G
		AAA0623	0 to 6 in.	U	13117		SU	DNA	7.7 UG/G
	21-1337	AAA0624	0 to 6 in.	AM-241	13099	18014	SU	RAS	14.25 PCI/G
		AAA0624	0 to 6 in.	PU-238	13099	18016	SU	RAS	.24 PCI/G
		AAA0624	0 to 6 in.	PU-239	13099	18016	SU	RAS	34.34 PCI/G
	21-1338	AAA0625	0 to 6 in.	AM-241	13117		SU	G	344 PCI/G
		AAA0625	0 to 6 in.	PU-238	13117		SU	RAS	1.7 PCI/G
		AAA0625	0 to 6 in.	PU-239	13117		SU	RAS	260 PCI/G
		AAA0625	0 to 6 in.	SR-90	13117		SU	PC	.9 PCI/G
		AAA0625	0 to 6 in.	U	13117		SU	DNA	8.6 UG/G
	21-1339	AAA0628	0-3 in.	AM-241	13099	18014	SU	RAS	213.4 PCI/G
		AAA0628	0-3 in.	PU-238	13099	18016	SU	RAS	.56 PCI/G
		AAA0628	0-3 in.	PU-239	13099	18016	SU	RAS	107.5 PCI/G
		AAA0628	0-3 in.	U	13099		SU	DNA	7.7 UG/G

Laboratory Radiological Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1340	AAA0629	0 to 6 in.	AM-241	13099	18014	SU	RAS	15.78 PCI/G
		AAA0629	0 to 6 in.	PU-239	13099	18016	SU	RAS	28.85 PCI/G
21-024(e)	21-1341	AAA0630	0 to 6 in.	AM-241	13099	18014	SU	RAS	1.53 PCI/G
		AAA0630	0 to 6 in.	H-3	13099		SU	LS	41700 PCI/L
		AAA0630	0 to 6 in.	PU-238	13099	18016	SU	RAS	.269 PCI/G
		AAA0630	0 to 6 in.	PU-239	13099	18016	SU	RAS	41.49 PCI/G
		AAA0630	0 to 6 in.	U	13099		SU	DNA	37.7 UG/G
		AAA0631	0 to 6 in.	AM-241	13099	18014	FD	RAS	1.45 PCI/G
		AAA0631	0 to 6 in.	H-3	13099		FD	LS	28700 PCI/L
		AAA0631	0 to 6 in.	PU-239	13099	18016	FD	RAS	40.79 PCI/G
		AAA0632	6 to 11 in.	AM-241	13099	18014	NS	RAS	.614 PCI/G
		AAA0632	6 to 11 in.	PU-239	13099	18016	NS	RAS	13.52 PCI/G
		AAA0632	6 to 11 in.	U	13099		NS	DNA	15 UG/G
	21-1342	AAA0633	0-4 in.	AM-241	13099	18014	SU	RAS	.464 PCI/G
		AAA0633	0-4 in.	PU-239	13099	18016	SU	RAS	11.77 PCI/G
		AAA0633	0-4 in.	U	13099		SU	DNA	15.3 UG/G
21-024(d)	21-1347	AAA0852	0 to 6 in.	AM-241	13187	18506	SU	RAS	.404 PCI/G
		AAA0852	0 to 6 in.	PU-239	13187	18509	SU	RAS	9.71 PCI/G
	21-1348	AAA0853	0 to 6 in.	AM-241	13187	18506	SU	RAS	.958 PCI/G
		AAA0853	0 to 6 in.	H-3	13187		SU	LS	40500 PCI/L
		AAA0853	0 to 6 in.	PU-238	13187	18509	SU	RAS	.25 PCI/G
		AAA0853	0 to 6 in.	PU-239	13187	18509	SU	RAS	33.8 PCI/G
		AAA0853	0 to 6 in.	U	13187		SU	DNA	8 UG/G
		AAA0854	6 to 12 in.	AM-241	13187	18506	NS	RAS	.528 PCI/G
		AAA0854	6 to 12 in.	H-3	13187		NS	LS	52000 PCI/L
		AAA0854	6 to 12 in.	PU-239	13187	18509	NS	RAS	16.1 PCI/G
		AAA0855	12 to 18 in.	H-3	13187		NS	LS	18700 PCI/L

Laboratory Radiological Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
21-027(c)	21-1349	AAA0856	0 to 6 in.	AM-241	13247		SU	G	.746 PCI/G
		AAA0856	0 to 6 in.	AM-241	13247		SU	RAS	.588 PCI/G
		AAA0856	0 to 6 in.	PU-239	13247		SU	RAS	10.5 PCI/G
	21-1350	AAA0857	0 to 6 in.	AM-241	13247		SU	G	1.49 PCI/G
		AAA0857	0 to 6 in.	AM-241	13247		SU	RAS	1.75 PCI/G
		AAA0857	0 to 6 in.	PU-238	13247		SU	RAS	.518 PCI/G
		AAA0857	0 to 6 in.	PU-239	13247		SU	RAS	30.2 PCI/G
	21-1351	AAA0858	0 to 6 in.	AM-241	13247		SU	G	4.15 PCI/G
		AAA0858	0 to 6 in.	AM-241	13247		SU	RAS	2.86 PCI/G
		AAA0858	0 to 6 in.	PU-238	13247		SU	RAS	.628 PCI/G
		AAA0858	0 to 6 in.	PU-239	13247		SU	RAS	84.5 PCI/G
		AAA0861	0 to 6 in.	AM-241	13247		FD	G	3.6 PCI/G
		AAA0861	0 to 6 in.	AM-241	13247		FD	RAS	3.02 PCI/G
		AAA0861	0 to 6 in.	PU-238	13247		FD	RAS	1.13 PCI/G
		AAA0861	0 to 6 in.	PU-239	13247		FD	RAS	74.6 PCI/G
	21-1352	AAA0862	0 to 6 in.	AM-241	13158	18537	SU	RAS	.41 PCI/G
		AAA0862	0 to 6 in.	PU-239	13158	18539	SU	RAS	5.67 PCI/G
	21-1353	AAA0863	0 to 6 in.	AM-241	13158	18537	SU	RAS	.262 PCI/G
	21-1354	AAA0864	0 to 6 in.	AM-241	13158	18537	SU	RAS	.507 PCI/G
		AAA0864	0 to 6 in.	PU-239	13158	18539	SU	RAS	3.02 PCI/G
21-027(a)	21-1361	AAA0872	0 to 6 in.	AM-241	13247		SU	G	17.4 PCI/G
		AAA0872	0 to 6 in.	AM-241	13247		SU	RAS	14.5 PCI/G
		AAA0872	0 to 6 in.	PU-238	13247		SU	RAS	4.08 PCI/G
		AAA0872	0 to 6 in.	PU-239	13247		SU	RAS	30.4 PCI/G
		AAA0872	0 to 6 in.	U	13247		SU	DNA	28.8 UG/G

Laboratory Radiological Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1362	AAA0873	0 to 6 in.	AM-241	13247		SU	G	26.3 PCI/G
		AAA0873	0 to 6 in.	AM-241	13247		SU	RAS	34 PCI/G
		AAA0873	0 to 6 in.	PU-238	13247		SU	RAS	12.1 PCI/G
		AAA0873	0 to 6 in.	PU-239	13247		SU	RAS	193 PCI/G
		AAA0873	0 to 6 in.	U	13247		SU	DNA	8.6 UG/G
	21-1363	AAA0874	0 to 6 in.	AM-241	13247		SU	G	1.49 PCI/G
		AAA0874	0 to 6 in.	AM-241	13247		SU	RAS	.784 PCI/G
		AAA0874	0 to 6 in.	PU-238	13247		SU	RAS	1.24 PCI/G
		AAA0874	0 to 6 in.	PU-239	13247		SU	RAS	16.8 PCI/G
		AAA0874	0 to 6 in.	U	13247		SU	DNA	7.6 UG/G
	21-1364	AAA0875	0 to 6 in.	AM-241	13247		SU	G	14.9 PCI/G
		AAA0875	0 to 6 in.	AM-241	13247		SU	RAS	8.77 PCI/G
		AAA0875	0 to 6 in.	PU-238	13247		SU	RAS	7.89 PCI/G
		AAA0875	0 to 6 in.	PU-239	13247		SU	RAS	43.6 PCI/G
		AAA0875	0 to 6 in.	U	13247		SU	DNA	158.6 UG/G
	21-1365	AAA0876	0 to 6 in.	AM-241	13117		SU	G	11.2 PCI/G
		AAA0876	0 to 6 in.	H-3	13117		SU	LS	8000 PCI/L
		AAA0876	0 to 6 in.	H-3	13117		SU	LS	9500 PCI/L
		AAA0876	0 to 6 in.	PU-238	13117		SU	RAS	3.1 PCI/G
		AAA0876	0 to 6 in.	PU-239	13117		SU	RAS	50 PCI/G
		AAA0876	0 to 6 in.	U	13117		SU	DNA	137 UG/G
	21-1366	AAA0877	0 to 6 in.	AM-241	13158	18537	SU	RAS	12.11 PCI/G
		AAA0877	0 to 6 in.	H-3	13158		SU	LS	127400 PCI/L
		AAA0877	0 to 6 in.	PU-238	13158	18539	SU	RAS	10.7 PCI/G
		AAA0877	0 to 6 in.	PU-239	13158	18539	SU	RAS	73.29 PCI/G
		AAA0877	0 to 6 in.	U	13158		SU	DNA	99.3 UG/G
	21-1367	AAA0878	0 to 6 in.	AM-241	13158	18537	SU	RAS	9.96 PCI/G

Laboratory Radiological Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0878	0 to 6 in.	H-3	13158		SU	LS	284700 PCI/L
		AAA0878	0 to 6 in.	PU-238	13158	18539	SU	RAS	8.79 PCI/G
		AAA0878	0 to 6 in.	PU-239	13158	18539	SU	RAS	67.26 PCI/G
		AAA0878	0 to 6 in.	U	13158		SU	DNA	111.4 UG/G
	21-1368	AAA0879	0 to 6 in.	H-3	13158		SU	LS	45900 PCI/L
		AAA0879	0 to 6 in.	PU-238	13158	18539	SU	RAS	14.8 PCI/G
		AAA0879	0 to 6 in.	PU-239	13158	18539	SU	RAS	67.08 PCI/G
		AAA0879	0 to 6 in.	U	13158		SU	DNA	231.5 UG/G
	21-1369	AAA0880	0 to 6 in.	AM-241	13158	18537	SU	RAS	15.82 PCI/G
		AAA0880	0 to 6 in.	H-3	13158		SU	LS	304900 PCI/L
		AAA0880	0 to 6 in.	PU-238	13158	18539	SU	RAS	14.16 PCI/G
		AAA0880	0 to 6 in.	PU-239	13158	18539	SU	RAS	75.03 PCI/G
		AAA0880	0 to 6 in.	U	13158		SU	DNA	108 UG/G
	21-1370	AAA0881	0 to 6 in.	AM-241	13117		SU	G	37.1 PCI/G
		AAA0881	0 to 6 in.	H-3	13117		SU	LS	24000 PCI/L
		AAA0881	0 to 6 in.	H-3	13117		SU	LS	25300 PCI/L
		AAA0881	0 to 6 in.	PU-238	13117		SU	RAS	52 PCI/G
		AAA0881	0 to 6 in.	PU-239	13117		SU	RAS	165 PCI/G
		AAA0881	0 to 6 in.	U	13117		SU	DNA	110.2 UG/G
	21-1371	AAA0882	0 to 6 in.	AM-241	13158	18537	SU	RAS	13.22 PCI/G
		AAA0882	0 to 6 in.	H-3	13158		SU	LS	56800 PCI/L
		AAA0882	0 to 6 in.	PU-238	13158	18539	SU	RAS	25.23 PCI/G
		AAA0882	0 to 6 in.	PU-239	13158	18539	SU	RAS	89.6 PCI/G
		AAA0882	0 to 6 in.	U	13158		SU	DNA	48.5 UG/G
	21-1372	AAA0883	0 to 6 in.	AM-241	13158	18537	SU	RAS	9.79 PCI/G
		AAA0883	0 to 6 in.	H-3	13158		SU	LS	263700 PCI/L
		AAA0883	0 to 6 in.	PU-238	13158	18539	SU	RAS	6.47 PCI/G

Laboratory Radiological Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0883	0 to 6 in.	PU-239	13158	18539	SU	RAS	59.63 PCI/G
		AAA0883	0 to 6 in.	U	13158		SU	DNA	42 UG/G
	21-1373	AAA0884	0 to 6 in.	AM-241	13158	18537	SU	RAS	8.15 PCI/G
		AAA0884	0 to 6 in.	H-3	13158		SU	LS	2300000 PCI/L
		AAA0884	0 to 6 in.	PU-238	13158	18539	SU	RAS	21.9 PCI/G
		AAA0884	0 to 6 in.	PU-239	13158	18539	SU	RAS	96.23 PCI/G
		AAA0884	0 to 6 in.	U	13158		SU	DNA	41 UG/G
	21-1374	AAA0885	0 to 6 in.	AM-241	13158	18537	SU	RAS	10.59 PCI/G
		AAA0885	0 to 6 in.	H-3	13158		SU	LS	69000 PCI/L
		AAA0885	0 to 6 in.	PU-238	13158	18539	SU	RAS	20.34 PCI/G
		AAA0885	0 to 6 in.	PU-239	13158	18539	SU	RAS	64.81 PCI/G
		AAA0885	0 to 6 in.	U	13158		SU	DNA	32.2 UG/G
21-024(b)	21-1377	AAA0896	0 to 6 in.	AM-241	13196	18518	SU	RAS	.905 PCI/G
		AAA0896	0 to 6 in.	PU-239	13196	18520	SU	RAS	22.01 PCI/G
		AAA0897	6 to 12 in.	AM-241	13196	18518	NS	RAS	.407 PCI/G
		AAA0897	6 to 12 in.	PU-239	13196	18520	NS	RAS	8.33 PCI/G
	21-1378	AAA0899	0 to 6 in.	AM-241	13196	18518	SU	RAS	1.69 PCI/G
		AAA0899	0 to 6 in.	H-3	13196		SU	LS	5500 PCI/L
		AAA0899	0 to 6 in.	PU-238	13196	18520	SU	RAS	.25 PCI/G
		AAA0899	0 to 6 in.	PU-239	13196	18520	SU	RAS	36.32 PCI/G
		AAA0899	0 to 6 in.	U	13196		SU	DNA	7.8 UG/G
		AAA0900	0 to 6 in.	AM-241	13196	18518	FD	RAS	.268 PCI/G
		AAA0900	0 to 6 in.	PU-239	13196	18520	FD	RAS	5.52 PCI/G
		AAA0902	6 to 12 in.	AM-241	13196	18518	NS	RAS	.139 PCI/G
		AAA0902	6 to 12 in.	PU-239	13196	18520	NS	RAS	2.36 PCI/G
	21-1379	AAA0903	0 to 6 in.	AM-241	13196	18518	SU	RAS	15.06 PCI/G
		AAA0903	0 to 6 in.	H-3	13196		SU	LS	37000 PCI/L

Laboratory Radiological Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0903	0 to 6 in.	PU-238	13196	18520	SU	RAS	3.25 PCI/G
		AAA0903	0 to 6 in.	PU-239	13196	18520	SU	RAS	324 PCI/G
		AAA0903	0 to 6 in.	U	13196		SU	DNA	21 UG/G
		AAA0904	6 to 12 in.	AM-241	13117		NS	G	9.47 PCI/G
		AAA0904	6 to 12 in.	PU-238	13117		NS	RAS	1.08 PCI/G
		AAA0904	6 to 12 in.	PU-239	13117		NS	RAS	145 PCI/G
		AAA0904	6 to 12 in.	U	13117		NS	DNA	11.9 UG/G
		AAA0905	12 to 18 in.	AM-241	13196	18518	NS	RAS	3.69 PCI/G
		AAA0905	12 to 18 in.	PU-238	13196	18520	NS	RAS	.913 PCI/G
		AAA0905	12 to 18 in.	PU-239	13196	18520	NS	RAS	83.63 PCI/G
		AAA0905	12 to 18 in.	U	13196		NS	DNA	10.7 UG/G
21-022(h)	21-1380	AAA0915	0 to 6 in.	AM-241	13187	18506	SU	RAS	1.41 PCI/G
		AAA0915	0 to 6 in.	PU-238	13187	18509	SU	RAS	4.9 PCI/G
		AAA0915	0 to 6 in.	PU-239	13187	18509	SU	RAS	14.77 PCI/G
		AAA0916	0 to 6 in.	AM-241	13187	18506	FD	RAS	1.39 PCI/G
		AAA0916	0 to 6 in.	PU-238	13187	18509	FD	RAS	9.29 PCI/G
		AAA0916	0 to 6 in.	PU-239	13187	18509	FD	RAS	13.01 PCI/G
		AAA0917	6 to 12 in.	AM-241	13196	18518	NS	RAS	.684 PCI/G
		AAA0917	6 to 12 in.	PU-238	13196	18520	NS	RAS	3.67 PCI/G
		AAA0917	6 to 12 in.	PU-239	13196	18520	NS	RAS	6.53 PCI/G
		AAA0918	12 to 18 in.	PU-238	13196	18520	NS	RAS	.523 PCI/G
	21-1381	AAA0919	0 to 6 in.	AM-241	13187	18506	SU	RAS	.486 PCI/G
		AAA0919	0 to 6 in.	H-3	13187		SU	LS	75200 PCI/L
		AAA0919	0 to 6 in.	PU-238	13187	18509	SU	RAS	2.18 PCI/G
		AAA0919	0 to 6 in.	PU-239	13187	18509	SU	RAS	3.24 PCI/G
		AAA0920	6 to 12 in.	AM-241	13187	18506	NS	RAS	.342 PCI/G
		AAA0920	6 to 12 in.	PU-238	13187	18509	NS	RAS	.682 PCI/G
		AAA0921	12 to 18 in.	PU-238	13187	18509	NS	RAS	.281 PCI/G
	21-1382	AAA0922	0 to 6 in.	AM-241	13187	18506	SU	RAS	.353 PCI/G

Laboratory Radiological Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0922	0 to 6 in.	H-3	13187		SU	LS	14700 PCI/L
		AAA0922	0 to 6 in.	PU-238	13187	18509	SU	RAS	.779 PCI/G
		AAA0922	0 to 6 in.	PU-239	13187	18509	SU	RAS	2.63 PCI/G
		AAA0923	6 to 12 in.	AM-241	13187	18506	NS	RAS	.195 PCI/G
		AAA0923	6 to 12 in.	H-3	13187		NS	LS	8100 PCI/L
		AAA0923	6 to 12 in.	PU-238	13187	18509	NS	RAS	.488 PCI/G
21-024(a)	21-1386	AAA0937	0 to 6 in.	U	13196		SU	DNA	15.5 UG/G
	21-1388	AAA0943	0 to 6 in.	AM-241	13196	18518	SU	RAS	.208 PCI/G
		AAA0943	0 to 6 in.	SR-90	13196	18517	SU	PC	.8 PCI/G
		AAA0943	0 to 6 in.	U	13196		SU	DNA	14.3 UG/G
		AAA0944	6 to 12 in.	U	13196		NS	DNA	9.1 UG/G
	21-1389	AAA0946	0 to 6 in.	AM-241	13196	18518	SU	RAS	.215 PCI/G
		AAA0946	0 to 6 in.	SR-90	13196	18517	SU	PC	.9 PCI/G
		AAA0946	0 to 6 in.	U	13196		SU	DNA	22.2 UG/G
		AAA0947	6 to 12 in.	U	13196		NS	DNA	9.6 UG/G
	21-1390	AAA0949	0 to 6 in.	AM-241	13213	18554	SU	RAS	.167 PCI/G
		AAA0949	0 to 6 in.	PU-239	13213	18555	SU	RAS	3 PCI/G
		AAA0950	0 to 6 in.	AM-241	13213	18554	FD	RAS	.276 PCI/G
		AAA0950	0 to 6 in.	PU-239	13213	18555	FD	RAS	3.85 PCI/G
21-024(c)	21-1391	AAA0753	0 to 6 in.	AM-241	13175	18510	SU	RAS	3.24 PCI/G
		AAA0753	0 to 6 in.	H-3	13175		SU	LS	7100000 PCI/L
		AAA0753	0 to 6 in.	PU-239	13175	18513	SU	RAS	13.23 PCI/G
		AAA0753	0 to 6 in.	U	13175		SU	DNA	195.5 UG/G
		AAA0756	6 to 12 in.	AM-241	13175	18510	NS	RAS	.254 PCI/G
		AAA0756	6 to 12 in.	H-3	13175		NS	LS	1300000 PCI/L
		AAA0756	6 to 12 in.	U	13175		NS	DNA	56.2 UG/G

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SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1392	AAA0757	0 to 6 in.	AM-241	13175	18510	SU	RAS	.537 PCI/G
		AAA0757	0 to 6 in.	H-3	13175	19121	SU	LS	1500000 PCI/L
		AAA0757	0 to 6 in.	PU-239	13175	18513	SU	RAS	3.96 PCI/G
		AAA0757	0 to 6 in.	U	13175	19122	SU	DNA	26.4 UG/G
		AAA0758	0 to 6 in.	AM-241	13175	18510	FD	RAS	.529 PCI/G
		AAA0758	0 to 6 in.	H-3	13175		FD	LS	560800 PCI/L
		AAA0758	0 to 6 in.	PU-239	13175	18513	FD	RAS	4.29 PCI/G
		AAA0758	0 to 6 in.	SR-90	13175	18511	FD	PC	.9 PCI/G
		AAA0758	0 to 6 in.	U	13175		FD	DNA	28.5 UG/G
		AAA0759	6 to 12 in.	H-3	13175		NS	LS	128200 PCI/L
21-024(i)	21-1395	AAA0770	0 to 6 in.	AM-241	13117		SU	G	1.3 PCI/G
		AAA0770	0 to 6 in.	H-3	13117		SU	LS	2300000 PCI/L
		AAA0770	0 to 6 in.	H-3	13117		SU	LS	2400000 PCI/L
		AAA0770	0 to 6 in.	SR-90	13117		SU	PC	1 PCI/G
		AAA0770	0 to 6 in.	U	13117		SU	DNA	40.4 UG/G
		AAA0771	6 to 12 in.	AM-241	13117		NS	G	.503 PCI/G
		AAA0771	6 to 12 in.	H-3	13117		NS	LS	2200000 PCI/L
		AAA0771	6 to 12 in.	H-3	13117		NS	LS	2300000 PCI/L
		AAA0771	6 to 12 in.	U	13117		NS	DNA	24.4 UG/G
	21-1396	AAA0772	0 to 6 in.	H-3	13117		SU	LS	635700 PCI/L
		AAA0772	0 to 6 in.	H-3	13117		SU	LS	664600 PCI/L
		AAA0772	0 to 6 in.	U	13117		SU	DNA	26.3 UG/G
		AAA0773	6 to 12 in.	AM-241	13117		NS	G	1.3 PCI/G
		AAA0773	6 to 12 in.	H-3	13117		NS	LS	105300 PCI/L
		AAA0773	6 to 12 in.	H-3	13117		NS	LS	111300 PCI/L
		AAA0773	6 to 12 in.	PU-239	13117		NS	RAS	9.2 PCI/G
		AAA0773	6 to 12 in.	U	13117		NS	DNA	28 UG/G
	21-1397	AAA0774	0 to 6 in.	AM-241	13117		SU	G	1.19 PCI/G
		AAA0774	0 to 6 in.	H-3	13117		SU	LS	3900000 PCI/L

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SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0774	0 to 6 in.	H-3	13117		SU	LS	4200000 PCI/L
		AAA0774	0 to 6 in.	PU-239	13117		SU	RAS	5.4 PCI/G
		AAA0774	0 to 6 in.	U	13117		SU	DNA	73 UG/G
		AAA0775	6 to 12 in.	AM-241	13117		NS	G	1.54 PCI/G
		AAA0775	6 to 12 in.	H-3	13117		NS	LS	757400 PCI/L
		AAA0775	6 to 12 in.	H-3	13117		NS	LS	791000 PCI/L
		AAA0775	6 to 12 in.	PU-239	13117		NS	RAS	6.1 PCI/G
		AAA0775	6 to 12 in.	U	13117		NS	DNA	52.2 UG/G
21-026(d)	21-1398	AAA0776	0 to 6 in.	AM-241	13175	18510	SU	RAS	.456 PCI/G
		AAA0776	0 to 6 in.	H-3	13175		SU	LS	33000 PCI/L
	21-1399	AAA0779	0 to 6 in.	AM-241	13175	18510	SU	RAS	.32 PCI/G
		AAA0779	0 to 6 in.	H-3	13175		SU	LS	8100 PCI/L
	21-1400	AAA0780	0 to 6 in.	AM-241	13175	18510	SU	RAS	1.07 PCI/G
		AAA0780	0 to 6 in.	H-3	13175		SU	LS	108400 PCI/L
	21-1401	AAA0781	0 to 6 in.	AM-241	13213	18554	SU	RAS	1.39 PCI/G
		AAA0781	0 to 6 in.	H-3	13213		SU	LS	57400 PCI/L
		AAA0781	0 to 6 in.	PU-239	13213	18555	SU	RAS	2.48 PCI/G
		AAA0782	6 to 12 in.	AM-241	13213	18554	NS	RAS	.333 PCI/G
		AAA0782	6 to 12 in.	H-3	13213		NS	LS	5300 PCI/L
21-024(n)	21-1402	AAA0785	0 to 6 in.	AM-241	13221		SU	RAS	.177 PCI/G
		AAA0785	0 to 6 in.	H-3	13221		SU	LS	14900 PCI/L
		AAA0788	6 to 12 in.	AM-241	13221		NS	RAS	.255 PCI/G
		AAA0788	6 to 12 in.	H-3	13221		NS	LS	12400 PCI/L
		AAA0789	12 to 18 in.	H-3	13221		NS	LS	13300 PCI/L
	21-1403	AAA0790	0 to 6 in.	H-3	13247		SU	LS	5700 PCI/L
		AAA0791	6 to 12 in.	H-3	13247		NS	LS	14500 PCI/L

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SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0791	6 to 12 in.	U	13247		NS	DNA	8.3 UG/G
		AAA0792	12 to 18 in.	AM-241	13247		NS	RAS	.175 PCI/G
		AAA0792	12 to 18 in.	H-3	13247		NS	LS	14300 PCI/L
	21-1404	AAA0793	0 to 6 in.	H-3	13247		SU	LS	8800 PCI/L
		AAA0793	0 to 6 in.	U	13247		SU	DNA	8.8 UG/G
		AAA0794	6 to 12 in.	H-3	13247		NS	LS	9100 PCI/L
		AAA0795	12 to 18 in.	H-3	13247		NS	LS	10600 PCI/L
21-004(d)	21-1407	AAA0802	0 to 6 in.	AM-241	13221		SU	RAS	.149 PCI/G
		AAA0802	0 to 6 in.	H-3	13221		SU	LS	19000 PCI/L
		AAA0802	0 to 6 in.	H-3	13221		SU	LS	35200 PCI/L
		AAA0803	6 to 12 in.	AM-241	13221		NS	RAS	.654 PCI/G
		AAA0803	6 to 12 in.	H-3	13221		NS	LS	152600 PCI/L
		AAA0804	12 to 18 in.	H-3	13221		NS	LS	58300 PCI/L
		AAA0804	12 to 18 in.	H-3	13221		NS	LS	115300 PCI/L
	21-1408	AAA0805	0 to 6 in.	AM-241	13221		SU	RAS	.27 PCI/G
		AAA0805	0 to 6 in.	H-3	13221		SU	LS	78100 PCI/L
		AAA0805	0 to 6 in.	PU-239	13221		SU	RAS	4.01 PCI/G
		AAA0805	0 to 6 in.	SR-90	13221		SU	PC	1.14 PCI/G
		AAA0806	0 to 6 in.	AM-241	13221		FD	RAS	.227 PCI/G
		AAA0806	0 to 6 in.	H-3	13221		FD	LS	54100 PCI/L
		AAA0806	0 to 6 in.	H-3	13221		FD	LS	81000 PCI/L
		AAA0806	0 to 6 in.	PU-239	13221		FD	RAS	10.3 PCI/G
		AAA0806	0 to 6 in.	SR-90	13221		FD	PC	.798 PCI/G
		AAA0807	6 to 12 in.	H-3	13221		NS	LS	248300 PCI/L
		AAA0807	6 to 12 in.	H-3	13221		NS	LS	604400 PCI/L
		AAA0807	6 to 12 in.	PU-239	13221		NS	RAS	2.79 PCI/G
		AAA0808	12 to 18 in.	H-3	13221		NS	LS	1700000 PCI/L
	21-1409	AAA0809	0 to 6 in.	AM-241	13221		SU	RAS	.165 PCI/G

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SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0809	0 to 6 in.	H-3	13221		SU	LS	11100 PCI/L
		AAA0809	0 to 6 in.	H-3	13221		SU	LS	19000 PCI/L
		AAA0809	0 to 6 in.	PU-239	13221		SU	RAS	2.04 PCI/G
		AAA0810	6 to 12 in.	AM-241	13221		NS	RAS	.293 PCI/G
		AAA0810	6 to 12 in.	H-3	13221		NS	LS	78700 PCI/L
		AAA0811	12 to 18 in.	AM-241	13221		NS	RAS	.173 PCI/G
		AAA0811	12 to 18 in.	H-3	13221		NS	LS	622700 PCI/L
		AAA0811	12 to 18 in.	H-3	13221		NS	LS	753500 PCI/L
		AAA0811	12 to 18 in.	TH-228	13221		NS	RAS	2.99 PCI/G
	21-1410	AAA0812	0 to 6 in.	PU-238	13221		SU	RAS	.432 PCI/G
	21-1411	AAA0815	0 to 6 in.	AM-241	13221		SU	RAS	.157 PCI/G
		AAA0815	0 to 6 in.	H-3	13221		SU	LS	6000 PCI/L
		AAA0816	6 to 12 in.	AM-241	13221		NS	RAS	.209 PCI/G
		AAA0816	6 to 12 in.	H-3	13221		NS	LS	4600 PCI/L
		AAA0817	12 to 18 in.	AM-241	13221		NS	RAS	.252 PCI/G
	21-1412	AAA0818	0 to 6 in.	AM-241	13221		SU	RAS	.325 PCI/G
		AAA0818	0 to 6 in.	H-3	13221		SU	LS	6600 PCI/L
		AAA0819	6 to 12 in.	H-3	13221		NS	LS	5000 PCI/L
		AAA0819	6 to 12 in.	PU-238	13221		NS	RAS	.371 PCI/G
		AAA0820	12 to 18 in.	AM-241	13221		NS	RAS	.132 PCI/G
21-024(h)	21-1413	AAA0824	6 to 12 in.	AM-241	13221		NS	RAS	.298 PCI/G
		AAA0824	6 to 12 in.	PU-238	13221		NS	RAS	.914 PCI/G
		AAA0825	12 to 18 in.	PU-238	13221		NS	RAS	.272 PCI/G
		AAA0825	12 to 18 in.	U	13221		NS	DNA	38 UG/G
	21-1414	AAA0826	0 to 6 in.	AM-241	13221		SU	RAS	.132 PCI/G
		AAA0827	0 to 6 in.	AM-241	13221		FD	RAS	.217 PCI/G
		AAA0827	0 to 6 in.	PU-239	13221		FD	RAS	4.4 PCI/G

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SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0828	6 to 12 in.	AM-241	13221		NS	RAS	.677 PCI/G
		AAA0828	6 to 12 in.	PU-238	13221		NS	RAS	.355 PCI/G
		AAA0828	6 to 12 in.	PU-239	13221		NS	RAS	33 PCI/G
	21-1415	AAA0830	0 to 6 in.	AM-241	13221		SU	RAS	.184 PCI/G
		AAA0831	6 to 12 in.	TH-228	13221		NS	RAS	2.08 PCI/G
		AAA0832	12 to 18 in.	TH-228	13221		NS	RAS	2.87 PCI/G
21-011(k)	21-1416	AAA0833	0-5 in.	AM-241	13117		SU	G	2600 PCI/G
		AAA0833	0-5 in.	H-3	13117		SU	LS	229500 PCI/L
		AAA0833	0-5 in.	H-3	13117		SU	LS	237100 PCI/L
		AAA0833	0-5 in.	PU-238	13117		SU	RAS	2200 PCI/G
		AAA0833	0-5 in.	PU-239	13117		SU	RAS	46000 PCI/G
		AAA0833	0-5 in.	SR-90	13117		SU	PC	1800 PCI/G
		AAA0833	0-5 in.	U	13117		SU	DNA	54.2 UG/G
	21-1417	AAA0906	0 to 6 in.	AM-241	13117		SU	G	289 PCI/G
		AAA0906	0 to 6 in.	H-3	13117		SU	LS	18500 PCI/L
		AAA0906	0 to 6 in.	H-3	13117		SU	LS	20000 PCI/L
		AAA0906	0 to 6 in.	PU-238	13117		SU	RAS	15 PCI/G
		AAA0906	0 to 6 in.	PU-239	13117		SU	RAS	390 PCI/G
		AAA0906	0 to 6 in.	SR-90	13117		SU	PC	600 PCI/G
		AAA0907	6 to 12 in.	AM-241	13117		NS	G	38 PCI/G
		AAA0907	6 to 12 in.	H-3	13117		NS	LS	8400 PCI/L
		AAA0907	6 to 12 in.	H-3	13117		NS	LS	9700 PCI/L
		AAA0907	6 to 12 in.	PU-238	13117		NS	RAS	2.2 PCI/G
		AAA0907	6 to 12 in.	PU-239	13117		NS	RAS	53 PCI/G
		AAA0907	6 to 12 in.	SR-90	13117		NS	PC	220 PCI/G
	21-1418	AAA0908	0 to 6 in.	AM-241	13117		SU	G	29.8 PCI/G

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SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0908	0 to 6 in.	H-3	13117		SU	LS	5500 PCI/L
		AAA0908	0 to 6 in.	PU-238	13117		SU	RAS	2.8 PCI/G
		AAA0908	0 to 6 in.	PU-239	13117		SU	RAS	49 PCI/G
		AAA0908	0 to 6 in.	SR-90	13117		SU	PC	170 PCI/G
		AAA0909	6 to 12 in.	AM-241	13117		NS	G	29.8 PCI/G
		AAA0909	6 to 12 in.	H-3	13117		NS	LS	9300 PCI/L
		AAA0909	6 to 12 in.	H-3	13117		NS	LS	10600 PCI/L
		AAA0909	6 to 12 in.	PU-238	13117		NS	RAS	.77 PCI/G
		AAA0909	6 to 12 in.	PU-239	13117		NS	RAS	14 PCI/G
		AAA0909	6 to 12 in.	SR-90	13117		NS	PC	180 PCI/G
21-024(i)	21-1422	AAA0890	0 to 6 in.	AM-241	13247		SU	RAS	.424 PCI/G
		AAA0890	0 to 6 in.	PU-238	13247		SU	RAS	12.1 PCI/G
	21-1423	AAA0891	0 to 6 in.	AM-241	13247		SU	G	.239 PCI/G
		AAA0891	0 to 6 in.	AM-241	13247		SU	RAS	.193 PCI/G
21-024(g)	21-1428	AAA0799	0 to 6 in.	AM-241	13187	18506	SU	RAS	.218 PCI/G
		AAA0799	0 to 6 in.	H-3	13187		SU	LS	792700 PCI/L
		AAA0799	0 to 6 in.	PU-239	13187	18509	SU	RAS	4.08 PCI/G
		AAA0799	0 to 6 in.	SR-90	13187	18507	SU	PC	.9 PCI/G
		AAA0799	0 to 6 in.	U	13187		SU	DNA	16.3 UG/G
		AAA0800	6 to 12 in.	H-3	13187		NS	LS	136200 PCI/L
	21-1429	AAA0801	0 to 6 in.	H-3	13247		SU	LS	46200 PCI/L
		AAA1091	6 to 12 in.	AM-241	13247		NS	RAS	.137 PCI/G
		AAA1091	6 to 12 in.	H-3	13247		NS	LS	66200 PCI/L
		AAA1091	6 to 12 in.	H-3	13247		NS	LS	87800 PCI/L
	21-1430	AAA1092	0 to 6 in.	AM-241	13247		SU	G	.303 PCI/G
		AAA1092	0 to 6 in.	AM-241	13247		SU	RAS	.551 PCI/G
		AAA1092	0 to 6 in.	H-3	13247		SU	LS	165200 PCI/L

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SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA1092	0 to 6 in.	H-3	13247		SU	LS	201900 PCI/L
		AAA1092	0 to 6 in.	PU-238	13247		SU	RAS	.508 PCI/G
		AAA1092	0 to 6 in.	PU-239	13247		SU	RAS	19.4 PCI/G
		AAA1092	0 to 6 in.	U	13247		SU	DNA	18 UG/G
		AAA1093	0 to 6 in.	AM-241	13247		FD	G	.256 PCI/G
		AAA1093	0 to 6 in.	AM-241	13247		FD	RAS	.245 PCI/G
		AAA1093	0 to 6 in.	H-3	13247		FD	LS	195500 PCI/L
		AAA1093	0 to 6 in.	H-3	13247		FD	LS	319300 PCI/L
		AAA1093	0 to 6 in.	PU-239	13247		FD	RAS	2.66 PCI/G
		AAA1093	0 to 6 in.	U	13247		FD	DNA	20 UG/G
		AAA1094	6 to 12 in.	H-3	13247		NS	LS	267700 PCI/L
		AAA1094	6 to 12 in.	H-3	13247		NS	LS	338900 PCI/L
21-024(f)	21-1431	AAA1095	0 to 6 in.	AM-241	13247		SU	RAS	.129 PCI/G
		AAA1096	6 to 12 in.	SR-90	13247		NS	PC	.736 PCI/G
	21-1432	AAA1098	0 to 6 in.	AM-241	13247		SU	G	.677 PCI/G
		AAA1098	0 to 6 in.	AM-241	13247		SU	RAS	.62 PCI/G
		AAA1098	0 to 6 in.	PU-239	13247		SU	RAS	13.9 PCI/G
		AAA1099	0 to 6 in.	AM-241	13247		FD	G	.699 PCI/G
		AAA1099	0 to 6 in.	AM-241	13247		FD	RAS	.598 PCI/G
		AAA1099	0 to 6 in.	PU-239	13247		FD	RAS	11.8 PCI/G
		AAA1100	6 to 12 in.	AM-241	13247		NS	RAS	.163 PCI/G
	21-1433	AAA1102	0 to 6 in.	AM-241	13247		SU	RAS	.179 PCI/G

Outfalls
Laboratory Inorganic Data

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
21-027(d)	21-1329	AAA0615	0 to 6 in.	CD	13101		SU	ICPES	1.2 MG/KG
	21-1330	AAA0616	0 to 6 in.	CD	13101		SU	ICPES	1.4 MG/KG
	21-1331	AAA0617	0 to 6 in.	CD	13101		SU	ICPES	1.4 MG/KG
		AAA0618	0 to 6 in.	CD	13101		FD	ICPES	1.2 MG/KG
21-023(c)	21-1335	AAA0622	0 to 4 in.	AS	13115		SU	ETVAA	6.9 UG/G
		AAA0622	0 to 4 in.	CR	13115		SU	ICPMS	213.2 UG/G
		AAA0622	0 to 4 in.	NI	13115		SU	ICPMS	37.4 UG/G
		AAA0622	0 to 4 in.	PB	13115		SU	ICPMS	87.8 UG/G
	21-1336	AAA0623	0 to 6 in.	AS	13115		SU	ETVAA	9.1 UG/G
		AAA0623	0 to 6 in.	CR	13115		SU	ICPMS	109.6 UG/G
		AAA0623	0 to 6 in.	CU	13115		SU	ICPMS	21.4 UG/G
		AAA0623	0 to 6 in.	NI	13115		SU	ICPMS	151.6 UG/G
		AAA0623	0 to 6 in.	PB	13115		SU	ICPMS	90.2 UG/G
		AAA0623	0 to 6 in.	ZN	13115		SU	ICPMS	305 UG/G
	21-1337	AAA0624	0 to 6 in.	CR	13101		SU	ICPES	50.2 MG/KG
		AAA0624	0 to 6 in.	PB	13101		SU	ETVAA	51.9 MG/KG
	21-1338	AAA0625	0 to 6 in.	AS	13115		SU	ETVAA	7.7 UG/G
		AAA0625	0 to 6 in.	CR	13115		SU	ICPMS	328 UG/G
		AAA0625	0 to 6 in.	CU	13115		SU	ICPMS	20 UG/G
		AAA0625	0 to 6 in.	NI	13115		SU	ICPMS	33.7 UG/G
		AAA0625	0 to 6 in.	PB	13115		SU	ICPMS	171.3 UG/G
	21-1339	AAA0628	0 to 3 in.	AS	13101		SU	ETVAA	5.5 MG/KG
		AAA0628	0 to 3 in.	CD	13101		SU	ICPES	1.3 MG/KG
		AAA0628	0 to 3 in.	CR	13101		SU	ICPES	158 MG/KG
		AAA0628	0 to 3 in.	PB	13101		SU	ETVAA	97.4 MG/KG

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SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1340	AAA0629	0 to 6 in.	CD	13101		SU	ICPES	1.2 MG/KG
		AAA0629	0 to 6 in.	CR	13101		SU	ICPES	48.1 MG/KG
21-024(e)	21-1341	AAA0630	0 to 6 in.	AS	13101		SU	ETVAA	5.9 MG/KG
		AAA0630	0 to 6 in.	CD	13101		SU	ICPES	7.9 MG/KG
		AAA0630	0 to 6 in.	CR	13101		SU	ICPES	30.5 MG/KG
		AAA0630	0 to 6 in.	CU	13101		SU	ICPES	37.5 MG/KG
		AAA0630	0 to 6 in.	PB	13101		SU	ETVAA	75 MG/KG
		AAA0630	0 to 6 in.	SE	13101		SU	ETVAA	.69 MG/KG
		AAA0630	0 to 6 in.	V	13101		SU	ICPES	48.3 MG/KG
		AAA0630	0 to 6 in.	ZN	13101		SU	ICPES	262 MG/KG
		AAA0631	0 to 6 in.	AS	13101		FD	ETVAA	6.6 MG/KG
		AAA0631	0 to 6 in.	CD	13101		FD	ICPES	8.4 MG/KG
		AAA0631	0 to 6 in.	CR	13101		FD	ICPES	31 MG/KG
		AAA0631	0 to 6 in.	CU	13101		FD	ICPES	39.4 MG/KG
		AAA0631	0 to 6 in.	PB	13101		FD	ETVAA	92.6 MG/KG
		AAA0631	0 to 6 in.	SE	13101		FD	ETVAA	.81 MG/KG
		AAA0631	0 to 6 in.	V	13101		FD	ICPES	50.3 MG/KG
		AAA0631	0 to 6 in.	ZN	13101		FD	ICPES	275 MG/KG
		AAA0632	6 to 11 in.	AS	13101		NS	ETVAA	5.6 MG/KG
		AAA0632	6 to 11 in.	CD	13101		NS	ICPES	3.7 MG/KG
		AAA0632	6 to 11 in.	ZN	13101		NS	ICPES	201 MG/KG
	21-1342	AAA0633	0 to 4 in.	AS	13101		SU	ETVAA	3.8 MG/KG
		AAA0633	0 to 4 in.	CD	13101		SU	ICPES	2.3 MG/KG
		AAA0633	0 to 4 in.	ZN	13101		SU	ICPES	136 MG/KG
21-024(o)	21-1343	AAA0837	0 to 6 in.	CD	13101		SU	ICPES	1.6 MG/KG
		AAA0837	0 to 6 in.	ZN	13101		SU	ICPES	115 MG/KG
		AAA0838	0 to 6 in.	CD	13101		FD	ICPES	1.8 MG/KG
		AAA0838	0 to 6 in.	ZN	13101		FD	ICPES	132 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1344	AAA0841	0 to 6 in.	CD	13101		SU	ICPES	1.8 MG/KG
		AAA0841	0 to 6 in.	ZN	13101		SU	ICPES	95.6 MG/KG
		AAA0842	6 to 12 in.	CD	13101		NS	ICPES	1.3 MG/KG
		AAA0842	6 to 12 in.	PB	13101		NS	ETVAA	45 MG/KG
		AAA0842	6 to 12 in.	ZN	13101		NS	ICPES	75.9 MG/KG
EPA03A035	21-1346	AAA0847	0 to 6 in.	CD	13101		SU	ICPES	2.1 MG/KG
		AAA0847	0 to 6 in.	CU	13101		SU	ICPES	48.2 MG/KG
		AAA0847	0 to 6 in.	NI	13101		SU	ICPES	13.4 MG/KG
		AAA0847	0 to 6 in.	ZN	13101		SU	ICPES	187 MG/KG
		AAA0850	12 to 18 in.	CD	13101		NS	ICPES	1.3 MG/KG
		AAA0850	12 to 18 in.	CR	13101		NS	ICPES	28.2 MG/KG
		AAA0850	12 to 18 in.	CU	13101		NS	ICPES	54.5 MG/KG
		AAA0850	12 to 18 in.	NI	13101		NS	ICPES	23 MG/KG
		AAA0850	12 to 18 in.	ZN	13101		NS	ICPES	184 MG/KG
		AAA0851	6 to 12 in.	CR	13101		SU	ICPES	56.6 MG/KG
		AAA0851	6 to 12 in.	CU	13101		SU	ICPES	52.3 MG/KG
		AAA0851	6 to 12 in.	NI	13101		SU	ICPES	46.4 MG/KG
		AAA0851	6 to 12 in.	ZN	13101		SU	ICPES	187 MG/KG
21-024(d)	21-1347	AAA0852	0 to 6 in.	CD	13185		SU	ICPES	1.8 MG/KG
	21-1348	AAA0853	0 to 6 in.	AG	13185		SU	ICPES	19.4 MG/KG
		AAA0854	6 to 12 in.	AG	13185		NS	ICPES	15.7 MG/KG
		AAA0855	12 to 18 in.	AG	13185		NS	ICPES	3 MG/KG
		AAA0855	12 to 18 in.	PB	13185		NS	ETVAA	146 MG/KG
21-027(c)	21-1349	AAA0856	0 to 6 in.	CD	13245	17915	SU	ICPES	1.6 MG/KG
	21-1350	AAA0857	0 to 6 in.	AS	13245	17915	SU	ETVAA	4.7 MG/KG
		AAA0857	0 to 6 in.	CA	13245	17915	SU	ICPES	14800 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0857	0 to 6 in.	CD	13245	17915	SU	ICPES	1.6 MG/KG
		AAA0857	0 to 6 in.	CU	13245	17915	SU	ICPES	19.1 MG/KG
		AAA0857	0 to 6 in.	PB	13245	17915	SU	ETVAA	103 MG/KG
		AAA0857	0 to 6 in.	ZN	13245	17915	SU	ICPES	136 MG/KG
	21-1351	AAA0858	0 to 6 in.	AS	13245	17915	SU	ETVAA	4.8 MG/KG
		AAA0858	0 to 6 in.	CD	13245	17915	SU	ICPES	1.6 MG/KG
		AAA0858	0 to 6 in.	ZN	13245	17915	SU	ICPES	87.3 MG/KG
		AAA0861	0 to 6 in.	AS	13245	17915	FD	ETVAA	5.6 MG/KG
		AAA0861	0 to 6 in.	CD	13245	17915	FD	ICPES	1.5 MG/KG
		AAA0861	0 to 6 in.	ZN	13245	17915	FD	ICPES	79.5 MG/KG
	21-1352	AAA0862	0 to 6 in.	CD	13156		SU	ICPES	1.2 MG/KG
	21-1353	AAA0863	0 to 6 in.	ZN	13156		SU	ICPES	82.6 MG/KG
	21-1354	AAA0864	0 to 6 in.	CD	13156		SU	ICPES	1.5 MG/KG
		AAA0864	0 to 6 in.	PB	13156		SU	ETVAA	42.6 MG/KG
		AAA0864	0 to 6 in.	ZN	13156		SU	ICPES	188 MG/KG
21-027(a)	21-1361	AAA0872	0 to 6 in.	CD	13245	17915	SU	ICPES	1.8 MG/KG
		AAA0872	0 to 6 in.	CU	13245	17915	SU	ICPES	41 MG/KG
		AAA0872	0 to 6 in.	PB	13245	17915	SU	ETVAA	55.6 MG/KG
		AAA0872	0 to 6 in.	ZN	13245	17915	SU	ICPES	442 MG/KG
	21-1362	AAA0873	0 to 6 in.	CD	13245	17915	SU	ICPES	2.2 MG/KG
		AAA0873	0 to 6 in.	CR	13245	17915	SU	ICPES	36.6 MG/KG
		AAA0873	0 to 6 in.	CU	13245	17915	SU	ICPES	79.2 MG/KG
		AAA0873	0 to 6 in.	ZN	13245	17915	SU	ICPES	316 MG/KG
	21-1363	AAA0874	0 to 6 in.	CD	13245	17915	SU	ICPES	1.3 MG/KG
		AAA0874	0 to 6 in.	CU	13245	17915	SU	ICPES	22.5 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0874	0 to 6 in.	ZN	13245	17915	SU	ICPES	89.5 MG/KG
	21-1364	AAA0875	0 to 6 in.	AS	13245	17915	SU	ETVAA	5 MG/KG
		AAA0875	0 to 6 in.	CD	13245	17915	SU	ICPES	4.2 MG/KG
		AAA0875	0 to 6 in.	CR	13245	17915	SU	ICPES	436 MG/KG
		AAA0875	0 to 6 in.	CU	13245	17915	SU	ICPES	198 MG/KG
		AAA0875	0 to 6 in.	NI	13245	17915	SU	ICPES	42.3 MG/KG
		AAA0875	0 to 6 in.	PB	13245	17915	SU	ETVAA	73 MG/KG
		AAA0875	0 to 6 in.	ZN	13245	17915	SU	ICPES	512 MG/KG
	21-1365	AAA0876	0 to 6 in.	AS	13115		SU	ETVAA	4.7 UG/G
		AAA0876	0 to 6 in.	CR	13115		SU	ICPMS	463.1 UG/G
		AAA0876	0 to 6 in.	CU	13115		SU	ICPMS	49.4 UG/G
		AAA0876	0 to 6 in.	NI	13115		SU	ICPMS	34.7 UG/G
		AAA0876	0 to 6 in.	ZN	13115		SU	ICPMS	826.3 UG/G
	21-1366	AAA0877	0 to 6 in.	AS	13156		SU	ETVAA	4.4 MG/KG
		AAA0877	0 to 6 in.	CD	13156		SU	ICPES	3.9 MG/KG
		AAA0877	0 to 6 in.	CR	13156		SU	ICPES	410 MG/KG
		AAA0877	0 to 6 in.	CU	13156		SU	ICPES	179 MG/KG
		AAA0877	0 to 6 in.	PB	13156		SU	ETVAA	57.8 MG/KG
		AAA0877	0 to 6 in.	ZN	13156		SU	ICPES	497 MG/KG
	21-1367	AAA0878	0 to 6 in.	AS	13156		SU	ETVAA	4.2 MG/KG
		AAA0878	0 to 6 in.	CD	13156		SU	ICPES	3.2 MG/KG
		AAA0878	0 to 6 in.	CR	13156		SU	ICPES	335 MG/KG
		AAA0878	0 to 6 in.	CU	13156		SU	ICPES	98.3 MG/KG
		AAA0878	0 to 6 in.	PB	13156		SU	ETVAA	47 MG/KG
		AAA0878	0 to 6 in.	ZN	13156		SU	ICPES	469 MG/KG
	21-1368	AAA0879	0 to 6 in.	AS	13156		SU	ETVAA	3.7 MG/KG
		AAA0879	0 to 6 in.	CD	13156		SU	ICPES	3.3 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0879	0 to 6 in.	CR	13156		SU	ICPES	461 MG/KG
		AAA0879	0 to 6 in.	CU	13156		SU	ICPES	86.7 MG/KG
		AAA0879	0 to 6 in.	ZN	13156		SU	ICPES	345 MG/KG
	21-1369	AAA0880	0 to 6 in.	AS	13156		SU	ETVAA	4.9 MG/KG
		AAA0880	0 to 6 in.	CD	13156		SU	ICPES	3.6 MG/KG
		AAA0880	0 to 6 in.	CR	13156		SU	ICPES	419 MG/KG
		AAA0880	0 to 6 in.	CU	13156		SU	ICPES	136 MG/KG
		AAA0880	0 to 6 in.	PB	13156		SU	ETVAA	62.3 MG/KG
		AAA0880	0 to 6 in.	ZN	13156		SU	ICPES	463 MG/KG
	21-1370	AAA0881	0 to 6 in.	AS	13115		SU	ETVAA	6.9 UG/G
		AAA0881	0 to 6 in.	CR	13115		SU	ICPMS	1000.4 UG/G
		AAA0881	0 to 6 in.	CU	13115		SU	ICPMS	43.5 UG/G
		AAA0881	0 to 6 in.	NI	13115		SU	ICPMS	21.8 UG/G
		AAA0881	0 to 6 in.	PB	13115		SU	ICPMS	41.7 UG/G
		AAA0881	0 to 6 in.	ZN	13115		SU	ICPMS	240.9 UG/G
	21-1371	AAA0882	0 to 6 in.	CD	13156		SU	ICPES	4 MG/KG
		AAA0882	0 to 6 in.	CR	13156		SU	ICPES	266 MG/KG
		AAA0882	0 to 6 in.	CU	13156		SU	ICPES	44.9 MG/KG
		AAA0882	0 to 6 in.	PB	13156		SU	ETVAA	79.8 MG/KG
		AAA0882	0 to 6 in.	ZN	13156		SU	ICPES	232 MG/KG
	21-1372	AAA0883	0 to 6 in.	CD	13156		SU	ICPES	1.7 MG/KG
		AAA0883	0 to 6 in.	CR	13156		SU	ICPES	174 MG/KG
		AAA0883	0 to 6 in.	CU	13156		SU	ICPES	86.5 MG/KG
		AAA0883	0 to 6 in.	PB	13156		SU	ETVAA	51.7 MG/KG
		AAA0883	0 to 6 in.	ZN	13156		SU	ICPES	216 MG/KG
	21-1373	AAA0884	0 to 6 in.	CD	13156		SU	ICPES	2.3 MG/KG
		AAA0884	0 to 6 in.	CR	13156		SU	ICPES	131 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0884	0 to 6 in.	CU	13156		SU	ICPES	40.8 MG/KG
		AAA0884	0 to 6 in.	ZN	13156		SU	ICPES	140 MG/KG
	21-1374	AAA0885	0 to 6 in.	CD	13156		SU	ICPES	3 MG/KG
		AAA0885	0 to 6 in.	CR	13156		SU	ICPES	178 MG/KG
		AAA0885	0 to 6 in.	CU	13156		SU	ICPES	33.8 MG/KG
		AAA0885	0 to 6 in.	ZN	13156		SU	ICPES	177 MG/KG
21-024(b)	21-1377	AAA0896	0 to 6 in.	ZN	13194	17950	SU	ICPES	96.9 MG/KG
		AAA0898	12 to 18 in.	ZN	13194	17950	NS	ICPES	107 MG/KG
	21-1378	AAA0899	0 to 6 in.	ZN	13194	17950	SU	ICPES	81 MG/KG
	21-1379	AAA0903	0 to 6 in.	AS	13194	17950	SU	ETVAA	3.8 MG/KG
		AAA0903	0 to 6 in.	CD	13194	17950	SU	ICPES	1.6 MG/KG
		AAA0903	0 to 6 in.	CR	13194	17950	SU	ICPES	27.1 MG/KG
		AAA0903	0 to 6 in.	CU	13194	17950	SU	ICPES	33.2 MG/KG
		AAA0903	0 to 6 in.	SE	13194	17950	SU	ETVAA	.72 MG/KG
		AAA0903	0 to 6 in.	ZN	13194	17950	SU	ICPES	246 MG/KG
		AAA0904	6 to 12 in.	CU	13115		NS	ICPMS	20 UG/G
		AAA0904	6 to 12 in.	NI	13115		NS	ICPMS	24.3 UG/G
		AAA0904	6 to 12 in.	ZN	13115		NS	ICPMS	130.9 UG/G
		AAA0905	12 to 18 in.	CR	13194	17950	NS	ICPES	23.6 MG/KG
		AAA0905	12 to 18 in.	ZN	13194	17950	NS	ICPES	149 MG/KG
21-022(h)	21-1380	AAA0915	0 to 6 in.	CU	13185		SU	ICPES	49.3 MG/KG
		AAA0915	0 to 6 in.	ZN	13185		SU	ICPES	119 MG/KG
		AAA0916	0 to 6 in.	CD	13185		FD	ICPES	1.4 MG/KG
		AAA0916	0 to 6 in.	CU	13185		FD	ICPES	72 MG/KG
		AAA0916	0 to 6 in.	PB	13185		FD	ETVAA	128 MG/KG
		AAA0916	0 to 6 in.	ZN	13185		FD	ICPES	207 MG/KG
		AAA0917	6 to 12 in.	CU	13194	17950	NS	ICPES	28.3 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0917	6 to 12 in.	ZN	13194	17950	NS	ICPES	85.1 MG/KG
21-024(a)	21-1385	AAA0932	0 to 6 in.	AS	13194	17950	SU	ETVAA	4.4 MG/KG
		AAA0932	0 to 6 in.	CD	13194	17950	SU	ICPES	2.2 MG/KG
		AAA0932	0 to 6 in.	CU	13194	17950	SU	ICPES	141 MG/KG
		AAA0932	0 to 6 in.	PB	13194	17950	SU	ETVAA	54.1 MG/KG
		AAA0932	0 to 6 in.	ZN	13194	17950	SU	ICPES	112 MG/KG
		AAA0936	12 to 18 in.	CU	13194	17950	NS	ICPES	46.7 MG/KG
		AAA0939	6 to 12 in.	CU	13194	17950	NS	ICPES	60.1 MG/KG
	21-1386	AAA0933	12 to 18 in.	CU	13194	17950	NS	ICPES	35.6 MG/KG
		AAA0933	12 to 18 in.	PB	13194	17950	NS	ETVAA	42.8 MG/KG
		AAA0937	0 to 6 in.	AS	13194	17950	SU	ETVAA	6.6 MG/KG
		AAA0937	0 to 6 in.	CD	13194	17950	SU	ICPES	2.3 MG/KG
		AAA0937	0 to 6 in.	CR	13194	17950	SU	ICPES	27.4 MG/KG
		AAA0937	0 to 6 in.	CU	13194	17950	SU	ICPES	301 MG/KG
		AAA0937	0 to 6 in.	PB	13194	17950	SU	ETVAA	204 MG/KG
		AAA0937	0 to 6 in.	ZN	13194	17950	SU	ICPES	268 MG/KG
		AAA0938	6 to 12 in.	AS	13194	17950	NS	ETVAA	3.8 MG/KG
		AAA0938	6 to 12 in.	CD	13194	17950	NS	ICPES	2.3 MG/KG
		AAA0938	6 to 12 in.	CR	13194	17950	NS	ICPES	26.5 MG/KG
		AAA0938	6 to 12 in.	CU	13194	17950	NS	ICPES	249 MG/KG
		AAA0938	6 to 12 in.	PB	13194	17950	NS	ETVAA	102 MG/KG
		AAA0938	6 to 12 in.	ZN	13194	17950	NS	ICPES	218 MG/KG
	21-1387	AAA0940	0 to 6 in.	CU	13194	17950	SU	ICPES	84.3 MG/KG
		AAA0940	0 to 6 in.	PB	13194	17950	SU	ETVAA	85.3 MG/KG
		AAA0940	0 to 6 in.	ZN	13194	17950	SU	ICPES	71.1 MG/KG
	21-1388	AAA0943	0 to 6 in.	AS	13194	17950	SU	ETVAA	4.7 MG/KG
		AAA0943	0 to 6 in.	CA	13194	17950	SU	ICPES	15500 MG/KG
		AAA0943	0 to 6 in.	CD	13194	17950	SU	ICPES	2.7 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0943	0 to 6 in.	CU	13194	17950	SU	ICPES	265 MG/KG
		AAA0943	0 to 6 in.	PB	13194	17950	SU	ETVAA	109 MG/KG
		AAA0943	0 to 6 in.	SR	13194	17950	SU	ICPES	165 MG/KG
		AAA0943	0 to 6 in.	ZN	13194	17950	SU	ICPES	228 MG/KG
		AAA0944	6 to 12 in.	AS	13194	17950	NS	ETVAA	3.8 MG/KG
		AAA0944	6 to 12 in.	CD	13194	17950	NS	ICPES	1.8 MG/KG
		AAA0944	6 to 12 in.	CU	13194	17950	NS	ICPES	152 MG/KG
		AAA0944	6 to 12 in.	PB	13194	17950	NS	ETVAA	64.3 MG/KG
		AAA0944	6 to 12 in.	ZN	13194	17950	NS	ICPES	97.2 MG/KG
		AAA0945	12 to 18 in.	CU	13194	17950	NS	ICPES	58.3 MG/KG
	21-1389	AAA0946	0 to 6 in.	AS	13194	17950	SU	ETVAA	7.5 MG/KG
		AAA0946	0 to 6 in.	CA	13194	17950	SU	ICPES	20100 MG/KG
		AAA0946	0 to 6 in.	CD	13194	17950	SU	ICPES	4.5 MG/KG
		AAA0946	0 to 6 in.	CR	13194	17950	SU	ICPES	31.8 MG/KG
		AAA0946	0 to 6 in.	CU	13194	17950	SU	ICPES	424 MG/KG
		AAA0946	0 to 6 in.	FE	13194	17950	SU	ICPES	24000 MG/KG
		AAA0946	0 to 6 in.	PB	13194	17950	SU	ETVAA	183 MG/KG
		AAA0946	0 to 6 in.	SR	13194	17950	SU	ICPES	265 MG/KG
		AAA0946	0 to 6 in.	ZN	13194	17950	SU	ICPES	362 MG/KG
		AAA0947	6 to 12 in.	AS	13194	17950	NS	ETVAA	4.4 MG/KG
		AAA0947	6 to 12 in.	CD	13194	17950	NS	ICPES	2.5 MG/KG
		AAA0947	6 to 12 in.	CU	13194	17950	NS	ICPES	174 MG/KG
		AAA0947	6 to 12 in.	PB	13194	17950	NS	ETVAA	48.6 MG/KG
		AAA0947	6 to 12 in.	ZN	13194	17950	NS	ICPES	103 MG/KG
		AAA0948	12 to 18 in.	CA	13194	17950	NS	ICPES	20800 MG/KG
		AAA0948	12 to 18 in.	CD	13194	17950	NS	ICPES	1.4 MG/KG
		AAA0948	12 to 18 in.	CU	13194	17950	NS	ICPES	78.6 MG/KG
	21-1390	AAA0929	12 to 18 in.	CR	13211	17716	NS	ICPES	131 MG/KG
		AAA0929	12 to 18 in.	CU	13211	17716	NS	ICPES	31 MG/KG
		AAA0929	12 to 18 in.	NI	13211	17716	NS	ICPES	73.6 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0949	0 to 6 in.	CD	13211	17716	SU	ICPES	1.8 MG/KG
		AAA0949	0 to 6 in.	CU	13211	17716	SU	ICPES	68.6 MG/KG
		AAA0949	0 to 6 in.	ZN	13211	17716	SU	ICPES	89.6 MG/KG
		AAA0950	0 to 6 in.	CD	13211	17716	FD	ICPES	1.2 MG/KG
		AAA0950	0 to 6 in.	CU	13211	17716	FD	ICPES	62.8 MG/KG
		AAA0950	0 to 6 in.	ZN	13211	17716	FD	ICPES	80.7 MG/KG
21-024(c)	21-1391	AAA0753	0 to 6 in.	AG	13174		SU	ICPES	105 MG/KG
		AAA0753	0 to 6 in.	AS	13174		SU	ETVAA	8.2 MG/KG
		AAA0753	0 to 6 in.	CD	13174		SU	ICPES	3.8 MG/KG
		AAA0753	0 to 6 in.	CR	13174		SU	ICPES	415 MG/KG
		AAA0753	0 to 6 in.	CU	13174		SU	ICPES	1520 MG/KG
		AAA0753	0 to 6 in.	NI	13174		SU	ICPES	43.7 MG/KG
		AAA0753	0 to 6 in.	PB	13174		SU	ETVAA	2300 MG/KG
		AAA0753	0 to 6 in.	V	13174		SU	ICPES	53.6 MG/KG
		AAA0753	0 to 6 in.	ZN	13174		SU	ICPES	122 MG/KG
		AAA0756	6 to 12 in.	AG	13174		NS	ICPES	14.6 MG/KG
		AAA0756	6 to 12 in.	AS	13174		NS	ETVAA	10 MG/KG
		AAA0756	6 to 12 in.	CD	13174		NS	ICPES	5.3 MG/KG
		AAA0756	6 to 12 in.	CR	13174		NS	ICPES	52.7 MG/KG
		AAA0756	6 to 12 in.	CU	13174		NS	ICPES	687 MG/KG
		AAA0756	6 to 12 in.	NI	13174		NS	ICPES	17 MG/KG
		AAA0756	6 to 12 in.	PB	13174		NS	ETVAA	571 MG/KG
		AAA0756	6 to 12 in.	ZN	13174		NS	ICPES	201 MG/KG
	21-1392	AAA0757	0 to 6 in.	AG	13174	19128	SU	ICPES	3.9 MG/KG
		AAA0757	0 to 6 in.	CD	13174	19128	SU	ICPES	2.4 MG/KG
		AAA0757	0 to 6 in.	CR	13174	19128	SU	ICPES	44.4 MG/KG
		AAA0757	0 to 6 in.	CU	13174	19128	SU	ICPES	120 MG/KG
		AAA0757	0 to 6 in.	PB	13174	19128	SU	ETVAA	320 MG/KG
		AAA0757	0 to 6 in.	ZN	13174	19128	SU	ICPES	142 MG/KG
		AAA0758	0 to 6 in.	AG	13174		FD	ICPES	5.2 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0758	0 to 6 in.	CD	13174		FD	ICPES	2.3 MG/KG
		AAA0758	0 to 6 in.	CR	13174		FD	ICPES	50 MG/KG
		AAA0758	0 to 6 in.	CU	13174		FD	ICPES	122 MG/KG
		AAA0758	0 to 6 in.	PB	13174		FD	ETVAA	312 MG/KG
		AAA0758	0 to 6 in.	ZN	13174		FD	ICPES	139 MG/KG
		AAA0759	6 to 12 in.	CD	13174		NS	ICPES	1.2 MG/KG
21-024(i)	21-1395	AAA0770	0 to 6 in.	AS	13115		SU	ETVAA	28 UG/G
		AAA0770	0 to 6 in.	BA	13115		SU	ICPMS	1329.3 UG/G
		AAA0770	0 to 6 in.	CR	13115		SU	ICPMS	61.2 UG/G
		AAA0770	0 to 6 in.	CU	13115		SU	ICPMS	68.6 UG/G
		AAA0770	0 to 6 in.	NI	13115		SU	ICPMS	23.7 UG/G
		AAA0770	0 to 6 in.	PB	13115		SU	ICPMS	109.6 UG/G
		AAA0770	0 to 6 in.	SE	13115	18840	SU	ETVAA	.9 UG/G
		AAA0770	0 to 6 in.	SE	13115		SU	ETVAA	.9 UG/G
		AAA0770	0 to 6 in.	V	13115		SU	ICPMS	77.2 UG/G
		AAA0770	0 to 6 in.	ZN	13115		SU	ICPMS	1220.5 UG/G
		AAA0771	6 to 12 in.	AS	13115		NS	ETVAA	10.1 UG/G
		AAA0771	6 to 12 in.	CR	13115		NS	ICPMS	49.8 UG/G
		AAA0771	6 to 12 in.	CU	13115		NS	ICPMS	34 UG/G
		AAA0771	6 to 12 in.	NI	13115		NS	ICPMS	14.6 UG/G
		AAA0771	6 to 12 in.	PB	13115		NS	ICPMS	97 UG/G
		AAA0771	6 to 12 in.	SE	13115	18840	NS	ETVAA	.4 UG/G
		AAA0771	6 to 12 in.	SE	13115		NS	ETVAA	.4 UG/G
		AAA0771	6 to 12 in.	ZN	13115		NS	ICPMS	706.4 UG/G
	21-1396	AAA0772	0 to 6 in.	AS	13115		SU	ETVAA	13.9 UG/G
		AAA0772	0 to 6 in.	BA	13115		SU	ICPMS	934.8 UG/G
		AAA0772	0 to 6 in.	CR	13115		SU	ICPMS	40.8 UG/G
		AAA0772	0 to 6 in.	CU	13115		SU	ICPMS	25.2 UG/G
		AAA0772	0 to 6 in.	NI	13115		SU	ICPMS	29.4 UG/G
		AAA0772	0 to 6 in.	PB	13115		SU	ICPMS	74 UG/G

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0772	0 to 6 in.	SE	13115	18840	SU	ETVAA	.69 UG/G
		AAA0772	0 to 6 in.	SE	13115		SU	ETVAA	.69 UG/G
		AAA0772	0 to 6 in.	ZN	13115		SU	ICPMS	631.6 UG/G
		AAA0773	6 to 12 in.	AS	13115		NS	ETVAA	12 UG/G
		AAA0773	6 to 12 in.	BA	13115		NS	ICPMS	882.8 UG/G
		AAA0773	6 to 12 in.	CR	13115		NS	ICPMS	39.8 UG/G
		AAA0773	6 to 12 in.	CU	13115		NS	ICPMS	24.6 UG/G
		AAA0773	6 to 12 in.	NI	13115		NS	ICPMS	30.4 UG/G
		AAA0773	6 to 12 in.	PB	13115		NS	ICPMS	70.4 UG/G
		AAA0773	6 to 12 in.	SE	13115	18840	NS	ETVAA	.65 UG/G
		AAA0773	6 to 12 in.	SE	13115		NS	ETVAA	.65 UG/G
		AAA0773	6 to 12 in.	ZN	13115		NS	ICPMS	618.4 UG/G
	21-1397	AAA0774	0 to 6 in.	AS	13115		SU	ETVAA	34.7 UG/G
		AAA0774	0 to 6 in.	BA	13115		SU	ICPMS	1733.4 UG/G
		AAA0774	0 to 6 in.	CR	13115		SU	ICPMS	157.4 UG/G
		AAA0774	0 to 6 in.	CU	13115		SU	ICPMS	71 UG/G
		AAA0774	0 to 6 in.	NI	13115		SU	ICPMS	34.8 UG/G
		AAA0774	0 to 6 in.	PB	13115		SU	ICPMS	299.4 UG/G
		AAA0774	0 to 6 in.	SE	13115	18840	SU	ETVAA	1.28 UG/G
		AAA0774	0 to 6 in.	SE	13115		SU	ETVAA	1.28 UG/G
		AAA0774	0 to 6 in.	V	13115		SU	ICPMS	127 UG/G
		AAA0774	0 to 6 in.	ZN	13115		SU	ICPMS	1217.8 UG/G
		AAA0775	6 to 12 in.	AS	13115		NS	ETVAA	30 UG/G
		AAA0775	6 to 12 in.	BA	13115		NS	ICPMS	980.6 UG/G
		AAA0775	6 to 12 in.	CR	13115		NS	ICPMS	122 UG/G
		AAA0775	6 to 12 in.	CU	13115		NS	ICPMS	47.6 UG/G
		AAA0775	6 to 12 in.	NI	13115		NS	ICPMS	28.2 UG/G
		AAA0775	6 to 12 in.	PB	13115		NS	ICPMS	257 UG/G
		AAA0775	6 to 12 in.	SE	13115	18840	NS	ETVAA	1.06 UG/G
		AAA0775	6 to 12 in.	SE	13115		NS	ETVAA	1.06 UG/G
		AAA0775	6 to 12 in.	V	13115		NS	ICPMS	91.4 UG/G

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0775	6 to 12 in.	ZN	13115		NS	ICPMS	820.8 UG/G
21-026(d)	21-1398	AAA0776	0 to 6 in.	CD	13174		SU	ICPES	1.3 MG/KG
		AAA0776	0 to 6 in.	CR	13174		SU	ICPES	182 MG/KG
		AAA0776	0 to 6 in.	NI	13174		SU	ICPES	127 MG/KG
		AAA0776	0 to 6 in.	ZN	13174		SU	ICPES	99.7 MG/KG
	21-1399	AAA0779	0 to 6 in.	CD	13174		SU	ICPES	1.4 MG/KG
		AAA0779	0 to 6 in.	ZN	13174		SU	ICPES	97.9 MG/KG
	21-1400	AAA0780	0 to 6 in.	AG	13174		SU	ICPES	3.5 MG/KG
		AAA0780	0 to 6 in.	CR	13174		SU	ICPES	21.5 MG/KG
		AAA0780	0 to 6 in.	CU	13174		SU	ICPES	30.7 MG/KG
		AAA0780	0 to 6 in.	ZN	13174		SU	ICPES	128 MG/KG
	21-1401	AAA0781	0 to 6 in.	AG	13211	17716	SU	ICPES	2.6 MG/KG
		AAA0781	0 to 6 in.	CR	13211	17716	SU	ICPES	21.3 MG/KG
		AAA0781	0 to 6 in.	CU	13211	17716	SU	ICPES	41.1 MG/KG
		AAA0781	0 to 6 in.	ZN	13211	17716	SU	ICPES	148 MG/KG
21-024(n)	21-1402	AAA0785	0 to 6 in.	ZN	13219	17827	SU	ICPES	85.2 MG/KG
		AAA0788	6 to 12 in.	CU	13219	17827	NS	ICPES	32.7 MG/KG
		AAA0788	6 to 12 in.	ZN	13219	17827	NS	ICPES	158 MG/KG
	21-1404	AAA0793	0 to 6 in.	CR	13245	17915	SU	ICPES	34.2 MG/KG
		AAA0794	6 to 12 in.	CR	13245	17915	NS	ICPES	37.2 MG/KG
21-004(d)	21-1407	AAA0802	0 to 6 in.	CD	13219	17827	SU	ICPES	1.2 MG/KG
		AAA0803	6 to 12 in.	CD	13219	17827	NS	ICPES	1.3 MG/KG
	21-1408	AAA0806	0 to 6 in.	CD	13219	17827	FD	ICPES	1.3 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1409	AAA0809	0 to 6 in.	CD	13219	17827	SU	ICPES	1.3 MG/KG
21-024(h)	21-1413	AAA0824	6 to 12 in.	CD	13219	17827	NS	ICPES	1.2 MG/KG
	21-1414	AAA0828	6 to 12 in.	CD	13219	17827	NS	ICPES	2.1 MG/KG
21-011(k)	21-1416	AAA0833	0 to 5 in.	AG	13115		SU	ICPMS	20.6 UG/G
		AAA0833	0 to 5 in.	AS	13115		SU	ETVAA	3.9 UG/G
		AAA0833	0 to 5 in.	CD	13115		SU	ICPMS	52 UG/G
		AAA0833	0 to 5 in.	CU	13115		SU	ICPMS	132.2 UG/G
		AAA0833	0 to 5 in.	NI	13115		SU	ICPMS	224.4 UG/G
		AAA0833	0 to 5 in.	PB	13115		SU	ICPMS	50.4 UG/G
		AAA0833	0 to 5 in.	SR	13115		SU	ICPMS	157 UG/G
		AAA0833	0 to 5 in.	ZN	13115		SU	ICPMS	196.6 UG/G
	21-1417	AAA0906	0 to 6 in.	CD	13115		SU	ICPMS	9.6 UG/G
		AAA0906	0 to 6 in.	CU	13115		SU	ICPMS	34.8 UG/G
		AAA0906	0 to 6 in.	NI	13115		SU	ICPMS	44.4 UG/G
		AAA0907	6 to 12 in.	NI	13115		NS	ICPMS	21.4 UG/G
	21-1418	AAA0908	0 to 6 in.	NI	13115		SU	ICPMS	25.1 UG/G
		AAA0909	6 to 12 in.	NI	13115		NS	ICPMS	18.7 UG/G
21-024(l)	21-1419	AAA0912	0 to 6 in.	CD	13245	17915	SU	ICPES	1.3 MG/KG
	21-1424	AAA0892	0 to 6 in.	CD	13245	17915	SU	ICPES	2 MG/KG
21-024(g)	21-1427	AAA0797	0 to 6 in.	CD	13174		SU	ICPES	1.4 MG/KG
		AAA0797	0 to 6 in.	CR	13174		SU	ICPES	23.9 MG/KG
		AAA0797	0 to 6 in.	NI	13174		SU	ICPES	19.5 MG/KG
	21-1428	AAA0799	0 to 6 in.	AS	13185		SU	ETVAA	10 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0799	0 to 6 in.	CD	13185		SU	ICPES	5.6 MG/KG
		AAA0799	0 to 6 in.	CR	13185		SU	ICPES	25 MG/KG
		AAA0799	0 to 6 in.	CU	13185		SU	ICPES	53.5 MG/KG
		AAA0799	0 to 6 in.	PB	13185		SU	ETVAA	67 MG/KG
		AAA0799	0 to 6 in.	SE	13185		SU	ETVAA	.83 MG/KG
		AAA0799	0 to 6 in.	V	13185		SU	ICPES	52.1 MG/KG
		AAA0799	0 to 6 in.	ZN	13185		SU	ICPES	399 MG/KG
		AAA0800	6 to 12 in.	ZN	13185		NS	ICPES	84.5 MG/KG
	21-1429	AAA0801	0 to 6 in.	AS	13245	17915	SU	ETVAA	8.7 MG/KG
		AAA0801	0 to 6 in.	CU	13245	17915	SU	ICPES	24.2 MG/KG
		AAA0801	0 to 6 in.	ZN	13245	17915	SU	ICPES	84.8 MG/KG
		AAA1091	6 to 12 in.	AS	13245	17915	NS	ETVAA	6.9 MG/KG
		AAA1091	6 to 12 in.	CD	13245	17915	NS	ICPES	1.9 MG/KG
		AAA1091	6 to 12 in.	ZN	13245	17915	NS	ICPES	179 MG/KG
	21-1430	AAA1092	0 to 6 in.	AS	13245	17915	SU	ETVAA	9.5 MG/KG
		AAA1092	0 to 6 in.	CD	13245	17915	SU	ICPES	4.5 MG/KG
		AAA1092	0 to 6 in.	CR	13245	17915	SU	ICPES	21.7 MG/KG
		AAA1092	0 to 6 in.	CU	13245	17915	SU	ICPES	59.3 MG/KG
		AAA1092	0 to 6 in.	MN	13245	17915	SU	ICPES	503 MG/KG
		AAA1092	0 to 6 in.	PB	13245	17915	SU	ETVAA	67.7 MG/KG
		AAA1092	0 to 6 in.	SE	13245	17915	SU	ETVAA	.67 MG/KG
		AAA1092	0 to 6 in.	V	13245	17915	SU	ICPES	47.3 MG/KG
		AAA1092	0 to 6 in.	ZN	13245	17915	SU	ICPES	310 MG/KG
		AAA1093	0 to 6 in.	AS	13245	17915	FD	ETVAA	7.5 MG/KG
		AAA1093	0 to 6 in.	CD	13245	17915	FD	ICPES	4.5 MG/KG
		AAA1093	0 to 6 in.	CR	13245	17915	FD	ICPES	32.3 MG/KG
		AAA1093	0 to 6 in.	CU	13245	17915	FD	ICPES	57.1 MG/KG
		AAA1093	0 to 6 in.	NI	13245	17915	FD	ICPES	16.2 MG/KG
		AAA1093	0 to 6 in.	PB	13245	17915	FD	ETVAA	73.6 MG/KG
		AAA1093	0 to 6 in.	SE	13245	17915	FD	ETVAA	.68 MG/KG

Laboratory Inorganic Data
Analyte Values Exceeding the 95.5 Percentile of Their Respective Baseline

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA1093	0 to 6 in.	V	13245	17915	FD	ICPES	45.1 MG/KG
		AAA1093	0 to 6 in.	ZN	13245	17915	FD	ICPES	296 MG/KG
		AAA1094	6 to 12 in.	AS	13245	17915	NS	ETVAA	4.9 MG/KG
		AAA1094	6 to 12 in.	CD	13245	17915	NS	ICPES	2.2 MG/KG
		AAA1094	6 to 12 in.	ZN	13245	17915	NS	ICPES	180 MG/KG
21-024(f)	21-1431	AAA1095	0 to 6 in.	CD	13245	17915	SU	ICPES	1.6 MG/KG
	21-1432	AAA1099	0 to 6 in.	CR	13245	17915	FD	ICPES	21 MG/KG

Outfalls
Laboratory Semivolatile Data

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
21-023(c)	21-1338	AAA0825	0 to 6 in.	Benzoic acid	13116		SU	GC[illegible]	360 UG/KG
21-024(o)	21-1342	AAA0834	-	Bis(2-ethylhexyl)phthalate	13104		FE	GCMS	18 UG/L
21-024(o)	21-1343	AAA0837	0 to 6 in.	Benzoic acid	13100		SU	GCMS	2600 UG/KG
		AAA0837	0 to 6 in.	Phenol	13100		SU	GCMS	1000 UG/KG
		AAA0838	0 to 6 in.	Benzoic acid	13100		FD	GCMS	2300 UG/KG
		AAA0838	0 to 6 in.	Phenol	13100		FD	GCMS	910 UG/KG
		AAA0839	6 to 12 in.	Phenol	13100		NS	GCMS	950 UG/KG
		AAA0840	12 to 18 in.	Benzoic acid	13100		NS	GCMS	560 UG/KG
		AAA0840	12 to 18 in.	Diethyl phthalate	13100		NS	GCMS	19000 UG/KG
	21-1344	AAA0841	0 to 6 in.	Benzo[b]fluoranthene	13100		SU	GCMS	580 UG/KG
		AAA0841	0 to 6 in.	Fluoranthene	13100		SU	GCMS	500 UG/KG
		AAA0841	0 to 6 in.	Phenanthrene	13100		SU	GCMS	410 UG/KG
		AAA0841	0 to 6 in.	Pyrene	13100		SU	GCMS	580 UG/KG
		AAA0842	6 to 12 in.	Phenol	13100		NS	GCMS	1100 UG/KG
		AAA0843	12 to 18 in.	Benzoic acid	13100		NS	GCMS	2300 UG/KG
		AAA0843	12 to 18 in.	Phenol	13100		NS	GCMS	1100 UG/KG
EPA03A035	21-1346	AAA0847	0 to 6 in.	Benzoic acid	13100		SU	GCMS	3700 UG/KG
		AAA0847	0 to 6 in.	Phenol	13100		SU	GCMS	980 UG/KG
21-027(c)	21-1351	AAA0861	0 to 6 in.	Acenaphthene	13246		FD	GCMS	820 UG/KG
		AAA0861	0 to 6 in.	Anthracene	13246		FD	GCMS	1300 UG/KG
		AAA0861	0 to 6 in.	Benzo[a]anthracene	13246		FD	GCMS	3200 UG/KG
		AAA0861	0 to 6 in.	Benzo[a]pyrene	13246		FD	GCMS	2800 UG/KG
		AAA0861	0 to 6 in.	Benzo[b]fluoranthene	13246		FD	GCMS	4100 UG/KG
		AAA0861	0 to 6 in.	Benzo[g,h,i]perylene	13246		FD	GCMS	860 UG/KG
		AAA0861	0 to 6 in.	Benzo[k]fluoranthene	13246		FD	GCMS	1400 UG/KG
		AAA0861	0 to 6 in.	Chrysene	13246		FD	GCMS	3400 UG/KG
		AAA0861	0 to 6 in.	Fluoranthene	13246		FD	GCMS	7600 UG/KG

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0861	0 to 6 in.	Fluorene	13246		FD	GCMS	730 UG/KG
		AAA0861	0 to 6 in.	Indeno[1,2,3-cd]pyrene	13246		FD	GCMS	890 UG/KG
		AAA0861	0 to 6 in.	Naphthalene	13246		FD	GCMS	440 UG/KG
		AAA0861	0 to 6 in.	Phenanthrene	13246		FD	GCMS	5500 UG/KG
		AAA0861	0 to 6 in.	Pyrene	13246		FD	GCMS	6000 UG/KG
21-027(a)	21-1361	AAA0872	0 to 6 in.	Benzo[a]anthracene	13246		SU	GCMS	820 UG/KG
		AAA0872	0 to 6 in.	Benzo[a]pyrene	13246		SU	GCMS	920 UG/KG
		AAA0872	0 to 6 in.	Benzo[b]fluoranthene	13246		SU	GCMS	1400 UG/KG
		AAA0872	0 to 6 in.	Benzo[k]fluoranthene	13246		SU	GCMS	490 UG/KG
		AAA0872	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13246		SU	GCMS	490 UG/KG
		AAA0872	0 to 6 in.	Chrysene	13246		SU	GCMS	1000 UG/KG
		AAA0872	0 to 6 in.	Fluoranthene	13246		SU	GCMS	2000 UG/KG
		AAA0872	0 to 6 in.	Indeno[1,2,3-cd]pyrene	13246		SU	GCMS	470 UG/KG
		AAA0872	0 to 6 in.	Phenanthrene	13246		SU	GCMS	1500 UG/KG
		AAA0872	0 to 6 in.	Pyrene	13246		SU	GCMS	3300 UG/KG
	21-1362	AAA0873	0 to 6 in.	Benzo[b]fluoranthene	13246		SU	GCMS	460 UG/KG
		AAA0873	0 to 6 in.	Fluoranthene	13246		SU	GCMS	490 UG/KG
		AAA0873	0 to 6 in.	Pyrene	13246		SU	GCMS	810 UG/KG
	21-1364	AAA0875	0 to 6 in.	Benzo[a]pyrene	13246		SU	GCMS	520 UG/KG
		AAA0875	0 to 6 in.	Benzo[b]fluoranthene	13246		SU	GCMS	890 UG/KG
		AAA0875	0 to 6 in.	Chrysene	13246		SU	GCMS	540 UG/KG
		AAA0875	0 to 6 in.	Fluoranthene	13246		SU	GCMS	1300 UG/KG
		AAA0875	0 to 6 in.	Phenanthrene	13246		SU	GCMS	580 UG/KG
		AAA0875	0 to 6 in.	Pyrene	13246		SU	GCMS	930 UG/KG
	21-1368	AAA0879	0 to 6 in.	Benzo[b]fluoranthene	13157		SU	GCMS	400 UG/KG
		AAA0879	0 to 6 in.	Fluoranthene	13157		SU	GCMS	490 UG/KG
		AAA0879	0 to 6 in.	Pyrene	13157		SU	GCMS	640 UG/KG

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1369	AAA0880	0 to 6 in.	Benzo[a]anthracene	13157		SU	GCMS	360 UG/KG
		AAA0880	0 to 6 in.	Benzo[a]pyrene	13157		SU	GCMS	530 UG/KG
		AAA0880	0 to 6 in.	Benzo[b]fluoranthene	13157		SU	GCMS	840 UG/KG
		AAA0880	0 to 6 in.	Chrysene	13157		SU	GCMS	390 UG/KG
		AAA0880	0 to 6 in.	Fluoranthene	13157		SU	GCMS	1000 UG/KG
		AAA0880	0 to 6 in.	Indeno[1,2,3-cd]pyrene	13157		SU	GCMS	380 UG/KG
		AAA0880	0 to 6 in.	Phenanthrene	13157		SU	GCMS	530 UG/KG
		AAA0880	0 to 6 in.	Pyrene	13157		SU	GCMS	860 UG/KG
	21-1370	AAA0881	0 to 6 in.	Benzo[k]fluoranthene	13160		SU	GCMS	970 UG/KG
		AAA0881	0 to 6 in.	Fluoranthene	13160		SU	GCMS	500 UG/KG
		AAA0881	0 to 6 in.	Pyrene	13160		SU	GCMS	820 UG/KG
	21-1371	AAA0882	0 to 6 in.	Benzo[b]fluoranthene	13157		SU	GCMS	570 UG/KG
		AAA0882	0 to 6 in.	Fluoranthene	13157		SU	GCMS	690 UG/KG
		AAA0882	0 to 6 in.	Phenanthrene	13157		SU	GCMS	420 UG/KG
		AAA0882	0 to 6 in.	Pyrene	13157		SU	GCMS	540 UG/KG
	21-1372	AAA0883	0 to 6 in.	Benzo[b]fluoranthene	13157		SU	GCMS	350 UG/KG
	21-1373	AAA0884	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13157		SU	GCMS	340 UG/KG
		AAA0884	0 to 6 in.	Fluoranthene	13157		SU	GCMS	370 UG/KG
		AAA0884	0 to 6 in.	Pyrene	13157		SU	GCMS	380 UG/KG
	21-1374	AAA0885	0 to 6 in.	Benzo[b]fluoranthene	13157		SU	GCMS	350 UG/KG
		AAA0885	0 to 6 in.	Pyrene	13157		SU	GCMS	370 UG/KG
21-024(b)	21-1379	AAA0904	6 to 12 in.	Anthracene	13180		NS	GCMS	390 UG/KG
		AAA0904	6 to 12 in.	Benzo[a]anthracene	13180		NS	GCMS	2500 UG/KG
		AAA0904	6 to 12 in.	Benzo[a]pyrene	13180		NS	GCMS	2300 UG/KG
		AAA0904	6 to 12 in.	Benzo[b]fluoranthene	13180		NS	GCMS	2800 UG/KG
		AAA0904	6 to 12 in.	Benzo[k]fluoranthene	13180		NS	GCMS	1300 UG/KG

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0904	6 to 12 in.	Bis(2-ethylhexyl)phthalate	13180		NS	GCMS	370 UG/KG
		AAA0904	6 to 12 in.	Chrysene	13180		NS	GCMS	2300 UG/KG
		AAA0904	6 to 12 in.	Di-n-butyl phthalate	13180		NS	GCMS	430 UG/KG
		AAA0904	6 to 12 in.	Fluoranthene	13180		NS	GCMS	2300 UG/KG
		AAA0904	6 to 12 in.	Phenanthrene	13180		NS	GCMS	840 UG/KG
		AAA0904	6 to 12 in.	Pyrene	13180		NS	GCMS	3000 UG/KG
21-022(h)	21-1380	AAA0915	0 to 6 in.	Benzo[b]fluoranthene	13186		SU	GCMS	710 UG/KG
		AAA0915	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13186		SU	GCMS	1800 UG/KG
		AAA0915	0 to 6 in.	Fluoranthene	13186		SU	GCMS	1100 UG/KG
		AAA0915	0 to 6 in.	Phenanthrene	13186		SU	GCMS	1400 UG/KG
		AAA0915	0 to 6 in.	Pyrene	13186		SU	GCMS	1200 UG/KG
		AAA0916	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13186		FD	GCMS	2200 UG/KG
		AAA0916	0 to 6 in.	Fluoranthene	13186		FD	GCMS	740 UG/KG
		AAA0916	0 to 6 in.	Phenanthrene	13186		FD	GCMS	1800 UG/KG
		AAA0916	0 to 6 in.	Pyrene	13186		FD	GCMS	2200 UG/KG
	21-1382	AAA0922	0 to 6 in.	Anthracene	13186		SU	GCMS	340 UG/KG
		AAA0922	0 to 6 in.	Fluoranthene	13186		SU	GCMS	340 UG/KG
		AAA0922	0 to 6 in.	Pyrene	13186		SU	GCMS	550 UG/KG
21-024(a)	21-1387	AAA0940	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13195		SU	GCMS	890 UG/KG
	21-1389	AAA0948	12 to 18 in.	Diethyl phthalate	13195		NS	GCMS	680 UG/KG
21-024(c)	21-1391	AAA0753	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13173		SU	GCMS	2600 UG/KG
		AAA0753	0 to 6 in.	Di-n-butyl phthalate	13173		SU	GCMS	5200 UG/KG
		AAA0756	6 to 12 in.	Bis(2-ethylhexyl)phthalate	13173		NS	GCMS	490 UG/KG
		AAA0756	6 to 12 in.	Di-n-butyl phthalate	13173		NS	GCMS	2200 UG/KG
	21-1392	AAA0757	0 to 6 in.	Di-n-butyl phthalate	13173	19127	SU	GCMS	610 UG/KG

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
21-024(i)	21-1397	AAA0775	6 to 12 in.	Di-n-butyl phthalate	13180		NS	GCMS	1100 UG/KG
21-026(d)	21-1398	AAA0776	0 to 6 in.	Benzo[a]anthracene	13173		SU	GCMS	990 UG/KG
		AAA0776	0 to 6 in.	Benzo[b]fluoranthene	13173		SU	GCMS	1200 UG/KG
		AAA0776	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13173		SU	GCMS	640 UG/KG
		AAA0776	0 to 6 in.	Chrysene	13173		SU	GCMS	870 UG/KG
		AAA0776	0 to 6 in.	Fluoranthene	13173		SU	GCMS	1200 UG/KG
		AAA0776	0 to 6 in.	Pyrene	13173		SU	GCMS	1300 UG/KG
	21-1400	AAA0780	0 to 6 in.	Benzo[a]anthracene	13173		SU	GCMS	410 UG/KG
		AAA0780	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13173		SU	GCMS	640 UG/KG
		AAA0780	0 to 6 in.	Chrysene	13173		SU	GCMS	390 UG/KG
		AAA0780	0 to 6 in.	Fluoranthene	13173		SU	GCMS	460 UG/KG
		AAA0780	0 to 6 in.	Pyrene	13173		SU	GCMS	540 UG/KG
	21-1401	AAA0781	0 to 6 in.	Benzo[a]anthracene	13212		SU	GCMS	700 UG/KG
		AAA0781	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13212		SU	GCMS	870 UG/KG
		AAA0781	0 to 6 in.	Chrysene	13212		SU	GCMS	1200 UG/KG
		AAA0781	0 to 6 in.	Pyrene	13212		SU	GCMS	990 UG/KG
		AAA0782	6 to 12 in.	Anthracene	13212		NS	GCMS	1500 UG/KG
		AAA0782	6 to 12 in.	Benzo[a]anthracene	13212		NS	GCMS	9100 UG/KG
		AAA0782	6 to 12 in.	Benzo[a]pyrene	13212		NS	GCMS	5200 UG/KG
		AAA0782	6 to 12 in.	Benzo[b]fluoranthene	13212		NS	GCMS	7800 UG/KG
		AAA0782	6 to 12 in.	Benzo[g,h,i]perylene	13212		NS	GCMS	1500 UG/KG
		AAA0782	6 to 12 in.	Benzo[k]fluoranthene	13212		NS	GCMS	2600 UG/KG
		AAA0782	6 to 12 in.	Chrysene	13212		NS	GCMS	11900 UG/KG
		AAA0782	6 to 12 in.	Fluoranthene	13212		NS	GCMS	9300 UG/KG
		AAA0782	6 to 12 in.	Indeno[1,2,3-cd]pyrene	13212		NS	GCMS	2200 UG/KG
		AAA0782	6 to 12 in.	Phenanthrene	13212		NS	GCMS	4200 UG/KG
		AAA0782	6 to 12 in.	Pyrene	13212		NS	GCMS	10900 UG/KG
21-024(n)	21-1402	AAA0785	0 to 6 in.	Diethyl phthalate	13220		SU	GCMS	510 UG/KG

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0789	12 to 18 in.	Diethyl phthalate	13220		NS	GCMS	950 UG/KG
21-004(d)	21-1408	AAA0806	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13220		FD	GCMS	5100 UG/KG
21-011(k)	21-1418	AAA0908	0 to 6 in.	Di-n-butyl phthalate	13180		SU	GCMS	600 UG/KG
		AAA0909	6 to 12 in.	Bis(2-ethylhexyl)phthalate	13180		NS	GCMS	340 UG/KG

Outfalls
Laboratory Volatile Data

Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
21-024(e)	21-1341	AAA0631	0 to 6 in.	Trichlorofluoromethane	13100		FD	PTGC	12 UG/KG
EPA03A035	21-1346	AAA0847	0 to 6 in.	Acetone	13100		SU	PTGC	60 UG/KG
21-024(d)	21-1347	AAA0914	-	Acetone	13217		FB	PTGC	40 UG/L
	21-1348	AAA0853	0 to 6 in.	Acetone	13186	15611	SU	PTGC	33 UG/KG
		AAA0853	0 to 6 in.	Acetone	13186		SU	PTGC	33 UG/KG
21-027(c)	21-1349	AAA0856	0 to 6 in.	Acetone	13246	17267	SU	PTGC	17 UG/KG
	21-1351	AAA0858	0 to 6 in.	Acetone	13246	17267	SU	PTGC	25 UG/KG
		AAA0860	-	Acetone	13271		FR	PTGC	21 UG/L
		AAA0861	0 to 6 in.	Acetone	13246	17267	FD	PTGC	17 UG/KG
21-027(a)	21-1361	AAA0872	0 to 6 in.	Acetone	13246	17267	SU	PTGC	40 UG/KG
		AAA0872	0 to 6 in.	Methylene chloride	13246	17267	SU	PTGC	10 UG/KG
		AAA0872	0 to 6 in.	Tetrachloroethylene	13246	17267	SU	PTGC	61 UG/KG
		AAA0911	-	Acetone	13271		FB	PTGC	31 UG/L
	21-1362	AAA0873	0 to 6 in.	Acetone	13246	17267	SU	PTGC	17 UG/KG
	21-1363	AAA0874	0 to 6 in.	Acetone	13246	17267	SU	PTGC	20 UG/KG
	21-1364	AAA0875	0 to 6 in.	Acetone	13246	17267	SU	PTGC	18 UG/KG
		AAA0875	0 to 6 in.	Methylene chloride	13246	17267	SU	PTGC	10 UG/KG
21-024(b)	21-1377	AAA0897	6 to 12 in.	Toluene	13195		NS	PTGC	17 UG/KG
		AAA0930	-	Acetone	13217		FB	PTGC	44 UG/L
	21-1379	AAA0903	0 to 6 in.	Acetone	13195		SU	PTGC	22 UG/KG
		AAA0904	6 to 12 in.	Toluene	13180		NS	PTGC	18 UG/KG

Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
21-022(h)	21-1380	AAA0916	0 to 6 in.	Acetone	13186	15611	FD	PTGC	28 UG/KG
		AAA0916	0 to 6 in.	Acetone	13186		FD	PTGC	28 UG/KG
	21-1381	AAA0919	0 to 6 in.	Acetone	13186	15611	SU	PTGC	36 UG/KG
		AAA0919	0 to 6 in.	Acetone	13186		SU	PTGC	36 UG/KG
		AAA0920	6 to 12 in.	Acetone	13186	15611	NS	PTGC	31 UG/KG
		AAA0920	6 to 12 in.	Acetone	13186		NS	PTGC	31 UG/KG
	21-1382	AAA0922	0 to 6 in.	Acetone	13186	15611	SU	PTGC	37 UG/KG
		AAA0922	0 to 6 in.	Acetone	13186		SU	PTGC	37 UG/KG
		AAA0922	0 to 6 in.	Toluene	13186	15611	SU	PTGC	14 UG/KG
		AAA0922	0 to 6 in.	Toluene	13186		SU	PTGC	14 UG/KG
		AAA0923	6 to 12 in.	Acetone	13186	15611	NS	PTGC	53 UG/KG
		AAA0923	6 to 12 in.	Acetone	13186		NS	PTGC	53 UG/KG
		AAA0923	6 to 12 in.	Toluene	13186	15611	NS	PTGC	5.8 UG/KG
		AAA0923	6 to 12 in.	Toluene	13186		NS	PTGC	5.8 UG/KG
21-024(a)	21-1385	AAA0932	0 to 6 in.	Acetone	13195		SU	PTGC	55 UG/KG
		AAA0932	0 to 6 in.	Toluene	13195		SU	PTGC	9.9 UG/KG
		AAA0934	-	Acetone	13217		FE	PTGC	38 UG/L
		AAA0935	-	Acetone	13217		FR	PTGC	42 UG/L
		AAA0936	12 to 18 in.	Toluene	13195		NS	PTGC	6.9 UG/KG
	21-1386	AAA0933	12 to 18 in.	Toluene	13195		NS	PTGC	40 UG/KG
		AAA0938	6 to 12 in.	Acetone	13195		NS	PTGC	55 UG/KG
	21-1387	AAA0941	6 to 12 in.	Toluene	13195		NS	PTGC	29 UG/KG
		AAA0942	12 to 18 in.	Acetone	13195		NS	PTGC	30 UG/KG
	21-1388	AAA0944	6 to 12 in.	Acetone	13195		NS	PTGC	42 UG/KG

Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1389	AAA0947	6 to 12 in.	Benzene	13195		NS	PTGC	3000 UG/KG
		AAA0947	6 to 12 in.	Chlorobenzene	13195		NS	PTGC	2500 UG/KG
		AAA0947	6 to 12 in.	Dichloroethene [1,1-]	13195		NS	PTGC	2900 UG/KG
		AAA0947	6 to 12 in.	Toluene	13195		NS	PTGC	2600 UG/KG
		AAA0947	6 to 12 in.	Trichloroethene	13195		NS	PTGC	2400 UG/KG
	21-1390	AAA0769	-	Acetone	13217		FB	PTGC	24 UG/L
21-024(c)	21-1391	AAA0753	0 to 6 in.	Methylene chloride	13173		SU	PTGC	59 UG/KG
		AAA0753	0 to 6 in.	Toluene	13173		SU	PTGC	6.7 UG/KG
		AAA0755	-	Carbon disulfide	13164	16745	FR	PTGC	5.6 UG/L
		AAA0755	-	Carbon disulfide	13164		FR	PTGC	5.6 UG/L
		AAA0927	-	Acetone	13164	16745	FB	PTGC	21 UG/L
		AAA0927	-	Acetone	13164		FB	PTGC	21 UG/L
	21-1392	AAA0757	0 to 6 in.	Acetone	13173	19130	SU	PTGC	32 UG/KG
		AAA0757	0 to 6 in.	Toluene	13173	19130	SU	PTGC	7 UG/KG
21-024(m), 21-027(b)	21-1394	AAA0768	-	Acetone	13217		FR	PTGC	76 UG/L
21-024(i)	21-1396	AAA0772	0 to 6 in.	Toluene	13180		SU	PTGC	16 UG/KG
21-026(d)	21-1398	AAA0777	-	Acetone	13164	16745	FE	PTGC	26 UG/L
		AAA0777	-	Acetone	13164		FE	PTGC	26 UG/L
		AAA0778	-	Acetone	13164	16745	FR	PTGC	21 UG/L
		AAA0778	-	Acetone	13164		FR	PTGC	21 UG/L
	21-1401	AAA0782	6 to 12 in.	Acetone	13212		NS	PTGC	24 UG/KG
21-024(n)	21-1402	AAA0786	-	Acetone	13217		FE	PTGC	40 UG/L
		AAA0787	-	Acetone	13217		FR	PTGC	44 UG/L
		AAA0787	-	Dibromo-3-chloropropane [1,2-]	13217		FR	PTGC	17 UG/L

Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0788	6 to 12 in.	Acetone	13220	17245	NS	PTGC	18 UG/KG
		AAA0789	12 to 18 in.	Acetone	13220	17245	NS	PTGC	15 UG/KG
	21-1403	AAA0791	6 to 12 in.	Acetone	13246	17267	NS	PTGC	34 UG/KG
		AAA0792	12 to 18 in.	Acetone	13246	17267	NS	PTGC	17 UG/KG
		AAA0910	-	Acetone	13271		FB	PTGC	46 UG/L
	21-1404	AAA0793	0 to 6 in.	Acetone	13246	17267	SU	PTGC	33 UG/KG
		AAA0794	6 to 12 in.	Acetone	13246	17267	NS	PTGC	24 UG/KG
		AAA0795	12 to 18 in.	Acetone	13246	17267	NS	PTGC	27 UG/KG
21-004(d)	21-1407	AAA0784	-	Acetone	13217		FB	PTGC	56 UG/L
		AAA0802	0 to 6 in.	Acetone	13220	17245	SU	PTGC	14 UG/KG
		AAA0803	6 to 12 in.	Acetone	13220	17245	NS	PTGC	45 UG/KG
		AAA0803	6 to 12 in.	Methylene chloride	13220	17245	NS	PTGC	18 UG/KG
		AAA0804	12 to 18 in.	Acetone	13220	17245	NS	PTGC	73 UG/KG
	21-1408	AAA0805	0 to 6 in.	Acetone	13220	17245	SU	PTGC	24 UG/KG
		AAA0805	0 to 6 in.	Methylene chloride	13220	17245	SU	PTGC	7 UG/KG
		AAA0806	0 to 6 in.	Acetone	13220	17245	FD	PTGC	15 UG/KG
		AAA0807	6 to 12 in.	Acetone	13220	17245	NS	PTGC	88 UG/KG
		AAA0808	12 to 18 in.	Acetone	13220	17245	NS	PTGC	16 UG/KG
		AAA0808	12 to 18 in.	Methylene chloride	13220	17245	NS	PTGC	7 UG/KG
	21-1409	AAA0809	0 to 6 in.	Acetone	13220	17245	SU	PTGC	28 UG/KG
		AAA0810	6 to 12 in.	Acetone	13220	17245	NS	PTGC	47 UG/KG
		AAA0810	6 to 12 in.	Methylene chloride	13220	17245	NS	PTGC	8 UG/KG
		AAA0811	12 to 18 in.	Acetone	13220	17245	NS	PTGC	110 UG/KG
	21-1410	AAA0812	0 to 6 in.	Acetone	13220	17245	SU	PTGC	27 UG/KG
		AAA0812	0 to 6 in.	Methylene chloride	13220	17245	SU	PTGC	14 UG/KG
		AAA0813	6 to 12 in.	Acetone	13220	17245	NS	PTGC	16 UG/KG

Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1411	AAA0815	0 to 6 in.	Acetone	13220	17245	SU	PTGC	22 UG/KG
		AAA0815	0 to 6 in.	Methylene chloride	13220	17245	SU	PTGC	13 UG/KG
		AAA0816	6 to 12 in.	Acetone	13220	17245	NS	PTGC	17 UG/KG
		AAA0817	12 to 18 in.	Acetone	13220	17245	NS	PTGC	18 UG/KG
	21-1412	AAA0818	0 to 6 in.	Acetone	13220	17245	SU	PTGC	12 UG/KG
		AAA0819	6 to 12 in.	Acetone	13220	17245	NS	PTGC	13 UG/KG
		AAA0820	12 to 18 in.	Acetone	13220	17245	NS	PTGC	29 UG/KG
		AAA0821	-	Acetone	13217		FE	PTGC	62 UG/L
		AAA0822	-	Acetone	13217		FR	PTGC	38 UG/L
21-024(h)	21-1413	AAA0823	0 to 6 in.	Acetone	13220	17245	SU	PTGC	15 UG/KG
		AAA0824	6 to 12 in.	Acetone	13220	17245	NS	PTGC	11 UG/KG
		AAA0825	12 to 18 in.	Acetone	13220	17245	NS	PTGC	32 UG/KG
	21-1414	AAA0826	0 to 6 in.	Acetone	13220	17245	SU	PTGC	19 UG/KG
		AAA0827	0 to 6 in.	Acetone	13220	17245	FD	PTGC	17 UG/KG
		AAA0828	6 to 12 in.	Acetone	13220	17245	NS	PTGC	18 UG/KG
	21-1415	AAA0831	6 to 12 in.	Acetone	13220	17245	NS	PTGC	14 UG/KG
		AAA0832	12 to 18 in.	Acetone	13220	17245	NS	PTGC	16 UG/KG
		AAA0832	12 to 18 in.	Methylene chloride	13220	17245	NS	PTGC	16 UG/KG
21-024(l)	21-1421	AAA0889	0 to 6 in.	Acetone	13246	17267	SU	PTGC	20 UG/KG
		AAA0889	0 to 6 in.	Methylene chloride	13246	17267	SU	PTGC	9 UG/KG
21-024(g)	21-1428	AAA0799	0 to 6 in.	Acetone	13186	15611	SU	PTGC	37 UG/KG
		AAA0799	0 to 6 in.	Acetone	13186		SU	PTGC	37 UG/KG
		AAA0800	6 to 12 in.	Acetone	13186	15611	NS	PTGC	37 UG/KG
		AAA0800	6 to 12 in.	Acetone	13186		NS	PTGC	37 UG/KG

Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1429	AAA0801	0 to 6 in.	Acetone	13246	17267	SU	PTGC	17 UG/KG
		AAA1091	6 to 12 in.	Acetone	13246	17267	NS	PTGC	35 UG/KG
	21-1430	AAA1092	0 to 6 in.	Acetone	13246	17267	SU	PTGC	21 UG/KG
21-024(f)	21-1431	AAA1095	0 to 6 in.	Acetone	13246	17267	SU	PTGC	28 UG/KG
		AAA1096	6 to 12 in.	Acetone	13246	17267	NS	PTGC	25 UG/KG
		AAA1097	12 to 18 in.	Acetone	13246	17267	NS	PTGC	19 UG/KG
	21-1432	AAA1098	0 to 6 in.	Acetone	13246	17267	SU	PTGC	35 UG/KG
		AAA1100	6 to 12 in.	Acetone	13246	17267	NS	PTGC	55 UG/KG
		AAA1100	6 to 12 in.	Toluene	13246	17267	NS	PTGC	8 UG/KG
		AAA1101	12 to 18 in.	Acetone	13246	17267	NS	PTGC	20 UG/KG
	21-1433	AAA1103	6 to 12 in.	Acetone	13246	17267	NS	PTGC	38 UG/KG
		AAA1104	12 to 18 in.	Acetone	13246	17267	NS	PTGC	42 UG/KG
		AAA1104	12 to 18 in.	Methylene chloride	13246	17267	NS	PTGC	7 UG/KG

APPENDIX C

DATA TABLES FOR ANALYTES EXCEEDING DETECTION LIMITS

The data in this appendix represent only detectable levels of radiological, inorganic, and organic analytical values. A complete set of data is available on the Facility for Information Management and Display database.

The following table lists definitions for acrocyms used in the appendices:

FE	rinsate blank
FB	trip blank
FR	field blank
NS	near-surface soil sample
SU	surface soil sample
FD	field duplicate
D	laboratory duplicate
R	laboratory replicate
ETVAA	electro thermal vapor atomic absorbtion
PTCG	photothermal gas chromotography
FAA	flame atomic absorbtion
RAS	radio alpha spectroscopy
PC	proportional counting
DNA	delayed neutron activation
GCMS	gas chromatorgraphy mass spectroscopy
ICPES	inductively-coupled plasma emmissions spectroscopy

Outfalls
Laboratory Radiological Data

Laboratory Radiological Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
21-004(d)	21-1407	AAA0802	0-6 in.	AM-241	13221		SU		RAS	0.149 PCI/G
	21-1407	AAA0802	0-6 in.	H-3	13221		SU	D	LS	19000 PCI/L
	21-1407	AAA0802	0-6 in.	H-3	13221		SU		LS	19000 PCI/L
	21-1407	AAA0802	0-6 in.	H-3	13221		SU		LS	35200 PCI/L
	21-1407	AAA0802	0-6 in.	PU-238	13221		SU		RAS	0.0573 PCI/G
	21-1407	AAA0802	0-6 in.	PU-239	13221		SU		RAS	1.47 PCI/G
	21-1407	AAA0802	0-6 in.	SR-90	13221		SU		PC	0.584 PCI/G
	21-1407	AAA0802	0-6 in.	TH-228	13221		SU		RAS	1.32 PCI/G
	21-1407	AAA0802	0-6 in.	TH-230	13221		SU		RAS	1 PCI/G
	21-1407	AAA0802	0-6 in.	TH-232	13221		SU		RAS	1.58 PCI/G
	21-1407	AAA0802	0-6 in.	U	13221		SU		DNA	4.4 UG/G
	21-1407	AAA0803	6-12 in.	AM-241	13221		NS		RAS	0.654 PCI/G
	21-1407	AAA0803	6-12 in.	H-3	13221		NS		LS	152600 PCI/L
	21-1407	AAA0803	6-12 in.	PU-238	13221		NS		RAS	0 PCI/G
	21-1407	AAA0803	6-12 in.	PU-239	13221		NS		RAS	0.685 PCI/G
	21-1407	AAA0803	6-12 in.	SR-90	13221		NS		PC	0.323 PCI/G
	21-1407	AAA0803	6-12 in.	TH-228	13221		NS		RAS	1.28 PCI/G
	21-1407	AAA0803	6-12 in.	TH-230	13221		NS		RAS	1.03 PCI/G
	21-1407	AAA0803	6-12 in.	TH-232	13221		NS		RAS	1.46 PCI/G
	21-1407	AAA0803	6-12 in.	U	13221		NS		DNA	3.5 UG/G
	21-1407	AAA0804	12-18 in.	AM-241	13221		NS	D	RAS	0.0449 PCI/G
	21-1407	AAA0804	12-18 in.	AM-241	13221		NS		RAS	0 PCI/G
	21-1407	AAA0804	12-18 in.	H-3	13221		NS	D	LS	58300 PCI/L
	21-1407	AAA0804	12-18 in.	H-3	13221		NS		LS	58300 PCI/L
	21-1407	AAA0804	12-18 in.	H-3	13221		NS		LS	115300 PCI/L
	21-1407	AAA0804	12-18 in.	PU-238	13221		NS	D	RAS	0.516 PCI/G
	21-1407	AAA0804	12-18 in.	PU-238	13221		NS		RAS	0.0502 PCI/G
	21-1407	AAA0804	12-18 in.	PU-239	13221		NS	D	RAS	0.0619 PCI/G
	21-1407	AAA0804	12-18 in.	PU-239	13221		NS		RAS	0.12 PCI/G
	21-1407	AAA0804	12-18 in.	SR-90	13221		NS		PC	0.564 PCI/G
	21-1407	AAA0804	12-18 in.	TH-228	13221		NS	D	RAS	1.77 PCI/G
	21-1407	AAA0804	12-18 in.	TH-228	13221		NS		RAS	1.68 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1407	AAA0804	12-18 in.	TH-230	13221		NS	D	RAS	0.887 PCI/G
	21-1407	AAA0804	12-18 in.	TH-230	13221		NS		RAS	0.998 PCI/G
	21-1407	AAA0804	12-18 in.	TH-232	13221		NS	D	RAS	1.4 PCI/G
	21-1407	AAA0804	12-18 in.	TH-232	13221		NS		RAS	1.78 PCI/G
	21-1407	AAA0804	12-18 in.	U	13221		NS		DNA	3.5 UG/G
	21-1408	AAA0805	0-6 in.	AM-241	13221		SU		RAS	0.27 PCI/G
	21-1408	AAA0805	0-6 in.	H-3	13221		SU		LS	78100 PCI/L
	21-1408	AAA0805	0-6 in.	PU-238	13221		SU		RAS	0.0647 PCI/G
	21-1408	AAA0805	0-6 in.	PU-239	13221		SU		RAS	4.01 PCI/G
	21-1408	AAA0805	0-6 in.	SR-90	13221		SU		PC	1.14 PCI/G
	21-1408	AAA0805	0-6 in.	TH-228	13221		SU		RAS	1.97 PCI/G
	21-1408	AAA0805	0-6 in.	TH-230	13221		SU		RAS	1.05 PCI/G
	21-1408	AAA0805	0-6 in.	TH-232	13221		SU		RAS	1.71 PCI/G
	21-1408	AAA0805	0-6 in.	U	13221		SU		DNA	4.5 UG/G
	21-1408	AAA0806	0-6 in.	AM-241	13221		FD		RAS	0.227 PCI/G
	21-1408	AAA0806	0-6 in.	H-3	13221		FD	D	LS	54100 PCI/L
	21-1408	AAA0806	0-6 in.	H-3	13221		FD		LS	54100 PCI/L
	21-1408	AAA0806	0-6 in.	H-3	13221		FD		LS	81000 PCI/L
	21-1408	AAA0806	0-6 in.	PU-238	13221		FD		RAS	0.204 PCI/G
	21-1408	AAA0806	0-6 in.	PU-239	13221		FD		RAS	10.3 PCI/G
	21-1408	AAA0806	0-6 in.	SR-90	13221		FD		PC	0.798 PCI/G
	21-1408	AAA0806	0-6 in.	TH-228	13221		FD		RAS	1.51 PCI/G
	21-1408	AAA0806	0-6 in.	TH-230	13221		FD		RAS	1.22 PCI/G
	21-1408	AAA0806	0-6 in.	TH-232	13221		FD		RAS	1.08 PCI/G
	21-1408	AAA0806	0-6 in.	U	13221		FD		DNA	4.8 UG/G
	21-1408	AAA0807	6-12 in.	AM-241	13221		NS		RAS	0.0412 PCI/G
	21-1408	AAA0807	6-12 in.	H-3	13221		NS	D	LS	248300 PCI/L
	21-1408	AAA0807	6-12 in.	H-3	13221		NS		LS	248300 PCI/L
	21-1408	AAA0807	6-12 in.	H-3	13221		NS		LS	604400 PCI/L
	21-1408	AAA0807	6-12 in.	PU-238	13221		NS		RAS	0.0624 PCI/G
	21-1408	AAA0807	6-12 in.	PU-239	13221		NS		RAS	2.79 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1408	AAA0807	6-12 in.	SR-90	13221		NS		PC	0.384 PCI/G
	21-1408	AAA0807	6-12 in.	TH-228	13221		NS		RAS	1.81 PCI/G
	21-1408	AAA0807	6-12 in.	TH-230	13221		NS		RAS	1.07 PCI/G
	21-1408	AAA0807	6-12 in.	TH-232	13221		NS		RAS	1.47 PCI/G
	21-1408	AAA0807	6-12 in.	U	13221		NS		DNA	5.6 UG/G
	21-1408	AAA0808	12-18 in.	AM-241	13221		NS		RAS	0.0642 PCI/G
	21-1408	AAA0808	12-18 in.	H-3	13221		NS		LS	2E+06 PCI/L
	21-1408	AAA0808	12-18 in.	PU-238	13221		NS		RAS	0.0435 PCI/G
	21-1408	AAA0808	12-18 in.	PU-239	13221		NS		RAS	0.0362 PCI/G
	21-1408	AAA0808	12-18 in.	SR-90	13221		NS		PC	0.579 PCI/G
	21-1408	AAA0808	12-18 in.	TH-228	13221		NS		RAS	1.23 PCI/G
	21-1408	AAA0808	12-18 in.	TH-230	13221		NS		RAS	1.36 PCI/G
	21-1408	AAA0808	12-18 in.	TH-232	13221		NS		RAS	1.34 PCI/G
	21-1408	AAA0808	12-18 in.	U	13221		NS		DNA	4.1 UG/G
	21-1409	AAA0809	0-6 in.	AM-241	13221		SU		RAS	0.165 PCI/G
	21-1409	AAA0809	0-6 in.	H-3	13221		SU	D	LS	11100 PCI/L
	21-1409	AAA0809	0-6 in.	H-3	13221		SU		LS	11100 PCI/L
	21-1409	AAA0809	0-6 in.	H-3	13221		SU		LS	19000 PCI/L
	21-1409	AAA0809	0-6 in.	PU-238	13221		SU		RAS	0.14 PCI/G
	21-1409	AAA0809	0-6 in.	PU-239	13221		SU		RAS	2.04 PCI/G
	21-1409	AAA0809	0-6 in.	SR-90	13221		SU		PC	0.503 PCI/G
	21-1409	AAA0809	0-6 in.	TH-228	13221		SU		RAS	1.55 PCI/G
	21-1409	AAA0809	0-6 in.	TH-230	13221		SU		RAS	1.75 PCI/G
	21-1409	AAA0809	0-6 in.	TH-232	13221		SU		RAS	1.68 PCI/G
	21-1409	AAA0809	0-6 in.	U	13221		SU		DNA	4.3 UG/G
	21-1409	AAA0810	6-12 in.	AM-241	13221		NS		RAS	0.293 PCI/G
	21-1409	AAA0810	6-12 in.	H-3	13221		NS		LS	78700 PCI/L
	21-1409	AAA0810	6-12 in.	PU-238	13221		NS		RAS	0.0752 PCI/G
	21-1409	AAA0810	6-12 in.	PU-239	13221		NS		RAS	0.178 PCI/G
	21-1409	AAA0810	6-12 in.	SR-90	13221		NS		PC	0.343 PCI/G
	21-1409	AAA0810	6-12 in.	TH-228	13221		NS		RAS	1.48 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1409	AAA0810	6-12 in.	TH-230	13221		NS		RAS	0.891 PCI/G
	21-1409	AAA0810	6-12 in.	TH-232	13221		NS		RAS	1.17 PCI/G
	21-1409	AAA0810	6-12 in.	U	13221		NS		DNA	4 UG/G
	21-1409	AAA0811	12-18 in.	AM-241	13221		NS		RAS	0.173 PCI/G
	21-1409	AAA0811	12-18 in.	H-3	13221		NS	D	LS	622700 PCI/L
	21-1409	AAA0811	12-18 in.	H-3	13221		NS		LS	622700 PCI/L
	21-1409	AAA0811	12-18 in.	H-3	13221		NS		LS	753500 PCI/L
	21-1409	AAA0811	12-18 in.	PU-238	13221		NS		RAS	0.0681 PCI/G
	21-1409	AAA0811	12-18 in.	PU-239	13221		NS		RAS	0.0681 PCI/G
	21-1409	AAA0811	12-18 in.	SR-90	13221		NS		PC	0.437 PCI/G
	21-1409	AAA0811	12-18 in.	TH-228	13221		NS		RAS	2.99 PCI/G
	21-1409	AAA0811	12-18 in.	TH-230	13221		NS		RAS	1.79 PCI/G
	21-1409	AAA0811	12-18 in.	TH-232	13221		NS		RAS	1.63 PCI/G
	21-1409	AAA0811	12-18 in.	U	13221		NS		DNA	4.5 UG/G
	21-1410	AAA0812	0-6 in.	AM-241	13221		SU		RAS	0.0738 PCI/G
	21-1410	AAA0812	0-6 in.	H-3	13221		SU		LS	4400 PCI/L
	21-1410	AAA0812	0-6 in.	PU-238	13221		SU		RAS	0.432 PCI/G
	21-1410	AAA0812	0-6 in.	PU-239	13221		SU		RAS	0.265 PCI/G
	21-1410	AAA0812	0-6 in.	SR-90	13221		SU		PC	0.578 PCI/G
	21-1410	AAA0812	0-6 in.	TH-228	13221		SU		RAS	1.51 PCI/G
	21-1410	AAA0812	0-6 in.	TH-230	13221		SU		RAS	1.06 PCI/G
	21-1410	AAA0812	0-6 in.	TH-232	13221		SU		RAS	1.3 PCI/G
	21-1410	AAA0812	0-6 in.	U	13221		SU		DNA	4.1 UG/G
	21-1410	AAA0813	6-12 in.	AM-241	13221		NS		RAS	0.0207 PCI/G
	21-1410	AAA0813	6-12 in.	H-3	13221		NS		LS	4200 PCI/L
	21-1410	AAA0813	6-12 in.	PU-238	13221		NS		RAS	0.0535 PCI/G
	21-1410	AAA0813	6-12 in.	PU-239	13221		NS		RAS	0.0134 PCI/G
	21-1410	AAA0813	6-12 in.	SR-90	13221		NS		PC	0.459 PCI/G
	21-1410	AAA0813	6-12 in.	TH-228	13221		NS		RAS	1.73 PCI/G
	21-1410	AAA0813	6-12 in.	TH-230	13221		NS		RAS	0.676 PCI/G
	21-1410	AAA0813	6-12 in.	TH-232	13221		NS		RAS	1.38 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1410	AAA0813	6-12 in.	U	13221		NS		DNA	3.7 UG/G
	21-1410	AAA0814	12-18 in.	AM-241	13221		NS		RAS	0.0449 PCI/G
	21-1410	AAA0814	12-18 in.	H-3	13221		NS		LS	3200 PCI/L
	21-1410	AAA0814	12-18 in.	PU-238	13221		NS		RAS	0.106 PCI/G
	21-1410	AAA0814	12-18 in.	PU-239	13221		NS		RAS	0.144 PCI/G
	21-1410	AAA0814	12-18 in.	SR-90	13221		NS		PC	0.409 PCI/G
	21-1410	AAA0814	12-18 in.	TH-228	13221		NS		RAS	1.95 PCI/G
	21-1410	AAA0814	12-18 in.	TH-230	13221		NS		RAS	0.904 PCI/G
	21-1410	AAA0814	12-18 in.	TH-232	13221		NS		RAS	1.43 PCI/G
	21-1410	AAA0814	12-18 in.	U	13221		NS		DNA	3.5 UG/G
	21-1411	AAA0815	0-6 in.	AM-241	13221		SU	D	RAS	0.147 PCI/G
	21-1411	AAA0815	0-6 in.	AM-241	13221		SU		RAS	0.157 PCI/G
	21-1411	AAA0815	0-6 in.	H-3	13221		SU		LS	6000 PCI/L
	21-1411	AAA0815	0-6 in.	PU-238	13221		SU	D	RAS	0.0555 PCI/G
	21-1411	AAA0815	0-6 in.	PU-238	13221		SU		RAS	0.0737 PCI/G
	21-1411	AAA0815	0-6 in.	PU-239	13221		SU	D	RAS	0.0437 PCI/G
	21-1411	AAA0815	0-6 in.	PU-239	13221		SU		RAS	0.388 PCI/G
	21-1411	AAA0815	0-6 in.	SR-90	13221		SU		PC	0.542 PCI/G
	21-1411	AAA0815	0-6 in.	TH-228	13221		SU	D	RAS	1.38 PCI/G
	21-1411	AAA0815	0-6 in.	TH-228	13221		SU		RAS	1.57 PCI/G
	21-1411	AAA0815	0-6 in.	TH-230	13221		SU	D	RAS	0.898 PCI/G
	21-1411	AAA0815	0-6 in.	TH-230	13221		SU		RAS	1.45 PCI/G
	21-1411	AAA0815	0-6 in.	TH-232	13221		SU	D	RAS	1.24 PCI/G
	21-1411	AAA0815	0-6 in.	TH-232	13221		SU		RAS	1.26 PCI/G
	21-1411	AAA0815	0-6 in.	U	13221		SU		DNA	3.8 UG/G
	21-1411	AAA0816	6-12 in.	AM-241	13221		NS		RAS	0.209 PCI/G
	21-1411	AAA0816	6-12 in.	H-3	13221		NS		LS	4600 PCI/L
	21-1411	AAA0816	6-12 in.	PU-238	13221		NS		RAS	0.13 PCI/G
	21-1411	AAA0816	6-12 in.	PU-239	13221		NS		RAS	0.0744 PCI/G
	21-1411	AAA0816	6-12 in.	SR-90	13221		NS		PC	0.244 PCI/G
	21-1411	AAA0816	6-12 in.	TH-228	13221		NS		RAS	1.07 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1411	AAA0816	6-12 in.	TH-230	13221		NS		RAS	0.744 PCI/G
	21-1411	AAA0816	6-12 in.	TH-232	13221		NS		RAS	1 PCI/G
	21-1411	AAA0816	6-12 in.	U	13221		NS		DNA	3.8 UG/G
	21-1411	AAA0817	12-18 in.	AM-241	13221		NS		RAS	0.252 PCI/G
	21-1411	AAA0817	12-18 in.	H-3	13221		NS		LS	3600 PCI/L
	21-1411	AAA0817	12-18 in.	PU-238	13221		NS		RAS	0.0746 PCI/G
	21-1411	AAA0817	12-18 in.	PU-239	13221		NS		RAS	0.0402 PCI/G
	21-1411	AAA0817	12-18 in.	SR-90	13221		NS		PC	0.192 PCI/G
	21-1411	AAA0817	12-18 in.	TH-228	13221		NS		RAS	1.5 PCI/G
	21-1411	AAA0817	12-18 in.	TH-230	13221		NS		RAS	0.931 PCI/G
	21-1411	AAA0817	12-18 in.	TH-232	13221		NS		RAS	1.12 PCI/G
	21-1411	AAA0817	12-18 in.	U	13221		NS		DNA	3.7 UG/G
	21-1412	AAA0818	0-6 in.	AM-241	13221		SU		RAS	0.325 PCI/G
	21-1412	AAA0818	0-6 in.	H-3	13221		SU		LS	6600 PCI/L
	21-1412	AAA0818	0-6 in.	PU-238	13221		SU		RAS	0.0847 PCI/G
	21-1412	AAA0818	0-6 in.	PU-239	13221		SU		RAS	1.24 PCI/G
	21-1412	AAA0818	0-6 in.	SR-90	13221		SU		PC	0.666 PCI/G
	21-1412	AAA0818	0-6 in.	TH-228	13221		SU		RAS	1.71 PCI/G
	21-1412	AAA0818	0-6 in.	TH-230	13221		SU		RAS	0.817 PCI/G
	21-1412	AAA0818	0-6 in.	TH-232	13221		SU		RAS	1.31 PCI/G
	21-1412	AAA0818	0-6 in.	U	13221		SU		DNA	6.8 UG/G
	21-1412	AAA0819	6-12 in.	AM-241	13221		NS		RAS	0.0191 PCI/G
	21-1412	AAA0819	6-12 in.	H-3	13221		NS		LS	5000 PCI/L
	21-1412	AAA0819	6-12 in.	PU-238	13221		NS		RAS	0.371 PCI/G
	21-1412	AAA0819	6-12 in.	PU-239	13221		NS		RAS	0 PCI/G
	21-1412	AAA0819	6-12 in.	SR-90	13221		NS		PC	0.547 PCI/G
	21-1412	AAA0819	6-12 in.	TH-228	13221		NS		RAS	1.57 PCI/G
	21-1412	AAA0819	6-12 in.	TH-230	13221		NS		RAS	0.856 PCI/G
	21-1412	AAA0819	6-12 in.	TH-232	13221		NS		RAS	1.44 PCI/G
	21-1412	AAA0819	6-12 in.	U	13221		NS		DNA	3.6 UG/G
	21-1412	AAA0820	12-18 in.	AM-241	13221		NS		RAS	0.132 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1412	AAA0820	12-18 in.	H-3	13221		NS		LS	3800 PCI/L
	21-1412	AAA0820	12-18 in.	PU-238	13221		NS		RAS	0.0581 PCI/G
	21-1412	AAA0820	12-18 in.	PU-239	13221		NS		RAS	0.0799 PCI/G
	21-1412	AAA0820	12-18 in.	SR-90	13221		NS		PC	0.314 PCI/G
	21-1412	AAA0820	12-18 in.	TH-228	13221		NS		RAS	1.49 PCI/G
	21-1412	AAA0820	12-18 in.	TH-230	13221		NS		RAS	0.718 PCI/G
	21-1412	AAA0820	12-18 in.	TH-232	13221		NS		RAS	1.22 PCI/G
	21-1412	AAA0820	12-18 in.	U	13221		NS		DNA	3.7 UG/G
	21-1412	AAA0821		AM-241	13179		FE		RAS	0.021 PCI/L
	21-1412	AAA0821		AM-241	13179		FE		RAS	0.037 PCI/L
	21-1412	AAA0821		H-3	13179		FE		LS	0 PCI/L
	21-1412	AAA0821		PU-238	13179		FE		RAS	0.004 PCI/L
	21-1412	AAA0821		PU-239	13179		FE		RAS	0.017 PCI/L
	21-1412	AAA0821		SR-90	13179		FE		PC	0.3 PCI/L
	21-1412	AAA0821		TH-230	13179		FE		RAS	0.03 PCI/L
	21-1412	AAA0821		TH-232	13179	18271	FE		RAS	0 PCI/L
21-006(b)	21-1355	AAA0866	0-6 in.	AM-241	13158	18537	SU		RAS	0.042 PCI/G
	21-1355	AAA0866	0-6 in.	H-3	13158		SU		LS	2900 PCI/L
	21-1355	AAA0866	0-6 in.	PU-238	13158	18539	SU		RAS	0.01 PCI/G
	21-1355	AAA0866	0-6 in.	PU-239	13158	18539	SU		RAS	0.623 PCI/G
	21-1355	AAA0866	0-6 in.	SR-90	13158	18538	SU		PC	0.6 PCI/G
	21-1355	AAA0866	0-6 in.	TH-228	13158	18541	SU	D	RAS	1.36 PCI/G
	21-1355	AAA0866	0-6 in.	TH-228	13158	18541	SU		RAS	1.5 PCI/G
	21-1355	AAA0866	0-6 in.	TH-230	13158	18541	SU	D	RAS	1.06 PCI/G
	21-1355	AAA0866	0-6 in.	TH-230	13158	18541	SU		RAS	1.24 PCI/G
	21-1355	AAA0866	0-6 in.	TH-232	13158	18541	SU	D	RAS	1.64 PCI/G
	21-1355	AAA0866	0-6 in.	TH-232	13158	18541	SU		RAS	1.45 PCI/G
	21-1355	AAA0866	0-6 in.	U	13158		SU		DNA	5.3 UG/G
	21-1356	AAA0867	0-6 in.	AM-241	13158	18537	SU		RAS	0.051 PCI/G
	21-1356	AAA0867	0-6 in.	H-3	13158		SU		LS	2100 PCI/L

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1356	AAA0867	0-6 in.	PU-238	13158	18539	SU		RAS	0.014 PCI/G
	21-1356	AAA0867	0-6 in.	PU-239	13158	18539	SU		RAS	0.896 PCI/G
	21-1356	AAA0867	0-6 in.	SR-90	13158	18538	SU		PC	0.3 PCI/G
	21-1356	AAA0867	0-6 in.	TH-228	13158	18541	SU		RAS	1.52 PCI/G
	21-1356	AAA0867	0-6 in.	TH-230	13158	18541	SU		RAS	1.4 PCI/G
	21-1356	AAA0867	0-6 in.	TH-232	13158	18541	SU		RAS	1.43 PCI/G
	21-1356	AAA0867	0-6 in.	U	13158		SU		DNA	5.2 UG/G
	21-1357	AAA0868	0-6 in.	AM-241	13158	18537	SU		RAS	0.022 PCI/G
	21-1357	AAA0868	0-6 in.	H-3	13158		SU		LS	1900 PCI/L
	21-1357	AAA0868	0-6 in.	PU-238	13158	18539	SU		RAS	0.003 PCI/G
	21-1357	AAA0868	0-6 in.	PU-239	13158	18539	SU		RAS	0.295 PCI/G
	21-1357	AAA0868	0-6 in.	SR-90	13158	18538	SU		PC	0.3 PCI/G
	21-1357	AAA0868	0-6 in.	TH-228	13158	18541	SU		RAS	1.53 PCI/G
	21-1357	AAA0868	0-6 in.	TH-230	13158	18541	SU		RAS	1.39 PCI/G
	21-1357	AAA0868	0-6 in.	TH-232	13158	18541	SU		RAS	1.46 PCI/G
	21-1357	AAA0868	0-6 in.	U	13158		SU		DNA	4.5 UG/G
	21-1358	AAA0869	0-4 in.	AM-241	13158	18537	SU		RAS	0.029 PCI/G
	21-1358	AAA0869	0-4 in.	H-3	13158		SU		LS	2900 PCI/L
	21-1358	AAA0869	0-4 in.	PU-238	13158	18539	SU		RAS	0.009 PCI/G
	21-1358	AAA0869	0-4 in.	PU-239	13158	18539	SU		RAS	0.28 PCI/G
	21-1358	AAA0869	0-4 in.	SR-90	13158	18538	SU		PC	0.7 PCI/G
	21-1358	AAA0869	0-4 in.	TH-228	13158	18541	SU		RAS	1.6 PCI/G
	21-1358	AAA0869	0-4 in.	TH-230	13158	18541	SU		RAS	1.3 PCI/G
	21-1358	AAA0869	0-4 in.	TH-232	13158	18541	SU		RAS	1.56 PCI/G
	21-1358	AAA0869	0-4 in.	U	13158		SU		DNA	5.7 UG/G
	21-1359	AAA0870	0-6 in.	AM-241	13158	18537	SU	D	RAS	0.01 PCI/G
	21-1359	AAA0870	0-6 in.	AM-241	13158	18537	SU		RAS	0.015 PCI/G
	21-1359	AAA0870	0-6 in.	H-3	13158		SU		LS	2000 PCI/L
	21-1359	AAA0870	0-6 in.	PU-238	13158	18539	SU	D	RAS	0.007 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1359	AAA0870	0-6 in.	PU-238	13158	18539	SU		RAS	0.003 PCI/G
	21-1359	AAA0870	0-6 in.	PU-239	13158	18539	SU	D	RAS	0.242 PCI/G
	21-1359	AAA0870	0-6 in.	PU-239	13158	18539	SU		RAS	0.221 PCI/G
	21-1359	AAA0870	0-6 in.	SR-90	13158	18538	SU		PC	0.4 PCI/G
	21-1359	AAA0870	0-6 in.	TH-228	13158	18541	SU		RAS	1.64 PCI/G
	21-1359	AAA0870	0-6 in.	TH-230	13158	18541	SU		RAS	1.49 PCI/G
	21-1359	AAA0870	0-6 in.	TH-232	13158	18541	SU		RAS	1.8 PCI/G
	21-1359	AAA0870	0-6 in.	U	13158		SU		DNA	5.6 UG/G
	21-1360	AAA0871	0-6 in.	AM-241	13158	18537	SU		RAS	0.104 PCI/G
	21-1360	AAA0871	0-6 in.	H-3	13158		SU		LS	3300 PCI/L
	21-1360	AAA0871	0-6 in.	PU-238	13158	18539	SU		RAS	0.015 PCI/G
	21-1360	AAA0871	0-6 in.	PU-239	13158	18539	SU		RAS	0.409 PCI/G
	21-1360	AAA0871	0-6 in.	SR-90	13158	18538	SU		PC	0.3 PCI/G
	21-1360	AAA0871	0-6 in.	TH-228	13158	18541	SU		RAS	1.59 PCI/G
	21-1360	AAA0871	0-6 in.	TH-230	13158	18541	SU		RAS	1.35 PCI/G
	21-1360	AAA0871	0-6 in.	TH-232	13158	18541	SU		RAS	1.61 PCI/G
	21-1360	AAA0871	0-6 in.	U	13158		SU		DNA	6.1 UG/G
21-011(k)	21-1416	AAA0833	0-5 in.	AM-241	13117		SU		G	2600 PCI/G
	21-1416	AAA0833	0-5 in.	H-3	13117		SU		LS	229500 PCI/L
	21-1416	AAA0833	0-5 in.	H-3	13117		SU		LS	237100 PCI/L
	21-1416	AAA0833	0-5 in.	PU-238	13117		SU		RAS	2200 PCI/G
	21-1416	AAA0833	0-5 in.	PU-239	13117		SU		RAS	46000 PCI/G
	21-1416	AAA0833	0-5 in.	SR-90	13117		SU		PC	1800 PCI/G
	21-1416	AAA0833	0-5 in.	U	13117		SU		DNA	54.2 UG/G
	21-1417	AAA0906	0-6 in.	AM-241	13117		SU		G	289 PCI/G
	21-1417	AAA0906	0-6 in.	H-3	13117		SU		LS	18500 PCI/L
	21-1417	AAA0906	0-6 in.	H-3	13117		SU		LS	20000 PCI/L
	21-1417	AAA0906	0-6 in.	PU-238	13117		SU		RAS	15 PCI/G
	21-1417	AAA0906	0-6 in.	PU-239	13117		SU		RAS	390 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1417	AAA0906	0-6 in.	SR-90	13117		SU		PC	600 PCI/G
	21-1417	AAA0906	0-6 in.	U	13117		SU		DNA	6.9 UG/G
	21-1417	AAA0907	6-12 in.	AM-241	13117		NS		G	38 PCI/G
	21-1417	AAA0907	6-12 in.	H-3	13117		NS		LS	8400 PCI/L
	21-1417	AAA0907	6-12 in.	H-3	13117		NS		LS	9700 PCI/L
	21-1417	AAA0907	6-12 in.	PU-238	13117		NS		RAS	2.2 PCI/G
	21-1417	AAA0907	6-12 in.	PU-239	13117		NS		RAS	53 PCI/G
	21-1417	AAA0907	6-12 in.	SR-90	13117		NS		PC	220 PCI/G
	21-1417	AAA0907	6-12 in.	U	13117		NS		DNA	4.5 UG/G
	21-1418	AAA0908	0-6 in.	AM-241	13117		SU		G	29.8 PCI/G
	21-1418	AAA0908	0-6 in.	H-3	13117		SU		LS	4400 PCI/L
	21-1418	AAA0908	0-6 in.	H-3	13117		SU		LS	5500 PCI/L
	21-1418	AAA0908	0-6 in.	PU-238	13117		SU		RAS	2.8 PCI/G
	21-1418	AAA0908	0-6 in.	PU-239	13117		SU		RAS	49 PCI/G
	21-1418	AAA0908	0-6 in.	SR-90	13117		SU		PC	170 PCI/G
	21-1418	AAA0908	0-6 in.	U	13117		SU		DNA	5.3 UG/G
	21-1418	AAA0909	6-12 in.	AM-241	13117		NS		G	29.8 PCI/G
	21-1418	AAA0909	6-12 in.	H-3	13117		NS		LS	9300 PCI/L
	21-1418	AAA0909	6-12 in.	H-3	13117		NS		LS	10600 PCI/L
	21-1418	AAA0909	6-12 in.	PU-238	13117		NS		RAS	0.77 PCI/G
	21-1418	AAA0909	6-12 in.	PU-239	13117		NS		RAS	14 PCI/G
	21-1418	AAA0909	6-12 in.	SR-90	13117		NS		PC	180 PCI/G
	21-1418	AAA0909	6-12 in.	U	13117		NS		DNA	4.3 UG/G
21-022(h)	21-1380	AAA0915	0-6 in.	AM-241	13187	18506	SU		RAS	1.41 PCI/G
	21-1380	AAA0915	0-6 in.	H-3	13187		SU		LS	1100 PCI/L
	21-1380	AAA0915	0-6 in.	PU-238	13187	18509	SU		RAS	4.9 PCI/G
	21-1380	AAA0915	0-6 in.	PU-239	13187	18509	SU		RAS	14.77 PCI/G
	21-1380	AAA0915	0-6 in.	U	13187		SU		DNA	5 UG/G
	21-1380	AAA0916	0-6 in.	AM-241	13187	18506	FD		RAS	1.39 PCI/G
	21-1380	AAA0916	0-6 in.	H-3	13187		FD		LS	700 PCI/L

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1380	AAA0916	0-6 in.	PU-238	13187	18509	FD		RAS	9.29 PCI/G
	21-1380	AAA0916	0-6 in.	PU-239	13187	18509	FD		RAS	13.01 PCI/G
	21-1380	AAA0916	0-6 in.	SR-90	13187	18507	FD		PC	0.2 PCI/G
	21-1380	AAA0916	0-6 in.	U	13187		FD		DNA	5 UG/G
	21-1380	AAA0917	6-12 in.	AM-241	13196	18518	NS		RAS	0.684 PCI/G
	21-1380	AAA0917	6-12 in.	H-3	13196		NS		LS	1200 PCI/L
	21-1380	AAA0917	6-12 in.	PU-238	13196	18520	NS		RAS	3.67 PCI/G
	21-1380	AAA0917	6-12 in.	PU-239	13196	18520	NS		RAS	6.53 PCI/G
	21-1380	AAA0917	6-12 in.	SR-90	13196	18517	NS		PC	0.2 PCI/G
	21-1380	AAA0917	6-12 in.	U	13196		NS		DNA	3.6 UG/G
	21-1380	AAA0918	12-18 in.	AM-241	13196	18518	NS		RAS	0.083 PCI/G
	21-1380	AAA0918	12-18 in.	H-3	13196		NS		LS	900 PCI/L
	21-1380	AAA0918	12-18 in.	PU-238	13196	18520	NS		RAS	0.523 PCI/G
	21-1380	AAA0918	12-18 in.	PU-239	13196	18520	NS		RAS	0.619 PCI/G
	21-1380	AAA0918	12-18 in.	SR-90	13196	18517	NS		PC	0.5 PCI/G
	21-1380	AAA0918	12-18 in.	U	13196		NS		DNA	3.4 UG/G
	21-1381	AAA0919	0-6 in.	AM-241	13187	18506	SU		RAS	0.486 PCI/G
	21-1381	AAA0919	0-6 in.	H-3	13187		SU		LS	75200 PCI/L
	21-1381	AAA0919	0-6 in.	PU-238	13187	18509	SU		RAS	2.18 PCI/G
	21-1381	AAA0919	0-6 in.	PU-239	13187	18509	SU		RAS	3.24 PCI/G
	21-1381	AAA0919	0-6 in.	SR-90	13187	18507	SU		PC	0 PCI/G
	21-1381	AAA0919	0-6 in.	U	13187		SU		DNA	4.5 UG/G
	21-1381	AAA0920	6-12 in.	AM-241	13187	18506	NS		RAS	0.342 PCI/G
	21-1381	AAA0920	6-12 in.	H-3	13187		NS		LS	2800 PCI/L
	21-1381	AAA0920	6-12 in.	PU-238	13187	18509	NS		RAS	0.682 PCI/G
	21-1381	AAA0920	6-12 in.	PU-239	13187	18509	NS		RAS	1.62 PCI/G
	21-1381	AAA0920	6-12 in.	U	13187		NS		DNA	3.8 UG/G
	21-1381	AAA0921	12-18 in.	AM-241	13187	18506	NS		RAS	0.09 PCI/G
	21-1381	AAA0921	12-18 in.	H-3	13187		NS		LS	1400 PCI/L
	21-1381	AAA0921	12-18 in.	PU-238	13187	18509	NS		RAS	0.281 PCI/G
	21-1381	AAA0921	12-18 in.	PU-239	13187	18509	NS		RAS	0.718 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1381	AAA0921	12-18 in.	SR-90	13187	18507	NS	D	PC	0 PCI/G
	21-1381	AAA0921	12-18 in.	SR-90	13187	18507	NS		PC	0.3 PCI/G
	21-1381	AAA0921	12-18 in.	U	13187		NS		DNA	3.7 UG/G
	21-1382	AAA0922	0-6 in.	AM-241	13187	18506	SU	D	RAS	0.339 PCI/G
	21-1382	AAA0922	0-6 in.	AM-241	13187	18506	SU		RAS	0.353 PCI/G
	21-1382	AAA0922	0-6 in.	H-3	13187		SU		LS	14700 PCI/L
	21-1382	AAA0922	0-6 in.	PU-238	13187	18509	SU	D	RAS	0.741 PCI/G
	21-1382	AAA0922	0-6 in.	PU-238	13187	18509	SU		RAS	0.779 PCI/G
	21-1382	AAA0922	0-6 in.	PU-239	13187	18509	SU	D	RAS	2.29 PCI/G
	21-1382	AAA0922	0-6 in.	PU-239	13187	18509	SU		RAS	2.63 PCI/G
	21-1382	AAA0922	0-6 in.	SR-90	13187	18507	SU		PC	0.2 PCI/G
	21-1382	AAA0922	0-6 in.	U	13187		SU		DNA	5.3 UG/G
	21-1382	AAA0923	6-12 in.	AM-241	13187	18506	NS		RAS	0.195 PCI/G
	21-1382	AAA0923	6-12 in.	H-3	13187		NS		LS	8100 PCI/L
	21-1382	AAA0923	6-12 in.	PU-238	13187	18509	NS		RAS	0.488 PCI/G
	21-1382	AAA0923	6-12 in.	PU-239	13187	18509	NS		RAS	1.5 PCI/G
	21-1382	AAA0923	6-12 in.	SR-90	13187	18507	NS		PC	0.3 PCI/G
	21-1382	AAA0923	6-12 in.	U	13187		NS		DNA	5.3 UG/G
21-023(c)	21-1335	AAA0622	0-4 in.	AM-241	13117		SU		G	154 PCI/G
	21-1335	AAA0622	0-4 in.	H-3	13117		SU		LS	100 PCI/L
	21-1335	AAA0622	0-4 in.	H-3	13117		SU		LS	1700 PCI/L
	21-1335	AAA0622	0-4 in.	PU-238	13117		SU		RAS	1.8 PCI/G
	21-1335	AAA0622	0-4 in.	PU-239	13117		SU		RAS	300 PCI/G
	21-1335	AAA0622	0-4 in.	SR-90	13117		SU		PC	0.9 PCI/G
	21-1335	AAA0622	0-4 in.	U	13117		SU		DNA	7.9 UG/G
	21-1336	AAA0623	0-6 in.	AM-241	13117		SU		G	140 PCI/G
	21-1336	AAA0623	0-6 in.	H-3	13117		SU		LS	0 PCI/L
	21-1336	AAA0623	0-6 in.	H-3	13117		SU		LS	1100 PCI/L
	21-1336	AAA0623	0-6 in.	PU-238	13117		SU		RAS	0.27 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1336	AAA0623	0-6 in.	PU-239	13117		SU		RAS	37 PCI/G
	21-1336	AAA0623	0-6 in.	SR-90	13117		SU		PC	0.8 PCI/G
	21-1336	AAA0623	0-6 in.	U	13117		SU		DNA	7.7 UG/G
	21-1337	AAA0624	0-6 in.	AM-241	13099	18014	SU	D	RAS	13.98 PCI/G
	21-1337	AAA0624	0-6 in.	AM-241	13099	18014	SU		RAS	14.25 PCI/G
	21-1337	AAA0624	0-6 in.	H-3	13099		SU		LS	1000 PCI/L
	21-1337	AAA0624	0-6 in.	PU-238	13099	18016	SU	D	RAS	0.28 PCI/G
	21-1337	AAA0624	0-6 in.	PU-238	13099	18016	SU		RAS	0.24 PCI/G
	21-1337	AAA0624	0-6 in.	PU-239	13099	18016	SU	D	RAS	34.57 PCI/G
	21-1337	AAA0624	0-6 in.	PU-239	13099	18016	SU		RAS	34.34 PCI/G
	21-1337	AAA0624	0-6 in.	SR-90	13099	18011	SU		PC	0 PCI/G
	21-1337	AAA0624	0-6 in.	U	13099		SU		DNA	3.2 UG/G
	21-1338	AAA0625	0-6 in.	AM-241	13117		SU		G	344 PCI/G
	21-1338	AAA0625	0-6 in.	H-3	13117		SU		LS	500 PCI/L
	21-1338	AAA0625	0-6 in.	H-3	13117		SU		LS	1400 PCI/L
	21-1338	AAA0625	0-6 in.	PU-238	13117		SU		RAS	1.7 PCI/G
	21-1338	AAA0625	0-6 in.	PU-239	13117		SU		RAS	260 PCI/G
	21-1338	AAA0625	0-6 in.	SR-90	13117		SU		PC	0.9 PCI/G
	21-1338	AAA0625	0-6 in.	U	13117		SU		DNA	8.6 UG/G
	21-1338	AAA0626		AM-241	13105		FE		RAS	0.005 PCI/L
	21-1338	AAA0626		AM-241	13105		FE		RAS	0.016 PCI/L
	21-1338	AAA0626		PU-238	13105		FE		RAS	0 PCI/L
	21-1338	AAA0626		PU-239	13105		FE		RAS	0.019 PCI/L
	21-1338	AAA0626		SR-90	13105		FE		PC	0.1 PCI/L
	21-1338	AAA0626		U	13105		FE		ICPMS	0.13 UG/L
	21-1339	AAA0628	0-3 in.	AM-241	13099	18014	SU	D	RAS	194.8 PCI/G
	21-1339	AAA0628	0-3 in.	AM-241	13099	18014	SU		RAS	213.4 PCI/G
	21-1339	AAA0628	0-3 in.	H-3	13099		SU		LS	1000 PCI/L
	21-1339	AAA0628	0-3 in.	PU-238	13099	18016	SU	D	RAS	0.66 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1339	AAA0628	0-3 in.	PU-238	13099	18016	SU		RAS	0.56 PCI/G
	21-1339	AAA0628	0-3 in.	PU-239	13099	18016	SU	D	RAS	99.58 PCI/G
	21-1339	AAA0628	0-3 in.	PU-239	13099	18016	SU		RAS	107.5 PCI/G
	21-1339	AAA0628	0-3 in.	SR-90	13099	18011	SU		PC	0.2 PCI/G
	21-1339	AAA0628	0-3 in.	U	13099		SU		DNA	7.7 UG/G
	21-1340	AAA0629	0-6 in.	AM-241	13099	18014	SU	D	RAS	15.8 PCI/G
	21-1340	AAA0629	0-6 in.	AM-241	13099	18014	SU		RAS	15.78 PCI/G
	21-1340	AAA0629	0-6 in.	H-3	13099		SU		LS	1100 PCI/L
	21-1340	AAA0629	0-6 in.	PU-238	13099	18016	SU	D	RAS	0.18 PCI/G
	21-1340	AAA0629	0-6 in.	PU-238	13099	18016	SU		RAS	0.22 PCI/G
	21-1340	AAA0629	0-6 in.	PU-239	13099	18016	SU	D	RAS	26.91 PCI/G
	21-1340	AAA0629	0-6 in.	PU-239	13099	18016	SU		RAS	28.85 PCI/G
	21-1340	AAA0629	0-6 in.	SR-90	13099	18011	SU		PC	0.4 PCI/G
	21-1340	AAA0629	0-6 in.	U	13099		SU		DNA	4.8 UG/G
21-024(a)	21-1385	AAA0932	0-6 in.	AM-241	13196	18518	SU		RAS	0.031 PCI/G
	21-1385	AAA0932	0-6 in.	H-3	13196		SU		LS	3900 PCI/L
	21-1385	AAA0932	0-6 in.	PU-238	13196	18520	SU		RAS	0.006 PCI/G
	21-1385	AAA0932	0-6 in.	PU-239	13196	18520	SU		RAS	0.733 PCI/G
	21-1385	AAA0932	0-6 in.	SR-90	13196	18517	SU		PC	0.4 PCI/G
	21-1385	AAA0932	0-6 in.	U	13196		SU		DNA	7.2 UG/G
	21-1385	AAA0934		AM-241	13179		FE		RAS	0.022 PCI/L
	21-1385	AAA0934		AM-241	13179		FE		RAS	0.033 PCI/L
	21-1385	AAA0934		PU-239	13179		FE		RAS	0.013 PCI/L
	21-1385	AAA0934		SR-90	13179		FE		PC	0.2 PCI/L
	21-1385	AAA0936	12-18 in.	AM-241	13196	18518	NS		RAS	0.004 PCI/G
	21-1385	AAA0936	12-18 in.	H-3	13196		NS		LS	3200 PCI/L
	21-1385	AAA0936	12-18 in.	PU-238	13196	18520	NS		RAS	0.005 PCI/G
	21-1385	AAA0936	12-18 in.	PU-239	13196	18520	NS		RAS	0.09 PCI/G
	21-1385	AAA0936	12-18 in.	SR-90	13196	18517	NS	D	PC	0.2 PCI/G
	21-1385	AAA0936	12-18 in.	U	13196		NS		DNA	3.9 UG/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1385	AAA0939	6-12 in.	AM-241	13196	18518	NS		RAS	0.009 PCI/G
	21-1385	AAA0939	6-1[illegible]	H-3	13196		NS		LS	3500 PCI/L
	21-1385	AAA0939	6-12 [illegible]	PU-238	13196	18520	NS		RAS	0.007 PCI/G
	21-1385	AAA0939	6-12 in.	PU-239	13196	18520	NS		RAS	0.183 PCI/G
	21-1385	AAA0939	6-12 in.	SR-90	13196	18517	NS		PC	0.1 PCI/G
	21-1385	AAA0939	6-12 in.	U	13196		NS		DNA	4.5 UG/G
	21-1386	AAA0933	12-18 in.	AM-241	13196	18518	NS		RAS	0.005 PCI/G
	21-1386	AAA0933	12-18 in.	H-3	13196		NS		LS	1900 PCI/L
	21-1386	AAA0933	12-18 in.	PU-238	13196	18520	NS		RAS	0.002 PCI/G
	21-1386	AAA0933	12-18 in.	PU-239	13196	18520	NS		RAS	0.032 PCI/G
	21-1386	AAA0933	12-18 in.	SR-90	13196	18517	NS		PC	0.2 PCI/G
	21-1386	AAA0933	12-18 in.	U	13196		NS		DNA	4 UG/G
	21-1386	AAA0937	0-6 in.	AM-241	13196	18518	SU		RAS	0.06 PCI/G
	21-1386	AAA0937	0-6 in.	H-3	13196		SU		LS	2800 PCI/L
	21-1386	AAA0937	0-6 in.	PU-238	13196	18520	SU		RAS	0.013 PCI/G
	21-1386	AAA0937	0-6 in.	PU-239	13196	18520	SU		RAS	0.822 PCI/G
	21-1386	AAA0937	0-6 in.	SR-90	13196	18517	SU		PC	0.3 PCI/G
	21-1386	AAA0937	0-6 in.	U	13196		SU		DNA	15.5 UG/G
	21-1386	AAA0938	6-12 in.	AM-241	13196	18518	NS		RAS	0.017 PCI/G
	21-1386	AAA0938	6-12 in.	H-3	13196		NS		LS	2000 PCI/L
	21-1386	AAA0938	6-12 in.	PU-238	13196	18520	NS		RAS	0.01 PCI/G
	21-1386	AAA0938	6-12 in.	PU-239	13196	18520	NS		RAS	0.232 PCI/G
	21-1386	AAA0938	6-12 in.	U	13196		NS		DNA	6 UG/G
	21-1387	AAA0940	0-6 in.	AM-241	13196	18518	SU		RAS	0.024 PCI/G
	21-1387	AAA0940	0-6 in.	H-3	13196		SU		LS	1600 PCI/L
	21-1387	AAA0940	0-6 in.	PU-238	13196	18520	SU		RAS	0.005 PCI/G
	21-1387	AAA0940	0-6 in.	PU-239	13196	18520	SU		RAS	0.198 PCI/G
	21-1387	AAA0940	0-6 in.	SR-90	13196	18517	SU		PC	0.3 PCI/G
	21-1387	AAA0940	0-6 in.	U	13196		SU		DNA	6.9 UG/G
	21-1387	AAA0941	6-12 in.	AM-241	13196	18518	NS		RAS	0.006 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1387	AAA0941	6-12 in.	H-3	13196		NS		LS	2400 PCI/L
	21-1387	AAA0941	6-12 in.	PU-238	13196	18520	NS		RAS	0.002 PCI/G
	21-1387	AAA0941	6-12 in.	PU-239	13196	18520	NS		RAS	0.034 PCI/G
	21-1387	AAA0941	6-12 in.	SR-90	13196	18517	NS		PC	0.1 PCI/G
	21-1387	AAA0941	6-12 in.	U	13196		NS		DNA	3.8 UG/G
	21-1387	AAA0942	12-18 in.	AM-241	13196	18518	NS		RAS	0.005 PCI/G
	21-1387	AAA0942	12-18 in.	H-3	13196		NS		LS	2700 PCI/L
	21-1387	AAA0942	12-18 in.	PU-238	13196	18520	NS		RAS	0.005 PCI/G
	21-1387	AAA0942	12-18 in.	PU-239	13196	18520	NS		RAS	0.017 PCI/G
	21-1387	AAA0942	12-18 in.	SR-90	13196	18517	NS		PC	0.1 PCI/G
	21-1387	AAA0942	12-18 in.	U	13196		NS		DNA	3.5 UG/G
	21-1388	AAA0943	0-6 in.	AM-241	13196	18518	SU	D	RAS	0.185 PCI/G
	21-1388	AAA0943	0-6 in.	AM-241	13196	18518	SU		RAS	0.208 PCI/G
	21-1388	AAA0943	0-6 in.	H-3	13196		SU		LS	2800 PCI/L
	21-1388	AAA0943	0-6 in.	PU-238	13196	18520	SU		RAS	0.059 PCI/G
	21-1388	AAA0943	0-6 in.	PU-238	13196	18520	SU	D	RAS	0.081 PCI/G
	21-1388	AAA0943	0-6 in.	PU-239	13196	18520	SU	D	RAS	1.05 PCI/G
	21-1388	AAA0943	0-6 in.	PU-239	13196	18520	SU		RAS	1.87 PCI/G
	21-1388	AAA0943	0-6 in.	SR-90	13196	18517	SU		PC	0.8 PCI/G
	21-1388	AAA0943	0-6 in.	U	13196		SU		DNA	14.3 UG/G
	21-1388	AAA0944	6-12 in.	AM-241	13196	18518	NS		RAS	0.038 PCI/G
	21-1388	AAA0944	6-12 in.	H-3	13196		NS		LS	1700 PCI/L
	21-1388	AAA0944	6-12 in.	PU-238	13196	18520	NS		RAS	0.028 PCI/G
	21-1388	AAA0944	6-12 in.	PU-239	13196	18520	NS		RAS	0.499 PCI/G
	21-1388	AAA0944	6-12 in.	SR-90	13196	18517	NS		PC	0.5 PCI/G
	21-1388	AAA0944	6-12 in.	U	13196		NS		DNA	9.1 UG/G
	21-1388	AAA0945	12-18 in.	AM-241	13196	18518	NS		RAS	0.008 PCI/G
	21-1388	AAA0945	12-18 in.	H-3	13196		NS		LS	1900 PCI/L
	21-1388	AAA0945	12-18 in.	PU-238	13196	18520	NS		RAS	0.006 PCI/G
	21-1388	AAA0945	12-18 in.	PU-239	13196	18520	NS		RAS	0.071 PCI/G
	21-1388	AAA0945	12-18 in.	SR-90	13196	18517	NS		PC	0.1 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1388	AAA0945	12-18 in.	U	13196		NS		DNA	5.2 UG/G
	21-1389	AAA0946	0-6 in.	AM-241	13196	18518	SU		RAS	0.215 PCI/G
	21-1389	AAA0946	0-6 in.	H-3	13196		SU		LS	1700 PCI/L
	21-1389	AAA0946	0-6 in.	PU-238	13196	18520	SU		RAS	0.03 PCI/G
	21-1389	AAA0946	0-6 in.	PU-239	13196	18520	SU		RAS	1.52 PCI/G
	21-1389	AAA0946	0-6 in.	SR-90	13196	18517	SU		PC	0.9 PCI/G
	21-1389	AAA0946	0-6 in.	U	13196		SU		DNA	22.2 UG/G
	21-1389	AAA0947	6-12 in.	AM-241	13196	18518	NS		RAS	0.019 PCI/G
	21-1389	AAA0947	6-12 in.	H-3	13196		NS		LS	1700 PCI/L
	21-1389	AAA0947	6-12 in.	PU-238	13196	18520	NS		RAS	0.004 PCI/G
	21-1389	AAA0947	6-12 in.	PU-239	13196	18520	NS		RAS	0.184 PCI/G
	21-1389	AAA0947	6-12 in.	U	13196		NS		DNA	9.6 UG/G
	21-1389	AAA0948	12-18 in.	AM-241	13196	18518	NS		RAS	0.011 PCI/G
	21-1389	AAA0948	12-18 in.	H-3	13196		NS		LS	1500 PCI/L
	21-1389	AAA0948	12-18 in.	PU-238	13196	18520	NS		RAS	0.002 PCI/G
	21-1389	AAA0948	12-18 in.	PU-239	13196	18520	NS		RAS	0.102 PCI/G
	21-1389	AAA0948	12-18 in.	SR-90	13196	18517	NS		PC	0.1 PCI/G
	21-1389	AAA0948	12-18 in.	U	13196		NS		DNA	4.8 UG/G
	21-1390	AAA0925	6-12 in.	AM-241	13213	18554	NS		RAS	0.014 PCI/G
	21-1390	AAA0925	6-12 in.	H-3	13213		NS		LS	1400 PCI/L
	21-1390	AAA0925	6-12 in.	PU-238	13213	18555	NS		RAS	0.006 PCI/G
	21-1390	AAA0925	6-12 in.	PU-239	13213	18555	NS		RAS	0.328 PCI/G
	21-1390	AAA0925	6-12 in.	U	13213		NS		DNA	4.34 UG/G
	21-1390	AAA0929	12-18 in.	AM-241	13213	19264	NS		RAS	0.007 PCI/G
	21-1390	AAA0929	12-18 in.	H-3	13213		NS		LS	1600 PCI/L
	21-1390	AAA0929	12-18 in.	PU-238	13213	19313	NS		RAS	0.001 PCI/G
	21-1390	AAA0929	12-18 in.	PU-239	13213	19313	NS		RAS	0.075 PCI/G
	21-1390	AAA0929	12-18 in.	SR-90	13213	19313	NS		PC	0 PCI/G
	21-1390	AAA0929	12-18 in.	U	13213	19020	NS		DNA	4 UG/G
	21-1390	AAA0949	0-6 in.	AM-241	13213	18554	SU		RAS	0.167 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1390	AAA0949	0-6 in.	H-3	13213		SU		LS	1100 PCI/L
	21-1390	AAA0949	0-6 in.	PU-238	13213	18555	SU		RAS	0.025 PCI/G
	21-1390	AAA0949	0-6 in.	PU-239	13213	18555	SU		RAS	3 PCI/G
	21-1390	AAA0949	0-6 in.	SR-90	13213	18553	SU	D	PC	0.6 PCI/G
	21-1390	AAA0949	0-6 in.	U	13213		SU		DNA	7.4 UG/G
	21-1390	AAA0950	0-6 in.	AM-241	13213	18554	FD		RAS	0.276 PCI/G
	21-1390	AAA0950	0-6 in.	H-3	13213		FD		LS	700 PCI/L
	21-1390	AAA0950	0-6 in.	PU-238	13213	18555	FD		RAS	0.052 PCI/G
	21-1390	AAA0950	0-6 in.	PU-239	13213	18555	FD		RAS	3.85 PCI/G
	21-1390	AAA0950	0-6 in.	SR-90	13213	18553	FD		PC	0.7 PCI/G
	21-1390	AAA0950	0-6 in.	U	13213		FD		DNA	7.3 UG/G
21-024(b)	21-1377	AAA0896	0-6 in.	AM-241	13196	18518	SU		RAS	0.905 PCI/G
	21-1377	AAA0896	0-6 in.	H-3	13196		SU		LS	4300 PCI/L
	21-1377	AAA0896	0-6 in.	PU-238	13196	18520	SU		RAS	0.193 PCI/G
	21-1377	AAA0896	0-6 in.	PU-239	13196	18520	SU		RAS	22.01 PCI/G
	21-1377	AAA0896	0-6 in.	SR-90	13196	18517	SU		PC	0.1 PCI/G
	21-1377	AAA0896	0-6 in.	TH-228	13196	18519	SU	D	RAS	1.49 PCI/G
	21-1377	AAA0896	0-6 in.	TH-228	13196	18519	SU		RAS	1.58 PCI/G
	21-1377	AAA0896	0-6 in.	TH-230	13196	18519	SU	D	RAS	1.31 PCI/G
	21-1377	AAA0896	0-6 in.	TH-230	13196	18519	SU		RAS	1.29 PCI/G
	21-1377	AAA0896	0-6 in.	TH-232	13196	18519	SU	D	RAS	1.43 PCI/G
	21-1377	AAA0896	0-6 in.	TH-232	13196	18519	SU		RAS	1.53 PCI/G
	21-1377	AAA0896	0-6 in.	U	13196		SU		DNA	5 UG/G
	21-1377	AAA0897	6-12 in.	AM-241	13196	18518	NS		RAS	0.407 PCI/G
	21-1377	AAA0897	6-12 in.	H-3	13196		NS		LS	1200 PCI/L
	21-1377	AAA0897	6-12 in.	PU-238	13196	18520	NS		RAS	0.071 PCI/G
	21-1377	AAA0897	6-12 in.	PU-239	13196	18520	NS		RAS	8.33 PCI/G
	21-1377	AAA0897	6-12 in.	SR-90	13196	18517	NS		PC	0.3 PCI/G
	21-1377	AAA0897	6-12 in.	TH-228	13196	18519	NS		RAS	1.48 PCI/G
	21-1377	AAA0897	6-12 in.	TH-230	13196	18519	NS		RAS	1.2 PCI/G
	21-1377	AAA0897	6-12 in.	TH-232	13196	18519	NS		RAS	1.52 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1377	AAA0897	6-12 in.	U	13196		NS		DNA	4.7 UG/G
	21-1377	AAA0898	12-18 in.	AM-241	13196	18518	NS		RAS	0.048 PCI/G
	21-1377	AAA0898	12-18 in.	H-3	13196		NS		LS	1300 PCI/L
	21-1377	AAA0898	12-18 in.	PU-238	13196	18520	NS		RAS	0.01 PCI/G
	21-1377	AAA0898	12-18 in.	PU-239	13196	18520	NS		RAS	0.957 PCI/G
	21-1377	AAA0898	12-18 in.	SR-90	13196	18517	NS		PC	0.3 PCI/G
	21-1377	AAA0898	12-18 in.	TH-228	13196	18519	NS		RAS	1.57 PCI/G
	21-1377	AAA0898	12-18 in.	TH-230	13196	18519	NS		RAS	1.3 PCI/G
	21-1377	AAA0898	12-18 in.	TH-232	13196	18519	NS		RAS	1.58 PCI/G
	21-1377	AAA0898	12-18 in.	U	13196		NS		DNA	3.9 UG/G
	21-1378	AAA0899	0-6 in.	AM-241	13196	18518	SU	D	RAS	1.61 PCI/G
	21-1378	AAA0899	0-6 in.	AM-241	13196	18518	SU		RAS	1.69 PCI/G
	21-1378	AAA0899	0-6 in.	H-3	13196		SU		LS	5500 PCI/L
	21-1378	AAA0899	0-6 in.	PU-238	13196	18520	SU	D	RAS	0.462 PCI/G
	21-1378	AAA0899	0-6 in.	PU-238	13196	18520	SU		RAS	0.25 PCI/G
	21-1378	AAA0899	0-6 in.	PU-239	13196	18520	SU	D	RAS	31.94 PCI/G
	21-1378	AAA0899	0-6 in.	PU-239	13196	18520	SU		RAS	36.32 PCI/G
	21-1378	AAA0899	0-6 in.	SR-90	13196	18517	SU		PC	0.6 PCI/G
	21-1378	AAA0899	0-6 in.	TH-228	13196	18519	SU		RAS	1.71 PCI/G
	21-1378	AAA0899	0-6 in.	TH-230	13196	18519	SU		RAS	1.29 PCI/G
	21-1378	AAA0899	0-6 in.	TH-232	13196	18519	SU		RAS	1.55 PCI/G
	21-1378	AAA0899	0-6 in.	U	13196		SU		DNA	7.8 UG/G
	21-1378	AAA0900	0-6 in.	AM-241	13196	18518	FD		RAS	0.268 PCI/G
	21-1378	AAA0900	0-6 in.	H-3	13196		FD		LS	1400 PCI/L
	21-1378	AAA0900	0-6 in.	PU-238	13196	18520	FD		RAS	0.046 PCI/G
	21-1378	AAA0900	0-6 in.	PU-239	13196	18520	FD		RAS	5.52 PCI/G
	21-1378	AAA0900	0-6 in.	SR-90	13196	18517	FD	D	PC	0.3 PCI/G
	21-1378	AAA0900	0-6 in.	TH-228	13196	18519	FD		RAS	1.68 PCI/G
	21-1378	AAA0900	0-6 in.	TH-230	13196	18519	FD		RAS	1.34 PCI/G
	21-1378	AAA0900	0-6 in.	TH-232	13196	18519	FD		RAS	1.53 PCI/G
	21-1378	AAA0900	0-6 in.	U	13196		FD		DNA	4.2 UG/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1378	AAA0901	12-18 in.	AM-241	13196	18518	NS		RAS	0.071 PCI/G
	21-1378	AAA0901	12-18 in.	H-3	13196		NS		LS	1200 PCI/L
	21-1378	AAA0901	12-18 in.	PU-238	13196	18520	NS		RAS	0.013 PCI/G
	21-1378	AAA0901	12-18 in.	PU-239	13196	18520	NS		RAS	1.04 PCI/G
	21-1378	AAA0901	12-18 in.	SR-90	13196	18517	NS		PC	0.1 PCI/G
	21-1378	AAA0901	12-18 in.	TH-228	13196	18519	NS		RAS	1.59 PCI/G
	21-1378	AAA0901	12-18 in.	TH-230	13196	18519	NS		RAS	1.41 PCI/G
	21-1378	AAA0901	12-18 in.	TH-232	13196	18519	NS		RAS	1.54 PCI/G
	21-1378	AAA0901	12-18 in.	U	13196		NS		DNA	3.5 UG/G
	21-1378	AAA0902	6-12 in.	AM-241	13196	18518	NS		RAS	0.139 PCI/G
	21-1378	AAA0902	6-12 in.	H-3	13196		NS		LS	1000 PCI/L
	21-1378	AAA0902	6-12 in.	PU-238	13196	18520	NS		RAS	0.02 PCI/G
	21-1378	AAA0902	6-12 in.	PU-239	13196	18520	NS		RAS	2.36 PCI/G
	21-1378	AAA0902	6-12 in.	SR-90	13196	18517	NS		PC	0.3 PCI/G
	21-1378	AAA0902	6-12 in.	TH-228	13196	18519	NS		RAS	1.92 PCI/G
	21-1378	AAA0902	6-12 in.	TH-230	13196	18519	NS		RAS	1.49 PCI/G
	21-1378	AAA0902	6-12 in.	TH-232	13196	18519	NS		RAS	1.82 PCI/G
	21-1378	AAA0902	6-12 in.	U	13196		NS		DNA	3.8 UG/G
	21-1379	AAA0903	0-6 in.	AM-241	13196	18518	SU		RAS	15.06 PCI/G
	21-1379	AAA0903	0-6 in.	H-3	13196		SU		LS	37000 PCI/L
	21-1379	AAA0903	0-6 in.	PU-238	13196	18520	SU	D	RAS	2.71 PCI/G
	21-1379	AAA0903	0-6 in.	PU-238	13196	18520	SU		RAS	3.25 PCI/G
	21-1379	AAA0903	0-6 in.	PU-239	13196	18520	SU	D	RAS	324 PCI/G
	21-1379	AAA0903	0-6 in.	PU-239	13196	18520	SU		RAS	324 PCI/G
	21-1379	AAA0903	0-6 in.	SR-90	13196	18517	SU		PC	0.3 PCI/G
	21-1379	AAA0903	0-6 in.	TH-228	13196	18519	SU		RAS	1.13 PCI/G
	21-1379	AAA0903	0-6 in.	TH-230	13196	18519	SU		RAS	0.96 PCI/G
	21-1379	AAA0903	0-6 in.	TH-232	13196	18519	SU		RAS	1.09 PCI/G
	21-1379	AAA0903	0-6 in.	U	13196		SU		DNA	21 UG/G
	21-1379	AAA0904	6-12 in.	AM-241	13117		NS		G	9.47 PCI/G
	21-1379	AAA0904	6-12 in.	H-3	13117		NS		LS	2500 PCI/L

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1379	AAA0904	6-12 in.	H-3	13117		NS		LS	3600 PCI/L
	21-1379	AAA0904	6-12 in.	PU-238	13117		NS		RAS	1.08 PCI/G
	21-1379	AAA0904	6-12 in.	PU-239	13117		NS		RAS	145 PCI/G
	21-1379	AAA0904	6-12 in.	SR-90	13117		NS		PC	0.4 PCI/G
	21-1379	AAA0904	6-12 in.	U	13117		NS		DNA	11.9 UG/G
	21-1379	AAA0905	12-18 in.	AM-241	13196	18518	NS		RAS	3.69 PCI/G
	21-1379	AAA0905	12-18 in.	H-3	13196		NS		LS	4100 PCI/L
	21-1379	AAA0905	12-18 in.	PU-238	13196	18520	NS		RAS	0.913 PCI/G
	21-1379	AAA0905	12-18 in.	PU-239	13196	18520	NS		RAS	83.63 PCI/G
	21-1379	AAA0905	12-18 in.	SR-90	13196	18517	NS		PC	0.2 PCI/G
	21-1379	AAA0905	12-18 in.	TH-228	13196	18519	NS		RAS	1.45 PCI/G
	21-1379	AAA0905	12-18 in.	TH-230	13196	18519	NS		RAS	1.23 PCI/G
	21-1379	AAA0905	12-18 in.	TH-232	13196	18519	NS		RAS	1.45 PCI/G
	21-1379	AAA0905	12-18 in.	U	13196		NS		DNA	10.7 UG/G
21-024(c)	21-1391	AAA0753	0-6 in.	AM-241	13175	18510	SU	D	RAS	1.58 PCI/G
	21-1391	AAA0753	0-6 in.	AM-241	13175	18510	SU		RAS	3.24 PCI/G
	21-1391	AAA0753	0-6 in.	H-3	13175		SU	R	LS	6E+06 PCI/L
	21-1391	AAA0753	0-6 in.	H-3	13175		SU		LS	7E+06 PCI/L
	21-1391	AAA0753	0-6 in.	PU-238	13175	18513	SU	D	RAS	0.476 PCI/G
	21-1391	AAA0753	0-6 in.	PU-238	13175	18513	SU	D	RAS	0.486 PCI/G
	21-1391	AAA0753	0-6 in.	PU-238	13175	18513	SU		RAS	0.211 PCI/G
	21-1391	AAA0753	0-6 in.	PU-239	13175	18513	SU	D	RAS	10.01 PCI/G
	21-1391	AAA0753	0-6 in.	PU-239	13175	18513	SU	D	RAS	11.2 PCI/G
	21-1391	AAA0753	0-6 in.	PU-239	13175	18513	SU		RAS	13.23 PCI/G
	21-1391	AAA0753	0-6 in.	SR-90	13175	18511	SU		PC	0.2 PCI/G
	21-1391	AAA0753	0-6 in.	TH-228	13175	18512	SU		RAS	0.89 PCI/G
	21-1391	AAA0753	0-6 in.	TH-230	13175	18512	SU		RAS	0.9 PCI/G
	21-1391	AAA0753	0-6 in.	TH-232	13175	18512	SU		RAS	0.91 PCI/G
	21-1391	AAA0753	0-6 in.	U	13175		SU		DNA	195.5 UG/G
	21-1391	AAA0754		AM-241	13165		FE		RAS	0.012 PCI/L
	21-1391	AAA0754		AM-241	13165		FE		RAS	0.023 PCI/L

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	21-1391	AAA0754		H-3	13165		FE		LS	200 PCI/L
	21-1391	AAA0754		PU-238	13165		FE		RAS	0 PCI/L
	21-1391	AAA0754		PU-239	13165		FE		RAS	0.019 PCI/L
	21-1391	AAA0754		SR-90	13165		FE		PC	0 PCI/L
	21-1391	AAA0754		TH-228	13165		FE		RAS	0.004 PCI/L
	21-1391	AAA0754		TH-230	13165		FE		RAS	0.04 PCI/L
	21-1391	AAA0754		TH-232	13165	18270	FE		RAS	0 PCI/L
	21-1391	AAA0756	6-12 in.	AM-241	13175	18510	NS	D	RAS	0.255 PCI/G
	21-1391	AAA0756	6-12 in.	AM-241	13175	18510	NS		RAS	0.254 PCI/G
	21-1391	AAA0756	6-12 in.	H-3	13175		NS	R	LS	1E+06 PCI/L
	21-1391	AAA0756	6-12 in.	H-3	13175		NS		LS	1E+06 PCI/L
	21-1391	AAA0756	6-12 in.	PU-238	13175	18513	NS	D	RAS	0.037 PCI/G
	21-1391	AAA0756	6-12 in.	PU-238	13175	18513	NS		RAS	0.033 PCI/G
	21-1391	AAA0756	6-12 in.	PU-239	13175	18513	NS	D	RAS	1.67 PCI/G
	21-1391	AAA0756	6-12 in.	PU-239	13175	18513	NS		RAS	1.78 PCI/G
	21-1391	AAA0756	6-12 in.	SR-90	13175	18511	NS		PC	0 PCI/G
	21-1391	AAA0756	6-12 in.	TH-228	13175	18512	NS	D	RAS	1.56 PCI/G
	21-1391	AAA0756	6-12 in.	TH-228	13175	18512	NS		RAS	1.68 PCI/G
	21-1391	AAA0756	6-12 in.	TH-230	13175	18512	NS	D	RAS	1.26 PCI/G
	21-1391	AAA0756	6-12 in.	TH-230	13175	18512	NS		RAS	1.32 PCI/G
	21-1391	AAA0756	6-12 in.	TH-232	13175	18512	NS	D	RAS	1.64 PCI/G
	21-1391	AAA0756	6-12 in.	TH-232	13175	18512	NS		RAS	1.69 PCI/G
	21-1391	AAA0756	6-12 in.	U	13175		NS		DNA	56.2 UG/G
	21-1392	AAA0757	0-6 in.	AM-241	13175	18510	SU		RAS	0.537 PCI/G
	21-1392	AAA0757	0-6 in.	H-3	13175	19121	SU	R	LS	1E+06 PCI/L
	21-1392	AAA0757	0-6 in.	H-3	13175	19121	SU		LS	2E+06 PCI/L
	21-1392	AAA0757	0-6 in.	PU-238	13175	18513	SU		RAS	0.089 PCI/G
	21-1392	AAA0757	0-6 in.	PU-239	13175	18513	SU		RAS	3.96 PCI/G
	21-1392	AAA0757	0-6 in.	SR-90	13175	18511	SU	D	PC	0.5 PCI/G
	21-1392	AAA0757	0-6 in.	SR-90	13175	18511	SU		PC	0.6 PCI/G
	21-1392	AAA0757	0-6 in.	TH-228	13175	18512	SU		RAS	1.13 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1392	AAA0757	0-6 in.	TH-230	13175	18512	SU		RAS	0.97 PCI/G
	21-1392	AAA0757	0-6 in.	TH-232	13175	18512	SU		RAS	1.02 PCI/G
	21-1392	AAA0757	0-6 in.	U	13175	19122	SU		DNA	26.4 UG/G
	21-1392	AAA0758	0-6 in.	AM-241	13175	18510	FD		RAS	0.529 PCI/G
	21-1392	AAA0758	0-6 in.	H-3	13175		FD	R	LS	436900 PCI/L
	21-1392	AAA0758	0-6 in.	H-3	13175		FD		LS	560800 PCI/L
	21-1392	AAA0758	0-6 in.	PU-238	13175	18513	FD		RAS	0.077 PCI/G
	21-1392	AAA0758	0-6 in.	PU-239	13175	18513	FD		RAS	4.29 PCI/G
	21-1392	AAA0758	0-6 in.	SR-90	13175	18511	FD		PC	0.9 PCI/G
	21-1392	AAA0758	0-6 in.	TH-228	13175	18512	FD		RAS	1.18 PCI/G
	21-1392	AAA0758	0-6 in.	TH-230	13175	18512	FD		RAS	1.09 PCI/G
	21-1392	AAA0758	0-6 in.	TH-232	13175	18512	FD		RAS	1.2 PCI/G
	21-1392	AAA0758	0-6 in.	U	13175		FD		DNA	28.5 UG/G
	21-1392	AAA0759	6-12 in.	AM-241	13175	18510	NS		RAS	0.065 PCI/G
	21-1392	AAA0759	6-12 in.	H-3	13175		NS	R	LS	99100 PCI/L
	21-1392	AAA0759	6-12 in.	H-3	13175		NS		LS	128200 PCI/L
	21-1392	AAA0759	6-12 in.	PU-238	13175	18513	NS		RAS	0.012 PCI/G
	21-1392	AAA0759	6-12 in.	PU-239	13175	18513	NS		RAS	0.878 PCI/G
	21-1392	AAA0759	6-12 in.	SR-90	13175	18511	NS		PC	0.2 PCI/G
	21-1392	AAA0759	6-12 in.	TH-228	13175	18512	NS		RAS	1.63 PCI/G
	21-1392	AAA0759	6-12 in.	TH-230	13175	18512	NS		RAS	1.3 PCI/G
	21-1392	AAA0759	6-12 in.	TH-232	13175	18512	NS		RAS	1.64 PCI/G
	21-1392	AAA0759	6-12 in.	U	13175		NS		DNA	5.8 UG/G
21-024(d)	21-1347	AAA0852	0-6 in.	AM-241	13187	18506	SU		RAS	0.404 PCI/G
	21-1347	AAA0852	0-6 in.	H-3	13187		SU		LS	2800 PCI/L
	21-1347	AAA0852	0-6 in.	PU-238	13187	18509	SU		RAS	0.082 PCI/G
	21-1347	AAA0852	0-6 in.	PU-239	13187	18509	SU		RAS	9.71 PCI/G
	21-1347	AAA0852	0-6 in.	SR-90	13187	18507	SU	D	PC	0.3 PCI/G
	21-1347	AAA0852	0-6 in.	SR-90	13187	18507	SU		PC	0.2 PCI/G
	21-1347	AAA0852	0-6 in.	TH-228	13187	18508	SU		RAS	1.32 PCI/G
	21-1347	AAA0852	0-6 in.	TH-230	13187	18508	SU		RAS	1.03 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1347	AAA0852	0-6 in.	TH-232	13187	18508	SU		RAS	1.22 PCI/G
	21-1347	AAA0852	0-6 in.	U	13187		SU		DNA	4.6 UG/G
	21-1348	AAA0853	0-6 in.	AM-241	13187	18506	SU		RAS	0.958 PCI/G
	21-1348	AAA0853	0-6 in.	H-3	13187		SU		LS	40500 PCI/L
	21-1348	AAA0853	0-6 in.	PU-238	13187	18509	SU		RAS	0.25 PCI/G
	21-1348	AAA0853	0-6 in.	PU-239	13187	18509	SU		RAS	33.8 PCI/G
	21-1348	AAA0853	0-6 in.	SR-90	13187	18507	SU		PC	0.2 PCI/G
	21-1348	AAA0853	0-6 in.	TH-228	13187	18508	SU		RAS	1.69 PCI/G
	21-1348	AAA0853	0-6 in.	TH-230	13187	18508	SU		RAS	1.23 PCI/G
	21-1348	AAA0853	0-6 in.	TH-232	13187	18508	SU		RAS	1.53 PCI/G
	21-1348	AAA0853	0-6 in.	U	13187		SU		DNA	8 UG/G
	21-1348	AAA0854	6-12 in.	AM-241	13187	18506	NS		RAS	0.528 PCI/G
	21-1348	AAA0854	6-12 in.	H-3	13187		NS		LS	52000 PCI/L
	21-1348	AAA0854	6-12 in.	PU-238	13187	18509	NS		RAS	0.132 PCI/G
	21-1348	AAA0854	6-12 in.	PU-239	13187	18509	NS		RAS	16.1 PCI/G
	21-1348	AAA0854	6-12 in.	TH-228	13187	18508	NS		RAS	1.59 PCI/G
	21-1348	AAA0854	6-12 in.	TH-230	13187	18508	NS		RAS	1.28 PCI/G
	21-1348	AAA0854	6-12 in.	TH-232	13187	18508	NS		RAS	1.57 PCI/G
	21-1348	AAA0854	6-12 in.	U	13187		NS		DNA	6.4 UG/G
	21-1348	AAA0855	12-18 in.	AM-241	13187	18506	NS		RAS	0.048 PCI/G
	21-1348	AAA0855	12-18 in.	H-3	13187		NS		LS	18700 PCI/L
	21-1348	AAA0855	12-18 in.	PU-238	13187	18509	NS		RAS	0.014 PCI/G
	21-1348	AAA0855	12-18 in.	PU-239	13187	18509	NS		RAS	1.9 PCI/G
	21-1348	AAA0855	12-18 in.	SR-90	13187	18507	NS		PC	0.1 PCI/G
	21-1348	AAA0855	12-18 in.	TH-228	13187	18508	NS		RAS	1.72 PCI/G
	21-1348	AAA0855	12-18 in.	TH-230	13187	18508	NS		RAS	1.36 PCI/G
	21-1348	AAA0855	12-18 in.	TH-232	13187	18508	NS		RAS	1.59 PCI/G
	21-1348	AAA0855	12-18 in.	U	13187		NS		DNA	5 UG/G
21-024(e)	21-1341	AAA0630	0-6 in.	AM-241	13099	18014	SU		RAS	1.53 PCI/G
	21-1341	AAA0630	0-6 in.	AM-241	13099	18014	SU	D	RAS	1.62 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1341	AAA0630	0-6 in.	H-3	13099		SU		LS	41700 PCI/L
	21-1341	AAA0630	0-6 in.	PU-238	13099	18016	SU	D	RAS	0.257 PCI/G
	21-1341	AAA0630	0-6 in.	PU-238	13099	18016	SU		RAS	0.269 PCI/G
	21-1341	AAA0630	0-6 in.	PU-239	13099	18016	SU		RAS	41.49 PCI/G
	21-1341	AAA0630	0-6 in.	PU-239	13099	18016	SU	D	RAS	46.39 PCI/G
	21-1341	AAA0630	0-6 in.	SR-90	13099	18011	SU		PC	0.3 PCI/G
	21-1341	AAA0630	0-6 in.	TH-228	13099	18018	SU		RAS	1.54 PCI/G
	21-1341	AAA0630	0-6 in.	TH-230	13099	18018	SU		RAS	1.49 PCI/G
	21-1341	AAA0630	0-6 in.	TH-232	13099	18018	SU		RAS	1.7 PCI/G
	21-1341	AAA0630	0-6 in.	U	13099		SU		DNA	37.7 UG/G
	21-1341	AAA0631	0-6 in.	AM-241	13099	18014	FD		RAS	1.45 PCI/G
	21-1341	AAA0631	0-6 in.	AM-241	13099	18014	FD	D	RAS	2.89 PCI/G
	21-1341	AAA0631	0-6 in.	H-3	13099		FD		LS	28700 PCI/L
	21-1341	AAA0631	0-6 in.	PU-238	13099	18016	FD		RAS	0.182 PCI/G
	21-1341	AAA0631	0-6 in.	PU-238	13099	18016	FD	D	RAS	0.622 PCI/G
	21-1341	AAA0631	0-6 in.	PU-239	13099	18016	FD		RAS	40.79 PCI/G
	21-1341	AAA0631	0-6 in.	PU-239	13099	18016	FD	D	RAS	125.33 PCI/G
	21-1341	AAA0631	0-6 in.	SR-90	13099	18011	FD		PC	0.7 PCI/G
	21-1341	AAA0631	0-6 in.	TH-228	13099	18018	FD		RAS	1.33 PCI/G
	21-1341	AAA0631	0-6 in.	TH-230	13099	18018	FD		RAS	1.27 PCI/G
	21-1341	AAA0631	0-6 in.	TH-232	13099	18018	FD		RAS	1.33 PCI/G
	21-1341	AAA0632	6-11 in.	AM-241	13099	18014	NS		RAS	0.614 PCI/G
	21-1341	AAA0632	6-11 in.	H-3	13099		NS		LS	3600 PCI/L
	21-1341	AAA0632	6-11 in.	PU-238	13099	18016	NS		RAS	0.064 PCI/G
	21-1341	AAA0632	6-11 in.	PU-239	13099	18016	NS		RAS	13.52 PCI/G
	21-1341	AAA0632	6-11 in.	SR-90	13099	18011	NS		PC	0.3 PCI/G
	21-1341	AAA0632	6-11 in.	TH-228	13099	18018	NS		RAS	1.43 PCI/G
	21-1341	AAA0632	6-11 in.	TH-230	13099	18018	NS		RAS	1.34 PCI/G
	21-1341	AAA0632	6-11 in.	TH-232	13099	18018	NS		RAS	1.49 PCI/G
	21-1341	AAA0632	6-11 in.	U	13099		NS		DNA	15 UG/G
	21-1342	AAA0633	0-4 in.	AM-241	13099	18014	SU		RAS	0.464 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1342	AAA0633	0-4 in.	H-3	13099		SU		LS	900 PCI/L
	21-1342	AAA0633	0-4 in.	PU-238	13099	18016	SU		RAS	0.214 PCI/G
	21-1342	AAA0633	0-4 in.	PU-239	13099	18016	SU		RAS	11.77 PCI/G
	21-1342	AAA0633	0-4 in.	TH-228	13099	18018	SU		RAS	1.37 PCI/G
	21-1342	AAA0633	0-4 in.	TH-230	13099	18018	SU		RAS	1.35 PCI/G
	21-1342	AAA0633	0-4 in.	TH-232	13099	18018	SU		RAS	1.28 PCI/G
	21-1342	AAA0633	0-4 in.	U	13099		SU		DNA	15.3 UG/G
	21-1342	AAA0834		AM-241	13105		FE		RAS	0.044 PCI/L
	21-1342	AAA0834		AM-241	13105		FE		RAS	0.061 PCI/L
	21-1342	AAA0834		PU-238	13105		FE		RAS	0.009 PCI/L
	21-1342	AAA0834		PU-239	13105		FE		RAS	0.013 PCI/L
	21-1342	AAA0834		SR-90	13105		FE		PC	0 PCI/L
	21-1342	AAA0834		TH-228	13105		FE		RAS	0.009 PCI/L
	21-1342	AAA0834		TH-230	13105		FE		RAS	0.04 PCI/L
	21-1342	AAA0834		U	13105		FE		ICPMS	0.13 UG/L
21-024(f)	21-1431	AAA1095	0-6 in.	AM-241	13247		SU	D	RAS	0.108 PCI/G
	21-1431	AAA1095	0-6 in.	AM-241	13247		SU		RAS	0.129 PCI/G
	21-1431	AAA1095	0-6 in.	H-3	13247		SU		LS	2000 PCI/L
	21-1431	AAA1095	0-6 in.	PU-238	13247		SU	D	RAS	0.0464 PCI/G
	21-1431	AAA1095	0-6 in.	PU-238	13247		SU		RAS	0.164 PCI/G
	21-1431	AAA1095	0-6 in.	PU-239	13247		SU	D	RAS	0.452 PCI/G
	21-1431	AAA1095	0-6 in.	PU-239	13247		SU		RAS	1.06 PCI/G
	21-1431	AAA1095	0-6 in.	SR-90	13247		SU	D	PC	0.891 PCI/G
	21-1431	AAA1095	0-6 in.	SR-90	13247		SU		PC	0.659 PCI/G
	21-1431	AAA1095	0-6 in.	TH-228	13247		SU	D	RAS	1.53 PCI/G
	21-1431	AAA1095	0-6 in.	TH-228	13247		SU		RAS	1.18 PCI/G
	21-1431	AAA1095	0-6 in.	TH-230	13247		SU	D	RAS	0.588 PCI/G
	21-1431	AAA1095	0-6 in.	TH-230	13247		SU		RAS	0.733 PCI/G
	21-1431	AAA1095	0-6 in.	TH-232	13247		SU	D	RAS	1.49 PCI/G
	21-1431	AAA1095	0-6 in.	TH-232	13247		SU		RAS	1.4 PCI/G
	21-1431	AAA1095	0-6 in.	U	13247		SU		DNA	4.6 UG/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1431	AAA1096	6-12 in.	AM-241	13247		NS		RAS	0.0967 PCI/G
	21-1431	AAA1096	6-12 in.	H-3	13247		NS		LS	600 PCI/L
	21-1431	AAA1096	6-12 in.	PU-238	13247		NS		RAS	0.0301 PCI/G
	21-1431	AAA1096	6-12 in.	PU-239	13247		NS		RAS	0.0904 PCI/G
	21-1431	AAA1096	6-12 in.	SR-90	13247		NS		PC	0.736 PCI/G
	21-1431	AAA1096	6-12 in.	TH-228	13247		NS		RAS	1.49 PCI/G
	21-1431	AAA1096	6-12 in.	TH-230	13247		NS		RAS	0.273 PCI/G
	21-1431	AAA1096	6-12 in.	TH-232	13247		NS		RAS	1.19 PCI/G
	21-1431	AAA1096	6-12 in.	U	13247		NS		DNA	3.3 UG/G
	21-1431	AAA1097	12-18 in.	AM-241	13247		NS		RAS	0.0505 PCI/G
	21-1431	AAA1097	12-18 in.	H-3	13247		NS		LS	1000 PCI/L
	21-1431	AAA1097	12-18 in.	PU-238	13247		NS		RAS	0.0464 PCI/G
	21-1431	AAA1097	12-18 in.	PU-239	13247		NS		RAS	0.0093 PCI/G
	21-1431	AAA1097	12-18 in.	SR-90	13247		NS		PC	0.427 PCI/G
	21-1431	AAA1097	12-18 in.	TH-228	13247		NS		RAS	1.22 PCI/G
	21-1431	AAA1097	12-18 in.	TH-230	13247		NS		RAS	0.736 PCI/G
	21-1431	AAA1097	12-18 in.	TH-232	13247		NS		RAS	1.31 PCI/G
	21-1431	AAA1097	12-18 in.	U	13247		NS		DNA	3.7 UG/G
	21-1432	AAA1098	0-6 in.	AM-241	13247		SU		G	0.677 PCI/G
	21-1432	AAA1098	0-6 in.	AM-241	13247		SU		RAS	0.62 PCI/G
	21-1432	AAA1098	0-6 in.	H-3	13247		SU		LS	2300 PCI/L
	21-1432	AAA1098	0-6 in.	PU-238	13247		SU		RAS	0.121 PCI/G
	21-1432	AAA1098	0-6 in.	PU-239	13247		SU		RAS	13.9 PCI/G
	21-1432	AAA1098	0-6 in.	SR-90	13247		SU		PC	0.669 PCI/G
	21-1432	AAA1098	0-6 in.	TH-228	13247		SU		RAS	1.06 PCI/G
	21-1432	AAA1098	0-6 in.	TH-230	13247		SU		RAS	0.605 PCI/G
	21-1432	AAA1098	0-6 in.	TH-232	13247		SU		RAS	0.941 PCI/G
	21-1432	AAA1098	0-6 in.	U	13247		SU		DNA	5.3 UG/G
	21-1432	AAA1099	0-6 in.	AM-241	13247		FD		G	0.699 PCI/G
	21-1432	AAA1099	0-6 in.	AM-241	13247		FD		RAS	0.598 PCI/G
	21-1432	AAA1099	0-6 in.	H-3	13247		FD		LS	1900 PCI/L

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1432	AAA1099	0-6 in.	PU-238	13247		FD		RAS	0.127 PCI/G
	21-1432	AAA1099	0-6 in.	PU-239	13247		FD		RAS	11.8 PCI/G
	21-1432	AAA1099	0-6 in.	SR-90	13247		FD		PC	0.356 PCI/G
	21-1432	AAA1099	0-6 in.	TH-228	13247		FD		RAS	1.09 PCI/G
	21-1432	AAA1099	0-6 in.	TH-230	13247		FD		RAS	0.67 PCI/G
	21-1432	AAA1099	0-6 in.	TH-232	13247		FD		RAS	1.08 PCI/G
	21-1432	AAA1099	0-6 in.	U	13247		FD		DNA	5.1 UG/G
	21-1432	AAA1100	6-12 in.	AM-241	13247		NS		RAS	0.163 PCI/G
	21-1432	AAA1100	6-12 in.	H-3	13247		NS		LS	700 PCI/L
	21-1432	AAA1100	6-12 in.	PU-238	13247		NS		RAS	0.0519 PCI/G
	21-1432	AAA1100	6-12 in.	PU-239	13247		NS		RAS	0.571 PCI/G
	21-1432	AAA1100	6-12 in.	SR-90	13247		NS		PC	0.681 PCI/G
	21-1432	AAA1100	6-12 in.	TH-228	13247		NS		RAS	1.39 PCI/G
	21-1432	AAA1100	6-12 in.	TH-230	13247		NS		RAS	0.757 PCI/G
	21-1432	AAA1100	6-12 in.	TH-232	13247		NS		RAS	1.39 PCI/G
	21-1432	AAA1100	6-12 in.	U	13247		NS		DNA	4.3 UG/G
	21-1432	AAA1101	12-18 in.	AM-241	13247		NS		RAS	0.0782 PCI/G
	21-1432	AAA1101	12-18 in.	H-3	13247		NS		LS	600 PCI/L
	21-1432	AAA1101	12-18 in.	PU-238	13247		NS		RAS	0.0547 PCI/G
	21-1432	AAA1101	12-18 in.	PU-239	13247		NS		RAS	0.153 PCI/G
	21-1432	AAA1101	12-18 in.	SR-90	13247		NS		PC	0.27 PCI/G
	21-1432	AAA1101	12-18 in.	TH-228	13247		NS		RAS	1.24 PCI/G
	21-1432	AAA1101	12-18 in.	TH-230	13247		NS		RAS	0.386 PCI/G
	21-1432	AAA1101	12-18 in.	TH-232	13247		NS		RAS	1.26 PCI/G
	21-1432	AAA1101	12-18 in.	U	13247		NS		DNA	3.5 UG/G
	21-1433	AAA1102	0-6 in.	AM-241	13247		SU		RAS	0.179 PCI/G
	21-1433	AAA1102	0-6 in.	H-3	13247		SU		LS	2200 PCI/L
	21-1433	AAA1102	0-6 in.	PU-238	13247		SU		RAS	0.131 PCI/G
	21-1433	AAA1102	0-6 in.	PU-239	13247		SU		RAS	1.04 PCI/G
	21-1433	AAA1102	0-6 in.	SR-90	13247		SU		PC	0.508 PCI/G
	21-1433	AAA1102	0-6 in.	TH-228	13247		SU		RAS	1.25 PCI/G

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Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1433	AAA1102	0-6 in.	TH-230	13247		SU		RAS	0.684 PCI/G
	21-1433	AAA1102	0-6 in.	TH-232	13247		SU		RAS	1.12 PCI/G
	21-1433	AAA1102	0-6 in.	U	13247		SU		DNA	5.4 UG/G
	21-1433	AAA1103	6-12 in.	AM-241	13247		NS		RAS	0.0572 PCI/G
	21-1433	AAA1103	6-12 in.	H-3	13247		NS		LS	1000 PCI/L
	21-1433	AAA1103	6-12 in.	PU-238	13247		NS		RAS	0.0309 PCI/G
	21-1433	AAA1103	6-12 in.	PU-239	13247		NS		RAS	0.0412 PCI/G
	21-1433	AAA1103	6-12 in.	SR-90	13247		NS		PC	0.42 PCI/G
	21-1433	AAA1103	6-12 in.	TH-228	13247		NS		RAS	1.14 PCI/G
	21-1433	AAA1103	6-12 in.	TH-230	13247		NS		RAS	0.394 PCI/G
	21-1433	AAA1103	6-12 in.	TH-232	13247		NS		RAS	1.21 PCI/G
	21-1433	AAA1103	6-12 in.	U	13247		NS		DNA	3.7 UG/G
	21-1433	AAA1104	12-18 in.	AM-241	13247		NS		RAS	0.058 PCI/G
	21-1433	AAA1104	12-18 in.	H-3	13247		NS		LS	700 PCI/L
	21-1433	AAA1104	12-18 in.	PU-238	13247		NS		RAS	0.0834 PCI/G
	21-1433	AAA1104	12-18 in.	PU-239	13247		NS		RAS	0.0169 PCI/G
	21-1433	AAA1104	12-18 in.	SR-90	13247		NS		PC	0.448 PCI/G
	21-1433	AAA1104	12-18 in.	TH-228	13247		NS		RAS	1.38 PCI/G
	21-1433	AAA1104	12-18 in.	TH-230	13247		NS		RAS	0.683 PCI/G
	21-1433	AAA1104	12-18 in.	TH-232	13247		NS		RAS	1.13 PCI/G
	21-1433	AAA1104	12-18 in.	U	13247		NS		DNA	3.4 UG/G
21-024(g)	21-1425	AAA0893	0-6 in.	AM-241	13175	18510	SU		RAS	0.015 PCI/G
	21-1425	AAA0893	0-6 in.	H-3	13175		SU		LS	1100 PCI/L
	21-1425	AAA0893	0-6 in.	PU-238	13175	18513	SU		RAS	0.005 PCI/G
	21-1425	AAA0893	0-6 in.	PU-239	13175	18513	SU		RAS	0.281 PCI/G
	21-1425	AAA0893	0-6 in.	SR-90	13175	18511	SU		PC	0.1 PCI/G
	21-1425	AAA0893	0-6 in.	U	13175		SU		DNA	3.6 UG/G
	21-1425	AAA0894	6-12 in.	AM-241	13175	18510	NS		RAS	0.01 PCI/G
	21-1425	AAA0894	6-12 in.	H-3	13175		NS		LS	600 PCI/L
	21-1425	AAA0894	6-12 in.	PU-238	13175	18513	NS		RAS	0.003 PCI/G
	21-1425	AAA0894	6-12 in.	PU-239	13175	18513	NS		RAS	0.346 PCI/G

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Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1425	AAA0894	6-12 in.	U	13175		NS		DNA	3.5 UG/G
	21-1426	AAA0796	6-12 in.	AM-241	13175	18510	NS		RAS	0.003 PCI/G
	21-1426	AAA0796	6-12 in.	H-3	13175		NS		LS	200 PCI/L
	21-1426	AAA0796	6-12 in.	PU-238	13175	18513	NS		RAS	0.002 PCI/G
	21-1426	AAA0796	6-12 in.	PU-239	13175	18513	NS		RAS	0.031 PCI/G
	21-1426	AAA0796	6-12 in.	U	13175		NS		DNA	3.3 UG/G
	21-1426	AAA0895	0-6 in.	AM-241	13175	18510	SU		RAS	0.015 PCI/G
	21-1426	AAA0895	0-6 in.	H-3	13175		SU		LS	1200 PCI/L
	21-1426	AAA0895	0-6 in.	PU-238	13175	18513	SU		RAS	0.007 PCI/G
	21-1426	AAA0895	0-6 in.	PU-239	13175	18513	SU		RAS	0.201 PCI/G
	21-1426	AAA0895	0-6 in.	U	13175		SU		DNA	3.4 UG/G
	21-1427	AAA0797	0-6 in.	AM-241	13175	18510	SU		RAS	0.012 PCI/G
	21-1427	AAA0797	0-6 in.	H-3	13175		SU		LS	700 PCI/L
	21-1427	AAA0797	0-6 in.	PU-238	13175	18513	SU		RAS	0.006 PCI/G
	21-1427	AAA0797	0-6 in.	PU-239	13175	18513	SU		RAS	0.306 PCI/G
	21-1427	AAA0797	0-6 in.	U	13175		SU		DNA	3.9 UG/G
	21-1427	AAA0798	6-12 in.	AM-241	13175	18510	NS		RAS	0.01 PCI/G
	21-1427	AAA0798	6-12 in.	H-3	13175		NS		LS	400 PCI/L
	21-1427	AAA0798	6-12 in.	PU-238	13175	18513	NS		RAS	0.002 PCI/G
	21-1427	AAA0798	6-12 in.	PU-239	13175	18513	NS		RAS	0.148 PCI/G
	21-1427	AAA0798	6-12 in.	SR-90	13175	18511	NS		PC	0.1 PCI/G
	21-1427	AAA0798	6-12 in.	U	13175		NS		DNA	3.8 UG/G
	21-1428	AAA0799	0-6 in.	AM-241	13187	18506	SU		RAS	0.218 PCI/G
	21-1428	AAA0799	0-6 in.	H-3	13187		SU		LS	792700 PCI/L
	21-1428	AAA0799	0-6 in.	PU-238	13187	18509	SU		RAS	0.034 PCI/G
	21-1428	AAA0799	0-6 in.	PU-239	13187	18509	SU		RAS	4.08 PCI/G
	21-1428	AAA0799	0-6 in.	SR-90	13187	18507	SU		PC	0.9 PCI/G
	21-1428	AAA0799	0-6 in.	U	13187		SU		DNA	16.3 UG/G
	21-1428	AAA0800	6-12 in.	AM-241	13187	18506	NS		RAS	0.027 PCI/G

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Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1428	AAA0800	6-12 in.	H-3	13187		NS		LS	136200 PCI/L
	21-1428	AAA0800	6-12 in.	PU-238	13187	18509	NS		RAS	0.005 PCI/G
	21-1428	AAA0800	6-12 in.	PU-239	13187	18509	NS		RAS	0.459 PCI/G
	21-1428	AAA0800	6-12 in.	SR-90	13187	18507	NS		PC	0 PCI/G
	21-1428	AAA0800	6-12 in.	U	13187		NS		DNA	5.1 UG/G
	21-1429	AAA0801	0-6 in.	AM-241	13247		SU		RAS	0.0936 PCI/G
	21-1429	AAA0801	0-6 in.	H-3	13247		SU		LS	[illegible]00 PCI/L
	21-1429	AAA0801	0-6 in.	PU-238	13247		SU		RAS	0.0988 PCI/G
	21-1429	AAA0801	0-6 in.	PU-239	13247		SU		RAS	0.926 PCI/G
	21-1429	AAA0801	0-6 in.	U	13247		SU		DNA	7.4 UG/G
	21-1429	AAA1091	6-12 in.	AM-241	13247		NS		RAS	0.137 PCI/G
	21-1429	AAA1091	6-12 in.	H-3	13247		NS	D	LS	66200 PCI/L
	21-1429	AAA1091	6-12 in.	H-3	13247		NS		LS	66200 PCI/L
	21-1429	AAA1091	6-12 in.	H-3	13247		NS		LS	87800 PCI/L
	21-1429	AAA1091	6-12 in.	PU-239	13247		NS		RAS	0.259 PCI/G
	21-1429	AAA1091	6-12 in.	SR-90	13247		NS		PC	0.509 PCI/G
	21-1429	AAA1091	6-12 in.	U	13247		NS		DNA	6.6 UG/G
	21-1430	AAA1092	0-6 in.	AM-241	13247		SU		G	0.303 PCI/G
	21-1430	AAA1092	0-6 in.	AM-241	13247		SU		RAS	0.551 PCI/G
	21-1430	AAA1092	0-6 in.	H-3	13247		SU	D	LS	165200 PCI/L
	21-1430	AAA1092	0-6 in.	H-3	13247		SU		LS	165200 PCI/L
	21-1430	AAA1092	0-6 in.	H-3	13247		SU		LS	201900 PCI/L
	21-1430	AAA1092	0-6 in.	PU-238	13247		SU		RAS	0.508 PCI/G
	21-1430	AAA1092	0-6 in.	PU-239	13247		SU		RAS	19.4 PCI/G
	21-1430	AAA1092	0-6 in.	SR-90	13247		SU		PC	0.685 PCI/G
	21-1430	AAA1092	0-6 in.	U	13247		SU		DNA	18 UG/G
	21-1430	AAA1093	0-6 in.	AM-241	13247		FD		G	0.256 PCI/G
	21-1430	AAA1093	0-6 in.	AM-241	13247		FD		RAS	0.245 PCI/G
	21-1430	AAA1093	0-6 in.	H-3	13247		FD	D	LS	195500 PCI/L
	21-1430	AAA1093	0-6 in.	H-3	13247		FD		LS	195500 PCI/L

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1430	AAA1093	0-6 in.	H-3	13247		FD		LS	319300 PCI/L
	21-1430	AAA1093	0-6 in.	PU-238	13247		FD		RAS	0.0655 PCI/G
	21-1430	AAA1093	0-6 in.	PU-239	13247		FD		RAS	2.66 PCI/G
	21-1430	AAA1093	0-6 in.	SR-90	13247		FD		PC	0.626 PCI/G
	21-1430	AAA1093	0-6 in.	U	13247		FD		DNA	20 UG/G
	21-1430	AAA1094	6-12 in.	AM-241	13247		NS		RAS	0.0932 PCI/G
	21-1430	AAA1094	6-12 in.	H-3	13247		NS	D	LS	267700 PCI/L
	21-1430	AAA1094	6-12 in.	H-3	13247		NS		LS	267700 PCI/L
	21-1430	AAA1094	6-12 in.	H-3	13247		NS		LS	338900 PCI/L
	21-1430	AAA1094	6-12 in.	PU-238	13247		NS		RAS	0 PCI/G
	21-1430	AAA1094	6-12 in.	PU-239	13247		NS		RAS	0.634 PCI/G
	21-1430	AAA1094	6-12 in.	SR-90	13247		NS		PC	0.504 PCI/G
	21-1430	AAA1094	6-12 in.	U	13247		NS		DNA	5.5 UG/G
21-024(h)	21-1413	AAA0823	0-6 in.	AM-241	13221		SU		RAS	0.114 PCI/G
	21-1413	AAA0823	0-6 in.	H-3	13221		SU		LS	1600 PCI/L
	21-1413	AAA0823	0-6 in.	PU-238	13221		SU		RAS	0.144 PCI/G
	21-1413	AAA0823	0-6 in.	PU-239	13221		SU		RAS	0.36 PCI/G
	21-1413	AAA0823	0-6 in.	SR-90	13221		SU		PC	0.263 PCI/G
	21-1413	AAA0823	0-6 in.	TH-228	13221		SU		RAS	0.989 PCI/G
	21-1413	AAA0823	0-6 in.	TH-230	13221		SU		RAS	1.18 PCI/G
	21-1413	AAA0823	0-6 in.	TH-232	13221		SU		RAS	0.407 PCI/G
	21-1413	AAA0823	0-6 in.	U	13221		SU		DNA	2.6 UG/G
	21-1413	AAA0824	6-12 in.	AM-241	13221		NS		RAS	0.298 PCI/G
	21-1413	AAA0824	6-12 in.	H-3	13221		NS		LS	300 PCI/L
	21-1413	AAA0824	6-12 in.	PU-238	13221		NS		RAS	0.914 PCI/G
	21-1413	AAA0824	6-12 in.	PU-239	13221		NS		RAS	1.84 PCI/G
	21-1413	AAA0824	6-12 in.	SR-90	13221		NS		PC	0.156 PCI/G
	21-1413	AAA0824	6-12 in.	TH-228	13221		NS		RAS	1.51 PCI/G
	21-1413	AAA0824	6-12 in.	TH-230	13221		NS		RAS	1.32 PCI/G
	21-1413	AAA0824	6-12 in.	TH-232	13221		NS		RAS	1.33 PCI/G
	21-1413	AAA0824	6-12 in.	U	13221		NS		DNA	3.5 UG/G

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Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1413	AAA0825	12-18 in.	AM-241	13221		NS		RAS	0.073 PCI/G
	21-1413	AAA0825	12-18 in.	H-3	13221		NS		LS	1000 PCI/L
	21-1413	AAA0825	12-18 in.	PU-238	13221		NS		RAS	0.272 PCI/G
	21-1413	AAA0825	12-18 in.	PU-239	13221		NS		RAS	0.19 PCI/G
	21-1413	AAA0825	12-18 in.	SR-90	13221		NS	D	PC	0.18 PCI/G
	21-1413	AAA0825	12-18 in.	SR-90	13221		NS		PC	0.066 PCI/G
	21-1413	AAA0825	12-18 in.	TH-228	13221		NS		RAS	1.98 PCI/G
	21-1413	AAA0825	12-18 in.	TH-230	13221		NS		RAS	1.12 PCI/G
	21-1413	AAA0825	12-18 in.	TH-232	13221		NS		RAS	1.53 PCI/G
	21-1413	AAA0825	12-18 in.	U	13221		NS		DNA	38 UG/G
	21-1414	AAA0826	0-6 in.	AM-241	13221		SU		RAS	0.132 PCI/G
	21-1414	AAA0826	0-6 in.	H-3	13221		SU		LS	1300 PCI/L
	21-1414	AAA0826	0-6 in.	PU-238	13221		SU		RAS	0.0751 PCI/G
	21-1414	AAA0826	0-6 in.	PU-239	13221		SU		RAS	1.74 PCI/G
	21-1414	AAA0826	0-6 in.	SR-90	13221		SU		PC	0.125 PCI/G
	21-1414	AAA0826	0-6 in.	TH-228	13221		SU		RAS	1.39 PCI/G
	21-1414	AAA0826	0-6 in.	TH-230	13221		SU		RAS	0.903 PCI/G
	21-1414	AAA0826	0-6 in.	TH-232	13221		SU		RAS	1.32 PCI/G
	21-1414	AAA0826	0-6 in.	U	13221		SU		DNA	3.3 UG/G
	21-1414	AAA0827	0-6 in.	AM-241	13221		FD		RAS	0.217 PCI/G
	21-1414	AAA0827	0-6 in.	H-3	13221		FD		LS	1800 PCI/L
	21-1414	AAA0827	0-6 in.	PU-238	13221		FD		RAS	0.0374 PCI/G
	21-1414	AAA0827	0-6 in.	PU-239	13221		FD		RAS	4.4 PCI/G
	21-1414	AAA0827	0-6 in.	SR-90	13221		FD		PC	0.26 PCI/G
	21-1414	AAA0827	0-6 in.	TH-228	13221		FD		RAS	1.24 PCI/G
	21-1414	AAA0827	0-6 in.	TH-230	13221		FD		RAS	0.998 PCI/G
	21-1414	AAA0827	0-6 in.	TH-232	13221		FD		RAS	1.09 PCI/G
	21-1414	AAA0827	0-6 in.	U	13221		FD		DNA	3.2 UG/G
	21-1414	AAA0828	6-12 in.	AM-241	13221		NS		RAS	0.677 PCI/G
	21-1414	AAA0828	6-12 in.	H-3	13221		NS		LS	2200 PCI/L
	21-1414	AAA0828	6-12 in.	PU-238	13221		NS		RAS	0.355 PCI/G

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Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1414	AAA0828	6-12 in.	PU-239	13221		NS		RAS	33 PCI/G
	21-1414	AAA0828	6-12 in.	SR-90	13221		NS		PC	0.692 PCI/G
	21-1414	AAA0828	6-12 in.	TH-228	13221		NS		RAS	1.53 PCI/G
	21-1414	AAA0828	6-12 in.	TH-230	13221		NS		RAS	1.37 PCI/G
	21-1414	AAA0828	6-12 in.	TH-232	13221		NS		RAS	1.11 PCI/G
	21-1414	AAA0828	6-12 in.	U	13221		NS		DNA	4.3 UG/G
	21-1415	AAA0830	0-6 in.	AM-241	13221		SU		RAS	0.184 PCI/G
	21-1415	AAA0830	0-6 in.	H-3	13221		SU		LS	3500 PCI/L
	21-1415	AAA0830	0-6 in.	PU-238	13221		SU		RAS	0.0615 PCI/G
	21-1415	AAA0830	0-6 in.	PU-239	13221		SU		RAS	0.191 PCI/G
	21-1415	AAA0830	0-6 in.	SR-90	13221		SU		PC	0.463 PCI/G
	21-1415	AAA0830	0-6 in.	TH-228	13221		SU		RAS	1.73 PCI/G
	21-1415	AAA0830	0-6 in.	TH-230	13221		SU		RAS	1.47 PCI/G
	21-1415	AAA0830	0-6 in.	TH-232	13221		SU		RAS	1.41 PCI/G
	21-1415	AAA0830	0-6 in.	U	13221		SU		DNA	4.2 UG/G
	21-1415	AAA0831	6-12 in.	AM-241	13221		NS		RAS	0.0524 PCI/G
	21-1415	AAA0831	6-12 in.	H-3	13221		NS		LS	2000 PCI/L
	21-1415	AAA0831	6-12 in.	PU-238	13221		NS		RAS	0.0198 PCI/G
	21-1415	AAA0831	6-12 in.	PU-239	13221		NS		RAS	0.0989 PCI/G
	21-1415	AAA0831	6-12 in.	SR-90	13221		NS		PC	0.533 PCI/G
	21-1415	AAA0831	6-12 in.	TH-228	13221		NS		RAS	2.08 PCI/G
	21-1415	AAA0831	6-12 in.	TH-230	13221		NS		RAS	0.998 PCI/G
	21-1415	AAA0831	6-12 in.	TH-232	13221		NS		RAS	1.51 PCI/G
	21-1415	AAA0831	6-12 in.	U	13221		NS		DNA	3.9 UG/G
	21-1415	AAA0832	12-18 in.	AM-241	13221		NS		RAS	0.0435 PCI/G
	21-1415	AAA0832	12-18 in.	H-3	13221		NS		LS	2300 PCI/L
	21-1415	AAA0832	12-18 in.	PU-238	13221		NS		RAS	0.136 PCI/G
	21-1415	AAA0832	12-18 in.	PU-239	13221		NS		RAS	0.163 PCI/G
	21-1415	AAA0832	12-18 in.	SR-90	13221		NS		PC	0.521 PCI/G
	21-1415	AAA0832	12-18 in.	TH-228	13221		NS		RAS	2.87 PCI/G
	21-1415	AAA0832	12-18 in.	TH-230	13221		NS		RAS	1.63 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1415	AAA0832	12-18 in.	TH-232	13221		NS		RAS	1.28 PCI/G
	21-1415	AAA0832	12-18 in.	U	13221		NS		DNA	3.9 UG/G
21-024(i)	21-1395	AAA077	0-6 in.	AM-24	13117		SU		G	1.3 PCI/G
	21-1395	AAA077	0-6 in.	H-3	13117		SU		LS	##### PCI/L
	21-1395	AAA077	0-6 in.	H-3	13117		SU		LS	##### PCI/L
	21-1395	AAA077	0-6 in.	PU-238	13117		SU		RAS	0.043 PCI/G
	21-1395	AAA077	0-6 in.	PU-239	13117		SU		RAS	0.64 PCI/G
	21-1395	AAA077	0-6 in.	SR-90	13117		SU		PC	1 PCI/G
	21-1395	AAA077	0-6 in.	TH-228	13117	19444	SU		RAS	1.5 PCI/G
	21-1395	AAA077	0-6 in.	TH-230	13117	19444	SU		RAS	0.9 PCI/G
	21-1395	AAA077	0-6 in.	TH-232	13117	19444	SU		RAS	1.2 PCI/G
	21-1395	AAA077	0-6 in.	U	13117		SU		DNA	40.4 UG/G
	21-1395	AAA077	6-12 in	AM-24	13117		NS		G	0.503 PCI/G
	21-1395	AAA077	6-12 in	H-3	13117		NS		LS	##### PCI/L
	21-1395	AAA077	6-12 in	H-3	13117		NS		LS	##### PCI/L
	21-1395	AAA077	6-12 in	PU-238	13117		NS		RAS	0.018 PCI/G
	21-1395	AAA077	6-12 in	PU-239	13117		NS		RAS	0.37 PCI/G
	21-1395	AAA077	6-12 in	SR-90	13117		NS		PC	0.2 PCI/G
	21-1395	AAA077	6-12 in	TH-228	13117	19444	NS		RAS	1.3 PCI/G
	21-1395	AAA077	6-12 in	TH-230	13117	19444	NS		RAS	0.8 PCI/G
	21-1395	AAA077	6-12 in	TH-232	13117	19444	NS		RAS	1.1 PCI/G
	21-1395	AAA077	6-12 in	U	13117		NS		DNA	24.4 UG/G
	21-1396	AAA077	0-6 in.	AM-24	13117		SU		G	0.001 PCI/G
	21-1396	AAA077	0-6 in.	H-3	13117		SU		LS	##### PCI/L
	21-1396	AAA077	0-6 in.	H-3	13117		SU		LS	##### PCI/L
	21-1396	AAA077	0-6 in.	PU-238	13117		SU		RAS	0.016 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1396	AAA077	0-6 in.	PU-239	13117		SU		RAS	0.56 PCI/G
	21-1396	AAA077	0-6 in.	SR-90	13117		SU		PC	0.5 PCI/G
	21-1396	AAA077	0-6 in.	TH-228	13117	19444	SU		RAS	1.3 PCI/G
	21-1396	AAA077	0-6 in.	TH-230	13117	19444	SU		RAS	0.9 PCI/G
	21-1396	AAA077	0-6 in.	TH-232	13117	19444	SU		RAS	1.2 PCI/G
	21-1396	AAA077	0-6 in.	U	13117		SU		DNA	26.3 UG/G
	21-1396	AAA077	6-12 in	AM-24	13117		NS		G	1.3 PCI/G
	21-1396	AAA077	6-12 in	H-3	13117		NS		LS	##### PCI/L
	21-1396	AAA077	6-12 in	H-3	13117		NS		LS	##### PCI/L
	21-1396	AAA077	6-12 in	PU-238	13117		NS		RAS	0.084 PCI/G
	21-1396	AAA077	6-12 in	PU-239	13117		NS		RAS	9.2 PCI/G
	21-1396	AAA077	6-12 in	SR-90	13117		NS		PC	0.4 PCI/G
	21-1396	AAA077	6-12 in	TH-228	13117	19444	NS		RAS	1.4 PCI/G
	21-1396	AAA077	6-12 in	TH-230	13117	19444	NS		RAS	1.1 PCI/G
	21-1396	AAA077	6-12 in	TH-232	13117	19444	NS		RAS	1.4 PCI/G
	21-1396	AAA077	6-12 in	U	13117		NS		DNA	28 UG/G
	21-1397	AAA077	0-6 in.	AM-24	13117		SU		G	1.19 PCI/G
	21-1397	AAA077	0-6 in.	H-3	13117		SU		LS	##### PCI/L
	21-1397	AAA077	0-6 in.	H-3	13117		SU		LS	##### PCI/L
	21-1397	AAA077	0-6 in.	PU-238	13117		SU		RAS	0.077 PCI/G
	21-1397	AAA077	0-6 in.	PU-239	13117		SU		RAS	5.4 PCI/G
	21-1397	AAA077	0-6 in.	SR-90	13117		SU		PC	0.3 PCI/G
	21-1397	AAA077	0-6 in.	TH-228	13117	19444	SU		RAS	0.7 PCI/G
	21-1397	AAA077	0-6 in.	TH-230	13117	19444	SU		RAS	0.6 PCI/G
	21-1397	AAA077	0-6 in.	TH-232	13117	19444	SU		RAS	0.7 PCI/G
	21-1397	AAA077	0-6 in.	U	13117		SU		DNA	73 UG/G
	21-1397	AAA077	6-12 in	AM-24	13117		NS		G	1.54 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1397	AAA077	6-12 in	H-3	13117		NS		LS	##### PCI/L
	21-1397	AAA077	6-12 in	H-3	13117		NS		LS	##### PCI/L
	21-1397	AAA077	6-12 in	PU-238	13117		NS		RAS	0.07 PCI/G
	21-1397	AAA077	6-12 in	PU-239	13117		NS		RAS	6.1 PCI/G
	21-1397	AAA077	6-12 in	SR-90	13117		NS		PC	0.7 PCI/G
	21-1397	AAA077	6-12 in	TH-228	13117	19444	NS		RAS	1.2 PCI/G
	21-1397	AAA077	6-12 in	TH-230	13117	19444	NS		RAS	1.3 PCI/G
	21-1397	AAA077	6-12 in	TH-232	13117	19444	NS		RAS	1.1 PCI/G
	21-1397	AAA077	6-12 in	U	13117		NS		DNA	52.2 UG/G
21-024(I)	21-1419	AAA0912	0-6 in.	AM-241	13247		SU		RAS	0.0781 PCI/G
	21-1419	AAA0912	0-6 in.	H-3	13247		SU		LS	600 PCI/L
	21-1419	AAA0912	0-6 in.	PU-238	13247		SU		RAS	0.0548 PCI/G
	21-1419	AAA0912	0-6 in.	PU-239	13247		SU		RAS	0.931 PCI/G
	21-1419	AAA0912	0-6 in.	SR-90	13247		SU		PC	0.08 PCI/G
	21-1419	AAA0912	0-6 in.	U	13247		SU		DNA	3.1 UG/G
	21-1420	AAA0913	0-6 in.	AM-241	13247		SU		RAS	0.0603 PCI/G
	21-1420	AAA0913	0-6 in.	H-3	13247		SU		LS	200 PCI/L
	21-1420	AAA0913	0-6 in.	PU-238	13247		SU		RAS	0.0869 PCI/G
	21-1420	AAA0913	0-6 in.	PU-239	13247		SU		RAS	0.217 PCI/G
	21-1420	AAA0913	0-6 in.	SR-90	13247		SU		PC	0.02 PCI/G
	21-1420	AAA0913	0-6 in.	U	13247		SU		DNA	2.7 UG/G
	21-1421	AAA0889	0-6 in.	AM-241	13247		SU		RAS	0.0253 PCI/G
	21-1421	AAA0889	0-6 in.	H-3	13247		SU		LS	1300 PCI/L
	21-1421	AAA0889	0-6 in.	PU-238	13247		SU		RAS	0.119 PCI/G
	21-1421	AAA0889	0-6 in.	PU-239	13247		SU		RAS	0.151 PCI/G
	21-1421	AAA0889	0-6 in.	SR-90	13247		SU		PC	0.122 PCI/G
	21-1421	AAA0889	0-6 in.	U	13247		SU		DNA	3.5 UG/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1422	AAA0890	0-6 in.	AM-241	13247		SU	D	G	0.329 PCI/G
	21-1422	AAA0890	0-6 in.	AM-241	13247		SU	D	RAS	0.634 PCI/G
	21-1422	AAA0890	0-6 in.	AM-241	13247		SU		RAS	0.424 PCI/G
	21-1422	AAA0890	0-6 in.	H-3	13247		SU		LS	1300 PCI/L
	21-1422	AAA0890	0-6 in.	PU-238	13247		SU	D	RAS	5.12 PCI/G
	21-1422	AAA0890	0-6 in.	PU-238	13247		SU		RAS	12.1 PCI/G
	21-1422	AAA0890	0-6 in.	PU-239	13247		SU	D	RAS	1.54 PCI/G
	21-1422	AAA0890	0-6 in.	PU-239	13247		SU		RAS	1.42 PCI/G
	21-1422	AAA0890	0-6 in.	SR-90	13247		SU	D	PC	0.306 PCI/G
	21-1422	AAA0890	0-6 in.	SR-90	13247		SU		PC	0.581 PCI/G
	21-1422	AAA0890	0-6 in.	U	13247		SU		DNA	6.2 UG/G
	21-1423	AAA0891	0-6 in.	AM-241	13247		SU		G	0.239 PCI/G
	21-1423	AAA0891	0-6 in.	AM-241	13247		SU		RAS	0.193 PCI/G
	21-1423	AAA0891	0-6 in.	H-3	13247		SU		LS	2100 PCI/L
	21-1423	AAA0891	0-6 in.	PU-238	13247		SU		RAS	0.153 PCI/G
	21-1423	AAA0891	0-6 in.	PU-239	13247		SU		RAS	1.71 PCI/G
	21-1423	AAA0891	0-6 in.	SR-90	13247		SU		PC	0.478 PCI/G
	21-1423	AAA0891	0-6 in.	U	13247		SU		DNA	4.8 UG/G
	21-1424	AAA0892	0-6 in.	AM-241	13247		SU	D	RAS	0.165 PCI/G
	21-1424	AAA0892	0-6 in.	AM-241	13247		SU		G	0.105 PCI/G
	21-1424	AAA0892	0-6 in.	AM-241	13247		SU		RAS	0.107 PCI/G
	21-1424	AAA0892	0-6 in.	H-3	13247		SU		LS	800 PCI/L
	21-1424	AAA0892	0-6 in.	PU-238	13247		SU		RAS	0.19 PCI/G
	21-1424	AAA0892	0-6 in.	PU-239	13247		SU		RAS	1.18 PCI/G
	21-1424	AAA0892	0-6 in.	SR-90	13247		SU		PC	0.215 PCI/G
	21-1424	AAA0892	0-6 in.	U	13247		SU		DNA	4.5 UG/G
21-024(m),	21-1393	AAA0760	0-6 in.	AM-241	13213	18554	SU		RAS	0.034 PCI/G
21-027(b)	21-1393	AAA0760	0-6 in.	H-3	13213		SU		LS	800 PCI/L

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1393	AAA0760	0-6 in.	PU-238	13213	18555	SU		RAS	0.015 PCI/G
	21-1393	AAA0760	0-6 in.	PU-239	13213	18555	SU		RAS	0.068 PCI/G
	21-1393	AAA0760	0-6 in.	SR-90	13213	18553	SU		PC	0 PCI/G
	21-1393	AAA0760	0-6 in.	TH-228	13213	18556	SU		RAS	1.06 PCI/G
	21-1393	AAA0760	0-6 in.	TH-230	13213	18556	SU		RAS	0.88 PCI/G
	21-1393	AAA0760	0-6 in.	TH-232	13213	18556	SU		RAS	1.07 PCI/G
	21-1393	AAA0760	0-6 in.	U	13213		SU		DNA	4.9 UG/G
	21-1393	AAA0761	6-12 in.	AM-241	13213	18554	NS		RAS	0.041 PCI/G
	21-1393	AAA0761	6-12 in.	H-3	13213		NS		LS	0 PCI/L
	21-1393	AAA0761	6-12 in.	PU-238	13213	18555	NS		RAS	0.013 PCI/G
	21-1393	AAA0761	6-12 in.	PU-239	13213	18555	NS		RAS	0.171 PCI/G
	21-1393	AAA0761	6-12 in.	SR-90	13213	18553	NS		PC	0.5 PCI/G
	21-1393	AAA0761	6-12 in.	TH-228	13213	18556	NS		RAS	1.47 PCI/G
	21-1393	AAA0761	6-12 in.	TH-230	13213	18556	NS		RAS	1.23 PCI/G
	21-1393	AAA0761	6-12 in.	TH-232	13213	18556	NS		RAS	1.42 PCI/G
	21-1393	AAA0761	6-12 in.	U	13213		NS		DNA	4.9 UG/G
	21-1393	AAA0762	12-18 in.	AM-241	13213	18554	NS		RAS	0.013 PCI/G
	21-1393	AAA0762	12-18 in.	H-3	13213		NS		LS	300 PCI/L
	21-1393	AAA0762	12-18 in.	PU-238	13213	18555	NS		RAS	0.005 PCI/G
	21-1393	AAA0762	12-18 in.	PU-239	13213	18555	NS		RAS	0.038 PCI/G
	21-1393	AAA0762	12-18 in.	TH-228	13213	18556	NS		RAS	1.34 PCI/G
	21-1393	AAA0762	12-18 in.	TH-230	13213	18556	NS		RAS	1.05 PCI/G
	21-1393	AAA0762	12-18 in.	TH-232	13213	18556	NS		RAS	1.31 PCI/G
	21-1393	AAA0762	12-18 in.	U	13213		NS		DNA	4.5 UG/G
	21-1394	AAA0763	0-6 in.	AM-241	13213	18554	SU	D	RAS	0.023 PCI/G
	21-1394	AAA0763	0-6 in.	AM-241	13213	18554	SU		RAS	0.023 PCI/G
	21-1394	AAA0763	0-6 in.	H-3	13213		SU		LS	1000 PCI/L
	21-1394	AAA0763	0-6 in.	PU-238	13213	18555	SU		RAS	0.008 PCI/G
	21-1394	AAA0763	0-6 in.	PU-238	13213	18555	SU	D	RAS	0.01 PCI/G
	21-1394	AAA0763	0-6 in.	PU-239	13213	18555	SU	D	RAS	0.088 PCI/G
	21-1394	AAA0763	0-6 in.	PU-239	13213	18555	SU		RAS	0.137 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1394	AAA0763	0-6 in.	SR-90	13213	18553	SU		PC	0.2 PCI/G
	21-1394	AAA0763	0-6 in.	TH-228	13213	18556	SU		RAS	1.54 PCI/G
	21-1394	AAA0763	0-6 in.	TH-228	13213	18556	SU	D	RAS	1.6 PCI/G
	21-1394	AAA0763	0-6 in.	TH-230	13213	18556	SU		RAS	1.25 PCI/G
	21-1394	AAA0763	0-6 in.	TH-230	13213	18556	SU	D	RAS	1.31 PCI/G
	21-1394	AAA0763	0-6 in.	TH-232	13213	18556	SU	D	RAS	1.43 PCI/G
	21-1394	AAA0763	0-6 in.	TH-232	13213	18556	SU		RAS	1.5 PCI/G
	21-1394	AAA0763	0-6 in.	U	13213		SU		DNA	5.22 UG/G
	21-1394	AAA0764	0-6 in.	AM-241	13213	18554	FD		RAS	0.024 PCI/G
	21-1394	AAA0764	0-6 in.	AM-241	13213	18554	FD	D	RAS	0.026 PCI/G
	21-1394	AAA0764	0-6 in.	H-3	13213		FD		LS	700 PCI/L
	21-1394	AAA0764	0-6 in.	PU-238	13213	18555	FD	D	RAS	0.008 PCI/G
	21-1394	AAA0764	0-6 in.	PU-238	13213	18555	FD		RAS	0.008 PCI/G
	21-1394	AAA0764	0-6 in.	PU-239	13213	18555	FD		RAS	0.105 PCI/G
	21-1394	AAA0764	0-6 in.	PU-239	13213	18555	FD	D	RAS	0.119 PCI/G
	21-1394	AAA0764	0-6 in.	SR-90	13213	18553	FD		PC	0.1 PCI/G
	21-1394	AAA0764	0-6 in.	TH-228	13213	18556	FD		RAS	1.49 PCI/G
	21-1394	AAA0764	0-6 in.	TH-230	13213	18556	FD		RAS	1.34 PCI/G
	21-1394	AAA0764	0-6 in.	TH-232	13213	18556	FD		RAS	1.41 PCI/G
	21-1394	AAA0764	0-6 in.	U	13213		FD		DNA	5.3 UG/G
	21-1394	AAA0765	6-12 in.	AM-241	13213	18554	NS		RAS	0.007 PCI/G
	21-1394	AAA0765	6-12 in.	H-3	13213		NS		LS	2000 PCI/L
	21-1394	AAA0765	6-12 in.	PU-238	13213	18555	NS		RAS	0.004 PCI/G
	21-1394	AAA0765	6-12 in.	PU-239	13213	18555	NS		RAS	0.023 PCI/G
	21-1394	AAA0765	6-12 in.	SR-90	13213	18553	NS		PC	0.4 PCI/G
	21-1394	AAA0765	6-12 in.	TH-228	13213	18556	NS		RAS	1.46 PCI/G
	21-1394	AAA0765	6-12 in.	TH-230	13213	18556	NS		RAS	1.32 PCI/G
	21-1394	AAA0765	6-12 in.	TH-232	13213	18556	NS		RAS	1.39 PCI/G
	21-1394	AAA0765	6-12 in.	U	13213		NS		DNA	3.7 UG/G
	21-1394	AAA0766	12-18 in.	AM-241	13213	18554	NS		RAS	0 PCI/G
	21-1394	AAA0766	12-18 in.	H-3	13213		NS		LS	2300 PCI/L
	21-1394	AAA0766	12-18 in.	PU-239	13213	18555	NS		RAS	0.001 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1394	AAA0766	12-18 in.	TH-228	13213	18556	NS		RAS	1.51 PCI/G
	21-1394	AAA0766	12-18 in.	TH-230	13213	18556	NS		RAS	1.26 PCI/G
	21-1394	AAA0766	12-18 in.	TH-232	13213	18556	NS		RAS	1.53 PCI/G
	21-1394	AAA0766	12-18 in.	U	13213		NS		DNA	3.5 UG/G
	21-1394	AAA0767		AM-241	13179		FE		RAS	0.028 PCI/L
	21-1394	AAA0767		AM-241	13179		FE		RAS	0.029 PCI/L
	21-1394	AAA0767		H-3	13179		FE		LS	100 PCI/L
	21-1394	AAA0767		PU-238	13179		FE		RAS	0.004 PCI/L
	21-1394	AAA0767		PU-239	13179		FE		RAS	0.024 PCI/L
	21-1394	AAA0767		SR-90	13179		FE		PC	0.3 PCI/L
	21-1394	AAA0767		TH-228	13179		FE		RAS	0.01 PCI/L
	21-1394	AAA0767		TH-230	13179		FE		RAS	0.011 PCI/L
	21-1394	AAA0767		TH-232	13179	18271	FE		RAS	0.01 PCI/L
21-024(n)	21-1402	AAA0785	0-6 in.	AM-241	13221		SU		RAS	0.177 PCI/G
	21-1402	AAA0785	0-6 in.	H-3	13221		SU		LS	14900 PCI/L
	21-1402	AAA0785	0-6 in.	PU-238	13221		SU		RAS	0.11 PCI/G
	21-1402	AAA0785	0-6 in.	PU-239	13221		SU		RAS	0.175 PCI/G
	21-1402	AAA0785	0-6 in.	SR-90	13221		SU		PC	0.2 PCI/G
	21-1402	AAA0785	0-6 in.	U	13221		SU		DNA	4.4 UG/G
	21-1402	AAA0786		AM-241	13179		FE		RAS	0.035 PCI/L
	21-1402	AAA0786		AM-241	13179		FE		RAS	0.045 PCI/L
	21-1402	AAA0786		PU-238	13179		FE		RAS	0 PCI/L
	21-1402	AAA0786		PU-239	13179		FE		RAS	0.016 PCI/L
	21-1402	AAA0786		SR-90	13179		FE		PC	0.6 PCI/L
	21-1402	AAA0788	6-12 in.	AM-241	13221		NS		RAS	0.255 PCI/G
	21-1402	AAA0788	6-12 in.	H-3	13221		NS		LS	12400 PCI/L
	21-1402	AAA0788	6-12 in.	PU-238	13221		NS		RAS	0.072 PCI/G
	21-1402	AAA0788	6-12 in.	PU-239	13221		NS		RAS	0.174 PCI/G
	21-1402	AAA0788	6-12 in.	SR-90	13221		NS		PC	0.319 PCI/G
	21-1402	AAA0788	6-12 in.	U	13221		NS		DNA	4.6 UG/G
	21-1402	AAA0789	12-18 in.	AM-241	13221		NS		RAS	0.0845 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1402	AAA0789	12-18 in.	H-3	13221		NS		LS	13300 PCI/L
	21-1402	AAA0789	12-18 in.	PU-238	13221		NS		RAS	0.186 PCI/G
	21-1402	AAA0789	12-18 in.	PU-239	13221		NS		RAS	0.0506 PCI/G
	21-1402	AAA0789	12-18 in.	SR-90	13221		NS	D	PC	0.311 PCI/G
	21-1402	AAA0789	12-18 in.	SR-90	13221		NS		PC	0.327 PCI/G
	21-1402	AAA0789	12-18 in.	U	13221		NS		DNA	3.78 UG/G
	21-1403	AAA0790	0-6 in.	AM-241	13247		SU		RAS	0.0634 PCI/G
	21-1403	AAA0790	0-6 in.	H-3	13247		SU		LS	5700 PCI/L
	21-1403	AAA0790	0-6 in.	PU-238	13247		SU		RAS	0.0853 PCI/G
	21-1403	AAA0790	0-6 in.	PU-239	13247		SU		RAS	0.146 PCI/G
	21-1403	AAA0790	0-6 in.	SR-90	13247		SU		PC	0.077 PCI/G
	21-1403	AAA0790	0-6 in.	U	13247		SU		DNA	5.3 UG/G
	21-1403	AAA0791	6-12 in.	AM-241	13247		NS		RAS	0.106 PCI/G
	21-1403	AAA0791	6-12 in.	H-3	13247		NS		LS	14500 PCI/L
	21-1403	AAA0791	6-12 in.	PU-238	13247		NS		RAS	0.0596 PCI/G
	21-1403	AAA0791	6-12 in.	PU-239	13247		NS		RAS	0.111 PCI/G
	21-1403	AAA0791	6-12 in.	SR-90	13247		NS		PC	0.292 PCI/G
	21-1403	AAA0791	6-12 in.	U	13247		NS		DNA	8.3 UG/G
	21-1403	AAA0792	12-18 in.	AM-241	13247		NS		RAS	0.175 PCI/G
	21-1403	AAA0792	12-18 in.	H-3	13247		NS		LS	14300 PCI/L
	21-1403	AAA0792	12-18 in.	PU-238	13247		NS		RAS	0.0282 PCI/G
	21-1403	AAA0792	12-18 in.	PU-239	13247		NS		RAS	0.0282 PCI/G
	21-1403	AAA0792	12-18 in.	SR-90	13247		NS		PC	0.447 PCI/G
	21-1403	AAA0792	12-18 in.	U	13247		NS		DNA	3.6 UG/G
	21-1404	AAA0793	0-6 in.	AM-241	13247		SU		RAS	0.085 PCI/G
	21-1404	AAA0793	0-6 in.	H-3	13247		SU		LS	8800 PCI/L
	21-1404	AAA0793	0-6 in.	PU-238	13247		SU		RAS	0.0381 PCI/G
	21-1404	AAA0793	0-6 in.	PU-239	13247		SU		RAS	0.14 PCI/G
	21-1404	AAA0793	0-6 in.	SR-90	13247		SU		PC	0.199 PCI/G
	21-1404	AAA0793	0-6 in.	U	13247		SU		DNA	8.8 UG/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1404	AAA0794	6-12 in.	AM-241	13247		NS		RAS	0.093 PCI/G
	21-1404	AAA0794	6-12 in.	H-3	13247		NS		LS	9100 PCI/L
	21-1404	AAA0794	6-12 in.	PU-238	13247		NS		RAS	0.0936 PCI/G
	21-1404	AAA0794	6-12 in.	PU-239	13247		NS		RAS	0.052 PCI/G
	21-1404	AAA0794	6-12 in.	SR-90	13247		NS		PC	0.318 PCI/G
	21-1404	AAA0794	6-12 in.	U	13247		NS		DNA	3.8 UG/G
	21-1404	AAA0795	12-18 in.	AM-241	13247		NS		RAS	0.0747 PCI/G
	21-1404	AAA0795	12-18 in.	H-3	13247		NS		LS	10600 PCI/L
	21-1404	AAA0795	12-18 in.	PU-238	13247		NS		RAS	0.121 PCI/G
	21-1404	AAA0795	12-18 in.	PU-239	13247		NS		RAS	0 PCI/G
	21-1404	AAA0795	12-18 in.	SR-90	13247		NS		PC	0.403 PCI/G
	21-1404	AAA0795	12-18 in.	U	13247		NS		DNA	4.2 UG/G
21-024(o)	21-1343	AAA0837	0-6 in.	AM-241	13099	18014	SU		RAS	0.07 PCI/G
	21-1343	AAA0837	0-6 in.	H-3	13099		SU		LS	1700 PCI/L
	21-1343	AAA0837	0-6 in.	PU-238	13099	18016	SU		RAS	0.015 PCI/G
	21-1343	AAA0837	0-6 in.	PU-239	13099	18016	SU		RAS	1.66 PCI/G
	21-1343	AAA0837	0-6 in.	SR-90	13099	18011	SU		PC	0 PCI/G
	21-1343	AAA0837	0-6 in.	U	13099		SU		DNA	4.1 UG/G
	21-1343	AAA0838	0-6 in.	AM-241	13099	18014	FD		RAS	0.087 PCI/G
	21-1343	AAA0838	0-6 in.	H-3	13099		FD		LS	2400 PCI/L
	21-1343	AAA0838	0-6 in.	PU-238	13099	18016	FD		RAS	0.019 PCI/G
	21-1343	AAA0838	0-6 in.	PU-239	13099	18016	FD		RAS	1.35 PCI/G
	21-1343	AAA0838	0-6 in.	SR-90	13099	18011	FD		PC	0 PCI/G
	21-1343	AAA0838	0-6 in.	U	13099		FD		DNA	4.3 UG/G
	21-1343	AAA0839	6-12 in.	AM-241	13099	18014	NS		RAS	0.004 PCI/G
	21-1343	AAA0839	6-12 in.	H-3	13099		NS		LS	600 PCI/L
	21-1343	AAA0839	6-12 in.	PU-238	13099	18016	NS		RAS	0.001 PCI/G
	21-1343	AAA0839	6-12 in.	PU-239	13099	18016	NS		RAS	0.147 PCI/G
	21-1343	AAA0839	6-12 in.	U	13099		NS		DNA	3.8 UG/G
	21-1343	AAA0840	12-18 in.	AM-241	13099	18014	NS		RAS	0.002 PCI/G
	21-1343	AAA0840	12-18 in.	H-3	13099		NS		LS	500 PCI/L

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1343	AAA0840	12-18 in.	PU-238	13099	18016	NS		RAS	0.001 PCI/G
	21-1343	AAA0840	12-18 in.	PU-239	13099	18016	NS		RAS	0.008 PCI/G
	21-1343	AAA0840	12-18 in.	SR-90	13099	18011	NS		PC	0 PCI/G
	21-1343	AAA0840	12-18 in.	U	13099		NS		DNA	3.7 UG/G
	21-1344	AAA0841	0-6 in.	AM-241	13099	18014	SU		RAS	0.026 PCI/G
	21-1344	AAA0841	0-6 in.	H-3	13099		SU		LS	900 PCI/L
	21-1344	AAA0841	0-6 in.	PU-238	13099	18016	SU		RAS	0.015 PCI/G
	21-1344	AAA0841	0-6 in.	PU-239	13099	18016	SU		RAS	0.297 PCI/G
	21-1344	AAA0841	0-6 in.	SR-90	13099	18011	SU		PC	0 PCI/G
	21-1344	AAA0841	0-6 in.	U	13099		SU		DNA	3.6 UG/G
	21-1344	AAA0842	6-12 in.	AM-241	13099	18014	NS		RAS	0.029 PCI/G
	21-1344	AAA0842	6-12 in.	H-3	13099		NS		LS	900 PCI/L
	21-1344	AAA0842	6-12 in.	PU-238	13099	18016	NS		RAS	0.005 PCI/G
	21-1344	AAA0842	6-12 in.	PU-239	13099	18016	NS		RAS	0.555 PCI/G
	21-1344	AAA0842	6-12 in.	U	13099		NS		DNA	4.1 UG/G
	21-1344	AAA0843	12-18 in.	AM-241	13099	18014	NS		RAS	0.005 PCI/G
	21-1344	AAA0843	12-18 in.	H-3	13099		NS		LS	400 PCI/L
	21-1344	AAA0843	12-18 in.	PU-238	13099	18016	NS		RAS	0.001 PCI/G
	21-1344	AAA0843	12-18 in.	PU-239	13099	18016	NS		RAS	0.144 PCI/G
	21-1344	AAA0843	12-18 in.	SR-90	13099	18011	NS		PC	0 PCI/G
	21-1344	AAA0843	12-18 in.	U	13099		NS		DNA	3.8 UG/G
21-026(d)	21-1398	AAA0776	0-6 in.	AM-241	13175	18510	SU		RAS	0.456 PCI/G
	21-1398	AAA0776	0-6 in.	H-3	13175		SU		LS	33000 PCI/L
	21-1398	AAA0776	0-6 in.	PU-238	13175	18513	SU		RAS	0.019 PCI/G
	21-1398	AAA0776	0-6 in.	PU-239	13175	18513	SU		RAS	0.592 PCI/G
	21-1398	AAA0776	0-6 in.	SR-90	13175	18511	SU		PC	0 PCI/G
	21-1398	AAA0776	0-6 in.	U	13175		SU		DNA	3.7 UG/G
	21-1398	AAA0777		AM-241	13179		FE		RAS	0 PCI/L
	21-1398	AAA0777		AM-241	13179		FE		RAS	0.027 PCI/L
	21-1398	AAA0777		PU-239	13179		FE		RAS	0.008 PCI/L

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1398	AAA0777		SR-90	13179		FE		PC	0.3 PCI/L
	21-1399	AAA0779	0-6 in.	AM-241	13175	18510	SU	D	RAS	0.318 PCI/G
	21-1399	AAA0779	0-6 in.	AM-241	13175	18510	SU		RAS	0.32 PCI/G
	21-1399	AAA0779	0-6 in.	H-3	13175		SU		LS	8100 PCI/L
	21-1399	AAA0779	0-6 in.	PU-238	13175	18513	SU	D	RAS	0.037 PCI/G
	21-1399	AAA0779	0-6 in.	PU-238	13175	18513	SU		RAS	0.036 PCI/G
	21-1399	AAA0779	0-6 in.	PU-239	13175	18513	SU	D	RAS	0.61 PCI/G
	21-1399	AAA0779	0-6 in.	PU-239	13175	18513	SU		RAS	0.613 PCI/G
	21-1399	AAA0779	0-6 in.	SR-90	13175	18511	SU		PC	0.2 PCI/G
	21-1399	AAA0779	0-6 in.	U	13175		SU		DNA	4.9 UG/G
	21-1400	AAA0780	0-6 in.	AM-241	13175	18510	SU		RAS	1.07 PCI/G
	21-1400	AAA0780	0-6 in.	H-3	13175		SU		LS	108400 PCI/L
	21-1400	AAA0780	0-6 in.	PU-238	13175	18513	SU		RAS	0.122 PCI/G
	21-1400	AAA0780	0-6 in.	PU-239	13175	18513	SU		RAS	1.96 PCI/G
	21-1400	AAA0780	0-6 in.	U	13175		SU		DNA	6.3 UG/G
	21-1401	AAA0781	0-6 in.	AM-241	13213	18554	SU		RAS	1.39 PCI/G
	21-1401	AAA0781	0-6 in.	H-3	13213		SU		LS	57400 PCI/L
	21-1401	AAA0781	0-6 in.	PU-238	13213	18555	SU		RAS	0.129 PCI/G
	21-1401	AAA0781	0-6 in.	PU-239	13213	18555	SU		RAS	2.48 PCI/G
	21-1401	AAA0781	0-6 in.	U	13213		SU		DNA	5.1 UG/G
	21-1401	AAA0782	6-12 in.	AM-241	13213	18554	NS		RAS	0.333 PCI/G
	21-1401	AAA0782	6-12 in.	H-3	13213		NS		LS	5300 PCI/L
	21-1401	AAA0782	6-12 in.	PU-238	13213	18555	NS		RAS	0.089 PCI/G
	21-1401	AAA0782	6-12 in.	PU-239	13213	18555	NS		RAS	0.609 PCI/G
	21-1401	AAA0782	6-12 in.	SR-90	13213	18553	NS		PC	0 PCI/G
	21-1401	AAA0782	6-12 in.	U	13213		NS		DNA	4.1 UG/G
	21-1401	AAA0783	12-18 in.	AM-241	13213	18554	NS		RAS	0.011 PCI/G
	21-1401	AAA0783	12-18 in.	H-3	13213		NS		LS	4500 PCI/L
	21-1401	AAA0783	12-18 in.	PU-238	13213	18555	NS		RAS	0.002 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1401	AAA0783	12-18 in.	PU-239	13213	18555	NS		RAS	0.018 PCI/G
	21-1401	AAA0783	12-18 in.	SR-90	13213	18553	NS		PC	0 PCI/G
	21-1401	AAA0783	12-18 in.	U	13213		NS		DNA	3.7 UG/G
21-027(a)	21-1361	AAA0872	0-6 in.	AM-241	13247		SU		G	17.4 PCI/G
	21-1361	AAA0872	0-6 in.	AM-241	13247		SU		RAS	14.5 PCI/G
	21-1361	AAA0872	0-6 in.	H-3	13247		SU		LS	2200 PCI/L
	21-1361	AAA0872	0-6 in.	PU-238	13247		SU		RAS	4.08 PCI/G
	21-1361	AAA0872	0-6 in.	PU-239	13247		SU		RAS	30.4 PCI/G
	21-1361	AAA0872	0-6 in.	SR-90	13247		SU		PC	0.078 PCI/G
	21-1361	AAA0872	0-6 in.	TH-228	13247		SU		RAS	0.774 PCI/G
	21-1361	AAA0872	0-6 in.	TH-230	13247		SU		RAS	0.908 PCI/G
	21-1361	AAA0872	0-6 in.	TH-232	13247		SU		RAS	0.711 PCI/G
	21-1361	AAA0872	0-6 in.	U	13247		SU		DNA	28.8 UG/G
	21-1362	AAA0873	0-6 in.	AM-241	13247		SU		G	26.3 PCI/G
	21-1362	AAA0873	0-6 in.	AM-241	13247		SU		RAS	34 PCI/G
	21-1362	AAA0873	0-6 in.	H-3	13247		SU		LS	2200 PCI/L
	21-1362	AAA0873	0-6 in.	PU-238	13247		SU		RAS	12.1 PCI/G
	21-1362	AAA0873	0-6 in.	PU-239	13247		SU		RAS	193 PCI/G
	21-1362	AAA0873	0-6 in.	SR-90	13247		SU		PC	0.211 PCI/G
	21-1362	AAA0873	0-6 in.	TH-228	13247		SU		RAS	0.868 PCI/G
	21-1362	AAA0873	0-6 in.	TH-230	13247		SU		RAS	0.97 PCI/G
	21-1362	AAA0873	0-6 in.	TH-232	13247		SU		RAS	0.694 PCI/G
	21-1362	AAA0873	0-6 in.	U	13247		SU		DNA	8.6 UG/G
	21-1363	AAA0874	0-6 in.	AM-241	13247		SU		G	1.49 PCI/G
	21-1363	AAA0874	0-6 in.	AM-241	13247		SU		RAS	0.784 PCI/G
	21-1363	AAA0874	0-6 in.	H-3	13247		SU		LS	600 PCI/L
	21-1363	AAA0874	0-6 in.	PU-238	13247		SU		RAS	1.24 PCI/G
	21-1363	AAA0874	0-6 in.	PU-239	13247		SU		RAS	16.8 PCI/G
	21-1363	AAA0874	0-6 in.	SR-90	13247		SU		PC	0.115 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1363	AAA0874	0-6 in.	TH-228	13247		SU		RAS	1.03 PCI/G
	21-1363	AAA0874	0-6 in.	TH-230	13247		SU		RAS	0.807 PCI/G
	21-1363	AAA0874	0-6 in.	TH-232	13247		SU		RAS	1.12 PCI/G
	21-1363	AAA0874	0-6 in.	U	13247		SU		DNA	7.6 UG/G
	21-1364	AAA0875	0-6 in.	AM-241	13247		SU		G	14.9 PCI/G
	21-1364	AAA0875	0-6 in.	AM-241	13247		SU		RAS	8.77 PCI/G
	21-1364	AAA0875	0-6 in.	H-3	13247		SU		LS	900 PCI/L
	21-1364	AAA0875	0-6 in.	PU-238	13247		SU		RAS	7.89 PCI/G
	21-1364	AAA0875	0-6 in.	PU-239	13247		SU		RAS	43.6 PCI/G
	21-1364	AAA0875	0-6 in.	SR-90	13247		SU		PC	0.099 PCI/G
	21-1364	AAA0875	0-6 in.	TH-228	13247		SU		RAS	1.01 PCI/G
	21-1364	AAA0875	0-6 in.	TH-230	13247		SU		RAS	0.915 PCI/G
	21-1364	AAA0875	0-6 in.	TH-232	13247		SU		RAS	0.994 PCI/G
	21-1364	AAA0875	0-6 in.	U	13247		SU		DNA	158.6 UG/G
	21-1365	AAA0876	0-6 in.	AM-241	13117		SU		G	11.2 PCI/G
	21-1365	AAA0876	0-6 in.	H-3	13117		SU		LS	8000 PCI/L
	21-1365	AAA0876	0-6 in.	H-3	13117		SU		LS	9500 PCI/L
	21-1365	AAA0876	0-6 in.	PU-238	13117		SU		RAS	3.1 PCI/G
	21-1365	AAA0876	0-6 in.	PU-239	13117		SU		RAS	50 PCI/G
	21-1365	AAA0876	0-6 in.	SR-90	13117		SU		PC	0.4 PCI/G
	21-1365	AAA0876	0-6 in.	TH-228	13117	19444	SU		RAS	1.4 PCI/G
	21-1365	AAA0876	0-6 in.	TH-230	13117	19444	SU		RAS	1.1 PCI/G
	21-1365	AAA0876	0-6 in.	TH-232	13117	19444	SU		RAS	1.3 PCI/G
	21-1365	AAA0876	0-6 in.	U	13117		SU		DNA	137 UG/G
	21-1366	AAA0877	0-6 in.	AM-241	13158	18537	SU		RAS	12.11 PCI/G
	21-1366	AAA0877	0-6 in.	H-3	13158		SU		LS	127400 PCI/L
	21-1366	AAA0877	0-6 in.	PU-238	13158	18539	SU		RAS	10.7 PCI/G
	21-1366	AAA0877	0-6 in.	PU-239	13158	18539	SU		RAS	73.29 PCI/G
	21-1366	AAA0877	0-6 in.	SR-90	13158	18538	SU		PC	0.4 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1366	AAA0877	0-6 in.	TH-228	13158	18541	SU		RAS	1.3 PCI/G
	21-1366	AAA0877	0-6 in.	TH-230	13158	18541	SU		RAS	1.13 PCI/G
	21-1366	AAA0877	0-6 in.	TH-232	13158	18541	SU		RAS	1.24 PCI/G
	21-1366	AAA0877	0-6 in.	U	13158		SU		DNA	99.3 UG/G
	21-1367	AAA0878	0-6 in.	AM-241	13158	18537	SU	D	RAS	16.64 PCI/G
	21-1367	AAA0878	0-6 in.	AM-241	13158	18537	SU		RAS	9.96 PCI/G
	21-1367	AAA0878	0-6 in.	H-3	13158		SU		LS	284700 PCI/L
	21-1367	AAA0878	0-6 in.	PU-238	13158	18539	SU	D	RAS	9.58 PCI/G
	21-1367	AAA0878	0-6 in.	PU-238	13158	18539	SU		RAS	8.79 PCI/G
	21-1367	AAA0878	0-6 in.	PU-239	13158	18539	SU	D	RAS	112.08 PCI/G
	21-1367	AAA0878	0-6 in.	PU-239	13158	18539	SU		RAS	67.26 PCI/G
	21-1367	AAA0878	0-6 in.	SR-90	13158	18538	SU		PC	0.1 PCI/G
	21-1367	AAA0878	0-6 in.	TH-228	13158	18541	SU		RAS	1.23 PCI/G
	21-1367	AAA0878	0-6 in.	TH-230	13158	18541	SU		RAS	1.13 PCI/G
	21-1367	AAA0878	0-6 in.	TH-232	13158	18541	SU		RAS	1.22 PCI/G
	21-1367	AAA0878	0-6 in.	U	13158		SU		DNA	111.4 UG/G
	21-1368	AAA0879	0-6 in.	H-3	13158		SU		LS	45900 PCI/L
	21-1368	AAA0879	0-6 in.	PU-238	13158	18539	SU		RAS	14.8 PCI/G
	21-1368	AAA0879	0-6 in.	PU-239	13158	18539	SU		RAS	67.08 PCI/G
	21-1368	AAA0879	0-6 in.	U	13158		SU		DNA	231.5 UG/G
	21-1369	AAA0880	0-6 in.	AM-241	13158	18537	SU		RAS	15.82 PCI/G
	21-1369	AAA0880	0-6 in.	H-3	13158		SU		LS	304900 PCI/L
	21-1369	AAA0880	0-6 in.	PU-238	13158	18539	SU		RAS	14.16 PCI/G
	21-1369	AAA0880	0-6 in.	PU-239	13158	18539	SU		RAS	75.03 PCI/G
	21-1369	AAA0880	0-6 in.	TH-228	13158	18541	SU	D	RAS	1.49 PCI/G
	21-1369	AAA0880	0-6 in.	TH-228	13158	18541	SU		RAS	1.32 PCI/G
	21-1369	AAA0880	0-6 in.	TH-230	13158	18541	SU	D	RAS	1.25 PCI/G
	21-1369	AAA0880	0-6 in.	TH-230	13158	18541	SU		RAS	1.3 PCI/G
	21-1369	AAA0880	0-6 in.	TH-232	13158	18541	SU	D	RAS	1.51 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1369	AAA0880	0-6 in.	TH-232	13158	18541	SU		RAS	1.48 PCI/G
	21-1369	AAA0880	0-6 in.	U	13158		SU		DNA	108 UG/G
	21-1370	AAA0881	0-6 in.	AM-241	13117		SU		G	37.1 PCI/G
	21-1370	AAA0881	0-6 in.	H-3	13117		SU		LS	24000 PCI/L
	21-1370	AAA0881	0-6 in.	H-3	13117		SU		LS	25300 PCI/L
	21-1370	AAA0881	0-6 in.	PU-238	13117		SU		RAS	52 PCI/G
	21-1370	AAA0881	0-6 in.	PU-239	13117		SU		RAS	165 PCI/G
	21-1370	AAA0881	0-6 in.	SR-90	13117		SU		PC	0.6 PCI/G
	21-1370	AAA0881	0-6 in.	TH-228	13117	19444	SU		RAS	1.3 PCI/G
	21-1370	AAA0881	0-6 in.	TH-230	13117	19444	SU		RAS	0.8 PCI/G
	21-1370	AAA0881	0-6 in.	TH-232	13117	19444	SU		RAS	1.2 PCI/G
	21-1370	AAA0881	0-6 in.	U	13117		SU		DNA	110.2 UG/G
	21-1371	AAA0882	0-6 in.	AM-241	13158	18537	SU		RAS	13.22 PCI/G
	21-1371	AAA0882	0-6 in.	H-3	13158		SU		LS	56800 PCI/L
	21-1371	AAA0882	0-6 in.	PU-238	13158	18539	SU		RAS	25.23 PCI/G
	21-1371	AAA0882	0-6 in.	PU-239	13158	18539	SU		RAS	89.6 PCI/G
	21-1371	AAA0882	0-6 in.	SR-90	13158	18538	SU		PC	0.1 PCI/G
	21-1371	AAA0882	0-6 in.	TH-228	13158	18541	SU		RAS	1.38 PCI/G
	21-1371	AAA0882	0-6 in.	TH-230	13158	18541	SU		RAS	1.22 PCI/G
	21-1371	AAA0882	0-6 in.	TH-232	13158	18541	SU		RAS	1.38 PCI/G
	21-1371	AAA0882	0-6 in.	U	13158		SU		DNA	48.5 UG/G
	21-1372	AAA0883	0-6 in.	AM-241	13158	18537	SU		RAS	9.79 PCI/G
	21-1372	AAA0883	0-6 in.	H-3	13158		SU		LS	263700 PCI/L
	21-1372	AAA0883	0-6 in.	PU-238	13158	18539	SU		RAS	6.47 PCI/G
	21-1372	AAA0883	0-6 in.	PU-239	13158	18539	SU		RAS	59.63 PCI/G
	21-1372	AAA0883	0-6 in.	TH-228	13158	18541	SU		RAS	1.3 PCI/G
	21-1372	AAA0883	0-6 in.	TH-230	13158	18541	SU		RAS	1.27 PCI/G
	21-1372	AAA0883	0-6 in.	TH-232	13158	18541	SU		RAS	1.24 PCI/G
	21-1372	AAA0883	0-6 in.	U	13158		SU		DNA	42 UG/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1373	AAA0884	0-6 in.	AM-241	13158	18537	SU		RAS	8.15 PCI/G
	21-1373	AAA0884	0-6 in.	H-3	13158		SU		LS	2E+06 PCI/L
	21-1373	AAA0884	0-6 in.	PU-238	13158	18539	SU		RAS	21.9 PCI/G
	21-1373	AAA0884	0-6 in.	PU-239	13158	18539	SU		RAS	96.23 PCI/G
	21-1373	AAA0884	0-6 in.	TH-228	13158	18541	SU		RAS	1.55 PCI/G
	21-1373	AAA0884	0-6 in.	TH-230	13158	18541	SU		RAS	1.33 PCI/G
	21-1373	AAA0884	0-6 in.	TH-232	13158	18541	SU		RAS	1.58 PCI/G
	21-1373	AAA0884	0-6 in.	U	13158		SU		DNA	41 UG/G
	21-1374	AAA0885	0-6 in.	AM-241	13158	18537	SU		RAS	10.59 PCI/G
	21-1374	AAA0885	0-6 in.	H-3	13158		SU		LS	69000 PCI/L
	21-1374	AAA0885	0-6 in.	PU-238	13158	18539	SU		RAS	20.34 PCI/G
	21-1374	AAA0885	0-6 in.	PU-239	13158	18539	SU		RAS	64.81 PCI/G
	21-1374	AAA0885	0-6 in.	SR-90	13158	18538	SU		PC	0.1 PCI/G
	21-1374	AAA0885	0-6 in.	TH-228	13158	18541	SU		RAS	1.15 PCI/G
	21-1374	AAA0885	0-6 in.	TH-230	13158	18541	SU		RAS	1.05 PCI/G
	21-1374	AAA0885	0-6 in.	TH-232	13158	18541	SU		RAS	1.23 PCI/G
	21-1374	AAA0885	0-6 in.	U	13158		SU		DNA	32.2 UG/G
	21-1374	AAA0886		AM-241	13165		FE		RAS	0.008 PCI/L
	21-1374	AAA0886		AM-241	13165		FE		RAS	0.018 PCI/L
	21-1374	AAA0886		H-3	13165		FE		LS	0 PCI/L
	21-1374	AAA0886		PU-239	13165		FE		RAS	0.009 PCI/L
	21-1374	AAA0886		SR-90	13165		FE		PC	0.4 PCI/L
	21-1374	AAA0886		TH-228	13165		FE		RAS	0 PCI/L
	21-1374	AAA0886		TH-230	13165		FE		RAS	0.05 PCI/L
	21-1374	AAA0886		TH-232	13165	18270	FE		RAS	0.03 PCI/L
21-027(c)	21-1349	AAA0856	0-6 in.	AM-241	13247		SU	D	G	0.772 PCI/G
	21-1349	AAA0856	0-6 in.	AM-241	13247		SU	D	RAS	0.564 PCI/G
	21-1349	AAA0856	0-6 in.	AM-241	13247		SU		G	0.746 PCI/G
	21-1349	AAA0856	0-6 in.	AM-241	13247		SU		RAS	0.588 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1349	AAA0856	0-6 in.	H-3	13247		SU		LS	0 PCI/L
	21-1349	AAA0856	0-6 in.	PU-238	13247		SU	D	RAS	0.0987 PCI/G
	21-1349	AAA0856	0-6 in.	PU-238	13247		SU		RAS	0.133 PCI/G
	21-1349	AAA0856	0-6 in.	PU-239	13247		SU	D	RAS	11.5 PCI/G
	21-1349	AAA0856	0-6 in.	PU-239	13247		SU		RAS	10.5 PCI/G
	21-1349	AAA0856	0-6 in.	SR-90	13247		SU	D	PC	0.214 PCI/G
	21-1349	AAA0856	0-6 in.	SR-90	13247		SU		PC	0.28 PCI/G
	21-1349	AAA0856	0-6 in.	U	13247		SU		DNA	4.9 UG/G
	21-1350	AAA0857	0-6 in.	AM-241	13247		SU		G	1.49 PCI/G
	21-1350	AAA0857	0-6 in.	AM-241	13247		SU		RAS	1.75 PCI/G
	21-1350	AAA0857	0-6 in.	H-3	13247		SU		LS	300 PCI/L
	21-1350	AAA0857	0-6 in.	PU-238	13247		SU		RAS	0.518 PCI/G
	21-1350	AAA0857	0-6 in.	PU-239	13247		SU		RAS	30.2 PCI/G
	21-1350	AAA0857	0-6 in.	SR-90	13247		SU		PC	0.258 PCI/G
	21-1350	AAA0857	0-6 in.	U	13247		SU		DNA	5.7 UG/G
	21-1351	AAA0858	0-6 in.	AM-241	13247		SU	D	G	4.11 PCI/G
	21-1351	AAA0858	0-6 in.	AM-241	13247		SU		G	4.15 PCI/G
	21-1351	AAA0858	0-6 in.	AM-241	13247		SU		RAS	2.86 PCI/G
	21-1351	AAA0858	0-6 in.	H-3	13247		SU		LS	400 PCI/L
	21-1351	AAA0858	0-6 in.	PU-238	13247		SU		RAS	0.628 PCI/G
	21-1351	AAA0858	0-6 in.	PU-239	13247		SU		RAS	84.5 PCI/G
	21-1351	AAA0858	0-6 in.	SR-90	13247		SU		PC	0.196 PCI/G
	21-1351	AAA0858	0-6 in.	U	13247		SU		DNA	5.1 UG/G
	21-1351	AAA0859		AM-241	13272		FE		RAS	0.024 PCI/L
	21-1351	AAA0859		H-3	13272		FE		LS	0 PCI/L
	21-1351	AAA0859		PU-238	13272		FE		RAS	0.058 PCI/L
	21-1351	AAA0859		PU-239	13272		FE		RAS	0.023 PCI/L
	21-1351	AAA0859		SR-90	13272		FE		PC	0.2 PCI/L
	21-1351	AAA0859		SR-90	13272		FE		RAS	0.2 PCI/L
	21-1351	AAA0861	0-6 in.	AM-241	13247		FD		G	3.6 PCI/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1351	AAA0861	0-6 in.	AM-241	13247		FD		RAS	3.02 PCI/G
	21-1351	AAA0861	0-6 in.	H-3	13247		FD		LS	300 PCI/L
	21-1351	AAA0861	0-6 in.	PU-238	13247		FD		RAS	1.13 PCI/G
	21-1351	AAA0861	0-6 in.	PU-239	13247		FD		RAS	74.6 PCI/G
	21-1351	AAA0861	0-6 in.	SR-90	13247		FD		PC	0.165 PCI/G
	21-1351	AAA0861	0-6 in.	U	13247		FD		DNA	5.6 UG/G
	21-1352	AAA0862	0-6 in.	AM-241	13158	18537	SU		RAS	0.41 PCI/G
	21-1352	AAA0862	0-6 in.	H-3	13158		SU		LS	700 PCI/L
	21-1352	AAA0862	0-6 in.	PU-238	13158	18539	SU		RAS	0.068 PCI/G
	21-1352	AAA0862	0-6 in.	PU-239	13158	18539	SU		RAS	5.67 PCI/G
	21-1352	AAA0862	0-6 in.	U	13158		SU		DNA	4.4 UG/G
	21-1353	AAA0863	0-6 in.	AM-241	13158	18537	SU		RAS	0.262 PCI/G
	21-1353	AAA0863	0-6 in.	H-3	13158		SU		LS	1000 PCI/L
	21-1353	AAA0863	0-6 in.	PU-238	13158	18539	SU		RAS	0.036 PCI/G
	21-1353	AAA0863	0-6 in.	PU-239	13158	18539	SU		RAS	1.96 PCI/G
	21-1353	AAA0863	0-6 in.	U	13158		SU		DNA	4.5 UG/G
	21-1354	AAA0864	0-6 in.	AM-241	13158	18537	SU		RAS	0.507 PCI/G
	21-1354	AAA0864	0-6 in.	H-3	13158		SU		LS	800 PCI/L
	21-1354	AAA0864	0-6 in.	PU-238	13158	18539	SU		RAS	0.05 PCI/G
	21-1354	AAA0864	0-6 in.	PU-239	13158	18539	SU		RAS	3.02 PCI/G
	21-1354	AAA0864	0-6 in.	U	13158		SU		DNA	5.64 UG/G
21-027(d)	21-1329	AAA0615	0-6 in.	AM-241	13099	18014	SU		RAS	0.052 PCI/G
	21-1329	AAA0615	0-6 in.	H-3	13099		SU		LS	1400 PCI/L
	21-1329	AAA0615	0-6 in.	PU-238	13099	18016	SU		RAS	0.008 PCI/G
	21-1329	AAA0615	0-6 in.	PU-239	13099	18016	SU		RAS	0.753 PCI/G
	21-1329	AAA0615	0-6 in.	SR-90	13099	18011	SU		PC	0 PCI/G
	21-1329	AAA0615	0-6 in.	U	13099		SU		DNA	4.7 UG/G

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1330	AAA0616	0-6 in.	AM-241	13099	18014	SU	D	RAS	0.065 PCI/G
	21-1330	AAA0616	0-6 in.	AM-241	13099	18014	SU		RAS	0.067 PCI/G
	21-1330	AAA0616	0-6 in.	H-3	13099		SU		LS	900 PCI/L
	21-1330	AAA0616	0-6 in.	PU-238	13099	18016	SU	D	RAS	0.011 PCI/G
	21-1330	AAA0616	0-6 in.	PU-238	13099	18016	SU		RAS	0.012 PCI/G
	21-1330	AAA0616	0-6 in.	PU-239	13099	18016	SU	D	RAS	1.55 PCI/G
	21-1330	AAA0616	0-6 in.	PU-239	13099	18016	SU		RAS	1.35 PCI/G
	21-1330	AAA0616	0-6 in.	SR-90	13099	18011	SU		PC	0 PCI/G
	21-1330	AAA0616	0-6 in.	U	13099		SU		DNA	4.6 UG/G
	21-1331	AAA0617	0-6 in.	AM-241	13099	18014	SU		RAS	0.141 PCI/G
	21-1331	AAA0617	0-6 in.	H-3	13099		SU		LS	1100 PCI/L
	21-1331	AAA0617	0-6 in.	PU-238	13099	18016	SU		RAS	0.025 PCI/G
	21-1331	AAA0617	0-6 in.	PU-239	13099	18016	SU		RAS	4.46 PCI/G
	21-1331	AAA0617	0-6 in.	SR-90	13099	18011	SU		PC	0.2 PCI/G
	21-1331	AAA0617	0-6 in.	U	13099		SU		DNA	7.3 UG/G
	21-1331	AAA0618	0-6 in.	AM-241	13099	18014	FD		RAS	0.16 PCI/G
	21-1331	AAA0618	0-6 in.	H-3	13099		FD		LS	1200 PCI/L
	21-1331	AAA0618	0-6 in.	PU-238	13099	18016	FD		RAS	0.025 PCI/G
	21-1331	AAA0618	0-6 in.	PU-239	13099	18016	FD		RAS	4.6 PCI/G
	21-1331	AAA0618	0-6 in.	SR-90	13099	18011	FD		PC	0.4 PCI/G
	21-1331	AAA0618	0-6 in.	U	13099		FD		DNA	6.5 UG/G
	21-1332	AAA0619	0-6 in.	AM-241	13099	18014	SU		RAS	0.076 PCI/G
	21-1332	AAA0619	0-6 in.	H-3	13099		SU		LS	1200 PCI/L
	21-1332	AAA0619	0-6 in.	PU-238	13099	18016	SU		RAS	0.016 PCI/G
	21-1332	AAA0619	0-6 in.	PU-239	13099	18016	SU		RAS	0.868 PCI/G
	21-1332	AAA0619	0-6 in.	SR-90	13099	18011	SU		PC	0.3 PCI/G
	21-1332	AAA0619	0-6 in.	U	13099		SU		DNA	4.9 UG/G
	21-1333	AAA0620	0-1 in.	AM-241	13099	18014	SU		RAS	0.092 PCI/G
	21-1333	AAA0620	0-1 in.	H-3	13099		SU		LS	1300 PCI/L

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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1333	AAA0620	0-1 in.	PU-238	13099	18016	SU		RAS	0.012 PCI/G
	21-1333	AAA0620	0-1 in.	PU-239	13099	18016	SU		RAS	1.54 PCI/G
	21-1333	AAA0620	0-1 in.	SR-90	13099	18011	SU		PC	0.3 PCI/G
	21-1333	AAA0620	0-1 in.	U	13099		SU		DNA	7.2 UG/G
	21-1334	AAA0621	0-6 in.	AM-241	13099	18014	SU		RAS	0.064 PCI/G
	21-1334	AAA0621	0-6 in.	H-3	13099		SU		LS	1100 PCI/L
	21-1334	AAA0621	0-6 in.	PU-238	13099	18016	SU		RAS	0.007 PCI/G
	21-1334	AAA0621	0-6 in.	PU-239	13099	18016	SU		RAS	1.11 PCI/G
	21-1334	AAA0621	0-6 in.	SR-90	13099	18011	SU	D	PC	0.3 PCI/G
	21-1334	AAA0621	0-6 in.	SR-90	13099	18011	SU		PC	0.3 PCI/G
	21-1334	AAA0621	0-6 in.	U	13099		SU		DNA	5.5 UG/G
EPA03A035	21-1346	AAA0847	0-6 in.	AM-241	13099	18014	SU		RAS	0.024 PCI/G
	21-1346	AAA0847	0-6 in.	H-3	13099		SU		LS	200 PCI/L
	21-1346	AAA0847	0-6 in.	PU-238	13099	18016	SU		RAS	0.008 PCI/G
	21-1346	AAA0847	0-6 in.	PU-239	13099	18016	SU		RAS	0.306 PCI/G
	21-1346	AAA0847	0-6 in.	U	13099		SU		DNA	3 UG/G
	21-1346	AAA0848		AM-241	13105		FE		RAS	0.03 PCI/L
	21-1346	AAA0848		AM-241	13105		FE		RAS	0.045 PCI/L
	21-1346	AAA0848		PU-238	13105		FE		RAS	0.005 PCI/L
	21-1346	AAA0848		PU-239	13105		FE		RAS	0 PCI/L
	21-1346	AAA0848		SR-90	13105		FE		PC	0.7 PCI/L
	21-1346	AAA0850	12-18 in.	AM-241	13099	18014	NS		RAS	0.028 PCI/G
	21-1346	AAA0850	12-18 in.	H-3	13099		NS		LS	0 PCI/L
	21-1346	AAA0850	12-18 in.	PU-238	13099	18016	NS		RAS	0.016 PCI/G
	21-1346	AAA0850	12-18 in.	PU-239	13099	18016	NS		RAS	0.353 PCI/G
	21-1346	AAA0850	12-18 in.	U	13099		NS		DNA	3.2 UG/G
	21-1346	AAA0851	6-12 in.	AM-241	13099	18014	SU	D	RAS	0.026 PCI/G
	21-1346	AAA0851	6-12 in.	AM-241	13099	18014	SU		RAS	0.03 PCI/G
	21-1346	AAA0851	6-12 in.	H-3	13099		SU		LS	300 PCI/L
	21-1346	AAA0851	6-12 in.	PU-238	13099	18016	SU	D	RAS	0.01 PCI/G

Laboratory Radiological Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
	21-1346	AAA0851	6-12 in.	PU-238	13099	18016	SU		RAS	0.01 PCI/G
	21-1346	AAA0851	6-12 in.	PU-239	13099	18016	SU	D	RAS	0.397 PCI/G
	21-1346	AAA0851	6-12 in.	PU-239	13099	18016	SU		RAS	0.352 PCI/G
	21-1346	AAA0851	6-12 in.	U	13099		SU		DNA	2.8 UG/G

Outfalls
Laboratory Inorganic Data

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Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
21-004(d)	21-1407	AAA0802	0-6 in.	AM-241	13221		SU		RAS	0.149 PCI/G
	21-1407	AAA0802	0-6 in.	H-3	13221		SU	D	LS	19000 PCI/L
	21-1407	AAA0802	0-6 in.	H-3	13221		SU		LS	19000 PCI/L
	21-1407	AAA0802	0-6 in.	H-3	13221		SU		LS	35200 PCI/L
	21-1407	AAA0802	0-6 in.	PU-238	13221		SU		RAS	0.0573 PCI/G
	21-1407	AAA0802	0-6 in.	PU-239	13221		SU		RAS	1.47 PCI/G
	21-1407	AAA0802	0-6 in.	SR-90	13221		SU		PC	0.584 PCI/G
	21-1407	AAA0802	0-6 in.	TH-228	13221		SU		RAS	1.32 PCI/G
	21-1407	AAA0802	0-6 in.	TH-230	13221		SU		RAS	1 PCI/G
	21-1407	AAA0802	0-6 in.	TH-232	13221		SU		RAS	1.58 PCI/G
	21-1407	AAA0802	0-6 in.	U	13221		SU		DNA	4.4 UG/G
	21-1407	AAA0803	6-12 in.	AM-241	13221		NS		RAS	0.654 PCI/G
	21-1407	AAA0803	6-12 in.	H-3	13221		NS		LS	152600 PCI/L
	21-1407	AAA0803	6-12 in.	PU-238	13221		NS		RAS	0 PCI/G
	21-1407	AAA0803	6-12 in.	PU-239	13221		NS		RAS	0.685 PCI/G
	21-1407	AAA0803	6-12 in.	SR-90	13221		NS		PC	0.323 PCI/G
	21-1407	AAA0803	6-12 in.	TH-228	13221		NS		RAS	1.28 PCI/G
	21-1407	AAA0803	6-12 in.	TH-230	13221		NS		RAS	1.03 PCI/G
	21-1407	AAA0803	6-12 in.	TH-232	13221		NS		RAS	1.46 PCI/G
	21-1407	AAA0803	6-12 in.	U	13221		NS		DNA	3.5 UG/G
	21-1407	AAA0804	12-18 in.	AM-241	13221		NS	D	RAS	0.0449 PCI/G
	21-1407	AAA0804	12-18 in.	AM-241	13221		NS		RAS	0 PCI/G
	21-1407	AAA0804	12-18 in.	H-3	13221		NS	D	LS	58300 PCI/L
	21-1407	AAA0804	12-18 in.	H-3	13221		NS		LS	58300 PCI/L
	21-1407	AAA0804	12-18 in.	H-3	13221		NS		LS	115300 PCI/L
	21-1407	AAA0804	12-18 in.	PU-238	13221		NS	D	RAS	0.516 PCI/G
	21-1407	AAA0804	12-18 in.	PU-238	13221		NS		RAS	0.0502 PCI/G
	21-1407	AAA0804	12-18 in.	PU-239	13221		NS	D	RAS	0.0619 PCI/G
	21-1407	AAA0804	12-18 in.	PU-239	13221		NS		RAS	0.12 PCI/G
	21-1407	AAA0804	12-18 in.	SR-90	13221		NS		PC	0.564 PCI/G
	21-1407	AAA0804	12-18 in.	TH-228	13221		NS	D	RAS	1.77 PCI/G
	21-1407	AAA0804	12-18 in.	TH-228	13221		NS		RAS	1.68 PCI/G

Laboratory Radiological Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value
21-004(d)	21-1407	AAA0802	0-6 in.	AM-241	13221		SU		RAS	0.149 PCI/G
	21-1407	AAA0802	0-6 in.	H-3	13221		SU	D	LS	19000 PCI/L
	21-1407	AAA0802	0-6 in.	H-3	13221		SU		LS	19000 PCI/L
	21-1407	AAA0802	0-6 in.	H-3	13221		SU		LS	35200 PCI/L
	21-1407	AAA0802	0-6 in.	PU-238	13221		SU		RAS	0.0573 PCI/G
	21-1407	AAA0802	0-6 in.	PU-239	13221		SU		RAS	1.47 PCI/G
	21-1407	AAA0802	0-6 in.	SR-90	13221		SU		PC	0.584 PCI/G
	21-1407	AAA0802	0-6 in.	TH-228	13221		SU		RAS	1.32 PCI/G
	21-1407	AAA0802	0-6 in.	TH-230	13221		SU		RAS	1 PCI/G
	21-1407	AAA0802	0-6 in.	TH-232	13221		SU		RAS	1.58 PCI/G
	21-1407	AAA0802	0-6 in.	U	13221		SU		DNA	4.4 UG/G
	21-1407	AAA0803	6-12 in.	AM-241	13221		NS		RAS	0.654 PCI/G
	21-1407	AAA0803	6-12 in.	H-3	13221		NS		LS	152600 PCI/L
	21-1407	AAA0803	6-12 in.	PU-238	13221		NS		RAS	0 PCI/G
	21-1407	AAA0803	6-12 in.	PU-239	13221		NS		RAS	0.685 PCI/G
	21-1407	AAA0803	6-12 in.	SR-90	13221		NS		PC	0.323 PCI/G
	21-1407	AAA0803	6-12 in.	TH-228	13221		NS		RAS	1.28 PCI/G
	21-1407	AAA0803	6-12 in.	TH-230	13221		NS		RAS	1.03 PCI/G
	21-1407	AAA0803	6-12 in.	TH-232	13221		NS		RAS	1.46 PCI/G
	21-1407	AAA0803	6-12 in.	U	13221		NS		DNA	3.5 UG/G
	21-1407	AAA0804	12-18 in.	AM-241	13221		NS	D	RAS	0.0449 PCI/G
	21-1407	AAA0804	12-18 in.	AM-241	13221		NS		RAS	0 PCI/G
	21-1407	AAA0804	12-18 in.	H-3	13221		NS	D	LS	58300 PCI/L
	21-1407	AAA0804	12-18 in.	H-3	13221		NS		LS	58300 PCI/L
	21-1407	AAA0804	12-18 in.	H-3	13221		NS		LS	115300 PCI/L
	21-1407	AAA0804	12-18 in.	PU-238	13221		NS	D	RAS	0.516 PCI/G
	21-1407	AAA0804	12-18 in.	PU-238	13221		NS		RAS	0.0502 PCI/G
	21-1407	AAA0804	12-18 in.	PU-239	13221		NS	D	RAS	0.0619 PCI/G
	21-1407	AAA0804	12-18 in.	PU-239	13221		NS		RAS	0.12 PCI/G
	21-1407	AAA0804	12-18 in.	SR-90	13221		NS		PC	0.564 PCI/G
	21-1407	AAA0804	12-18 in.	TH-228	13221		NS	D	RAS	1.77 PCI/G
	21-1407	AAA0804	12-18 in.	TH-228	13221		NS		RAS	1.68 PCI/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
21-004(d)	21-1407	AAA0802	0-6 in.	AL	13219	17827	SU	D	ICPES	11200	MG/KG
	21-1407	AAA0802	0-6 in.	AL	13219	17827	SU		ICPES	12000	MG/KG
	21-1407	AAA0802	0-6 in.	AS	13219	17827	SU	D	ETVAA	1.9	MG/KG
	21-1407	AAA0802	0-6 in.	AS	13219	17827	SU		ETVAA	2.3	MG/KG
	21-1407	AAA0802	0-6 in.	BA	13219	17827	SU	D	ICPES	97	MG/KG
	21-1407	AAA0802	0-6 in.	BA	13219	17827	SU		ICPES	110	MG/KG
	21-1407	AAA0802	0-6 in.	BE	13219	17827	SU	D	ICPES	0.64	MG/KG
	21-1407	AAA0802	0-6 in.	BE	13219	17827	SU		ICPES	0.69	MG/KG
	21-1407	AAA0802	0-6 in.	CA	13219	17827	SU	D	ICPES	2850	MG/KG
	21-1407	AAA0802	0-6 in.	CA	13219	17827	SU		ICPES	3220	MG/KG
	21-1407	AAA0802	0-6 in.	CD	13219	17827	SU	D	ICPES	1.1	MG/KG
	21-1407	AAA0802	0-6 in.	CD	13219	17827	SU		ICPES	1.2	MG/KG
	21-1407	AAA0802	0-6 in.	CO	13219	17827	SU	D	ICPES	3.9	MG/KG
	21-1407	AAA0802	0-6 in.	CO	13219	17827	SU		ICPES	4.8	MG/KG
	21-1407	AAA0802	0-6 in.	CR	13219	17827	SU	D	ICPES	8.8	MG/KG
	21-1407	AAA0802	0-6 in.	CR	13219	17827	SU		ICPES	9.1	MG/KG
	21-1407	AAA0802	0-6 in.	CU	13219	17827	SU	D	ICPES	7.5	MG/KG
	21-1407	AAA0802	0-6 in.	CU	13219	17827	SU		ICPES	7.5	MG/KG
	21-1407	AAA0802	0-6 in.	FE	13219	17827	SU	D	ICPES	10800	MG/KG
	21-1407	AAA0802	0-6 in.	FE	13219	17827	SU		ICPES	11900	MG/KG
	21-1407	AAA0802	0-6 in.	K	13219	17827	SU	D	ICPES	1810	MG/KG
	21-1407	AAA0802	0-6 in.	K	13219	17827	SU		ICPES	1950	MG/KG
	21-1407	AAA0802	0-6 in.	LI	13219	17827	SU	D	ICPES	8.6	MG/KG
	21-1407	AAA0802	0-6 in.	LI	13219	17827	SU		ICPES	10.3	MG/KG
	21-1407	AAA0802	0-6 in.	MG	13219	17827	SU	D	ICPES	1820	MG/KG
	21-1407	AAA0802	0-6 in.	MG	13219	17827	SU		ICPES	2120	MG/KG
	21-1407	AAA0802	0-6 in.	MN	13219	17827	SU	D	ICPES	342	MG/KG
	21-1407	AAA0802	0-6 in.	MN	13219	17827	SU		ICPES	389	MG/KG
	21-1407	AAA0802	0-6 in.	NA	13219	17827	SU	D	ICPES	102	MG/KG
	21-1407	AAA0802	0-6 in.	NA	13219	17827	SU		ICPES	112	MG/KG
	21-1407	AAA0802	0-6 in.	NI	13219	17827	SU	D	ICPES	6.8	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1407	AAA0802	0-6 in.	NI	13219	17827	SU		ICPES	7.4	MG/KG
	21-1407	AAA0802	0-6 in.	PB	13219	17827	SU	D	ETVAA	19.2	MG/KG
	21-1407	AAA0802	0-6 in.	PB	13219	17827	SU		ETVAA	18.2	MG/KG
	21-1407	AAA0802	0-6 in.	SR	13219	17827	SU	D	ICPES	22	MG/KG
	21-1407	AAA0802	0-6 in.	SR	13219	17827	SU		ICPES	24.6	MG/KG
	21-1407	AAA0802	0-6 in.	TL	13219	17827	SU	D	ETVAA	0.5	MG/KG
	21-1407	AAA0802	0-6 in.	TL	13219	17827	SU		ETVAA	0.3	MG/KG
	21-1407	AAA0802	0-6 in.	V	13219	17827	SU	D	ICPES	16.6	MG/KG
	21-1407	AAA0802	0-6 in.	V	13219	17827	SU		ICPES	18.1	MG/KG
	21-1407	AAA0802	0-6 in.	ZN	13219	17827	SU	D	ICPES	41.1	MG/KG
	21-1407	AAA0802	0-6 in.	ZN	13219	17827	SU		ICPES	44.9	MG/KG
	21-1407	AAA0803	6-12 in.	AL	13219	17827	NS		ICPES	12300	MG/KG
	21-1407	AAA0803	6-12 in.	AS	13219	17827	NS		ETVAA	1.6	MG/KG
	21-1407	AAA0803	6-12 in.	BA	13219	17827	NS		ICPES	91.7	MG/KG
	21-1407	AAA0803	6-12 in.	BE	13219	17827	NS		ICPES	0.68	MG/KG
	21-1407	AAA0803	6-12 in.	CA	13219	17827	NS		ICPES	1920	MG/KG
	21-1407	AAA0803	6-12 in.	CD	13219	17827	NS		ICPES	1.3	MG/KG
	21-1407	AAA0803	6-12 in.	CO	13219	17827	NS		ICPES	4	MG/KG
	21-1407	AAA0803	6-12 in.	CR	13219	17827	NS		ICPES	8.9	MG/KG
	21-1407	AAA0803	6-12 in.	CU	13219	17827	NS		ICPES	4.7	MG/KG
	21-1407	AAA0803	6-12 in.	FE	13219	17827	NS		ICPES	12800	MG/KG
	21-1407	AAA0803	6-12 in.	K	13219	17827	NS		ICPES	1450	MG/KG
	21-1407	AAA0803	6-12 in.	LI	13219	17827	NS		ICPES	12.5	MG/KG
	21-1407	AAA0803	6-12 in.	MG	13219	17827	NS		ICPES	1680	MG/KG
	21-1407	AAA0803	6-12 in.	MN	13219	17827	NS		ICPES	409	MG/KG
	21-1407	AAA0803	6-12 in.	NA	13219	17827	NS		ICPES	133	MG/KG
	21-1407	AAA0803	6-12 in.	NI	13219	17827	NS		ICPES	6.7	MG/KG
	21-1407	AAA0803	6-12 in.	PB	13219	17827	NS		ETVAA	11.2	MG/KG
	21-1407	AAA0803	6-12 in.	SR	13219	17827	NS		ICPES	18.5	MG/KG
	21-1407	AAA0803	6-12 in.	TL	13219	17827	NS		ETVAA	0.15	MG/KG
	21-1407	AAA0803	6-12 in.	V	13219	17827	NS		ICPES	19.2	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1407	AAA0803	6-12 in.	ZN	13219	17827	NS		ICPES	52.1	MG/KG
	21-1407	AAA0804	12-18 in.	AL	13219	17827	NS		ICPES	2960	MG/KG
	21-1407	AAA0804	12-18 in.	AS	13219	17827	NS		ETVAA	1.1	MG/KG
	21-1407	AAA0804	12-18 in.	BA	13219	17827	NS		ICPES	25.9	MG/KG
	21-1407	AAA0804	12-18 in.	BE	13219	17827	NS		ICPES	0.16	MG/KG
	21-1407	AAA0804	12-18 in.	CA	13219	17827	NS		ICPES	845	MG/KG
	21-1407	AAA0804	12-18 in.	CD	13219	17827	NS		ICPES	0.59	MG/KG
	21-1407	AAA0804	12-18 in.	CO	13219	17827	NS		ICPES	1.2	MG/KG
	21-1407	AAA0804	12-18 in.	CR	13219	17827	NS		ICPES	2.3	MG/KG
	21-1407	AAA0804	12-18 in.	CU	13219	17827	NS		ICPES	1.8	MG/KG
	21-1407	AAA0804	12-18 in.	FE	13219	17827	NS		ICPES	6210	MG/KG
	21-1407	AAA0804	12-18 in.	K	13219	17827	NS		ICPES	407	MG/KG
	21-1407	AAA0804	12-18 in.	LI	13219	17827	NS		ICPES	2.6	MG/KG
	21-1407	AAA0804	12-18 in.	MG	13219	17827	NS		ICPES	489	MG/KG
	21-1407	AAA0804	12-18 in.	MN	13219	17827	NS		ICPES	242	MG/KG
	21-1407	AAA0804	12-18 in.	NA	13219	17827	NS		ICPES	103	MG/KG
	21-1407	AAA0804	12-18 in.	NI	13219	17827	NS		ICPES	3.4	MG/KG
	21-1407	AAA0804	12-18 in.	PB	13219	17827	NS		ETVAA	5.2	MG/KG
	21-1407	AAA0804	12-18 in.	SR	13219	17827	NS		ICPES	5.3	MG/KG
	21-1407	AAA0804	12-18 in.	TL	13219	17827	NS		ETVAA	0.42	MG/KG
	21-1407	AAA0804	12-18 in.	V	13219	17827	NS		ICPES	4.9	MG/KG
	21-1407	AAA0804	12-18 in.	ZN	13219	17827	NS		ICPES	32.2	MG/KG
	21-1408	AAA0805	0-6 in.	AL	13219	17827	SU		ICPES	11300	MG/KG
	21-1408	AAA0805	0-6 in.	AS	13219	17827	SU		ETVAA	2.2	MG/KG
	21-1408	AAA0805	0-6 in.	BA	13219	17827	SU		ICPES	122	MG/KG
	21-1408	AAA0805	0-6 in.	BE	13219	17827	SU		ICPES	0.71	MG/KG
	21-1408	AAA0805	0-6 in.	CA	13219	17827	SU		ICPES	3430	MG/KG
	21-1408	AAA0805	0-6 in.	CD	13219	17827	SU		ICPES	1.1	MG/KG
	21-1408	AAA0805	0-6 in.	CO	13219	17827	SU		ICPES	5.2	MG/KG
	21-1408	AAA0805	0-6 in.	CR	13219	17827	SU		ICPES	9.8	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1408	AAA0805	0-6 in.	CU	13219	17827	SU		ICPES	11	MG/KG
	21-1408	AAA0805	0-6 in.	FE	13219	17827	SU		ICPES	11200	MG/KG
	21-1408	AAA0805	0-6 in.	K	13219	17827	SU		ICPES	1760	MG/KG
	21-1408	AAA0805	0-6 in.	LI	13219	17827	SU		ICPES	10.2	MG/KG
	21-1408	AAA0805	0-6 in.	MG	13219	17827	SU		ICPES	2030	MG/KG
	21-1408	AAA0805	0-6 in.	MN	13219	17827	SU		ICPES	358	MG/KG
	21-1408	AAA0805	0-6 in.	NA	13219	17827	SU		ICPES	161	MG/KG
	21-1408	AAA0805	0-6 in.	NI	13219	17827	SU		ICPES	8.3	MG/KG
	21-1408	AAA0805	0-6 in.	PB	13219	17827	SU		ETVAA	21.5	MG/KG
	21-1408	AAA0805	0-6 in.	SR	13219	17827	SU		ICPES	28.4	MG/KG
	21-1408	AAA0805	0-6 in.	TL	13219	17827	SU		ETVAA	0.26	MG/KG
	21-1408	AAA0805	0-6 in.	V	13219	17827	SU		ICPES	18.4	MG/KG
	21-1408	AAA0805	0-6 in.	ZN	13219	17827	SU		ICPES	47	MG/KG
	21-1408	AAA0806	0-6 in.	AL	13219	17827	FD		ICPES	10600	MG/KG
	21-1408	AAA0806	0-6 in.	AS	13219	17827	FD		ETVAA	2.5	MG/KG
	21-1408	AAA0806	0-6 in.	BA	13219	17827	FD		ICPES	104	MG/KG
	21-1408	AAA0806	0-6 in.	BE	13219	17827	FD		ICPES	0.61	MG/KG
	21-1408	AAA0806	0-6 in.	CA	13219	17827	FD		ICPES	2790	MG/KG
	21-1408	AAA0806	0-6 in.	CD	13219	17827	FD		ICPES	1.3	MG/KG
	21-1408	AAA0806	0-6 in.	CO	13219	17827	FD		ICPES	3.9	MG/KG
	21-1408	AAA0806	0-6 in.	CR	13219	17827	FD		ICPES	8.9	MG/KG
	21-1408	AAA0806	0-6 in.	CU	13219	17827	FD		ICPES	10.2	MG/KG
	21-1408	AAA0806	0-6 in.	FE	13219	17827	FD		ICPES	10900	MG/KG
	21-1408	AAA0806	0-6 in.	K	13219	17827	FD		ICPES	1690	MG/KG
	21-1408	AAA0806	0-6 in.	LI	13219	17827	FD		ICPES	9.4	MG/KG
	21-1408	AAA0806	0-6 in.	MG	13219	17827	FD		ICPES	1870	MG/KG
	21-1408	AAA0806	0-6 in.	MN	13219	17827	FD		ICPES	320	MG/KG
	21-1408	AAA0806	0-6 in.	NA	13219	17827	FD		ICPES	142	MG/KG
	21-1408	AAA0806	0-6 in.	NI	13219	17827	FD		ICPES	6.3	MG/KG
	21-1408	AAA0806	0-6 in.	PB	13219	17827	FD		ETVAA	23.6	MG/KG
	21-1408	AAA0806	0-6 in.	SR	13219	17827	FD		ICPES	24.4	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1408	AAA0806	0-6 in.	TL	13219	17827	FD		ETVAA	0.4	MG/KG
	21-1408	AAA0806	0-6 in.	V	13219	17827	FD		ICPES	17.9	MG/KG
	21-1408	AAA0806	0-6 in.	ZN	13219	17827	FD		ICPES	49.8	MG/KG
	21-1408	AAA0807	6-12 in.	AG	13219	17827	NS		ICPES	0.67	MG/KG
	21-1408	AAA0807	6-12 in.	AL	13219	17827	NS		ICPES	14200	MG/KG
	21-1408	AAA0807	6-12 in.	AS	13219	17827	NS		ETVAA	2.1	MG/KG
	21-1408	AAA0807	6-12 in.	BA	13219	17827	NS		ICPES	119	MG/KG
	21-1408	AAA0807	6-12 in.	BE	13219	17827	NS		ICPES	0.74	MG/KG
	21-1408	AAA0807	6-12 in.	CA	13219	17827	NS		ICPES	2370	MG/KG
	21-1408	AAA0807	6-12 in.	CD	13219	17827	NS		ICPES	1.1	MG/KG
	21-1408	AAA0807	6-12 in.	CO	13219	17827	NS		ICPES	5.7	MG/KG
	21-1408	AAA0807	6-12 in.	CR	13219	17827	NS		ICPES	9.9	MG/KG
	21-1408	AAA0807	6-12 in.	CU	13219	17827	NS		ICPES	8.3	MG/KG
	21-1408	AAA0807	6-12 in.	FE	13219	17827	NS		ICPES	13100	MG/KG
	21-1408	AAA0807	6-12 in.	K	13219	17827	NS		ICPES	1970	MG/KG
	21-1408	AAA0807	6-12 in.	LI	13219	17827	NS		ICPES	20.4	MG/KG
	21-1408	AAA0807	6-12 in.	MG	13219	17827	NS		ICPES	2300	MG/KG
	21-1408	AAA0807	6-12 in.	MN	13219	17827	NS		ICPES	482	MG/KG
	21-1408	AAA0807	6-12 in.	NA	13219	17827	NS		ICPES	276	MG/KG
	21-1408	AAA0807	6-12 in.	NI	13219	17827	NS		ICPES	7.3	MG/KG
	21-1408	AAA0807	6-12 in.	PB	13219	17827	NS		ETVAA	18.3	MG/KG
	21-1408	AAA0807	6-12 in.	SR	13219	17827	NS		ICPES	21.3	MG/KG
	21-1408	AAA0807	6-12 in.	TL	13219	17827	NS		ETVAA	0.56	MG/KG
	21-1408	AAA0807	6-12 in.	V	13219	17827	NS		ICPES	22.7	MG/KG
	21-1408	AAA0807	6-12 in.	ZN	13219	17827	NS		ICPES	51.4	MG/KG
	21-1408	AAA0808	12-18 in.	AL	13219	17827	NS		ICPES	2350	MG/KG
	21-1408	AAA0808	12-18 in.	AS	13219	17827	NS		ETVAA	1.8	MG/KG
	21-1408	AAA0808	12-18 in.	BA	13219	17827	NS		ICPES	36.3	MG/KG
	21-1408	AAA0808	12-18 in.	BE	13219	17827	NS		ICPES	0.21	MG/KG
	21-1408	AAA0808	12-18 in.	CA	13219	17827	NS		ICPES	650	MG/KG
	21-1408	AAA0808	12-18 in.	[illegible]	13219	17827	NS		ICPES	0.64	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1408	AAA0808	12-18 in.	CR	13219	17827	NS		ICPES	2	MG/KG
	21-1408	AAA0808	12-18 in.	CU	13219	17827	NS		ICPES	3.3	MG/KG
	21-1408	AAA0808	12-18 in.	FE	13219	17827	NS		ICPES	4970	MG/KG
	21-1408	AAA0808	12-18 in.	K	13219	17827	NS		ICPES	334	MG/KG
	21-1408	AAA0808	12-18 in.	LI	13219	17827	NS		ICPES	3.4	MG/KG
	21-1408	AAA0808	12-18 in.	MG	13219	17827	NS		ICPES	358	MG/KG
	21-1408	AAA0808	12-18 in.	MN	13219	17827	NS		ICPES	286	MG/KG
	21-1408	AAA0808	12-18 in.	NA	13219	17827	NS		ICPES	178	MG/KG
	21-1408	AAA0808	12-18 in.	NI	13219	17827	NS		ICPES	3.1	MG/KG
	21-1408	AAA0808	12-18 in.	PB	13219	17827	NS		ETVAA	11.5	MG/KG
	21-1408	AAA0808	12-18 in.	SR	13219	17827	NS		ICPES	5	MG/KG
	21-1408	AAA0808	12-18 in.	TL	13219	17827	NS		ETVAA	0.27	MG/KG
	21-1408	AAA0808	12-18 in.	V	13219	17827	NS		ICPES	3.2	MG/KG
	21-1408	AAA0808	12-18 in.	ZN	13219	17827	NS		ICPES	35.8	MG/KG
	21-1409	AAA0809	0-6 in.	AL	13219	17827	SU		ICPES	13800	MG/KG
	21-1409	AAA0809	0-6 in.	AS	13219	17827	SU		ETVAA	2.4	MG/KG
	21-1409	AAA0809	0-6 in.	BA	13219	17827	SU		ICPES	128	MG/KG
	21-1409	AAA0809	0-6 in.	BE	13219	17827	SU		ICPES	0.79	MG/KG
	21-1409	AAA0809	0-6 in.	CA	13219	17827	SU		ICPES	3280	MG/KG
	21-1409	AAA0809	0-6 in.	CD	13219	17827	SU		ICPES	1.3	MG/KG
	21-1409	AAA0809	0-6 in.	CO	13219	17827	SU		ICPES	5.1	MG/KG
	21-1409	AAA0809	0-6 in.	CR	13219	17827	SU		ICPES	11.5	MG/KG
	21-1409	AAA0809	0-6 in.	CU	13219	17827	SU		ICPES	8.9	MG/KG
	21-1409	AAA0809	0-6 in.	FE	13219	17827	SU		ICPES	13700	MG/KG
	21-1409	AAA0809	0-6 in.	K	13219	17827	SU		ICPES	1820	MG/KG
	21-1409	AAA0809	0-6 in.	LI	13219	17827	SU		ICPES	13.2	MG/KG
	21-1409	AAA0809	0-6 in.	MG	13219	17827	SU		ICPES	2230	MG/KG
	21-1409	AAA0809	0-6 in.	MN	13219	17827	SU		ICPES	338	MG/KG
	21-1409	AAA0809	0-6 in.	NA	13219	17827	SU		ICPES	125	MG/KG
	21-1409	AAA0809	0-6 in.	NI	13219	17827	SU		ICPES	7.3	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1409	AAA0809	0-6 in.	PB	13219	17827	SU		ETVAA	29.6	MG/KG
	21-1409	AAA0809	0-6 in.	SR	13219	17827	SU		ICPES	22.7	MG/KG
	21-1409	AAA0809	0-6 in.	TL	13219	17827	SU		ETVAA	0.45	MG/KG
	21-1409	AAA0809	0-6 in.	V	13219	17827	SU		ICPES	23.2	MG/KG
	21-1409	AAA0809	0-6 in.	ZN	13219	17827	SU		ICPES	46.2	MG/KG
	21-1409	AAA0810	6-12 in.	AL	13219	17827	NS		ICPES	13000	MG/KG
	21-1409	AAA0810	6-12 in.	AS	13219	17827	NS		ETVAA	2.1	MG/KG
	21-1409	AAA0810	6-12 in.	BA	13219	17827	NS		ICPES	86.6	MG/KG
	21-1409	AAA0810	6-12 in.	BE	13219	17827	NS		ICPES	0.72	MG/KG
	21-1409	AAA0810	6-12 in.	CA	13219	17827	NS		ICPES	2410	MG/KG
	21-1409	AAA0810	6-12 in.	CD	13219	17827	NS		ICPES	1.1	MG/KG
	21-1409	AAA0810	6-12 in.	CO	13219	17827	NS		ICPES	4	MG/KG
	21-1409	AAA0810	6-12 in.	CR	13219	17827	NS		ICPES	8.2	MG/KG
	21-1409	AAA0810	6-12 in.	CU	13219	17827	NS		ICPES	6.9	MG/KG
	21-1409	AAA0810	6-12 in.	FE	13219	17827	NS		ICPES	11600	MG/KG
	21-1409	AAA0810	6-12 in.	K	13219	17827	NS		ICPES	1290	MG/KG
	21-1409	AAA0810	6-12 in.	LI	13219	17827	NS		ICPES	10.7	MG/KG
	21-1409	AAA0810	6-12 in.	MG	13219	17827	NS		ICPES	1880	MG/KG
	21-1409	AAA0810	6-12 in.	MN	13219	17827	NS		ICPES	245	MG/KG
	21-1409	AAA0810	6-12 in.	NA	13219	17827	NS		ICPES	299	MG/KG
	21-1409	AAA0810	6-12 in.	NI	13219	17827	NS		ICPES	6.1	MG/KG
	21-1409	AAA0810	6-12 in.	PB	13219	17827	NS		ETVAA	17	MG/KG
	21-1409	AAA0810	6-12 in.	SR	13219	17827	NS		ICPES	18.8	MG/KG
	21-1409	AAA0810	6-12 in.	TL	13219	17827	NS		ETVAA	0.22	MG/KG
	21-1409	AAA0810	6-12 in.	V	13219	17827	NS		ICPES	16.8	MG/KG
	21-1409	AAA0810	6-12 in.	ZN	13219	17827	NS		ICPES	33.9	MG/KG
	21-1409	AAA0811	12-18 in.	AG	13219	17827	NS		ICPES	1.4	MG/KG
	21-1409	AAA0811	12-18 in.	AL	13219	17827	NS		ICPES	20200	MG/KG
	21-1409	AAA0811	12-18 in.	AS	13219	17827	NS		ETVAA	2.8	MG/KG
	21-1409	AAA0811	12-18 in.	BA	13219	17827	NS		ICPES	105	MG/KG
	21-1409	AAA0811	12-18 in.	BE	13219	17827	NS		ICPES	1.1	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1409	AAA0811	12-18 in.	CA	13219	17827	NS		ICPES	3110	MG/KG
	21-1409	AAA0811	12-18 in.	CD	13219	17827	NS		ICPES	0.8	MG/KG
	21-1409	AAA0811	12-18 in.	CO	13219	17827	NS		ICPES	5	MG/KG
	21-1409	AAA0811	12-18 in.	CR	13219	17827	NS		ICPES	10.9	MG/KG
	21-1409	AAA0811	12-18 in.	CU	13219	17827	NS		ICPES	8.9	MG/KG
	21-1409	AAA0811	12-18 in.	FE	13219	17827	NS		ICPES	15300	MG/KG
	21-1409	AAA0811	12-18 in.	K	13219	17827	NS		ICPES	1870	MG/KG
	21-1409	AAA0811	12-18 in.	LI	13219	17827	NS		ICPES	15.5	MG/KG
	21-1409	AAA0811	12-18 in.	MG	13219	17827	NS		ICPES	2660	MG/KG
	21-1409	AAA0811	12-18 in.	MN	13219	17827	NS		ICPES	297	MG/KG
	21-1409	AAA0811	12-18 in.	NA	13219	17827	NS		ICPES	460	MG/KG
	21-1409	AAA0811	12-18 in.	NI	13219	17827	NS		ICPES	8.2	MG/KG
	21-1409	AAA0811	12-18 in.	PB	13219	17827	NS		ETVAA	14.1	MG/KG
	21-1409	AAA0811	12-18 in.	SR	13219	17827	NS		ICPES	24	MG/KG
	21-1409	AAA0811	12-18 in.	TL	13219	17827	NS		ETVAA	0.53	MG/KG
	21-1409	AAA0811	12-18 in.	V	13219	17827	NS		ICPES	22.4	MG/KG
	21-1409	AAA0811	12-18 in.	ZN	13219	17827	NS		ICPES	43	MG/KG
	21-1410	AAA0812	0-6 in.	AL	13219	17827	SU		ICPES	3440	MG/KG
	21-1410	AAA0812	0-6 in.	AS	13219	17827	SU		ETVAA	2.7	MG/KG
	21-1410	AAA0812	0-6 in.	BA	13219	17827	SU		ICPES	26.1	MG/KG
	21-1410	AAA0812	0-6 in.	BE	13219	17827	SU		ICPES	0.21	MG/KG
	21-1410	AAA0812	0-6 in.	CA	13219	17827	SU		ICPES	638	MG/KG
	21-1410	AAA0812	0-6 in.	CD	13219	17827	SU		ICPES	0.73	MG/KG
	21-1410	AAA0812	0-6 in.	CO	13219	17827	SU		ICPES	1.3	MG/KG
	21-1410	AAA0812	0-6 in.	CR	13219	17827	SU		ICPES	2.2	MG/KG
	21-1410	AAA0812	0-6 in.	CU	13219	17827	SU		ICPES	3	MG/KG
	21-1410	AAA0812	0-6 in.	FE	13219	17827	SU		ICPES	6150	MG/KG
	21-1410	AAA0812	0-6 in.	K	13219	17827	SU		ICPES	476	MG/KG
	21-1410	AAA0812	0-6 in.	LI	13219	17827	SU		ICPES	4.1	MG/KG
	21-1410	AAA0812	0-6 in.	MG	13219	17827	SU		ICPES	416	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1410	AAA0812	0-6 in.	MN	13219	17827	SU		ICPES	333	MG/KG
	21-1410	AAA0812	0-6 in.	NA	13219	17827	SU		ICPES	81.3	MG/KG
	21-1410	AAA0812	0-6 in.	NI	13219	17827	SU		ICPES	2.5	MG/KG
	21-1410	AAA0812	0-6 in.	PB	13219	17827	SU		ETVAA	7.7	MG/KG
	21-1410	AAA0812	0-6 in.	SR	13219	17827	SU		ICPES	4.1	MG/KG
	21-1410	AAA0812	0-6 in.	V	13219	17827	SU		ICPES	4.6	MG/KG
	21-1410	AAA0812	0-6 in.	ZN	13219	17827	SU		ICPES	31.9	MG/KG
	21-1410	AAA0813	6-12 in.	AL	13219	17827	NS		ICPES	1410	MG/KG
	21-1410	AAA0813	6-12 in.	AS	13219	17827	NS		ETVAA	0.91	MG/KG
	21-1410	AAA0813	6-12 in.	BA	13219	17827	NS		ICPES	12.7	MG/KG
	21-1410	AAA0813	6-12 in.	BE	13219	17827	NS		ICPES	0.2	MG/KG
	21-1410	AAA0813	6-12 in.	CA	13219	17827	NS		ICPES	222	MG/KG
	21-1410	AAA0813	6-12 in.	CD	13219	17827	NS		ICPES	0.71	MG/KG
	21-1410	AAA0813	6-12 in.	CR	13219	17827	NS		ICPES	1.2	MG/KG
	21-1410	AAA0813	6-12 in.	CU	13219	17827	NS		ICPES	1.1	MG/KG
	21-1410	AAA0813	6-12 in.	FE	13219	17827	NS		ICPES	5290	MG/KG
	21-1410	AAA0813	6-12 in.	K	13219	17827	NS		ICPES	357	MG/KG
	21-1410	AAA0813	6-12 in.	LI	13219	17827	NS		ICPES	2.9	MG/KG
	21-1410	AAA0813	6-12 in.	MG	13219	17827	NS		ICPES	144	MG/KG
	21-1410	AAA0813	6-12 in.	MN	13219	17827	NS		ICPES	335	MG/KG
	21-1410	AAA0813	6-12 in.	NA	13219	17827	NS		ICPES	194	MG/KG
	21-1410	AAA0813	6-12 in.	NI	13219	17827	NS		ICPES	1.9	MG/KG
	21-1410	AAA0813	6-12 in.	PB	13219	17827	NS		ETVAA	4.7	MG/KG
	21-1410	AAA0813	6-12 in.	SR	13219	17827	NS		ICPES	1.2	MG/KG
	21-1410	AAA0813	6-12 in.	TL	13219	17827	NS		ETVAA	0.26	MG/KG
	21-1410	AAA0813	6-12 in.	V	13219	17827	NS		ICPES	1.1	MG/KG
	21-1410	AAA0813	6-12 in.	ZN	13219	17827	NS		ICPES	34.1	MG/KG
	21-1410	AAA0814	12-18 in.	AL	13219	17827	NS		ICPES	1140	MG/KG
	21-1410	AAA0814	12-18 in.	AS	13219	17827	NS		ETVAA	0.75	MG/KG
	21-1410	AAA0814	12-18 in.	BA	13219	17827	NS		ICPES	12.2	MG/KG
	21-1410	AAA0814	12-18 in.	BE	13219	17827	NS		ICPES	0.15	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1410	AAA0814	12-18 in.	CA	13219	17827	NS		ICPES	184	MG/KG
	21-1410	AAA0814	12-18 in.	CD	13219	17827	NS		ICPES	0.87	MG/KG
	21-1410	AAA0814	12-18 in.	CR	13219	17827	NS		ICPES	0.91	MG/KG
	21-1410	AAA0814	12-18 in.	CU	13219	17827	NS		ICPES	0.99	MG/KG
	21-1410	AAA0814	12-18 in.	FE	13219	17827	NS		ICPES	3920	MG/KG
	21-1410	AAA0814	12-18 in.	K	13219	17827	NS		ICPES	386	MG/KG
	21-1410	AAA0814	12-18 in.	LI	13219	17827	NS		ICPES	2.6	MG/KG
	21-1410	AAA0814	12-18 in.	MG	13219	17827	NS		ICPES	124	MG/KG
	21-1410	AAA0814	12-18 in.	MN	13219	17827	NS		ICPES	281	MG/KG
	21-1410	AAA0814	12-18 in.	NA	13219	17827	NS		ICPES	200	MG/KG
	21-1410	AAA0814	12-18 in.	NI	13219	17827	NS		ICPES	1.9	MG/KG
	21-1410	AAA0814	12-18 in.	PB	13219	17827	NS		ETVAA	4.6	MG/KG
	21-1410	AAA0814	12-18 in.	SR	13219	17827	NS		ICPES	1	MG/KG
	21-1410	AAA0814	12-18 in.	ZN	13219	17827	NS		ICPES	25.5	MG/KG
	21-1411	AAA0815	0-6 in.	AL	13219	17827	SU		ICPES	2370	MG/KG
	21-1411	AAA0815	0-6 in.	AS	13219	17827	SU		ETVAA	1.5	MG/KG
	21-1411	AAA0815	0-6 in.	BA	13219	17827	SU		ICPES	24.2	MG/KG
	21-1411	AAA0815	0-6 in.	BE	13219	17827	SU		ICPES	0.18	MG/KG
	21-1411	AAA0815	0-6 in.	CA	13219	17827	SU		ICPES	662	MG/KG
	21-1411	AAA0815	0-6 in.	CR	13219	17827	SU		ICPES	1.7	MG/KG
	21-1411	AAA0815	0-6 in.	CU	13219	17827	SU		ICPES	2.4	MG/KG
	21-1411	AAA0815	0-6 in.	FE	13219	17827	SU		ICPES	4450	MG/KG
	21-1411	AAA0815	0-6 in.	K	13219	17827	SU		ICPES	424	MG/KG
	21-1411	AAA0815	0-6 in.	LI	13219	17827	SU		ICPES	3.5	MG/KG
	21-1411	AAA0815	0-6 in.	MG	13219	17827	SU		ICPES	388	MG/KG
	21-1411	AAA0815	0-6 in.	MN	13219	17827	SU		ICPES	299	MG/KG
	21-1411	AAA0815	0-6 in.	NA	13219	17827	SU		ICPES	87.1	MG/KG
	21-1411	AAA0815	0-6 in.	NI	13219	17827	SU		ICPES	2.7	MG/KG
	21-1411	AAA0815	0-6 in.	PB	13219	17827	SU		ETVAA	9.9	MG/KG
	21-1411	AAA0815	0-6 in.	SR	13219	17827	SU		ICPES	4.1	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1411	AAA0815	0-6 in.	V	13219	17827	SU		ICPES	3	MG/KG
	21-1411	AAA0815	0-6 in.	ZN	13219	17827	SU		ICPES	33.2	MG/KG
	21-1411	AAA0816	6-12 in.	AL	13219	17827	NS		ICPES	1320	MG/KG
	21-1411	AAA0816	6-12 in.	AS	13219	17827	NS		ETVAA	1.1	MG/KG
	21-1411	AAA0816	6-12 in.	BA	13219	17827	NS		ICPES	16	MG/KG
	21-1411	AAA0816	6-12 in.	BE	13219	17827	NS		ICPES	0.21	MG/KG
	21-1411	AAA0816	6-12 in.	CA	13219	17827	NS		ICPES	176	MG/KG
	21-1411	AAA0816	6-12 in.	CD	13219	17827	NS		ICPES	0.53	MG/KG
	21-1411	AAA0816	6-12 in.	CR	13219	17827	NS		ICPES	0.97	MG/KG
	21-1411	AAA0816	6-12 in.	CU	13219	17827	NS		ICPES	1.7	MG/KG
	21-1411	AAA0816	6-12 in.	FE	13219	17827	NS		ICPES	3760	MG/KG
	21-1411	AAA0816	6-12 in.	K	13219	17827	NS		ICPES	413	MG/KG
	21-1411	AAA0816	6-12 in.	LI	13219	17827	NS		ICPES	4.7	MG/KG
	21-1411	AAA0816	6-12 in.	MG	13219	17827	NS		ICPES	216	MG/KG
	21-1411	AAA0816	6-12 in.	MN	13219	17827	NS		ICPES	294	MG/KG
	21-1411	AAA0816	6-12 in.	NA	13219	17827	NS		ICPES	240	MG/KG
	21-1411	AAA0816	6-12 in.	NI	13219	17827	NS		ICPES	1.8	MG/KG
	21-1411	AAA0816	6-12 in.	PB	13219	17827	NS		ETVAA	7.3	MG/KG
	21-1411	AAA0816	6-12 in.	SR	13219	17827	NS		ICPES	1.2	MG/KG
	21-1411	AAA0816	6-12 in.	V	13219	17827	NS		ICPES	1.3	MG/KG
	21-1411	AAA0816	6-12 in.	ZN	13219	17827	NS		ICPES	33.3	MG/KG
	21-1411	AAA0817	12-18 in.	AL	13219	17827	NS		ICPES	1600	MG/KG
	21-1411	AAA0817	12-18 in.	AS	13219	17827	NS		ETVAA	0.9	MG/KG
	21-1411	AAA0817	12-18 in.	BA	13219	17827	NS		ICPES	25.1	MG/KG
	21-1411	AAA0817	12-18 in.	BE	13219	17827	NS		ICPES	0.31	MG/KG
	21-1411	AAA0817	12-18 in.	CA	13219	17827	NS		ICPES	371	MG/KG
	21-1411	AAA0817	12-18 in.	CD	13219	17827	NS		ICPES	0.61	MG/KG
	21-1411	AAA0817	12-18 in.	CO	13219	17827	NS		ICPES	1.1	MG/KG
	21-1411	AAA0817	12-18 in.	CR	13219	17827	NS		ICPES	1.5	MG/KG
	21-1411	AAA0817	12-18 in.	CU	13219	17827	NS		ICPES	2.5	MG/KG
	21-1411	AAA0817	12-18 in.	FE	13219	17827	NS		ICPES	5180	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1411	AAA0817	12-18 in.	K	13219	17827	NS		ICPES	534	MG/KG
	21-1411	AAA0817	12-18 in.	LI	13219	17827	NS		ICPES	8.3	MG/KG
	21-1411	AAA0817	12-18 in.	MG	13219	17827	NS		ICPES	434	MG/KG
	21-1411	AAA0817	12-18 in.	MN	13219	17827	NS		ICPES	482	MG/KG
	21-1411	AAA0817	12-18 in.	NA	13219	17827	NS		ICPES	319	MG/KG
	21-1411	AAA0817	12-18 in.	NI	13219	17827	NS		ICPES	2.8	MG/KG
	21-1411	AAA0817	12-18 in.	PB	13219	17827	NS		ETVAA	5.9	MG/KG
	21-1411	AAA0817	12-18 in.	SR	13219	17827	NS		ICPES	2.3	MG/KG
	21-1411	AAA0817	12-18 in.	TL	13219	17827	NS		ETVAA	0.21	MG/KG
	21-1411	AAA0817	12-18 in.	V	13219	17827	NS		ICPES	2.1	MG/KG
	21-1411	AAA0817	12-18 in.	ZN	13219	17827	NS		ICPES	46.9	MG/KG
	21-1412	AAA0818	0-6 in.	AL	13219	17827	SU		ICPES	3670	MG/KG
	21-1412	AAA0818	0-6 in.	AS	13219	17827	SU		ETVAA	2.4	MG/KG
	21-1412	AAA0818	0-6 in.	BA	13219	17827	SU		ICPES	38.9	MG/KG
	21-1412	AAA0818	0-6 in.	BE	13219	17827	SU		ICPES	0.4	MG/KG
	21-1412	AAA0818	0-6 in.	CA	13219	17827	SU		ICPES	1160	MG/KG
	21-1412	AAA0818	0-6 in.	CD	13219	17827	SU		ICPES	0.95	MG/KG
	21-1412	AAA0818	0-6 in.	CR	13219	17827	SU		ICPES	2.3	MG/KG
	21-1412	AAA0818	0-6 in.	CU	13219	17827	SU		ICPES	3.9	MG/KG
	21-1412	AAA0818	0-6 in.	FE	13219	17827	SU		ICPES	5980	MG/KG
	21-1412	AAA0818	0-6 in.	K	13219	17827	SU		ICPES	552	MG/KG
	21-1412	AAA0818	0-6 in.	LI	13219	17827	SU		ICPES	5	MG/KG
	21-1412	AAA0818	0-6 in.	MG	13219	17827	SU		ICPES	630	MG/KG
	21-1412	AAA0818	0-6 in.	MN	13219	17827	SU		ICPES	337	MG/KG
	21-1412	AAA0818	0-6 in.	NA	13219	17827	SU		ICPES	103	MG/KG
	21-1412	AAA0818	0-6 in.	NI	13219	17827	SU		ICPES	4.1	MG/KG
	21-1412	AAA0818	0-6 in.	PB	13219	17827	SU		ETVAA	13.1	MG/KG
	21-1412	AAA0818	0-6 in.	SR	13219	17827	SU		ICPES	7.3	MG/KG
	21-1412	AAA0818	0-6 in.	V	13219	17827	SU		ICPES	5.5	MG/KG
	21-1412	AAA0818	0-6 in.	ZN	13219	17827	SU		ICPES	27.8	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1412	AAA0819	6-12 in.	AL	13219	17827	NS		ICPES	1470	MG/KG
	21-1412	AAA0819	6-12 in.	AS	13219	17827	NS		ETVAA	1.3	MG/KG
	21-1412	AAA0819	6-12 in.	BA	13219	17827	NS		ICPES	20.1	MG/KG
	21-1412	AAA0819	6-12 in.	BE	13219	17827	NS		ICPES	0.5	MG/KG
	21-1412	AAA0819	6-12 in.	CA	13219	17827	NS		ICPES	211	MG/KG
	21-1412	AAA0819	6-12 in.	CD	13219	17827	NS		ICPES	0.44	MG/KG
	21-1412	AAA0819	6-12 in.	CU	13219	17827	NS		ICPES	2	MG/KG
	21-1412	AAA0819	6-12 in.	FE	13219	17827	NS		ICPES	4680	MG/KG
	21-1412	AAA0819	6-12 in.	K	13219	17827	NS		ICPES	490	MG/KG
	21-1412	AAA0819	6-12 in.	LI	13219	17827	NS		ICPES	2.8	MG/KG
	21-1412	AAA0819	6-12 in.	MG	13219	17827	NS		ICPES	106	MG/KG
	21-1412	AAA0819	6-12 in.	MN	13219	17827	NS		ICPES	337	MG/KG
	21-1412	AAA0819	6-12 in.	NA	13219	17827	NS		ICPES	257	MG/KG
	21-1412	AAA0819	6-12 in.	NI	13219	17827	NS		ICPES	2.4	MG/KG
	21-1412	AAA0819	6-12 in.	PB	13219	17827	NS		ETVAA	4.5	MG/KG
	21-1412	AAA0819	6-12 in.	SR	13219	17827	NS		ICPES	1.3	MG/KG
	21-1412	AAA0819	6-12 in.	TL	13219	17827	NS		ETVAA	0.42	MG/KG
	21-1412	AAA0819	6-12 in.	V	13219	17827	NS		ICPES	1.1	MG/KG
	21-1412	AAA0819	6-12 in.	ZN	13219	17827	NS		ICPES	24.3	MG/KG
	21-1412	AAA0820	12-18 in.	AL	13219	17827	NS		ICPES	1360	MG/KG
	21-1412	AAA0820	12-18 in.	AS	13219	17827	NS		ETVAA	1.2	MG/KG
	21-1412	AAA0820	12-18 in.	BA	13219	17827	NS		ICPES	17.2	MG/KG
	21-1412	AAA0820	12-18 in.	BE	13219	17827	NS		ICPES	0.39	MG/KG
	21-1412	AAA0820	12-18 in.	CA	13219	17827	NS		ICPES	251	MG/KG
	21-1412	AAA0820	12-18 in.	CD	13219	17827	NS		ICPES	0.57	MG/KG
	21-1412	AAA0820	12-18 in.	CR	13219	17827	NS		ICPES	1.7	MG/KG
	21-1412	AAA0820	12-18 in.	CU	13219	17827	NS		ICPES	3.7	MG/KG
	21-1412	AAA0820	12-18 in.	FE	13219	17827	NS		ICPES	4010	MG/KG
	21-1412	AAA0820	12-18 in.	K	13219	17827	NS		ICPES	369	MG/KG
	21-1412	AAA0820	12-18 in.	LI	13219	17827	NS		ICPES	2.3	MG/KG
	21-1412	AAA0820	12-18 in.	MG	13219	17827	NS		ICPES	113	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1412	AAA0820	12-18 in.	MN	13219	17827	NS		ICPES	294	MG/KG
	21-1412	AAA0820	12-18 in.	NA	13219	17827	NS		ICPES	221	MG/KG
	21-1412	AAA0820	12-18 in.	NI	13219	17827	NS		ICPES	2.7	MG/KG
	21-1412	AAA0820	12-18 in.	PB	13219	17827	NS		ETVAA	4.5	MG/KG
	21-1412	AAA0820	12-18 in.	SR	13219	17827	NS		ICPES	1.2	MG/KG
	21-1412	AAA0820	12-18 in.	V	13219	17827	NS		ICPES	1.5	MG/KG
	21-1412	AAA0820	12-18 in.	ZN	13219	17827	NS		ICPES	36.3	MG/KG
	21-1412	AAA0821		NA	13176		FE		ICPES	48.3	UG/L
	21-1412	AAA0822		AS	13176		FR		ETVAA	6.3	UG/L
21-006(b)	21-1355	AAA0866	0-6 in.	AL	13156		SU	D	ICPES	5180	MG/KG
	21-1355	AAA0866	0-6 in.	AL	13156		SU		ICPES	2250	MG/KG
	21-1355	AAA0866	0-6 in.	AS	13156		SU	D	ETVAA	0.66	MG/KG
	21-1355	AAA0866	0-6 in.	AS	13156		SU		ETVAA	0.73	MG/KG
	21-1355	AAA0866	0-6 in.	BA	13156		SU	D	ICPES	49.3	MG/KG
	21-1355	AAA0866	0-6 in.	BA	13156		SU		ICPES	22.8	MG/KG
	21-1355	AAA0866	0-6 in.	BE	13156		SU	D	ICPES	0.2	MG/KG
	21-1355	AAA0866	0-6 in.	BE	13156		SU		ICPES	0.24	MG/KG
	21-1355	AAA0866	0-6 in.	CA	13156		SU	D	ICPES	2400	MG/KG
	21-1355	AAA0866	0-6 in.	CA	13156		SU		ICPES	1090	MG/KG
	21-1355	AAA0866	0-6 in.	CD	13156		SU	D	ICPES	1.04	MG/KG
	21-1355	AAA0866	0-6 in.	CD	13156		SU		ICPES	0.69	MG/KG
	21-1355	AAA0866	0-6 in.	CO	13156		SU	D	ICPES	3.2	MG/KG
	21-1355	AAA0866	0-6 in.	CO	13156		SU		ICPES	0.99	MG/KG
	21-1355	AAA0866	0-6 in.	CR	13156		SU	D	ICPES	7	MG/KG
	21-1355	AAA0866	0-6 in.	CR	13156		SU		ICPES	3.7	MG/KG
	21-1355	AAA0866	0-6 in.	CU	13156		SU	D	ICPES	6.2	MG/KG
	21-1355	AAA0866	0-6 in.	CU	13156		SU		ICPES	3.9	MG/KG
	21-1355	AAA0866	0-6 in.	FE	13156		SU	D	ICPES	6510	MG/KG
	21-1355	AAA0866	0-6 in.	FE	13156		SU		ICPES	3000	MG/KG
	21-1355	AAA0866	0-6 in.	K	13156		SU	D	ICPES	755	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1355	AAA0866	0-6 in.	K	13156		SU		ICPES	405	MG/KG
	21-1355	AAA0866	0-6 in.	LI	13156		SU	D	ICPES	6.6	MG/KG
	21-1355	AAA0866	0-6 in.	LI	13156		SU		ICPES	3	MG/KG
	21-1355	AAA0866	0-6 in.	MG	13156		SU	D	ICPES	1070	MG/KG
	21-1355	AAA0866	0-6 in.	MG	13156		SU		ICPES	454	MG/KG
	21-1355	AAA0866	0-6 in.	MN	13156		SU	D	ICPES	266	MG/KG
	21-1355	AAA0866	0-6 in.	MN	13156		SU		ICPES	125	MG/KG
	21-1355	AAA0866	0-6 in.	NA	13156		SU	D	ICPES	106	MG/KG
	21-1355	AAA0866	0-6 in.	NA	13156		SU		ICPES	47.4	MG/KG
	21-1355	AAA0866	0-6 in.	NI	13156		SU	D	ICPES	3.4	MG/KG
	21-1355	AAA0866	0-6 in.	PB	13156		SU	D	ETVAA	21	MG/KG
	21-1355	AAA0866	0-6 in.	PB	13156		SU		ETVAA	17.6	MG/KG
	21-1355	AAA0866	0-6 in.	SR	13156		SU	D	ICPES	9.8	MG/KG
	21-1355	AAA0866	0-6 in.	SR	13156		SU		ICPES	4.4	MG/KG
	21-1355	AAA0866	0-6 in.	V	13156		SU	D	ICPES	8.4	MG/KG
	21-1355	AAA0866	0-6 in.	V	13156		SU		ICPES	3.9	MG/KG
	21-1355	AAA0866	0-6 in.	ZN	13156		SU	D	ICPES	42.7	MG/KG
	21-1355	AAA0866	0-6 in.	ZN	13156		SU		ICPES	20.4	MG/KG
	21-1356	AAA0867	0-6 in.	AL	13156		SU		ICPES	2620	MG/KG
	21-1356	AAA0867	0-6 in.	AS	13156		SU		ETVAA	1	MG/KG
	21-1356	AAA0867	0-6 in.	BA	13156		SU		ICPES	27.5	MG/KG
	21-1356	AAA0867	0-6 in.	BE	13156		SU		ICPES	0.26	MG/KG
	21-1356	AAA0867	0-6 in.	CA	13156		SU		ICPES	1030	MG/KG
	21-1356	AAA0867	0-6 in.	CD	13156		SU		ICPES	0.59	MG/KG
	21-1356	AAA0867	0-6 in.	CO	13156		SU		ICPES	1.2	MG/KG
	21-1356	AAA0867	0-6 in.	CR	13156		SU		ICPES	2.8	MG/KG
	21-1356	AAA0867	0-6 in.	CU	13156		SU		ICPES	2.5	MG/KG
	21-1356	AAA0867	0-6 in.	FE	13156		SU		ICPES	3140	MG/KG
	21-1356	AAA0867	0-6 in.	K	13156		SU		ICPES	374	MG/KG
	21-1356	AAA0867	0-6 in.	LI	13156		SU		ICPES	2.8	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1356	AAA0867	0-6 in.	MG	13156		SU		ICPES	464	MG/KG
	21-1356	AAA0867	0-6 in.	MN	13156		SU		ICPES	120	MG/KG
	21-1356	AAA0867	0-6 in.	NA	13156		SU		ICPES	44.7	MG/KG
	21-1356	AAA0867	0-6 in.	NI	13156		SU		ICPES	1.9	MG/KG
	21-1356	AAA0867	0-6 in.	PB	13156		SU		ETVAA	40.1	MG/KG
	21-1356	AAA0867	0-6 in.	SR	13156		SU		ICPES	5	MG/KG
	21-1356	AAA0867	0-6 in.	V	13156		SU		ICPES	4.1	MG/KG
	21-1356	AAA0867	0-6 in.	ZN	13156		SU		ICPES	22.4	MG/KG
	21-1357	AAA0868	0-6 in.	AL	13156		SU		ICPES	4080	MG/KG
	21-1357	AAA0868	0-6 in.	AS	13156		SU		ETVAA	1.1	MG/KG
	21-1357	AAA0868	0-6 in.	BA	13156		SU		ICPES	44.7	MG/KG
	21-1357	AAA0868	0-6 in.	BE	13156		SU		ICPES	0.43	MG/KG
	21-1357	AAA0868	0-6 in.	CA	13156		SU		ICPES	1310	MG/KG
	21-1357	AAA0868	0-6 in.	CD	13156		SU		ICPES	0.85	MG/KG
	21-1357	AAA0868	0-6 in.	CO	13156		SU		ICPES	2.2	MG/KG
	21-1357	AAA0868	0-6 in.	CR	13156		SU		ICPES	7.3	MG/KG
	21-1357	AAA0868	0-6 in.	CU	13156		SU		ICPES	2.2	MG/KG
	21-1357	AAA0868	0-6 in.	FE	13156		SU		ICPES	5590	MG/KG
	21-1357	AAA0868	0-6 in.	K	13156		SU		ICPES	681	MG/KG
	21-1357	AAA0868	0-6 in.	LI	13156		SU		ICPES	3.3	MG/KG
	21-1357	AAA0868	0-6 in.	MG	13156		SU		ICPES	759	MG/KG
	21-1357	AAA0868	0-6 in.	MN	13156		SU		ICPES	195	MG/KG
	21-1357	AAA0868	0-6 in.	NA	13156		SU		ICPES	60.6	MG/KG
	21-1357	AAA0868	0-6 in.	NI	13156		SU		ICPES	5.6	MG/KG
	21-1357	AAA0868	0-6 in.	PB	13156		SU		ETVAA	15.2	MG/KG
	21-1357	AAA0868	0-6 in.	SR	13156		SU		ICPES	8.6	MG/KG
	21-1357	AAA0868	0-6 in.	V	13156		SU		ICPES	6.9	MG/KG
	21-1357	AAA0868	0-6 in.	ZN	13156		SU		ICPES	20.9	MG/KG
	21-1358	AAA0869	0-4 in.	AL	13156		SU		ICPES	3100	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1358	AAA0869	0-4 in.	AS	13156		SU		ETVAA	1.1	MG/KG
	21-1358	AAA0869	0-4 in.	BA	13156		SU		ICPES	31.4	MG/KG
	21-1358	AAA0869	0-4 in.	BE	13156		SU		ICPES	0.29	MG/KG
	21-1358	AAA0869	0-4 in.	CA	13156		SU		ICPES	1060	MG/KG
	21-1358	AAA0869	0-4 in.	CD	13156		SU		ICPES	0.75	MG/KG
	21-1358	AAA0869	0-4 in.	CO	13156		SU		ICPES	0.88	MG/KG
	21-1358	AAA0869	0-4 in.	CR	13156		SU		ICPES	3.2	MG/KG
	21-1358	AAA0869	0-4 in.	CU	13156		SU		ICPES	3.1	MG/KG
	21-1358	AAA0869	0-4 in.	FE	13156		SU		ICPES	3780	MG/KG
	21-1358	AAA0869	0-4 in.	K	13156		SU		ICPES	531	MG/KG
	21-1358	AAA0869	0-4 in.	LI	13156		SU		ICPES	4.7	MG/KG
	21-1358	AAA0869	0-4 in.	MG	13156		SU		ICPES	568	MG/KG
	21-1358	AAA0869	0-4 in.	MN	13156		SU		ICPES	172	MG/KG
	21-1358	AAA0869	0-4 in.	NA	13156		SU		ICPES	55.5	MG/KG
	21-1358	AAA0869	0-4 in.	NI	13156		SU		ICPES	2.2	MG/KG
	21-1358	AAA0869	0-4 in.	PB	13156		SU		ETVAA	11.7	MG/KG
	21-1358	AAA0869	0-4 in.	SR	13156		SU		ICPES	6.5	MG/KG
	21-1358	AAA0869	0-4 in.	V	13156		SU		ICPES	4.4	MG/KG
	21-1358	AAA0869	0-4 in.	ZN	13156		SU		ICPES	20.5	MG/KG
	21-1359	AAA0870	0-6 in.	AL	13156		SU		ICPES	3240	MG/KG
	21-1359	AAA0870	0-6 in.	AS	13156		SU		ETVAA	0.78	MG/KG
	21-1359	AAA0870	0-6 in.	BA	13156		SU		ICPES	26.8	MG/KG
	21-1359	AAA0870	0-6 in.	BE	13156		SU		ICPES	0.26	MG/KG
	21-1359	AAA0870	0-6 in.	CA	13156		SU		ICPES	815	MG/KG
	21-1359	AAA0870	0-6 in.	CD	13156		SU		ICPES	0.52	MG/KG
	21-1359	AAA0870	0-6 in.	CO	13156		SU		ICPES	1.6	MG/KG
	21-1359	AAA0870	0-6 in.	CR	13156		SU		ICPES	2	MG/KG
	21-1359	AAA0870	0-6 in.	CU	13156		SU		ICPES	1.4	MG/KG
	21-1359	AAA0870	0-6 in.	FE	13156		SU		ICPES	3890	MG/KG
	21-1359	AAA0870	0-6 in.	K	13156		SU		ICPES	409	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1359	AAA0870	0-6 in.	LI	13156		SU		ICPES	3.2	MG/KG
	21-1359	AAA0870	0-6 in.	MG	13156		SU		ICPES	476	MG/KG
	21-1359	AAA0870	0-6 in.	MN	13156		SU		ICPES	119	MG/KG
	21-1359	AAA0870	0-6 in.	NA	13156		SU		ICPES	68.2	MG/KG
	21-1359	AAA0870	0-6 in.	NI	13156		SU		ICPES	2	MG/KG
	21-1359	AAA0870	0-6 in.	PB	13156		SU		ETVAA	13.3	MG/KG
	21-1359	AAA0870	0-6 in.	SR	13156		SU		ICPES	5	MG/KG
	21-1359	AAA0870	0-6 in.	V	13156		SU		ICPES	4	MG/KG
	21-1359	AAA0870	0-6 in.	ZN	13156		SU		ICPES	21.3	MG/KG
	21-1360	AAA0871	0-6 in.	AL	13156		SU		ICPES	3190	MG/KG
	21-1360	AAA0871	0-6 in.	AS	13156		SU		ETVAA	0.91	MG/KG
	21-1360	AAA0871	0-6 in.	BA	13156		SU		ICPES	27.9	MG/KG
	21-1360	AAA0871	0-6 in.	BE	13156		SU		ICPES	0.2	MG/KG
	21-1360	AAA0871	0-6 in.	CA	13156		SU		ICPES	870	MG/KG
	21-1360	AAA0871	0-6 in.	CD	13156		SU		ICPES	0.66	MG/KG
	21-1360	AAA0871	0-6 in.	CO	13156		SU		ICPES	2.4	MG/KG
	21-1360	AAA0871	0-6 in.	CR	13156		SU		ICPES	7.3	MG/KG
	21-1360	AAA0871	0-6 in.	CU	13156		SU		ICPES	3	MG/KG
	21-1360	AAA0871	0-6 in.	FE	13156		SU		ICPES	4160	MG/KG
	21-1360	AAA0871	0-6 in.	K	13156		SU		ICPES	554	MG/KG
	21-1360	AAA0871	0-6 in.	LI	13156		SU		ICPES	3.3	MG/KG
	21-1360	AAA0871	0-6 in.	MG	13156		SU		ICPES	498	MG/KG
	21-1360	AAA0871	0-6 in.	MN	13156		SU		ICPES	151	MG/KG
	21-1360	AAA0871	0-6 in.	NA	13156		SU		ICPES	64.2	MG/KG
	21-1360	AAA0871	0-6 in.	NI	13156		SU		ICPES	4.1	MG/KG
	21-1360	AAA0871	0-6 in.	PB	13156		SU		ETVAA	14.1	MG/KG
	21-1360	AAA0871	0-6 in.	SR	13156		SU		ICPES	5.2	MG/KG
	21-1360	AAA0871	0-6 in.	V	13156		SU		ICPES	5	MG/KG
	21-1360	AAA0871	0-6 in.	ZN	13156		SU		ICPES	21.5	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
21-011(k)	21-1416	AAA0833	0-5 in.	AG	13115		SU		ICPMS	20.6	UG/G
	21-1416	AAA0833	0-5 in.	AL	13115		SU		ICPMS	4886	UG/G
	21-1416	AAA0833	0-5 in.	AS	13115		SU		ETVAA	3.9	UG/G
	21-1416	AAA0833	0-5 in.	BA	13115		SU		ICPMS	57.6	UG/G
	21-1416	AAA0833	0-5 in.	BE	13115		SU		ICPMS	0.96	UG/G
	21-1416	AAA0833	0-5 in.	CA	13115	18838	SU		FAA	46	MG/G
	21-1416	AAA0833	0-5 in.	CA	13115		SU		FAA	46	MG/G
	21-1416	AAA0833	0-5 in.	CD	13115		SU		ICPMS	52	UG/G
	21-1416	AAA0833	0-5 in.	CO	13115		SU		ICPMS	5.5	UG/G
	21-1416	AAA0833	0-5 in.	CR	13115		SU		ICPMS	11	UG/G
	21-1416	AAA0833	0-5 in.	CU	13115		SU		ICPMS	132.2	UG/G
	21-1416	AAA0833	0-5 in.	FE	13115		SU		FAA	9.5	MG/G
	21-1416	AAA0833	0-5 in.	K	13115		SU		FAA	828	UG/G
	21-1416	AAA0833	0-5 in.	LI	13115		SU		ICPMS	6.92	UG/G
	21-1416	AAA0833	0-5 in.	MG	13115		SU		ICPMS	1040	UG/G
	21-1416	AAA0833	0-5 in.	MN	13115		SU		ICPMS	169.4	UG/G
	21-1416	AAA0833	0-5 in.	NA	13115		SU		FAA	537	UG/G
	21-1416	AAA0833	0-5 in.	NI	13115		SU		ICPMS	224.4	UG/G
	21-1416	AAA0833	0-5 in.	PB	13115		SU		ICPMS	50.4	UG/G
	21-1416	AAA0833	0-5 in.	SE	13115	18840	SU		ETVAA	0.27	UG/G
	21-1416	AAA0833	0-5 in.	SE	13115		SU		ETVAA	0.27	UG/G
	21-1416	AAA0833	0-5 in.	SR	13115		SU		ICPMS	157	UG/G
	21-1416	AAA0833	0-5 in.	V	13115		SU		ICPMS	8	UG/G
	21-1416	AAA0833	0-5 in.	ZN	13115		SU		ICPMS	196.6	UG/G
	21-1417	AAA0906	0-6 in.	AL	13115		SU		ICPMS	4840	UG/G
	21-1417	AAA0906	0-6 in.	AS	13115		SU		ETVAA	2.1	UG/G
	21-1417	AAA0906	0-6 in.	BA	13115		SU		ICPMS	43	UG/G
	21-1417	AAA0906	0-6 in.	BE	13115		SU		ICPMS	1.4	UG/G
	21-1417	AAA0906	0-6 in.	CA	13115		SU		FAA	550	UG/G
	21-1417	AAA0906	0-6 in.	CD	13115		SU		ICPMS	9.6	UG/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1417	AAA0906	0-6 in.	CO	13115		SU		ICPMS	2.5	UG/G
	21-1417	AAA0906	0-6 in.	CR	13115		SU		ICPMS	2.5	UG/G
	21-1417	AAA0906	0-6 in.	CU	13115		SU		ICPMS	34.8	UG/G
	21-1417	AAA0906	0-6 in.	FE	13115		SU		FAA	6.1	MG/G
	21-1417	AAA0906	0-6 in.	K	13115		SU		FAA	1.1	MG/G
	21-1417	AAA0906	0-6 in.	LI	13115		SU		ICPMS	6.2	UG/G
	21-1417	AAA0906	0-6 in.	MG	13115		SU		ICPMS	940	UG/G
	21-1417	AAA0906	0-6 in.	MN	13115		SU		ICPMS	191.6	UG/G
	21-1417	AAA0906	0-6 in.	NA	13115		SU		FAA	380	UG/G
	21-1417	AAA0906	0-6 in.	NI	13115		SU		ICPMS	44.4	UG/G
	21-1417	AAA0906	0-6 in.	PB	13115		SU		ICPMS	12.3	UG/G
	21-1417	AAA0906	0-6 in.	SR	13115		SU		ICPMS	39.2	UG/G
	21-1417	AAA0906	0-6 in.	V	13115		SU		ICPMS	5.4	UG/G
	21-1417	AAA0906	0-6 in.	ZN	13115		SU		ICPMS	36.6	UG/G
	21-1417	AAA0907	6-12 in.	AL	13115		NS		ICPMS	3816.1	UG/G
	21-1417	AAA0907	6-12 in.	AS	13115		NS		ETVAA	1	UG/G
	21-1417	AAA0907	6-12 in.	BA	13115		NS		ICPMS	25.1	UG/G
	21-1417	AAA0907	6-12 in.	BE	13115		NS		ICPMS	1.2	UG/G
	21-1417	AAA0907	6-12 in.	CA	13115		NS		FAA	237	UG/G
	21-1417	AAA0907	6-12 in.	CO	13115		NS		ICPMS	0.8	UG/G
	21-1417	AAA0907	6-12 in.	CR	13115		NS		ICPMS	2.8	UG/G
	21-1417	AAA0907	6-12 in.	CU	13115		NS		ICPMS	8.2	UG/G
	21-1417	AAA0907	6-12 in.	FE	13115		NS		FAA	4.4	MG/G
	21-1417	AAA0907	6-12 in.	K	13115		NS		FAA	1.1	MG/G
	21-1417	AAA0907	6-12 in.	LI	13115		NS		ICPMS	5.1	UG/G
	21-1417	AAA0907	6-12 in.	MG	13115		NS		ICPMS	550	UG/G
	21-1417	AAA0907	6-12 in.	MN	13115		NS		ICPMS	37.2	UG/G
	21-1417	AAA0907	6-12 in.	NA	13115		NS		FAA	710	UG/G
	21-1417	AAA0907	6-12 in.	NI	13115		NS		ICPMS	21.4	UG/G
	21-1417	AAA0907	6-12 in.	SR	13115		NS		ICPMS	14.2	UG/G
	21-1417	AAA0907	6-12 in.	V	13115		NS		ICPMS	5.1	UG/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1417	AAA0907	6-12 in.	ZN	13115		NS		ICPMS	21	UG/G
	21-1418	AAA0908	0-6 in.	AL	13115		SU		ICPMS	5511.5	UG/G
	21-1418	AAA0908	0-6 in.	AS	13115		SU		ETVAA	2.1	UG/G
	21-1418	AAA0908	0-6 in.	BA	13115		SU		ICPMS	52.3	UG/G
	21-1418	AAA0908	0-6 in.	BE	13115		SU		ICPMS	1.4	UG/G
	21-1418	AAA0908	0-6 in.	CA	13115		SU		FAA	528	UG/G
	21-1418	AAA0908	0-6 in.	CO	13115		SU		ICPMS	1.9	UG/G
	21-1418	AAA0908	0-6 in.	CR	13115		SU		ICPMS	4.3	UG/G
	21-1418	AAA0908	0-6 in.	CU	13115		SU		ICPMS	8.9	UG/G
	21-1418	AAA0908	0-6 in.	FE	13115		SU		FAA	7.1	MG/G
	21-1418	AAA0908	0-6 in.	K	13115		SU		FAA	1.3	MG/G
	21-1418	AAA0908	0-6 in.	LI	13115		SU		ICPMS	6.1	UG/G
	21-1418	AAA0908	0-6 in.	MG	13115		SU		ICPMS	1170	UG/G
	21-1418	AAA0908	0-6 in.	MN	13115		SU		ICPMS	214.2	UG/G
	21-1418	AAA0908	0-6 in.	NA	13115		SU		FAA	254	UG/G
	21-1418	AAA0908	0-6 in.	NI	13115		SU		ICPMS	25.1	UG/G
	21-1418	AAA0908	0-6 in.	PB	13115		SU		ICPMS	16.1	UG/G
	21-1418	AAA0908	0-6 in.	SE	13115	18840	SU		ETVAA	0.24	UG/G
	21-1418	AAA0908	0-6 in.	SE	13115		SU		ETVAA	0.24	UG/G
	21-1418	AAA0908	0-6 in.	SR	13115		SU		ICPMS	41.4	UG/G
	21-1418	AAA0908	0-6 in.	V	13115		SU		ICPMS	5.5	UG/G
	21-1418	AAA0908	0-6 in.	ZN	13115		SU		ICPMS	32.7	UG/G
	21-1418	AAA0909	6-12 in.	AL	13115		NS		ICPMS	4194.4	UG/G
	21-1418	AAA0909	6-12 in.	AS	13115		NS		ETVAA	1.5	UG/G
	21-1418	AAA0909	6-12 in.	BA	13115		NS		ICPMS	39.6	UG/G
	21-1418	AAA0909	6-12 in.	BE	13115		NS		ICPMS	1.8	UG/G
	21-1418	AAA0909	6-12 in.	CO	13115		NS		ICPMS	1.6	UG/G
	21-1418	AAA0909	6-12 in.	CR	13115		NS		ICPMS	4.2	UG/G
	21-1418	AAA0909	6-12 in.	CU	13115		NS		ICPMS	7.3	UG/G
	21-1418	AAA0909	6-12 in.	FE	13115		NS		FAA	5.9	MG/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1418	AAA0909	6-12 in.	K	13115		NS		FAA	1.1	MG/G
	21-1418	AAA0909	6-12 in.	LI	13115		NS		ICPMS	4.9	UG/G
	21-1418	AAA0909	6-12 in.	MG	13115		NS		ICPMS	770	UG/G
	21-1418	AAA0909	6-12 in.	MN	13115		NS		ICPMS	245.2	UG/G
	21-1418	AAA0909	6-12 in.	NA	13115		NS		FAA	583	UG/G
	21-1418	AAA0909	6-12 in.	NI	13115		NS		ICPMS	18.7	UG/G
	21-1418	AAA0909	6-12 in.	PB	13115		NS		ICPMS	12.9	UG/G
	21-1418	AAA0909	6-12 in.	SR	13115		NS		ICPMS	25.5	UG/G
	21-1418	AAA0909	6-12 in.	V	13115		NS		ICPMS	5.4	UG/G
	21-1418	AAA0909	6-12 in.	ZN	13115		NS		ICPMS	28.2	UG/G
21-022(h)	21-1380	AAA0915	0-6 in.	AG	13185		SU		ICPES	0.8	MG/KG
	21-1380	AAA0915	0-6 in.	AL	13185		SU		ICPES	1800	MG/KG
	21-1380	AAA0915	0-6 in.	AS	13185		SU		ETVAA	0.53	MG/KG
	21-1380	AAA0915	0-6 in.	BA	13185		SU		ICPES	19.8	MG/KG
	21-1380	AAA0915	0-6 in.	BE	13185		SU		ICPES	0.2	MG/KG
	21-1380	AAA0915	0-6 in.	CA	13185		SU		ICPES	1080	MG/KG
	21-1380	AAA0915	0-6 in.	CD	13185		SU		ICPES	0.97	MG/KG
	21-1380	AAA0915	0-6 in.	CR	13185		SU		ICPES	8.7	MG/KG
	21-1380	AAA0915	0-6 in.	CU	13185		SU		ICPES	49.3	MG/KG
	21-1380	AAA0915	0-6 in.	FE	13185		SU		ICPES	4860	MG/KG
	21-1380	AAA0915	0-6 in.	K	13185		SU		ICPES	382	MG/KG
	21-1380	AAA0915	0-6 in.	LI	13185		SU		ICPES	4	MG/KG
	21-1380	AAA0915	0-6 in.	MG	13185		SU		ICPES	396	MG/KG
	21-1380	AAA0915	0-6 in.	MN	13185		SU		ICPES	189	MG/KG
	21-1380	AAA0915	0-6 in.	NA	13185		SU		ICPES	164	MG/KG
	21-1380	AAA0915	0-6 in.	PB	13185		SU		ETVAA	26.2	MG/KG
	21-1380	AAA0915	0-6 in.	SR	13185		SU		ICPES	8.4	MG/KG
	21-1380	AAA0915	0-6 in.	V	13185		SU		ICPES	5.1	MG/KG
	21-1380	AAA0915	0-6 in.	ZN	13185		SU		ICPES	119	MG/KG
	21-1380	AAA0916	0-6 in.	AG	13185		FD		ICPES	1.1	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1380	AAA0916	0-6 in.	AL	13185		FD		ICPES	2280	MG/KG
	21-1380	AAA0916	0-6 in.	AS	13185		FD		ETVAA	0.97	MG/KG
	21-1380	AAA0916	0-6 in.	BA	13185		FD		ICPES	28.8	MG/KG
	21-1380	AAA0916	0-6 in.	BE	13185		FD		ICPES	0.29	MG/KG
	21-1380	AAA0916	0-6 in.	CA	13185		FD		ICPES	1620	MG/KG
	21-1380	AAA0916	0-6 in.	CD	13185		FD		ICPES	1.4	MG/KG
	21-1380	AAA0916	0-6 in.	CO	13185		FD		ICPES	1.5	MG/KG
	21-1380	AAA0916	0-6 in.	CR	13185		FD		ICPES	19.7	MG/KG
	21-1380	AAA0916	0-6 in.	CU	13185		FD		ICPES	72	MG/KG
	21-1380	AAA0916	0-6 in.	FE	13185		FD		ICPES	5640	MG/KG
	21-1380	AAA0916	0-6 in.	K	13185		FD		ICPES	488	MG/KG
	21-1380	AAA0916	0-6 in.	LI	13185		FD		ICPES	4.6	MG/KG
	21-1380	AAA0916	0-6 in.	MG	13185		FD		ICPES	565	MG/KG
	21-1380	AAA0916	0-6 in.	MN	13185		FD		ICPES	191	MG/KG
	21-1380	AAA0916	0-6 in.	MO	13185		FD		ICPES	5.4	MG/KG
	21-1380	AAA0916	0-6 in.	NA	13185		FD		ICPES	275	MG/KG
	21-1380	AAA0916	0-6 in.	NI	13185		FD		ICPES	3.1	MG/KG
	21-1380	AAA0916	0-6 in.	PB	13185		FD		ETVAA	128	MG/KG
	21-1380	AAA0916	0-6 in.	SR	13185		FD		ICPES	13	MG/KG
	21-1380	AAA0916	0-6 in.	V	13185		FD		ICPES	6.2	MG/KG
	21-1380	AAA0916	0-6 in.	ZN	13185		FD		ICPES	207	MG/KG
	21-1380	AAA0917	6-12 in.	AL	13194	17950	NS		ICPES	1100	MG/KG
	21-1380	AAA0917	6-12 in.	AS	13194	17950	NS		ETVAA	0.94	MG/KG
	21-1380	AAA0917	6-12 in.	BA	13194	17950	NS		ICPES	13	MG/KG
	21-1380	AAA0917	6-12 in.	CA	13194	17950	NS		ICPES	704	MG/KG
	21-1380	AAA0917	6-12 in.	CO	13194	17950	NS		ICPES	1.1	MG/KG
	21-1380	AAA0917	6-12 in.	CR	13194	17950	NS		ICPES	7.9	MG/KG
	21-1380	AAA0917	6-12 in.	CU	13194	17950	NS		ICPES	28.3	MG/KG
	21-1380	AAA0917	6-12 in.	FE	13194	17950	NS		ICPES	3460	MG/KG
	21-1380	AAA0917	6-12 in.	K	13194	17950	NS		ICPES	158	MG/KG
	21-1380	AAA0917	6-12 in.	LI	13194	17950	NS		ICPES	2.3	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1380	AAA0917	6-12 in.	MG	13194	17950	NS		ICPES	251	MG/KG
	21-1380	AAA0917	6-12 in.	MN	13194	17950	NS		ICPES	132	MG/KG
	21-1380	AAA0917	6-12 in.	MO	13194	17950	NS		ICPES	6.4	MG/KG
	21-1380	AAA0917	6-12 in.	NA	13194	17950	NS		ICPES	112	MG/KG
	21-1380	AAA0917	6-12 in.	PB	13194	17950	NS		ETVAA	22.5	MG/KG
	21-1380	AAA0917	6-12 in.	SB	13194	17950	NS		ICPES	8.3	MG/KG
	21-1380	AAA0917	6-12 in.	SR	13194	17950	NS		ICPES	5.4	MG/KG
	21-1380	AAA0917	6-12 in.	V	13194	17950	NS		ICPES	3.8	MG/KG
	21-1380	AAA0917	6-12 in.	ZN	13194	17950	NS		ICPES	85.1	MG/KG
	21-1380	AAA0918	12-18 in.	AL	13194	17950	NS		ICPES	1980	MG/KG
	21-1380	AAA0918	12-18 in.	BA	13194	17950	NS		ICPES	13.4	MG/KG
	21-1380	AAA0918	12-18 in.	BE	13194	17950	NS		ICPES	0.41	MG/KG
	21-1380	AAA0918	12-18 in.	CA	13194	17950	NS		ICPES	813	MG/KG
	21-1380	AAA0918	12-18 in.	CO	13194	17950	NS		ICPES	2.4	MG/KG
	21-1380	AAA0918	12-18 in.	CR	13194	17950	NS		ICPES	4.6	MG/KG
	21-1380	AAA0918	12-18 in.	CU	13194	17950	NS		ICPES	13	MG/KG
	21-1380	AAA0918	12-18 in.	FE	13194	17950	NS		ICPES	4560	MG/KG
	21-1380	AAA0918	12-18 in.	K	13194	17950	NS		ICPES	179	MG/KG
	21-1380	AAA0918	12-18 in.	LI	13194	17950	NS		ICPES	4.4	MG/KG
	21-1380	AAA0918	12-18 in.	MG	13194	17950	NS		ICPES	366	MG/KG
	21-1380	AAA0918	12-18 in.	MN	13194	17950	NS		ICPES	174	MG/KG
	21-1380	AAA0918	12-18 in.	NA	13194	17950	NS		ICPES	182	MG/KG
	21-1380	AAA0918	12-18 in.	PB	13194	17950	NS		ETVAA	8.6	MG/KG
	21-1380	AAA0918	12-18 in.	SR	13194	17950	NS		ICPES	6.6	MG/KG
	21-1380	AAA0918	12-18 in.	V	13194	17950	NS		ICPES	3.8	MG/KG
	21-1380	AAA0918	12-18 in.	ZN	13194	17950	NS		ICPES	46.4	MG/KG
	21-1381	AAA0919	0-6 in.	AL	13185		SU		ICPES	3240	MG/KG
	21-1381	AAA0919	0-6 in.	AS	13185		SU		ETVAA	1.2	MG/KG
	21-1381	AAA0919	0-6 in.	BA	13185		SU		ICPES	27.9	MG/KG
	21-1381	AAA0919	0-6 in.	BE	13185		SU		ICPES	0.47	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1381	AAA0919	0-6 in.	CA	13185		SU		ICPES	4970	MG/KG
	21-1381	AAA0919	0-6 in.	CD	13185		SU		ICPES	0.68	MG/KG
	21-1381	AAA0919	0-6 in.	CR	13185		SU		ICPES	2.6	MG/KG
	21-1381	AAA0919	0-6 in.	CU	13185		SU		ICPES	12.5	MG/KG
	21-1381	AAA0919	0-6 in.	FE	13185		SU		ICPES	4320	MG/KG
	21-1381	AAA0919	0-6 in.	K	13185		SU		ICPES	1080	MG/KG
	21-1381	AAA0919	0-6 in.	LI	13185		SU		ICPES	5.5	MG/KG
	21-1381	AAA0919	0-6 in.	MG	13185		SU		ICPES	911	MG/KG
	21-1381	AAA0919	0-6 in.	MN	13185		SU		ICPES	168	MG/KG
	21-1381	AAA0919	0-6 in.	NA	13185		SU		ICPES	90.8	MG/KG
	21-1381	AAA0919	0-6 in.	NI	13185		SU		ICPES	2	MG/KG
	21-1381	AAA0919	0-6 in.	PB	13185		SU		ETVAA	14.5	MG/KG
	21-1381	AAA0919	0-6 in.	SR	13185		SU		ICPES	15.8	MG/KG
	21-1381	AAA0919	0-6 in.	V	13185		SU		ICPES	5.7	MG/KG
	21-1381	AAA0919	0-6 in.	ZN	13185		SU		ICPES	42.6	MG/KG
	21-1381	AAA0920	6-12 in.	AL	13185		NS		ICPES	3540	MG/KG
	21-1381	AAA0920	6-12 in.	AS	13185		NS		ETVAA	1	MG/KG
	21-1381	AAA0920	6-12 in.	BA	13185		NS		ICPES	24.1	MG/KG
	21-1381	AAA0920	6-12 in.	BE	13185		NS		ICPES	0.5	MG/KG
	21-1381	AAA0920	6-12 in.	CA	13185		NS		ICPES	3280	MG/KG
	21-1381	AAA0920	6-12 in.	CD	13185		NS		ICPES	0.69	MG/KG
	21-1381	AAA0920	6-12 in.	CR	13185		NS		ICPES	2.6	MG/KG
	21-1381	AAA0920	6-12 in.	CU	13185		NS		ICPES	6.5	MG/KG
	21-1381	AAA0920	6-12 in.	FE	13185		NS		ICPES	4340	MG/KG
	21-1381	AAA0920	6-12 in.	K	13185		NS		ICPES	1080	MG/KG
	21-1381	AAA0920	6-12 in.	LI	13185		NS		ICPES	5.4	MG/KG
	21-1381	AAA0920	6-12 in.	MG	13185		NS		ICPES	825	MG/KG
	21-1381	AAA0920	6-12 in.	MN	13185		NS		ICPES	159	MG/KG
	21-1381	AAA0920	6-12 in.	NA	13185		NS		ICPES	116	MG/KG
	21-1381	AAA0920	6-12 in.	NI	13185		NS		ICPES	3.8	MG/KG
	21-1381	AAA0920	6-12 in.	PB	13185		NS		ETVAA	7.9	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1381	AAA0920	6-12 in.	SR	13185		NS		ICPES	10.8	MG/KG
	21-1381	AAA0920	6-12 in.	V	13185		NS		ICPES	6	MG/KG
	21-1381	AAA0920	6-12 in.	ZN	13185		NS		ICPES	26.6	MG/KG
	21-1381	AAA0921	12-18 in.	AL	13185		NS		ICPES	3580	MG/KG
	21-1381	AAA0921	12-18 in.	AS	13185		NS		ETVAA	0.98	MG/KG
	21-1381	AAA0921	12-18 in.	BA	13185		NS		ICPES	26.2	MG/KG
	21-1381	AAA0921	12-18 in.	BE	13185		NS		ICPES	0.44	MG/KG
	21-1381	AAA0921	12-18 in.	CA	13185		NS		ICPES	3660	MG/KG
	21-1381	AAA0921	12-18 in.	CD	13185		NS		ICPES	0.81	MG/KG
	21-1381	AAA0921	12-18 in.	CR	13185		NS		ICPES	2	MG/KG
	21-1381	AAA0921	12-18 in.	CU	13185		NS		ICPES	3.8	MG/KG
	21-1381	AAA0921	12-18 in.	FE	13185		NS		ICPES	4180	MG/KG
	21-1381	AAA0921	12-18 in.	K	13185		NS		ICPES	1010	MG/KG
	21-1381	AAA0921	12-18 in.	LI	13185		NS		ICPES	6	MG/KG
	21-1381	AAA0921	12-18 in.	MG	13185		NS		ICPES	856	MG/KG
	21-1381	AAA0921	12-18 in.	MN	13185		NS		ICPES	152	MG/KG
	21-1381	AAA0921	12-18 in.	NA	13185		NS		ICPES	163	MG/KG
	21-1381	AAA0921	12-18 in.	NI	13185		NS		ICPES	2.6	MG/KG
	21-1381	AAA0921	12-18 in.	PB	13185		NS		ETVAA	7.6	MG/KG
	21-1381	AAA0921	12-18 in.	SR	13185		NS		ICPES	10.7	MG/KG
	21-1381	AAA0921	12-18 in.	V	13185		NS		ICPES	5.6	MG/KG
	21-1381	AAA0921	12-18 in.	ZN	13185		NS		ICPES	21.5	MG/KG
	21-1382	AAA0922	0-6 in.	AL	13185		SU		ICPES	3210	MG/KG
	21-1382	AAA0922	0-6 in.	AS	13185		SU		ETVAA	0.97	MG/KG
	21-1382	AAA0922	0-6 in.	BA	13185		SU		ICPES	35.4	MG/KG
	21-1382	AAA0922	0-6 in.	BE	13185		SU		ICPES	0.47	MG/KG
	21-1382	AAA0922	0-6 in.	CA	13185		SU		ICPES	6600	MG/KG
	21-1382	AAA0922	0-6 in.	CD	13185		SU		ICPES	0.79	MG/KG
	21-1382	AAA0922	0-6 in.	CR	13185		SU		ICPES	2.7	MG/KG
	21-1382	AAA0922	0-6 in.	CU	13185		SU		ICPES	13.2	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1382	AAA0922	0-6 in.	FE	13185		SU		ICPES	3230	MG/KG
	21-1382	AAA0922	0-6 in.	K	13185		SU		ICPES	1200	MG/KG
	21-1382	AAA0922	0-6 in.	LI	13185		SU		ICPES	5.5	MG/KG
	21-1382	AAA0922	0-6 in.	MG	13185		SU		ICPES	1030	MG/KG
	21-1382	AAA0922	0-6 in.	MN	13185		SU		ICPES	133	MG/KG
	21-1382	AAA0922	0-6 in.	NA	13185		SU		ICPES	97.8	MG/KG
	21-1382	AAA0922	0-6 in.	NI	13185		SU		ICPES	2.4	MG/KG
	21-1382	AAA0922	0-6 in.	PB	13185		SU		ETVAA	14.5	MG/KG
	21-1382	AAA0922	0-6 in.	SR	13185		SU		ICPES	24.9	MG/KG
	21-1382	AAA0922	0-6 in.	V	13185		SU		ICPES	5.3	MG/KG
	21-1382	AAA0922	0-6 in.	ZN	13185		SU		ICPES	40.6	MG/KG
	21-1382	AAA0923	6-12 in.	AL	13185		NS		ICPES	3570	MG/KG
	21-1382	AAA0923	6-12 in.	AS	13185		NS		ETVAA	1.1	MG/KG
	21-1382	AAA0923	6-12 in.	BA	13185		NS		ICPES	30.2	MG/KG
	21-1382	AAA0923	6-12 in.	BE	13185		NS		ICPES	0.46	MG/KG
	21-1382	AAA0923	6-12 in.	CA	13185		NS		ICPES	4590	MG/KG
	21-1382	AAA0923	6-12 in.	CD	13185		NS		ICPES	0.95	MG/KG
	21-1382	AAA0923	6-12 in.	CO	13185		NS		ICPES	0.95	MG/KG
	21-1382	AAA0923	6-12 in.	CR	13185		NS		ICPES	3.4	MG/KG
	21-1382	AAA0923	6-12 in.	CU	13185		NS		ICPES	9	MG/KG
	21-1382	AAA0923	6-12 in.	FE	13185		NS		ICPES	3920	MG/KG
	21-1382	AAA0923	6-12 in.	K	13185		NS		ICPES	1230	MG/KG
	21-1382	AAA0923	6-12 in.	LI	13185		NS		ICPES	6.6	MG/KG
	21-1382	AAA0923	6-12 in.	MG	13185		NS		ICPES	980	MG/KG
	21-1382	AAA0923	6-12 in.	MN	13185		NS		ICPES	148	MG/KG
	21-1382	AAA0923	6-12 in.	NA	13185		NS		ICPES	97.1	MG/KG
	21-1382	AAA0923	6-12 in.	NI	13185		NS		ICPES	1.8	MG/KG
	21-1382	AAA0923	6-12 in.	PB	13185		NS		ETVAA	10.7	MG/KG
	21-1382	AAA0923	6-12 in.	SR	13185		NS		ICPES	15.7	MG/KG
	21-1382	AAA0923	6-12 in.	V	13185		NS		ICPES	5.2	MG/KG
	21-1382	AAA0923	6-12 in.	ZN	13185		NS		ICPES	32.6	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1335	AAA0622	0-4 in.	AL	13115		SU	R	ICPMS	7142	UG/G
	21-1335	AAA0622	0-4 in.	AL	13115		SU		ICPMS	6840	UG/G
	21-1335	AAA0622	0-4 in.	AS	13115		SU	R	ETVAA	6.6	UG/G
	21-1335	AAA0622	0-4 in.	AS	13115		SU		ETVAA	6.9	UG/G
	21-1335	AAA0622	0-4 in.	BA	13115		SU	R	ICPMS	108.6	UG/G
	21-1335	AAA0622	0-4 in.	BA	13115		SU		ICPMS	106	UG/G
	21-1335	AAA0622	0-4 in.	BE	13115		SU	R	ICPMS	1.8	UG/G
	21-1335	AAA0622	0-4 in.	BE	13115		SU		ICPMS	2.2	UG/G
	21-1335	AAA0622	0-4 in.	CA	13115		SU	R	FAA	499	UG/G
	21-1335	AAA0622	0-4 in.	CA	13115		SU		FAA	530	UG/G
	21-1335	AAA0622	0-4 in.	CO	13115		SU	R	ICPMS	2.9	UG/G
	21-1335	AAA0622	0-4 in.	CO	13115		SU		ICPMS	2.9	UG/G
	21-1335	AAA0622	0-4 in.	CR	13115		SU	R	ICPMS	250	UG/G
	21-1335	AAA0622	0-4 in.	CR	13115		SU		ICPMS	213.2	UG/G
	21-1335	AAA0622	0-4 in.	CU	13115		SU	R	ICPMS	127.2	UG/G
	21-1335	AAA0622	0-4 in.	CU	13115		SU		ICPMS	12	UG/G
	21-1335	AAA0622	0-4 in.	FE	13115		SU	R	FAA	47	MG/G
	21-1335	AAA0622	0-4 in.	FE	13115		SU		FAA	55	MG/G
	21-1335	AAA0622	0-4 in.	K	13115		SU	R	FAA	918	UG/G
	21-1335	AAA0622	0-4 in.	K	13115		SU		FAA	924	UG/G
	21-1335	AAA0622	0-4 in.	LI	13115		SU	R	ICPMS	7.2	UG/G
	21-1335	AAA0622	0-4 in.	LI	13115		SU		ICPMS	7.1	UG/G
	21-1335	AAA0622	0-4 in.	MG	13115		SU	R	ICPMS	1600	UG/G
	21-1335	AAA0622	0-4 in.	MG	13115		SU		ICPMS	1510	UG/G
	21-1335	AAA0622	0-4 in.	MN	13115		SU	R	ICPMS	160.2	UG/G
	21-1335	AAA0622	0-4 in.	MN	13115		SU		ICPMS	154.4	UG/G
	21-1335	AAA0622	0-4 in.	NA	13115		SU	R	FAA	226	UG/G
	21-1335	AAA0622	0-4 in.	NA	13115		SU		FAA	240	UG/G
	21-1335	AAA0622	0-4 in.	NI	13115		SU	R	ICPMS	42.2	UG/G
	21-1335	AAA0622	0-4 in.	NI	13115		SU		ICPMS	37.4	UG/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1335	AAA0622	0-4 in.	PB	13115		SU	R	ICPMS	102.6	UG/G
	21-1335	AAA0622	0-4 in.	PB	13115		SU		ICPMS	87.8	UG/G
	21-1335	AAA0622	0-4 in.	SE	13115	18840	SU	R	ETVAA	0.29	UG/G
	21-1335	AAA0622	0-4 in.	SE	13115		SU	R	ETVAA	0.29	UG/G
	21-1335	AAA0622	0-4 in.	SE	13115	18840	SU		ETVAA	0.35	UG/G
	21-1335	AAA0622	0-4 in.	SE	13115		SU		ETVAA	0.35	UG/G
	21-1335	AAA0622	0-4 in.	SR	13115		SU	R	ICPMS	75	UG/G
	21-1335	AAA0622	0-4 in.	SR	13115		SU		ICPMS	24.5	UG/G
	21-1335	AAA0622	0-4 in.	V	13115		SU	R	ICPMS	16.3	UG/G
	21-1335	AAA0622	0-4 in.	V	13115		SU		ICPMS	14.8	UG/G
	21-1335	AAA0622	0-4 in.	ZN	13115		SU	R	ICPMS	416.6	UG/G
	21-1335	AAA0622	0-4 in.	ZN	13115		SU		ICPMS	42.3	UG/G
	21-1336	AAA0623	0-6 in.	AL	13115		SU		ICPMS	6110	UG/G
	21-1336	AAA0623	0-6 in.	AS	13115		SU		ETVAA	9.1	UG/G
	21-1336	AAA0623	0-6 in.	BA	13115		SU		ICPMS	95	UG/G
	21-1336	AAA0623	0-6 in.	BE	13115		SU		ICPMS	1.7	UG/G
	21-1336	AAA0623	0-6 in.	CA	13115		SU		FAA	259	UG/G
	21-1336	AAA0623	0-6 in.	CR	13115		SU		ICPMS	109.6	UG/G
	21-1336	AAA0623	0-6 in.	CU	13115		SU		ICPMS	21.4	UG/G
	21-1336	AAA0623	0-6 in.	FE	13115		SU		FAA	7	MG/G
	21-1336	AAA0623	0-6 in.	K	13115		SU		FAA	792	UG/G
	21-1336	AAA0623	0-6 in.	LI	13115		SU		ICPMS	6.9	UG/G
	21-1336	AAA0623	0-6 in.	MG	13115		SU		ICPMS	1250	UG/G
	21-1336	AAA0623	0-6 in.	MN	13115		SU		ICPMS	98.6	UG/G
	21-1336	AAA0623	0-6 in.	NA	13115		SU		FAA	249	UG/G
	21-1336	AAA0623	0-6 in.	NI	13115		SU		ICPMS	151.6	UG/G
	21-1336	AAA0623	0-6 in.	PB	13115		SU		ICPMS	90.2	UG/G
	21-1336	AAA0623	0-6 in.	SR	13115		SU		ICPMS	36.2	UG/G
	21-1336	AAA0623	0-6 in.	V	13115		SU		ICPMS	17.6	UG/G
	21-1336	AAA0623	0-6 in.	ZN	13115		SU		ICPMS	305	UG/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1337	AAA0624	0-6 in.	AL	13101		SU	D	ICPES	6760	MG/KG
	21-1337	AAA0624	0-6 in.	AL	13101		SU		ICPES	6780	MG/KG
	21-1337	AAA0624	0-6 in.	AS	13101		SU	D	ETVAA	2.6	MG/KG
	21-1337	AAA0624	0-6 in.	AS	13101		SU		ETVAA	2.5	MG/KG
	21-1337	AAA0624	0-6 in.	BA	13101		SU	D	ICPES	89.2	MG/KG
	21-1337	AAA0624	0-6 in.	BA	13101		SU		ICPES	93.8	MG/KG
	21-1337	AAA0624	0-6 in.	BE	13101		SU	D	ICPES	0.53	MG/KG
	21-1337	AAA0624	0-6 in.	BE	13101		SU		ICPES	0.52	MG/KG
	21-1337	AAA0624	0-6 in.	CA	13101		SU	D	ICPES	1860	MG/KG
	21-1337	AAA0624	0-6 in.	CA	13101		SU		ICPES	1920	MG/KG
	21-1337	AAA0624	0-6 in.	CD	13101		SU	D	ICPES	0.98	MG/KG
	21-1337	AAA0624	0-6 in.	CD	13101		SU		ICPES	0.99	MG/KG
	21-1337	AAA0624	0-6 in.	CO	13101		SU	D	ICPES	4.1	MG/KG
	21-1337	AAA0624	0-6 in.	CO	13101		SU		ICPES	3.9	MG/KG
	21-1337	AAA0624	0-6 in.	CR	13101		SU	D	ICPES	44.5	MG/KG
	21-1337	AAA0624	0-6 in.	CR	13101		SU		ICPES	50.2	MG/KG
	21-1337	AAA0624	0-6 in.	CU	13101		SU	D	ICPES	5.6	MG/KG
	21-1337	AAA0624	0-6 in.	CU	13101		SU		ICPES	6.2	MG/KG
	21-1337	AAA0624	0-6 in.	FE	13101		SU	D	ICPES	7580	MG/KG
	21-1337	AAA0624	0-6 in.	FE	13101		SU		ICPES	7500	MG/KG
	21-1337	AAA0624	0-6 in.	K	13101		SU	D	ICPES	1020	MG/KG
	21-1337	AAA0624	0-6 in.	K	13101		SU		ICPES	1020	MG/KG
	21-1337	AAA0624	0-6 in.	LI	13101		SU	D	ICPES	5.1	MG/KG
	21-1337	AAA0624	0-6 in.	LI	13101		SU		ICPES	5.2	MG/KG
	21-1337	AAA0624	0-6 in.	MG	13101		SU	D	ICPES	1220	MG/KG
	21-1337	AAA0624	0-6 in.	MG	13101		SU		ICPES	1280	MG/KG
	21-1337	AAA0624	0-6 in.	MN	13101		SU	D	ICPES	263	MG/KG
	21-1337	AAA0624	0-6 in.	MN	13101		SU		ICPES	270	MG/KG
	21-1337	AAA0624	0-6 in.	NA	13101		SU	D	ICPES	90	MG/KG
	21-1337	AAA0624	0-6 in.	NA	13101		SU		ICPES	90.3	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1337	AAA0624	0-6 in.	NI	13101		SU	D	ICPES	6	MG/KG
	21-1337	AAA0624	0-6 in.	NI	13101		SU		ICPES	5.4	MG/KG
	21-1337	AAA0624	0-6 in.	PB	13101		SU	D	ETVAA	45.3	MG/KG
	21-1337	AAA0624	0-6 in.	PB	13101		SU		ETVAA	51.9	MG/KG
	21-1337	AAA0624	0-6 in.	SR	13101		SU	D	ICPES	16.2	MG/KG
	21-1337	AAA0624	0-6 in.	SR	13101		SU		ICPES	16.9	MG/KG
	21-1337	AAA0624	0-6 in.	V	13101		SU	D	ICPES	13.1	MG/KG
	21-1337	AAA0624	0-6 in.	V	13101		SU		ICPES	13.4	MG/KG
	21-1337	AAA0624	0-6 in.	ZN	13101		SU	D	ICPES	30.9	MG/KG
	21-1337	AAA0624	0-6 in.	ZN	13101		SU		ICPES	28.8	MG/KG
	21-1338	AAA0625	0-6 in.	AL	13115		SU		ICPMS	7187.3	UG/G
	21-1338	AAA0625	0-6 in.	AS	13115		SU		ETVAA	7.7	UG/G
	21-1338	AAA0625	0-6 in.	BA	13115		SU		ICPMS	111.1	UG/G
	21-1338	AAA0625	0-6 in.	BE	13115		SU		ICPMS	1.7	UG/G
	21-1338	AAA0625	0-6 in.	CA	13115		SU		FAA	559	UG/G
	21-1338	AAA0625	0-6 in.	CO	13115		SU		ICPMS	2.5	UG/G
	21-1338	AAA0625	0-6 in.	CR	13115		SU		ICPMS	328	UG/G
	21-1338	AAA0625	0-6 in.	CU	13115		SU		ICPMS	20	UG/G
	21-1338	AAA0625	0-6 in.	FE	13115		SU		FAA	9.5	MG/G
	21-1338	AAA0625	0-6 in.	K	13115		SU		FAA	980	UG/G
	21-1338	AAA0625	0-6 in.	LI	13115		SU		ICPMS	7.6	UG/G
	21-1338	AAA0625	0-6 in.	MG	13115		SU		ICPMS	1650	UG/G
	21-1338	AAA0625	0-6 in.	MN	13115		SU		ICPMS	171.1	UG/G
	21-1338	AAA0625	0-6 in.	NI	13115		SU		ICPMS	33.7	UG/G
	21-1338	AAA0625	0-6 in.	PB	13115		SU		ICPMS	171.3	UG/G
	21-1338	AAA0625	0-6 in.	SR	13115		SU		ICPMS	23.5	UG/G
	21-1338	AAA0625	0-6 in.	V	13115		SU		ICPMS	14.5	UG/G
	21-1338	AAA0625	0-6 in.	ZN	13115		SU		ICPMS	41	UG/G
	21-1338	AAA0626		CA	13103	17410	FE	D	ICPES	494	UG/L
	21-1338	AAA0626		CA	13103	17410	FE		ICPES	489	UG/L

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1338	AAA0626		FE	13103	17410	FE		ICPES	13.5	UG/L
	21-1338	AAA0626		MG	13103	17410	FE		ICPES	55.9	UG/L
	21-1338	AAA0626		NA	13103	17410	FE	D	ICPES	1040	UG/L
	21-1338	AAA0626		NA	13103	17410	FE		ICPES	1040	UG/L
	21-1338	AAA0626		SR	13103	17410	FE	D	ICPES	5.5	UG/L
	21-1338	AAA0626		SR	13103	17410	FE		ICPES	5.6	UG/L
	21-1338	AAA0626		ZN	13103	17410	FE	D	ICPES	16.9	UG/L
	21-1338	AAA0626		ZN	13103	17410	FE		ICPES	16.7	UG/L
	21-1338	AAA0627		CA	13103	17410	FR		ICPES	3430	UG/L
	21-1338	AAA0627		LI	13103	17410	FR		ICPES	14.7	UG/L
	21-1338	AAA0627		MG	13103	17410	FR		ICPES	778	UG/L
	21-1338	AAA0627		NA	13103	17410	FR		ICPES	4780	UG/L
	21-1338	AAA0627		SR	13103	17410	FR		ICPES	48.6	UG/L
	21-1339	AAA0628	0-3 in.	AL	13101		SU		ICPES	8070	MG/KG
	21-1339	AAA0628	0-3 in.	AS	13101		SU		ETVAA	5.5	MG/KG
	21-1339	AAA0628	0-3 in.	BA	13101		SU		ICPES	125	MG/KG
	21-1339	AAA0628	0-3 in.	BE	13101		SU		ICPES	0.6	MG/KG
	21-1339	AAA0628	0-3 in.	CA	13101		SU		ICPES	2690	MG/KG
	21-1339	AAA0628	0-3 in.	CD	13101		SU		ICPES	1.3	MG/KG
	21-1339	AAA0628	0-3 in.	CO	13101		SU		ICPES	4.3	MG/KG
	21-1339	AAA0628	0-3 in.	CR	13101		SU		ICPES	158	MG/KG
	21-1339	AAA0628	0-3 in.	CU	13101		SU		ICPES	18.5	MG/KG
	21-1339	AAA0628	0-3 in.	FE	13101		SU		ICPES	9290	MG/KG
	21-1339	AAA0628	0-3 in.	K	13101		SU		ICPES	1170	MG/KG
	21-1339	AAA0628	0-3 in.	LI	13101		SU		ICPES	7.5	MG/KG
	21-1339	AAA0628	0-3 in.	MG	13101		SU		ICPES	1590	MG/KG
	21-1339	AAA0628	0-3 in.	MN	13101		SU		ICPES	230	MG/KG
	21-1339	AAA0628	0-3 in.	NA	13101		SU		ICPES	162	MG/KG
	21-1339	AAA0628	0-3 in.	NI	13101		SU		ICPES	10.7	MG/KG
	21-1339	AAA0628	0-3 in.	PB	13101		SU		ETVAA	97.4	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1339	AAA0628	0-3 in.	SR	13101		SU		ICPES	25.6	MG/KG
	21-1339	AAA0628	0-3 in.	V	13101		SU		ICPES	21.9	MG/KG
	21-1339	AAA0628	0-3 in.	ZN	13101		SU		ICPES	34.8	MG/KG
	21-1340	AAA0629	0-6 in.	AL	13101		SU		ICPES	10400	MG/KG
	21-1340	AAA0629	0-6 in.	AS	13101		SU		ETVAA	3.2	MG/KG
	21-1340	AAA0629	0-6 in.	BA	13101		SU		ICPES	117	MG/KG
	21-1340	AAA0629	0-6 in.	BE	13101		SU		ICPES	0.67	MG/KG
	21-1340	AAA0629	0-6 in.	CA	13101		SU		ICPES	2700	MG/KG
	21-1340	AAA0629	0-6 in.	CD	13101		SU		ICPES	1.2	MG/KG
	21-1340	AAA0629	0-6 in.	CO	13101		SU		ICPES	4.6	MG/KG
	21-1340	AAA0629	0-6 in.	CR	13101		SU		ICPES	48.1	MG/KG
	21-1340	AAA0629	0-6 in.	CU	13101		SU		ICPES	9	MG/KG
	21-1340	AAA0629	0-6 in.	FE	13101		SU		ICPES	10400	MG/KG
	21-1340	AAA0629	0-6 in.	K	13101		SU		ICPES	1530	MG/KG
	21-1340	AAA0629	0-6 in.	LI	13101		SU		ICPES	8.5	MG/KG
	21-1340	AAA0629	0-6 in.	MG	13101		SU		ICPES	1820	MG/KG
	21-1340	AAA0629	0-6 in.	MN	13101		SU		ICPES	318	MG/KG
	21-1340	AAA0629	0-6 in.	NA	13101		SU		ICPES	150	MG/KG
	21-1340	AAA0629	0-6 in.	NI	13101		SU		ICPES	10	MG/KG
	21-1340	AAA0629	0-6 in.	PB	13101		SU		ETVAA	36.3	MG/KG
	21-1340	AAA0629	0-6 in.	SR	13101		SU		ICPES	24.9	MG/KG
	21-1340	AAA0629	0-6 in.	V	13101		SU		ICPES	20.5	MG/KG
	21-1340	AAA0629	0-6 in.	ZN	13101		SU		ICPES	45.7	MG/KG
21-024(a)	21-1385	AAA0932	0-6 in.	AL	13194	17950	SU		ICPES	12500	MG/KG
	21-1385	AAA0932	0-6 in.	AS	13194	17950	SU		ETVAA	4.4	MG/KG
	21-1385	AAA0932	0-6 in.	BA	13194	17950	SU		ICPES	165	MG/KG
	21-1385	AAA0932	0-6 in.	BE	13194	17950	SU		ICPES	0.92	MG/KG
	21-1385	AAA0932	0-6 in.	CA	13194	17950	SU		ICPES	5470	MG/KG
	21-1385	AAA0932	0-6 in.	CD	13194	17950	SU		ICPES	2.2	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1385	AAA0932	0-6 in.	CO	13194	17950	SU		ICPES	4.1	MG/KG
	21-1385	AAA0932	0-6 in.	CR	13194	17950	SU		ICPES	10.7	MG/KG
	21-1385	AAA0932	0-6 in.	CU	13194	17950	SU		ICPES	141	MG/KG
	21-1385	AAA0932	0-6 in.	FE	13194	17950	SU		ICPES	15000	MG/KG
	21-1385	AAA0932	0-6 in.	K	13194	17950	SU		ICPES	2780	MG/KG
	21-1385	AAA0932	0-6 in.	LI	13194	17950	SU		ICPES	25	MG/KG
	21-1385	AAA0932	0-6 in.	MG	13194	17950	SU		ICPES	2160	MG/KG
	21-1385	AAA0932	0-6 in.	MN	13194	17950	SU		ICPES	227	MG/KG
	21-1385	AAA0932	0-6 in.	NA	13194	17950	SU		ICPES	3310	MG/KG
	21-1385	AAA0932	0-6 in.	NI	13194	17950	SU		ICPES	7.8	MG/KG
	21-1385	AAA0932	0-6 in.	PB	13194	17950	SU		ETVAA	54.1	MG/KG
	21-1385	AAA0932	0-6 in.	SR	13194	17950	SU		ICPES	57.3	MG/KG
	21-1385	AAA0932	0-6 in.	TL	13194	17950	SU		ETVAA	0.11	MG/KG
	21-1385	AAA0932	0-6 in.	V	13194	17950	SU		ICPES	20.3	MG/KG
	21-1385	AAA0932	0-6 in.	ZN	13194	17950	SU		ICPES	112	MG/KG
	21-1385	AAA0934		CO	13176		FE		ICPES	10.5	UG/L
	21-1385	AAA0936	12-18 in.	AL	13194	17950	NS		ICPES	4080	MG/KG
	21-1385	AAA0936	12-18 in.	AS	13194	17950	NS		ETVAA	1.6	MG/KG
	21-1385	AAA0936	12-18 in.	BA	13194	17950	NS		ICPES	42.9	MG/KG
	21-1385	AAA0936	12-18 in.	BE	13194	17950	NS		ICPES	0.4	MG/KG
	21-1385	AAA0936	12-18 in.	CA	13194	17950	NS		ICPES	1310	MG/KG
	21-1385	AAA0936	12-18 in.	CD	13194	17950	NS		ICPES	0.68	MG/KG
	21-1385	AAA0936	12-18 in.	CO	13194	17950	NS		ICPES	2	MG/KG
	21-1385	AAA0936	12-18 in.	CR	13194	17950	NS		ICPES	4.5	MG/KG
	21-1385	AAA0936	12-18 in.	CU	13194	17950	NS		ICPES	46.7	MG/KG
	21-1385	AAA0936	12-18 in.	FE	13194	17950	NS		ICPES	6730	MG/KG
	21-1385	AAA0936	12-18 in.	K	13194	17950	NS		ICPES	632	MG/KG
	21-1385	AAA0936	12-18 in.	LI	13194	17950	NS		ICPES	8.7	MG/KG
	21-1385	AAA0936	12-18 in.	MG	13194	17950	NS		ICPES	617	MG/KG
	21-1385	AAA0936	12-18 in.	MN	13194	17950	NS		ICPES	230	MG/KG
	21-1385	AAA0936	12-18 in.	NA	13194	17950	NS		ICPES	1360	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1385	AAA0936	12-18 in.	PB	13194	17950	NS		ETVAA	13.3	MG/KG
	21-1385	AAA0936	12-18 in.	SR	13194	17950	NS		ICPES	14.7	MG/KG
	21-1385	AAA0936	12-18 in.	V	13194	17950	NS		ICPES	8.1	MG/KG
	21-1385	AAA0936	12-18 in.	ZN	13194	17950	NS		ICPES	33.1	MG/KG
	21-1385	AAA0939	6-12 in.	AL	13194	17950	NS		ICPES	5470	MG/KG
	21-1385	AAA0939	6-12 in.	AS	13194	17950	NS		ETVAA	1.9	MG/KG
	21-1385	AAA0939	6-12 in.	BA	13194	17950	NS		ICPES	64.7	MG/KG
	21-1385	AAA0939	6-12 in.	BE	13194	17950	NS		ICPES	0.41	MG/KG
	21-1385	AAA0939	6-12 in.	CA	13194	17950	NS		ICPES	1850	MG/KG
	21-1385	AAA0939	6-12 in.	CD	13194	17950	NS		ICPES	0.9	MG/KG
	21-1385	AAA0939	6-12 in.	CO	13194	17950	NS		ICPES	2.3	MG/KG
	21-1385	AAA0939	6-12 in.	CR	13194	17950	NS		ICPES	14.7	MG/KG
	21-1385	AAA0939	6-12 in.	CU	13194	17950	NS		ICPES	60.1	MG/KG
	21-1385	AAA0939	6-12 in.	FE	13194	17950	NS		ICPES	8160	MG/KG
	21-1385	AAA0939	6-12 in.	K	13194	17950	NS		ICPES	993	MG/KG
	21-1385	AAA0939	6-12 in.	LI	13194	17950	NS		ICPES	9.9	MG/KG
	21-1385	AAA0939	6-12 in.	MG	13194	17950	NS		ICPES	838	MG/KG
	21-1385	AAA0939	6-12 in.	MN	13194	17950	NS		ICPES	255	MG/KG
	21-1385	AAA0939	6-12 in.	NA	13194	17950	NS		ICPES	1400	MG/KG
	21-1385	AAA0939	6-12 in.	NI	13194	17950	NS		ICPES	5.6	MG/KG
	21-1385	AAA0939	6-12 in.	PB	13194	17950	NS		ETVAA	26.1	MG/KG
	21-1385	AAA0939	6-12 in.	SR	13194	17950	NS		ICPES	21.2	MG/KG
	21-1385	AAA0939	6-12 in.	V	13194	17950	NS		ICPES	11.1	MG/KG
	21-1385	AAA0939	6-12 in.	ZN	13194	17950	NS		ICPES	46.3	MG/KG
	21-1386	AAA0933	12-18 in.	AL	13194	17950	NS		ICPES	1290	MG/KG
	21-1386	AAA0933	12-18 in.	AS	13194	17950	NS		ETVAA	1.3	MG/KG
	21-1386	AAA0933	12-18 in.	BA	13194	17950	NS		ICPES	30.3	MG/KG
	21-1386	AAA0933	12-18 in.	BE	13194	17950	NS		ICPES	0.2	MG/KG
	21-1386	AAA0933	12-18 in.	CA	13194	17950	NS		ICPES	1370	MG/KG
	21-1386	AAA0933	12-18 in.	CO	13194	17950	NS		ICPES	1.6	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1386	AAA0933	12-18 in.	CR	13194	17950	NS		ICPES	2.1	MG/KG
	21-1386	AAA0933	12-18 in.	CU	13194	17950	NS		ICPES	35.6	MG/KG
	21-1386	AAA0933	12-18 in.	FE	13194	17950	NS		ICPES	4370	MG/KG
	21-1386	AAA0933	12-18 in.	K	13194	17950	NS		ICPES	373	MG/KG
	21-1386	AAA0933	12-18 in.	LI	13194	17950	NS		ICPES	4	MG/KG
	21-1386	AAA0933	12-18 in.	MG	13194	17950	NS		ICPES	262	MG/KG
	21-1386	AAA0933	12-18 in.	MN	13194	17950	NS		ICPES	168	MG/KG
	21-1386	AAA0933	12-18 in.	NA	13194	17950	NS		ICPES	204	MG/KG
	21-1386	AAA0933	12-18 in.	PB	13194	17950	NS		ETVAA	42.8	MG/KG
	21-1386	AAA0933	12-18 in.	SR	13194	17950	NS		ICPES	13.5	MG/KG
	21-1386	AAA0933	12-18 in.	V	13194	17950	NS		ICPES	1.9	MG/KG
	21-1386	AAA0933	12-18 in.	ZN	13194	17950	NS		ICPES	39.2	MG/KG
	21-1386	AAA0937	0-6 in.	AL	13194	17950	SU		ICPES	6540	MG/KG
	21-1386	AAA0937	0-6 in.	AS	13194	17950	SU		ETVAA	6.6	MG/KG
	21-1386	AAA0937	0-6 in.	BA	13194	17950	SU		ICPES	260	MG/KG
	21-1386	AAA0937	0-6 in.	BE	13194	17950	SU		ICPES	0.44	MG/KG
	21-1386	AAA0937	0-6 in.	CA	13194	17950	SU		ICPES	11400	MG/KG
	21-1386	AAA0937	0-6 in.	CD	13194	17950	SU		ICPES	2.3	MG/KG
	21-1386	AAA0937	0-6 in.	CO	13194	17950	SU		ICPES	2.8	MG/KG
	21-1386	AAA0937	0-6 in.	CR	13194	17950	SU		ICPES	27.4	MG/KG
	21-1386	AAA0937	0-6 in.	CU	13194	17950	SU		ICPES	301	MG/KG
	21-1386	AAA0937	0-6 in.	FE	13194	17950	SU		ICPES	13700	MG/KG
	21-1386	AAA0937	0-6 in.	K	13194	17950	SU		ICPES	1570	MG/KG
	21-1386	AAA0937	0-6 in.	LI	13194	17950	SU		ICPES	16.2	MG/KG
	21-1386	AAA0937	0-6 in.	MG	13194	17950	SU		ICPES	1610	MG/KG
	21-1386	AAA0937	0-6 in.	MN	13194	17950	SU		ICPES	211	MG/KG
	21-1386	AAA0937	0-6 in.	NA	13194	17950	SU		ICPES	249	MG/KG
	21-1386	AAA0937	0-6 in.	NI	13194	17950	SU		ICPES	11.1	MG/KG
	21-1386	AAA0937	0-6 in.	PB	13194	17950	SU		ETVAA	204	MG/KG
	21-1386	AAA0937	0-6 in.	SR	13194	17950	SU		ICPES	139	MG/KG
	21-1386	AAA0937	0-6 in.	V	13194	17950	SU		ICPES	10.1	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1386	AAA0937	0-6 in.	ZN	13194	17950	SU		ICPES	268	MG/KG
	21-1386	AAA0938	6-12 in.	AL	13194	17950	NS		ICPES	5340	MG/KG
	21-1386	AAA0938	6-12 in.	AS	13194	17950	NS		ETVAA	3.8	MG/KG
	21-1386	AAA0938	6-12 in.	BA	13194	17950	NS		ICPES	210	MG/KG
	21-1386	AAA0938	6-12 in.	BE	13194	17950	NS		ICPES	0.36	MG/KG
	21-1386	AAA0938	6-12 in.	CA	13194	17950	NS		ICPES	8400	MG/KG
	21-1386	AAA0938	6-12 in.	CD	13194	17950	NS		ICPES	2.3	MG/KG
	21-1386	AAA0938	6-12 in.	CO	13194	17950	NS		ICPES	2.4	MG/KG
	21-1386	AAA0938	6-12 in.	CR	13194	17950	NS		ICPES	26.5	MG/KG
	21-1386	AAA0938	6-12 in.	CU	13194	17950	NS		ICPES	249	MG/KG
	21-1386	AAA0938	6-12 in.	FE	13194	17950	NS		ICPES	13000	MG/KG
	21-1386	AAA0938	6-12 in.	K	13194	17950	NS		ICPES	1100	MG/KG
	21-1386	AAA0938	6-12 in.	LI	13194	17950	NS		ICPES	13	MG/KG
	21-1386	AAA0938	6-12 in.	MG	13194	17950	NS		ICPES	1390	MG/KG
	21-1386	AAA0938	6-12 in.	MN	13194	17950	NS		ICPES	231	MG/KG
	21-1386	AAA0938	6-12 in.	NA	13194	17950	NS		ICPES	305	MG/KG
	21-1386	AAA0938	6-12 in.	NI	13194	17950	NS		ICPES	11	MG/KG
	21-1386	AAA0938	6-12 in.	PB	13194	17950	NS		ETVAA	102	MG/KG
	21-1386	AAA0938	6-12 in.	SR	13194	17950	NS		ICPES	105	MG/KG
	21-1386	AAA0938	6-12 in.	V	13194	17950	NS		ICPES	10.1	MG/KG
	21-1386	AAA0938	6-12 in.	ZN	13194	17950	NS		ICPES	218	MG/KG
	21-1387	AAA0940	0-6 in.	AL	13194	17950	SU		ICPES	1630	MG/KG
	21-1387	AAA0940	0-6 in.	AS	13194	17950	SU		ETVAA	1.7	MG/KG
	21-1387	AAA0940	0-6 in.	BA	13194	17950	SU		ICPES	51.8	MG/KG
	21-1387	AAA0940	0-6 in.	BE	13194	17950	SU		ICPES	0.18	MG/KG
	21-1387	AAA0940	0-6 in.	CA	13194	17950	SU		ICPES	3310	MG/KG
	21-1387	AAA0940	0-6 in.	CD	13194	17950	SU		ICPES	0.64	MG/KG
	21-1387	AAA0940	0-6 in.	CO	13194	17950	SU		ICPES	2.1	MG/KG
	21-1387	AAA0940	0-6 in.	CR	13194	17950	SU		ICPES	4.9	MG/KG
	21-1387	AAA0940	0-6 in.	CU	13194	17950	SU		ICPES	84.3	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1387	AAA0940	0-6 in.	FE	13194	17950	SU		ICPES	6000	MG/KG
	21-1387	AAA0940	0-6 in.	K	13194	17950	SU		ICPES	269	MG/KG
	21-1387	AAA0940	0-6 in.	LI	13194	17950	SU		ICPES	5.6	MG/KG
	21-1387	AAA0940	0-6 in.	MG	13194	17950	SU		ICPES	507	MG/KG
	21-1387	AAA0940	0-6 in.	MN	13194	17950	SU		ICPES	209	MG/KG
	21-1387	AAA0940	0-6 in.	NA	13194	17950	SU		ICPES	98.7	MG/KG
	21-1387	AAA0940	0-6 in.	PB	13194	17950	SU		ETVAA	85.3	MG/KG
	21-1387	AAA0940	0-6 in.	SR	13194	17950	SU		ICPES	37.3	MG/KG
	21-1387	AAA0940	0-6 in.	V	13194	17950	SU		ICPES	3.1	MG/KG
	21-1387	AAA0940	0-6 in.	ZN	13194	17950	SU		ICPES	71.1	MG/KG
	21-1387	AAA0941	6-12 in.	AL	13194	17950	NS		ICPES	482	MG/KG
	21-1387	AAA0941	6-12 in.	AS	13194	17950	NS		ETVAA	0.74	MG/KG
	21-1387	AAA0941	6-12 in.	BA	13194	17950	NS		ICPES	8.1	MG/KG
	21-1387	AAA0941	6-12 in.	BE	13194	17950	NS		ICPES	0.16	MG/KG
	21-1387	AAA0941	6-12 in.	CA	13194	17950	NS		ICPES	558	MG/KG
	21-1387	AAA0941	6-12 in.	CR	13194	17950	NS		ICPES	1.1	MG/KG
	21-1387	AAA0941	6-12 in.	CU	13194	17950	NS		ICPES	9.8	MG/KG
	21-1387	AAA0941	6-12 in.	FE	13194	17950	NS		ICPES	3060	MG/KG
	21-1387	AAA0941	6-12 in.	LI	13194	17950	NS		ICPES	3.2	MG/KG
	21-1387	AAA0941	6-12 in.	MG	13194	17950	NS		ICPES	116	MG/KG
	21-1387	AAA0941	6-12 in.	MN	13194	17950	NS		ICPES	170	MG/KG
	21-1387	AAA0941	6-12 in.	NA	13194	17950	NS		ICPES	91.6	MG/KG
	21-1387	AAA0941	6-12 in.	PB	13194	17950	NS		ETVAA	4.1	MG/KG
	21-1387	AAA0941	6-12 in.	SR	13194	17950	NS		ICPES	4.2	MG/KG
	21-1387	AAA0941	6-12 in.	ZN	13194	17950	NS		ICPES	17.9	MG/KG
	21-1387	AAA0942	12-18 in.	AL	13194	17950	NS		ICPES	637	MG/KG
	21-1387	AAA0942	12-18 in.	AS	13194	17950	NS		ETVAA	0.64	MG/KG
	21-1387	AAA0942	12-18 in.	BA	13194	17950	NS		ICPES	6.2	MG/KG
	21-1387	AAA0942	12-18 in.	BE	13194	17950	NS		ICPES	0.25	MG/KG
	21-1387	AAA0942	12-18 in.	CA	13194	17950	NS		ICPES	407	MG/KG
	21-1387	AAA0942	12-18 in.	CR	13194	17950	NS		ICPES	14.1	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1387	AAA0942	12-18 in.	CU	13194	17950	NS		ICPES	6.1	MG/KG
	21-1387	AAA0942	12-18 in.	FE	13194	17950	NS		ICPES	3350	MG/KG
	21-1387	AAA0942	12-18 in.	LI	13194	17950	NS		ICPES	3.9	MG/KG
	21-1387	AAA0942	12-18 in.	MG	13194	17950	NS		ICPES	161	MG/KG
	21-1387	AAA0942	12-18 in.	MN	13194	17950	NS		ICPES	179	MG/KG
	21-1387	AAA0942	12-18 in.	MO	13194	17950	NS		ICPES	3.4	MG/KG
	21-1387	AAA0942	12-18 in.	NA	13194	17950	NS		ICPES	123	MG/KG
	21-1387	AAA0942	12-18 in.	NI	13194	17950	NS		ICPES	5.2	MG/KG
	21-1387	AAA0942	12-18 in.	PB	13194	17950	NS		ETVAA	3.2	MG/KG
	21-1387	AAA0942	12-18 in.	SR	13194	17950	NS		ICPES	2.3	MG/KG
	21-1387	AAA0942	12-18 in.	V	13194	17950	NS		ICPES	1.5	MG/KG
	21-1387	AAA0942	12-18 in.	ZN	13194	17950	NS		ICPES	17	MG/KG
	21-1388	AAA0943	0-6 in.	AL	13194	17950	SU	D	ICPES	6030	MG/KG
	21-1388	AAA0943	0-6 in.	AL	13194	17950	SU		ICPES	6240	MG/KG
	21-1388	AAA0943	0-6 in.	AS	13194	17950	SU	D	ETVAA	4.5	MG/KG
	21-1388	AAA0943	0-6 in.	AS	13194	17950	SU		ETVAA	4.7	MG/KG
	21-1388	AAA0943	0-6 in.	BA	13194	17950	SU	D	ICPES	195	MG/KG
	21-1388	AAA0943	0-6 in.	BA	13194	17950	SU		ICPES	207	MG/KG
	21-1388	AAA0943	0-6 in.	BE	13194	17950	SU	D	ICPES	0.43	MG/KG
	21-1388	AAA0943	0-6 in.	BE	13194	17950	SU		ICPES	0.46	MG/KG
	21-1388	AAA0943	0-6 in.	CA	13194	17950	SU	D	ICPES	14700	MG/KG
	21-1388	AAA0943	0-6 in.	CA	13194	17950	SU		ICPES	15500	MG/KG
	21-1388	AAA0943	0-6 in.	CD	13194	17950	SU	D	ICPES	2.3	MG/KG
	21-1388	AAA0943	0-6 in.	CD	13194	17950	SU		ICPES	2.7	MG/KG
	21-1388	AAA0943	0-6 in.	CO	13194	17950	SU	D	ICPES	2.4	MG/KG
	21-1388	AAA0943	0-6 in.	CO	13194	17950	SU		ICPES	2.8	MG/KG
	21-1388	AAA0943	0-6 in.	CR	13194	17950	SU	D	ICPES	18	MG/KG
	21-1388	AAA0943	0-6 in.	CR	13194	17950	SU		ICPES	19.2	MG/KG
	21-1388	AAA0943	0-6 in.	CU	13194	17950	SU	D	ICPES	246	MG/KG
	21-1388	AAA0943	0-6 in.	CU	13194	17950	SU		ICPES	265	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1388	AAA0943	0-6 in.	FE	13194	17950	SU	D	ICPES	15900	MG/KG
	21-1388	AAA0943	0-6 in.	FE	13194	17950	SU		ICPES	15900	MG/KG
	21-1388	AAA0943	0-6 in.	K	13194	17950	SU	D	ICPES	1310	MG/KG
	21-1388	AAA0943	0-6 in.	K	13194	17950	SU		ICPES	1450	MG/KG
	21-1388	AAA0943	0-6 in.	LI	13194	17950	SU	D	ICPES	16	MG/KG
	21-1388	AAA0943	0-6 in.	LI	13194	17950	SU		ICPES	15.4	MG/KG
	21-1388	AAA0943	0-6 in.	MG	13194	17950	SU	D	ICPES	1860	MG/KG
	21-1388	AAA0943	0-6 in.	MG	13194	17950	SU		ICPES	1970	MG/KG
	21-1388	AAA0943	0-6 in.	MN	13194	17950	SU	D	ICPES	367	MG/KG
	21-1388	AAA0943	0-6 in.	MN	13194	17950	SU		ICPES	387	MG/KG
	21-1388	AAA0943	0-6 in.	NA	13194	17950	SU	D	ICPES	198	MG/KG
	21-1388	AAA0943	0-6 in.	NA	13194	17950	SU		ICPES	221	MG/KG
	21-1388	AAA0943	0-6 in.	NI	13194	17950	SU	D	ICPES	6.1	MG/KG
	21-1388	AAA0943	0-6 in.	NI	13194	17950	SU		ICPES	8.3	MG/KG
	21-1388	AAA0943	0-6 in.	PB	13194	17950	SU	D	ETVAA	117	MG/KG
	21-1388	AAA0943	0-6 in.	PB	13194	17950	SU		ETVAA	109	MG/KG
	21-1388	AAA0943	0-6 in.	SR	13194	17950	SU	D	ICPES	150	MG/KG
	21-1388	AAA0943	0-6 in.	SR	13194	17950	SU		ICPES	165	MG/KG
	21-1388	AAA0943	0-6 in.	V	13194	17950	SU	D	ICPES	12.4	MG/KG
	21-1388	AAA0943	0-6 in.	V	13194	17950	SU		ICPES	12.6	MG/KG
	21-1388	AAA0943	0-6 in.	ZN	13194	17950	SU	D	ICPES	220	MG/KG
	21-1388	AAA0943	0-6 in.	ZN	13194	17950	SU		ICPES	228	MG/KG
	21-1388	AAA0944	6-12 in.	AL	13194	17950	NS		ICPES	7770	MG/KG
	21-1388	AAA0944	6-12 in.	AS	13194	17950	NS		ETVAA	3.8	MG/KG
	21-1388	AAA0944	6-12 in.	BA	13194	17950	NS		ICPES	102	MG/KG
	21-1388	AAA0944	6-12 in.	BE	13194	17950	NS		ICPES	0.64	MG/KG
	21-1388	AAA0944	6-12 in.	CA	13194	17950	NS		ICPES	5450	MG/KG
	21-1388	AAA0944	6-12 in.	CD	13194	17950	NS		ICPES	1.8	MG/KG
	21-1388	AAA0944	6-12 in.	CO	13194	17950	NS		ICPES	2.9	MG/KG
	21-1388	AAA0944	6-12 in.	CR	13194	17950	NS		ICPES	9.9	MG/KG
	21-1388	AAA0944	6-12 in.	CU	13194	17950	NS		ICPES	152	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1388	AAA0944	6-12 in.	FE	13194	17950	NS		ICPES	12700	MG/KG
	21-1388	AAA0944	6-12 in.	K	13194	17950	NS		ICPES	1360	MG/KG
	21-1388	AAA0944	6-12 in.	LI	13194	17950	NS		ICPES	15.4	MG/KG
	21-1388	AAA0944	6-12 in.	MG	13194	17950	NS		ICPES	1370	MG/KG
	21-1388	AAA0944	6-12 in.	MN	13194	17950	NS		ICPES	269	MG/KG
	21-1388	AAA0944	6-12 in.	NA	13194	17950	NS		ICPES	720	MG/KG
	21-1388	AAA0944	6-12 in.	NI	13194	17950	NS		ICPES	3.6	MG/KG
	21-1388	AAA0944	6-12 in.	PB	13194	17950	NS		ETVAA	64.3	MG/KG
	21-1388	AAA0944	6-12 in.	SR	13194	17950	NS		ICPES	64.2	MG/KG
	21-1388	AAA0944	6-12 in.	V	13194	17950	NS		ICPES	10.7	MG/KG
	21-1388	AAA0944	6-12 in.	ZN	13194	17950	NS		ICPES	97.2	MG/KG
	21-1388	AAA0945	12-18 in.	AL	13194	17950	NS		ICPES	6920	MG/KG
	21-1388	AAA0945	12-18 in.	AS	13194	17950	NS		ETVAA	2.3	MG/KG
	21-1388	AAA0945	12-18 in.	BA	13194	17950	NS		ICPES	56.9	MG/KG
	21-1388	AAA0945	12-18 in.	BE	13194	17950	NS		ICPES	0.7	MG/KG
	21-1388	AAA0945	12-18 in.	CA	13194	17950	NS		ICPES	2840	MG/KG
	21-1388	AAA0945	12-18 in.	CD	13194	17950	NS		ICPES	1.1	MG/KG
	21-1388	AAA0945	12-18 in.	CO	13194	17950	NS		ICPES	2.8	MG/KG
	21-1388	AAA0945	12-18 in.	CR	13194	17950	NS		ICPES	5.8	MG/KG
	21-1388	AAA0945	12-18 in.	CU	13194	17950	NS		ICPES	58.3	MG/KG
	21-1388	AAA0945	12-18 in.	FE	13194	17950	NS		ICPES	8800	MG/KG
	21-1388	AAA0945	12-18 in.	K	13194	17950	NS		ICPES	895	MG/KG
	21-1388	AAA0945	12-18 in.	LI	13194	17950	NS		ICPES	10.9	MG/KG
	21-1388	AAA0945	12-18 in.	MG	13194	17950	NS		ICPES	909	MG/KG
	21-1388	AAA0945	12-18 in.	MN	13194	17950	NS		ICPES	222	MG/KG
	21-1388	AAA0945	12-18 in.	NA	13194	17950	NS		ICPES	1280	MG/KG
	21-1388	AAA0945	12-18 in.	NI	13194	17950	NS		ICPES	2.5	MG/KG
	21-1388	AAA0945	12-18 in.	PB	13194	17950	NS		ETVAA	19.2	MG/KG
	21-1388	AAA0945	12-18 in.	SR	13194	17950	NS		ICPES	28	MG/KG
	21-1388	AAA0945	12-18 in.	V	13194	17950	NS		ICPES	12.6	MG/KG
	21-1388	AAA0945	12-18 in.	ZN	13194	17950	NS		ICPES	47.4	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1389	AAA0946	0-6 in.	AL	13194	17950	SU		ICPES	7450	MG/KG
	21-1389	AAA0946	0-6 in.	AS	13194	17950	SU		ETVAA	7.5	MG/KG
	21-1389	AAA0946	0-6 in.	BA	13194	17950	SU		ICPES	270	MG/KG
	21-1389	AAA0946	0-6 in.	BE	13194	17950	SU		ICPES	0.49	MG/KG
	21-1389	AAA0946	0-6 in.	CA	13194	17950	SU		ICPES	20100	MG/KG
	21-1389	AAA0946	0-6 in.	CD	13194	17950	SU		ICPES	4.5	MG/KG
	21-1389	AAA0946	0-6 in.	CO	13194	17950	SU		ICPES	3.9	MG/KG
	21-1389	AAA0946	0-6 in.	CR	13194	17950	SU		ICPES	31.8	MG/KG
	21-1389	AAA0946	0-6 in.	CU	13194	17950	SU		ICPES	424	MG/KG
	21-1389	AAA0946	0-6 in.	FE	13194	17950	SU		ICPES	24000	MG/KG
	21-1389	AAA0946	0-6 in.	K	13194	17950	SU		ICPES	1380	MG/KG
	21-1389	AAA0946	0-6 in.	LI	13194	17950	SU		ICPES	19.2	MG/KG
	21-1389	AAA0946	0-6 in.	MG	13194	17950	SU		ICPES	2390	MG/KG
	21-1389	AAA0946	0-6 in.	MN	13194	17950	SU		ICPES	433	MG/KG
	21-1389	AAA0946	0-6 in.	NA	13194	17950	SU		ICPES	405	MG/KG
	21-1389	AAA0946	0-6 in.	NI	13194	17950	SU		ICPES	9.4	MG/KG
	21-1389	AAA0946	0-6 in.	PB	13194	17950	SU		ETVAA	183	MG/KG
	21-1389	AAA0946	0-6 in.	SR	13194	17950	SU		ICPES	265	MG/KG
	21-1389	AAA0946	0-6 in.	V	13194	17950	SU		ICPES	13.7	MG/KG
	21-1389	AAA0946	0-6 in.	ZN	13194	17950	SU		ICPES	362	MG/KG
	21-1389	AAA0947	6-12 in.	AL	13194	17950	NS		ICPES	15800	MG/KG
	21-1389	AAA0947	6-12 in.	AS	13194	17950	NS		ETVAA	4.4	MG/KG
	21-1389	AAA0947	6-12 in.	BA	13194	17950	NS		ICPES	158	MG/KG
	21-1389	AAA0947	6-12 in.	BE	13194	17950	NS		ICPES	1.5	MG/KG
	21-1389	AAA0947	6-12 in.	CA	13194	17950	NS		ICPES	5650	MG/KG
	21-1389	AAA0947	6-12 in.	CD	13194	17950	NS		ICPES	2.5	MG/KG
	21-1389	AAA0947	6-12 in.	CO	13194	17950	NS		ICPES	4.2	MG/KG
	21-1389	AAA0947	6-12 in.	CR	13194	17950	NS		ICPES	14.6	MG/KG
	21-1389	AAA0947	6-12 in.	CU	13194	17950	NS		ICPES	174	MG/KG
	21-1389	AAA0947	6-12 in.	FE	13194	17950	NS		ICPES	17100	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1389	AAA0947	6-12 in.	K	13194	17950	NS		ICPES	2360	MG/KG
	21-1389	AAA0947	6-12 in.	LI	13194	17950	NS		ICPES	26.9	MG/KG
	21-1389	AAA0947	6-12 in.	MG	13194	17950	NS		ICPES	2360	MG/KG
	21-1389	AAA0947	6-12 in.	MN	13194	17950	NS		ICPES	292	MG/KG
	21-1389	AAA0947	6-12 in.	NA	13194	17950	NS		ICPES	2810	MG/KG
	21-1389	AAA0947	6-12 in.	NI	13194	17950	NS		ICPES	10.5	MG/KG
	21-1389	AAA0947	6-12 in.	PB	13194	17950	NS		ETVAA	48.6	MG/KG
	21-1389	AAA0947	6-12 in.	SR	13194	17950	NS		ICPES	68.9	MG/KG
	21-1389	AAA0947	6-12 in.	TL	13194	17950	NS		ETVAA	0.14	MG/KG
	21-1389	AAA0947	6-12 in.	V	13194	17950	NS		ICPES	19.4	MG/KG
	21-1389	AAA0947	6-12 in.	ZN	13194	17950	NS		ICPES	103	MG/KG
	21-1389	AAA0948	12-18 in.	AL	13194	17950	NS		ICPES	10200	MG/KG
	21-1389	AAA0948	12-18 in.	AS	13194	17950	NS		ETVAA	2.9	MG/KG
	21-1389	AAA0948	12-18 in.	BA	13194	17950	NS		ICPES	114	MG/KG
	21-1389	AAA0948	12-18 in.	BE	13194	17950	NS		ICPES	0.95	MG/KG
	21-1389	AAA0948	12-18 in.	CA	13194	17950	NS		ICPES	20800	MG/KG
	21-1389	AAA0948	12-18 in.	CD	13194	17950	NS		ICPES	1.4	MG/KG
	21-1389	AAA0948	12-18 in.	CO	13194	17950	NS		ICPES	2.8	MG/KG
	21-1389	AAA0948	12-18 in.	CR	13194	17950	NS		ICPES	8	MG/KG
	21-1389	AAA0948	12-18 in.	CU	13194	17950	NS		ICPES	78.6	MG/KG
	21-1389	AAA0948	12-18 in.	FE	13194	17950	NS		ICPES	10300	MG/KG
	21-1389	AAA0948	12-18 in.	K	13194	17950	NS		ICPES	1350	MG/KG
	21-1389	AAA0948	12-18 in.	LI	13194	17950	NS		ICPES	15.2	MG/KG
	21-1389	AAA0948	12-18 in.	MG	13194	17950	NS		ICPES	1750	MG/KG
	21-1389	AAA0948	12-18 in.	MN	13194	17950	NS		ICPES	239	MG/KG
	21-1389	AAA0948	12-18 in.	NA	13194	17950	NS		ICPES	2050	MG/KG
	21-1389	AAA0948	12-18 in.	NI	13194	17950	NS		ICPES	6.7	MG/KG
	21-1389	AAA0948	12-18 in.	PB	13194	17950	NS		ETVAA	21	MG/KG
	21-1389	AAA0948	12-18 in.	SR	13194	17950	NS		ICPES	48.3	MG/KG
	21-1389	AAA0948	12-18 in.	V	13194	17950	NS		ICPES	13.6	MG/KG
	21-1389	AAA0948	12-18 in.	ZN	13194	17950	NS		ICPES	48.3	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1390	AAA0925	6-12 in.	AL	13211	17716	NS		ICPES	8920	MG/KG
	21-1390	AAA0925	6-12 in.	AS	13211	17716	NS		ETVAA	1.5	MG/KG
	21-1390	AAA0925	6-12 in.	BA	13211	17716	NS		ICPES	47.8	MG/KG
	21-1390	AAA0925	6-12 in.	BE	13211	17716	NS		ICPES	0.65	MG/KG
	21-1390	AAA0925	6-12 in.	CA	13211	17716	NS		ICPES	1550	MG/KG
	21-1390	AAA0925	6-12 in.	CD	13211	17716	NS		ICPES	0.97	MG/KG
	21-1390	AAA0925	6-12 in.	CO	13211	17716	NS		ICPES	1.9	MG/KG
	21-1390	AAA0925	6-12 in.	CR	13211	17716	NS		ICPES	6.5	MG/KG
	21-1390	AAA0925	6-12 in.	CU	13211	17716	NS		ICPES	17	MG/KG
	21-1390	AAA0925	6-12 in.	FE	13211	17716	NS		ICPES	9010	MG/KG
	21-1390	AAA0925	6-12 in.	K	13211	17716	NS		ICPES	954	MG/KG
	21-1390	AAA0925	6-12 in.	LI	13211	17716	NS		ICPES	12.6	MG/KG
	21-1390	AAA0925	6-12 in.	MG	13211	17716	NS		ICPES	1190	MG/KG
	21-1390	AAA0925	6-12 in.	MN	13211	17716	NS		ICPES	232	MG/KG
	21-1390	AAA0925	6-12 in.	NA	13211	17716	NS		ICPES	952	MG/KG
	21-1390	AAA0925	6-12 in.	NI	13211	17716	NS		ICPES	4.3	MG/KG
	21-1390	AAA0925	6-12 in.	PB	13211	17716	NS		ETVAA	13	MG/KG
	21-1390	AAA0925	6-12 in.	SR	13211	17716	NS		ICPES	13.9	MG/KG
	21-1390	AAA0925	6-12 in.	V	13211	17716	NS		ICPES	11.6	MG/KG
	21-1390	AAA0925	6-12 in.	ZN	13211	17716	NS		ICPES	32.4	MG/KG
	21-1390	AAA0929	12-18 in.	AL	13211	17716	NS		ICPES	24100	MG/KG
	21-1390	AAA0929	12-18 in.	AS	13211	17716	NS		ETVAA	2.5	MG/KG
	21-1390	AAA0929	12-18 in.	BA	13211	17716	NS		ICPES	320	MG/KG
	21-1390	AAA0929	12-18 in.	BE	13211	17716	NS		ICPES	1.9	MG/KG
	21-1390	AAA0929	12-18 in.	CA	13211	17716	NS		ICPES	3210	MG/KG
	21-1390	AAA0929	12-18 in.	CD	13211	17716	NS		ICPES	1.1	MG/KG
	21-1390	AAA0929	12-18 in.	CO	13211	17716	NS		ICPES	4.7	MG/KG
	21-1390	AAA0929	12-18 in.	CR	13211	17716	NS		ICPES	131	MG/KG
	21-1390	AAA0929	12-18 in.	CU	13211	17716	NS		ICPES	31	MG/KG
	21-1390	AAA0929	12-18 in.	FE	13211	17716	NS		ICPES	16800	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1390	AAA0929	12-18 in.	K	13211	17716	NS		ICPES	2230	MG/KG
	21-1390	AAA0929	12-18 in.	LI	13211	17716	NS		ICPES	29.7	MG/KG
	21-1390	AAA0929	12-18 in.	MG	13211	17716	NS		ICPES	3150	MG/KG
	21-1390	AAA0929	12-18 in.	MN	13211	17716	NS		ICPES	249	MG/KG
	21-1390	AAA0929	12-18 in.	NA	13211	17716	NS		ICPES	3470	MG/KG
	21-1390	AAA0929	12-18 in.	NI	13211	17716	NS		ICPES	73.6	MG/KG
	21-1390	AAA0929	12-18 in.	PB	13211	17716	NS		ETVAA	15.5	MG/KG
	21-1390	AAA0929	12-18 in.	SR	13211	17716	NS		ICPES	29.5	MG/KG
	21-1390	AAA0929	12-18 in.	TL	13211	17716	NS		ETVAA	0.19	MG/KG
	21-1390	AAA0929	12-18 in.	V	13211	17716	NS		ICPES	26.4	MG/KG
	21-1390	AAA0929	12-18 in.	ZN	13211	17716	NS		ICPES	46.7	MG/KG
	21-1390	AAA0949	0-6 in.	AL	13211	17716	SU		ICPES	7270	MG/KG
	21-1390	AAA0949	0-6 in.	AS	13211	17716	SU		ETVAA	2	MG/KG
	21-1390	AAA0949	0-6 in.	BA	13211	17716	SU		ICPES	87.3	MG/KG
	21-1390	AAA0949	0-6 in.	BE	13211	17716	SU		ICPES	0.48	MG/KG
	21-1390	AAA0949	0-6 in.	CA	13211	17716	SU		ICPES	4320	MG/KG
	21-1390	AAA0949	0-6 in.	CD	13211	17716	SU		ICPES	1.8	MG/KG
	21-1390	AAA0949	0-6 in.	CO	13211	17716	SU		ICPES	2.4	MG/KG
	21-1390	AAA0949	0-6 in.	CR	13211	17716	SU		ICPES	9.7	MG/KG
	21-1390	AAA0949	0-6 in.	CU	13211	17716	SU		ICPES	68.6	MG/KG
	21-1390	AAA0949	0-6 in.	FE	13211	17716	SU		ICPES	10700	MG/KG
	21-1390	AAA0949	0-6 in.	K	13211	17716	SU		ICPES	1560	MG/KG
	21-1390	AAA0949	0-6 in.	LI	13211	17716	SU		ICPES	11.5	MG/KG
	21-1390	AAA0949	0-6 in.	MG	13211	17716	SU		ICPES	1520	MG/KG
	21-1390	AAA0949	0-6 in.	MN	13211	17716	SU		ICPES	365	MG/KG
	21-1390	AAA0949	0-6 in.	NA	13211	17716	SU		ICPES	176	MG/KG
	21-1390	AAA0949	0-6 in.	NI	13211	17716	SU		ICPES	4.8	MG/KG
	21-1390	AAA0949	0-6 in.	PB	13211	17716	SU		ETVAA	41	MG/KG
	21-1390	AAA0949	0-6 in.	SR	13211	17716	SU		ICPES	43.8	MG/KG
	21-1390	AAA0949	0-6 in.	TL	13211	17716	SU		ETVAA	0.17	MG/KG
	21-1390	AAA0949	0-6 in.	V	13211	17716	SU		ICPES	12.1	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1390	AAA0949	0-6 in.	ZN	13211	17716	SU		ICPES	89.6	MG/KG
	21-1390	AAA0950	0-6 in.	AL	13211	17716	FD		ICPES	6170	MG/KG
	21-1390	AAA0950	0-6 in.	AS	13211	17716	FD		ETVAA	2.4	MG/KG
	21-1390	AAA0950	0-6 in.	BA	13211	17716	FD		ICPES	83.1	MG/KG
	21-1390	AAA0950	0-6 in.	BE	13211	17716	FD		ICPES	0.46	MG/KG
	21-1390	AAA0950	0-6 in.	CA	13211	17716	FD		ICPES	4110	MG/KG
	21-1390	AAA0950	0-6 in.	CD	13211	17716	FD		ICPES	1.2	MG/KG
	21-1390	AAA0950	0-6 in.	CO	13211	17716	FD		ICPES	1.9	MG/KG
	21-1390	AAA0950	0-6 in.	CR	13211	17716	FD		ICPES	8.2	MG/KG
	21-1390	AAA0950	0-6 in.	CU	13211	17716	FD		ICPES	62.8	MG/KG
	21-1390	AAA0950	0-6 in.	FE	13211	17716	FD		ICPES	9160	MG/KG
	21-1390	AAA0950	0-6 in.	K	13211	17716	FD		ICPES	1210	MG/KG
	21-1390	AAA0950	0-6 in.	LI	13211	17716	FD		ICPES	9.3	MG/KG
	21-1390	AAA0950	0-6 in.	MG	13211	17716	FD		ICPES	1330	MG/KG
	21-1390	AAA0950	0-6 in.	MN	13211	17716	FD		ICPES	334	MG/KG
	21-1390	AAA0950	0-6 in.	NA	13211	17716	FD		ICPES	184	MG/KG
	21-1390	AAA0950	0-6 in.	NI	13211	17716	FD		ICPES	3.4	MG/KG
	21-1390	AAA0950	0-6 in.	PB	13211	17716	FD		ETVAA	41	MG/KG
	21-1390	AAA0950	0-6 in.	SR	13211	17716	FD		ICPES	41.5	MG/KG
	21-1390	AAA0950	0-6 in.	TL	13211	17716	FD		ETVAA	0.25	MG/KG
	21-1390	AAA0950	0-6 in.	V	13211	17716	FD		ICPES	9.3	MG/KG
	21-1390	AAA0950	0-6 in.	ZN	13211	17716	FD		ICPES	80.7	MG/KG
21-024(b)	21-1377	AAA0896	0-6 in.	AL	13194	17950	SU	D	ICPES	9810	MG/KG
	21-1377	AAA0896	0-6 in.	AL	13194	17950	SU		ICPES	7150	MG/KG
	21-1377	AAA0896	0-6 in.	AS	13194	17950	SU	D	ETVAA	2.5	MG/KG
	21-1377	AAA0896	0-6 in.	AS	13194	17950	SU		ETVAA	2.1	MG/KG
	21-1377	AAA0896	0-6 in.	BA	13194	17950	SU	D	ICPES	84.9	MG/KG
	21-1377	AAA0896	0-6 in.	BA	13194	17950	SU		ICPES	71.8	MG/KG
	21-1377	AAA0896	0-6 in.	BE	13194	17950	SU	D	ICPES	0.94	MG/KG
	21-1377	AAA0896	0-6 in.	BE	13194	17950	SU		ICPES	0.73	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1377	AAA0896	0-6 in.	CA	13194	17950	SU	D	ICPES	5120	MG/KG
	21-1377	AAA0896	0-6 in.	CA	13194	17950	SU		ICPES	4720	MG/KG
	21-1377	AAA0896	0-6 in.	CD	13194	17950	SU	D	ICPES	1.2	MG/KG
	21-1377	AAA0896	0-6 in.	CD	13194	17950	SU		ICPES	0.7	MG/KG
	21-1377	AAA0896	0-6 in.	CO	13194	17950	SU	D	ICPES	3.4	MG/KG
	21-1377	AAA0896	0-6 in.	CO	13194	17950	SU		ICPES	3	MG/KG
	21-1377	AAA0896	0-6 in.	CR	13194	17950	SU	D	ICPES	7.9	MG/KG
	21-1377	AAA0896	0-6 in.	CR	13194	17950	SU		ICPES	6.1	MG/KG
	21-1377	AAA0896	0-6 in.	CU	13194	17950	SU	D	ICPES	9.1	MG/KG
	21-1377	AAA0896	0-6 in.	CU	13194	17950	SU		ICPES	7.6	MG/KG
	21-1377	AAA0896	0-6 in.	FE	13194	17950	SU	D	ICPES	10400	MG/KG
	21-1377	AAA0896	0-6 in.	FE	13194	17950	SU		ICPES	7140	MG/KG
	21-1377	AAA0896	0-6 in.	K	13194	17950	SU	D	ICPES	1400	MG/KG
	21-1377	AAA0896	0-6 in.	K	13194	17950	SU		ICPES	1110	MG/KG
	21-1377	AAA0896	0-6 in.	LI	13194	17950	SU	D	ICPES	9	MG/KG
	21-1377	AAA0896	0-6 in.	LI	13194	17950	SU		ICPES	7.2	MG/KG
	21-1377	AAA0896	0-6 in.	MG	13194	17950	SU	D	ICPES	1540	MG/KG
	21-1377	AAA0896	0-6 in.	MG	13194	17950	SU		ICPES	1170	MG/KG
	21-1377	AAA0896	0-6 in.	MN	13194	17950	SU	D	ICPES	198	MG/KG
	21-1377	AAA0896	0-6 in.	MN	13194	17950	SU		ICPES	177	MG/KG
	21-1377	AAA0896	0-6 in.	NA	13194	17950	SU	D	ICPES	89.6	MG/KG
	21-1377	AAA0896	0-6 in.	NA	13194	17950	SU		ICPES	64.6	MG/KG
	21-1377	AAA0896	0-6 in.	NI	13194	17950	SU	D	ICPES	5.2	MG/KG
	21-1377	AAA0896	0-6 in.	NI	13194	17950	SU		ICPES	3.4	MG/KG
	21-1377	AAA0896	0-6 in.	PB	13194	17950	SU	D	ETVAA	17.2	MG/KG
	21-1377	AAA0896	0-6 in.	PB	13194	17950	SU		ETVAA	15	MG/KG
	21-1377	AAA0896	0-6 in.	SB	13194	17950	SU	D	ICPES	6.7	MG/KG
	21-1377	AAA0896	0-6 in.	SB	13194	17950	SU		ICPES	5.4	MG/KG
	21-1377	AAA0896	0-6 in.	SR	13194	17950	SU	D	ICPES	18	MG/KG
	21-1377	AAA0896	0-6 in.	SR	13194	17950	SU		ICPES	15.5	MG/KG
	21-1377	AAA0896	0-6 in.	TL	13194	17950	SU		ETVAA	0.22	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1377	AAA0896	0-6 in.	V	13194	17950	SU	D	ICPES	13.9	MG/KG
	21-1377	AAA0896	0-6 in.	V	13194	17950	SU		ICPES	11.4	MG/KG
	21-1377	AAA0896	0-6 in.	ZN	13194	17950	SU	D	ICPES	106.4	MG/KG
	21-1377	AAA0896	0-6 in.	ZN	13194	17950	SU		ICPES	96.9	MG/KG
	21-1377	AAA0897	6-12 in.	AL	13194	17950	NS		ICPES	5660	MG/KG
	21-1377	AAA0897	6-12 in.	AS	13194	17950	NS		ETVAA	2	MG/KG
	21-1377	AAA0897	6-12 in.	BA	13194	17950	NS		ICPES	56	MG/KG
	21-1377	AAA0897	6-12 in.	BE	13194	17950	NS		ICPES	0.59	MG/KG
	21-1377	AAA0897	6-12 in.	CA	13194	17950	NS		ICPES	3260	MG/KG
	21-1377	AAA0897	6-12 in.	CD	13194	17950	NS		ICPES	0.89	MG/KG
	21-1377	AAA0897	6-12 in.	CO	13194	17950	NS		ICPES	2.2	MG/KG
	21-1377	AAA0897	6-12 in.	CR	13194	17950	NS		ICPES	4.5	MG/KG
	21-1377	AAA0897	6-12 in.	CU	13194	17950	NS		ICPES	4.6	MG/KG
	21-1377	AAA0897	6-12 in.	FE	13194	17950	NS		ICPES	6560	MG/KG
	21-1377	AAA0897	6-12 in.	K	13194	17950	NS		ICPES	786	MG/KG
	21-1377	AAA0897	6-12 in.	LI	13194	17950	NS		ICPES	5.9	MG/KG
	21-1377	AAA0897	6-12 in.	MG	13194	17950	NS		ICPES	913	MG/KG
	21-1377	AAA0897	6-12 in.	MN	13194	17950	NS		ICPES	213	MG/KG
	21-1377	AAA0897	6-12 in.	NA	13194	17950	NS		ICPES	88.9	MG/KG
	21-1377	AAA0897	6-12 in.	NI	13194	17950	NS		ICPES	2.9	MG/KG
	21-1377	AAA0897	6-12 in.	PB	13194	17950	NS		ETVAA	10.7	MG/KG
	21-1377	AAA0897	6-12 in.	SR	13194	17950	NS		ICPES	12.1	MG/KG
	21-1377	AAA0897	6-12 in.	V	13194	17950	NS		ICPES	9.7	MG/KG
	21-1377	AAA0897	6-12 in.	ZN	13194	17950	NS		ICPES	62.9	MG/KG
	21-1377	AAA0898	12-18 in.	AL	13194	17950	NS		ICPES	1770	MG/KG
	21-1377	AAA0898	12-18 in.	AS	13194	17950	NS		ETVAA	1.1	MG/KG
	21-1377	AAA0898	12-18 in.	BA	13194	17950	NS		ICPES	19.5	MG/KG
	21-1377	AAA0898	12-18 in.	BE	13194	17950	NS		ICPES	0.24	MG/KG
	21-1377	AAA0898	12-18 in.	CA	13194	17950	NS		ICPES	895	MG/KG
	21-1377	AAA0898	12-18 in.	CO	13194	17950	NS		ICPES	1.9	MG/KG
	21-1377	AAA0898	12-18 in.	CR	13194	17950	NS		ICPES	1.4	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1377	AAA0898	12-18 in.	CU	13194	17950	NS		ICPES	1	MG/KG
	21-1377	AAA0898	12-18 in.	FE	13194	17950	NS		ICPES	3340	MG/KG
	21-1377	AAA0898	12-18 in.	K	13194	17950	NS		ICPES	317	MG/KG
	21-1377	AAA0898	12-18 in.	LI	13194	17950	NS		ICPES	2.9	MG/KG
	21-1377	AAA0898	12-18 in.	MG	13194	17950	NS		ICPES	288	MG/KG
	21-1377	AAA0898	12-18 in.	MN	13194	17950	NS		ICPES	183	MG/KG
	21-1377	AAA0898	12-18 in.	NA	13194	17950	NS		ICPES	62.9	MG/KG
	21-1377	AAA0898	12-18 in.	PB	13194	17950	NS		ETVAA	3.4	MG/KG
	21-1377	AAA0898	12-18 in.	SB	13194	17950	NS		ICPES	5.1	MG/KG
	21-1377	AAA0898	12-18 in.	SR	13194	17950	NS		ICPES	3.5	MG/KG
	21-1377	AAA0898	12-18 in.	V	13194	17950	NS		ICPES	3.1	MG/KG
	21-1377	AAA0898	12-18 in.	ZN	13194	17950	NS		ICPES	107	MG/KG
	21-1378	AAA0899	0-6 in.	AL	13194	17950	SU		ICPES	9600	MG/KG
	21-1378	AAA0899	0-6 in.	AS	13194	17950	SU		ETVAA	2.9	MG/KG
	21-1378	AAA0899	0-6 in.	BA	13194	17950	SU		ICPES	86.1	MG/KG
	21-1378	AAA0899	0-6 in.	BE	13194	17950	SU		ICPES	0.94	MG/KG
	21-1378	AAA0899	0-6 in.	CA	13194	17950	SU		ICPES	4850	MG/KG
	21-1378	AAA0899	0-6 in.	CD	13194	17950	SU		ICPES	1	MG/KG
	21-1378	AAA0899	0-6 in.	CO	13194	17950	SU		ICPES	3.8	MG/KG
	21-1378	AAA0899	0-6 in.	CR	13194	17950	SU		ICPES	10.1	MG/KG
	21-1378	AAA0899	0-6 in.	CU	13194	17950	SU		ICPES	11.9	MG/KG
	21-1378	AAA0899	0-6 in.	FE	13194	17950	SU		ICPES	9360	MG/KG
	21-1378	AAA0899	0-6 in.	K	13194	17950	SU		ICPES	1690	MG/KG
	21-1378	AAA0899	0-6 in.	LI	13194	17950	SU		ICPES	9	MG/KG
	21-1378	AAA0899	0-6 in.	MG	13194	17950	SU		ICPES	1470	MG/KG
	21-1378	AAA0899	0-6 in.	MN	13194	17950	SU		ICPES	265	MG/KG
	21-1378	AAA0899	0-6 in.	NA	13194	17950	SU		ICPES	80.4	MG/KG
	21-1378	AAA0899	0-6 in.	NI	13194	17950	SU		ICPES	4.1	MG/KG
	21-1378	AAA0899	0-6 in.	PB	13194	17950	SU		ETVAA	19.5	MG/KG
	21-1378	AAA0899	0-6 in.	SR	13194	17950	SU		ICPES	28.9	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1378	AAA0899	0-6 in.	V	13194	17950	SU		ICPES	18	MG/KG
	21-1378	AAA0899	0-6 in.	ZN	13194	17950	SU		ICPES	81	MG/KG
	21-1378	AAA0900	0-6 in.	AL	13194	17950	FD		ICPES	7400	MG/KG
	21-1378	AAA0900	0-6 in.	AS	13194	17950	FD		ETVAA	1.7	MG/KG
	21-1378	AAA0900	0-6 in.	BA	13194	17950	FD		ICPES	47.3	MG/KG
	21-1378	AAA0900	0-6 in.	BE	13194	17950	FD		ICPES	0.86	MG/KG
	21-1378	AAA0900	0-6 in.	CA	13194	17950	FD		ICPES	1810	MG/KG
	21-1378	AAA0900	0-6 in.	CD	13194	17950	FD		ICPES	0.93	MG/KG
	21-1378	AAA0900	0-6 in.	CO	13194	17950	FD		ICPES	2.2	MG/KG
	21-1378	AAA0900	0-6 in.	CR	13194	17950	FD		ICPES	5.2	MG/KG
	21-1378	AAA0900	0-6 in.	CU	13194	17950	FD		ICPES	4.2	MG/KG
	21-1378	AAA0900	0-6 in.	FE	13194	17950	FD		ICPES	7810	MG/KG
	21-1378	AAA0900	0-6 in.	K	13194	17950	FD		ICPES	1010	MG/KG
	21-1378	AAA0900	0-6 in.	LI	13194	17950	FD		ICPES	8	MG/KG
	21-1378	AAA0900	0-6 in.	MG	13194	17950	FD		ICPES	1050	MG/KG
	21-1378	AAA0900	0-6 in.	MN	13194	17950	FD		ICPES	194	MG/KG
	21-1378	AAA0900	0-6 in.	NA	13194	17950	FD		ICPES	74.1	MG/KG
	21-1378	AAA0900	0-6 in.	NI	13194	17950	FD		ICPES	4.1	MG/KG
	21-1378	AAA0900	0-6 in.	PB	13194	17950	FD		ETVAA	7.3	MG/KG
	21-1378	AAA0900	0-6 in.	SR	13194	17950	FD		ICPES	11	MG/KG
	21-1378	AAA0900	0-6 in.	V	13194	17950	FD		ICPES	10.2	MG/KG
	21-1378	AAA0900	0-6 in.	ZN	13194	17950	FD		ICPES	29.7	MG/KG
	21-1378	AAA0901	12-18 in.	AL	13194	17950	NS		ICPES	1570	MG/KG
	21-1378	AAA0901	12-18 in.	AS	13194	17950	NS		ETVAA	0.7	MG/KG
	21-1378	AAA0901	12-18 in.	BA	13194	17950	NS		ICPES	8.5	MG/KG
	21-1378	AAA0901	12-18 in.	BE	13194	17950	NS		ICPES	0.25	MG/KG
	21-1378	AAA0901	12-18 in.	CA	13194	17950	NS		ICPES	498	MG/KG
	21-1378	AAA0901	12-18 in.	CO	13194	17950	NS		ICPES	0.88	MG/KG
	21-1378	AAA0901	12-18 in.	CR	13194	17950	NS		ICPES	1	MG/KG
	21-1378	AAA0901	12-18 in.	CU	13194	17950	NS		ICPES	0.79	MG/KG
	21-1378	AAA0901	12-18 in.	FE	13194	17950	NS		ICPES	3920	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1378	AAA0901	12-18 in.	K	13194	17950	NS		ICPES	226	MG/KG
	21-1378	AAA0901	12-18 in.	LI	13194	17950	NS		ICPES	3.2	MG/KG
	21-1378	AAA0901	12-18 in.	MG	13194	17950	NS		ICPES	262	MG/KG
	21-1378	AAA0901	12-18 in.	MN	13194	17950	NS		ICPES	167	MG/KG
	21-1378	AAA0901	12-18 in.	NA	13194	17950	NS		ICPES	64.3	MG/KG
	21-1378	AAA0901	12-18 in.	PB	13194	17950	NS		ETVAA	3.4	MG/KG
	21-1378	AAA0901	12-18 in.	SR	13194	17950	NS		ICPES	2.1	MG/KG
	21-1378	AAA0901	12-18 in.	V	13194	17950	NS		ICPES	2.7	MG/KG
	21-1378	AAA0901	12-18 in.	ZN	13194	17950	NS		ICPES	17.6	MG/KG
	21-1378	AAA0902	6-12 in.	AL	13194	17950	NS		ICPES	8560	MG/KG
	21-1378	AAA0902	6-12 in.	AS	13194	17950	NS		ETVAA	2.3	MG/KG
	21-1378	AAA0902	6-12 in.	BA	13194	17950	NS		ICPES	63.2	MG/KG
	21-1378	AAA0902	6-12 in.	BE	13194	17950	NS		ICPES	0.96	MG/KG
	21-1378	AAA0902	6-12 in.	CA	13194	17950	NS		ICPES	2370	MG/KG
	21-1378	AAA0902	6-12 in.	CD	13194	17950	NS		ICPES	1	MG/KG
	21-1378	AAA0902	6-12 in.	CO	13194	17950	NS		ICPES	2.8	MG/KG
	21-1378	AAA0902	6-12 in.	CR	13194	17950	NS		ICPES	12.1	MG/KG
	21-1378	AAA0902	6-12 in.	CU	13194	17950	NS		ICPES	5.2	MG/KG
	21-1378	AAA0902	6-12 in.	FE	13194	17950	NS		ICPES	8640	MG/KG
	21-1378	AAA0902	6-12 in.	K	13194	17950	NS		ICPES	1110	MG/KG
	21-1378	AAA0902	6-12 in.	LI	13194	17950	NS		ICPES	8.8	MG/KG
	21-1378	AAA0902	6-12 in.	MG	13194	17950	NS		ICPES	1220	MG/KG
	21-1378	AAA0902	6-12 in.	MN	13194	17950	NS		ICPES	219	MG/KG
	21-1378	AAA0902	6-12 in.	NA	13194	17950	NS		ICPES	97.6	MG/KG
	21-1378	AAA0902	6-12 in.	NI	13194	17950	NS		ICPES	6.8	MG/KG
	21-1378	AAA0902	6-12 in.	PB	13194	17950	NS		ETVAA	8	MG/KG
	21-1378	AAA0902	6-12 in.	SR	13194	17950	NS		ICPES	15	MG/KG
	21-1378	AAA0902	6-12 in.	V	13194	17950	NS		ICPES	12.1	MG/KG
	21-1378	AAA0902	6-12 in.	ZN	13194	17950	NS		ICPES	39.3	MG/KG
	21-1379	AAA0903	0-6 in.	AL	13194	17950	SU		ICPES	7990	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1379	AAA0903	0-6 in.	AS	13194	17950	SU		ETVAA	3.8	MG/KG
	21-1379	AAA0903	0-6 in.	BA	13194	17950	SU		ICPES	110	MG/KG
	21-1379	AAA0903	0-6 in.	BE	13194	17950	SU		ICPES	0.56	MG/KG
	21-1379	AAA0903	0-6 in.	CA	13194	17950	SU		ICPES	5560	MG/KG
	21-1379	AAA0903	0-6 in.	CD	13194	17950	SU		ICPES	1.6	MG/KG
	21-1379	AAA0903	0-6 in.	CO	13194	17950	SU		ICPES	3.4	MG/KG
	21-1379	AAA0903	0-6 in.	CR	13194	17950	SU		ICPES	27.1	MG/KG
	21-1379	AAA0903	0-6 in.	CU	13194	17950	SU		ICPES	33.2	MG/KG
	21-1379	AAA0903	0-6 in.	FE	13194	17950	SU		ICPES	8030	MG/KG
	21-1379	AAA0903	0-6 in.	K	13194	17950	SU		ICPES	1740	MG/KG
	21-1379	AAA0903	0-6 in.	LI	13194	17950	SU		ICPES	6.9	MG/KG
	21-1379	AAA0903	0-6 in.	MG	13194	17950	SU		ICPES	1330	MG/KG
	21-1379	AAA0903	0-6 in.	MN	13194	17950	SU		ICPES	252	MG/KG
	21-1379	AAA0903	0-6 in.	NA	13194	17950	SU		ICPES	133	MG/KG
	21-1379	AAA0903	0-6 in.	NI	13194	17950	SU		ICPES	7.7	MG/KG
	21-1379	AAA0903	0-6 in.	PB	13194	17950	SU		ETVAA	30	MG/KG
	21-1379	AAA0903	0-6 in.	SE	13194	17950	SU		ETVAA	0.72	MG/KG
	21-1379	AAA0903	0-6 in.	SR	13194	17950	SU		ICPES	42.4	MG/KG
	21-1379	AAA0903	0-6 in.	TL	13194	17950	SU		ETVAA	0.19	MG/KG
	21-1379	AAA0903	0-6 in.	V	13194	17950	SU		ICPES	28.8	MG/KG
	21-1379	AAA0903	0-6 in.	ZN	13194	17950	SU		ICPES	246	MG/KG
	21-1379	AAA0904	6-12 in.	AL	13115		NS		ICPMS	5834.9	UG/G
	21-1379	AAA0904	6-12 in.	AS	13115		NS		ETVAA	3.4	UG/G
	21-1379	AAA0904	6-12 in.	BA	13115		NS		ICPMS	73.4	UG/G
	21-1379	AAA0904	6-12 in.	BE	13115		NS		ICPMS	0.8	UG/G
	21-1379	AAA0904	6-12 in.	CA	13115		NS		FAA	337	UG/G
	21-1379	AAA0904	6-12 in.	CO	13115		NS		ICPMS	2	UG/G
	21-1379	AAA0904	6-12 in.	CR	13115		NS		ICPMS	15.5	UG/G
	21-1379	AAA0904	6-12 in.	CU	13115		NS		ICPMS	20	UG/G
	21-1379	AAA0904	6-12 in.	FE	13115		NS		FAA	6.8	MG/G
	21-1379	AAA0904	6-12 in.	K	13115		NS		FAA	980	UG/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1379	AAA0904	6-12 in.	LI	13115		NS		ICPMS	6.4	UG/G
	21-1379	AAA0904	6-12 in.	MG	13115		NS		ICPMS	1070	UG/G
	21-1379	AAA0904	6-12 in.	MN	13115		NS		ICPMS	122.3	UG/G
	21-1379	AAA0904	6-12 in.	NA	13115		NS		FAA	228	UG/G
	21-1379	AAA0904	6-12 in.	NI	13115		NS		ICPMS	24.3	UG/G
	21-1379	AAA0904	6-12 in.	PB	13115		NS		ICPMS	18.1	UG/G
	21-1379	AAA0904	6-12 in.	SE	13115	18840	NS		ETVAA	0.32	UG/G
	21-1379	AAA0904	6-12 in.	SE	13115		NS		ETVAA	0.32	UG/G
	21-1379	AAA0904	6-12 in.	SR	13115		NS		ICPMS	21.6	UG/G
	21-1379	AAA0904	6-12 in.	V	13115		NS		ICPMS	14.3	UG/G
	21-1379	AAA0904	6-12 in.	ZN	13115		NS		ICPMS	130.9	UG/G
	21-1379	AAA0905	12-18 in.	AL	13194	17950	NS		ICPES	6820	MG/KG
	21-1379	AAA0905	12-18 in.	AS	13194	17950	NS		ETVAA	2.8	MG/KG
	21-1379	AAA0905	12-18 in.	BA	13194	17950	NS		ICPES	59.7	MG/KG
	21-1379	AAA0905	12-18 in.	BE	13194	17950	NS		ICPES	0.44	MG/KG
	21-1379	AAA0905	12-18 in.	CA	13194	17950	NS		ICPES	1880	MG/KG
	21-1379	AAA0905	12-18 in.	CD	13194	17950	NS		ICPES	0.67	MG/KG
	21-1379	AAA0905	12-18 in.	CO	13194	17950	NS		ICPES	4.4	MG/KG
	21-1379	AAA0905	12-18 in.	CR	13194	17950	NS		ICPES	23.6	MG/KG
	21-1379	AAA0905	12-18 in.	CU	13194	17950	NS		ICPES	11.8	MG/KG
	21-1379	AAA0905	12-18 in.	FE	13194	17950	NS		ICPES	8090	MG/KG
	21-1379	AAA0905	12-18 in.	K	13194	17950	NS		ICPES	1020	MG/KG
	21-1379	AAA0905	12-18 in.	LI	13194	17950	NS		ICPES	7.4	MG/KG
	21-1379	AAA0905	12-18 in.	MG	13194	17950	NS		ICPES	931	MG/KG
	21-1379	AAA0905	12-18 in.	MN	13194	17950	NS		ICPES	260	MG/KG
	21-1379	AAA0905	12-18 in.	NA	13194	17950	NS		ICPES	154	MG/KG
	21-1379	AAA0905	12-18 in.	NI	13194	17950	NS		ICPES	8.9	MG/KG
	21-1379	AAA0905	12-18 in.	PB	13194	17950	NS		ETVAA	11.6	MG/KG
	21-1379	AAA0905	12-18 in.	SR	13194	17950	NS		ICPES	19.7	MG/KG
	21-1379	AAA0905	12-18 in.	TL	13194	17950	NS		ETVAA	0.11	MG/KG
	21-1379	AAA0905	12-18 in.	V	13194	17950	NS		ICPES	17.2	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1379	AAA0905	12-18 in.	ZN	13194	17950	NS		ICPES	149	MG/KG
21-024(c)	21-1391	AAA0753	0-6 in.	AG	13174		SU		ICPES	105	MG/KG
	21-1391	AAA0753	0-6 in.	AL	13174		SU		ICPES	3740	MG/KG
	21-1391	AAA0753	0-6 in.	AS	13174		SU		ETVAA	8.2	MG/KG
	21-1391	AAA0753	0-6 in.	BA	13174		SU		ICPES	193	MG/KG
	21-1391	AAA0753	0-6 in.	CA	13174		SU		ICPES	4760	MG/KG
	21-1391	AAA0753	0-6 in.	CD	13174		SU		ICPES	3.8	MG/KG
	21-1391	AAA0753	0-6 in.	CO	13174		SU		ICPES	3.3	MG/KG
	21-1391	AAA0753	0-6 in.	CR	13174		SU		ICPES	415	MG/KG
	21-1391	AAA0753	0-6 in.	CU	13174		SU		ICPES	1520	MG/KG
	21-1391	AAA0753	0-6 in.	FE	13174		SU		ICPES	9760	MG/KG
	21-1391	AAA0753	0-6 in.	K	13174		SU		ICPES	1100	MG/KG
	21-1391	AAA0753	0-6 in.	LI	13174		SU		ICPES	3.8	MG/KG
	21-1391	AAA0753	0-6 in.	MG	13174		SU		ICPES	914	MG/KG
	21-1391	AAA0753	0-6 in.	MN	13174		SU		ICPES	179	MG/KG
	21-1391	AAA0753	0-6 in.	MO	13174		SU		ICPES	20.1	MG/KG
	21-1391	AAA0753	0-6 in.	NA	13174		SU		ICPES	95.8	MG/KG
	21-1391	AAA0753	0-6 in.	NI	13174		SU		ICPES	43.7	MG/KG
	21-1391	AAA0753	0-6 in.	PB	13174		SU		ETVAA	2300	MG/KG
	21-1391	AAA0753	0-6 in.	SB	13174		SU		ICPES	29.5	MG/KG
	21-1391	AAA0753	0-6 in.	SR	13174		SU		ICPES	39.1	MG/KG
	21-1391	AAA0753	0-6 in.	V	13174		SU		ICPES	53.6	MG/KG
	21-1391	AAA0753	0-6 in.	ZN	13174		SU		ICPES	122	MG/KG
	21-1391	AAA0754		CA	13176		FE	D	ICPES	25.2	UG/L
	21-1391	AAA0754		CA	13176		FE		ICPES	33	UG/L
	21-1391	AAA0754		CU	13176		FE		ICPES	8	UG/L
	21-1391	AAA0754		NA	13176		FE	D	ICPES	89.9	UG/L
	21-1391	AAA0754		NA	13176		FE		ICPES	85.5	UG/L
	21-1391	AAA0754		ZN	13176		FE	D	ICPES	3.1	UG/L
	21-1391	AAA0756	6-12 in.	AG	13174		NS		ICPES	14.6	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1391	AAA0756	6-12 in.	AL	13174		NS		ICPES	11100	MG/KG
	21-1391	AAA0756	6-12 in.	AS	13174		NS		ETVAA	10	MG/KG
	21-1391	AAA0756	6-12 in.	BA	13174		NS		ICPES	145	MG/KG
	21-1391	AAA0756	6-12 in.	BE	13174		NS		ICPES	0.57	MG/KG
	21-1391	AAA0756	6-12 in.	CA	13174		NS		ICPES	2050	MG/KG
	21-1391	AAA0756	6-12 in.	CD	13174		NS		ICPES	5.3	MG/KG
	21-1391	AAA0756	6-12 in.	CO	13174		NS		ICPES	2.1	MG/KG
	21-1391	AAA0756	6-12 in.	CR	13174		NS		ICPES	52.7	MG/KG
	21-1391	AAA0756	6-12 in.	CU	13174		NS		ICPES	687	MG/KG
	21-1391	AAA0756	6-12 in.	FE	13174		NS		ICPES	10500	MG/KG
	21-1391	AAA0756	6-12 in.	K	13174		NS		ICPES	1410	MG/KG
	21-1391	AAA0756	6-12 in.	LI	13174		NS		ICPES	12.6	MG/KG
	21-1391	AAA0756	6-12 in.	MG	13174		NS		ICPES	1480	MG/KG
	21-1391	AAA0756	6-12 in.	MN	13174		NS		ICPES	98.7	MG/KG
	21-1391	AAA0756	6-12 in.	MO	13174		NS		ICPES	2.8	MG/KG
	21-1391	AAA0756	6-12 in.	NA	13174		NS		ICPES	122	MG/KG
	21-1391	AAA0756	6-12 in.	NI	13174		NS		ICPES	17	MG/KG
	21-1391	AAA0756	6-12 in.	PB	13174		NS		ETVAA	571	MG/KG
	21-1391	AAA0756	6-12 in.	SR	13174		NS		ICPES	22.1	MG/KG
	21-1391	AAA0756	6-12 in.	V	13174		NS		ICPES	36	MG/KG
	21-1391	AAA0756	6-12 in.	ZN	13174		NS		ICPES	201	MG/KG
	21-1392	AAA0757	0-6 in.	AG	13174	19128	SU		ICPES	3.9	MG/KG
	21-1392	AAA0757	0-6 in.	AL	13174	19128	SU		ICPES	4960	MG/KG
	21-1392	AAA0757	0-6 in.	AS	13174	19128	SU		ETVAA	3.5	MG/KG
	21-1392	AAA0757	0-6 in.	BA	13174	19128	SU		ICPES	93.7	MG/KG
	21-1392	AAA0757	0-6 in.	BE	13174	19128	SU		ICPES	0.29	MG/KG
	21-1392	AAA0757	0-6 in.	CA	13174	19128	SU		ICPES	4330	MG/KG
	21-1392	AAA0757	0-6 in.	CD	13174	19128	SU		ICPES	2.4	MG/KG
	21-1392	AAA0757	0-6 in.	CO	13174	19128	SU		ICPES	1.1	MG/KG
	21-1392	AAA0757	0-6 in.	CR	13174	19128	SU		ICPES	44.4	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1392	AAA0757	0-6 in.	CU	13174	19128	SU		ICPES	120	MG/KG
	21-1392	AAA0757	0-6 in.	FE	13174	19128	SU		ICPES	5850	MG/KG
	21-1392	AAA0757	0-6 in.	K	13174	19128	SU		ICPES	1060	MG/KG
	21-1392	AAA0757	0-6 in.	LI	13174	19128	SU		ICPES	5	MG/KG
	21-1392	AAA0757	0-6 in.	MG	13174	19128	SU		ICPES	959	MG/KG
	21-1392	AAA0757	0-6 in.	MN	13174	19128	SU		ICPES	195	MG/KG
	21-1392	AAA0757	0-6 in.	NA	13174	19128	SU		ICPES	59.6	MG/KG
	21-1392	AAA0757	0-6 in.	NI	13174	19128	SU		ICPES	7.1	MG/KG
	21-1392	AAA0757	0-6 in.	PB	13174	19128	SU		ETVAA	320	MG/KG
	21-1392	AAA0757	0-6 in.	SB	13174	19128	SU		ICPES	7.3	MG/KG
	21-1392	AAA0757	0-6 in.	SR	13174	19128	SU		ICPES	32.1	MG/KG
	21-1392	AAA0757	0-6 in.	V	13174	19128	SU		ICPES	15.3	MG/KG
	21-1392	AAA0757	0-6 in.	ZN	13174	19128	SU		ICPES	142	MG/KG
	21-1392	AAA0758	0-6 in.	AG	13174		FD		ICPES	5.2	MG/KG
	21-1392	AAA0758	0-6 in.	AL	13174		FD		ICPES	5040	MG/KG
	21-1392	AAA0758	0-6 in.	AS	13174		FD		ETVAA	3.3	MG/KG
	21-1392	AAA0758	0-6 in.	BA	13174		FD		ICPES	93.3	MG/KG
	21-1392	AAA0758	0-6 in.	BE	13174		FD		ICPES	0.36	MG/KG
	21-1392	AAA0758	0-6 in.	CA	13174		FD		ICPES	4150	MG/KG
	21-1392	AAA0758	0-6 in.	CD	13174		FD		ICPES	2.3	MG/KG
	21-1392	AAA0758	0-6 in.	CO	13174		FD		ICPES	2	MG/KG
	21-1392	AAA0758	0-6 in.	CR	13174		FD		ICPES	50	MG/KG
	21-1392	AAA0758	0-6 in.	CU	13174		FD		ICPES	122	MG/KG
	21-1392	AAA0758	0-6 in.	FE	13174		FD		ICPES	5900	MG/KG
	21-1392	AAA0758	0-6 in.	K	13174		FD		ICPES	1140	MG/KG
	21-1392	AAA0758	0-6 in.	LI	13174		FD		ICPES	5.5	MG/KG
	21-1392	AAA0758	0-6 in.	MG	13174		FD		ICPES	977	MG/KG
	21-1392	AAA0758	0-6 in.	MN	13174		FD		ICPES	198	MG/KG
	21-1392	AAA0758	0-6 in.	NA	13174		FD		ICPES	60.1	MG/KG
	21-1392	AAA0758	0-6 in.	NI	13174		FD		ICPES	6.7	MG/KG
	21-1392	AAA0758	0-6 in.	PB	13174		FD		ETVAA	312	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1392	AAA0758	0-6 in.	SB	13174		FD		ICPES	7.7	MG/KG
	21-1392	AAA0758	0-6 in.	SR	13174		FD		ICPES	31.4	MG/KG
	21-1392	AAA0758	0-6 in.	V	13174		FD		ICPES	15.3	MG/KG
	21-1392	AAA0758	0-6 in.	ZN	13174		FD		ICPES	139	MG/KG
	21-1392	AAA0759	6-12 in.	AL	13174		NS		ICPES	6020	MG/KG
	21-1392	AAA0759	6-12 in.	AS	13174		NS		ETVAA	1.9	MG/KG
	21-1392	AAA0759	6-12 in.	BA	13174		NS		ICPES	60.8	MG/KG
	21-1392	AAA0759	6-12 in.	BE	13174		NS		ICPES	0.54	MG/KG
	21-1392	AAA0759	6-12 in.	CA	13174		NS		ICPES	1640	MG/KG
	21-1392	AAA0759	6-12 in.	CD	13174		NS		ICPES	1.2	MG/KG
	21-1392	AAA0759	6-12 in.	CO	13174		NS		ICPES	2.4	MG/KG
	21-1392	AAA0759	6-12 in.	CR	13174		NS		ICPES	6.1	MG/KG
	21-1392	AAA0759	6-12 in.	CU	13174		NS		ICPES	11.8	MG/KG
	21-1392	AAA0759	6-12 in.	FE	13174		NS		ICPES	6580	MG/KG
	21-1392	AAA0759	6-12 in.	K	13174		NS		ICPES	1030	MG/KG
	21-1392	AAA0759	6-12 in.	LI	13174		NS		ICPES	7.6	MG/KG
	21-1392	AAA0759	6-12 in.	MG	13174		NS		ICPES	924	MG/KG
	21-1392	AAA0759	6-12 in.	MN	13174		NS		ICPES	257	MG/KG
	21-1392	AAA0759	6-12 in.	NA	13174		NS		ICPES	76.1	MG/KG
	21-1392	AAA0759	6-12 in.	NI	13174		NS		ICPES	3.5	MG/KG
	21-1392	AAA0759	6-12 in.	PB	13174		NS		ETVAA	29.8	MG/KG
	21-1392	AAA0759	6-12 in.	SR	13174		NS		ICPES	15.8	MG/KG
	21-1392	AAA0759	6-12 in.	V	13174		NS		ICPES	9.4	MG/KG
	21-1392	AAA0759	6-12 in.	ZN	13174		NS		ICPES	30.4	MG/KG
21-024(d)	21-1347	AAA0852	0-6 in.	AG	13185		SU	D	ICPES	1.8	MG/KG
	21-1347	AAA0852	0-6 in.	AG	13185		SU		ICPES	2.1	MG/KG
	21-1347	AAA0852	0-6 in.	AL	13185		SU	D	ICPES	7270	MG/KG
	21-1347	AAA0852	0-6 in.	AL	13185		SU		ICPES	7050	MG/KG
	21-1347	AAA0852	0-6 in.	AS	13185		SU	D	ETVAA	2.5	MG/KG
	21-1347	AAA0852	0-6 in.	AS	13185		SU		ETVAA	2.3	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1347	AAA0852	0-6 in.	BA	13185		SU	D	ICPES	95.7	MG/KG
	21-1347	AAA0852	0-6 in.	BA	13185		SU		ICPES	97.4	MG/KG
	21-1347	AAA0852	0-6 in.	BE	13185		SU	D	ICPES	0.65	MG/KG
	21-1347	AAA0852	0-6 in.	BE	13185		SU		ICPES	0.72	MG/KG
	21-1347	AAA0852	0-6 in.	CA	13185		SU	D	ICPES	4110	MG/KG
	21-1347	AAA0852	0-6 in.	CA	13185		SU		ICPES	4180	MG/KG
	21-1347	AAA0852	0-6 in.	CD	13185		SU	D	ICPES	2	MG/KG
	21-1347	AAA0852	0-6 in.	CD	13185		SU		ICPES	1.8	MG/KG
	21-1347	AAA0852	0-6 in.	CO	13185		SU	D	ICPES	3.2	MG/KG
	21-1347	AAA0852	0-6 in.	CO	13185		SU		ICPES	3.4	MG/KG
	21-1347	AAA0852	0-6 in.	CR	13185		SU	D	ICPES	7.1	MG/KG
	21-1347	AAA0852	0-6 in.	CR	13185		SU		ICPES	7.8	MG/KG
	21-1347	AAA0852	0-6 in.	CU	13185		SU	D	ICPES	11.2	MG/KG
	21-1347	AAA0852	0-6 in.	CU	13185		SU		ICPES	12.3	MG/KG
	21-1347	AAA0852	0-6 in.	FE	13185		SU	D	ICPES	8340	MG/KG
	21-1347	AAA0852	0-6 in.	FE	13185		SU		ICPES	8260	MG/KG
	21-1347	AAA0852	0-6 in.	K	13185		SU	D	ICPES	1810	MG/KG
	21-1347	AAA0852	0-6 in.	K	13185		SU		ICPES	1780	MG/KG
	21-1347	AAA0852	0-6 in.	LI	13185		SU	D	ICPES	7.5	MG/KG
	21-1347	AAA0852	0-6 in.	LI	13185		SU		ICPES	6.9	MG/KG
	21-1347	AAA0852	0-6 in.	MG	13185		SU	D	ICPES	1300	MG/KG
	21-1347	AAA0852	0-6 in.	MG	13185		SU		ICPES	1300	MG/KG
	21-1347	AAA0852	0-6 in.	MN	13185		SU	D	ICPES	345	MG/KG
	21-1347	AAA0852	0-6 in.	MN	13185		SU		ICPES	339	MG/KG
	21-1347	AAA0852	0-6 in.	NA	13185		SU	D	ICPES	94.7	MG/KG
	21-1347	AAA0852	0-6 in.	NA	13185		SU		ICPES	99.2	MG/KG
	21-1347	AAA0852	0-6 in.	NI	13185		SU	D	ICPES	6.4	MG/KG
	21-1347	AAA0852	0-6 in.	NI	13185		SU		ICPES	4.7	MG/KG
	21-1347	AAA0852	0-6 in.	PB	13185		SU	D	ETVAA	28.1	MG/KG
	21-1347	AAA0852	0-6 in.	PB	13185		SU		ETVAA	30.8	MG/KG
	21-1347	AAA0852	0-6 in.	SE	13185		SU	D	ETVAA	0.35	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1347	AAA0852	0-6 in.	SR	13185		SU	D	ICPES	27.2	MG/KG
	21-1347	AAA0852	0-6 in.	SR	13185		SU		ICPES	27.5	MG/KG
	21-1347	AAA0852	0-6 in.	V	13185		SU	D	ICPES	15.4	MG/KG
	21-1347	AAA0852	0-6 in.	V	13185		SU		ICPES	14.8	MG/KG
	21-1347	AAA0852	0-6 in.	ZN	13185		SU	D	ICPES	58.9	MG/KG
	21-1347	AAA0852	0-6 in.	ZN	13185		SU		ICPES	57.2	MG/KG
	21-1348	AAA0853	0-6 in.	AG	13185		SU		ICPES	19.4	MG/KG
	21-1348	AAA0853	0-6 in.	AL	13185		SU		ICPES	2160	MG/KG
	21-1348	AAA0853	0-6 in.	AS	13185		SU		ETVAA	0.7	MG/KG
	21-1348	AAA0853	0-6 in.	BA	13185		SU		ICPES	36.9	MG/KG
	21-1348	AAA0853	0-6 in.	BE	13185		SU		ICPES	0.31	MG/KG
	21-1348	AAA0853	0-6 in.	CA	13185		SU		ICPES	866	MG/KG
	21-1348	AAA0853	0-6 in.	CD	13185		SU		ICPES	0.42	MG/KG
	21-1348	AAA0853	0-6 in.	CO	13185		SU		ICPES	0.99	MG/KG
	21-1348	AAA0853	0-6 in.	CR	13185		SU		ICPES	7	MG/KG
	21-1348	AAA0853	0-6 in.	CU	13185		SU		ICPES	10.7	MG/KG
	21-1348	AAA0853	0-6 in.	FE	13185		SU		ICPES	2670	MG/KG
	21-1348	AAA0853	0-6 in.	K	13185		SU		ICPES	422	MG/KG
	21-1348	AAA0853	0-6 in.	LI	13185		SU		ICPES	3.6	MG/KG
	21-1348	AAA0853	0-6 in.	MG	13185		SU		ICPES	412	MG/KG
	21-1348	AAA0853	0-6 in.	MN	13185		SU		ICPES	95	MG/KG
	21-1348	AAA0853	0-6 in.	NA	13185		SU		ICPES	66.2	MG/KG
	21-1348	AAA0853	0-6 in.	NI	13185		SU		ICPES	2.2	MG/KG
	21-1348	AAA0853	0-6 in.	PB	13185		SU		ETVAA	30.1	MG/KG
	21-1348	AAA0853	0-6 in.	SR	13185		SU		ICPES	8.2	MG/KG
	21-1348	AAA0853	0-6 in.	V	13185		SU		ICPES	6.5	MG/KG
	21-1348	AAA0853	0-6 in.	ZN	13185		SU		ICPES	59.7	MG/KG
	21-1348	AAA0854	6-12 in.	AG	13185		NS		ICPES	15.7	MG/KG
	21-1348	AAA0854	6-12 in.	AL	13185		NS		ICPES	1750	MG/KG
	21-1348	AAA0854	6-12 in.	AS	13185		NS		ETVAA	1.1	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1348	AAA0854	6-12 in.	BA	13185		NS		ICPES	26.9	MG/KG
	21-1348	AAA0854	6-12 in.	BE	13185		NS		ICPES	0.29	MG/KG
	21-1348	AAA0854	6-12 in.	CA	13185		NS		ICPES	652	MG/KG
	21-1348	AAA0854	6-12 in.	CD	13185		NS		ICPES	0.41	MG/KG
	21-1348	AAA0854	6-12 in.	CR	13185		NS		ICPES	5.9	MG/KG
	21-1348	AAA0854	6-12 in.	CU	13185		NS		ICPES	8.3	MG/KG
	21-1348	AAA0854	6-12 in.	FE	13185		NS		ICPES	2340	MG/KG
	21-1348	AAA0854	6-12 in.	K	13185		NS		ICPES	346	MG/KG
	21-1348	AAA0854	6-12 in.	LI	13185		NS		ICPES	2.6	MG/KG
	21-1348	AAA0854	6-12 in.	MG	13185		NS		ICPES	288	MG/KG
	21-1348	AAA0854	6-12 in.	MN	13185		NS		ICPES	110	MG/KG
	21-1348	AAA0854	6-12 in.	NA	13185		NS		ICPES	82	MG/KG
	21-1348	AAA0854	6-12 in.	NI	13185		NS		ICPES	2.7	MG/KG
	21-1348	AAA0854	6-12 in.	PB	13185		NS		ETVAA	31.6	MG/KG
	21-1348	AAA0854	6-12 in.	SR	13185		NS		ICPES	5.8	MG/KG
	21-1348	AAA0854	6-12 in.	V	13185		NS		ICPES	5.3	MG/KG
	21-1348	AAA0854	6-12 in.	ZN	13185		NS		ICPES	46.5	MG/KG
	21-1348	AAA0855	12-18 in.	AG	13185		NS		ICPES	3	MG/KG
	21-1348	AAA0855	12-18 in.	AL	13185		NS		ICPES	1540	MG/KG
	21-1348	AAA0855	12-18 in.	BA	13185		NS		ICPES	14.6	MG/KG
	21-1348	AAA0855	12-18 in.	BE	13185		NS		ICPES	0.31	MG/KG
	21-1348	AAA0855	12-18 in.	CA	13185		NS		ICPES	499	MG/KG
	21-1348	AAA0855	12-18 in.	CO	13185		NS		ICPES	0.93	MG/KG
	21-1348	AAA0855	12-18 in.	CR	13185		NS		ICPES	1.6	MG/KG
	21-1348	AAA0855	12-18 in.	CU	13185		NS		ICPES	3.1	MG/KG
	21-1348	AAA0855	12-18 in.	FE	13185		NS		ICPES	1980	MG/KG
	21-1348	AAA0855	12-18 in.	K	13185		NS		ICPES	320	MG/KG
	21-1348	AAA0855	12-18 in.	LI	13185		NS		ICPES	3.8	MG/KG
	21-1348	AAA0855	12-18 in.	MG	13185		NS		ICPES	240	MG/KG
	21-1348	AAA0855	12-18 in.	MN	13185		NS		ICPES	265	MG/KG
	21-1348	AAA0855	12-18 in.	NA	13185		NS		ICPES	78.9	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1348	AAA0855	12-18 in.	NI	13185		NS		ICPES	2	MG/KG
	21-1348	AAA0855	12-18 in.	PB	13185		NS		ETVAA	146	MG/KG
	21-1348	AAA0855	12-18 in.	SR	13185		NS		ICPES	4.9	MG/KG
	21-1348	AAA0855	12-18 in.	V	13185		NS		ICPES	5.8	MG/KG
	21-1348	AAA0855	12-18 in.	ZN	13185		NS		ICPES	33.6	MG/KG
21-024(e)	21-1341	AAA0630	0-6 in.	AL	13101		SU		ICPES	12300	MG/KG
	21-1341	AAA0630	0-6 in.	AS	13101		SU		ETVAA	5.9	MG/KG
	21-1341	AAA0630	0-6 in.	BA	13101		SU		ICPES	263	MG/KG
	21-1341	AAA0630	0-6 in.	BE	13101		SU		ICPES	0.79	MG/KG
	21-1341	AAA0630	0-6 in.	CA	13101		SU		ICPES	2520	MG/KG
	21-1341	AAA0630	0-6 in.	CD	13101		SU		ICPES	7.9	MG/KG
	21-1341	AAA0630	0-6 in.	CO	13101		SU		ICPES	5.7	MG/KG
	21-1341	AAA0630	0-6 in.	CR	13101		SU		ICPES	30.5	MG/KG
	21-1341	AAA0630	0-6 in.	CU	13101		SU		ICPES	37.5	MG/KG
	21-1341	AAA0630	0-6 in.	FE	13101		SU		ICPES	11200	MG/KG
	21-1341	AAA0630	0-6 in.	K	13101		SU		ICPES	1520	MG/KG
	21-1341	AAA0630	0-6 in.	LI	13101		SU		ICPES	9.8	MG/KG
	21-1341	AAA0630	0-6 in.	MG	13101		SU		ICPES	1950	MG/KG
	21-1341	AAA0630	0-6 in.	MN	13101		SU		ICPES	397	MG/KG
	21-1341	AAA0630	0-6 in.	NA	13101		SU		ICPES	94.3	MG/KG
	21-1341	AAA0630	0-6 in.	NI	13101		SU		ICPES	9.8	MG/KG
	21-1341	AAA0630	0-6 in.	PB	13101		SU		ETVAA	75	MG/KG
	21-1341	AAA0630	0-6 in.	SE	13101		SU		ETVAA	0.69	MG/KG
	21-1341	AAA0630	0-6 in.	SR	13101		SU		ICPES	30.2	MG/KG
	21-1341	AAA0630	0-6 in.	V	13101		SU		ICPES	48.3	MG/KG
	21-1341	AAA0630	0-6 in.	ZN	13101		SU		ICPES	262	MG/KG
	21-1341	AAA0631	0-6 in.	AG	13101		FD		ICPES	0.74	MG/KG
	21-1341	AAA0631	0-6 in.	AL	13101		FD		ICPES	12300	MG/KG
	21-1341	AAA0631	0-6 in.	AS	13101		FD		ETVAA	6.6	MG/KG
	21-1341	AAA0631	0-6 in.	BA	13101		FD		ICPES	286	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1341	AAA0631	0-6 in.	BE	13101		FD		ICPES	0.82	MG/KG
	21-1341	AAA0631	0-6 in.	CA	13101		FD		ICPES	2620	MG/KG
	21-1341	AAA0631	0-6 in.	CD	13101		FD		ICPES	8.4	MG/KG
	21-1341	AAA0631	0-6 in.	CO	13101		FD		ICPES	5.5	MG/KG
	21-1341	AAA0631	0-6 in.	CR	13101		FD		ICPES	31	MG/KG
	21-1341	AAA0631	0-6 in.	CU	13101		FD		ICPES	39.4	MG/KG
	21-1341	AAA0631	0-6 in.	FE	13101		FD		ICPES	11300	MG/KG
	21-1341	AAA0631	0-6 in.	K	13101		FD		ICPES	1430	MG/KG
	21-1341	AAA0631	0-6 in.	LI	13101		FD		ICPES	9.6	MG/KG
	21-1341	AAA0631	0-6 in.	MG	13101		FD		ICPES	2080	MG/KG
	21-1341	AAA0631	0-6 in.	MN	13101		FD		ICPES	390	MG/KG
	21-1341	AAA0631	0-6 in.	NA	13101		FD		ICPES	115	MG/KG
	21-1341	AAA0631	0-6 in.	NI	13101		FD		ICPES	10.5	MG/KG
	21-1341	AAA0631	0-6 in.	PB	13101		FD		ETVAA	92.6	MG/KG
	21-1341	AAA0631	0-6 in.	SE	13101		FD		ETVAA	0.81	MG/KG
	21-1341	AAA0631	0-6 in.	SR	13101		FD		ICPES	31.5	MG/KG
	21-1341	AAA0631	0-6 in.	V	13101		FD		ICPES	50.3	MG/KG
	21-1341	AAA0631	0-6 in.	ZN	13101		FD		ICPES	275	MG/KG
	21-1341	AAA0632	6-11 in.	AL	13101		NS		ICPES	9690	MG/KG
	21-1341	AAA0632	6-11 in.	AS	13101		NS		ETVAA	5.6	MG/KG
	21-1341	AAA0632	6-11 in.	BA	13101		NS		ICPES	143	MG/KG
	21-1341	AAA0632	6-11 in.	BE	13101		NS		ICPES	0.75	MG/KG
	21-1341	AAA0632	6-11 in.	CA	13101		NS		ICPES	1920	MG/KG
	21-1341	AAA0632	6-11 in.	CD	13101		NS		ICPES	3.7	MG/KG
	21-1341	AAA0632	6-11 in.	CO	13101		NS		ICPES	4.5	MG/KG
	21-1341	AAA0632	6-11 in.	CR	13101		NS		ICPES	15	MG/KG
	21-1341	AAA0632	6-11 in.	CU	13101		NS		ICPES	14.1	MG/KG
	21-1341	AAA0632	6-11 in.	FE	13101		NS		ICPES	9320	MG/KG
	21-1341	AAA0632	6-11 in.	K	13101		NS		ICPES	1160	MG/KG
	21-1341	AAA0632	6-11 in.	LI	13101		NS		ICPES	8.6	MG/KG
	21-1341	AAA0632	6-11 in.	MG	13101		NS		ICPES	1380	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1341	AAA0632	6-11 in.	MN	13101		NS		ICPES	273	MG/KG
	21-1341	AAA0632	6-11 in.	NA	13101		NS		ICPES	89.7	MG/KG
	21-1341	AAA0632	6-11 in.	NI	13101		NS		ICPES	5.5	MG/KG
	21-1341	AAA0632	6-11 in.	PB	13101		NS		ETVAA	29.4	MG/KG
	21-1341	AAA0632	6-11 in.	SR	13101		NS		ICPES	22.2	MG/KG
	21-1341	AAA0632	6-11 in.	V	13101		NS		ICPES	27.6	MG/KG
	21-1341	AAA0632	6-11 in.	ZN	13101		NS		ICPES	201	MG/KG
	21-1342	AAA0633	0-4 in.	AL	13101		SU		ICPES	12100	MG/KG
	21-1342	AAA0633	0-4 in.	AS	13101		SU		ETVAA	3.8	MG/KG
	21-1342	AAA0633	0-4 in.	BA	13101		SU		ICPES	142	MG/KG
	21-1342	AAA0633	0-4 in.	BE	13101		SU		ICPES	0.7	MG/KG
	21-1342	AAA0633	0-4 in.	CA	13101		SU		ICPES	2720	MG/KG
	21-1342	AAA0633	0-4 in.	CD	13101		SU		ICPES	2.3	MG/KG
	21-1342	AAA0633	0-4 in.	CO	13101		SU		ICPES	3.9	MG/KG
	21-1342	AAA0633	0-4 in.	CR	13101		SU		ICPES	15	MG/KG
	21-1342	AAA0633	0-4 in.	CU	13101		SU		ICPES	13.5	MG/KG
	21-1342	AAA0633	0-4 in.	FE	13101		SU		ICPES	10600	MG/KG
	21-1342	AAA0633	0-4 in.	K	13101		SU		ICPES	1540	MG/KG
	21-1342	AAA0633	0-4 in.	LI	13101		SU		ICPES	10.9	MG/KG
	21-1342	AAA0633	0-4 in.	MG	13101		SU		ICPES	1780	MG/KG
	21-1342	AAA0633	0-4 in.	MN	13101		SU		ICPES	432	MG/KG
	21-1342	AAA0633	0-4 in.	MO	13101		SU		ICPES	3.2	MG/KG
	21-1342	AAA0633	0-4 in.	NA	13101		SU		ICPES	124	MG/KG
	21-1342	AAA0633	0-4 in.	NI	13101		SU		ICPES	5.9	MG/KG
	21-1342	AAA0633	0-4 in.	PB	13101		SU		ETVAA	35.5	MG/KG
	21-1342	AAA0633	0-4 in.	SR	13101		SU		ICPES	26.7	MG/KG
	21-1342	AAA0633	0-4 in.	V	13101		SU		ICPES	26.2	MG/KG
	21-1342	AAA0633	0-4 in.	ZN	13101		SU		ICPES	136	MG/KG
	21-1342	AAA0834		CA	13103	17410	FE		ICPES	651	UG/L
	21-1342	AAA0834		MG	13103	17410	FE		ICPES	68.9	UG/L

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1342	AAA0834		NA	13103	17410	FE		ICPES	995	UG/L
	21-1342	AAA0834		SR	13103	17410	FE		ICPES	9	UG/L
	21-1342	AAA0835		CA	13103	17410	FR		ICPES	397	UG/L
	21-1342	AAA0835		NA	13103	17410	FR		ICPES	675	UG/L
	21-1342	AAA0835		SR	13103	17410	FR		ICPES	5	UG/L
21-024(f)	21-1431	AAA1095	0-6 in.	AL	13245	17915	SU	D	ICPES	11000	MG/KG
	21-1431	AAA1095	0-6 in.	AL	13245	17915	SU		ICPES	14100	MG/KG
	21-1431	AAA1095	0-6 in.	AS	13245	17915	SU	D	ETVAA	3	MG/KG
	21-1431	AAA1095	0-6 in.	AS	13245	17915	SU		ETVAA	2.8	MG/KG
	21-1431	AAA1095	0-6 in.	BA	13245	17915	SU	D	ICPES	96.3	MG/KG
	21-1431	AAA1095	0-6 in.	BA	13245	17915	SU		ICPES	101	MG/KG
	21-1431	AAA1095	0-6 in.	BE	13245	17915	SU	D	ICPES	0.79	MG/KG
	21-1431	AAA1095	0-6 in.	BE	13245	17915	SU		ICPES	0.93	MG/KG
	21-1431	AAA1095	0-6 in.	CA	13245	17915	SU	D	ICPES	3160	MG/KG
	21-1431	AAA1095	0-6 in.	CA	13245	17915	SU		ICPES	3570	MG/KG
	21-1431	AAA1095	0-6 in.	CD	13245	17915	SU	D	ICPES	1.4	MG/KG
	21-1431	AAA1095	0-6 in.	CD	13245	17915	SU		ICPES	1.6	MG/KG
	21-1431	AAA1095	0-6 in.	CO	13245	17915	SU	D	ICPES	3.4	MG/KG
	21-1431	AAA1095	0-6 in.	CO	13245	17915	SU		ICPES	3.3	MG/KG
	21-1431	AAA1095	0-6 in.	CR	13245	17915	SU	D	ICPES	8.6	MG/KG
	21-1431	AAA1095	0-6 in.	CR	13245	17915	SU		ICPES	10	MG/KG
	21-1431	AAA1095	0-6 in.	CU	13245	17915	SU	D	ICPES	6.3	MG/KG
	21-1431	AAA1095	0-6 in.	CU	13245	17915	SU		ICPES	7.7	MG/KG
	21-1431	AAA1095	0-6 in.	FE	13245	17915	SU	D	ICPES	11600	MG/KG
	21-1431	AAA1095	0-6 in.	FE	13245	17915	SU		ICPES	13700	MG/KG
	21-1431	AAA1095	0-6 in.	K	13245	17915	SU	D	ICPES	1460	MG/KG
	21-1431	AAA1095	0-6 in.	K	13245	17915	SU		ICPES	1660	MG/KG
	21-1431	AAA1095	0-6 in.	LI	13245	17915	SU	D	ICPES	8.5	MG/KG
	21-1431	AAA1095	0-6 in.	LI	13245	17915	SU		ICPES	10.2	MG/KG
	21-1431	AAA1095	0-6 in.	MG	13245	17915	SU	D	ICPES	1860	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1431	AAA1095	0-6 in.	MG	13245	17915	SU		ICPES	2330	MG/KG
	21-1431	AAA1095	0-6 in.	MN	13245	17915	SU	D	ICPES	282	MG/KG
	21-1431	AAA1095	0-6 in.	MN	13245	17915	SU		ICPES	273	MG/KG
	21-1431	AAA1095	0-6 in.	NA	13245	17915	SU	D	ICPES	74.4	MG/KG
	21-1431	AAA1095	0-6 in.	NA	13245	17915	SU		ICPES	75.1	MG/KG
	21-1431	AAA1095	0-6 in.	NI	13245	17915	SU	D	ICPES	7	MG/KG
	21-1431	AAA1095	0-6 in.	NI	13245	17915	SU		ICPES	7.7	MG/KG
	21-1431	AAA1095	0-6 in.	PB	13245	17915	SU	D	ETVAA	24.8	MG/KG
	21-1431	AAA1095	0-6 in.	PB	13245	17915	SU		ETVAA	20.8	MG/KG
	21-1431	AAA1095	0-6 in.	SR	13245	17915	SU	D	ICPES	23.2	MG/KG
	21-1431	AAA1095	0-6 in.	SR	13245	17915	SU		ICPES	25.5	MG/KG
	21-1431	AAA1095	0-6 in.	TL	13245	17915	SU	D	ETVAA	0.22	MG/KG
	21-1431	AAA1095	0-6 in.	TL	13245	17915	SU		ETVAA	0.31	MG/KG
	21-1431	AAA1095	0-6 in.	V	13245	17915	SU	D	ICPES	17.5	MG/KG
	21-1431	AAA1095	0-6 in.	V	13245	17915	SU		ICPES	20.5	MG/KG
	21-1431	AAA1095	0-6 in.	ZN	13245	17915	SU	D	ICPES	31.5	MG/KG
	21-1431	AAA1095	0-6 in.	ZN	13245	17915	SU		ICPES	33.7	MG/KG
	21-1431	AAA1096	6-12 in.	AL	13245	17915	NS		ICPES	2310	MG/KG
	21-1431	AAA1096	6-12 in.	AS	13245	17915	NS		ETVAA	2.5	MG/KG
	21-1431	AAA1096	6-12 in.	BA	13245	17915	NS		ICPES	20.7	MG/KG
	21-1431	AAA1096	6-12 in.	BE	13245	17915	NS		ICPES	0.34	MG/KG
	21-1431	AAA1096	6-12 in.	CA	13245	17915	NS		ICPES	580	MG/KG
	21-1431	AAA1096	6-12 in.	CR	13245	17915	NS		ICPES	1.7	MG/KG
	21-1431	AAA1096	6-12 in.	CU	13245	17915	NS		ICPES	2.3	MG/KG
	21-1431	AAA1096	6-12 in.	FE	13245	17915	NS		ICPES	5410	MG/KG
	21-1431	AAA1096	6-12 in.	K	13245	17915	NS		ICPES	228	MG/KG
	21-1431	AAA1096	6-12 in.	LI	13245	17915	NS		ICPES	3.1	MG/KG
	21-1431	AAA1096	6-12 in.	MG	13245	17915	NS		ICPES	462	MG/KG
	21-1431	AAA1096	6-12 in.	MN	13245	17915	NS		ICPES	163	MG/KG
	21-1431	AAA1096	6-12 in.	NA	13245	17915	NS		ICPES	78.7	MG/KG
	21-1431	AAA1096	6-12 in.	NI	13245	17915	NS		ICPES	2.7	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1431	AAA1096	6-12 in.	PB	13245	17915	NS		ETVAA	6.9	MG/KG
	21-1431	AAA1096	6-12 in.	SR	13245	17915	NS		ICPES	4.2	MG/KG
	21-1431	AAA1096	6-12 in.	TL	13245	17915	NS		ETVAA	0.17	MG/KG
	21-1431	AAA1096	6-12 in.	V	13245	17915	NS		ICPES	5.2	MG/KG
	21-1431	AAA1096	6-12 in.	ZN	13245	17915	NS		ICPES	22	MG/KG
	21-1431	AAA1097	12-18 in.	AL	13245	17915	NS		ICPES	1020	MG/KG
	21-1431	AAA1097	12-18 in.	AS	13245	17915	NS		ETVAA	1.4	MG/KG
	21-1431	AAA1097	12-18 in.	BA	13245	17915	NS		ICPES	14.6	MG/KG
	21-1431	AAA1097	12-18 in.	BE	13245	17915	NS		ICPES	0.51	MG/KG
	21-1431	AAA1097	12-18 in.	CA	13245	17915	NS		ICPES	238	MG/KG
	21-1431	AAA1097	12-18 in.	CR	13245	17915	NS		ICPES	2.5	MG/KG
	21-1431	AAA1097	12-18 in.	CU	13245	17915	NS		ICPES	2.3	MG/KG
	21-1431	AAA1097	12-18 in.	FE	13245	17915	NS		ICPES	4150	MG/KG
	21-1431	AAA1097	12-18 in.	LI	13245	17915	NS		ICPES	1.9	MG/KG
	21-1431	AAA1097	12-18 in.	MG	13245	17915	NS		ICPES	236	MG/KG
	21-1431	AAA1097	12-18 in.	MN	13245	17915	NS		ICPES	173	MG/KG
	21-1431	AAA1097	12-18 in.	NA	13245	17915	NS		ICPES	75.1	MG/KG
	21-1431	AAA1097	12-18 in.	NI	13245	17915	NS		ICPES	3.6	MG/KG
	21-1431	AAA1097	12-18 in.	PB	13245	17915	NS		ETVAA	3.5	MG/KG
	21-1431	AAA1097	12-18 in.	SR	13245	17915	NS		ICPES	1.7	MG/KG
	21-1431	AAA1097	12-18 in.	V	13245	17915	NS		ICPES	2.9	MG/KG
	21-1431	AAA1097	12-18 in.	ZN	13245	17915	NS		ICPES	22	MG/KG
	21-1432	AAA1098	0-6 in.	AL	13245	17915	SU		ICPES	4300	MG/KG
	21-1432	AAA1098	0-6 in.	AS	13245	17915	SU		ETVAA	3.5	MG/KG
	21-1432	AAA1098	0-6 in.	BA	13245	17915	SU		ICPES	57.1	MG/KG
	21-1432	AAA1098	0-6 in.	BE	13245	17915	SU		ICPES	0.27	MG/KG
	21-1432	AAA1098	0-6 in.	CA	13245	17915	SU		ICPES	928	MG/KG
	21-1432	AAA1098	0-6 in.	CD	13245	17915	SU		ICPES	0.74	MG/KG
	21-1432	AAA1098	0-6 in.	CO	13245	17915	SU		ICPES	1.2	MG/KG
	21-1432	AAA1098	0-6 in.	CR	13245	17915	SU		ICPES	20.4	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1432	AAA1098	0-6 in.	CU	13245	17915	SU		ICPES	5.7	MG/KG
	21-1432	AAA1098	0-6 in.	FE	13245	17915	SU		ICPES	6900	MG/KG
	21-1432	AAA1098	0-6 in.	K	13245	17915	SU		ICPES	703	MG/KG
	21-1432	AAA1098	0-6 in.	LI	13245	17915	SU		ICPES	3.3	MG/KG
	21-1432	AAA1098	0-6 in.	MG	13245	17915	SU		ICPES	800	MG/KG
	21-1432	AAA1098	0-6 in.	MN	13245	17915	SU		ICPES	113	MG/KG
	21-1432	AAA1098	0-6 in.	MO	13245	17915	SU		ICPES	10.6	MG/KG
	21-1432	AAA1098	0-6 in.	NA	13245	17915	SU		ICPES	75.3	MG/KG
	21-1432	AAA1098	0-6 in.	NI	13245	17915	SU		ICPES	3.2	MG/KG
	21-1432	AAA1098	0-6 in.	PB	13245	17915	SU		ETVAA	32.3	MG/KG
	21-1432	AAA1098	0-6 in.	SR	13245	17915	SU		ICPES	8.6	MG/KG
	21-1432	AAA1098	0-6 in.	TL	13245	17915	SU		ETVAA	0.26	MG/KG
	21-1432	AAA1098	0-6 in.	V	13245	17915	SU		ICPES	9.1	MG/KG
	21-1432	AAA1098	0-6 in.	ZN	13245	17915	SU		ICPES	23.4	MG/KG
	21-1432	AAA1099	0-6 in.	AL	13245	17915	FD		ICPES	4750	MG/KG
	21-1432	AAA1099	0-6 in.	AS	13245	17915	FD		ETVAA	2.3	MG/KG
	21-1432	AAA1099	0-6 in.	BA	13245	17915	FD		ICPES	56.2	MG/KG
	21-1432	AAA1099	0-6 in.	BE	13245	17915	FD		ICPES	0.28	MG/KG
	21-1432	AAA1099	0-6 in.	CA	13245	17915	FD		ICPES	922	MG/KG
	21-1432	AAA1099	0-6 in.	CD	13245	17915	FD		ICPES	0.78	MG/KG
	21-1432	AAA1099	0-6 in.	CR	13245	17915	FD		ICPES	21	MG/KG
	21-1432	AAA1099	0-6 in.	CU	13245	17915	FD		ICPES	6.3	MG/KG
	21-1432	AAA1099	0-6 in.	FE	13245	17915	FD		ICPES	7360	MG/KG
	21-1432	AAA1099	0-6 in.	K	13245	17915	FD		ICPES	719	MG/KG
	21-1432	AAA1099	0-6 in.	LI	13245	17915	FD		ICPES	3.9	MG/KG
	21-1432	AAA1099	0-6 in.	MG	13245	17915	FD		ICPES	844	MG/KG
	21-1432	AAA1099	0-6 in.	MN	13245	17915	FD		ICPES	121	MG/KG
	21-1432	AAA1099	0-6 in.	MO	13245	17915	FD		ICPES	9.4	MG/KG
	21-1432	AAA1099	0-6 in.	NA	13245	17915	FD		ICPES	64.6	MG/KG
	21-1432	AAA1099	0-6 in.	NI	13245	17915	FD		ICPES	3.1	MG/KG
	21-1432	AAA1099	0-6 in.	PB	13245	17915	FD		ETVAA	22.7	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1432	AAA1099	0-6 in.	SR	13245	17915	FD		ICPES	8.8	MG/KG
	21-1432	AAA1099	0-6 in.	V	13245	17915	FD		ICPES	9.4	MG/KG
	21-1432	AAA1099	0-6 in.	ZN	13245	17915	FD		ICPES	28.3	MG/KG
	21-1432	AAA1100	6-12 in.	AL	13245	17915	NS		ICPES	7020	MG/KG
	21-1432	AAA1100	6-12 in.	AS	13245	17915	NS		ETVAA	3.3	MG/KG
	21-1432	AAA1100	6-12 in.	BA	13245	17915	NS		ICPES	36.5	MG/KG
	21-1432	AAA1100	6-12 in.	BE	13245	17915	NS		ICPES	0.29	MG/KG
	21-1432	AAA1100	6-12 in.	CA	13245	17915	NS		ICPES	272	MG/KG
	21-1432	AAA1100	6-12 in.	CD	13245	17915	NS		ICPES	0.93	MG/KG
	21-1432	AAA1100	6-12 in.	CR	13245	17915	NS		ICPES	15.3	MG/KG
	21-1432	AAA1100	6-12 in.	CU	13245	17915	NS		ICPES	3.3	MG/KG
	21-1432	AAA1100	6-12 in.	FE	13245	17915	NS		ICPES	8570	MG/KG
	21-1432	AAA1100	6-12 in.	K	13245	17915	NS		ICPES	622	MG/KG
	21-1432	AAA1100	6-12 in.	LI	13245	17915	NS		ICPES	4.9	MG/KG
	21-1432	AAA1100	6-12 in.	MG	13245	17915	NS		ICPES	739	MG/KG
	21-1432	AAA1100	6-12 in.	MN	13245	17915	NS		ICPES	99.4	MG/KG
	21-1432	AAA1100	6-12 in.	NA	13245	17915	NS		ICPES	76.4	MG/KG
	21-1432	AAA1100	6-12 in.	NI	13245	17915	NS		ICPES	3.8	MG/KG
	21-1432	AAA1100	6-12 in.	PB	13245	17915	NS		ETVAA	7.2	MG/KG
	21-1432	AAA1100	6-12 in.	SR	13245	17915	NS		ICPES	3.8	MG/KG
	21-1432	AAA1100	6-12 in.	TL	13245	17915	NS		ETVAA	0.21	MG/KG
	21-1432	AAA1100	6-12 in.	V	13245	17915	NS		ICPES	12	MG/KG
	21-1432	AAA1100	6-12 in.	ZN	13245	17915	NS		ICPES	26.5	MG/KG
	21-1432	AAA1101	12-18 in.	AL	13245	17915	NS		ICPES	2760	MG/KG
	21-1432	AAA1101	12-18 in.	AS	13245	17915	NS		ETVAA	2.2	MG/KG
	21-1432	AAA1101	12-18 in.	BA	13245	17915	NS		ICPES	16.2	MG/KG
	21-1432	AAA1101	12-18 in.	BE	13245	17915	NS		ICPES	0.18	MG/KG
	21-1432	AAA1101	12-18 in.	CA	13245	17915	NS		ICPES	167	MG/KG
	21-1432	AAA1101	12-18 in.	CR	13245	17915	NS		ICPES	5.9	MG/KG
	21-1432	AAA1101	12-18 in.	CU	13245	17915	NS		ICPES	1.8	MG/KG
	21-1432	AAA1101	12-18 in.	FE	13245	17915	NS		ICPES	5350	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1432	AAA1101	12-18 in.	K	13245	17915	NS		ICPES	228	MG/KG
	21-1432	AAA1101	12-18 in.	LI	13245	17915	NS		ICPES	2.5	MG/KG
	21-1432	AAA1101	12-18 in.	MG	13245	17915	NS		ICPES	317	MG/KG
	21-1432	AAA1101	12-18 in.	MN	13245	17915	NS		ICPES	146	MG/KG
	21-1432	AAA1101	12-18 in.	NA	13245	17915	NS		ICPES	59.5	MG/KG
	21-1432	AAA1101	12-18 in.	NI	13245	17915	NS		ICPES	1.8	MG/KG
	21-1432	AAA1101	12-18 in.	PB	13245	17915	NS		ETVAA	3.9	MG/KG
	21-1432	AAA1101	12-18 in.	SR	13245	17915	NS		ICPES	1.7	MG/KG
	21-1432	AAA1101	12-18 in.	TL	13245	17915	NS		ETVAA	0.21	MG/KG
	21-1432	AAA1101	12-18 in.	V	13245	17915	NS		ICPES	4.6	MG/KG
	21-1432	AAA1101	12-18 in.	ZN	13245	17915	NS		ICPES	27.1	MG/KG
	21-1433	AAA1102	0-6 in.	AL	13245	17915	SU		ICPES	5740	MG/KG
	21-1433	AAA1102	0-6 in.	AS	13245	17915	SU		ETVAA	1.8	MG/KG
	21-1433	AAA1102	0-6 in.	BA	13245	17915	SU		ICPES	58	MG/KG
	21-1433	AAA1102	0-6 in.	BE	13245	17915	SU		ICPES	0.39	MG/KG
	21-1433	AAA1102	0-6 in.	CA	13245	17915	SU		ICPES	1840	MG/KG
	21-1433	AAA1102	0-6 in.	CD	13245	17915	SU		ICPES	0.88	MG/KG
	21-1433	AAA1102	0-6 in.	CO	13245	17915	SU		ICPES	1.8	MG/KG
	21-1433	AAA1102	0-6 in.	CR	13245	17915	SU		ICPES	4.3	MG/KG
	21-1433	AAA1102	0-6 in.	CU	13245	17915	SU		ICPES	5	MG/KG
	21-1433	AAA1102	0-6 in.	FE	13245	17915	SU		ICPES	8140	MG/KG
	21-1433	AAA1102	0-6 in.	K	13245	17915	SU		ICPES	919	MG/KG
	21-1433	AAA1102	0-6 in.	LI	13245	17915	SU		ICPES	5.6	MG/KG
	21-1433	AAA1102	0-6 in.	MG	13245	17915	SU		ICPES	1020	MG/KG
	21-1433	AAA1102	0-6 in.	MN	13245	17915	SU		ICPES	282	MG/KG
	21-1433	AAA1102	0-6 in.	NA	13245	17915	SU		ICPES	66.4	MG/KG
	21-1433	AAA1102	0-6 in.	NI	13245	17915	SU		ICPES	3.9	MG/KG
	21-1433	AAA1102	0-6 in.	PB	13245	17915	SU		ETVAA	14.3	MG/KG
	21-1433	AAA1102	0-6 in.	SR	13245	17915	SU		ICPES	12.6	MG/KG
	21-1433	AAA1102	0-6 in.	TL	13245	17915	SU		ETVAA	0.24	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1433	AAA1102	0-6 in.	V	13245	17915	SU		ICPES	10.5	MG/KG
	21-1433	AAA1102	0-6 in.	ZN	13245	17915	SU		ICPES	34	MG/KG
	21-1433	AAA1103	6-12 in.	AL	13245	17915	NS		ICPES	3350	MG/KG
	21-1433	AAA1103	6-12 in.	AS	13245	17915	NS		ETVAA	0.97	MG/KG
	21-1433	AAA1103	6-12 in.	BA	13245	17915	NS		ICPES	24.7	MG/KG
	21-1433	AAA1103	6-12 in.	BE	13245	17915	NS		ICPES	0.4	MG/KG
	21-1433	AAA1103	6-12 in.	CA	13245	17915	NS		ICPES	766	MG/KG
	21-1433	AAA1103	6-12 in.	CD	13245	17915	NS		ICPES	0.62	MG/KG
	21-1433	AAA1103	6-12 in.	CR	13245	17915	NS		ICPES	5	MG/KG
	21-1433	AAA1103	6-12 in.	CU	13245	17915	NS		ICPES	2	MG/KG
	21-1433	AAA1103	6-12 in.	FE	13245	17915	NS		ICPES	5810	MG/KG
	21-1433	AAA1103	6-12 in.	K	13245	17915	NS		ICPES	265	MG/KG
	21-1433	AAA1103	6-12 in.	LI	13245	17915	NS		ICPES	2.8	MG/KG
	21-1433	AAA1103	6-12 in.	MG	13245	17915	NS		ICPES	437	MG/KG
	21-1433	AAA1103	6-12 in.	MN	13245	17915	NS		ICPES	116	MG/KG
	21-1433	AAA1103	6-12 in.	NA	13245	17915	NS		ICPES	90.4	MG/KG
	21-1433	AAA1103	6-12 in.	NI	13245	17915	NS		ICPES	3.2	MG/KG
	21-1433	AAA1103	6-12 in.	PB	13245	17915	NS		ETVAA	4.2	MG/KG
	21-1433	AAA1103	6-12 in.	SR	13245	17915	NS		ICPES	5.4	MG/KG
	21-1433	AAA1103	6-12 in.	TL	13245	17915	NS		ETVAA	0.15	MG/KG
	21-1433	AAA1103	6-12 in.	V	13245	17915	NS		ICPES	5.8	MG/KG
	21-1433	AAA1103	6-12 in.	ZN	13245	17915	NS		ICPES	22.6	MG/KG
	21-1433	AAA1104	12-18 in.	AL	13245	17915	NS		ICPES	3170	MG/KG
	21-1433	AAA1104	12-18 in.	AS	13245	17915	NS		ETVAA	1.4	MG/KG
	21-1433	AAA1104	12-18 in.	BA	13245	17915	NS		ICPES	27.6	MG/KG
	21-1433	AAA1104	12-18 in.	BE	13245	17915	NS		ICPES	0.79	MG/KG
	21-1433	AAA1104	12-18 in.	CA	13245	17915	NS		ICPES	514	MG/KG
	21-1433	AAA1104	12-18 in.	CD	13245	17915	NS		ICPES	0.61	MG/KG
	21-1433	AAA1104	12-18 in.	CR	13245	17915	NS		ICPES	3.3	MG/KG
	21-1433	AAA1104	12-18 in.	CU	13245	17915	NS		ICPES	4.5	MG/KG
	21-1433	AAA1104	12-18 in.	FE	13245	17915	NS		ICPES	5670	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1433	AAA1104	12-18 in.	K	13245	17915	NS		ICPES	315	MG/KG
	21-1433	AAA1104	12-18 in.	LI	13245	17915	NS		ICPES	3	MG/KG
	21-1433	AAA1104	12-18 in.	MG	13245	17915	NS		ICPES	485	MG/KG
	21-1433	AAA1104	12-18 in.	MN	13245	17915	NS		ICPES	287	MG/KG
	21-1433	AAA1104	12-18 in.	NA	13245	17915	NS		ICPES	74.7	MG/KG
	21-1433	AAA1104	12-18 in.	NI	13245	17915	NS		ICPES	4.1	MG/KG
	21-1433	AAA1104	12-18 in.	PB	13245	17915	NS		ETVAA	3.7	MG/KG
	21-1433	AAA1104	12-18 in.	SR	13245	17915	NS		ICPES	4	MG/KG
	21-1433	AAA1104	12-18 in.	V	13245	17915	NS		ICPES	6.3	MG/KG
	21-1433	AAA1104	12-18 in.	ZN	13245	17915	NS		ICPES	27.9	MG/KG
21-024(g)	21-1425	AAA0893	0-6 in.	AL	13174		SU		ICPES	5140	MG/KG
	21-1425	AAA0893	0-6 in.	AS	13174		SU		ETVAA	2.7	MG/KG
	21-1425	AAA0893	0-6 in.	BA	13174		SU		ICPES	66.1	MG/KG
	21-1425	AAA0893	0-6 in.	BE	13174		SU		ICPES	0.6	MG/KG
	21-1425	AAA0893	0-6 in.	CA	13174		SU		ICPES	2250	MG/KG
	21-1425	AAA0893	0-6 in.	CD	13174		SU		ICPES	0.95	MG/KG
	21-1425	AAA0893	0-6 in.	CO	13174		SU		ICPES	1.5	MG/KG
	21-1425	AAA0893	0-6 in.	CR	13174		SU		ICPES	4.2	MG/KG
	21-1425	AAA0893	0-6 in.	CU	13174		SU		ICPES	4.5	MG/KG
	21-1425	AAA0893	0-6 in.	FE	13174		SU		ICPES	6150	MG/KG
	21-1425	AAA0893	0-6 in.	K	13174		SU		ICPES	1110	MG/KG
	21-1425	AAA0893	0-6 in.	LI	13174		SU		ICPES	5.1	MG/KG
	21-1425	AAA0893	0-6 in.	MG	13174		SU		ICPES	1090	MG/KG
	21-1425	AAA0893	0-6 in.	MN	13174		SU		ICPES	233	MG/KG
	21-1425	AAA0893	0-6 in.	NA	13174		SU		ICPES	61.5	MG/KG
	21-1425	AAA0893	0-6 in.	NI	13174		SU		ICPES	4.8	MG/KG
	21-1425	AAA0893	0-6 in.	PB	13174		SU		ETVAA	15.3	MG/KG
	21-1425	AAA0893	0-6 in.	SR	13174		SU		ICPES	15.6	MG/KG
	21-1425	AAA0893	0-6 in.	V	13174		SU		ICPES	9.7	MG/KG
	21-1425	AAA0893	0-6 in.	ZN	13174		SU		ICPES	26.2	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1425	AAA0894	6-12 in.	AL	13174		NS		ICPES	4630	MG/KG
	21-1425	AAA0894	6-12 in.	AS	13174		NS		ETVAA	1.9	MG/KG
	21-1425	AAA0894	6-12 in.	BA	13174		NS		ICPES	53.3	MG/KG
	21-1425	AAA0894	6-12 in.	BE	13174		NS		ICPES	0.5	MG/KG
	21-1425	AAA0894	6-12 in.	CA	13174		NS		ICPES	1400	MG/KG
	21-1425	AAA0894	6-12 in.	CD	13174		NS		ICPES	1.1	MG/KG
	21-1425	AAA0894	6-12 in.	CR	13174		NS		ICPES	15.6	MG/KG
	21-1425	AAA0894	6-12 in.	CU	13174		NS		ICPES	5.5	MG/KG
	21-1425	AAA0894	6-12 in.	FE	13174		NS		ICPES	5930	MG/KG
	21-1425	AAA0894	6-12 in.	K	13174		NS		ICPES	721	MG/KG
	21-1425	AAA0894	6-12 in.	LI	13174		NS		ICPES	5	MG/KG
	21-1425	AAA0894	6-12 in.	MG	13174		NS		ICPES	815	MG/KG
	21-1425	AAA0894	6-12 in.	MN	13174		NS		ICPES	188	MG/KG
	21-1425	AAA0894	6-12 in.	NA	13174		NS		ICPES	95.5	MG/KG
	21-1425	AAA0894	6-12 in.	NI	13174		NS		ICPES	10.5	MG/KG
	21-1425	AAA0894	6-12 in.	PB	13174		NS		ETVAA	8.5	MG/KG
	21-1425	AAA0894	6-12 in.	SR	13174		NS		ICPES	11.9	MG/KG
	21-1425	AAA0894	6-12 in.	V	13174		NS		ICPES	9.3	MG/KG
	21-1425	AAA0894	6-12 in.	ZN	13174		NS		ICPES	19.6	MG/KG
	21-1426	AAA0796	6-12 in.	AL	13174		NS		ICPES	3300	MG/KG
	21-1426	AAA0796	6-12 in.	AS	13174		NS		ETVAA	2.8	MG/KG
	21-1426	AAA0796	6-12 in.	BA	13174		NS		ICPES	27.4	MG/KG
	21-1426	AAA0796	6-12 in.	BE	13174		NS		ICPES	0.54	MG/KG
	21-1426	AAA0796	6-12 in.	CA	13174		NS		ICPES	926	MG/KG
	21-1426	AAA0796	6-12 in.	CD	13174		NS		ICPES	0.69	MG/KG
	21-1426	AAA0796	6-12 in.	CR	13174		NS		ICPES	10.6	MG/KG
	21-1426	AAA0796	6-12 in.	CU	13174		NS		ICPES	2.7	MG/KG
	21-1426	AAA0796	6-12 in.	FE	13174		NS		ICPES	4300	MG/KG
	21-1426	AAA0796	6-12 in.	K	13174		NS		ICPES	508	MG/KG
	21-1426	AAA0796	6-12 in.	LI	13174		NS		ICPES	4.1	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1426	AAA0796	6-12 in.	MG	13174		NS		ICPES	634	MG/KG
	21-1426	AAA0796	6-12 in.	MN	13174		NS		ICPES	149	MG/KG
	21-1426	AAA0796	6-12 in.	NA	13174		NS		ICPES	77.1	MG/KG
	21-1426	AAA0796	6-12 in.	NI	13174		NS		ICPES	5.9	MG/KG
	21-1426	AAA0796	6-12 in.	PB	13174		NS		ETVAA	14.6	MG/KG
	21-1426	AAA0796	6-12 in.	SR	13174		NS		ICPES	6.5	MG/KG
	21-1426	AAA0796	6-12 in.	V	13174		NS		ICPES	5.2	MG/KG
	21-1426	AAA0796	6-12 in.	ZN	13174		NS		ICPES	19	MG/KG
	21-1426	AAA0895	0-6 in.	AL	13174		SU		ICPES	5450	MG/KG
	21-1426	AAA0895	0-6 in.	AS	13174		SU		ETVAA	2.6	MG/KG
	21-1426	AAA0895	0-6 in.	BA	13174		SU		ICPES	53.7	MG/KG
	21-1426	AAA0895	0-6 in.	BE	13174		SU		ICPES	0.4	MG/KG
	21-1426	AAA0895	0-6 in.	CA	13174		SU		ICPES	1670	MG/KG
	21-1426	AAA0895	0-6 in.	CD	13174		SU		ICPES	1.1	MG/KG
	21-1426	AAA0895	0-6 in.	CR	13174		SU		ICPES	15.3	MG/KG
	21-1426	AAA0895	0-6 in.	CU	13174		SU		ICPES	3.8	MG/KG
	21-1426	AAA0895	0-6 in.	FE	13174		SU		ICPES	7070	MG/KG
	21-1426	AAA0895	0-6 in.	K	13174		SU		ICPES	935	MG/KG
	21-1426	AAA0895	0-6 in.	LI	13174		SU		ICPES	5.9	MG/KG
	21-1426	AAA0895	0-6 in.	MG	13174		SU		ICPES	993	MG/KG
	21-1426	AAA0895	0-6 in.	MN	13174		SU		ICPES	233	MG/KG
	21-1426	AAA0895	0-6 in.	NA	13174		SU		ICPES	72.3	MG/KG
	21-1426	AAA0895	0-6 in.	NI	13174		SU		ICPES	10.4	MG/KG
	21-1426	AAA0895	0-6 in.	PB	13174		SU		ETVAA	14.4	MG/KG
	21-1426	AAA0895	0-6 in.	SR	13174		SU		ICPES	12.2	MG/KG
	21-1426	AAA0895	0-6 in.	V	13174		SU		ICPES	9.9	MG/KG
	21-1426	AAA0895	0-6 in.	ZN	13174		SU		ICPES	40.9	MG/KG
	21-1427	AAA0797	0-6 in.	AL	13174		SU		ICPES	6670	MG/KG
	21-1427	AAA0797	0-6 in.	AS	13174		SU		ETVAA	2.5	MG/KG
	21-1427	AAA0797	0-6 in.	BA	13174		SU		ICPES	72.3	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1427	AAA0797	0-6 in.	BE	13174		SU		ICPES	0.47	MG/KG
	21-1427	AAA0797	0-6 in.	CA	13174		SU		ICPES	1920	MG/KG
	21-1427	AAA0797	0-6 in.	CD	13174		SU		ICPES	1.4	MG/KG
	21-1427	AAA0797	0-6 in.	CO	13174		SU		ICPES	1.4	MG/KG
	21-1427	AAA0797	0-6 in.	CR	13174		SU		ICPES	23.9	MG/KG
	21-1427	AAA0797	0-6 in.	CU	13174		SU		ICPES	4.6	MG/KG
	21-1427	AAA0797	0-6 in.	FE	13174		SU		ICPES	7960	MG/KG
	21-1427	AAA0797	0-6 in.	K	13174		SU		ICPES	1120	MG/KG
	21-1427	AAA0797	0-6 in.	LI	13174		SU		ICPES	5.9	MG/KG
	21-1427	AAA0797	0-6 in.	MG	13174		SU		ICPES	1200	MG/KG
	21-1427	AAA0797	0-6 in.	MN	13174		SU		ICPES	278	MG/KG
	21-1427	AAA0797	0-6 in.	NA	13174		SU		ICPES	72.9	MG/KG
	21-1427	AAA0797	0-6 in.	NI	13174		SU		ICPES	19.5	MG/KG
	21-1427	AAA0797	0-6 in.	PB	13174		SU		ETVAA	16.7	MG/KG
	21-1427	AAA0797	0-6 in.	SR	13174		SU		ICPES	16.7	MG/KG
	21-1427	AAA0797	0-6 in.	V	13174		SU		ICPES	12.1	MG/KG
	21-1427	AAA0797	0-6 in.	ZN	13174		SU		ICPES	28	MG/KG
	21-1427	AAA0798	6-12 in.	AL	13174		NS		ICPES	4350	MG/KG
	21-1427	AAA0798	6-12 in.	AS	13174		NS		ETVAA	1.8	MG/KG
	21-1427	AAA0798	6-12 in.	BA	13174		NS		ICPES	48.5	MG/KG
	21-1427	AAA0798	6-12 in.	BE	13174		NS		ICPES	0.53	MG/KG
	21-1427	AAA0798	6-12 in.	CA	13174		NS		ICPES	1430	MG/KG
	21-1427	AAA0798	6-12 in.	CD	13174		NS		ICPES	0.83	MG/KG
	21-1427	AAA0798	6-12 in.	CO	13174		NS		ICPES	1.1	MG/KG
	21-1427	AAA0798	6-12 in.	CR	13174		NS		ICPES	2.9	MG/KG
	21-1427	AAA0798	6-12 in.	CU	13174		NS		ICPES	3.7	MG/KG
	21-1427	AAA0798	6-12 in.	FE	13174		NS		ICPES	5680	MG/KG
	21-1427	AAA0798	6-12 in.	K	13174		NS		ICPES	742	MG/KG
	21-1427	AAA0798	6-12 in.	LI	13174		NS		ICPES	4.5	MG/KG
	21-1427	AAA0798	6-12 in.	MG	13174		NS		ICPES	811	MG/KG
	21-1427	AAA0798	6-12 in.	MN	13174		NS		ICPES	215	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1427	AAA0798	6-12 in.	NA	13174		NS		ICPES	77.3	MG/KG
	21-1427	AAA0798	6-12 in.	NI	13174		NS		ICPES	2.4	MG/KG
	21-1427	AAA0798	6-12 in.	PB	13174		NS		ETVAA	13.6	MG/KG
	21-1427	AAA0798	6-12 in.	SR	13174		NS		ICPES	11.2	MG/KG
	21-1427	AAA0798	6-12 in.	V	13174		NS		ICPES	8.3	MG/KG
	21-1427	AAA0798	6-12 in.	ZN	13174		NS		ICPES	23.7	MG/KG
	21-1428	AAA0799	0-6 in.	AG	13185		SU		ICPES	1.6	MG/KG
	21-1428	AAA0799	0-6 in.	AL	13185		SU		ICPES	5210	MG/KG
	21-1428	AAA0799	0-6 in.	AS	13185		SU		ETVAA	10	MG/KG
	21-1428	AAA0799	0-6 in.	BA	13185		SU		ICPES	125	MG/KG
	21-1428	AAA0799	0-6 in.	BE	13185		SU		ICPES	0.56	MG/KG
	21-1428	AAA0799	0-6 in.	CA	13185		SU		ICPES	3650	MG/KG
	21-1428	AAA0799	0-6 in.	CD	13185		SU		ICPES	5.6	MG/KG
	21-1428	AAA0799	0-6 in.	CO	13185		SU		ICPES	2.1	MG/KG
	21-1428	AAA0799	0-6 in.	CR	13185		SU		ICPES	25	MG/KG
	21-1428	AAA0799	0-6 in.	CU	13185		SU		ICPES	53.5	MG/KG
	21-1428	AAA0799	0-6 in.	FE	13185		SU		ICPES	7540	MG/KG
	21-1428	AAA0799	0-6 in.	K	13185		SU		ICPES	846	MG/KG
	21-1428	AAA0799	0-6 in.	LI	13185		SU		ICPES	4.7	MG/KG
	21-1428	AAA0799	0-6 in.	MG	13185		SU		ICPES	1070	MG/KG
	21-1428	AAA0799	0-6 in.	MN	13185		SU		ICPES	244	MG/KG
	21-1428	AAA0799	0-6 in.	NA	13185		SU		ICPES	61.4	MG/KG
	21-1428	AAA0799	0-6 in.	NI	13185		SU		ICPES	7.6	MG/KG
	21-1428	AAA0799	0-6 in.	PB	13185		SU		ETVAA	67	MG/KG
	21-1428	AAA0799	0-6 in.	SE	13185		SU		ETVAA	0.83	MG/KG
	21-1428	AAA0799	0-6 in.	SR	13185		SU		ICPES	31.9	MG/KG
	21-1428	AAA0799	0-6 in.	V	13185		SU		ICPES	52.1	MG/KG
	21-1428	AAA0799	0-6 in.	ZN	13185		SU		ICPES	399	MG/KG
	21-1428	AAA0800	6-12 in.	AL	13185		NS		ICPES	3830	MG/KG
	21-1428	AAA0800	6-12 in.	AS	13185		NS		ETVAA	3	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1428	AAA0800	6-12 in.	BA	13185		NS		ICPES	50.4	MG/KG
	21-1428	AAA0800	6-12 in.	BE	13185		NS		ICPES	0.41	MG/KG
	21-1428	AAA0800	6-12 in.	CA	13185		NS		ICPES	1140	MG/KG
	21-1428	AAA0800	6-12 in.	CD	13185		NS		ICPES	0.93	MG/KG
	21-1428	AAA0800	6-12 in.	CO	13185		NS		ICPES	1.4	MG/KG
	21-1428	AAA0800	6-12 in.	CR	13185		NS		ICPES	5.3	MG/KG
	21-1428	AAA0800	6-12 in.	CU	13185		NS		ICPES	10	MG/KG
	21-1428	AAA0800	6-12 in.	FE	13185		NS		ICPES	5620	MG/KG
	21-1428	AAA0800	6-12 in.	K	13185		NS		ICPES	585	MG/KG
	21-1428	AAA0800	6-12 in.	LI	13185		NS		ICPES	4.9	MG/KG
	21-1428	AAA0800	6-12 in.	MG	13185		NS		ICPES	588	MG/KG
	21-1428	AAA0800	6-12 in.	MN	13185		NS		ICPES	116	MG/KG
	21-1428	AAA0800	6-12 in.	NA	13185		NS		ICPES	69.7	MG/KG
	21-1428	AAA0800	6-12 in.	NI	13185		NS		ICPES	4.2	MG/KG
	21-1428	AAA0800	6-12 in.	PB	13185		NS		ETVAA	15.9	MG/KG
	21-1428	AAA0800	6-12 in.	SR	13185		NS		ICPES	14.7	MG/KG
	21-1428	AAA0800	6-12 in.	TL	13185		NS		ETVAA	0.26	MG/KG
	21-1428	AAA0800	6-12 in.	V	13185		NS		ICPES	18.1	MG/KG
	21-1428	AAA0800	6-12 in.	ZN	13185		NS		ICPES	84.5	MG/KG
	21-1429	AAA0801	0-6 in.	AL	13245	17915	SU		ICPES	2930	MG/KG
	21-1429	AAA0801	0-6 in.	AS	13245	17915	SU		ETVAA	8.7	MG/KG
	21-1429	AAA0801	0-6 in.	BA	13245	17915	SU		ICPES	41.5	MG/KG
	21-1429	AAA0801	0-6 in.	BE	13245	17915	SU		ICPES	0.28	MG/KG
	21-1429	AAA0801	0-6 in.	CA	13245	17915	SU		ICPES	339	MG/KG
	21-1429	AAA0801	0-6 in.	CD	13245	17915	SU		ICPES	0.98	MG/KG
	21-1429	AAA0801	0-6 in.	CR	13245	17915	SU		ICPES	17.8	MG/KG
	21-1429	AAA0801	0-6 in.	CU	13245	17915	SU		ICPES	24.2	MG/KG
	21-1429	AAA0801	0-6 in.	FE	13245	17915	SU		ICPES	4090	MG/KG
	21-1429	AAA0801	0-6 in.	K	13245	17915	SU		ICPES	337	MG/KG
	21-1429	AAA0801	0-6 in.	LI	13245	17915	SU		ICPES	4.7	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1429	AAA0801	0-6 in.	MG	13245	17915	SU		ICPES	431	MG/KG
	21-1429	AAA0801	0-6 in.	MN	13245	17915	SU		ICPES	56.7	MG/KG
	21-1429	AAA0801	0-6 in.	NA	13245	17915	SU		ICPES	39.8	MG/KG
	21-1429	AAA0801	0-6 in.	NI	13245	17915	SU		ICPES	4.4	MG/KG
	21-1429	AAA0801	0-6 in.	PB	13245	17915	SU		ETVAA	26.4	MG/KG
	21-1429	AAA0801	0-6 in.	SR	13245	17915	SU		ICPES	3.1	MG/KG
	21-1429	AAA0801	0-6 in.	TL	13245	17915	SU		ETVAA	0.14	MG/KG
	21-1429	AAA0801	0-6 in.	V	13245	17915	SU		ICPES	24.5	MG/KG
	21-1429	AAA0801	0-6 in.	ZN	13245	17915	SU		ICPES	84.8	MG/KG
	21-1429	AAA1091	6-12 in.	AL	13245	17915	NS		ICPES	4580	MG/KG
	21-1429	AAA1091	6-12 in.	AS	13245	17915	NS		ETVAA	6.9	MG/KG
	21-1429	AAA1091	6-12 in.	BA	13245	17915	NS		ICPES	42	MG/KG
	21-1429	AAA1091	6-12 in.	BE	13245	17915	NS		ICPES	0.4	MG/KG
	21-1429	AAA1091	6-12 in.	CA	13245	17915	NS		ICPES	489	MG/KG
	21-1429	AAA1091	6-12 in.	CD	13245	17915	NS		ICPES	1.9	MG/KG
	21-1429	AAA1091	6-12 in.	CR	13245	17915	NS		ICPES	11.1	MG/KG
	21-1429	AAA1091	6-12 in.	CU	13245	17915	NS		ICPES	15	MG/KG
	21-1429	AAA1091	6-12 in.	FE	13245	17915	NS		ICPES	5760	MG/KG
	21-1429	AAA1091	6-12 in.	K	13245	17915	NS		ICPES	691	MG/KG
	21-1429	AAA1091	6-12 in.	LI	13245	17915	NS		ICPES	4.8	MG/KG
	21-1429	AAA1091	6-12 in.	MG	13245	17915	NS		ICPES	611	MG/KG
	21-1429	AAA1091	6-12 in.	MN	13245	17915	NS		ICPES	87.7	MG/KG
	21-1429	AAA1091	6-12 in.	NA	13245	17915	NS		ICPES	84.2	MG/KG
	21-1429	AAA1091	6-12 in.	NI	13245	17915	NS		ICPES	4.1	MG/KG
	21-1429	AAA1091	6-12 in.	PB	13245	17915	NS		ETVAA	19.8	MG/KG
	21-1429	AAA1091	6-12 in.	SR	13245	17915	NS		ICPES	6.1	MG/KG
	21-1429	AAA1091	6-12 in.	TL	13245	17915	NS		ETVAA	0.29	MG/KG
	21-1429	AAA1091	6-12 in.	V	13245	17915	NS		ICPES	27.1	MG/KG
	21-1429	AAA1091	6-12 in.	ZN	13245	17915	NS		ICPES	179	MG/KG
	21-1430	AAA1092	0-6 in.	AG	13245	17915	SU		ICPES	1.8	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1430	AAA1092	0-6 in.	AL	13245	17915	SU		ICPES	6950	MG/KG
	21-1430	AAA1092	0-6 in.	AS	13245	17915	SU		ETVAA	9.5	MG/KG
	21-1430	AAA1092	0-6 in.	BA	13245	17915	SU		ICPES	148	MG/KG
	21-1430	AAA1092	0-6 in.	BE	13245	17915	SU		ICPES	0.62	MG/KG
	21-1430	AAA1092	0-6 in.	CA	13245	17915	SU		ICPES	4370	MG/KG
	21-1430	AAA1092	0-6 in.	CD	13245	17915	SU		ICPES	4.5	MG/KG
	21-1430	AAA1092	0-6 in.	CO	13245	17915	SU		ICPES	3.6	MG/KG
	21-1430	AAA1092	0-6 in.	CR	13245	17915	SU		ICPES	21.7	MG/KG
	21-1430	AAA1092	0-6 in.	CU	13245	17915	SU		ICPES	59.3	MG/KG
	21-1430	AAA1092	0-6 in.	FE	13245	17915	SU		ICPES	7790	MG/KG
	21-1430	AAA1092	0-6 in.	K	13245	17915	SU		ICPES	1130	MG/KG
	21-1430	AAA1092	0-6 in.	LI	13245	17915	SU		ICPES	6.3	MG/KG
	21-1430	AAA1092	0-6 in.	MG	13245	17915	SU		ICPES	1270	MG/KG
	21-1430	AAA1092	0-6 in.	MN	13245	17915	SU		ICPES	503	MG/KG
	21-1430	AAA1092	0-6 in.	NA	13245	17915	SU		ICPES	87.8	MG/KG
	21-1430	AAA1092	0-6 in.	NI	13245	17915	SU		ICPES	8	MG/KG
	21-1430	AAA1092	0-6 in.	PB	13245	17915	SU		ETVAA	67.7	MG/KG
	21-1430	AAA1092	0-6 in.	SE	13245	17915	SU		ETVAA	0.67	MG/KG
	21-1430	AAA1092	0-6 in.	SR	13245	17915	SU		ICPES	35	MG/KG
	21-1430	AAA1092	0-6 in.	V	13245	17915	SU		ICPES	47.3	MG/KG
	21-1430	AAA1092	0-6 in.	ZN	13245	17915	SU		ICPES	310	MG/KG
	21-1430	AAA1093	0-6 in.	AG	13245	17915	FD		ICPES	1.7	MG/KG
	21-1430	AAA1093	0-6 in.	AL	13245	17915	FD		ICPES	6300	MG/KG
	21-1430	AAA1093	0-6 in.	AS	13245	17915	FD		ETVAA	7.5	MG/KG
	21-1430	AAA1093	0-6 in.	BA	13245	17915	FD		ICPES	129	MG/KG
	21-1430	AAA1093	0-6 in.	BE	13245	17915	FD		ICPES	0.59	MG/KG
	21-1430	AAA1093	0-6 in.	CA	13245	17915	FD		ICPES	3640	MG/KG
	21-1430	AAA1093	0-6 in.	CD	13245	17915	FD		ICPES	4.5	MG/KG
	21-1430	AAA1093	0-6 in.	CO	13245	17915	FD		ICPES	3.3	MG/KG
	21-1430	AAA1093	0-6 in.	CR	13245	17915	FD		ICPES	32.3	MG/KG
	21-1430	AAA1093	0-6 in.	CU	13245	17915	FD		ICPES	57.1	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1430	AAA1093	0-6 in.	FE	13245	17915	FD		ICPES	7370	MG/KG
	21-1430	AAA1093	0-6 in.	K	13245	17915	FD		ICPES	1070	MG/KG
	21-1430	AAA1093	0-6 in.	LI	13245	17915	FD		ICPES	5.1	MG/KG
	21-1430	AAA1093	0-6 in.	MG	13245	17915	FD		ICPES	1100	MG/KG
	21-1430	AAA1093	0-6 in.	MN	13245	17915	FD		ICPES	453	MG/KG
	21-1430	AAA1093	0-6 in.	NA	13245	17915	FD		ICPES	96	MG/KG
	21-1430	AAA1093	0-6 in.	NI	13245	17915	FD		ICPES	16.2	MG/KG
	21-1430	AAA1093	0-6 in.	PB	13245	17915	FD		ETVAA	73.6	MG/KG
	21-1430	AAA1093	0-6 in.	SE	13245	17915	FD		ETVAA	0.68	MG/KG
	21-1430	AAA1093	0-6 in.	SR	13245	17915	FD		ICPES	29.2	MG/KG
	21-1430	AAA1093	0-6 in.	V	13245	17915	FD		ICPES	45.1	MG/KG
	21-1430	AAA1093	0-6 in.	ZN	13245	17915	FD		ICPES	296	MG/KG
	21-1430	AAA1094	6-12 in.	AL	13245	17915	NS		ICPES	4410	MG/KG
	21-1430	AAA1094	6-12 in.	AS	13245	17915	NS		ETVAA	4.9	MG/KG
	21-1430	AAA1094	6-12 in.	BA	13245	17915	NS		ICPES	47	MG/KG
	21-1430	AAA1094	6-12 in.	BE	13245	17915	NS		ICPES	0.46	MG/KG
	21-1430	AAA1094	6-12 in.	CA	13245	17915	NS		ICPES	1270	MG/KG
	21-1430	AAA1094	6-12 in.	CD	13245	17915	NS		ICPES	2.2	MG/KG
	21-1430	AAA1094	6-12 in.	CO	13245	17915	NS		ICPES	1.5	MG/KG
	21-1430	AAA1094	6-12 in.	CR	13245	17915	NS		ICPES	6.2	MG/KG
	21-1430	AAA1094	6-12 in.	CU	13245	17915	NS		ICPES	15.2	MG/KG
	21-1430	AAA1094	6-12 in.	FE	13245	17915	NS		ICPES	5720	MG/KG
	21-1430	AAA1094	6-12 in.	K	13245	17915	NS		ICPES	504	MG/KG
	21-1430	AAA1094	6-12 in.	LI	13245	17915	NS		ICPES	4.6	MG/KG
	21-1430	AAA1094	6-12 in.	MG	13245	17915	NS		ICPES	629	MG/KG
	21-1430	AAA1094	6-12 in.	MN	13245	17915	NS		ICPES	199	MG/KG
	21-1430	AAA1094	6-12 in.	NA	13245	17915	NS		ICPES	91.3	MG/KG
	21-1430	AAA1094	6-12 in.	NI	13245	17915	NS		ICPES	2.5	MG/KG
	21-1430	AAA1094	6-12 in.	PB	13245	17915	NS		ETVAA	17.9	MG/KG
	21-1430	AAA1094	6-12 in.	SR	13245	17915	NS		ICPES	13.5	MG/KG
	21-1430	AAA1094	6-12 in.	TL	13245	17915	NS		ETVAA	0.14	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1430	AAA1094	6-12 in.	V	13245	17915	NS		ICPES	24.9	MG/KG
	21-1430	AAA1094	6-12 in.	ZN	13245	17915	NS		ICPES	180	MG/KG
21-024(h)	21-1413	AAA0823	0-6 in.	AL	13219	17827	SU		ICPES	4230	MG/KG
	21-1413	AAA0823	0-6 in.	AS	13219	17827	SU		ETVAA	1.1	MG/KG
	21-1413	AAA0823	0-6 in.	BA	13219	17827	SU		ICPES	75.8	MG/KG
	21-1413	AAA0823	0-6 in.	BE	13219	17827	SU		ICPES	0.26	MG/KG
	21-1413	AAA0823	0-6 in.	CA	13219	17827	SU		ICPES	1510	MG/KG
	21-1413	AAA0823	0-6 in.	CD	13219	17827	SU		ICPES	0.94	MG/KG
	21-1413	AAA0823	0-6 in.	CO	13219	17827	SU		ICPES	2.9	MG/KG
	21-1413	AAA0823	0-6 in.	CR	13219	17827	SU		ICPES	6.5	MG/KG
	21-1413	AAA0823	0-6 in.	CU	13219	17827	SU		ICPES	7.8	MG/KG
	21-1413	AAA0823	0-6 in.	FE	13219	17827	SU		ICPES	7010	MG/KG
	21-1413	AAA0823	0-6 in.	K	13219	17827	SU		ICPES	652	MG/KG
	21-1413	AAA0823	0-6 in.	LI	13219	17827	SU		ICPES	4.9	MG/KG
	21-1413	AAA0823	0-6 in.	MG	13219	17827	SU		ICPES	1060	MG/KG
	21-1413	AAA0823	0-6 in.	MN	13219	17827	SU		ICPES	215	MG/KG
	21-1413	AAA0823	0-6 in.	NA	13219	17827	SU		ICPES	158	MG/KG
	21-1413	AAA0823	0-6 in.	NI	13219	17827	SU		ICPES	4.9	MG/KG
	21-1413	AAA0823	0-6 in.	PB	13219	17827	SU		ETVAA	21.5	MG/KG
	21-1413	AAA0823	0-6 in.	SR	13219	17827	SU		ICPES	12.3	MG/KG
	21-1413	AAA0823	0-6 in.	TL	13219	17827	SU		ETVAA	0.45	MG/KG
	21-1413	AAA0823	0-6 in.	V	13219	17827	SU		ICPES	13.6	MG/KG
	21-1413	AAA0823	0-6 in.	ZN	13219	17827	SU		ICPES	51.8	MG/KG
	21-1413	AAA0824	6-12 in.	AL	13219	17827	NS		ICPES	5320	MG/KG
	21-1413	AAA0824	6-12 in.	AS	13219	17827	NS		ETVAA	0.98	MG/KG
	21-1413	AAA0824	6-12 in.	BA	13219	17827	NS		ICPES	81.1	MG/KG
	21-1413	AAA0824	6-12 in.	BE	13219	17827	NS		ICPES	0.43	MG/KG
	21-1413	AAA0824	6-12 in.	CA	13219	17827	NS		ICPES	1140	MG/KG
	21-1413	AAA0824	6-12 in.	CD	13219	17827	NS		ICPES	1.2	MG/KG
	21-1413	AAA0824	6-12 in.	CO	13219	17827	NS		ICPES	3.4	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1413	AAA0824	6-12 in.	CR	13219	17827	NS		ICPES	5.3	MG/KG
	21-1413	AAA0824	6-12 in.	CU	13219	17827	NS		ICPES	5.6	MG/KG
	21-1413	AAA0824	6-12 in.	FE	13219	17827	NS		ICPES	7250	MG/KG
	21-1413	AAA0824	6-12 in.	K	13219	17827	NS		ICPES	1040	MG/KG
	21-1413	AAA0824	6-12 in.	LI	13219	17827	NS		ICPES	5.6	MG/KG
	21-1413	AAA0824	6-12 in.	MG	13219	17827	NS		ICPES	996	MG/KG
	21-1413	AAA0824	6-12 in.	MN	13219	17827	NS		ICPES	331	MG/KG
	21-1413	AAA0824	6-12 in.	NA	13219	17827	NS		ICPES	299	MG/KG
	21-1413	AAA0824	6-12 in.	NI	13219	17827	NS		ICPES	5.6	MG/KG
	21-1413	AAA0824	6-12 in.	PB	13219	17827	NS		ETVAA	18.2	MG/KG
	21-1413	AAA0824	6-12 in.	SR	13219	17827	NS		ICPES	12.6	MG/KG
	21-1413	AAA0824	6-12 in.	TL	13219	17827	NS		ETVAA	0.37	MG/KG
	21-1413	AAA0824	6-12 in.	V	13219	17827	NS		ICPES	11.3	MG/KG
	21-1413	AAA0824	6-12 in.	ZN	13219	17827	NS		ICPES	35.2	MG/KG
	21-1413	AAA0825	12-18 in.	AL	13219	17827	NS		ICPES	5740	MG/KG
	21-1413	AAA0825	12-18 in.	AS	13219	17827	NS		ETVAA	1.1	MG/KG
	21-1413	AAA0825	12-18 in.	BA	13219	17827	NS		ICPES	61.3	MG/KG
	21-1413	AAA0825	12-18 in.	BE	13219	17827	NS		ICPES	0.41	MG/KG
	21-1413	AAA0825	12-18 in.	CA	13219	17827	NS		ICPES	1030	MG/KG
	21-1413	AAA0825	12-18 in.	CD	13219	17827	NS		ICPES	0.99	MG/KG
	21-1413	AAA0825	12-18 in.	CO	13219	17827	NS		ICPES	3	MG/KG
	21-1413	AAA0825	12-18 in.	CR	13219	17827	NS		ICPES	5.2	MG/KG
	21-1413	AAA0825	12-18 in.	CU	13219	17827	NS		ICPES	3.5	MG/KG
	21-1413	AAA0825	12-18 in.	FE	13219	17827	NS		ICPES	7690	MG/KG
	21-1413	AAA0825	12-18 in.	K	13219	17827	NS		ICPES	800	MG/KG
	21-1413	AAA0825	12-18 in.	LI	13219	17827	NS		ICPES	5.4	MG/KG
	21-1413	AAA0825	12-18 in.	MG	13219	17827	NS		ICPES	858	MG/KG
	21-1413	AAA0825	12-18 in.	MN	13219	17827	NS		ICPES	273	MG/KG
	21-1413	AAA0825	12-18 in.	NA	13219	17827	NS		ICPES	255	MG/KG
	21-1413	AAA0825	12-18 in.	NI	13219	17827	NS		ICPES	4.4	MG/KG
	21-1413	AAA0825	12-18 in.	PB	13219	17827	NS		ETVAA	10.1	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1413	AAA0825	12-18 in.	SR	13219	17827	NS		ICPES	10.4	MG/KG
	21-1413	AAA0825	12-18 in.	TL	13219	17827	NS		ETVAA	0.14	MG/KG
	21-1413	AAA0825	12-18 in.	V	13219	17827	NS		ICPES	9.8	MG/KG
	21-1413	AAA0825	12-18 in.	ZN	13219	17827	NS		ICPES	23.5	MG/KG
	21-1414	AAA0826	0-6 in.	AL	13219	17827	SU		ICPES	8020	MG/KG
	21-1414	AAA0826	0-6 in.	AS	13219	17827	SU		ETVAA	1.3	MG/KG
	21-1414	AAA0826	0-6 in.	BA	13219	17827	SU		ICPES	104	MG/KG
	21-1414	AAA0826	0-6 in.	BE	13219	17827	SU		ICPES	0.54	MG/KG
	21-1414	AAA0826	0-6 in.	CA	13219	17827	SU		ICPES	1570	MG/KG
	21-1414	AAA0826	0-6 in.	CD	13219	17827	SU		ICPES	1.1	MG/KG
	21-1414	AAA0826	0-6 in.	CO	13219	17827	SU		ICPES	4.3	MG/KG
	21-1414	AAA0826	0-6 in.	CR	13219	17827	SU		ICPES	7.2	MG/KG
	21-1414	AAA0826	0-6 in.	CU	13219	17827	SU		ICPES	6.5	MG/KG
	21-1414	AAA0826	0-6 in.	FE	13219	17827	SU		ICPES	9130	MG/KG
	21-1414	AAA0826	0-6 in.	K	13219	17827	SU		ICPES	1030	MG/KG
	21-1414	AAA0826	0-6 in.	LI	13219	17827	SU		ICPES	7.9	MG/KG
	21-1414	AAA0826	0-6 in.	MG	13219	17827	SU		ICPES	1370	MG/KG
	21-1414	AAA0826	0-6 in.	MN	13219	17827	SU		ICPES	328	MG/KG
	21-1414	AAA0826	0-6 in.	NA	13219	17827	SU		ICPES	237	MG/KG
	21-1414	AAA0826	0-6 in.	NI	13219	17827	SU		ICPES	6.3	MG/KG
	21-1414	AAA0826	0-6 in.	PB	13219	17827	SU		ETVAA	14.8	MG/KG
	21-1414	AAA0826	0-6 in.	SR	13219	17827	SU		ICPES	14.9	MG/KG
	21-1414	AAA0826	0-6 in.	TL	13219	17827	SU		ETVAA	0.18	MG/KG
	21-1414	AAA0826	0-6 in.	V	13219	17827	SU		ICPES	14.7	MG/KG
	21-1414	AAA0826	0-6 in.	ZN	13219	17827	SU		ICPES	46.5	MG/KG
	21-1414	AAA0827	0-6 in.	AL	13219	17827	FD		ICPES	7470	MG/KG
	21-1414	AAA0827	0-6 in.	AS	13219	17827	FD		ETVAA	2.4	MG/KG
	21-1414	AAA0827	0-6 in.	BA	13219	17827	FD		ICPES	76.6	MG/KG
	21-1414	AAA0827	0-6 in.	BE	13219	17827	FD		ICPES	0.52	MG/KG
	21-1414	AAA0827	0-6 in.	CA	13219	17827	FD		ICPES	1570	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1414	AAA0827	0-6 in.	CD	13219	17827	FD		ICPES	0.98	MG/KG
	21-1414	AAA0827	0-6 in.	CO	13219	17827	FD		ICPES	3.8	MG/KG
	21-1414	AAA0827	0-6 in.	CR	13219	17827	FD		ICPES	6.6	MG/KG
	21-1414	AAA0827	0-6 in.	CU	13219	17827	FD		ICPES	7.2	MG/KG
	21-1414	AAA0827	0-6 in.	FE	13219	17827	FD		ICPES	8280	MG/KG
	21-1414	AAA0827	0-6 in.	K	13219	17827	FD		ICPES	1070	MG/KG
	21-1414	AAA0827	0-6 in.	LI	13219	17827	FD		ICPES	7.5	MG/KG
	21-1414	AAA0827	0-6 in.	MG	13219	17827	FD		ICPES	1290	MG/KG
	21-1414	AAA0827	0-6 in.	MN	13219	17827	FD		ICPES	258	MG/KG
	21-1414	AAA0827	0-6 in.	NA	13219	17827	FD		ICPES	218	MG/KG
	21-1414	AAA0827	0-6 in.	NI	13219	17827	FD		ICPES	5.2	MG/KG
	21-1414	AAA0827	0-6 in.	PB	13219	17827	FD		ETVAA	19.5	MG/KG
	21-1414	AAA0827	0-6 in.	SR	13219	17827	FD		ICPES	14	MG/KG
	21-1414	AAA0827	0-6 in.	TL	13219	17827	FD		ETVAA	0.16	MG/KG
	21-1414	AAA0827	0-6 in.	V	13219	17827	FD		ICPES	13.2	MG/KG
	21-1414	AAA0827	0-6 in.	ZN	13219	17827	FD		ICPES	46.5	MG/KG
	21-1414	AAA0828	6-12 in.	AL	13219	17827	NS		ICPES	11800	MG/KG
	21-1414	AAA0828	6-12 in.	AS	13219	17827	NS		ETVAA	2.3	MG/KG
	21-1414	AAA0828	6-12 in.	BA	13219	17827	NS		ICPES	74.3	MG/KG
	21-1414	AAA0828	6-12 in.	BE	13219	17827	NS		ICPES	0.57	MG/KG
	21-1414	AAA0828	6-12 in.	CA	13219	17827	NS		ICPES	1130	MG/KG
	21-1414	AAA0828	6-12 in.	CD	13219	17827	NS		ICPES	2.1	MG/KG
	21-1414	AAA0828	6-12 in.	CO	13219	17827	NS		ICPES	3.5	MG/KG
	21-1414	AAA0828	6-12 in.	CR	13219	17827	NS		ICPES	9.1	MG/KG
	21-1414	AAA0828	6-12 in.	CU	13219	17827	NS		ICPES	7	MG/KG
	21-1414	AAA0828	6-12 in.	FE	13219	17827	NS		ICPES	17000	MG/KG
	21-1414	AAA0828	6-12 in.	K	13219	17827	NS		ICPES	1450	MG/KG
	21-1414	AAA0828	6-12 in.	LI	13219	17827	NS		ICPES	8.7	MG/KG
	21-1414	AAA0828	6-12 in.	MG	13219	17827	NS		ICPES	1680	MG/KG
	21-1414	AAA0828	6-12 in.	MN	13219	17827	NS		ICPES	251	MG/KG
	21-1414	AAA0828	6-12 in.	NA	13219	17827	NS		ICPES	360	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1414	AAA0828	6-12 in.	NI	13219	17827	NS		ICPES	6.2	MG/KG
	21-1414	AAA0828	6-12 in.	PB	13219	17827	NS		ETVAA	19.7	MG/KG
	21-1414	AAA0828	6-12 in.	SR	13219	17827	NS		ICPES	13.4	MG/KG
	21-1414	AAA0828	6-12 in.	TL	13219	17827	NS		ETVAA	0.24	MG/KG
	21-1414	AAA0828	6-12 in.	V	13219	17827	NS		ICPES	19.2	MG/KG
	21-1414	AAA0828	6-12 in.	ZN	13219	17827	NS		ICPES	44.4	MG/KG
	21-1415	AAA0830	0-6 in.	AL	13219	17827	SU	D	ICPES	8380	MG/KG
	21-1415	AAA0830	0-6 in.	AL	13219	17827	SU		ICPES	8750	MG/KG
	21-1415	AAA0830	0-6 in.	AS	13219	17827	SU	D	ETVAA	2.2	MG/KG
	21-1415	AAA0830	0-6 in.	AS	13219	17827	SU		ETVAA	2.1	MG/KG
	21-1415	AAA0830	0-6 in.	BA	13219	17827	SU	D	ICPES	50.6	MG/KG
	21-1415	AAA0830	0-6 in.	BA	13219	17827	SU		ICPES	62.2	MG/KG
	21-1415	AAA0830	0-6 in.	BE	13219	17827	SU	D	ICPES	0.53	MG/KG
	21-1415	AAA0830	0-6 in.	BE	13219	17827	SU		ICPES	0.55	MG/KG
	21-1415	AAA0830	0-6 in.	CA	13219	17827	SU	D	ICPES	1370	MG/KG
	21-1415	AAA0830	0-6 in.	CA	13219	17827	SU		ICPES	1510	MG/KG
	21-1415	AAA0830	0-6 in.	CD	13219	17827	SU	D	ICPES	0.8	MG/KG
	21-1415	AAA0830	0-6 in.	CD	13219	17827	SU		ICPES	1.1	MG/KG
	21-1415	AAA0830	0-6 in.	CO	13219	17827	SU	D	ICPES	2	MG/KG
	21-1415	AAA0830	0-6 in.	CO	13219	17827	SU		ICPES	2.2	MG/KG
	21-1415	AAA0830	0-6 in.	CR	13219	17827	SU	D	ICPES	4.7	MG/KG
	21-1415	AAA0830	0-6 in.	CR	13219	17827	SU		ICPES	4.9	MG/KG
	21-1415	AAA0830	0-6 in.	CU	13219	17827	SU	D	ICPES	5	MG/KG
	21-1415	AAA0830	0-6 in.	CU	13219	17827	SU		ICPES	7	MG/KG
	21-1415	AAA0830	0-6 in.	FE	13219	17827	SU	D	ICPES	8780	MG/KG
	21-1415	AAA0830	0-6 in.	FE	13219	17827	SU		ICPES	8820	MG/KG
	21-1415	AAA0830	0-6 in.	K	13219	17827	SU	D	ICPES	1010	MG/KG
	21-1415	AAA0830	0-6 in.	K	13219	17827	SU		ICPES	1060	MG/KG
	21-1415	AAA0830	0-6 in.	LI	13219	17827	SU	D	ICPES	6.8	MG/KG
	21-1415	AAA0830	0-6 in.	LI	13219	17827	SU		ICPES	8.2	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1415	AAA0830	0-6 in.	MG	13219	17827	SU	D	ICPES	1130	MG/KG
	21-1415	AAA0830	0-6 in.	MG	13219	17827	SU		ICPES	1200	MG/KG
	21-1415	AAA0830	0-6 in.	MN	13219	17827	SU	D	ICPES	295	MG/KG
	21-1415	AAA0830	0-6 in.	MN	13219	17827	SU		ICPES	271	MG/KG
	21-1415	AAA0830	0-6 in.	NA	13219	17827	SU	D	ICPES	265	MG/KG
	21-1415	AAA0830	0-6 in.	NA	13219	17827	SU		ICPES	266	MG/KG
	21-1415	AAA0830	0-6 in.	NI	13219	17827	SU	D	ICPES	4.2	MG/KG
	21-1415	AAA0830	0-6 in.	NI	13219	17827	SU		ICPES	3.5	MG/KG
	21-1415	AAA0830	0-6 in.	PB	13219	17827	SU	D	ETVAA	12.9	MG/KG
	21-1415	AAA0830	0-6 in.	PB	13219	17827	SU		ETVAA	9.5	MG/KG
	21-1415	AAA0830	0-6 in.	SR	13219	17827	SU	D	ICPES	12	MG/KG
	21-1415	AAA0830	0-6 in.	SR	13219	17827	SU		ICPES	12.9	MG/KG
	21-1415	AAA0830	0-6 in.	V	13219	17827	SU	D	ICPES	11.2	MG/KG
	21-1415	AAA0830	0-6 in.	V	13219	17827	SU		ICPES	11.4	MG/KG
	21-1415	AAA0830	0-6 in.	ZN	13219	17827	SU	D	ICPES	30.8	MG/KG
	21-1415	AAA0830	0-6 in.	ZN	13219	17827	SU		ICPES	29.5	MG/KG
	21-1415	AAA0831	6-12 in.	AL	13219	17827	NS		ICPES	6790	MG/KG
	21-1415	AAA0831	6-12 in.	AS	13219	17827	NS		ETVAA	1.7	MG/KG
	21-1415	AAA0831	6-12 in.	BA	13219	17827	NS		ICPES	38	MG/KG
	21-1415	AAA0831	6-12 in.	BE	13219	17827	NS		ICPES	0.58	MG/KG
	21-1415	AAA0831	6-12 in.	CA	13219	17827	NS		ICPES	1230	MG/KG
	21-1415	AAA0831	6-12 in.	CD	13219	17827	NS		ICPES	0.9	MG/KG
	21-1415	AAA0831	6-12 in.	CO	13219	17827	NS		ICPES	1.5	MG/KG
	21-1415	AAA0831	6-12 in.	CR	13219	17827	NS		ICPES	3.7	MG/KG
	21-1415	AAA0831	6-12 in.	CU	13219	17827	NS		ICPES	4.3	MG/KG
	21-1415	AAA0831	6-12 in.	FE	13219	17827	NS		ICPES	7760	MG/KG
	21-1415	AAA0831	6-12 in.	K	13219	17827	NS		ICPES	556	MG/KG
	21-1415	AAA0831	6-12 in.	LI	13219	17827	NS		ICPES	5.8	MG/KG
	21-1415	AAA0831	6-12 in.	MG	13219	17827	NS		ICPES	922	MG/KG
	21-1415	AAA0831	6-12 in.	MN	13219	17827	NS		ICPES	309	MG/KG
	21-1415	AAA0831	6-12 in.	NA	13219	17827	NS		ICPES	291	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1415	AAA0831	6-12 in.	NI	13219	17827	NS		ICPES	3.2	MG/KG
	21-1415	AAA0831	6-12 in.	PB	13219	17827	NS		ETVAA	6	MG/KG
	21-1415	AAA0831	6-12 in.	SR	13219	17827	NS		ICPES	8.5	MG/KG
	21-1415	AAA0831	6-12 in.	TL	13219	17827	NS		ETVAA	0.39	MG/KG
	21-1415	AAA0831	6-12 in.	V	13219	17827	NS		ICPES	8.7	MG/KG
	21-1415	AAA0831	6-12 in.	ZN	13219	17827	NS		ICPES	29.2	MG/KG
	21-1415	AAA0832	12-18 in.	AL	13219	17827	NS		ICPES	3670	MG/KG
	21-1415	AAA0832	12-18 in.	AS	13219	17827	NS		ETVAA	1.1	MG/KG
	21-1415	AAA0832	12-18 in.	BA	13219	17827	NS		ICPES	21.9	MG/KG
	21-1415	AAA0832	12-18 in.	BE	13219	17827	NS		ICPES	0.41	MG/KG
	21-1415	AAA0832	12-18 in.	CA	13219	17827	NS		ICPES	692	MG/KG
	21-1415	AAA0832	12-18 in.	CD	13219	17827	NS		ICPES	0.53	MG/KG
	21-1415	AAA0832	12-18 in.	CR	13219	17827	NS		ICPES	1.8	MG/KG
	21-1415	AAA0832	12-18 in.	CU	13219	17827	NS		ICPES	2.5	MG/KG
	21-1415	AAA0832	12-18 in.	FE	13219	17827	NS		ICPES	5610	MG/KG
	21-1415	AAA0832	12-18 in.	K	13219	17827	NS		ICPES	420	MG/KG
	21-1415	AAA0832	12-18 in.	LI	13219	17827	NS		ICPES	3.9	MG/KG
	21-1415	AAA0832	12-18 in.	MG	13219	17827	NS		ICPES	483	MG/KG
	21-1415	AAA0832	12-18 in.	MN	13219	17827	NS		ICPES	301	MG/KG
	21-1415	AAA0832	12-18 in.	NA	13219	17827	NS		ICPES	155	MG/KG
	21-1415	AAA0832	12-18 in.	NI	13219	17827	NS		ICPES	2.1	MG/KG
	21-1415	AAA0832	12-18 in.	PB	13219	17827	NS		ETVAA	6.1	MG/KG
	21-1415	AAA0832	12-18 in.	SR	13219	17827	NS		ICPES	4.4	MG/KG
	21-1415	AAA0832	12-18 in.	TL	13219	17827	NS		ETVAA	0.33	MG/KG
	21-1415	AAA0832	12-18 in.	V	13219	17827	NS		ICPES	4.9	MG/KG
	21-1415	AAA0832	12-18 in.	ZN	13219	17827	NS		ICPES	25.8	MG/KG
21-024(i)	21-1395	AAA0770	0-6 in.	AL	13115		SU		ICPMS	5446.8	UG/G
	21-1395	AAA0770	0-6 in.	AS	13115		SU		ETVAA	28	UG/G
	21-1395	AAA0770	0-6 in.	BA	13115		SU		ICPMS	1329.3	UG/G
	21-1395	AAA0770	0-6 in.	BE	13115		SU		ICPMS	1.3	UG/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1395	AAA0770	0-6 in.	CO	13115		SU		ICPMS	4.1	UG/G
	21-1395	AAA0770	0-6 in.	CR	13115		SU		ICPMS	61.2	UG/G
	21-1395	AAA0770	0-6 in.	CU	13115		SU		ICPMS	68.6	UG/G
	21-1395	AAA0770	0-6 in.	FE	13115		SU		FAA	6.3	MG/G
	21-1395	AAA0770	0-6 in.	K	13115		SU		FAA	794	UG/G
	21-1395	AAA0770	0-6 in.	LI	13115		SU		ICPMS	6.5	UG/G
	21-1395	AAA0770	0-6 in.	MG	13115		SU		ICPMS	1140	UG/G
	21-1395	AAA0770	0-6 in.	MN	13115		SU		ICPMS	115.8	UG/G
	21-1395	AAA0770	0-6 in.	NA	13115		SU		FAA	351	UG/G
	21-1395	AAA0770	0-6 in.	NI	13115		SU		ICPMS	23.7	UG/G
	21-1395	AAA0770	0-6 in.	PB	13115		SU		ICPMS	109.6	UG/G
	21-1395	AAA0770	0-6 in.	SE	13115	18840	SU		ETVAA	0.9	UG/G
	21-1395	AAA0770	0-6 in.	SE	13115		SU		ETVAA	0.9	UG/G
	21-1395	AAA0770	0-6 in.	SR	13115		SU		ICPMS	41.9	UG/G
	21-1395	AAA0770	0-6 in.	V	13115		SU		ICPMS	77.2	UG/G
	21-1395	AAA0770	0-6 in.	ZN	13115		SU		ICPMS	1220.5	UG/G
	21-1395	AAA0771	6-12 in.	AL	13115		NS	R	ICPMS	3251.6	UG/G
	21-1395	AAA0771	6-12 in.	AL	13115		NS		ICPMS	3468	UG/G
	21-1395	AAA0771	6-12 in.	AS	13115		NS	R	ETVAA	7.2	UG/G
	21-1395	AAA0771	6-12 in.	AS	13115		NS		ETVAA	10.1	UG/G
	21-1395	AAA0771	6-12 in.	BA	13115		NS	R	ICPMS	532.7	UG/G
	21-1395	AAA0771	6-12 in.	BA	13115		NS		ICPMS	353.2	UG/G
	21-1395	AAA0771	6-12 in.	BE	13115		NS	R	ICPMS	1.1	UG/G
	21-1395	AAA0771	6-12 in.	BE	13115		NS		ICPMS	1.1	UG/G
	21-1395	AAA0771	6-12 in.	CO	13115		NS	R	ICPMS	0.8	UG/G
	21-1395	AAA0771	6-12 in.	CO	13115		NS		ICPMS	2.04	UG/G
	21-1395	AAA0771	6-12 in.	CR	13115		NS	R	ICPMS	24.9	UG/G
	21-1395	AAA0771	6-12 in.	CR	13115		NS		ICPMS	49.8	UG/G
	21-1395	AAA0771	6-12 in.	CU	13115		NS	R	ICPMS	17.6	UG/G
	21-1395	AAA0771	6-12 in.	CU	13115		NS		ICPMS	34	UG/G
	21-1395	AAA0771	6-12 in.	FE	13115		NS	R	FAA	3.3	MG/G

Laboratory Inorganic Data
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SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1395	AAA0771	6-12 in.	FE	13115		NS		FAA	5.8	MG/G
	21-1395	AAA0771	6-12 in.	K	13115		NS	R	FAA	677	UG/G
	21-1395	AAA0771	6-12 in.	K	13115		NS		FAA	769	UG/G
	21-1395	AAA0771	6-12 in.	LI	13115		NS	R	ICPMS	4.6	UG/G
	21-1395	AAA0771	6-12 in.	LI	13115		NS		ICPMS	4.8	UG/G
	21-1395	AAA0771	6-12 in.	MG	13115		NS	R	ICPMS	570	UG/G
	21-1395	AAA0771	6-12 in.	MG	13115		NS		ICPMS	660	UG/G
	21-1395	AAA0771	6-12 in.	MN	13115		NS	R	ICPMS	57.4	UG/G
	21-1395	AAA0771	6-12 in.	MN	13115		NS		ICPMS	72.8	UG/G
	21-1395	AAA0771	6-12 in.	NA	13115		NS	R	FAA	558	UG/G
	21-1395	AAA0771	6-12 in.	NA	13115		NS		FAA	765	UG/G
	21-1395	AAA0771	6-12 in.	NI	13115		NS	R	ICPMS	12.7	UG/G
	21-1395	AAA0771	6-12 in.	NI	13115		NS		ICPMS	14.6	UG/G
	21-1395	AAA0771	6-12 in.	PB	13115		NS	R	ICPMS	51.7	UG/G
	21-1395	AAA0771	6-12 in.	PB	13115		NS		ICPMS	97	UG/G
	21-1395	AAA0771	6-12 in.	SE	13115	18840	NS	R	ETVAA	0.35	UG/G
	21-1395	AAA0771	6-12 in.	SE	13115	18840	NS		ETVAA	0.4	UG/G
	21-1395	AAA0771	6-12 in.	SE	13115		NS	R	ETVAA	0.35	UG/G
	21-1395	AAA0771	6-12 in.	SE	13115		NS		ETVAA	0.4	UG/G
	21-1395	AAA0771	6-12 in.	SR	13115		NS	R	ICPMS	12	UG/G
	21-1395	AAA0771	6-12 in.	SR	13115		NS		ICPMS	17.4	UG/G
	21-1395	AAA0771	6-12 in.	V	13115		NS	R	ICPMS	20.9	UG/G
	21-1395	AAA0771	6-12 in.	V	13115		NS		ICPMS	37	UG/G
	21-1395	AAA0771	6-12 in.	ZN	13115		NS	R	ICPMS	276.9	UG/G
	21-1395	AAA0771	6-12 in.	ZN	13115		NS		ICPMS	706.4	UG/G
	21-1396	AAA0772	0-6 in.	AL	13115		SU		ICPMS	7150	UG/G
	21-1396	AAA0772	0-6 in.	AS	13115		SU		ETVAA	13.9	UG/G
	21-1396	AAA0772	0-6 in.	BA	13115		SU		ICPMS	934.8	UG/G
	21-1396	AAA0772	0-6 in.	BE	13115		SU		ICPMS	1.7	UG/G
	21-1396	AAA0772	0-6 in.	CO	13115		SU		ICPMS	3.5	UG/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1396	AAA0772	0-6 in.	CR	13115		SU		ICPMS	40.8	UG/G
	21-1396	AAA0772	0-6 in.	CU	13115		SU		ICPMS	25.2	UG/G
	21-1396	AAA0772	0-6 in.	FE	13115		SU		FAA	9.7	MG/G
	21-1396	AAA0772	0-6 in.	K	13115		SU		FAA	916	UG/G
	21-1396	AAA0772	0-6 in.	LI	13115		SU		ICPMS	9.9	UG/G
	21-1396	AAA0772	0-6 in.	MG	13115		SU		ICPMS	1370	UG/G
	21-1396	AAA0772	0-6 in.	MN	13115		SU		ICPMS	217	UG/G
	21-1396	AAA0772	0-6 in.	NI	13115		SU		ICPMS	29.4	UG/G
	21-1396	AAA0772	0-6 in.	PB	13115		SU		ICPMS	74	UG/G
	21-1396	AAA0772	0-6 in.	SE	13115	18840	SU		ETVAA	0.69	UG/G
	21-1396	AAA0772	0-6 in.	SE	13115		SU		ETVAA	0.69	UG/G
	21-1396	AAA0772	0-6 in.	SR	13115		SU		ICPMS	38.6	UG/G
	21-1396	AAA0772	0-6 in.	V	13115		SU		ICPMS	37.8	UG/G
	21-1396	AAA0772	0-6 in.	ZN	13115		SU		ICPMS	631.6	UG/G
	21-1396	AAA0773	6-12 in.	AL	13115		NS		ICPMS	8254	UG/G
	21-1396	AAA0773	6-12 in.	AS	13115		NS		ETVAA	12	UG/G
	21-1396	AAA0773	6-12 in.	BA	13115		NS		ICPMS	882.8	UG/G
	21-1396	AAA0773	6-12 in.	BE	13115		NS		ICPMS	1.7	UG/G
	21-1396	AAA0773	6-12 in.	CO	13115		NS		ICPMS	3.7	UG/G
	21-1396	AAA0773	6-12 in.	CR	13115		NS		ICPMS	39.8	UG/G
	21-1396	AAA0773	6-12 in.	CU	13115		NS		ICPMS	24.6	UG/G
	21-1396	AAA0773	6-12 in.	FE	13115		NS		FAA	7.5	MG/G
	21-1396	AAA0773	6-12 in.	K	13115		NS		FAA	771	UG/G
	21-1396	AAA0773	6-12 in.	LI	13115		NS		ICPMS	9.6	UG/G
	21-1396	AAA0773	6-12 in.	MG	13115		NS		ICPMS	1440	UG/G
	21-1396	AAA0773	6-12 in.	MN	13115		NS		ICPMS	148.2	UG/G
	21-1396	AAA0773	6-12 in.	NA	13115		NS		FAA	240	UG/G
	21-1396	AAA0773	6-12 in.	NI	13115		NS		ICPMS	30.4	UG/G
	21-1396	AAA0773	6-12 in.	PB	13115		NS		ICPMS	70.4	UG/G
	21-1396	AAA0773	6-12 in.	SE	13115	18840	NS		ETVAA	0.65	UG/G
	21-1396	AAA0773	6-12 in.	SE	13115		NS		ETVAA	0.65	UG/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1396	AAA0773	6-12 in.	SR	13115		NS		ICPMS	28.4	UG/G
	21-1396	AAA0773	6-12 in.	V	13115		NS		ICPMS	34.1	UG/G
	21-1396	AAA0773	6-12 in.	ZN	13115		NS		ICPMS	618.4	UG/G
	21-1397	AAA0774	0-6 in.	AL	13115		SU		ICPMS	8390	UG/G
	21-1397	AAA0774	0-6 in.	AS	13115		SU		ETVAA	34.7	UG/G
	21-1397	AAA0774	0-6 in.	BA	13115		SU		ICPMS	1733.4	UG/G
	21-1397	AAA0774	0-6 in.	BE	13115		SU		ICPMS	1.5	UG/G
	21-1397	AAA0774	0-6 in.	CA	13115		SU		FAA	557	UG/G
	21-1397	AAA0774	0-6 in.	CO	13115		SU		ICPMS	5.3	UG/G
	21-1397	AAA0774	0-6 in.	CR	13115		SU		ICPMS	157.4	UG/G
	21-1397	AAA0774	0-6 in.	CU	13115		SU		ICPMS	71	UG/G
	21-1397	AAA0774	0-6 in.	FE	13115		SU		FAA	9.5	MG/G
	21-1397	AAA0774	0-6 in.	K	13115		SU		FAA	1	MG/G
	21-1397	AAA0774	0-6 in.	LI	13115		SU		ICPMS	9	UG/G
	21-1397	AAA0774	0-6 in.	MG	13115		SU		ICPMS	1700	UG/G
	21-1397	AAA0774	0-6 in.	MN	13115		SU		ICPMS	236.2	UG/G
	21-1397	AAA0774	0-6 in.	NI	13115		SU		ICPMS	34.8	UG/G
	21-1397	AAA0774	0-6 in.	PB	13115		SU		ICPMS	299.4	UG/G
	21-1397	AAA0774	0-6 in.	SE	13115	18840	SU		ETVAA	1.28	UG/G
	21-1397	AAA0774	0-6 in.	SE	13115		SU		ETVAA	1.28	UG/G
	21-1397	AAA0774	0-6 in.	SR	13115		SU		ICPMS	49.8	UG/G
	21-1397	AAA0774	0-6 in.	V	13115		SU		ICPMS	127	UG/G
	21-1397	AAA0774	0-6 in.	ZN	13115		SU		ICPMS	1217.8	UG/G
	21-1397	AAA0775	6-12 in.	AL	13115		NS		ICPMS	7534	UG/G
	21-1397	AAA0775	6-12 in.	AS	13115		NS		ETVAA	30	UG/G
	21-1397	AAA0775	6-12 in.	BA	13115		NS		ICPMS	980.6	UG/G
	21-1397	AAA0775	6-12 in.	BE	13115		NS		ICPMS	1.3	UG/G
	21-1397	AAA0775	6-12 in.	CA	13115		NS		FAA	556	UG/G
	21-1397	AAA0775	6-12 in.	CO	13115		NS		ICPMS	4.3	UG/G
	21-1397	AAA0775	6-12 in.	CR	13115		NS		ICPMS	122	UG/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1397	AAA0775	6-12 in.	CU	13115		NS		ICPMS	47.6	UG/G
	21-1397	AAA0775	6-12 in.	FE	13115		NS		FAA	8	MG/G
	21-1397	AAA0775	6-12 in.	K	13115		NS		FAA	913	UG/G
	21-1397	AAA0775	6-12 in.	LI	13115		NS		ICPMS	8.1	UG/G
	21-1397	AAA0775	6-12 in.	MG	13115		NS		ICPMS	1570	UG/G
	21-1397	AAA0775	6-12 in.	MN	13115		NS		ICPMS	139.6	UG/G
	21-1397	AAA0775	6-12 in.	NI	13115		NS		ICPMS	28.2	UG/G
	21-1397	AAA0775	6-12 in.	PB	13115		NS		ICPMS	257	UG/G
	21-1397	AAA0775	6-12 in.	SE	13115	18840	NS		ETVAA	1.06	UG/G
	21-1397	AAA0775	6-12 in.	SE	13115		NS		ETVAA	1.06	UG/G
	21-1397	AAA0775	6-12 in.	SR	13115		NS		ICPMS	43.8	UG/G
	21-1397	AAA0775	6-12 in.	V	13115		NS		ICPMS	91.4	UG/G
	21-1397	AAA0775	6-12 in.	ZN	13115		NS		ICPMS	820.8	UG/G
21-024(I)	21-1419	AAA0912	0-6 in.	AL	13245	17915	SU		ICPES	6290	MG/KG
	21-1419	AAA0912	0-6 in.	AS	13245	17915	SU		ETVAA	2.3	MG/KG
	21-1419	AAA0912	0-6 in.	BA	13245	17915	SU		ICPES	79.5	MG/KG
	21-1419	AAA0912	0-6 in.	BE	13245	17915	SU		ICPES	0.44	MG/KG
	21-1419	AAA0912	0-6 in.	CA	13245	17915	SU		ICPES	5210	MG/KG
	21-1419	AAA0912	0-6 in.	CD	13245	17915	SU		ICPES	1.3	MG/KG
	21-1419	AAA0912	0-6 in.	CO	13245	17915	SU		ICPES	3.4	MG/KG
	21-1419	AAA0912	0-6 in.	CR	13245	17915	SU		ICPES	6.8	MG/KG
	21-1419	AAA0912	0-6 in.	CU	13245	17915	SU		ICPES	6.4	MG/KG
	21-1419	AAA0912	0-6 in.	FE	13245	17915	SU		ICPES	8900	MG/KG
	21-1419	AAA0912	0-6 in.	K	13245	17915	SU		ICPES	922	MG/KG
	21-1419	AAA0912	0-6 in.	LI	13245	17915	SU		ICPES	6.5	MG/KG
	21-1419	AAA0912	0-6 in.	MG	13245	17915	SU		ICPES	1760	MG/KG
	21-1419	AAA0912	0-6 in.	MN	13245	17915	SU		ICPES	205	MG/KG
	21-1419	AAA0912	0-6 in.	NA	13245	17915	SU		ICPES	97.5	MG/KG
	21-1419	AAA0912	0-6 in.	NI	13245	17915	SU		ICPES	5.1	MG/KG
	21-1419	AAA0912	0-6 in.	PB	13245	17915	SU		ETVAA	11.6	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1419	AAA0912	0-6 in.	SR	13245	17915	SU		ICPES	18.4	MG/KG
	21-1419	AAA0912	0-6 in.	TL	13245	17915	SU		ETVAA	0.17	MG/KG
	21-1419	AAA0912	0-6 in.	V	13245	17915	SU		ICPES	14.9	MG/KG
	21-1419	AAA0912	0-6 in.	ZN	13245	17915	SU		ICPES	28.1	MG/KG
	21-1420	AAA0913	0-6 in.	AL	13245	17915	SU		ICPES	4850	MG/KG
	21-1420	AAA0913	0-6 in.	AS	13245	17915	SU		ETVAA	1.8	MG/KG
	21-1420	AAA0913	0-6 in.	BA	13245	17915	SU		ICPES	67.6	MG/KG
	21-1420	AAA0913	0-6 in.	BE	13245	17915	SU		ICPES	0.33	MG/KG
	21-1420	AAA0913	0-6 in.	CA	13245	17915	SU		ICPES	7120	MG/KG
	21-1420	AAA0913	0-6 in.	CD	13245	17915	SU		ICPES	1	MG/KG
	21-1420	AAA0913	0-6 in.	CO	13245	17915	SU		ICPES	3.7	MG/KG
	21-1420	AAA0913	0-6 in.	CR	13245	17915	SU		ICPES	6.6	MG/KG
	21-1420	AAA0913	0-6 in.	CU	13245	17915	SU		ICPES	5.6	MG/KG
	21-1420	AAA0913	0-6 in.	FE	13245	17915	SU		ICPES	7680	MG/KG
	21-1420	AAA0913	0 6 in.	K	13245	17915	SU		ICPES	1070	MG/KG
	21-1420	AAA0913	0-6 in.	LI	13245	17915	SU		ICPES	5.8	MG/KG
	21-1420	AAA0913	0-6 in.	MG	13245	17915	SU		ICPES	1740	MG/KG
	21-1420	AAA0913	0-6 in.	MN	13245	17915	SU		ICPES	194	MG/KG
	21-1420	AAA0913	0-6 in.	NA	13245	17915	SU		ICPES	107	MG/KG
	21-1420	AAA0913	0-6 in.	NI	13245	17915	SU		ICPES	5.1	MG/KG
	21-1420	AAA0913	0-6 in.	PB	13245	17915	SU		ETVAA	9.8	MG/KG
	21-1420	AAA0913	0-6 in.	SR	13245	17915	SU		ICPES	20.4	MG/KG
	21-1420	AAA0913	0-6 in.	V	13245	17915	SU		ICPES	14.3	MG/KG
	21-1420	AAA0913	0-6 in.	ZN	13245	17915	SU		ICPES	23.3	MG/KG
	21-1421	AAA0889	0-6 in.	AL	13245	17915	SU		ICPES	3480	MG/KG
	21-1421	AAA0889	0-6 in.	AS	13245	17915	SU		ETVAA	3.1	MG/KG
	21-1421	AAA0889	0-6 in.	BA	13245	17915	SU		ICPES	46	MG/KG
	21-1421	AAA0889	0-6 in.	BE	13245	17915	SU		ICPES	0.3	MG/KG
	21-1421	AAA0889	0-6 in.	CA	13245	17915	SU		ICPES	4010	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1421	AAA0889	0-6 in.	CD	13245	17915	SU		ICPES	0.78	MG/KG
	21-1421	AAA0889	0-6 in.	CO	13245	17915	SU		ICPES	1.6	MG/KG
	21-1421	AAA0889	0-6 in.	CR	13245	17915	SU		ICPES	4.5	MG/KG
	21-1421	AAA0889	0-6 in.	CU	13245	17915	SU		ICPES	5.7	MG/KG
	21-1421	AAA0889	0-6 in.	FE	13245	17915	SU		ICPES	6720	MG/KG
	21-1421	AAA0889	0-6 in.	K	13245	17915	SU		ICPES	789	MG/KG
	21-1421	AAA0889	0-6 in.	LI	13245	17915	SU		ICPES	4.2	MG/KG
	21-1421	AAA0889	0-6 in.	MG	13245	17915	SU		ICPES	1300	MG/KG
	21-1421	AAA0889	0-6 in.	MN	13245	17915	SU		ICPES	150	MG/KG
	21-1421	AAA0889	0-6 in.	NA	13245	17915	SU		ICPES	65	MG/KG
	21-1421	AAA0889	0-6 in.	NI	13245	17915	SU		ICPES	4	MG/KG
	21-1421	AAA0889	0-6 in.	PB	13245	17915	SU		ETVAA	10.1	MG/KG
	21-1421	AAA0889	0-6 in.	SR	13245	17915	SU		ICPES	12.5	MG/KG
	21-1421	AAA0889	0-6 in.	TL	13245	17915	SU		ETVAA	0.15	MG/KG
	21-1421	AAA0889	0-6 in.	V	13245	17915	SU		ICPES	13.5	MG/KG
	21-1421	AAA0889	0-6 in.	ZN	13245	17915	SU		ICPES	25.4	MG/KG
	21-1422	AAA0890	0-6 in.	AL	13245	17915	SU		ICPES	7370	MG/KG
	21-1422	AAA0890	0-6 in.	AS	13245	17915	SU		ETVAA	2.1	MG/KG
	21-1422	AAA0890	0-6 in.	BA	13245	17915	SU		ICPES	90.9	MG/KG
	21-1422	AAA0890	0-6 in.	BE	13245	17915	SU		ICPES	0.68	MG/KG
	21-1422	AAA0890	0-6 in.	CA	13245	17915	SU		ICPES	2080	MG/KG
	21-1422	AAA0890	0-6 in.	CD	13245	17915	SU		ICPES	1.1	MG/KG
	21-1422	AAA0890	0-6 in.	CO	13245	17915	SU		ICPES	2.6	MG/KG
	21-1422	AAA0890	0-6 in.	CR	13245	17915	SU		ICPES	5.8	MG/KG
	21-1422	AAA0890	0-6 in.	CU	13245	17915	SU		ICPES	8.5	MG/KG
	21-1422	AAA0890	0-6 in.	FE	13245	17915	SU		ICPES	8400	MG/KG
	21-1422	AAA0890	0-6 in.	K	13245	17915	SU		ICPES	1170	MG/KG
	21-1422	AAA0890	0-6 in.	LI	13245	17915	SU		ICPES	9	MG/KG
	21-1422	AAA0890	0-6 in.	MG	13245	17915	SU		ICPES	1470	MG/KG
	21-1422	AAA0890	0-6 in.	MN	13245	17915	SU		ICPES	212	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1422	AAA0890	0-6 in.	NA	13245	17915	SU		ICPES	47.1	MG/KG
	21-1422	AAA0890	0-6 in.	NI	13245	17915	SU		ICPES	4.8	MG/KG
	21-1422	AAA0890	0-6 in.	PB	13245	17915	SU		ETVAA	20.2	MG/KG
	21-1422	AAA0890	0-6 in.	SR	13245	17915	SU		ICPES	14.9	MG/KG
	21-1422	AAA0890	0-6 in.	V	13245	17915	SU		ICPES	13.1	MG/KG
	21-1422	AAA0890	0-6 in.	ZN	13245	17915	SU		ICPES	39.8	MG/KG
	21-1423	AAA0891	0-6 in.	AL	13245	17915	SU		ICPES	5400	MG/KG
	21-1423	AAA0891	0-6 in.	AS	13245	17915	SU		ETVAA	2	MG/KG
	21-1423	AAA0891	0-6 in.	BA	13245	17915	SU		ICPES	67.8	MG/KG
	21-1423	AAA0891	0-6 in.	BE	13245	17915	SU		ICPES	0.55	MG/KG
	21-1423	AAA0891	0-6 in.	CA	13245	17915	SU		ICPES	1720	MG/KG
	21-1423	AAA0891	0-6 in.	CD	13245	17915	SU		ICPES	1	MG/KG
	21-1423	AAA0891	0-6 in.	CO	13245	17915	SU		ICPES	1.5	MG/KG
	21-1423	AAA0891	0-6 in.	CR	13245	17915	SU		ICPES	4.8	MG/KG
	21-1423	AAA0891	0-6 in.	CU	13245	17915	SU		ICPES	5.9	MG/KG
	21-1423	AAA0891	0-6 in.	FE	13245	17915	SU		ICPES	6540	MG/KG
	21-1423	AAA0891	0-6 in.	K	13245	17915	SU		ICPES	976	MG/KG
	21-1423	AAA0891	0-6 in.	LI	13245	17915	SU		ICPES	5.1	MG/KG
	21-1423	AAA0891	0-6 in.	MG	13245	17915	SU		ICPES	1100	MG/KG
	21-1423	AAA0891	0-6 in.	MN	13245	17915	SU		ICPES	172	MG/KG
	21-1423	AAA0891	0-6 in.	NA	13245	17915	SU		ICPES	63.3	MG/KG
	21-1423	AAA0891	0-6 in.	NI	13245	17915	SU		ICPES	4.6	MG/KG
	21-1423	AAA0891	0-6 in.	PB	13245	17915	SU		ETVAA	18.3	MG/KG
	21-1423	AAA0891	0-6 in.	SR	13245	17915	SU		ICPES	10.9	MG/KG
	21-1423	AAA0891	0-6 in.	TL	13245	17915	SU		ETVAA	0.19	MG/KG
	21-1423	AAA0891	0-6 in.	V	13245	17915	SU		ICPES	10.3	MG/KG
	21-1423	AAA0891	0-6 in.	ZN	13245	17915	SU		ICPES	30.1	MG/KG
	21-1424	AAA0892	0-6 in.	AL	13245	17915	SU	D	ICPES	8610	MG/KG
	21-1424	AAA0892	0-6 in.	AL	13245	17915	SU		ICPES	10400	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1424	AAA0892	0-6 in.	AS	13245	17915	SU	D	ETVAA	2.1	MG/KG
	21-1424	AAA0892	0-6 in.	AS	13245	17915	SU		ETVAA	3	MG/KG
	21-1424	AAA0892	0-6 in.	BA	13245	17915	SU	D	ICPES	89.3	MG/KG
	21-1424	AAA0892	0-6 in.	BA	13245	17915	SU		ICPES	101	MG/KG
	21-1424	AAA0892	0-6 in.	BE	13245	17915	SU	D	ICPES	0.58	MG/KG
	21-1424	AAA0892	0-6 in.	BE	13245	17915	SU		ICPES	0.6	MG/KG
	21-1424	AAA0892	0-6 in.	CA	13245	17915	SU	D	ICPES	2460	MG/KG
	21-1424	AAA0892	0-6 in.	CA	13245	17915	SU		ICPES	2450	MG/KG
	21-1424	AAA0892	0-6 in.	CD	13245	17915	SU	D	ICPES	2	MG/KG
	21-1424	AAA0892	0-6 in.	CD	13245	17915	SU		ICPES	2	MG/KG
	21-1424	AAA0892	0-6 in.	CO	13245	17915	SU	D	ICPES	4.3	MG/KG
	21-1424	AAA0892	0-6 in.	CO	13245	17915	SU		ICPES	4.5	MG/KG
	21-1424	AAA0892	0-6 in.	CR	13245	17915	SU	D	ICPES	7.8	MG/KG
	21-1424	AAA0892	0-6 in.	CR	13245	17915	SU		ICPES	7.9	MG/KG
	21-1424	AAA0892	0-6 in.	CU	13245	17915	SU	D	ICPES	12.9	MG/KG
	21-1424	AAA0892	0-6 in.	CU	13245	17915	SU		ICPES	11.2	MG/KG
	21-1424	AAA0892	0-6 in.	FE	13245	17915	SU	D	ICPES	9950	MG/KG
	21-1424	AAA0892	0-6 in.	FE	13245	17915	SU		ICPES	10500	MG/KG
	21-1424	AAA0892	0-6 in.	K	13245	17915	SU	D	ICPES	1210	MG/KG
	21-1424	AAA0892	0-6 in.	K	13245	17915	SU		ICPES	1470	MG/KG
	21-1424	AAA0892	0-6 in.	LI	13245	17915	SU	D	ICPES	7.4	MG/KG
	21-1424	AAA0892	0-6 in.	LI	13245	17915	SU		ICPES	27.7	MG/KG
	21-1424	AAA0892	0-6 in.	MG	13245	17915	SU	D	ICPES	1570	MG/KG
	21-1424	AAA0892	0-6 in.	MG	13245	17915	SU		ICPES	2840	MG/KG
	21-1424	AAA0892	0-6 in.	MN	13245	17915	SU	D	ICPES	258	MG/KG
	21-1424	AAA0892	0-6 in.	MN	13245	17915	SU		ICPES	379	MG/KG
	21-1424	AAA0892	0-6 in.	NA	13245	17915	SU	D	ICPES	78.3	MG/KG
	21-1424	AAA0892	0-6 in.	NA	13245	17915	SU		ICPES	149	MG/KG
	21-1424	AAA0892	0-6 in.	NI	13245	17915	SU	D	ICPES	5.8	MG/KG
	21-1424	AAA0892	0-6 in.	NI	13245	17915	SU		ICPES	5	MG/KG
	21-1424	AAA0892	0-6 in.	PB	13245	17915	SU	D	ETVAA	28.1	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1424	AAA0892	0-6 in.	PB	13245	17915	SU		ETVAA	16.2	MG/KG
	21-1424	AAA0892	0-6 in.	SR	13245	17915	SU	D	ICPES	15.2	MG/KG
	21-1424	AAA0892	0-6 in.	SR	13245	17915	SU		ICPES	16.7	MG/KG
	21-1424	AAA0892	0-6 in.	TL	13245	17915	SU	D	ETVAA	0.34	MG/KG
	21-1424	AAA0892	0-6 in.	TL	13245	17915	SU		ETVAA	0.38	MG/KG
	21-1424	AAA0892	0-6 in.	V	13245	17915	SU	D	ICPES	15.9	MG/KG
	21-1424	AAA0892	0-6 in.	V	13245	17915	SU		ICPES	16	MG/KG
	21-1424	AAA0892	0-6 in.	ZN	13245	17915	SU	D	ICPES	43.6	MG/KG
	21-1424	AAA0892	0-6 in.	ZN	13245	17915	SU		ICPES	50.1	MG/KG
21-024(m), 21-027(b)	21-1393	AAA0760	0-6 in.	AL	13211	17716	SU		ICPES	5080	MG/KG
	21-1393	AAA0760	0-6 in.	AS	13211	17716	SU		ETVAA	1.1	MG/KG
	21-1393	AAA0760	0-6 in.	BA	13211	17716	SU		ICPES	56	MG/KG
	21-1393	AAA0760	0-6 in.	BE	13211	17716	SU		ICPES	0.3	MG/KG
	21-1393	AAA0760	0-6 in.	CA	13211	17716	SU		ICPES	2120	MG/KG
	21-1393	AAA0760	0-6 in.	CD	13211	17716	SU		ICPES	0.54	MG/KG
	21-1393	AAA0760	0-6 in.	CO	13211	17716	SU		ICPES	2.2	MG/KG
	21-1393	AAA0760	0-6 in.	CR	13211	17716	SU		ICPES	9.1	MG/KG
	21-1393	AAA0760	0-6 in.	CU	13211	17716	SU		ICPES	5.6	MG/KG
	21-1393	AAA0760	0-6 in.	FE	13211	17716	SU		ICPES	6200	MG/KG
	21-1393	AAA0760	0-6 in.	K	13211	17716	SU		ICPES	760	MG/KG
	21-1393	AAA0760	0-6 in.	LI	13211	17716	SU		ICPES	6.3	MG/KG
	21-1393	AAA0760	0-6 in.	MG	13211	17716	SU		ICPES	942	MG/KG
	21-1393	AAA0760	0-6 in.	MN	13211	17716	SU		ICPES	220	MG/KG
	21-1393	AAA0760	0-6 in.	NA	13211	17716	SU		ICPES	87.1	MG/KG
	21-1393	AAA0760	0-6 in.	NI	13211	17716	SU		ICPES	3.2	MG/KG
	21-1393	AAA0760	0-6 in.	PB	13211	17716	SU		ETVAA	16.9	MG/KG
	21-1393	AAA0760	0-6 in.	SR	13211	17716	SU		ICPES	9.8	MG/KG
	21-1393	AAA0760	0-6 in.	V	13211	17716	SU		ICPES	10.6	MG/KG
	21-1393	AAA0760	0-6 in.	ZN	13211	17716	SU		ICPES	55.3	MG/KG
	21-1393	AAA0761	6-12 in.	AL	13211	17716	NS		ICPES	5830	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1393	AAA0761	6-12 in.	AS	13211	17716	NS		ETVAA	1.1	MG/KG
	21-1393	AAA0761	6-12 in.	BA	13211	17716	NS		ICPES	49.6	MG/KG
	21-1393	AAA0761	6-12 in.	BE	13211	17716	NS		ICPES	0.39	MG/KG
	21-1393	AAA0761	6-12 in.	CA	13211	17716	NS		ICPES	1060	MG/KG
	21-1393	AAA0761	6-12 in.	CD	13211	17716	NS		ICPES	0.74	MG/KG
	21-1393	AAA0761	6-12 in.	CO	13211	17716	NS		ICPES	1.9	MG/KG
	21-1393	AAA0761	6-12 in.	CR	13211	17716	NS		ICPES	4.7	MG/KG
	21-1393	AAA0761	6-12 in.	CU	13211	17716	NS		ICPES	6	MG/KG
	21-1393	AAA0761	6-12 in.	FE	13211	17716	NS		ICPES	6670	MG/KG
	21-1393	AAA0761	6-12 in.	K	13211	17716	NS		ICPES	661	MG/KG
	21-1393	AAA0761	6-12 in.	LI	13211	17716	NS		ICPES	6.3	MG/KG
	21-1393	AAA0761	6-12 in.	MG	13211	17716	NS		ICPES	970	MG/KG
	21-1393	AAA0761	6-12 in.	MN	13211	17716	NS		ICPES	237	MG/KG
	21-1393	AAA0761	6-12 in.	NA	13211	17716	NS		ICPES	77.9	MG/KG
	21-1393	AAA0761	6-12 in.	NI	13211	17716	NS		ICPES	3.9	MG/KG
	21-1393	AAA0761	6-12 in.	PB	13211	17716	NS		ETVAA	21.7	MG/KG
	21-1393	AAA0761	6-12 in.	SR	13211	17716	NS		ICPES	7.9	MG/KG
	21-1393	AAA0761	6-12 in.	V	13211	17716	NS		ICPES	9.2	MG/KG
	21-1393	AAA0761	6-12 in.	ZN	13211	17716	NS		ICPES	56.6	MG/KG
	21-1393	AAA0762	12-18 in.	AL	13211	17716	NS		ICPES	3410	MG/KG
	21-1393	AAA0762	12-18 in.	AS	13211	17716	NS		ETVAA	0.7	MG/KG
	21-1393	AAA0762	12-18 in.	BA	13211	17716	NS		ICPES	29.3	MG/KG
	21-1393	AAA0762	12-18 in.	BE	13211	17716	NS		ICPES	0.26	MG/KG
	21-1393	AAA0762	12-18 in.	CA	13211	17716	NS		ICPES	653	MG/KG
	21-1393	AAA0762	12-18 in.	CD	13211	17716	NS		ICPES	0.52	MG/KG
	21-1393	AAA0762	12-18 in.	CR	13211	17716	NS		ICPES	2.3	MG/KG
	21-1393	AAA0762	12-18 in.	CU	13211	17716	NS		ICPES	3	MG/KG
	21-1393	AAA0762	12-18 in.	FE	13211	17716	NS		ICPES	5280	MG/KG
	21-1393	AAA0762	12-18 in.	K	13211	17716	NS		ICPES	447	MG/KG
	21-1393	AAA0762	12-18 in.	LI	13211	17716	NS		ICPES	4.5	MG/KG
	21-1393	AAA0762	12-18 in.	MG	13211	17716	NS		ICPES	573	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1393	AAA0762	12-18 in.	MN	13211	17716	NS		ICPES	209	MG/KG
	21-1393	AAA0762	12-18 in.	NA	13211	17716	NS		ICPES	92.9	MG/KG
	21-1393	AAA0762	12-18 in.	PB	13211	17716	NS		ETVAA	9.2	MG/KG
	21-1393	AAA0762	12-18 in.	SR	13211	17716	NS		ICPES	4.2	MG/KG
	21-1393	AAA0762	12-18 in.	TL	13211	17716	NS		ETVAA	0.14	MG/KG
	21-1393	AAA0762	12-18 in.	V	13211	17716	NS		ICPES	6.3	MG/KG
	21-1393	AAA0762	12-18 in.	ZN	13211	17716	NS		ICPES	33.8	MG/KG
	21-1394	AAA0763	0-6 in.	AL	13211	17716	SU	D	ICPES	10760	MG/KG
	21-1394	AAA0763	0-6 in.	AL	13211	17716	SU		ICPES	9360	MG/KG
	21-1394	AAA0763	0-6 in.	AS	13211	17716	SU	D	ETVAA	1.3	MG/KG
	21-1394	AAA0763	0-6 in.	AS	13211	17716	SU		ETVAA	2.2	MG/KG
	21-1394	AAA0763	0-6 in.	BA	13211	17716	SU	D	ICPES	87.3	MG/KG
	21-1394	AAA0763	0-6 in.	BA	13211	17716	SU		ICPES	80.9	MG/KG
	21-1394	AAA0763	0-6 in.	BE	13211	17716	SU	D	ICPES	0.64	MG/KG
	21-1394	AAA0763	0-6 in.	BE	13211	17716	SU		ICPES	0.62	MG/KG
	21-1394	AAA0763	0-6 in.	CA	13211	17716	SU	D	ICPES	1950	MG/KG
	21-1394	AAA0763	0-6 in.	CA	13211	17716	SU		ICPES	2950	MG/KG
	21-1394	AAA0763	0-6 in.	CD	13211	17716	SU	D	ICPES	0.49	MG/KG
	21-1394	AAA0763	0-6 in.	CD	13211	17716	SU		ICPES	1.1	MG/KG
	21-1394	AAA0763	0-6 in.	CO	13211	17716	SU	D	ICPES	3.3	MG/KG
	21-1394	AAA0763	0-6 in.	CO	13211	17716	SU		ICPES	2.4	MG/KG
	21-1394	AAA0763	0-6 in.	CR	13211	17716	SU	D	ICPES	8.2	MG/KG
	21-1394	AAA0763	0-6 in.	CR	13211	17716	SU		ICPES	7.6	MG/KG
	21-1394	AAA0763	0-6 in.	CU	13211	17716	SU	D	ICPES	7.4	MG/KG
	21-1394	AAA0763	0-6 in.	CU	13211	17716	SU		ICPES	6.2	MG/KG
	21-1394	AAA0763	0-6 in.	FE	13211	17716	SU	D	ICPES	9850	MG/KG
	21-1394	AAA0763	0-6 in.	FE	13211	17716	SU		ICPES	8880	MG/KG
	21-1394	AAA0763	0-6 in.	K	13211	17716	SU	D	ICPES	1630	MG/KG
	21-1394	AAA0763	0-6 in.	K	13211	17716	SU		ICPES	1300	MG/KG
	21-1394	AAA0763	0-6 in.	LI	13211	17716	SU	D	ICPES	9.9	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1394	AAA0763	0-6 in.	LI	13211	17716	SU		ICPES	8.5	MG/KG
	21-1394	AAA0763	0-6 in.	MG	13211	17716	SU	D	ICPES	1630	MG/KG
	21-1394	AAA0763	0-6 in.	MG	13211	17716	SU		ICPES	1450	MG/KG
	21-1394	AAA0763	0-6 in.	MN	13211	17716	SU	D	ICPES	331	MG/KG
	21-1394	AAA0763	0-6 in.	MN	13211	17716	SU		ICPES	318	MG/KG
	21-1394	AAA0763	0-6 in.	NA	13211	17716	SU	D	ICPES	99.8	MG/KG
	21-1394	AAA0763	0-6 in.	NA	13211	17716	SU		ICPES	93.9	MG/KG
	21-1394	AAA0763	0-6 in.	NI	13211	17716	SU	D	ICPES	6.1	MG/KG
	21-1394	AAA0763	0-6 in.	NI	13211	17716	SU		ICPES	4.6	MG/KG
	21-1394	AAA0763	0-6 in.	PB	13211	17716	SU	D	ETVAA	15.3	MG/KG
	21-1394	AAA0763	0-6 in.	PB	13211	17716	SU		ETVAA	21.5	MG/KG
	21-1394	AAA0763	0-6 in.	SR	13211	17716	SU	D	ICPES	15.1	MG/KG
	21-1394	AAA0763	0-6 in.	SR	13211	17716	SU		ICPES	15.5	MG/KG
	21-1394	AAA0763	0-6 in.	V	13211	17716	SU	D	ICPES	16	MG/KG
	21-1394	AAA0763	0-6 in.	V	13211	17716	SU		ICPES	13.9	MG/KG
	21-1394	AAA0763	0-6 in.	ZN	13211	17716	SU	D	ICPES	49.3	MG/KG
	21-1394	AAA0763	0-6 in.	ZN	13211	17716	SU		ICPES	46.6	MG/KG
	21-1394	AAA0764	0-6 in.	AL	13211	17716	FD		ICPES	7420	MG/KG
	21-1394	AAA0764	0-6 in.	AS	13211	17716	FD		ETVAA	1.6	MG/KG
	21-1394	AAA0764	0-6 in.	BA	13211	17716	FD		ICPES	60.3	MG/KG
	21-1394	AAA0764	0-6 in.	BE	13211	17716	FD		ICPES	0.51	MG/KG
	21-1394	AAA0764	0-6 in.	CA	13211	17716	FD		ICPES	1370	MG/KG
	21-1394	AAA0764	0-6 in.	CD	13211	17716	FD		ICPES	0.88	MG/KG
	21-1394	AAA0764	0-6 in.	CO	13211	17716	FD		ICPES	1.2	MG/KG
	21-1394	AAA0764	0-6 in.	CR	13211	17716	FD		ICPES	5.5	MG/KG
	21-1394	AAA0764	0-6 in.	CU	13211	17716	FD		ICPES	4	MG/KG
	21-1394	AAA0764	0-6 in.	FE	13211	17716	FD		ICPES	7330	MG/KG
	21-1394	AAA0764	0-6 in.	K	13211	17716	FD		ICPES	1090	MG/KG
	21-1394	AAA0764	0-6 in.	LI	13211	17716	FD		ICPES	7.8	MG/KG
	21-1394	AAA0764	0-6 in.	MG	13211	17716	FD		ICPES	1100	MG/KG
	21-1394	AAA0764	0-6 in.	MN	13211	17716	FD		ICPES	289	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1394	AAA0764	0-6 in.	NA	13211	17716	FD		ICPES	100	MG/KG
	21-1394	AAA0764	0-6 in.	NI	13211	17716	FD		ICPES	3.4	MG/KG
	21-1394	AAA0764	0-6 in.	PB	13211	17716	FD		ETVAA	17.5	MG/KG
	21-1394	AAA0764	0-6 in.	SR	13211	17716	FD		ICPES	10.1	MG/KG
	21-1394	AAA0764	0-6 in.	V	13211	17716	FD		ICPES	10.3	MG/KG
	21-1394	AAA0764	0-6 in.	ZN	13211	17716	FD		ICPES	41.1	MG/KG
	21-1394	AAA0765	6-12 in.	AL	13211	17716	NS		ICPES	2950	MG/KG
	21-1394	AAA0765	6-12 in.	AS	13211	17716	NS		ETVAA	0.66	MG/KG
	21-1394	AAA0765	6-12 in.	BA	13211	17716	NS		ICPES	24.9	MG/KG
	21-1394	AAA0765	6-12 in.	BE	13211	17716	NS		ICPES	0.34	MG/KG
	21-1394	AAA0765	6-12 in.	CA	13211	17716	NS		ICPES	626	MG/KG
	21-1394	AAA0765	6-12 in.	CD	13211	17716	NS		ICPES	0.72	MG/KG
	21-1394	AAA0765	6-12 in.	CO	13211	17716	NS		ICPES	1.4	MG/KG
	21-1394	AAA0765	6-12 in.	CR	13211	17716	NS		ICPES	1.9	MG/KG
	21-1394	AAA0765	6-12 in.	CU	13211	17716	NS		ICPES	2.3	MG/KG
	21-1394	AAA0765	6-12 in.	FE	13211	17716	NS		ICPES	5210	MG/KG
	21-1394	AAA0765	6-12 in.	K	13211	17716	NS		ICPES	433	MG/KG
	21-1394	AAA0765	6-12 in.	LI	13211	17716	NS		ICPES	5	MG/KG
	21-1394	AAA0765	6-12 in.	MG	13211	17716	NS		ICPES	431	MG/KG
	21-1394	AAA0765	6-12 in.	MN	13211	17716	NS		ICPES	266	MG/KG
	21-1394	AAA0765	6-12 in.	NA	13211	17716	NS		ICPES	109	MG/KG
	21-1394	AAA0765	6-12 in.	NI	13211	17716	NS		ICPES	1.7	MG/KG
	21-1394	AAA0765	6-12 in.	PB	13211	17716	NS		ETVAA	5.6	MG/KG
	21-1394	AAA0765	6-12 in.	SR	13211	17716	NS		ICPES	3.7	MG/KG
	21-1394	AAA0765	6-12 in.	V	13211	17716	NS		ICPES	4.3	MG/KG
	21-1394	AAA0765	6-12 in.	ZN	13211	17716	NS		ICPES	27	MG/KG
	21-1394	AAA0766	12-18 in.	AL	13211	17716	NS		ICPES	765	MG/KG
	21-1394	AAA0766	12-18 in.	AS	13211	17716	NS		ETVAA	0.45	MG/KG
	21-1394	AAA0766	12-18 in.	BA	13211	17716	NS		ICPES	11	MG/KG
	21-1394	AAA0766	12-18 in.	BE	13211	17716	NS		ICPES	0.34	MG/KG
	21-1394	AAA0766	12-18 in.	CA	13211	17716	NS		ICPES	422	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1394	AAA0766	12-18 in.	CR	13211	17716	NS		ICPES	0.7	MG/KG
	21-1394	AAA0766	12-18 in.	FE	13211	17716	NS		ICPES	3900	MG/KG
	21-1394	AAA0766	12-18 in.	K	13211	17716	NS		ICPES	307	MG/KG
	21-1394	AAA0766	12-18 in.	LI	13211	17716	NS		ICPES	9.3	MG/KG
	21-1394	AAA0766	12-18 in.	MG	13211	17716	NS		ICPES	266	MG/KG
	21-1394	AAA0766	12-18 in.	MN	13211	17716	NS		ICPES	265	MG/KG
	21-1394	AAA0766	12-18 in.	NA	13211	17716	NS		ICPES	145	MG/KG
	21-1394	AAA0766	12-18 in.	PB	13211	17716	NS		ETVAA	3.3	MG/KG
	21-1394	AAA0766	12-18 in.	SR	13211	17716	NS		ICPES	1.1	MG/KG
	21-1394	AAA0766	12-18 in.	V	13211	17716	NS		ICPES	1.3	MG/KG
	21-1394	AAA0766	12-18 in.	ZN	13211	17716	NS		ICPES	29.3	MG/KG
	21-1394	AAA0767		CO	13176		FE		ICPES	9.1	UG/L
	21-1394	AAA0767		NA	13176		FE		ICPES	281	UG/L
	21-1394	AAA0767		ZN	13176		FE		ICPES	5.8	UG/L
	21-1394	AAA0768		CO	13176		FR		ICPES	11.1	UG/L
	21-1394	AAA0768		FE	13176		FR		ICPES	11.6	UG/L
	21-1394	AAA0768		MG	13176		FR		ICPES	61.5	UG/L
21-024(n)	21-1402	AAA0785	0-6 in.	AL	13219	17827	SU		ICPES	9590	MG/KG
	21-1402	AAA0785	0-6 in.	AS	13219	17827	SU		ETVAA	3.2	MG/KG
	21-1402	AAA0785	0-6 in.	BA	13219	17827	SU		ICPES	99.9	MG/KG
	21-1402	AAA0785	0-6 in.	BE	13219	17827	SU		ICPES	0.58	MG/KG
	21-1402	AAA0785	0-6 in.	CA	13219	17827	SU		ICPES	2110	MG/KG
	21-1402	AAA0785	0-6 in.	CD	13219	17827	SU		ICPES	0.9	MG/KG
	21-1402	AAA0785	0-6 in.	CO	13219	17827	SU		ICPES	3.8	MG/KG
	21-1402	AAA0785	0-6 in.	CR	13219	17827	SU		ICPES	7.5	MG/KG
	21-1402	AAA0785	0-6 in.	CU	13219	17827	SU		ICPES	13.8	MG/KG
	21-1402	AAA0785	0-6 in.	FE	13219	17827	SU		ICPES	9710	MG/KG
	21-1402	AAA0785	0-6 in.	K	13219	17827	SU		ICPES	1160	MG/KG
	21-1402	AAA0785	0-6 in.	LI	13219	17827	SU		ICPES	9.2	MG/KG
	21-1402	AAA0785	0-6 in.	MG	13219	17827	SU		ICPES	1600	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1402	AAA0785	0-6 in.	MN	13219	17827	SU		ICPES	290	MG/KG
	21-1402	AAA0785	0-6 in.	NA	13219	17827	SU		ICPES	91.9	MG/KG
	21-1402	AAA0785	0-6 in.	NI	13219	17827	SU		ICPES	5.7	MG/KG
	21-1402	AAA0785	0-6 in.	PB	13219	17827	SU		ETVAA	15.3	MG/KG
	21-1402	AAA0785	0-6 in.	SR	13219	17827	SU		ICPES	28	MG/KG
	21-1402	AAA0785	0-6 in.	TL	13219	17827	SU		ETVAA	0.13	MG/KG
	21-1402	AAA0785	0-6 in.	V	13219	17827	SU		ICPES	18.6	MG/KG
	21-1402	AAA0785	0-6 in.	ZN	13219	17827	SU		ICPES	85.2	MG/KG
	21-1402	AAA0786		NA	13176		FE		ICPES	188	UG/L
	21-1402	AAA0787		CO	13176		FR		ICPES	8.1	UG/L
	21-1402	AAA0787		MG	13176		FR		ICPES	70.4	UG/L
	21-1402	AAA0788	6-12 in.	AL	13219	17827	NS		ICPES	5480	MG/KG
	21-1402	AAA0788	6-12 in.	AS	13219	17827	NS		ETVAA	2.6	MG/KG
	21-1402	AAA0788	6-12 in.	BA	13219	17827	NS		ICPES	59.6	MG/KG
	21-1402	AAA0788	6-12 in.	BE	13219	17827	NS		ICPES	0.31	MG/KG
	21-1402	AAA0788	6-12 in.	CA	13219	17827	NS		ICPES	1410	MG/KG
	21-1402	AAA0788	6-12 in.	CD	13219	17827	NS		ICPES	0.97	MG/KG
	21-1402	AAA0788	6-12 in.	CO	13219	17827	NS		ICPES	1.9	MG/KG
	21-1402	AAA0788	6-12 in.	CR	13219	17827	NS		ICPES	4.8	MG/KG
	21-1402	AAA0788	6-12 in.	CU	13219	17827	NS		ICPES	32.7	MG/KG
	21-1402	AAA0788	6-12 in.	FE	13219	17827	NS		ICPES	7820	MG/KG
	21-1402	AAA0788	6-12 in.	K	13219	17827	NS		ICPES	768	MG/KG
	21-1402	AAA0788	6-12 in.	LI	13219	17827	NS		ICPES	7	MG/KG
	21-1402	AAA0788	6-12 in.	MG	13219	17827	NS		ICPES	819	MG/KG
	21-1402	AAA0788	6-12 in.	MN	13219	17827	NS		ICPES	302	MG/KG
	21-1402	AAA0788	6-12 in.	NA	13219	17827	NS		ICPES	108	MG/KG
	21-1402	AAA0788	6-12 in.	NI	13219	17827	NS		ICPES	3.4	MG/KG
	21-1402	AAA0788	6-12 in.	PB	13219	17827	NS		ETVAA	11.9	MG/KG
	21-1402	AAA0788	6-12 in.	SR	13219	17827	NS		ICPES	18.5	MG/KG
	21-1402	AAA0788	6-12 in.	V	13219	17827	NS		ICPES	12.1	MG/KG
	21-1402	AAA0788	6-12 in.	ZN	13219	17827	NS		ICPES	158	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1402	AAA0789	12-18 in.	AL	13219	17827	NS		ICPES	1600	MG/KG
	21-1402	AAA0789	12-18 in.	AS	13219	17827	NS		ETVAA	1.2	MG/KG
	21-1402	AAA0789	12-18 in.	BA	13219	17827	NS		ICPES	17.3	MG/KG
	21-1402	AAA0789	12-18 in.	BE	13219	17827	NS		ICPES	0.24	MG/KG
	21-1402	AAA0789	12-18 in.	CA	13219	17827	NS		ICPES	340	MG/KG
	21-1402	AAA0789	12-18 in.	CD	13219	17827	NS		ICPES	0.52	MG/KG
	21-1402	AAA0789	12-18 in.	CR	13219	17827	NS		ICPES	10.6	MG/KG
	21-1402	AAA0789	12-18 in.	CU	13219	17827	NS		ICPES	9.5	MG/KG
	21-1402	AAA0789	12-18 in.	FE	13219	17827	NS		ICPES	4820	MG/KG
	21-1402	AAA0789	12-18 in.	K	13219	17827	NS		ICPES	364	MG/KG
	21-1402	AAA0789	12-18 in.	LI	13219	17827	NS		ICPES	4.4	MG/KG
	21-1402	AAA0789	12-18 in.	MG	13219	17827	NS		ICPES	197	MG/KG
	21-1402	AAA0789	12-18 in.	MN	13219	17827	NS		ICPES	196	MG/KG
	21-1402	AAA0789	12-18 in.	NA	13219	17827	NS		ICPES	266	MG/KG
	21-1402	AAA0789	12-18 in.	NI	13219	17827	NS		ICPES	5.3	MG/KG
	21-1402	AAA0789	12-18 in.	PB	13219	17827	NS		ETVAA	6.9	MG/KG
	21-1402	AAA0789	12-18 in.	SR	13219	17827	NS		ICPES	3.5	MG/KG
	21-1402	AAA0789	12-18 in.	V	13219	17827	NS		ICPES	2.4	MG/KG
	21-1402	AAA0789	12-18 in.	ZN	13219	17827	NS		ICPES	49.7	MG/KG
	21-1403	AAA0790	0-6 in.	AL	13245	17915	SU		ICPES	3380	MG/KG
	21-1403	AAA0790	0-6 in.	AS	13245	17915	SU		ETVAA	1.1	MG/KG
	21-1403	AAA0790	0-6 in.	BA	13245	17915	SU		ICPES	47.2	MG/KG
	21-1403	AAA0790	0-6 in.	BE	13245	17915	SU		ICPES	0.32	MG/KG
	21-1403	AAA0790	0-6 in.	CA	13245	17915	SU		ICPES	2850	MG/KG
	21-1403	AAA0790	0-6 in.	CD	13245	17915	SU		ICPES	0.7	MG/KG
	21-1403	AAA0790	0-6 in.	CO	13245	17915	SU		ICPES	1.3	MG/KG
	21-1403	AAA0790	0-6 in.	CR	13245	17915	SU		ICPES	4.5	MG/KG
	21-1403	AAA0790	0-6 in.	CU	13245	17915	SU		ICPES	4.8	MG/KG
	21-1403	AAA0790	0-6 in.	FE	13245	17915	SU		ICPES	5930	MG/KG
	21-1403	AAA0790	0-6 in.	K	13245	17915	SU		ICPES	502	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1403	AAA0790	0-6 in.	LI	13245	17915	SU		ICPES	4	MG/KG
	21-1403	AAA0790	0-6 in.	MG	13245	17915	SU		ICPES	777	MG/KG
	21-1403	AAA0790	0-6 in.	MN	13245	17915	SU		ICPES	155	MG/KG
	21-1403	AAA0790	0-6 in.	NA	13245	17915	SU		ICPES	48.8	MG/KG
	21-1403	AAA0790	0-6 in.	NI	13245	17915	SU		ICPES	2.8	MG/KG
	21-1403	AAA0790	0-6 in.	PB	13245	17915	SU		ETVAA	6.3	MG/KG
	21-1403	AAA0790	0-6 in.	SR	13245	17915	SU		ICPES	8.6	MG/KG
	21-1403	AAA0790	0-6 in.	TL	13245	17915	SU		ETVAA	0.17	MG/KG
	21-1403	AAA0790	0-6 in.	V	13245	17915	SU		ICPES	11.9	MG/KG
	21-1403	AAA0790	0-6 in.	ZN	13245	17915	SU		ICPES	27.2	MG/KG
	21-1403	AAA0791	6-12 in.	AL	13245	17915	NS		ICPES	2160	MG/KG
	21-1403	AAA0791	6-12 in.	AS	13245	17915	NS		ETVAA	1.2	MG/KG
	21-1403	AAA0791	6-12 in.	BA	13245	17915	NS		ICPES	36.3	MG/KG
	21-1403	AAA0791	6-12 in.	BE	13245	17915	NS		ICPES	0.29	MG/KG
	21-1403	AAA0791	6-12 in.	CA	13245	17915	NS		ICPES	2100	MG/KG
	21-1403	AAA0791	6-12 in.	CD	13245	17915	NS		ICPES	0.48	MG/KG
	21-1403	AAA0791	6-12 in.	CO	13245	17915	NS		ICPES	1.3	MG/KG
	21-1403	AAA0791	6-12 in.	CR	13245	17915	NS		ICPES	3.5	MG/KG
	21-1403	AAA0791	6-12 in.	CU	13245	17915	NS		ICPES	5.1	MG/KG
	21-1403	AAA0791	6-12 in.	FE	13245	17915	NS		ICPES	4100	MG/KG
	21-1403	AAA0791	6-12 in.	K	13245	17915	NS		ICPES	363	MG/KG
	21-1403	AAA0791	6-12 in.	LI	13245	17915	NS		ICPES	3	MG/KG
	21-1403	AAA0791	6-12 in.	MG	13245	17915	NS		ICPES	531	MG/KG
	21-1403	AAA0791	6-12 in.	MN	13245	17915	NS		ICPES	151	MG/KG
	21-1403	AAA0791	6-12 in.	NA	13245	17915	NS		ICPES	55	MG/KG
	21-1403	AAA0791	6-12 in.	NI	13245	17915	NS		ICPES	2.5	MG/KG
	21-1403	AAA0791	6-12 in.	PB	13245	17915	NS		ETVAA	6.5	MG/KG
	21-1403	AAA0791	6-12 in.	SR	13245	17915	NS		ICPES	7.6	MG/KG
	21-1403	AAA0791	6-12 in.	TL	13245	17915	NS		ETVAA	0.2	MG/KG
	21-1403	AAA0791	6-12 in.	V	13245	17915	NS		ICPES	6.9	MG/KG
	21-1403	AAA0791	6-12 in.	ZN	13245	17915	NS		ICPES	31.5	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1403	AAA0792	12-18 in.	AL	13245	17915	NS		ICPES	850	MG/KG
	21-1403	AAA0792	12-18 in.	AS	13245	17915	NS		ETVAA	1	MG/KG
	21-1403	AAA0792	12-18 in.	BA	13245	17915	NS		ICPES	11.4	MG/KG
	21-1403	AAA0792	12-18 in.	BE	13245	17915	NS		ICPES	0.32	MG/KG
	21-1403	AAA0792	12-18 in.	CA	13245	17915	NS		ICPES	549	MG/KG
	21-1403	AAA0792	12-18 in.	CR	13245	17915	NS		ICPES	1.1	MG/KG
	21-1403	AAA0792	12-18 in.	CU	13245	17915	NS		ICPES	3.7	MG/KG
	21-1403	AAA0792	12-18 in.	FE	13245	17915	NS		ICPES	3190	MG/KG
	21-1403	AAA0792	12-18 in.	K	13245	17915	NS		ICPES	211	MG/KG
	21-1403	AAA0792	12-18 in.	LI	13245	17915	NS		ICPES	3.6	MG/KG
	21-1403	AAA0792	12-18 in.	MG	13245	17915	NS		ICPES	177	MG/KG
	21-1403	AAA0792	12-18 in.	MN	13245	17915	NS		ICPES	185	MG/KG
	21-1403	AAA0792	12-18 in.	NA	13245	17915	NS		ICPES	95.9	MG/KG
	21-1403	AAA0792	12-18 in.	PB	13245	17915	NS		ETVAA	3.3	MG/KG
	21-1403	AAA0792	12-18 in.	SR	13245	17915	NS		ICPES	1.8	MG/KG
	21-1403	AAA0792	12-18 in.	V	13245	17915	NS		ICPES	2.6	MG/KG
	21-1403	AAA0792	12-18 in.	ZN	13245	17915	NS		ICPES	19.8	MG/KG
	21-1404	AAA0793	0-6 in.	AL	13245	17915	SU		ICPES	8130	MG/KG
	21-1404	AAA0793	0-6 in.	AS	13245	17915	SU		ETVAA	2.4	MG/KG
	21-1404	AAA0793	0-6 in.	BA	13245	17915	SU		ICPES	62	MG/KG
	21-1404	AAA0793	0-6 in.	BE	13245	17915	SU		ICPES	0.68	MG/KG
	21-1404	AAA0793	0-6 in.	CA	13245	17915	SU		ICPES	1980	MG/KG
	21-1404	AAA0793	0-6 in.	CD	13245	17915	SU		ICPES	0.93	MG/KG
	21-1404	AAA0793	0-6 in.	CO	13245	17915	SU		ICPES	1.9	MG/KG
	21-1404	AAA0793	0-6 in.	CR	13245	17915	SU		ICPES	34.2	MG/KG
	21-1404	AAA0793	0-6 in.	CU	13245	17915	SU		ICPES	11.5	MG/KG
	21-1404	AAA0793	0-6 in.	FE	13245	17915	SU		ICPES	8440	MG/KG
	21-1404	AAA0793	0-6 in.	K	13245	17915	SU		ICPES	787	MG/KG
	21-1404	AAA0793	0-6 in.	LI	13245	17915	SU		ICPES	7.1	MG/KG
	21-1404	AAA0793	0-6 in.	MG	13245	17915	SU		ICPES	1260	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1404	AAA0793	0-6 in.	MN	13245	17915	SU		ICPES	178	MG/KG
	21-1404	AAA0793	0-6 in.	NA	13245	17915	SU		ICPES	98	MG/KG
	21-1404	AAA0793	0-6 in.	NI	13245	17915	SU		ICPES	4.8	MG/KG
	21-1404	AAA0793	0-6 in.	PB	13245	17915	SU		ETVAA	9.8	MG/KG
	21-1404	AAA0793	0-6 in.	SR	13245	17915	SU		ICPES	15.8	MG/KG
	21-1404	AAA0793	0-6 in.	TL	13245	17915	SU		ETVAA	0.28	MG/KG
	21-1404	AAA0793	0-6 in.	V	13245	17915	SU		ICPES	12.8	MG/KG
	21-1404	AAA0793	0-6 in.	ZN	13245	17915	SU		ICPES	31.9	MG/KG
	21-1404	AAA0794	6-12 in.	AL	13245	17915	NS		ICPES	6280	MG/KG
	21-1404	AAA0794	6-12 in.	AS	13245	17915	NS		ETVAA	1.5	MG/KG
	21-1404	AAA0794	6-12 in.	BA	13245	17915	NS		ICPES	47.4	MG/KG
	21-1404	AAA0794	6-12 in.	BE	13245	17915	NS		ICPES	0.61	MG/KG
	21-1404	AAA0794	6-12 in.	CA	13245	17915	NS		ICPES	1390	MG/KG
	21-1404	AAA0794	6-12 in.	CD	13245	17915	NS		ICPES	0.64	MG/KG
	21-1404	AAA0794	6-12 in.	CR	13245	17915	NS		ICPES	37.2	MG/KG
	21-1404	AAA0794	6-12 in.	CU	13245	17915	NS		ICPES	8.2	MG/KG
	21-1404	AAA0794	6-12 in.	FE	13245	17915	NS		ICPES	7490	MG/KG
	21-1404	AAA0794	6-12 in.	K	13245	17915	NS		ICPES	509	MG/KG
	21-1404	AAA0794	6-12 in.	LI	13245	17915	NS		ICPES	6.2	MG/KG
	21-1404	AAA0794	6-12 in.	MG	13245	17915	NS		ICPES	1070	MG/KG
	21-1404	AAA0794	6-12 in.	MN	13245	17915	NS		ICPES	140	MG/KG
	21-1404	AAA0794	6-12 in.	NA	13245	17915	NS		ICPES	156	MG/KG
	21-1404	AAA0794	6-12 in.	NI	13245	17915	NS		ICPES	4.1	MG/KG
	21-1404	AAA0794	6-12 in.	PB	13245	17915	NS		ETVAA	6	MG/KG
	21-1404	AAA0794	6-12 in.	SR	13245	17915	NS		ICPES	11.2	MG/KG
	21-1404	AAA0794	6-12 in.	TL	13245	17915	NS		ETVAA	0.22	MG/KG
	21-1404	AAA0794	6-12 in.	V	13245	17915	NS		ICPES	8.8	MG/KG
	21-1404	AAA0794	6-12 in.	ZN	13245	17915	NS		ICPES	24.9	MG/KG
	21-1404	AAA0795	12-18 in.	AL	13245	17915	NS		ICPES	4130	MG/KG
	21-1404	AAA0795	12-18 in.	AS	13245	17915	NS		ETVAA	1.6	MG/KG
	21-1404	AAA0795	12-18 in.	BA	13245	17915	NS		ICPES	40.6	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1404	AAA0795	12-18 in.	BE	13245	17915	NS		ICPES	0.45	MG/KG
	21-1404	AAA0795	12-18 in.	CA	13245	17915	NS		ICPES	1100	MG/KG
	21-1404	AAA0795	12-18 in.	CD	13245	17915	NS		ICPES	0.56	MG/KG
	21-1404	AAA0795	12-18 in.	CR	13245	17915	NS		ICPES	17.7	MG/KG
	21-1404	AAA0795	12-18 in.	CU	13245	17915	NS		ICPES	6.3	MG/KG
	21-1404	AAA0795	12-18 in.	FE	13245	17915	NS		ICPES	5980	MG/KG
	21-1404	AAA0795	12-18 in.	K	13245	17915	NS		ICPES	418	MG/KG
	21-1404	AAA0795	12-18 in.	LI	13245	17915	NS		ICPES	4.2	MG/KG
	21-1404	AAA0795	12-18 in.	MG	13245	17915	NS		ICPES	773	MG/KG
	21-1404	AAA0795	12-18 in.	MN	13245	17915	NS		ICPES	160	MG/KG
	21-1404	AAA0795	12-18 in.	NA	13245	17915	NS		ICPES	155	MG/KG
	21-1404	AAA0795	12-18 in.	NI	13245	17915	NS		ICPES	3.2	MG/KG
	21-1404	AAA0795	12-18 in.	PB	13245	17915	NS		ETVAA	7.2	MG/KG
	21-1404	AAA0795	12-18 in.	SR	13245	17915	NS		ICPES	8.5	MG/KG
	21-1404	AAA0795	12-18 in.	V	13245	17915	NS		ICPES	5.2	MG/KG
	21-1404	AAA0795	12-18 in.	ZN	13245	17915	NS		ICPES	22.3	MG/KG
21-024(o)	21-1343	AAA0837	0-6 in.	AL	13101		SU		ICPES	12900	MG/KG
	21-1343	AAA0837	0-6 in.	AS	13101		SU		ETVAA	2.4	MG/KG
	21-1343	AAA0837	0-6 in.	BA	13101		SU		ICPES	135	MG/KG
	21-1343	AAA0837	0-6 in.	BE	13101		SU		ICPES	0.73	MG/KG
	21-1343	AAA0837	0-6 in.	CA	13101		SU		ICPES	2320	MG/KG
	21-1343	AAA0837	0-6 in.	CD	13101		SU		ICPES	1.6	MG/KG
	21-1343	AAA0837	0-6 in.	CO	13101		SU		ICPES	5.4	MG/KG
	21-1343	AAA0837	0-6 in.	CR	13101		SU		ICPES	10.4	MG/KG
	21-1343	AAA0837	0-6 in.	CU	13101		SU		ICPES	8.9	MG/KG
	21-1343	AAA0837	0-6 in.	FE	13101		SU		ICPES	12200	MG/KG
	21-1343	AAA0837	0-6 in.	K	13101		SU		ICPES	1820	MG/KG
	21-1343	AAA0837	0-6 in.	LI	13101		SU		ICPES	10.5	MG/KG
	21-1343	AAA0837	0-6 in.	MG	13101		SU		ICPES	2110	MG/KG
	21-1343	AAA0837	0-6 in.	MN	13101		SU		ICPES	357	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1343	AAA0837	0-6 in.	NA	13101		SU		ICPES	107	MG/KG
	21-1343	AAA0837	0-6 in.	NI	13101		SU		ICPES	6.5	MG/KG
	21-1343	AAA0837	0-6 in.	PB	13101		SU		ETVAA	35.9	MG/KG
	21-1343	AAA0837	0-6 in.	SR	13101		SU		ICPES	21.2	MG/KG
	21-1343	AAA0837	0-6 in.	V	13101		SU		ICPES	22	MG/KG
	21-1343	AAA0837	0-6 in.	ZN	13101		SU		ICPES	115	MG/KG
	21-1343	AAA0838	0-6 in.	AL	13101		FD		ICPES	14800	MG/KG
	21-1343	AAA0838	0-6 in.	AS	13101		FD		ETVAA	2.6	MG/KG
	21-1343	AAA0838	0-6 in.	BA	13101		FD		ICPES	139	MG/KG
	21-1343	AAA0838	0-6 in.	BE	13101		FD		ICPES	0.79	MG/KG
	21-1343	AAA0838	0-6 in.	CA	13101		FD		ICPES	2370	MG/KG
	21-1343	AAA0838	0-6 in.	CD	13101		FD		ICPES	1.8	MG/KG
	21-1343	AAA0838	0-6 in.	CO	13101		FD		ICPES	6.9	MG/KG
	21-1343	AAA0838	0-6 in.	CR	13101		FD		ICPES	11.8	MG/KG
	21-1343	AAA0838	0-6 in.	CU	13101		FD		ICPES	9.5	MG/KG
	21-1343	AAA0838	0-6 in.	FE	13101		FD		ICPES	13100	MG/KG
	21-1343	AAA0838	0-6 in.	K	13101		FD		ICPES	1950	MG/KG
	21-1343	AAA0838	0-6 in.	LI	13101		FD		ICPES	11.6	MG/KG
	21-1343	AAA0838	0-6 in.	MG	13101		FD		ICPES	2330	MG/KG
	21-1343	AAA0838	0-6 in.	MN	13101		FD		ICPES	391	MG/KG
	21-1343	AAA0838	0-6 in.	NA	13101		FD		ICPES	122	MG/KG
	21-1343	AAA0838	0-6 in.	NI	13101		FD		ICPES	7.7	MG/KG
	21-1343	AAA0838	0-6 in.	PB	13101		FD		ETVAA	36.5	MG/KG
	21-1343	AAA0838	0-6 in.	SR	13101		FD		ICPES	22.6	MG/KG
	21-1343	AAA0838	0-6 in.	V	13101		FD		ICPES	23.7	MG/KG
	21-1343	AAA0838	0-6 in.	ZN	13101		FD		ICPES	132	MG/KG
	21-1343	AAA0839	6-12 in.	AL	13101		NS		ICPES	8030	MG/KG
	21-1343	AAA0839	6-12 in.	AS	13101		NS		ETVAA	2	MG/KG
	21-1343	AAA0839	6-12 in.	BA	13101		NS		ICPES	69.5	MG/KG
	21-1343	AAA0839	6-12 in.	BE	13101		NS		ICPES	0.45	MG/KG
	21-1343	AAA0839	6-12 in.	CA	13101		NS		ICPES	1170	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1343	AAA0839	6-12 in.	CD	13101		NS		ICPES	1.1	MG/KG
	21-1343	AAA0839	6-12 in.	CO	13101		NS		ICPES	5	MG/KG
	21-1343	AAA0839	6-12 in.	CR	13101		NS		ICPES	5.8	MG/KG
	21-1343	AAA0839	6-12 in.	CU	13101		NS		ICPES	4	MG/KG
	21-1343	AAA0839	6-12 in.	FE	13101		NS		ICPES	8510	MG/KG
	21-1343	AAA0839	6-12 in.	K	13101		NS		ICPES	926	MG/KG
	21-1343	AAA0839	6-12 in.	LI	13101		NS		ICPES	6.9	MG/KG
	21-1343	AAA0839	6-12 in.	MG	13101		NS		ICPES	1070	MG/KG
	21-1343	AAA0839	6-12 in.	MN	13101		NS		ICPES	346	MG/KG
	21-1343	AAA0839	6-12 in.	NA	13101		NS		ICPES	105	MG/KG
	21-1343	AAA0839	6-12 in.	NI	13101		NS		ICPES	1.9	MG/KG
	21-1343	AAA0839	6-12 in.	PB	13101		NS		ETVAA	12.1	MG/KG
	21-1343	AAA0839	6-12 in.	SR	13101		NS		ICPES	10.6	MG/KG
	21-1343	AAA0839	6-12 in.	V	13101		NS		ICPES	12.2	MG/KG
	21-1343	AAA0839	6-12 in.	ZN	13101		NS		ICPES	41.2	MG/KG
	21-1343	AAA0840	12-18 in.	AL	13101		NS		ICPES	1420	MG/KG
	21-1343	AAA0840	12-18 in.	AS	13101		NS		ETVAA	0.83	MG/KG
	21-1343	AAA0840	12-18 in.	BA	13101		NS		ICPES	7.3	MG/KG
	21-1343	AAA0840	12-18 in.	BE	13101		NS		ICPES	0.13	MG/KG
	21-1343	AAA0840	12-18 in.	CA	13101		NS		ICPES	277	MG/KG
	21-1343	AAA0840	12-18 in.	CO	13101		NS		ICPES	2.3	MG/KG
	21-1343	AAA0840	12-18 in.	CR	13101		NS		ICPES	0.85	MG/KG
	21-1343	AAA0840	12-18 in.	FE	13101		NS		ICPES	3540	MG/KG
	21-1343	AAA0840	12-18 in.	LI	13101		NS		ICPES	3	MG/KG
	21-1343	AAA0840	12-18 in.	MG	13101		NS		ICPES	150	MG/KG
	21-1343	AAA0840	12-18 in.	MN	13101		NS		ICPES	195	MG/KG
	21-1343	AAA0840	12-18 in.	NA	13101		NS		ICPES	95.4	MG/KG
	21-1343	AAA0840	12-18 in.	PB	13101		NS		ETVAA	2.2	MG/KG
	21-1343	AAA0840	12-18 in.	SR	13101		NS		ICPES	1	MG/KG
	21-1343	AAA0840	12-18 in.	V	13101		NS		ICPES	2.8	MG/KG
	21-1343	AAA0840	12-18 in.	ZN	13101		NS		ICPES	20.8	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1344	AAA0841	0-6 in.	AL	13101		SU		ICPES	13000	MG/KG
	21-1344	AAA0841	0-6 in.	AS	13101		SU		ETVAA	2.3	MG/KG
	21-1344	AAA0841	0-6 in.	BA	13101		SU		ICPES	137	MG/KG
	21-1344	AAA0841	0-6 in.	BE	13101		SU		ICPES	0.73	MG/KG
	21-1344	AAA0841	0-6 in.	CA	13101		SU		ICPES	2290	MG/KG
	21-1344	AAA0841	0-6 in.	CD	13101		SU		ICPES	1.8	MG/KG
	21-1344	AAA0841	0-6 in.	CO	13101		SU		ICPES	6.8	MG/KG
	21-1344	AAA0841	0-6 in.	CR	13101		SU		ICPES	10.5	MG/KG
	21-1344	AAA0841	0-6 in.	CU	13101		SU		ICPES	10.1	MG/KG
	21-1344	AAA0841	0-6 in.	FE	13101		SU		ICPES	12600	MG/KG
	21-1344	AAA0841	0-6 in.	K	13101		SU		ICPES	1750	MG/KG
	21-1344	AAA0841	0-6 in.	LI	13101		SU		ICPES	10.5	MG/KG
	21-1344	AAA0841	0-6 in.	MG	13101		SU		ICPES	2140	MG/KG
	21-1344	AAA0841	0-6 in.	MN	13101		SU		ICPES	400	MG/KG
	21-1344	AAA0841	0-6 in.	NA	13101		SU		ICPES	115	MG/KG
	21-1344	AAA0841	0-6 in.	NI	13101		SU		ICPES	8.5	MG/KG
	21-1344	AAA0841	0-6 in.	PB	13101		SU		ETVAA	35.9	MG/KG
	21-1344	AAA0841	0-6 in.	SR	13101		SU		ICPES	21.1	MG/KG
	21-1344	AAA0841	0-6 in.	V	13101		SU		ICPES	22.5	MG/KG
	21-1344	AAA0841	0-6 in.	ZN	13101		SU		ICPES	95.6	MG/KG
	21-1344	AAA0842	6-12 in.	AL	13101		NS		ICPES	11100	MG/KG
	21-1344	AAA0842	6-12 in.	AS	13101		NS		ETVAA	2.2	MG/KG
	21-1344	AAA0842	6-12 in.	BA	13101		NS		ICPES	248	MG/KG
	21-1344	AAA0842	6-12 in.	BE	13101		NS		ICPES	0.58	MG/KG
	21-1344	AAA0842	6-12 in.	CA	13101		NS		ICPES	1890	MG/KG
	21-1344	AAA0842	6-12 in.	CD	13101		NS		ICPES	1.3	MG/KG
	21-1344	AAA0842	6-12 in.	CO	13101		NS		ICPES	5.5	MG/KG
	21-1344	AAA0842	6-12 in.	CR	13101		NS		ICPES	8.1	MG/KG
	21-1344	AAA0842	6-12 in.	CU	13101		NS		ICPES	11.3	MG/KG
	21-1344	AAA0842	6-12 in.	FE	13101		NS		ICPES	9600	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1344	AAA0842	6-12 in.	K	13101		NS		ICPES	1430	MG/KG
	21-1344	AAA0842	6-12 in.	LI	13101		NS		ICPES	9.6	MG/KG
	21-1344	AAA0842	6-12 in.	MG	13101		NS		ICPES	1640	MG/KG
	21-1344	AAA0842	6-12 in.	MN	13101		NS		ICPES	358	MG/KG
	21-1344	AAA0842	6-12 in.	NA	13101		NS		ICPES	104	MG/KG
	21-1344	AAA0842	6-12 in.	NI	13101		NS		ICPES	6.1	MG/KG
	21-1344	AAA0842	6-12 in.	PB	13101		NS		ETVAA	45	MG/KG
	21-1344	AAA0842	6-12 in.	SR	13101		NS		ICPES	17.6	MG/KG
	21-1344	AAA0842	6-12 in.	V	13101		NS		ICPES	18.3	MG/KG
	21-1344	AAA0842	6-12 in.	ZN	13101		NS		ICPES	75.9	MG/KG
	21-1344	AAA0843	12-18 in.	AL	13101		NS		ICPES	5740	MG/KG
	21-1344	AAA0843	12-18 in.	AS	13101		NS		ETVAA	2	MG/KG
	21-1344	AAA0843	12-18 in.	BA	13101		NS		ICPES	93.5	MG/KG
	21-1344	AAA0843	12-18 in.	BE	13101		NS		ICPES	0.53	MG/KG
	21-1344	AAA0843	12-18 in.	CA	13101		NS		ICPES	1360	MG/KG
	21-1344	AAA0843	12-18 in.	CD	13101		NS		ICPES	1	MG/KG
	21-1344	AAA0843	12-18 in.	CO	13101		NS		ICPES	4.5	MG/KG
	21-1344	AAA0843	12-18 in.	CR	13101		NS		ICPES	3.9	MG/KG
	21-1344	AAA0843	12-18 in.	CU	13101		NS		ICPES	5.3	MG/KG
	21-1344	AAA0843	12-18 in.	FE	13101		NS		ICPES	6980	MG/KG
	21-1344	AAA0843	12-18 in.	K	13101		NS		ICPES	706	MG/KG
	21-1344	AAA0843	12-18 in.	LI	13101		NS		ICPES	4.8	MG/KG
	21-1344	AAA0843	12-18 in.	MG	13101		NS		ICPES	779	MG/KG
	21-1344	AAA0843	12-18 in.	MN	13101		NS		ICPES	406	MG/KG
	21-1344	AAA0843	12-18 in.	NA	13101		NS		ICPES	84.7	MG/KG
	21-1344	AAA0843	12-18 in.	NI	13101		NS		ICPES	3	MG/KG
	21-1344	AAA0843	12-18 in.	PB	13101		NS		ETVAA	11.9	MG/KG
	21-1344	AAA0843	12-18 in.	SR	13101		NS		ICPES	11.1	MG/KG
	21-1344	AAA0843	12-18 in.	V	13101		NS		ICPES	10	MG/KG
	21-1344	AAA0843	12-18 in.	ZN	13101		NS		ICPES	40	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
21-026(d)	21-1398	AAA0776	0-6 in.	AL	13174		SU		ICPES	2880	MG/KG
	21-1398	AAA0776	0-6 in.	AS	13174		SU		ETVAA	1.2	MG/KG
	21-1398	AAA0776	0-6 in.	BA	13174		SU		ICPES	37	MG/KG
	21-1398	AAA0776	0-6 in.	BE	13174		SU		ICPES	0.33	MG/KG
	21-1398	AAA0776	0-6 in.	CA	13174		SU		ICPES	1720	MG/KG
	21-1398	AAA0776	0-6 in.	CD	13174		SU		ICPES	1.3	MG/KG
	21-1398	AAA0776	0-6 in.	CO	13174		SU		ICPES	1.9	MG/KG
	21-1398	AAA0776	0-6 in.	CR	13174		SU		ICPES	182	MG/KG
	21-1398	AAA0776	0-6 in.	CU	13174		SU		ICPES	14.5	MG/KG
	21-1398	AAA0776	0-6 in.	FE	13174		SU		ICPES	7070	MG/KG
	21-1398	AAA0776	0-6 in.	K	13174		SU		ICPES	482	MG/KG
	21-1398	AAA0776	0-6 in.	LI	13174		SU		ICPES	4.8	MG/KG
	21-1398	AAA0776	0-6 in.	MG	13174		SU		ICPES	582	MG/KG
	21-1398	AAA0776	0-6 in.	MN	13174		SU		ICPES	190	MG/KG
	21-1398	AAA0776	0-6 in.	NA	13174		SU		ICPES	100	MG/KG
	21-1398	AAA0776	0-6 in.	NI	13174		SU		ICPES	127	MG/KG
	21-1398	AAA0776	0-6 in.	PB	13174		SU		ETVAA	17	MG/KG
	21-1398	AAA0776	0-6 in.	SR	13174		SU		ICPES	8.4	MG/KG
	21-1398	AAA0776	0-6 in.	V	13174		SU		ICPES	7.8	MG/KG
	21-1398	AAA0776	0-6 in.	ZN	13174		SU		ICPES	99.7	MG/KG
	21-1398	AAA0777		FE	13176		FE		ICPES	13.7	UG/L
	21-1398	AAA0778		AS	13176		FR		ETVAA	5.2	UG/L
	21-1398	AAA0778		MG	13176		FR		ICPES	61.2	UG/L
	21-1399	AAA0779	0-6 in.	AL	13174		SU	D	ICPES	4810	MG/KG
	21-1399	AAA0779	0-6 in.	AL	13174		SU		ICPES	8490	MG/KG
	21-1399	AAA0779	0-6 in.	AS	13174		SU	D	ETVAA	1.7	MG/KG
	21-1399	AAA0779	0-6 in.	AS	13174		SU		ETVAA	2.2	MG/KG
	21-1399	AAA0779	0-6 in.	BA	13174		SU	D	ICPES	29.3	MG/KG
	21-1399	AAA0779	0-6 in.	BA	13174		SU		ICPES	49.8	MG/KG
	21-1399	AAA0779	0-6 in.	BE	13174		SU	D	ICPES	0.46	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1399	AAA0779	0-6 in.	BE	13174		SU		ICPES	0.56	MG/KG
	21-1399	AAA0779	0-6 in.	CA	13174		SU	D	ICPES	1230	MG/KG
	21-1399	AAA0779	0-6 in.	CA	13174		SU		ICPES	2110	MG/KG
	21-1399	AAA0779	0-6 in.	CD	13174		SU		ICPES	1.4	MG/KG
	21-1399	AAA0779	0-6 in.	CR	13174		SU	D	ICPES	183	MG/KG
	21-1399	AAA0779	0-6 in.	CR	13174		SU		ICPES	11.2	MG/KG
	21-1399	AAA0779	0-6 in.	CU	13174		SU	D	ICPES	9	MG/KG
	21-1399	AAA0779	0-6 in.	CU	13174		SU		ICPES	14.8	MG/KG
	21-1399	AAA0779	0-6 in.	FE	13174		SU	D	ICPES	5360	MG/KG
	21-1399	AAA0779	0-6 in.	FE	13174		SU		ICPES	8780	MG/KG
	21-1399	AAA0779	0-6 in.	K	13174		SU	D	ICPES	720	MG/KG
	21-1399	AAA0779	0-6 in.	K	13174		SU		ICPES	1280	MG/KG
	21-1399	AAA0779	0-6 in.	LI	13174		SU	D	ICPES	6	MG/KG
	21-1399	AAA0779	0-6 in.	LI	13174		SU		ICPES	8.9	MG/KG
	21-1399	AAA0779	0-6 in.	MG	13174		SU	D	ICPES	650	MG/KG
	21-1399	AAA0779	0-6 in.	MG	13174		SU		ICPES	1150	MG/KG
	21-1399	AAA0779	0-6 in.	MN	13174		SU	D	ICPES	214	MG/KG
	21-1399	AAA0779	0-6 in.	MN	13174		SU		ICPES	195	MG/KG
	21-1399	AAA0779	0-6 in.	NA	13174		SU	D	ICPES	126	MG/KG
	21-1399	AAA0779	0-6 in.	NA	13174		SU		ICPES	195	MG/KG
	21-1399	AAA0779	0-6 in.	NI	13174		SU	D	ICPES	83.6	MG/KG
	21-1399	AAA0779	0-6 in.	NI	13174		SU		ICPES	4.4	MG/KG
	21-1399	AAA0779	0-6 in.	PB	13174		SU	D	ETVAA	8	MG/KG
	21-1399	AAA0779	0-6 in.	PB	13174		SU		ETVAA	8.5	MG/KG
	21-1399	AAA0779	0-6 in.	SR	13174		SU	D	ICPES	8.5	MG/KG
	21-1399	AAA0779	0-6 in.	SR	13174		SU		ICPES	17.3	MG/KG
	21-1399	AAA0779	0-6 in.	V	13174		SU	D	ICPES	7.9	MG/KG
	21-1399	AAA0779	0-6 in.	V	13174		SU		ICPES	14.1	MG/KG
	21-1399	AAA0779	0-6 in.	ZN	13174		SU	D	ICPES	80.3	MG/KG
	21-1399	AAA0779	0-6 in.	ZN	13174		SU		ICPES	97.9	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1400	AAA0780	0-6 in.	AG	13174		SU		ICPES	3.5	MG/KG
	21-1400	AAA0780	0-6 in.	AL	13174		SU		ICPES	2430	MG/KG
	21-1400	AAA0780	0-6 in.	AS	13174		SU		ETVAA	1	MG/KG
	21-1400	AAA0780	0-6 in.	BA	13174		SU		ICPES	47.4	MG/KG
	21-1400	AAA0780	0-6 in.	BE	13174		SU		ICPES	0.13	MG/KG
	21-1400	AAA0780	0-6 in.	CA	13174		SU		ICPES	1570	MG/KG
	21-1400	AAA0780	0-6 in.	CD	13174		SU		ICPES	1	MG/KG
	21-1400	AAA0780	0-6 in.	CR	13174		SU		ICPES	21.5	MG/KG
	21-1400	AAA0780	0-6 in.	CU	13174		SU		ICPES	30.7	MG/KG
	21-1400	AAA0780	0-6 in.	FE	13174		SU		ICPES	4140	MG/KG
	21-1400	AAA0780	0-6 in.	K	13174		SU		ICPES	574	MG/KG
	21-1400	AAA0780	0-6 in.	LI	13174		SU		ICPES	5.1	MG/KG
	21-1400	AAA0780	0-6 in.	MG	13174		SU		ICPES	538	MG/KG
	21-1400	AAA0780	0-6 in.	MN	13174		SU		ICPES	136	MG/KG
	21-1400	AAA0780	0-6 in.	NA	13174		SU		ICPES	145	MG/KG
	21-1400	AAA0780	0-6 in.	NI	13174		SU		ICPES	6.2	MG/KG
	21-1400	AAA0780	0-6 in.	PB	13174		SU		ETVAA	11.2	MG/KG
	21-1400	AAA0780	0-6 in.	SR	13174		SU		ICPES	12.2	MG/KG
	21-1400	AAA0780	0-6 in.	V	13174		SU		ICPES	7.6	MG/KG
	21-1400	AAA0780	0-6 in.	ZN	13174		SU		ICPES	128	MG/KG
	21-1401	AAA0781	0-6 in.	AG	13211	17716	SU		ICPES	2.6	MG/KG
	21-1401	AAA0781	0-6 in.	AL	13211	17716	SU		ICPES	4380	MG/KG
	21-1401	AAA0781	0-6 in.	AS	13211	17716	SU		ETVAA	2.2	MG/KG
	21-1401	AAA0781	0-6 in.	BA	13211	17716	SU		ICPES	66.4	MG/KG
	21-1401	AAA0781	0-6 in.	BE	13211	17716	SU		ICPES	0.22	MG/KG
	21-1401	AAA0781	0-6 in.	CA	13211	17716	SU		ICPES	2320	MG/KG
	21-1401	AAA0781	0-6 in.	CD	13211	17716	SU		ICPES	0.9	MG/KG
	21-1401	AAA0781	0-6 in.	CR	13211	17716	SU		ICPES	21.3	MG/KG
	21-1401	AAA0781	0-6 in.	CU	13211	17716	SU		ICPES	41.1	MG/KG
	21-1401	AAA0781	0-6 in.	FE	13211	17716	SU		ICPES	5670	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1401	AAA0781	0-6 in.	K	13211	17716	SU		ICPES	656	MG/KG
	21-1401	AAA0781	0-6 in.	LI	13211	17716	SU		ICPES	6	MG/KG
	21-1401	AAA0781	0-6 in.	MG	13211	17716	SU		ICPES	766	MG/KG
	21-1401	AAA0781	0-6 in.	MN	13211	17716	SU		ICPES	122	MG/KG
	21-1401	AAA0781	0-6 in.	NA	13211	17716	SU		ICPES	109	MG/KG
	21-1401	AAA0781	0-6 in.	NI	13211	17716	SU		ICPES	6.3	MG/KG
	21-1401	AAA0781	0-6 in.	PB	13211	17716	SU		ETVAA	27.3	MG/KG
	21-1401	AAA0781	0-6 in.	SR	13211	17716	SU		ICPES	14.3	MG/KG
	21-1401	AAA0781	0-6 in.	V	13211	17716	SU		ICPES	12.6	MG/KG
	21-1401	AAA0781	0-6 in.	ZN	13211	17716	SU		ICPES	148	MG/KG
	21-1401	AAA0782	6-12 in.	AL	13211	17716	NS		ICPES	1860	MG/KG
	21-1401	AAA0782	6-12 in.	AS	13211	17716	NS		ETVAA	0.42	MG/KG
	21-1401	AAA0782	6-12 in.	BA	13211	17716	NS		ICPES	30.2	MG/KG
	21-1401	AAA0782	6-12 in.	BE	13211	17716	NS		ICPES	0.13	MG/KG
	21-1401	AAA0782	6-12 in.	CA	13211	17716	NS		ICPES	750	MG/KG
	21-1401	AAA0782	6-12 in.	CR	13211	17716	NS		ICPES	5.1	MG/KG
	21-1401	AAA0782	6-12 in.	CU	13211	17716	NS		ICPES	8	MG/KG
	21-1401	AAA0782	6-12 in.	FE	13211	17716	NS		ICPES	3360	MG/KG
	21-1401	AAA0782	6-12 in.	LI	13211	17716	NS		ICPES	3.5	MG/KG
	21-1401	AAA0782	6-12 in.	MG	13211	17716	NS		ICPES	318	MG/KG
	21-1401	AAA0782	6-12 in.	MN	13211	17716	NS		ICPES	103	MG/KG
	21-1401	AAA0782	6-12 in.	NA	13211	17716	NS		ICPES	90.7	MG/KG
	21-1401	AAA0782	6-12 in.	PB	13211	17716	NS		ETVAA	12.1	MG/KG
	21-1401	AAA0782	6-12 in.	SR	13211	17716	NS		ICPES	4.2	MG/KG
	21-1401	AAA0782	6-12 in.	V	13211	17716	NS		ICPES	4	MG/KG
	21-1401	AAA0782	6-12 in.	ZN	13211	17716	NS		ICPES	52.4	MG/KG
	21-1401	AAA0783	12-18 in.	AL	13211	17716	NS		ICPES	2480	MG/KG
	21-1401	AAA0783	12-18 in.	AS	13211	17716	NS		ETVAA	0.85	MG/KG
	21-1401	AAA0783	12-18 in.	BA	13211	17716	NS		ICPES	15.1	MG/KG
	21-1401	AAA0783	12-18 in.	BE	13211	17716	NS		ICPES	0.21	MG/KG
	21-1401	AAA0783	12-18 in.	CA	13211	17716	NS		ICPES	779	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1401	AAA0783	12-18 in.	CR	13211	17716	NS		ICPES	3.2	MG/KG
	21-1401	AAA0783	12-18 in.	CU	13211	17716	NS		ICPES	3.2	MG/KG
	21-1401	AAA0783	12-18 in.	FE	13211	17716	NS		ICPES	3840	MG/KG
	21-1401	AAA0783	12-18 in.	K	13211	17716	NS		ICPES	303	MG/KG
	21-1401	AAA0783	12-18 in.	LI	13211	17716	NS		ICPES	5.6	MG/KG
	21-1401	AAA0783	12-18 in.	MG	13211	17716	NS		ICPES	345	MG/KG
	21-1401	AAA0783	12-18 in.	MN	13211	17716	NS		ICPES	233	MG/KG
	21-1401	AAA0783	12-18 in.	NA	13211	17716	NS		ICPES	112	MG/KG
	21-1401	AAA0783	12-18 in.	NI	13211	17716	NS		ICPES	1.8	MG/KG
	21-1401	AAA0783	12-18 in.	PB	13211	17716	NS		ETVAA	9.6	MG/KG
	21-1401	AAA0783	12-18 in.	SR	13211	17716	NS		ICPES	4.5	MG/KG
	21-1401	AAA0783	12-18 in.	V	13211	17716	NS		ICPES	3.6	MG/KG
	21-1401	AAA0783	12-18 in.	ZN	13211	17716	NS		ICPES	35.4	MG/KG
21-027(a)	21-1361	AAA0872	0-6 in.	AL	13245	17915	SU		ICPES	3740	MG/KG
	21-1361	AAA0872	0-6 in.	AS	13245	17915	SU		ETVAA	2.1	MG/KG
	21-1361	AAA0872	0-6 in.	BA	13245	17915	SU		ICPES	108	MG/KG
	21-1361	AAA0872	0-6 in.	BE	13245	17915	SU		ICPES	0.23	MG/KG
	21-1361	AAA0872	0-6 in.	CA	13245	17915	SU		ICPES	1930	MG/KG
	21-1361	AAA0872	0-6 in.	CD	13245	17915	SU		ICPES	1.8	MG/KG
	21-1361	AAA0872	0-6 in.	CO	13245	17915	SU		ICPES	2.9	MG/KG
	21-1361	AAA0872	0-6 in.	CR	13245	17915	SU		ICPES	16.5	MG/KG
	21-1361	AAA0872	0-6 in.	CU	13245	17915	SU		ICPES	41	MG/KG
	21-1361	AAA0872	0-6 in.	FE	13245	17915	SU		ICPES	8580	MG/KG
	21-1361	AAA0872	0-6 in.	K	13245	17915	SU		ICPES	629	MG/KG
	21-1361	AAA0872	0-6 in.	LI	13245	17915	SU		ICPES	4.4	MG/KG
	21-1361	AAA0872	0-6 in.	MG	13245	17915	SU		ICPES	1510	MG/KG
	21-1361	AAA0872	0-6 in.	MN	13245	17915	SU		ICPES	136	MG/KG
	21-1361	AAA0872	0-6 in.	NA	13245	17915	SU		ICPES	86.8	MG/KG
	21-1361	AAA0872	0-6 in.	NI	13245	17915	SU		ICPES	8	MG/KG
	21-1361	AAA0872	0-6 in.	PB	13245	17915	SU		ETVAA	55.6	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1361	AAA0872	0-6 in.	SR	13245	17915	SU		ICPES	12.5	MG/KG
	21-1361	AAA0872	0-6 in.	TL	13245	17915	SU		ETVAA	0.17	MG/KG
	21-1361	AAA0872	0-6 in.	V	13245	17915	SU		ICPES	15	MG/KG
	21-1361	AAA0872	0-6 in.	ZN	13245	17915	SU		ICPES	442	MG/KG
	21-1362	AAA0873	0-6 in.	AL	13245	17915	SU		ICPES	5550	MG/KG
	21-1362	AAA0873	0-6 in.	AS	13245	17915	SU		ETVAA	2.3	MG/KG
	21-1362	AAA0873	0-6 in.	BA	13245	17915	SU		ICPES	73.1	MG/KG
	21-1362	AAA0873	0-6 in.	BE	13245	17915	SU		ICPES	0.25	MG/KG
	21-1362	AAA0873	0-6 in.	CA	13245	17915	SU		ICPES	2090	MG/KG
	21-1362	AAA0873	0-6 in.	CD	13245	17915	SU		ICPES	2.2	MG/KG
	21-1362	AAA0873	0-6 in.	CO	13245	17915	SU		ICPES	3.4	MG/KG
	21-1362	AAA0873	0-6 in.	CR	13245	17915	SU		ICPES	36.6	MG/KG
	21-1362	AAA0873	0-6 in.	CU	13245	17915	SU		ICPES	79.2	MG/KG
	21-1362	AAA0873	0-6 in.	FE	13245	17915	SU		ICPES	9020	MG/KG
	21-1362	AAA0873	0-6 in.	K	13245	17915	SU		ICPES	678	MG/KG
	21-1362	AAA0873	0-6 in.	LI	13245	17915	SU		ICPES	7.8	MG/KG
	21-1362	AAA0873	0-6 in.	MG	13245	17915	SU		ICPES	1520	MG/KG
	21-1362	AAA0873	0-6 in.	MN	13245	17915	SU		ICPES	164	MG/KG
	21-1362	AAA0873	0-6 in.	NA	13245	17915	SU		ICPES	112	MG/KG
	21-1362	AAA0873	0-6 in.	NI	13245	17915	SU		ICPES	7.3	MG/KG
	21-1362	AAA0873	0-6 in.	PB	13245	17915	SU		ETVAA	38.9	MG/KG
	21-1362	AAA0873	0-6 in.	SR	13245	17915	SU		ICPES	13.2	MG/KG
	21-1362	AAA0873	0-6 in.	TL	13245	17915	SU		ETVAA	0.15	MG/KG
	21-1362	AAA0873	0-6 in.	V	13245	17915	SU		ICPES	17.5	MG/KG
	21-1362	AAA0873	0-6 in.	ZN	13245	17915	SU		ICPES	316	MG/KG
	21-1363	AAA0874	0-6 in.	AL	13245	17915	SU		ICPES	6040	MG/KG
	21-1363	AAA0874	0-6 in.	AS	13245	17915	SU		ETVAA	3.4	MG/KG
	21-1363	AAA0874	0-6 in.	BA	13245	17915	SU		ICPES	54.3	MG/KG
	21-1363	AAA0874	0-6 in.	BE	13245	17915	SU		ICPES	0.41	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1363	AAA0874	0-6 in.	CA	13245	17915	SU		ICPES	1230	MG/KG
	21-1363	AAA0874	0-6 in.	CD	13245	17915	SU		ICPES	1.3	MG/KG
	21-1363	AAA0874	0-6 in.	CO	13245	17915	SU		ICPES	2.8	MG/KG
	21-1363	AAA0874	0-6 in.	CR	13245	17915	SU		ICPES	13.6	MG/KG
	21-1363	AAA0874	0-6 in.	CU	13245	17915	SU		ICPES	22.5	MG/KG
	21-1363	AAA0874	0-6 in.	FE	13245	17915	SU		ICPES	7950	MG/KG
	21-1363	AAA0874	0-6 in.	K	13245	17915	SU		ICPES	1010	MG/KG
	21-1363	AAA0874	0-6 in.	LI	13245	17915	SU		ICPES	7.2	MG/KG
	21-1363	AAA0874	0-6 in.	MG	13245	17915	SU		ICPES	1090	MG/KG
	21-1363	AAA0874	0-6 in.	MN	13245	17915	SU		ICPES	174	MG/KG
	21-1363	AAA0874	0-6 in.	NA	13245	17915	SU		ICPES	112	MG/KG
	21-1363	AAA0874	0-6 in.	NI	13245	17915	SU		ICPES	5	MG/KG
	21-1363	AAA0874	0-6 in.	PB	13245	17915	SU		ETVAA	13.8	MG/KG
	21-1363	AAA0874	0-6 in.	SR	13245	17915	SU		ICPES	10.5	MG/KG
	21-1363	AAA0874	0-6 in.	TL	13245	17915	SU		ETVAA	0.15	MG/KG
	21-1363	AAA0874	0-6 in.	V	13245	17915	SU		ICPES	15	MG/KG
	21-1363	AAA0874	0-6 in.	ZN	13245	17915	SU		ICPES	89.5	MG/KG
	21-1364	AAA0875	0-6 in.	AL	13245	17915	SU		ICPES	6130	MG/KG
	21-1364	AAA0875	0-6 in.	AS	13245	17915	SU		ETVAA	5	MG/KG
	21-1364	AAA0875	0-6 in.	BA	13245	17915	SU		ICPES	133	MG/KG
	21-1364	AAA0875	0-6 in.	BE	13245	17915	SU		ICPES	0.36	MG/KG
	21-1364	AAA0875	0-6 in.	CA	13245	17915	SU		ICPES	13700	MG/KG
	21-1364	AAA0875	0-6 in.	CD	13245	17915	SU		ICPES	4.2	MG/KG
	21-1364	AAA0875	0-6 in.	CO	13245	17915	SU		ICPES	2.8	MG/KG
	21-1364	AAA0875	0-6 in.	CR	13245	17915	SU		ICPES	436	MG/KG
	21-1364	AAA0875	0-6 in.	CU	13245	17915	SU		ICPES	198	MG/KG
	21-1364	AAA0875	0-6 in.	FE	13245	17915	SU		ICPES	9430	MG/KG
	21-1364	AAA0875	0-6 in.	K	13245	17915	SU		ICPES	757	MG/KG
	21-1364	AAA0875	0-6 in.	LI	13245	17915	SU		ICPES	8.9	MG/KG
	21-1364	AAA0875	0-6 in.	MG	13245	17915	SU		ICPES	1670	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1364	AAA0875	0-6 in.	MN	13245	17915	SU		ICPES	151	MG/KG
	21-1364	AAA0875	0-6 in.	NA	13245	17915	SU		ICPES	133	MG/KG
	21-1364	AAA0875	0-6 in.	NI	13245	17915	SU		ICPES	42.3	MG/KG
	21-1364	AAA0875	0-6 in.	PB	13245	17915	SU		ETVAA	73	MG/KG
	21-1364	AAA0875	0-6 in.	SR	13245	17915	SU		ICPES	102	MG/KG
	21-1364	AAA0875	0-6 in.	TL	13245	17915	SU		ETVAA	0.13	MG/KG
	21-1364	AAA0875	0-6 in.	V	13245	17915	SU		ICPES	24.1	MG/KG
	21-1364	AAA0875	0-6 in.	ZN	13245	17915	SU		ICPES	512	MG/KG
	21-1365	AAA0876	0-6 in.	AL	13115		SU		ICPMS	2583.3	UG/G
	21-1365	AAA0876	0-6 in.	AS	13115		SU		ETVAA	4.7	UG/G
	21-1365	AAA0876	0-6 in.	BA	13115		SU		ICPMS	114.9	UG/G
	21-1365	AAA0876	0-6 in.	BE	13115		SU		ICPMS	1.2	UG/G
	21-1365	AAA0876	0-6 in.	CA	13115		SU		FAA	354	UG/G
	21-1365	AAA0876	0-6 in.	CO	13115		SU		ICPMS	2.2	UG/G
	21-1365	AAA0876	0-6 in.	CR	13115		SU		ICPMS	463.1	UG/G
	21-1365	AAA0876	0-6 in.	CU	13115		SU		ICPMS	49.4	UG/G
	21-1365	AAA0876	0-6 in.	FE	13115		SU		FAA	49	MG/G
	21-1365	AAA0876	0-6 in.	K	13115		SU		FAA	627	UG/G
	21-1365	AAA0876	0-6 in.	LI	13115		SU		ICPMS	5.9	UG/G
	21-1365	AAA0876	0-6 in.	MG	13115		SU		ICPMS	870	UG/G
	21-1365	AAA0876	0-6 in.	MN	13115		SU		ICPMS	136.2	UG/G
	21-1365	AAA0876	0-6 in.	NA	13115		SU		FAA	522	UG/G
	21-1365	AAA0876	0-6 in.	NI	13115		SU		ICPMS	34.7	UG/G
	21-1365	AAA0876	0-6 in.	PB	13115		SU		ICPMS	31.8	UG/G
	21-1365	AAA0876	0-6 in.	SR	13115		SU		ICPMS	23.5	UG/G
	21-1365	AAA0876	0-6 in.	V	13115		SU		ICPMS	13.4	UG/G
	21-1365	AAA0876	0-6 in.	ZN	13115		SU		ICPMS	826.3	UG/G
	21-1366	AAA0877	0-6 in.	AL	13156		SU		ICPES	8170	MG/KG
	21-1366	AAA0877	0-6 in.	AS	13156		SU		ETVAA	4.4	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1366	AAA0877	0-6 in.	BA	13156		SU		ICPES	139	MG/KG
	21-1366	AAA0877	0-6 in.	BE	13156		SU		ICPES	0.56	MG/KG
	21-1366	AAA0877	0-6 in.	CA	13156		SU		ICPES	6110	MG/KG
	21-1366	AAA0877	0-6 in.	CD	13156		SU		ICPES	3.9	MG/KG
	21-1366	AAA0877	0-6 in.	CO	13156		SU		ICPES	3.1	MG/KG
	21-1366	AAA0877	0-6 in.	CR	13156		SU		ICPES	410	MG/KG
	21-1366	AAA0877	0-6 in.	CU	13156		SU		ICPES	179	MG/KG
	21-1366	AAA0877	0-6 in.	FE	13156		SU		ICPES	9500	MG/KG
	21-1366	AAA0877	0-6 in.	K	13156		SU		ICPES	1430	MG/KG
	21-1366	AAA0877	0-6 in.	LI	13156		SU		ICPES	12.7	MG/KG
	21-1366	AAA0877	0-6 in.	MG	13156		SU		ICPES	2090	MG/KG
	21-1366	AAA0877	0-6 in.	MN	13156		SU		ICPES	263	MG/KG
	21-1366	AAA0877	0-6 in.	NA	13156		SU		ICPES	154	MG/KG
	21-1366	AAA0877	0-6 in.	NI	13156		SU		ICPES	9.3	MG/KG
	21-1366	AAA0877	0-6 in.	PB	13156		SU		ETVAA	57.8	MG/KG
	21-1366	AAA0877	0-6 in.	SR	13156		SU		ICPES	56.7	MG/KG
	21-1366	AAA0877	0-6 in.	V	13156		SU		ICPES	19.9	MG/KG
	21-1366	AAA0877	0-6 in.	ZN	13156		SU		ICPES	497	MG/KG
	21-1367	AAA0878	0-6 in.	AL	13156		SU		ICPES	5440	MG/KG
	21-1367	AAA0878	0-6 in.	AS	13156		SU		ETVAA	4.2	MG/KG
	21-1367	AAA0878	0-6 in.	BA	13156		SU		ICPES	96.2	MG/KG
	21-1367	AAA0878	0-6 in.	BE	13156		SU		ICPES	0.48	MG/KG
	21-1367	AAA0878	0-6 in.	CA	13156		SU		ICPES	4370	MG/KG
	21-1367	AAA0878	0-6 in.	CD	13156		SU		ICPES	3.2	MG/KG
	21-1367	AAA0878	0-6 in.	CO	13156		SU		ICPES	2.4	MG/KG
	21-1367	AAA0878	0-6 in.	CR	13156		SU		ICPES	335	MG/KG
	21-1367	AAA0878	0-6 in.	CU	13156		SU		ICPES	98.3	MG/KG
	21-1367	AAA0878	0-6 in.	FE	13156		SU		ICPES	7450	MG/KG
	21-1367	AAA0878	0-6 in.	K	13156		SU		ICPES	919	MG/KG
	21-1367	AAA0878	0-6 in.	LI	13156		SU		ICPES	9.6	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1367	AAA0878	0-6 in.	MG	13156		SU		ICPES	1530	MG/KG
	21-1367	AAA0878	0-6 in.	MN	13156		SU		ICPES	192	MG/KG
	21-1367	AAA0878	0-6 in.	NA	13156		SU		ICPES	115	MG/KG
	21-1367	AAA0878	0-6 in.	NI	13156		SU		ICPES	4.9	MG/KG
	21-1367	AAA0878	0-6 in.	PB	13156		SU		ETVAA	47	MG/KG
	21-1367	AAA0878	0-6 in.	SR	13156		SU		ICPES	42.6	MG/KG
	21-1367	AAA0878	0-6 in.	V	13156		SU		ICPES	17	MG/KG
	21-1367	AAA0878	0-6 in.	ZN	13156		SU		ICPES	469	MG/KG
	21-1368	AAA0879	0-6 in.	AL	13156		SU		ICPES	5710	MG/KG
	21-1368	AAA0879	0-6 in.	AS	13156		SU		ETVAA	3.7	MG/KG
	21-1368	AAA0879	0-6 in.	BA	13156		SU		ICPES	99.4	MG/KG
	21-1368	AAA0879	0-6 in.	BE	13156		SU		ICPES	0.47	MG/KG
	21-1368	AAA0879	0-6 in.	CA	13156		SU		ICPES	4030	MG/KG
	21-1368	AAA0879	0-6 in.	CD	13156		SU		ICPES	3.3	MG/KG
	21-1368	AAA0879	0-6 in.	CO	13156		SU		ICPES	2.2	MG/KG
	21-1368	AAA0879	0-6 in.	CR	13156		SU		ICPES	461	MG/KG
	21-1368	AAA0879	0-6 in.	CU	13156		SU		ICPES	86.7	MG/KG
	21-1368	AAA0879	0-6 in.	FE	13156		SU		ICPES	6440	MG/KG
	21-1368	AAA0879	0-6 in.	K	13156		SU		ICPES	1230	MG/KG
	21-1368	AAA0879	0-6 in.	LI	13156		SU		ICPES	10.1	MG/KG
	21-1368	AAA0879	0-6 in.	MG	13156		SU		ICPES	1460	MG/KG
	21-1368	AAA0879	0-6 in.	MN	13156		SU		ICPES	221	MG/KG
	21-1368	AAA0879	0-6 in.	NA	13156		SU		ICPES	161	MG/KG
	21-1368	AAA0879	0-6 in.	NI	13156		SU		ICPES	5.9	MG/KG
	21-1368	AAA0879	0-6 in.	PB	13156		SU		ETVAA	36.9	MG/KG
	21-1368	AAA0879	0-6 in.	SR	13156		SU		ICPES	37.5	MG/KG
	21-1368	AAA0879	0-6 in.	V	13156		SU		ICPES	13.9	MG/KG
	21-1368	AAA0879	0-6 in.	ZN	13156		SU		ICPES	345	MG/KG
	21-1369	AAA0880	0-6 in.	AL	13156		SU		ICPES	9290	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1369	AAA0880	0-6 in.	AS	13156		SU		ETVAA	4.9	MG/KG
	21-1369	AAA0880	0-6 in.	BA	13156		SU		ICPES	138	MG/KG
	21-1369	AAA0880	0-6 in.	BE	13156		SU		ICPES	0.67	MG/KG
	21-1369	AAA0880	0-6 in.	CA	13156		SU		ICPES	4770	MG/KG
	21-1369	AAA0880	0-6 in.	CD	13156		SU		ICPES	3.6	MG/KG
	21-1369	AAA0880	0-6 in.	CO	13156		SU		ICPES	3.8	MG/KG
	21-1369	AAA0880	0-6 in.	CR	13156		SU		ICPES	419	MG/KG
	21-1369	AAA0880	0-6 in.	CU	13156		SU		ICPES	136	MG/KG
	21-1369	AAA0880	0-6 in.	FE	13156		SU		ICPES	9250	MG/KG
	21-1369	AAA0880	0-6 in.	K	13156		SU		ICPES	1620	MG/KG
	21-1369	AAA0880	0-6 in.	LI	13156		SU		ICPES	14.1	MG/KG
	21-1369	AAA0880	0-6 in.	MG	13156		SU		ICPES	2060	MG/KG
	21-1369	AAA0880	0-6 in.	MN	13156		SU		ICPES	240	MG/KG
	21-1369	AAA0880	0-6 in.	NA	13156		SU		ICPES	186	MG/KG
	21-1369	AAA0880	0-6 in.	NI	13156		SU		ICPES	7	MG/KG
	21-1369	AAA0880	0-6 in.	PB	13156		SU		ETVAA	62.3	MG/KG
	21-1369	AAA0880	0-6 in.	SR	13156		SU		ICPES	60.2	MG/KG
	21-1369	AAA0880	0-6 in.	V	13156		SU		ICPES	19.4	MG/KG
	21-1369	AAA0880	0-6 in.	ZN	13156		SU		ICPES	463	MG/KG
	21-1370	AAA0881	0-6 in.	AL	13115		SU		ICPMS	6226.9	UG/G
	21-1370	AAA0881	0-6 in.	AS	13115		SU		ETVAA	6.9	UG/G
	21-1370	AAA0881	0-6 in.	BA	13115		SU		ICPMS	88.2	UG/G
	21-1370	AAA0881	0-6 in.	BE	13115		SU		ICPMS	1.7	UG/G
	21-1370	AAA0881	0-6 in.	CA	13115		SU		FAA	375	UG/G
	21-1370	AAA0881	0-6 in.	CO	13115		SU		ICPMS	2.3	UG/G
	21-1370	AAA0881	0-6 in.	CR	13115		SU		ICPMS	1000.4	UG/G
	21-1370	AAA0881	0-6 in.	CU	13115		SU		ICPMS	43.5	UG/G
	21-1370	AAA0881	0-6 in.	FE	13115		SU		FAA	6.7	MG/G
	21-1370	AAA0881	0-6 in.	K	13115		SU		FAA	923	UG/G
	21-1370	AAA0881	0-6 in.	LI	13115		SU		ICPMS	9.3	UG/G

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1370	AAA0881	0-6 in.	MG	13115		SU		ICPMS	1550	UG/G
	21-1370	AAA0881	0-6 in.	MN	13115		SU		ICPMS	113.7	UG/G
	21-1370	AAA0881	0-6 in.	NA	13115		SU		FAA	217	UG/G
	21-1370	AAA0881	0-6 in.	NI	13115		SU		ICPMS	21.8	UG/G
	21-1370	AAA0881	0-6 in.	PB	13115		SU		ICPMS	41.7	UG/G
	21-1370	AAA0881	0-6 in.	SE	13115	18840	SU		ETVAA	0.33	UG/G
	21-1370	AAA0881	0-6 in.	SE	13115		SU		ETVAA	0.33	UG/G
	21-1370	AAA0881	0-6 in.	SR	13115		SU		ICPMS	36.7	UG/G
	21-1370	AAA0881	0-6 in.	V	13115		SU		ICPMS	12.9	UG/G
	21-1370	AAA0881	0-6 in.	ZN	13115		SU		ICPMS	240.9	UG/G
	21-1371	AAA0882	0-6 in.	AL	13156		SU		ICPES	5490	MG/KG
	21-1371	AAA0882	0-6 in.	AS	13156		SU		ETVAA	2.4	MG/KG
	21-1371	AAA0882	0-6 in.	BA	13156		SU		ICPES	78.2	MG/KG
	21-1371	AAA0882	0-6 in.	BE	13156		SU		ICPES	0.38	MG/KG
	21-1371	AAA0882	0-6 in.	CA	13156		SU		ICPES	4200	MG/KG
	21-1371	AAA0882	0-6 in.	CD	13156		SU		ICPES	4	MG/KG
	21-1371	AAA0882	0-6 in.	CO	13156		SU		ICPES	2.3	MG/KG
	21-1371	AAA0882	0-6 in.	CR	13156		SU		ICPES	266	MG/KG
	21-1371	AAA0882	0-6 in.	CU	13156		SU		ICPES	44.9	MG/KG
	21-1371	AAA0882	0-6 in.	FE	13156		SU		ICPES	6240	MG/KG
	21-1371	AAA0882	0-6 in.	K	13156		SU		ICPES	1270	MG/KG
	21-1371	AAA0882	0-6 in.	LI	13156		SU		ICPES	9	MG/KG
	21-1371	AAA0882	0-6 in.	MG	13156		SU		ICPES	1380	MG/KG
	21-1371	AAA0882	0-6 in.	MN	13156		SU		ICPES	246	MG/KG
	21-1371	AAA0882	0-6 in.	NA	13156		SU		ICPES	118	MG/KG
	21-1371	AAA0882	0-6 in.	NI	13156		SU		ICPES	3.3	MG/KG
	21-1371	AAA0882	0-6 in.	PB	13156		SU		ETVAA	79.8	MG/KG
	21-1371	AAA0882	0-6 in.	SR	13156		SU		ICPES	37.6	MG/KG
	21-1371	AAA0882	0-6 in.	V	13156		SU		ICPES	10.8	MG/KG
	21-1371	AAA0882	0-6 in.	ZN	13156		SU		ICPES	232	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1372	AAA0883	0-6 in.	AL	13156		SU		ICPES	5200	MG/KG
	21-1372	AAA0883	0-6 in.	AS	13156		SU		ETVAA	2.5	MG/KG
	21-1372	AAA0883	0-6 in.	BA	13156		SU		ICPES	64	MG/KG
	21-1372	AAA0883	0-6 in.	BE	13156		SU		ICPES	0.42	MG/KG
	21-1372	AAA0883	0-6 in.	CA	13156		SU		ICPES	2190	MG/KG
	21-1372	AAA0883	0-6 in.	CD	13156		SU		ICPES	1.7	MG/KG
	21-1372	AAA0883	0-6 in.	CR	13156		SU		ICPES	174	MG/KG
	21-1372	AAA0883	0-6 in.	CU	13156		SU		ICPES	86.5	MG/KG
	21-1372	AAA0883	0-6 in.	FE	13156		SU		ICPES	5950	MG/KG
	21-1372	AAA0883	0-6 in.	K	13156		SU		ICPES	911	MG/KG
	21-1372	AAA0883	0-6 in.	LI	13156		SU		ICPES	11.7	MG/KG
	21-1372	AAA0883	0-6 in.	MG	13156		SU		ICPES	1130	MG/KG
	21-1372	AAA0883	0-6 in.	MN	13156		SU		ICPES	205	MG/KG
	21-1372	AAA0883	0-6 in.	NA	13156		SU		ICPES	131	MG/KG
	21-1372	AAA0883	0-6 in.	NI	13156		SU		ICPES	4.5	MG/KG
	21-1372	AAA0883	0-6 in.	PB	13156		SU		ETVAA	51.7	MG/KG
	21-1372	AAA0883	0-6 in.	SR	13156		SU		ICPES	24	MG/KG
	21-1372	AAA0883	0-6 in.	V	13156		SU		ICPES	9.1	MG/KG
	21-1372	AAA0883	0-6 in.	ZN	13156		SU		ICPES	216	MG/KG
	21-1373	AAA0884	0-6 in.	AL	13156		SU		ICPES	3860	MG/KG
	21-1373	AAA0884	0-6 in.	AS	13156		SU		ETVAA	1.7	MG/KG
	21-1373	AAA0884	0-6 in.	BA	13156		SU		ICPES	46.5	MG/KG
	21-1373	AAA0884	0-6 in.	BE	13156		SU		ICPES	0.29	MG/KG
	21-1373	AAA0884	0-6 in.	CA	13156		SU		ICPES	1790	MG/KG
	21-1373	AAA0884	0-6 in.	CD	13156		SU		ICPES	2.3	MG/KG
	21-1373	AAA0884	0-6 in.	CO	13156		SU		ICPES	1.1	MG/KG
	21-1373	AAA0884	0-6 in.	CR	13156		SU		ICPES	131	MG/KG
	21-1373	AAA0884	0-6 in.	CU	13156		SU		ICPES	40.8	MG/KG
	21-1373	AAA0884	0-6 in.	FE	13156		SU		ICPES	4610	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1373	AAA0884	0-6 in.	K	13156		SU		ICPES	651	MG/KG
	21-1373	AAA0884	0-6 in.	LI	13156		SU		ICPES	6.4	MG/KG
	21-1373	AAA0884	0-6 in.	MG	13156		SU		ICPES	761	MG/KG
	21-1373	AAA0884	0-6 in.	MN	13156		SU		ICPES	189	MG/KG
	21-1373	AAA0884	0-6 in.	NA	13156		SU		ICPES	93.5	MG/KG
	21-1373	AAA0884	0-6 in.	NI	13156		SU		ICPES	2.9	MG/KG
	21-1373	AAA0884	0-6 in.	PB	13156		SU		ETVAA	32.7	MG/KG
	21-1373	AAA0884	0-6 in.	SR	13156		SU		ICPES	17.5	MG/KG
	21-1373	AAA0884	0-6 in.	V	13156		SU		ICPES	7.4	MG/KG
	21-1373	AAA0884	0-6 in.	ZN	13156		SU		ICPES	140	MG/KG
	21-1374	AAA0885	0-6 in.	AL	13156		SU		ICPES	5110	MG/KG
	21-1374	AAA0885	0-6 in.	AS	13156		SU		ETVAA	2.1	MG/KG
	21-1374	AAA0885	0-6 in.	BA	13156		SU		ICPES	58.2	MG/KG
	21-1374	AAA0885	0-6 in.	BE	13156		SU		ICPES	0.43	MG/KG
	21-1374	AAA0885	0-6 in.	CA	13156		SU		ICPES	2670	MG/KG
	21-1374	AAA0885	0-6 in.	CD	13156		SU		ICPES	3	MG/KG
	21-1374	AAA0885	0-6 in.	CO	13156		SU		ICPES	1.6	MG/KG
	21-1374	AAA0885	0-6 in.	CR	13156		SU		ICPES	178	MG/KG
	21-1374	AAA0885	0-6 in.	CU	13156		SU		ICPES	33.8	MG/KG
	21-1374	AAA0885	0-6 in.	FE	13156		SU		ICPES	5750	MG/KG
	21-1374	AAA0885	0-6 in.	K	13156		SU		ICPES	927	MG/KG
	21-1374	AAA0885	0-6 in.	LI	13156		SU		ICPES	7.9	MG/KG
	21-1374	AAA0885	0-6 in.	MG	13156		SU		ICPES	1090	MG/KG
	21-1374	AAA0885	0-6 in.	MN	13156		SU		ICPES	221	MG/KG
	21-1374	AAA0885	0-6 in.	NA	13156		SU		ICPES	81.6	MG/KG
	21-1374	AAA0885	0-6 in.	NI	13156		SU		ICPES	4	MG/KG
	21-1374	AAA0885	0-6 in.	PB	13156		SU		ETVAA	39.2	MG/KG
	21-1374	AAA0885	0-6 in.	SR	13156		SU		ICPES	24.2	MG/KG
	21-1374	AAA0885	0-6 in.	V	13156		SU		ICPES	9.5	MG/KG
	21-1374	AAA0885	0-6 in.	ZN	13156		SU		ICPES	177	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1374	AAA0887		CO	13163		FR		ICPES	9.5	UG/L
	21-1374	AAA0887		NA	13163		FR		ICPES	42.8	UG/L
21-027(c)	21-1349	AAA0856	0-6 in.	AL	13245	17915	SU		ICPES	8990	MG/KG
	21-1349	AAA0856	0-6 in.	AS	13245	17915	SU		ETVAA	2.4	MG/KG
	21-1349	AAA0856	0-6 in.	BA	13245	17915	SU		ICPES	87.1	MG/KG
	21-1349	AAA0856	0-6 in.	BE	13245	17915	SU		ICPES	0.75	MG/KG
	21-1349	AAA0856	0-6 in.	CA	13245	17915	SU		ICPES	2380	MG/KG
	21-1349	AAA0856	0-6 in.	CD	13245	17915	SU		ICPES	1.6	MG/KG
	21-1349	AAA0856	0-6 in.	CO	13245	17915	SU		ICPES	3.2	MG/KG
	21-1349	AAA0856	0-6 in.	CR	13245	17915	SU		ICPES	8.9	MG/KG
	21-1349	AAA0856	0-6 in.	CU	13245	17915	SU		ICPES	12.4	MG/KG
	21-1349	AAA0856	0-6 in.	FE	13245	17915	SU		ICPES	9040	MG/KG
	21-1349	AAA0856	0-6 in.	K	13245	17915	SU		ICPES	1300	MG/KG
	21-1349	AAA0856	0-6 in.	LI	13245	17915	SU		ICPES	8.9	MG/KG
	21-1349	AAA0856	0-6 in.	MG	13245	17915	SU		ICPES	1490	MG/KG
	21-1349	AAA0856	0-6 in.	MN	13245	17915	SU		ICPES	247	MG/KG
	21-1349	AAA0856	0-6 in.	NA	13245	17915	SU		ICPES	96.5	MG/KG
	21-1349	AAA0856	0-6 in.	NI	13245	17915	SU		ICPES	6.2	MG/KG
	21-1349	AAA0856	0-6 in.	PB	13245	17915	SU		ETVAA	36.7	MG/KG
	21-1349	AAA0856	0-6 in.	SR	13245	17915	SU		ICPES	15.6	MG/KG
	21-1349	AAA0856	0-6 in.	TL	13245	17915	SU		ETVAA	0.24	MG/KG
	21-1349	AAA0856	0-6 in.	V	13245	17915	SU		ICPES	14.9	MG/KG
	21-1349	AAA0856	0-6 in.	ZN	13245	17915	SU		ICPES	58.6	MG/KG
	21-1350	AAA0857	0-6 in.	AL	13245	17915	SU		ICPES	9550	MG/KG
	21-1350	AAA0857	0-6 in.	AS	13245	17915	SU		ETVAA	4.7	MG/KG
	21-1350	AAA0857	0-6 in.	BA	13245	17915	SU		ICPES	127	MG/KG
	21-1350	AAA0857	0-6 in.	BE	13245	17915	SU		ICPES	0.66	MG/KG
	21-1350	AAA0857	0-6 in.	CA	13245	17915	SU		ICPES	14800	MG/KG
	21-1350	AAA0857	0-6 in.	CD	13245	17915	SU		ICPES	1.6	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1350	AAA0857	0-6 in.	CO	13245	17915	SU		ICPES	3.8	MG/KG
	21-1350	AAA0857	0-6 in.	CR	13245	17915	SU		ICPES	15.6	MG/KG
	21-1350	AAA0857	0-6 in.	CU	13245	17915	SU		ICPES	19.1	MG/KG
	21-1350	AAA0857	0-6 in.	FE	13245	17915	SU		ICPES	9810	MG/KG
	21-1350	AAA0857	0-6 in.	K	13245	17915	SU		ICPES	1220	MG/KG
	21-1350	AAA0857	0-6 in.	LI	13245	17915	SU		ICPES	9.8	MG/KG
	21-1350	AAA0857	0-6 in.	MG	13245	17915	SU		ICPES	2150	MG/KG
	21-1350	AAA0857	0-6 in.	MN	13245	17915	SU		ICPES	314	MG/KG
	21-1350	AAA0857	0-6 in.	NA	13245	17915	SU		ICPES	121	MG/KG
	21-1350	AAA0857	0-6 in.	NI	13245	17915	SU		ICPES	7.8	MG/KG
	21-1350	AAA0857	0-6 in.	PB	13245	17915	SU		ETVAA	103	MG/KG
	21-1350	AAA0857	0-6 in.	SR	13245	17915	SU		ICPES	27.6	MG/KG
	21-1350	AAA0857	0-6 in.	TL	13245	17915	SU		ETVAA	0.36	MG/KG
	21-1350	AAA0857	0-6 in.	V	13245	17915	SU		ICPES	17.7	MG/KG
	21-1350	AAA0857	0-6 in.	ZN	13245	17915	SU		ICPES	136	MG/KG
	21-1351	AAA0858	0-6 in.	AL	13245	17915	SU		ICPES	8940	MG/KG
	21-1351	AAA0858	0-6 in.	AS	13245	17915	SU		ETVAA	4.8	MG/KG
	21-1351	AAA0858	0-6 in.	BA	13245	17915	SU		ICPES	106	MG/KG
	21-1351	AAA0858	0-6 in.	BE	13245	17915	SU		ICPES	0.67	MG/KG
	21-1351	AAA0858	0-6 in.	CA	13245	17915	SU		ICPES	2000	MG/KG
	21-1351	AAA0858	0-6 in.	CD	13245	17915	SU		ICPES	1.6	MG/KG
	21-1351	AAA0858	0-6 in.	CO	13245	17915	SU		ICPES	3.5	MG/KG
	21-1351	AAA0858	0-6 in.	CR	13245	17915	SU		ICPES	10.7	MG/KG
	21-1351	AAA0858	0-6 in.	CU	13245	17915	SU		ICPES	15.9	MG/KG
	21-1351	AAA0858	0-6 in.	FE	13245	17915	SU		ICPES	9120	MG/KG
	21-1351	AAA0858	0-6 in.	K	13245	17915	SU		ICPES	1120	MG/KG
	21-1351	AAA0858	0-6 in.	LI	13245	17915	SU		ICPES	9.5	MG/KG
	21-1351	AAA0858	0-6 in.	MG	13245	17915	SU		ICPES	1470	MG/KG
	21-1351	AAA0858	0-6 in.	MN	13245	17915	SU		ICPES	325	MG/KG
	21-1351	AAA0858	0-6 in.	NA	13245	17915	SU		ICPES	117	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1351	AAA0858	0-6 in.	NI	13245	17915	SU		ICPES	6.2	MG/KG
	21-1351	AAA0858	0-6 in.	PB	13245	17915	SU		ETVAA	35.4	MG/KG
	21-1351	AAA0858	0-6 in.	SR	13245	17915	SU		ICPES	15	MG/KG
	21-1351	AAA0858	0-6 in.	V	13245	17915	SU		ICPES	17.7	MG/KG
	21-1351	AAA0858	0-6 in.	ZN	13245	17915	SU		ICPES	87.3	MG/KG
	21-1351	AAA0861	0-6 in.	AL	13245	17915	FD		ICPES	9060	MG/KG
	21-1351	AAA0861	0-6 in.	AS	13245	17915	FD		ETVAA	5.6	MG/KG
	21-1351	AAA0861	0-6 in.	BA	13245	17915	FD		ICPES	84.1	MG/KG
	21-1351	AAA0861	0-6 in.	BE	13245	17915	FD		ICPES	0.64	MG/KG
	21-1351	AAA0861	0-6 in.	CA	13245	17915	FD		ICPES	1960	MG/KG
	21-1351	AAA0861	0-6 in.	CD	13245	17915	FD		ICPES	1.5	MG/KG
	21-1351	AAA0861	0-6 in.	CO	13245	17915	FD		ICPES	4.1	MG/KG
	21-1351	AAA0861	0-6 in.	CR	13245	17915	FD		ICPES	9.8	MG/KG
	21-1351	AAA0861	0-6 in.	CU	13245	17915	FD		ICPES	15.4	MG/KG
	21-1351	AAA0861	0-6 in.	FE	13245	17915	FD		ICPES	9480	MG/KG
	21-1351	AAA0861	0-6 in.	K	13245	17915	FD		ICPES	1000	MG/KG
	21-1351	AAA0861	0-6 in.	LI	13245	17915	FD		ICPES	9.6	MG/KG
	21-1351	AAA0861	0-6 in.	MG	13245	17915	FD		ICPES	1460	MG/KG
	21-1351	AAA0861	0-6 in.	MN	13245	17915	FD		ICPES	332	MG/KG
	21-1351	AAA0861	0-6 in.	NA	13245	17915	FD		ICPES	120	MG/KG
	21-1351	AAA0861	0-6 in.	NI	13245	17915	FD		ICPES	6.2	MG/KG
	21-1351	AAA0861	0-6 in.	PB	13245	17915	FD		ETVAA	37.5	MG/KG
	21-1351	AAA0861	0-6 in.	SR	13245	17915	FD		ICPES	14.3	MG/KG
	21-1351	AAA0861	0-6 in.	TL	13245	17915	FD		ETVAA	0.29	MG/KG
	21-1351	AAA0861	0-6 in.	V	13245	17915	FD		ICPES	17.6	MG/KG
	21-1351	AAA0861	0-6 in.	ZN	13245	17915	FD		ICPES	79.5	MG/KG
	21-1352	AAA0862	0-6 in.	AL	13156		SU		ICPES	5910	MG/KG
	21-1352	AAA0862	0-6 in.	AS	13156		SU		ETVAA	1.2	MG/KG
	21-1352	AAA0862	0-6 in.	BA	13156		SU		ICPES	42.4	MG/KG
	21-1352	AAA0862	0-6 in.	BE	13156		SU		ICPES	0.51	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1352	AAA0862	0-6 in.	CA	13156		SU		ICPES	1950	MG/KG
	21-1352	AAA0862	0-6 in.	CD	13156		SU		ICPES	1.2	MG/KG
	21-1352	AAA0862	0-6 in.	CO	13156		SU		ICPES	1.7	MG/KG
	21-1352	AAA0862	0-6 in.	CR	13156		SU		ICPES	8.8	MG/KG
	21-1352	AAA0862	0-6 in.	CU	13156		SU		ICPES	5.5	MG/KG
	21-1352	AAA0862	0-6 in.	FE	13156		SU		ICPES	7240	MG/KG
	21-1352	AAA0862	0-6 in.	K	13156		SU		ICPES	696	MG/KG
	21-1352	AAA0862	0-6 in.	LI	13156		SU		ICPES	5.7	MG/KG
	21-1352	AAA0862	0-6 in.	MG	13156		SU		ICPES	872	MG/KG
	21-1352	AAA0862	0-6 in.	MN	13156		SU		ICPES	218	MG/KG
	21-1352	AAA0862	0-6 in.	NA	13156		SU		ICPES	68.8	MG/KG
	21-1352	AAA0862	0-6 in.	NI	13156		SU		ICPES	5.4	MG/KG
	21-1352	AAA0862	0-6 in.	PB	13156		SU		ETVAA	14.6	MG/KG
	21-1352	AAA0862	0-6 in.	SR	13156		SU		ICPES	7.8	MG/KG
	21-1352	AAA0862	0-6 in.	V	13156		SU		ICPES	7.3	MG/KG
	21-1352	AAA0862	0-6 in.	ZN	13156		SU		ICPES	52.8	MG/KG
	21-1353	AAA0863	0-6 in.	AL	13156		SU	D	ICPES	6500	MG/KG
	21-1353	AAA0863	0-6 in.	AL	13156		SU		ICPES	3370	MG/KG
	21-1353	AAA0863	0-6 in.	AS	13156		SU	D	ETVAA	1.3	MG/KG
	21-1353	AAA0863	0-6 in.	AS	13156		SU		ETVAA	3.3	MG/KG
	21-1353	AAA0863	0-6 in.	BA	13156		SU	D	ICPES	55.4	MG/KG
	21-1353	AAA0863	0-6 in.	BA	13156		SU		ICPES	32.4	MG/KG
	21-1353	AAA0863	0-6 in.	BE	13156		SU	D	ICPES	0.48	MG/KG
	21-1353	AAA0863	0-6 in.	BE	13156		SU		ICPES	0.79	MG/KG
	21-1353	AAA0863	0-6 in.	CA	13156		SU	D	ICPES	1600	MG/KG
	21-1353	AAA0863	0-6 in.	CA	13156		SU		ICPES	1640	MG/KG
	21-1353	AAA0863	0-6 in.	CD	13156		SU	D	ICPES	1.3	MG/KG
	21-1353	AAA0863	0-6 in.	CD	13156		SU		ICPES	1	MG/KG
	21-1353	AAA0863	0-6 in.	CO	13156		SU	D	ICPES	2.3	MG/KG
	21-1353	AAA0863	0-6 in.	CO	13156		SU		ICPES	1.7	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1353	AAA0863	0-6 in.	CR	13156		SU	D	ICPES	9.4	MG/KG
	21-1353	AAA0863	0-6 in.	CR	13156		SU		ICPES	6.6	MG/KG
	21-1353	AAA0863	0-6 in.	CU	13156		SU	D	ICPES	7.2	MG/KG
	21-1353	AAA0863	0-6 in.	CU	13156		SU		ICPES	5.4	MG/KG
	21-1353	AAA0863	0-6 in.	FE	13156		SU	D	ICPES	7590	MG/KG
	21-1353	AAA0863	0-6 in.	FE	13156		SU		ICPES	6160	MG/KG
	21-1353	AAA0863	0-6 in.	K	13156		SU	D	ICPES	1990	MG/KG
	21-1353	AAA0863	0-6 in.	K	13156		SU		ICPES	437	MG/KG
	21-1353	AAA0863	0-6 in.	LI	13156		SU	D	ICPES	60.4	MG/KG
	21-1353	AAA0863	0-6 in.	LI	13156		SU		ICPES	3.2	MG/KG
	21-1353	AAA0863	0-6 in.	MG	13156		SU	D	ICPES	2910	MG/KG
	21-1353	AAA0863	0-6 in.	MG	13156		SU		ICPES	623	MG/KG
	21-1353	AAA0863	0-6 in.	MN	13156		SU	D	ICPES	365	MG/KG
	21-1353	AAA0863	0-6 in.	MN	13156		SU		ICPES	213	MG/KG
	21-1353	AAA0863	0-6 in.	NA	13156		SU	D	ICPES	194	MG/KG
	21-1353	AAA0863	0-6 in.	NA	13156		SU		ICPES	79	MG/KG
	21-1353	AAA0863	0-6 in.	NI	13156		SU	D	ICPES	5.7	MG/KG
	21-1353	AAA0863	0-6 in.	NI	13156		SU		ICPES	5	MG/KG
	21-1353	AAA0863	0-6 in.	PB	13156		SU	D	ETVAA	28.5	MG/KG
	21-1353	AAA0863	0-6 in.	PB	13156		SU		ETVAA	26.5	MG/KG
	21-1353	AAA0863	0-6 in.	SR	13156		SU	D	ICPES	13.2	MG/KG
	21-1353	AAA0863	0-6 in.	SR	13156		SU		ICPES	6.7	MG/KG
	21-1353	AAA0863	0-6 in.	V	13156		SU	D	ICPES	10.6	MG/KG
	21-1353	AAA0863	0-6 in.	V	13156		SU		ICPES	6.4	MG/KG
	21-1353	AAA0863	0-6 in.	ZN	13156		SU	D	ICPES	178	MG/KG
	21-1353	AAA0863	0-6 in.	ZN	13156		SU		ICPES	82.6	MG/KG
	21-1354	AAA0864	0-6 in.	AL	13156		SU		ICPES	3950	MG/KG
	21-1354	AAA0864	0-6 in.	AS	13156		SU		ETVAA	1.6	MG/KG
	21-1354	AAA0864	0-6 in.	BA	13156		SU		ICPES	39.2	MG/KG
	21-1354	AAA0864	0-6 in.	BE	13156		SU		ICPES	0.44	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1354	AAA0864	0-6 in.	CA	13156		SU		ICPES	1740	MG/KG
	21-1354	AAA0864	0-6 in.	CD	13156		SU		ICPES	1.5	MG/KG
	21-1354	AAA0864	0-6 in.	CO	13156		SU		ICPES	2.7	MG/KG
	21-1354	AAA0864	0-6 in.	CR	13156		SU		ICPES	5.5	MG/KG
	21-1354	AAA0864	0-6 in.	CU	13156		SU		ICPES	7.8	MG/KG
	21-1354	AAA0864	0-6 in.	FE	13156		SU		ICPES	6190	MG/KG
	21-1354	AAA0864	0-6 in.	K	13156		SU		ICPES	574	MG/KG
	21-1354	AAA0864	0-6 in.	LI	13156		SU		ICPES	4.2	MG/KG
	21-1354	AAA0864	0-6 in.	MG	13156		SU		ICPES	719	MG/KG
	21-1354	AAA0864	0-6 in.	MN	13156		SU		ICPES	227	MG/KG
	21-1354	AAA0864	0-6 in.	NA	13156		SU		ICPES	78.1	MG/KG
	21-1354	AAA0864	0-6 in.	NI	13156		SU		ICPES	4.8	MG/KG
	21-1354	AAA0864	0-6 in.	PB	13156		SU		ETVAA	42.6	MG/KG
	21-1354	AAA0864	0-6 in.	SR	13156		SU		ICPES	9.4	MG/KG
	21-1354	AAA0864	0-6 in.	V	13156		SU		ICPES	8.3	MG/KG
	21-1354	AAA0864	0-6 in.	ZN	13156		SU		ICPES	188	MG/KG
21-027(d)	21-1329	AAA0615	0-6 in.	AL	13101		SU		ICPES	10000	MG/KG
	21-1329	AAA0615	0-6 in.	AS	13101		SU		ETVAA	2.5	MG/KG
	21-1329	AAA0615	0-6 in.	BA	13101		SU		ICPES	95.1	MG/KG
	21-1329	AAA0615	0-6 in.	BE	13101		SU		ICPES	0.64	MG/KG
	21-1329	AAA0615	0-6 in.	CA	13101		SU		ICPES	2210	MG/KG
	21-1329	AAA0615	0-6 in.	CD	13101		SU		ICPES	1.2	MG/KG
	21-1329	AAA0615	0-6 in.	CO	13101		SU		ICPES	5.4	MG/KG
	21-1329	AAA0615	0-6 in.	CR	13101		SU		ICPES	6.6	MG/KG
	21-1329	AAA0615	0-6 in.	CU	13101		SU		ICPES	5	MG/KG
	21-1329	AAA0615	0-6 in.	FE	13101		SU		ICPES	9390	MG/KG
	21-1329	AAA0615	0-6 in.	K	13101		SU		ICPES	1270	MG/KG
	21-1329	AAA0615	0-6 in.	LI	13101		SU		ICPES	7.9	MG/KG
	21-1329	AAA0615	0-6 in.	MG	13101		SU		ICPES	1510	MG/KG
	21-1329	AAA0615	0-6 in.	MN	13101		SU		ICPES	300	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1329	AAA0615	0-6 in.	NA	13101		SU		ICPES	97.3	MG/KG
	21-1329	AAA0615	0-6 in.	NI	13101		SU		ICPES	4.9	MG/KG
	21-1329	AAA0615	0-6 in.	PB	13101		SU		ETVAA	17.9	MG/KG
	21-1329	AAA0615	0-6 in.	SR	13101		SU		ICPES	19.2	MG/KG
	21-1329	AAA0615	0-6 in.	V	13101		SU		ICPES	15.4	MG/KG
	21-1329	AAA0615	0-6 in.	ZN	13101		SU		ICPES	41.5	MG/KG
	21-1330	AAA0616	0-6 in.	AL	13101		SU		ICPES	10700	MG/KG
	21-1330	AAA0616	0-6 in.	AS	13101		SU		ETVAA	2.3	MG/KG
	21-1330	AAA0616	0-6 in.	BA	13101		SU		ICPES	79.9	MG/KG
	21-1330	AAA0616	0-6 in.	BE	13101		SU		ICPES	0.56	MG/KG
	21-1330	AAA0616	0-6 in.	CA	13101		SU		ICPES	1570	MG/KG
	21-1330	AAA0616	0-6 in.	CD	13101		SU		ICPES	1.4	MG/KG
	21-1330	AAA0616	0-6 in.	CO	13101		SU		ICPES	3.9	MG/KG
	21-1330	AAA0616	0-6 in.	CR	13101		SU		ICPES	7.3	MG/KG
	21-1330	AAA0616	0-6 in.	CU	13101		SU		ICPES	5.3	MG/KG
	21-1330	AAA0616	0-6 in.	FE	13101		SU		ICPES	9630	MG/KG
	21-1330	AAA0616	0-6 in.	K	13101		SU		ICPES	1340	MG/KG
	21-1330	AAA0616	0-6 in.	LI	13101		SU		ICPES	8.5	MG/KG
	21-1330	AAA0616	0-6 in.	MG	13101		SU		ICPES	1440	MG/KG
	21-1330	AAA0616	0-6 in.	MN	13101		SU		ICPES	297	MG/KG
	21-1330	AAA0616	0-6 in.	NA	13101		SU		ICPES	83	MG/KG
	21-1330	AAA0616	0-6 in.	NI	13101		SU		ICPES	4.2	MG/KG
	21-1330	AAA0616	0-6 in.	PB	13101		SU		ETVAA	16	MG/KG
	21-1330	AAA0616	0-6 in.	SR	13101		SU		ICPES	14	MG/KG
	21-1330	AAA0616	0-6 in.	V	13101		SU		ICPES	14.5	MG/KG
	21-1330	AAA0616	0-6 in.	ZN	13101		SU		ICPES	42.7	MG/KG
	21-1331	AAA0617	0-6 in.	AL	13101		SU		ICPES	13300	MG/KG
	21-1331	AAA0617	0-6 in.	AS	13101		SU		ETVAA	2.2	MG/KG
	21-1331	AAA0617	0-6 in.	BA	13101		SU		ICPES	114	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1331	AAA0617	0-6 in.	BE	13101		SU		ICPES	0.79	MG/KG
	21-1331	AAA0617	0-6 in.	CA	13101		SU		ICPES	2560	MG/KG
	21-1331	AAA0617	0-6 in.	CD	13101		SU		ICPES	1.4	MG/KG
	21-1331	AAA0617	0-6 in.	CO	13101		SU		ICPES	5.7	MG/KG
	21-1331	AAA0617	0-6 in.	CR	13101		SU		ICPES	8.5	MG/KG
	21-1331	AAA0617	0-6 in.	CU	13101		SU		ICPES	7.8	MG/KG
	21-1331	AAA0617	0-6 in.	FE	13101		SU		ICPES	11600	MG/KG
	21-1331	AAA0617	0-6 in.	K	13101		SU		ICPES	1860	MG/KG
	21-1331	AAA0617	0-6 in.	LI	13101		SU		ICPES	10.4	MG/KG
	21-1331	AAA0617	0-6 in.	MG	13101		SU		ICPES	1930	MG/KG
	21-1331	AAA0617	0-6 in.	MN	13101		SU		ICPES	341	MG/KG
	21-1331	AAA0617	0-6 in.	NA	13101		SU		ICPES	97.2	MG/KG
	21-1331	AAA0617	0-6 in.	NI	13101		SU		ICPES	5.7	MG/KG
	21-1331	AAA0617	0-6 in.	PB	13101		SU		ETVAA	21.1	MG/KG
	21-1331	AAA0617	0-6 in.	SR	13101		SU		ICPES	22	MG/KG
	21-1331	AAA0617	0-6 in.	V	13101		SU		ICPES	19	MG/KG
	21-1331	AAA0617	0-6 in.	ZN	13101		SU		ICPES	48.1	MG/KG
	21-1331	AAA0618	0-6 in.	AL	13101		FD		ICPES	12200	MG/KG
	21-1331	AAA0618	0-6 in.	AS	13101		FD		ETVAA	2.5	MG/KG
	21-1331	AAA0618	0-6 in.	BA	13101		FD		ICPES	109	MG/KG
	21-1331	AAA0618	0-6 in.	BE	13101		FD		ICPES	0.62	MG/KG
	21-1331	AAA0618	0-6 in.	CA	13101		FD		ICPES	2500	MG/KG
	21-1331	AAA0618	0-6 in.	CD	13101		FD		ICPES	1.2	MG/KG
	21-1331	AAA0618	0-6 in.	CO	13101		FD		ICPES	4.8	MG/KG
	21-1331	AAA0618	0-6 in.	CR	13101		FD		ICPES	8	MG/KG
	21-1331	AAA0618	0-6 in.	CU	13101		FD		ICPES	7.7	MG/KG
	21-1331	AAA0618	0-6 in.	FE	13101		FD		ICPES	10900	MG/KG
	21-1331	AAA0618	0-6 in.	K	13101		FD		ICPES	1860	MG/KG
	21-1331	AAA0618	0-6 in.	LI	13101		FD		ICPES	9.4	MG/KG
	21-1331	AAA0618	0-6 in.	MG	13101		FD		ICPES	1770	MG/KG
	21-1331	AAA0618	0-6 in.	MN	13101		FD		ICPES	342	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1331	AAA0618	0-6 in.	MO	13101		FD		ICPES	2.8	MG/KG
	21-1331	AAA0618	0-6 in.	NA	13101		FD		ICPES	101	MG/KG
	21-1331	AAA0618	0-6 in.	NI	13101		FD		ICPES	5.9	MG/KG
	21-1331	AAA0618	0-6 in.	PB	13101		FD		ETVAA	20.8	MG/KG
	21-1331	AAA0618	0-6 in.	SR	13101		FD		ICPES	21.7	MG/KG
	21-1331	AAA0618	0-6 in.	V	13101		FD		ICPES	18	MG/KG
	21-1331	AAA0618	0-6 in.	ZN	13101		FD		ICPES	45.6	MG/KG
	21-1332	AAA0619	0-6 in.	AL	13101		SU		ICPES	6830	MG/KG
	21-1332	AAA0619	0-6 in.	AS	13101		SU		ETVAA	1.9	MG/KG
	21-1332	AAA0619	0-6 in.	BA	13101		SU		ICPES	72.8	MG/KG
	21-1332	AAA0619	0-6 in.	BE	13101		SU		ICPES	0.38	MG/KG
	21-1332	AAA0619	0-6 in.	CA	13101		SU		ICPES	2970	MG/KG
	21-1332	AAA0619	0-6 in.	CD	13101		SU		ICPES	1	MG/KG
	21-1332	AAA0619	0-6 in.	CO	13101		SU		ICPES	2.6	MG/KG
	21-1332	AAA0619	0-6 in.	CR	13101		SU		ICPES	5.2	MG/KG
	21-1332	AAA0619	0-6 in.	CU	13101		SU		ICPES	4.2	MG/KG
	21-1332	AAA0619	0-6 in.	FE	13101		SU		ICPES	7250	MG/KG
	21-1332	AAA0619	0-6 in.	K	13101		SU		ICPES	1100	MG/KG
	21-1332	AAA0619	0-6 in.	LI	13101		SU		ICPES	6	MG/KG
	21-1332	AAA0619	0-6 in.	MG	13101		SU		ICPES	1200	MG/KG
	21-1332	AAA0619	0-6 in.	MN	13101		SU		ICPES	329	MG/KG
	21-1332	AAA0619	0-6 in.	NA	13101		SU		ICPES	80.1	MG/KG
	21-1332	AAA0619	0-6 in.	NI	13101		SU		ICPES	2.8	MG/KG
	21-1332	AAA0619	0-6 in.	PB	13101		SU		ETVAA	16.5	MG/KG
	21-1332	AAA0619	0-6 in.	SR	13101		SU		ICPES	20.2	MG/KG
	21-1332	AAA0619	0-6 in.	V	13101		SU		ICPES	9.8	MG/KG
	21-1332	AAA0619	0-6 in.	ZN	13101		SU		ICPES	28.7	MG/KG
	21-1333	AAA0620	0-1 in.	AL	13101		SU		ICPES	7950	MG/KG
	21-1333	AAA0620	0-1 in.	AS	13101		SU		ETVAA	1.8	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1333	AAA0620	0-1 in.	BA	13101		SU		ICPES	88.2	MG/KG
	21-1333	AAA0620	0-1 in.	BE	13101		SU		ICPES	0.51	MG/KG
	21-1333	AAA0620	0-1 in.	CA	13101		SU		ICPES	3590	MG/KG
	21-1333	AAA0620	0-1 in.	CD	13101		SU		ICPES	0.89	MG/KG
	21-1333	AAA0620	0-1 in.	CO	13101		SU		ICPES	3.3	MG/KG
	21-1333	AAA0620	0-1 in.	CR	13101		SU		ICPES	5.6	MG/KG
	21-1333	AAA0620	0-1 in.	CU	13101		SU		ICPES	6.3	MG/KG
	21-1333	AAA0620	0-1 in.	FE	13101		SU		ICPES	7250	MG/KG
	21-1333	AAA0620	0-1 in.	K	13101		SU		ICPES	1200	MG/KG
	21-1333	AAA0620	0-1 in.	LI	13101		SU		ICPES	7.8	MG/KG
	21-1333	AAA0620	0-1 in.	MG	13101		SU		ICPES	1520	MG/KG
	21-1333	AAA0620	0-1 in.	MN	13101		SU		ICPES	319	MG/KG
	21-1333	AAA0620	0-1 in.	NA	13101		SU		ICPES	88	MG/KG
	21-1333	AAA0620	0-1 in.	NI	13101		SU		ICPES	4.7	MG/KG
	21-1333	AAA0620	0-1 in.	PB	13101		SU		ETVAA	23.7	MG/KG
	21-1333	AAA0620	0-1 in.	SR	13101		SU		ICPES	25	MG/KG
	21-1333	AAA0620	0-1 in.	V	13101		SU		ICPES	11.4	MG/KG
	21-1333	AAA0620	0-1 in.	ZN	13101		SU		ICPES	34.7	MG/KG
	21-1334	AAA0621	0-6 in.	AL	13101		SU		ICPES	6880	MG/KG
	21-1334	AAA0621	0-6 in.	AS	13101		SU		ETVAA	1.8	MG/KG
	21-1334	AAA0621	0-6 in.	BA	13101		SU		ICPES	49.6	MG/KG
	21-1334	AAA0621	0-6 in.	BE	13101		SU		ICPES	0.37	MG/KG
	21-1334	AAA0621	0-6 in.	CA	13101		SU		ICPES	2090	MG/KG
	21-1334	AAA0621	0-6 in.	CD	13101		SU		ICPES	0.69	MG/KG
	21-1334	AAA0621	0-6 in.	CO	13101		SU		ICPES	2.6	MG/KG
	21-1334	AAA0621	0-6 in.	CR	13101		SU		ICPES	4.4	MG/KG
	21-1334	AAA0621	0-6 in.	CU	13101		SU		ICPES	2.9	MG/KG
	21-1334	AAA0621	0-6 in.	FE	13101		SU		ICPES	6740	MG/KG
	21-1334	AAA0621	0-6 in.	K	13101		SU		ICPES	925	MG/KG
	21-1334	AAA0621	0-6 in.	LI	13101		SU		ICPES	6.2	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1334	AAA0621	0-6 in.	MG	13101		SU		ICPES	1000	MG/KG
	21-1334	AAA0621	0-6 in.	MN	13101		SU		ICPES	196	MG/KG
	21-1334	AAA0621	0-6 in.	NA	13101		SU		ICPES	100	MG/KG
	21-1334	AAA0621	0-6 in.	NI	13101		SU		ICPES	2.2	MG/KG
	21-1334	AAA0621	0-6 in.	PB	13101		SU		ETVAA	15.5	MG/KG
	21-1334	AAA0621	0-6 in.	SR	13101		SU		ICPES	14.5	MG/KG
	21-1334	AAA0621	0-6 in.	V	13101		SU		ICPES	9.6	MG/KG
	21-1334	AAA0621	0-6 in.	ZN	13101		SU		ICPES	22.6	MG/KG
EPA03A035	21-1346	AAA0847	0-6 in.	AL	13101		SU	D	ICPES	6680	MG/KG
	21-1346	AAA0847	0-6 in.	AL	13101		SU		ICPES	6730	MG/KG
	21-1346	AAA0847	0-6 in.	AS	13101		SU	D	ETVAA	1.9	MG/KG
	21-1346	AAA0847	0-6 in.	AS	13101		SU		ETVAA	2.5	MG/KG
	21-1346	AAA0847	0-6 in.	BA	13101		SU	D	ICPES	60.9	MG/KG
	21-1346	AAA0847	0-6 in.	BA	13101		SU		ICPES	59.2	MG/KG
	21-1346	AAA0847	0-6 in.	BE	13101		SU	D	ICPES	0.36	MG/KG
	21-1346	AAA0847	0-6 in.	BE	13101		SU		ICPES	0.38	MG/KG
	21-1346	AAA0847	0-6 in.	CA	13101		SU	D	ICPES	2590	MG/KG
	21-1346	AAA0847	0-6 in.	CA	13101		SU		ICPES	1440	MG/KG
	21-1346	AAA0847	0-6 in.	CD	13101		SU	D	ICPES	2	MG/KG
	21-1346	AAA0847	0-6 in.	CD	13101		SU		ICPES	2.1	MG/KG
	21-1346	AAA0847	0-6 in.	CO	13101		SU	D	ICPES	4.1	MG/KG
	21-1346	AAA0847	0-6 in.	CO	13101		SU		ICPES	4.4	MG/KG
	21-1346	AAA0847	0-6 in.	CR	13101		SU	D	ICPES	12.7	MG/KG
	21-1346	AAA0847	0-6 in.	CR	13101		SU		ICPES	15.5	MG/KG
	21-1346	AAA0847	0-6 in.	CU	13101		SU	D	ICPES	48.7	MG/KG
	21-1346	AAA0847	0-6 in.	CU	13101		SU		ICPES	48.2	MG/KG
	21-1346	AAA0847	0-6 in.	FE	13101		SU	D	ICPES	12400	MG/KG
	21-1346	AAA0847	0-6 in.	FE	13101		SU		ICPES	12800	MG/KG
	21-1346	AAA0847	0-6 in.	K	13101		SU	D	ICPES	796	MG/KG
	21-1346	AAA0847	0-6 in.	K	13101		SU		ICPES	708	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1346	AAA0847	0-6 in.	LI	13101		SU	D	ICPES	10.4	MG/KG
	21-1346	AAA0847	0-6 in.	LI	13101		SU		ICPES	9.8	MG/KG
	21-1346	AAA0847	0-6 in.	MG	13101		SU	D	ICPES	1320	MG/KG
	21-1346	AAA0847	0-6 in.	MG	13101		SU		ICPES	1620	MG/KG
	21-1346	AAA0847	0-6 in.	MN	13101		SU	D	ICPES	168	MG/KG
	21-1346	AAA0847	0-6 in.	MN	13101		SU		ICPES	192	MG/KG
	21-1346	AAA0847	0-6 in.	MO	13101		SU	D	ICPES	4.4	MG/KG
	21-1346	AAA0847	0-6 in.	MO	13101		SU		ICPES	5.8	MG/KG
	21-1346	AAA0847	0-6 in.	NA	13101		SU	D	ICPES	171	MG/KG
	21-1346	AAA0847	0-6 in.	NA	13101		SU		ICPES	129	MG/KG
	21-1346	AAA0847	0-6 in.	NI	13101		SU	D	ICPES	9.6	MG/KG
	21-1346	AAA0847	0-6 in.	NI	13101		SU		ICPES	13.4	MG/KG
	21-1346	AAA0847	0-6 in.	PB	13101		SU	D	ETVAA	25.6	MG/KG
	21-1346	AAA0847	0-6 in.	PB	13101		SU		ETVAA	25.6	MG/KG
	21-1346	AAA0847	0-6 in.	SR	13101		SU	D	ICPES	18.5	MG/KG
	21-1346	AAA0847	0-6 in.	SR	13101		SU		ICPES	10.8	MG/KG
	21-1346	AAA0847	0-6 in.	V	13101		SU	D	ICPES	17.8	MG/KG
	21-1346	AAA0847	0-6 in.	V	13101		SU		ICPES	18.2	MG/KG
	21-1346	AAA0847	0-6 in.	ZN	13101		SU	D	ICPES	206	MG/KG
	21-1346	AAA0847	0-6 in.	ZN	13101		SU		ICPES	187	MG/KG
	21-1346	AAA0848		CA	13103	17410	FE		ICPES	24.7	UG/L
	21-1346	AAA0848		FE	13103	17410	FE		ICPES	10.9	UG/L
	21-1346	AAA0848		ZN	13103	17410	FE		ICPES	4.3	UG/L
	21-1346	AAA0850	12-18 in.	AG	13101		NS		ICPES	0.95	MG/KG
	21-1346	AAA0850	12-18 in.	AL	13101		NS		ICPES	3780	MG/KG
	21-1346	AAA0850	12-18 in.	AS	13101		NS		ETVAA	1.5	MG/KG
	21-1346	AAA0850	12-18 in.	BA	13101		NS		ICPES	52.9	MG/KG
	21-1346	AAA0850	12-18 in.	BE	13101		NS		ICPES	0.25	MG/KG
	21-1346	AAA0850	12-18 in.	CA	13101		NS		ICPES	1220	MG/KG
	21-1346	AAA0850	12-18 in.	CD	13101		NS		ICPES	1.3	MG/KG
	21-1346	AAA0850	12-18 in.	CO	13101		NS		ICPES	5	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1346	AAA0850	12-18 in.	CR	13101		NS		ICPES	28.2	MG/KG
	21-1346	AAA0850	12-18 in.	CU	13101		NS		ICPES	54.5	MG/KG
	21-1346	AAA0850	12-18 in.	FE	13101		NS		ICPES	7180	MG/KG
	21-1346	AAA0850	12-18 in.	K	13101		NS		ICPES	360	MG/KG
	21-1346	AAA0850	12-18 in.	LI	13101		NS		ICPES	5.4	MG/KG
	21-1346	AAA0850	12-18 in.	MG	13101		NS		ICPES	802	MG/KG
	21-1346	AAA0850	12-18 in.	MN	13101		NS		ICPES	128	MG/KG
	21-1346	AAA0850	12-18 in.	NA	13101		NS		ICPES	112	MG/KG
	21-1346	AAA0850	12-18 in.	NI	13101		NS		ICPES	23	MG/KG
	21-1346	AAA0850	12-18 in.	PB	13101		NS		ETVAA	22.3	MG/KG
	21-1346	AAA0850	12-18 in.	SR	13101		NS		ICPES	9.8	MG/KG
	21-1346	AAA0850	12-18 in.	V	13101		NS		ICPES	13.5	MG/KG
	21-1346	AAA0850	12-18 in.	ZN	13101		NS		ICPES	184	MG/KG
	21-1346	AAA0851	6-12 in.	AG	13101		SU		ICPES	0.92	MG/KG
	21-1346	AAA0851	6-12 in.	AL	13101		SU		ICPES	3430	MG/KG
	21-1346	AAA0851	6-12 in.	AS	13101		SU		ETVAA	1.6	MG/KG
	21-1346	AAA0851	6-12 in.	BA	13101		SU		ICPES	43.7	MG/KG
	21-1346	AAA0851	6-12 in.	BE	13101		SU		ICPES	0.2	MG/KG
	21-1346	AAA0851	6-12 in.	CA	13101		SU		ICPES	981	MG/KG
	21-1346	AAA0851	6-12 in.	CD	13101		SU		ICPES	1.1	MG/KG
	21-1346	AAA0851	6-12 in.	CO	13101		SU		ICPES	4.7	MG/KG
	21-1346	AAA0851	6-12 in.	CR	13101		SU		ICPES	56.6	MG/KG
	21-1346	AAA0851	6-12 in.	CU	13101		SU		ICPES	52.3	MG/KG
	21-1346	AAA0851	6-12 in.	FE	13101		SU		ICPES	7300	MG/KG
	21-1346	AAA0851	6-12 in.	K	13101		SU		ICPES	342	MG/KG
	21-1346	AAA0851	6-12 in.	LI	13101		SU		ICPES	4.4	MG/KG
	21-1346	AAA0851	6-12 in.	MG	13101		SU		ICPES	697	MG/KG
	21-1346	AAA0851	6-12 in.	MN	13101		SU		ICPES	110	MG/KG
	21-1346	AAA0851	6-12 in.	MO	13101		SU		ICPES	7	MG/KG
	21-1346	AAA0851	6-12 in.	NA	13101		SU		ICPES	97.7	MG/KG
	21-1346	AAA0851	6-12 in.	NI	13101		SU		ICPES	46.4	MG/KG

Laboratory Inorganic Data
Detects

SWMU	location id	sample id	depth	analyte	request number	report number	sample type	lab qc type	technique	sample value	
	21-1346	AAA0851	6-12 in.	PB	13101		SU		ETVAA	28.5	MG/KG
	21-1346	AAA0851	6-12 in.	SR	13101		SU		ICPES	8.6	MG/KG
	21-1346	AAA0851	6-12 in.	V	13101		SU		ICPES	16.6	MG/KG
	21-1346	AAA0851	6-12 in.	ZN	13101		SU		ICPES	187	MG/KG

Outfalls
Laboratory Semivolatile Data

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
21-023(c)	21-1338	AAA0625	0 to 6 in.	Benzoic acid	13116		SU	GCMS	360 UG/KG
21-024(e)	21-1342	AAA0834	-	Bis(2-ethylhexyl)phthalate	13104		FE	GCMS	18 UG/L
21-024(o)	21-1343	AAA0837	0 to 6 in.	Benzoic acid	13100		SU	GCMS	2600 UG/KG
		AAA0837	0 to 6 in.	Phenol	13100		SU	GCMS	1000 UG/KG
		AAA0838	0 to 6 in.	Benzoic acid	13100		FD	GCMS	2300 UG/KG
		AAA0838	0 to 6 in.	Phenol	13100		FD	GCMS	910 UG/KG
		AAA0839	6 to 12 in.	Phenol	13100		NS	GCMS	950 UG/KG
		AAA0840	12 to 18 in.	Benzoic acid	13100		NS	GCMS	560 UG/KG
		AAA0840	12 to 18 in.	Diethyl phthalate	13100		NS	GCMS	19000 UG/KG
	21-1344	AAA0841	0 to 6 in.	Benzo[b]fluoranthene	13100		SU	GCMS	580 UG/KG
		AAA0841	0 to 6 in.	Fluoranthene	13100		SU	GCMS	500 UG/KG
		AAA0841	0 to 6 in.	Phenanthrene	13100		SU	GCMS	410 UG/KG
		AAA0841	0 to 6 in.	Pyrene	13100		SU	GCMS	580 UG/KG
		AAA0842	6 to 12 in.	Phenol	13100		NS	GCMS	1100 UG/KG
		AAA0843	12 to 18 in.	Benzoic acid	13100		NS	GCMS	2300 UG/KG
		AAA0843	12 to 18 in.	Phenol	13100		NS	GCMS	1100 UG/KG
EPA03A035	21-1346	AAA0847	0 to 6 in.	Benzoic acid	13100		SU	GCMS	3700 UG/KG
		AAA0847	0 to 6 in.	Phenol	13100		SU	GCMS	980 UG/KG
21-027(c)	21-1351	AAA0861	0 to 6 in.	Acenaphthene	13246		FD	GCMS	820 UG/KG
		AAA0861	0 to 6 in.	Anthracene	13246		FD	GCMS	1300 UG/KG
		AAA0861	0 to 6 in.	Benzo[a]anthracene	13246		FD	GCMS	3200 UG/KG
		AAA0861	0 to 6 in.	Benzo[a]pyrene	13246		FD	GCMS	2800 UG/KG
		AAA0861	0 to 6 in.	Benzo[b]fluoranthene	13246		FD	GCMS	4100 UG/KG
		AAA0861	0 to 6 in.	Benzo[g,h,i]perylene	13246		FD	GCMS	860 UG/KG
		AAA0861	0 to 6 in.	Benzo[k]fluoranthene	13246		FD	GCMS	1400 UG/KG
		AAA0861	0 to 6 in.	Chrysene	13246		FD	GCMS	3400 UG/KG
		AAA0861	0 to 6 in.	Fluoranthene	13246		FD	GCMS	7600 UG/KG

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0861	0 to 6 in.	Fluorene	13246		FD	GCMS	730 UG/KG
		AAA0861	0 to 6 in.	Indeno[1,2,3-cd]pyrene	13246		FD	GCMS	890 UG/KG
		AAA0861	0 to 6 in.	Naphthalene	13246		FD	GCMS	440 UG/KG
		AAA0861	0 to 6 in.	Phenanthrene	13246		FD	GCMS	5500 UG/KG
		AAA0861	0 to 6 in.	Pyrene	13246		FD	GCMS	6000 UG/KG
21-027(a)	21-1361	AAA0872	0 to 6 in.	Benzo[a]anthracene	13246		SU	GCMS	820 UG/KG
		AAA0872	0 to 6 in.	Benzo[a]pyrene	13246		SU	GCMS	920 UG/KG
		AAA0872	0 to 6 in.	Benzo[b]fluoranthene	13246		SU	GCMS	1400 UG/KG
		AAA0872	0 to 6 in.	Benzo[k]fluoranthene	13246		SU	GCMS	490 UG/KG
		AAA0872	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13246		SU	GCMS	490 UG/KG
		AAA0872	0 to 6 in.	Chrysene	13246		SU	GCMS	1000 UG/KG
		AAA0872	0 to 6 in.	Fluoranthene	13246		SU	GCMS	2000 UG/KG
		AAA0872	0 to 6 in.	Indeno[1,2,3-cd]pyrene	13246		SU	GCMS	470 UG/KG
		AAA0872	0 to 6 in.	Phenanthrene	13246		SU	GCMS	1500 UG/KG
		AAA0872	0 to 6 in.	Pyrene	13246		SU	GCMS	3300 UG/KG
	21-1362	AAA0873	0 to 6 in.	Benzo[b]fluoranthene	13246		SU	GCMS	460 UG/KG
		AAA0873	0 to 6 in.	Fluoranthene	13246		SU	GCMS	490 UG/KG
		AAA0873	0 to 6 in.	Pyrene	13246		SU	GCMS	810 UG/KG
	21-1364	AAA0875	0 to 6 in.	Benzo[a]pyrene	13246		SU	GCMS	520 UG/KG
		AAA0875	0 to 6 in.	Benzo[b]fluoranthene	13246		SU	GCMS	890 UG/KG
		AAA0875	0 to 6 in.	Chrysene	13246		SU	GCMS	540 UG/KG
		AAA0875	0 to 6 in.	Fluoranthene	13246		SU	GCMS	1300 UG/KG
		AAA0875	0 to 6 in.	Phenanthrene	13246		SU	GCMS	580 UG/KG
		AAA0875	0 to 6 in.	Pyrene	13246		SU	GCMS	930 UG/KG
	21-1368	AAA0879	0 to 6 in.	Benzo[b]fluoranthene	13157		SU	GCMS	400 UG/KG
		AAA0879	0 to 6 in.	Fluoranthene	13157		SU	GCMS	490 UG/KG
		AAA0879	0 to 6 in.	Pyrene	13157		SU	GCMS	640 UG/KG

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1369	AAA0880	0 to 6 in.	Benzo[a]anthracene	13157		SU	GCMS	360 UG/KG
		AAA0880	0 to 6 in.	Benzo[a]pyrene	13157		SU	GCMS	530 UG/KG
		AAA0880	0 to 6 in.	Benzo[b]fluoranthene	13157		SU	GCMS	840 UG/KG
		AAA0880	0 to 6 in.	Chrysene	13157		SU	GCMS	390 UG/KG
		AAA0880	0 to 6 in.	Fluoranthene	13157		SU	GCMS	1000 UG/KG
		AAA0880	0 to 6 in.	Indeno[1,2,3-cd]pyrene	13157		SU	GCMS	380 UG/KG
		AAA0880	0 to 6 in.	Phenanthrene	13157		SU	GCMS	530 UG/KG
		AAA0880	0 to 6 in.	Pyrene	13157		SU	GCMS	860 UG/KG
	21-1370	AAA0881	0 to 6 in.	Benzo[k]fluoranthene	13160		SU	GCMS	970 UG/KG
		AAA0881	0 to 6 in.	Fluoranthene	13160		SU	GCMS	500 UG/KG
		AAA0881	0 to 6 in.	Pyrene	13160		SU	GCMS	820 UG/KG
	21-1371	AAA0882	0 to 6 in.	Benzo[b]fluoranthene	13157		SU	GCMS	570 UG/KG
		AAA0882	0 to 6 in.	Fluoranthene	13157		SU	GCMS	690 UG/KG
		AAA0882	0 to 6 in.	Phenanthrene	13157		SU	GCMS	420 UG/KG
		AAA0882	0 to 6 in.	Pyrene	13157		SU	GCMS	540 UG/KG
	21-1372	AAA0883	0 to 6 in.	Benzo[b]fluoranthene	13157		SU	GCMS	350 UG/KG
	21-1373	AAA0884	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13157		SU	GCMS	340 UG/KG
		AAA0884	0 to 6 in.	Fluoranthene	13157		SU	GCMS	370 UG/KG
		AAA0884	0 to 6 in.	Pyrene	13157		SU	GCMS	380 UG/KG
	21-1374	AAA0885	0 to 6 in.	Benzo[b]fluoranthene	13157		SU	GCMS	350 UG/KG
		AAA0885	0 to 6 in.	Pyrene	13157		SU	GCMS	370 UG/KG
21-024(b)	21-1379	AAA0904	6 to 12 in.	Anthracene	13180		NS	GCMS	390 UG/KG
		AAA0904	6 to 12 in.	Benzo[a]anthracene	13180		NS	GCMS	2500 UG/KG
		AAA0904	6 to 12 in.	Benzo[a]pyrene	13180		NS	GCMS	2300 UG/KG
		AAA0904	6 to 12 in.	Benzo[b]fluoranthene	13180		NS	GCMS	2800 UG/KG
		AAA0904	6 to 12 in.	Benzo[k]fluoranthene	13180		NS	GCMS	1300 UG/KG

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0904	6 to 12 in.	Bis(2-ethylhexyl)phthalate	13180		NS	GCMS	370 UG/KG
		AAA0904	6 to 12 in.	Chrysene	13180		NS	GCMS	2300 UG/KG
		AAA0904	6 to 12 in.	Di-n-butyl phthalate	13180		NS	GCMS	430 UG/KG
		AAA0904	6 to 12 in.	Fluoranthene	13180		NS	GCMS	2300 UG/KG
		AAA0904	6 to 12 in.	Phenanthrene	13180		NS	GCMS	840 UG/KG
		AAA0904	6 to 12 in.	Pyrene	13180		NS	GCMS	3000 UG/KG
21-022(h)	21-1380	AAA0915	0 to 6 in.	Benzo[b]fluoranthene	13186		SU	GCMS	710 UG/KG
		AAA0915	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13186		SU	GCMS	1800 UG/KG
		AAA0915	0 to 6 in.	Fluoranthene	13186		SU	GCMS	1100 UG/KG
		AAA0915	0 to 6 in.	Phenanthrene	13186		SU	GCMS	1400 UG/KG
		AAA0915	0 to 6 in.	Pyrene	13186		SU	GCMS	1200 UG/KG
		AAA0916	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13186		FD	GCMS	2200 UG/KG
		AAA0916	0 to 6 in.	Fluoranthene	13186		FD	GCMS	740 UG/KG
		AAA0916	0 to 6 in.	Phenanthrene	13186		FD	GCMS	1800 UG/KG
		AAA0916	0 to 6 in.	Pyrene	13186		FD	GCMS	2200 UG/KG
	21-1382	AAA0922	0 to 6 in.	Anthracene	13186		SU	GCMS	340 UG/KG
		AAA0922	0 to 6 in.	Fluoranthene	13186		SU	GCMS	340 UG/KG
		AAA0922	0 to 6 in.	Pyrene	13186		SU	GCMS	550 UG/KG
21-024(a)	21-1387	AAA0940	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13195		SU	GCMS	890 UG/KG
	21-1389	AAA0948	12 to 18 in.	Diethyl phthalate	13195		NS	GCMS	680 UG/KG
21-024(c)	21-1391	AAA0753	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13173		SU	GCMS	2600 UG/KG
		AAA0753	0 to 6 in.	Di-n-butyl phthalate	13173		SU	GCMS	5200 UG/KG
		AAA0756	6 to 12 in.	Bis(2-ethylhexyl)phthalate	13173		NS	GCMS	490 UG/KG
		AAA0756	6 to 12 in.	Di-n-butyl phthalate	13173		NS	GCMS	2200 UG/KG
	21-1392	AAA0757	0 to 6 in.	Di-n-butyl phthalate	13173	19127	SU	GCMS	610 UG/KG

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
21-024(i)	21-1397	AAA0775	6 to 12 in.	Di-n-butyl phthalate	13180		NS	GCMS	1100 UG/KG
21-026(d)	21-1398	AAA0776	0 to 6 in.	Benzo[a]anthracene	13173		SU	GCMS	990 UG/KG
		AAA0776	0 to 6 in.	Benzo[b]fluoranthene	13173		SU	GCMS	1200 UG/KG
		AAA0776	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13173		SU	GCMS	640 UG/KG
		AAA0776	0 to 6 in.	Chrysene	13173		SU	GCMS	870 UG/KG
		AAA0776	0 to 6 in.	Fluoranthene	13173		SU	GCMS	1200 UG/KG
		AAA0776	0 to 6 in.	Pyrene	13173		SU	GCMS	1300 UG/KG
	21-1400	AAA0780	0 to 6 in.	Benzo[a]anthracene	13173		SU	GCMS	410 UG/KG
		AAA0780	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13173		SU	GCMS	640 UG/KG
		AAA0780	0 to 6 in.	Chrysene	13173		SU	GCMS	390 UG/KG
		AAA0780	0 to 6 in.	Fluoranthene	13173		SU	GCMS	460 UG/KG
		AAA0780	0 to 6 in.	Pyrene	13173		SU	GCMS	540 UG/KG
	21-1401	AAA0781	0 to 6 in.	Benzo[a]anthracene	13212		SU	GCMS	700 UG/KG
		AAA0781	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13212		SU	GCMS	870 UG/KG
		AAA0781	0 to 6 in.	Chrysene	13212		SU	GCMS	1200 UG/KG
		AAA0781	0 to 6 in.	Pyrene	13212		SU	GCMS	990 UG/KG
		AAA0782	6 to 12 in.	Anthracene	13212		NS	GCMS	1500 UG/KG
		AAA0782	6 to 12 in.	Benzo[a]anthracene	13212		NS	GCMS	9100 UG/KG
		AAA0782	6 to 12 in.	Benzo[a]pyrene	13212		NS	GCMS	5200 UG/KG
		AAA0782	6 to 12 in.	Benzo[b]fluoranthene	13212		NS	GCMS	7800 UG/KG
		AAA0782	6 to 12 in.	Benzo[g,h,i]perylene	13212		NS	GCMS	1500 UG/KG
		AAA0782	6 to 12 in.	Benzo[k]fluoranthene	13212		NS	GCMS	2600 UG/KG
		AAA0782	6 to 12 in.	Chrysene	13212		NS	GCMS	11900 UG/KG
		AAA0782	6 to 12 in.	Fluoranthene	13212		NS	GCMS	9300 UG/KG
		AAA0782	6 to 12 in.	Indeno[1,2,3-cd]pyrene	13212		NS	GCMS	2200 UG/KG
		AAA0782	6 to 12 in.	Phenanthrene	13212		NS	GCMS	4200 UG/KG
		AAA0782	6 to 12 in.	Pyrene	13212		NS	GCMS	10900 UG/KG
21-024(n)	21-1402	AAA0785	0 to 6 in.	Diethyl phthalate	13220		SU	GCMS	510 UG/KG

Laboratory Semivolatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0789	12 to 18 in.	Diethyl phthalate	13220		NS	GCMS	950 UG/KG
21-004(d)	21-1408	AAA0806	0 to 6 in.	Bis(2-ethylhexyl)phthalate	13220		FD	GCMS	5100 UG/KG
21-011(k)	21-1418	AAA0908	0 to 6 in.	Di-n-butyl phthalate	13180		SU	GCMS	600 UG/KG
		AAA0909	6 to 12 in.	Bis(2-ethylhexyl)phthalate	13180		NS	GCMS	340 UG/KG

Outfalls
Laboratory Volatile Data

Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
21-024(e)	21-1341	AAA0631	0 to 6 in.	Trichlorofluoromethane	13100		FD	PTGC	12 UG/KG
EPA03A035	21-1346	AAA0847	0 to 6 in.	Acetone	13100		SU	PTGC	60 UG/KG
21-024(d)	21-1347	AAA0914	-	Acetone	13217		FB	PTGC	40 UG/L
	21-1348	AAA0853	0 to 6 in.	Acetone	13186	15611	SU	PTGC	33 UG/KG
		AAA0853	0 to 6 in.	Acetone	13186		SU	PTGC	33 UG/KG
21-027(c)	21-1349	AAA0856	0 to 6 in.	Acetone	13246	17267	SU	PTGC	17 UG/KG
	21-1351	AAA0858	0 to 6 in.	Acetone	13246	17267	SU	PTGC	25 UG/KG
		AAA0860	-	Acetone	13271		FR	PTGC	21 UG/L
		AAA0861	0 to 6 in.	Acetone	13246	17267	FD	PTGC	17 UG/KG
21-027(a)	21-1361	AAA0872	0 to 6 in.	Acetone	13246	17267	SU	PTGC	40 UG/KG
		AAA0872	0 to 6 in.	Methylene chloride	13246	17267	SU	PTGC	10 UG/KG
		AAA0872	0 to 6 in.	Tetrachloroethylene	13246	17267	SU	PTGC	61 UG/KG
		AAA0911	-	Acetone	13271		FB	PTGC	31 UG/L
	21-1362	AAA0873	0 to 6 in.	Acetone	13246	17267	SU	PTGC	17 UG/KG
	21-1363	AAA0874	0 to 6 in.	Acetone	13246	17267	SU	PTGC	20 UG/KG
	21-1364	AAA0875	0 to 6 in.	Acetone	13246	17267	SU	PTGC	18 UG/KG
		AAA0875	0 to 6 in.	Methylene chloride	13246	17267	SU	PTGC	10 UG/KG
21-024(b)	21-1377	AAA0897	6 to 12 in.	Toluene	13195		NS	PTGC	17 UG/KG
		AAA0930	-	Acetone	13217		FB	PTGC	44 UG/L
	21-1379	AAA0903	0 to 6 in.	Acetone	13195		SU	PTGC	22 UG/KG
		AAA0904	6 to 12 in.	Toluene	13180		NS	PTGC	18 UG/KG

Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
21-022(h)	21-1380	AAA0916	0 to 6 in.	Acetone	13186	15611	FD	PTGC	28 UG/KG
		AAA0916	0 to 6 in.	Acetone	13186		FD	PTGC	28 UG/KG
	21-1381	AAA0919	0 to 6 in.	Acetone	13186	15611	SU	PTGC	36 UG/KG
		AAA0919	0 to 6 in.	Acetone	13186		SU	PTGC	36 UG/KG
		AAA0920	6 to 12 in.	Acetone	13186	15611	NS	PTGC	31 UG/KG
		AAA0920	6 to 12 in.	Acetone	13186		NS	PTGC	31 UG/KG
	21-1382	AAA0922	0 to 6 in.	Acetone	13186	15611	SU	PTGC	37 UG/KG
		AAA0922	0 to 6 in.	Acetone	13186		SU	PTGC	37 UG/KG
		AAA0922	0 to 6 in.	Toluene	13186	15611	SU	PTGC	14 UG/KG
		AAA0922	0 to 6 in.	Toluene	13186		SU	PTGC	14 UG/KG
		AAA0923	6 to 12 in.	Acetone	13186	15611	NS	PTGC	53 UG/KG
		AAA0923	6 to 12 in.	Acetone	13186		NS	PTGC	53 UG/KG
		AAA0923	6 to 12 in.	Toluene	13186	15611	NS	PTGC	5.8 UG/KG
		AAA0923	6 to 12 in.	Toluene	13186		NS	PTGC	5.8 UG/KG
21-024(a)	21-1385	AAA0932	0 to 6 in.	Acetone	13195		SU	PTGC	55 UG/KG
		AAA0932	0 to 6 in.	Toluene	13195		SU	PTGC	9.9 UG/KG
		AAA0934	-	Acetone	13217		FE	PTGC	38 UG/L
		AAA0935	-	Acetone	13217		FR	PTGC	42 UG/L
		AAA0936	12 to 18 in.	Toluene	13195		NS	PTGC	6.9 UG/KG
	21-1386	AAA0933	12 to 18 in.	Toluene	13195		NS	PTGC	40 UG/KG
		AAA0938	6 to 12 in.	Acetone	13195		NS	PTGC	55 UG/KG
	21-1387	AAA0941	6 to 12 in.	Toluene	13195		NS	PTGC	29 UG/KG
		AAA0942	12 to 18 in.	Acetone	13195		NS	PTGC	30 UG/KG
	21-1388	AAA0944	6 to 12 in.	Acetone	13195		NS	PTGC	42 UG/KG

Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1389	AAA0947	6 to 12 in.	Benzene	13195		NS	PTGC	3000 UG/KG
		AAA0947	6 to 12 in.	Chlorobenzene	13195		NS	PTGC	2500 UG/KG
		AAA0947	6 to 12 in.	Dichloroethene [1,1-]	13195		NS	PTGC	2900 UG/KG
		AAA0947	6 to 12 in.	Toluene	13195		NS	PTGC	2600 UG/KG
		AAA0947	6 to 12 in.	Trichloroethene	13195		NS	PTGC	2400 UG/KG
	21-1390	AAA0769	-	Acetone	13217		FB	PTGC	24 UG/L
21-024(c)	21-1391	AAA0753	0 to 6 in.	Methylene chloride	13173		SU	PTGC	59 UG/KG
		AAA0753	0 to 6 in.	Toluene	13173		SU	PTGC	6.7 UG/KG
		AAA0755	-	Carbon disulfide	13164	16745	FR	PTGC	5.6 UG/L
		AAA0755	-	Carbon disulfide	13164		FR	PTGC	5.6 UG/L
		AAA0927	-	Acetone	13164	16745	FB	PTGC	21 UG/L
		AAA0927	-	Acetone	13164		FB	PTGC	21 UG/L
	21-1392	AAA0757	0 to 6 in.	Acetone	13173	19130	SU	PTGC	32 UG/KG
		AAA0757	0 to 6 in.	Toluene	13173	19130	SU	PTGC	7 UG/KG
21-024(m), 21-027(b)	21-1394	AAA0768	-	Acetone	13217		FR	PTGC	76 UG/L
21-024(i)	21-1396	AAA0772	0 to 6 in.	Toluene	13180		SU	PTGC	16 UG/KG
21-026(d)	21-1398	AAA0777	-	Acetone	13164	16745	FE	PTGC	26 UG/L
		AAA0777	-	Acetone	13164		FE	PTGC	26 UG/L
		AAA0778	-	Acetone	13164	16745	FR	PTGC	21 UG/L
		AAA0778	-	Acetone	13164		FR	PTGC	21 UG/L
	21-1401	AAA0782	6 to 12 in.	Acetone	13212		NS	PTGC	24 UG/KG
21-024(n)	21-1402	AAA0786	-	Acetone	13217		FE	PTGC	40 UG/L
		AAA0787	-	Acetone	13217		FR	PTGC	44 UG/L
		AAA0787	-	Dibromo-3-chloropropane [1,2-]	13217		FR	PTGC	17 UG/L

Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
		AAA0788	6 to 12 in.	Acetone	13220	17245	NS	PTGC	18 UG/KG
		AAA0789	12 to 18 in.	Acetone	13220	17245	NS	PTGC	15 UG/KG
	21-1403	AAA0791	6 to 12 in.	Acetone	13246	17267	NS	PTGC	34 UG/KG
		AAA0792	12 to 18 in.	Acetone	13246	17267	NS	PTGC	17 UG/KG
		AAA0910	-	Acetone	13271		FB	PTGC	46 UG/L
	21-1404	AAA0793	0 to 6 in.	Acetone	13246	17267	SU	PTGC	33 UG/KG
		AAA0794	6 to 12 in.	Acetone	13246	17267	NS	PTGC	24 UG/KG
		AAA0795	12 to 18 in.	Acetone	13246	17267	NS	PTGC	27 UG/KG
21-004(d)	21-1407	AAA0784	-	Acetone	13217		FB	PTGC	56 UG/L
		AAA0802	0 to 6 in.	Acetone	13220	17245	SU	PTGC	14 UG/KG
		AAA0803	6 to 12 in.	Acetone	13220	17245	NS	PTGC	45 UG/KG
		AAA0803	6 to 12 in.	Methylene chloride	13220	17245	NS	PTGC	18 UG/KG
		AAA0804	12 to 18 in.	Acetone	13220	17245	NS	PTGC	73 UG/KG
	21-1408	AAA0805	0 to 6 in.	Acetone	13220	17245	SU	PTGC	24 UG/KG
		AAA0805	0 to 6 in.	Methylene chloride	13220	17245	SU	PTGC	7 UG/KG
		AAA0806	0 to 6 in.	Acetone	13220	17245	FD	PTGC	15 UG/KG
		AAA0807	6 to 12 in.	Acetone	13220	17245	NS	PTGC	88 UG/KG
		AAA0808	12 to 18 in.	Acetone	13220	17245	NS	PTGC	16 UG/KG
		AAA0808	12 to 18 in.	Methylene chloride	13220	17245	NS	PTGC	7 UG/KG
	21-1409	AAA0809	0 to 6 in.	Acetone	13220	17245	SU	PTGC	28 UG/KG
		AAA0810	6 to 12 in.	Acetone	13220	17245	NS	PTGC	47 UG/KG
		AAA0810	6 to 12 in.	Methylene chloride	13220	17245	NS	PTGC	8 UG/KG
		AAA0811	12 to 18 in.	Acetone	13220	17245	NS	PTGC	110 UG/KG
	21-1410	AAA0812	0 to 6 in.	Acetone	13220	17245	SU	PTGC	27 UG/KG
		AAA0812	0 to 6 in.	Methylene chloride	13220	17245	SU	PTGC	14 UG/KG
		AAA0813	6 to 12 in.	Acetone	13220	17245	NS	PTGC	16 UG/KG

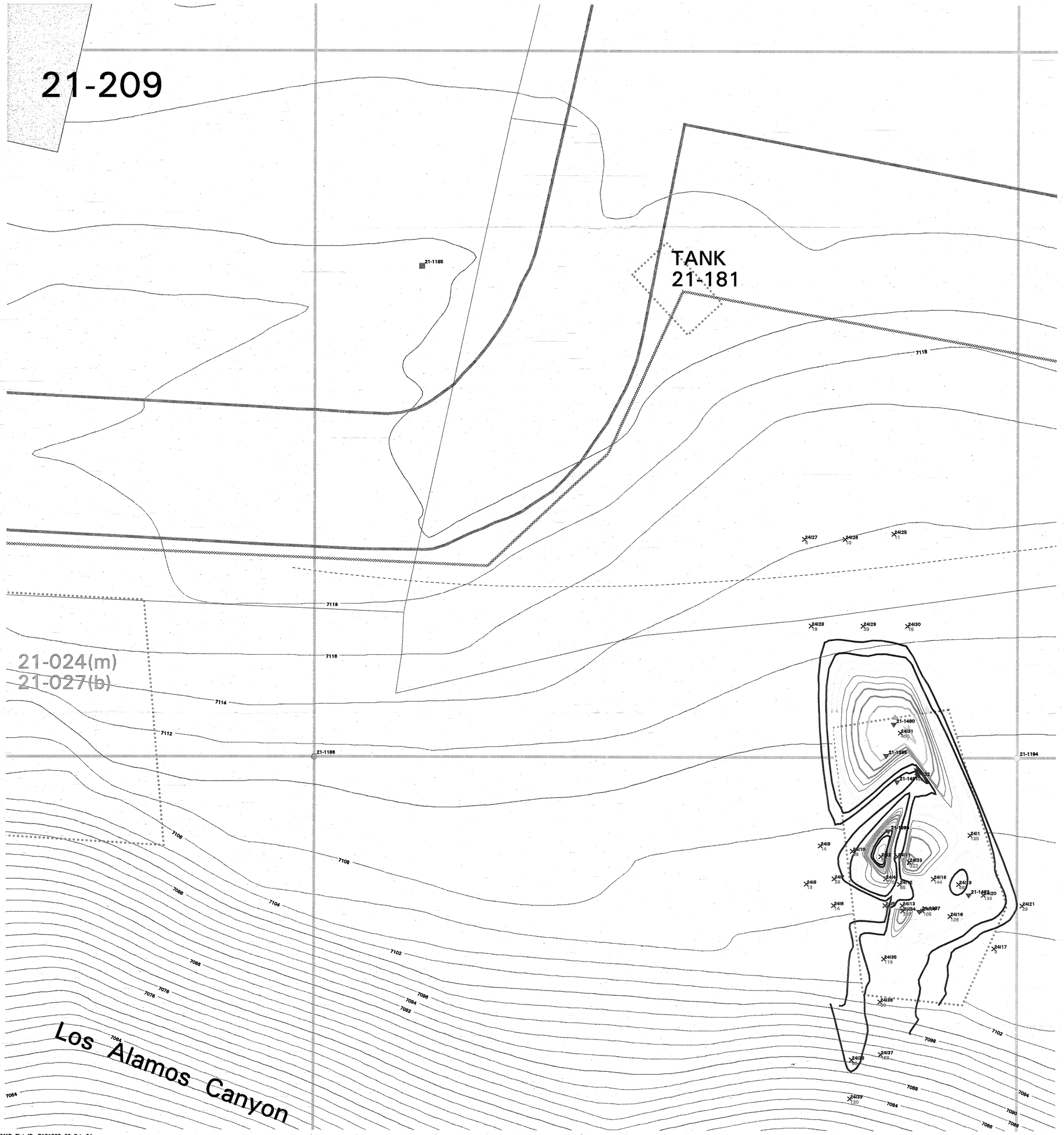
Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1411	AAA0815	0 to 6 in.	Acetone	13220	17245	SU	PTGC	22 UG/KG
		AAA0815	0 to 6 in.	Methylene chloride	13220	17245	SU	PTGC	13 UG/KG
		AAA0816	6 to 12 in.	Acetone	13220	17245	NS	PTGC	17 UG/KG
		AAA0817	12 to 18 in.	Acetone	13220	17245	NS	PTGC	18 UG/KG
	21-1412	AAA0818	0 to 6 in.	Acetone	13220	17245	SU	PTGC	12 UG/KG
		AAA0819	6 to 12 in.	Acetone	13220	17245	NS	PTGC	13 UG/KG
		AAA0820	12 to 18 in.	Acetone	13220	17245	NS	PTGC	29 UG/KG
		AAA0821	-	Acetone	13217		FE	PTGC	62 UG/L
		AAA0822	-	Acetone	13217		FR	PTGC	38 UG/L
21-024(h)	21-1413	AAA0823	0 to 6 in.	Acetone	13220	17245	SU	PTGC	15 UG/KG
		AAA0824	6 to 12 in.	Acetone	13220	17245	NS	PTGC	19 UG/KG
		AAA0825	12 to 18 in.	Acetone	13220	17245	NS	PTGC	32 UG/KG
	21-1414	AAA0826	0 to 6 in.	Acetone	13220	17245	SU	PTGC	19 UG/KG
		AAA0827	0 to 6 in.	Acetone	13220	17245	FD	PTGC	17 UG/KG
		AAA0828	6 to 12 in.	Acetone	13220	17245	NS	PTGC	18 UG/KG
	21-1415	AAA0831	6 to 12 in.	Acetone	13220	17245	NS	PTGC	14 UG/KG
		AAA0832	12 to 18 in.	Acetone	13220	17245	NS	PTGC	16 UG/KG
		AAA0832	12 to 18 in.	Methylene chloride	13220	17245	NS	PTGC	16 UG/KG
21-024(i)	21-1421	AAA0889	0 to 6 in.	Acetone	13246	17267	SU	PTGC	20 UG/KG
		AAA0889	0 to 6 in.	Methylene chloride	13246	17267	SU	PTGC	9 UG/KG
21-024(g)	21-1428	AAA0799	0 to 6 in.	Acetone	13186	15611	SU	PTGC	37 UG/KG
		AAA0799	0 to 6 in.	Acetone	13186		SU	PTGC	37 UG/KG
		AAA0800	6 to 12 in.	Acetone	13186	15611	NS	PTGC	37 UG/KG
		AAA0800	6 to 12 in.	Acetone	13186		NS	PTGC	37 UG/KG

Laboratory Volatile Data
Detects

SWMU	Location ID	Sample ID	Depth	Analyte	Request No	Report No	Sample Type	Technique	Sample Value
	21-1429	AAA0801	0 to 6 in.	Acetone	13246	17267	SU	PTGC	17 UG/KG
		AAA1091	6 to 12 in.	Acetone	13246	17267	NS	PTGC	35 UG/KG
	21-1430	AAA1092	0 to 6 in.	Acetone	13246	17267	SU	PTGC	21 UG/KG
21-024(f)	21-1431	AAA1095	0 to 6 in.	Acetone	13246	17267	SU	PTGC	28 UG/KG
		AAA1096	6 to 12 in.	Acetone	13246	17267	NS	PTGC	25 UG/KG
		AAA1097	12 to 18 in.	Acetone	13246	17267	NS	PTGC	19 UG/KG
	21-1432	AAA1098	0 to 6 in.	Acetone	13246	17267	SU	PTGC	35 UG/KG
		AAA1100	6 to 12 in.	Acetone	13246	17267	NS	PTGC	55 UG/KG
		AAA1100	6 to 12 in.	Toluene	13246	17267	NS	PTGC	8 UG/KG
		AAA1101	12 to 18 in.	Acetone	13246	17267	NS	PTGC	20 UG/KG
	21-1433	AAA1103	6 to 12 in.	Acetone	13246	17267	NS	PTGC	36 UG/KG
		AAA1104	12 to 18 in.	Acetone	13246	17267	NS	PTGC	42 UG/KG
		AAA1104	12 to 18 in.	Methylene chloride	13246	17267	NS	PTGC	7 UG/KG

RAD SURVEY RESULTS FOR GROSS ALPHA
TECHNICAL AREA 21 - OUTFALL SWMU 21-024(i)



FIMAD Plot ID: G101953 22 Feb 94

Rad Survey Results
Outfall SWMU 21-024(i)

10173-C

LEGEND

- Contours, 100 ft
- Contours, 2 ft
- SWMU Boundary
- Road, Dirt
- Road, Paved
- Road/Trail
- Sample Grid
- Security Fence
- Water Line
- Former Fuel Tank
- Material Disposal Areas
- 0-1" 1st Round Deposition-Layer Soil Sample (Grid)
- Gross Alpha
- Outfall Sample
- 1988 Reconaissance Sample Location
- <= 80 counts/min
- <= 160 counts/min
- <= 240 counts/min
- <= 320 counts/min
- <= 400 counts/min
- <= 480 counts/min
- > 480 counts/min

Gross Alpha Sample Units are counts per minute taken at the surface. Instrument background is less than 10 counts/min. Isogram of Gross Alpha readings created using a bivariate quintic interpolation which assumes a continuous, smooth surface model. The interpolation uses only actual points.

24Ixx = Rad Survey Location ID

= Instrument Reading in Micro-R/hour

21-xxxx = RFI Soil Sampling Location ID

21-xxx = SWMU ID

N

State Plane Coordinate System, New Mexico Central Zone.
1927 North American Datum

Grid provides New Mexico State Plane coordinates in feet.
Grid interval, in feet: 100

METERS

FEET

Notice: The information on this map is provisional and has not been checked for accuracy. Maps should not be relied upon to establish legal claims, boundary lines or locations of improvements.

Basemap Sources: Utility and structure data are from Los Alamos National Laboratory Engineering Division and Los Alamos County Utility and Engineering Departments. Contour data is from Los Alamos National Laboratory Environmental Restoration Program aerial survey, September, 1991.

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Earth & Environmental Sciences Division

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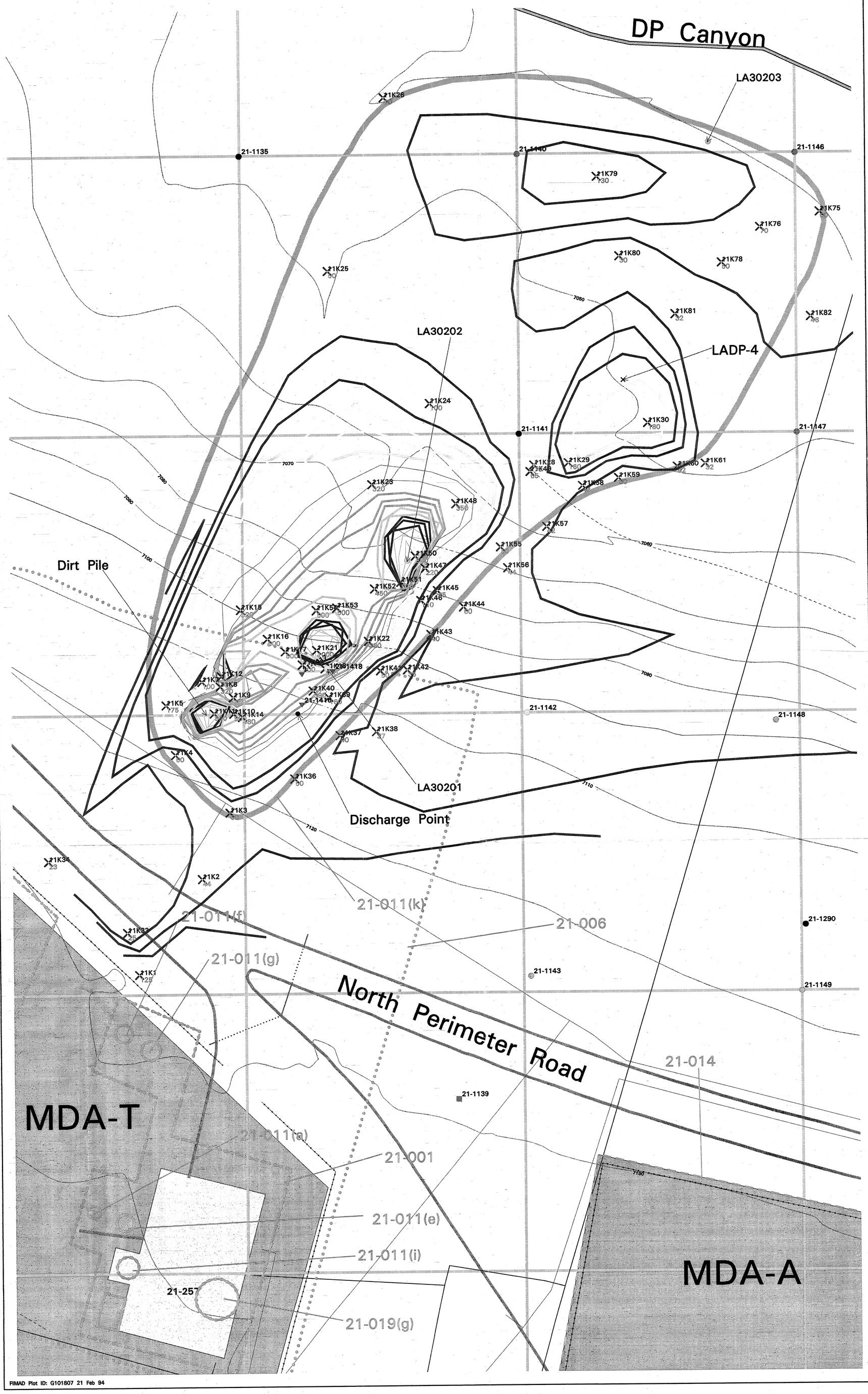
FIMAD is the electronic data repository for the Environmental Restoration Program at Los Alamos National Laboratory.

Produced by: Marcia Jones

Date: February 22, 1994 FIMAD Plot ID: G101953

RAD SURVEY RESULTS FROM 1 m ABOVE SURFACE (micro-rem)
OUTFALL SWMU 21-011(k)



FIMAD Plot ID: G101807 21 Feb 94

Rad Survey Results
Outfall SWMU 21-011(k)

LEGEND

10173-B

- Boundaries, Operable Unit
- Boundaries, Technical Area
- Contours, 100 ft
- Contours, 10 ft
- Fence, Industrial
- SWMU Boundary, Temporary Fence
- Road, Dirt
- Road, Paved
- Road/Trail
- Sample Grid
- Storm Drain
- Water Line
- Material Disposal Areas
- Permanent Buildings

FIRST ROUND

- 0-1" Deposition-Layer Soil Sample (Grid)
- 0-6" Surface Soil Sample (Grid) and 0-1" Deposition-Layer Soil Sample (Grid)

SECOND ROUND

- 0-1" Deposition-Layer Soil Sample (Grid)
- 0-6" Surface Soil Sample (Grid) and 0-1" Deposition-Layer Soil Sample (Grid)

- DOE Environmental Problem #6 Sample Locations (approx. locations)
- Micro-R Samples
- Outfall Sample
- < 140 urem/hr
- < 240 urem/hr
- < 340 urem/hr
- < 440 urem/hr
- < 540 urem/hr
- < 640 urem/hr
- >= 640 urem/hr

Micro-R Sample Units are micro rem taken 1 meter above the surface. Isogram of Micro-R readings created using a bivariate quintic interpolation which assumes a continuous, smooth surface model. The interpolation uses only actual points.

11Kxx = Rad Sample Location ID

= Instrument Reading in Micro-R/hour

21-xxxx = RFI Soil Sampling Location ID

21-xxx = SWMU ID

N

State Plane Coordinate System, New Mexico Central Zone.
1927 North American Datum

Grid provides New Mexico State Plane coordinates in feet.
Grid interval, in feet: 200

METERS

FEET

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Earth & Environmental Sciences Division

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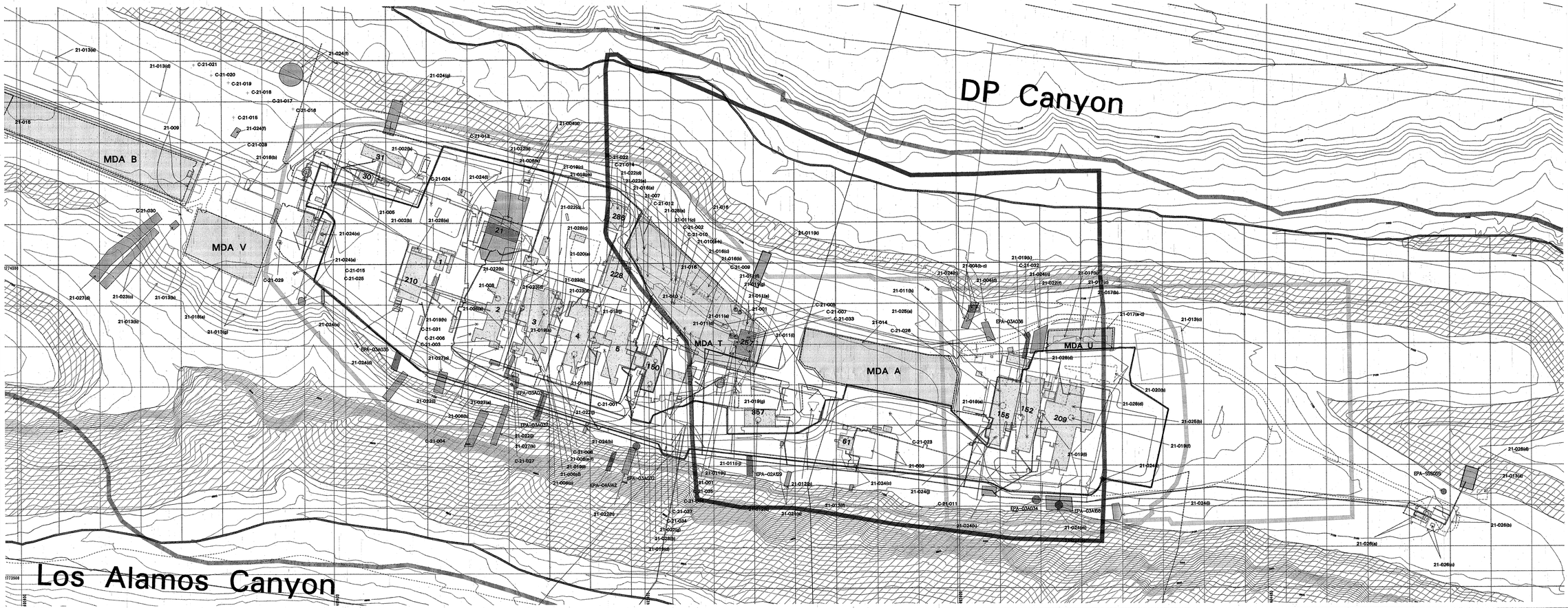
Produced by: Marcia Jones
Date: February 21, 1994 FIMAD Plot ID: G101807

OUTFALL LOCATIONS (Summer 1992) AND BASELINE AREAS

10173-A



OUTFALL LOCATIONS

LEGEND

- Boundary, TA
- Contours, 10 foot
- Contours, 100 foot
- Electrical >13.2 kV
- Electrical <13.2 kV
- Fence, Industrial
- Fence, Security
- Gas Line
- Radioactive Liquid Waste Line
- SWMU, Absent
- SWMU, Possible
- SWMU, Probable
- SWMUS, Present
- SWMU, not in King Database
- Radioactive Liquid Waste Line
- Retaining Wall
- Roads, Dirt
- Roads, Paved
- Road/Trail
- Sewer Line
- Steam Line
- Storm Drain/Culvert
- Telephone Line
- Water Line

- Non Process Area
- Process Area
- MDA A/MDA T Special Impact Area
- TSTA Special Impact Area
- Area of Steep Slope
- MDA
- NPDES Outfall
- Permanent Structure
- SWMU in Report 1C
- Temporary Structure
- Underground Structure
- PRS, point location

C-21-www indicates a workplan Area of Concern

21-xxx(y) indicates a workplan SWMU

N

State Plane Coordinate System, New Mexico Central Zone. 1927 North American Datum

Grid provides New Mexico State Plane coordinates in feet. Grid interval, in feet: 1000

Notice: The information on this map is provisional and has not been created for assessment, title or other uses. Its sole purpose is support of planning, budgeting, tracking and management of Environmental Restoration Program, utility and services data are from Los Alamos National Laboratory Engineering Division and has undergone a quality control check. Information is current as of Feb. 1994.

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Earth & Environmental Sciences Division
FIMAD Facility for Information Management, Analysis and Display
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