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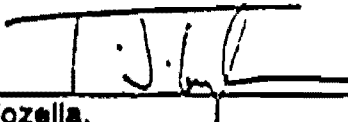
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Submittal Of The Resource Conservation And Recovery Act Facility Investigation Report For Potential Release Sites At Technical Area 15

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RFI Report for Potential Release Sites

15-003(a,d,f)
15-007(b)
15-008(a,b)
15-009(e,j)
15-012(b)
C-15-003

(located in former
Operable Unit 1086)

Field Unit 2
Environmental
Restoration
Project

November 1995

A Department of Energy
Environmental Cleanup Program

Los Alamos

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**RFI REPORT
FOR**

FIELD UNIT 2 (OU 1086)

POTENTIAL RELEASE SITES

- 15-004(b,c)- Firing Site A-B
- 15-004(a,d)- Firing Site C
- 15-004(f) 15-008(a), 15-009(e), AOC-15-004 - E-F
Aggregate
- 15-007(b) - MDA-Z
- 15-008(b) - Surface Disposal Area at R-44
- 15-012(b) - Operational Release
- 15-009(j) - Inactive Septic System

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EXECUTIVE SUMMARY

This Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) report describes the Phase I investigation conducted in 1994 at formerly designated Operable Unit (OU) 1086, Technical Area (TA)-15, at Los Alamos National Laboratory. TA-15 is bounded by TA-66 and -67 to the north, TA-14, -16, -37, and -49 to the west and south, and TA-36 to the east. Much of TA-15 has been used from the mid-1940s to the present for explosives experiments. Test explosions were conducted ranging from a few pounds of high explosives (HE) to as much as three-quarters of a ton. These explosions sometimes contained multi-pound quantities of natural uranium, depleted uranium, and lesser quantities of beryllium and other metals. In most cases, the tests were carried out aboveground, so the test materials were potentially scattered over areas with radii up to several hundred yards. The objectives of the Phase I sampling were to determine the extent, concentration, and depth profile of any chemicals of potential concern (COPC) at the inactive firing sites, landfills, and septic systems, and from operational releases.

This document reports on field investigations carried out during the 1994 RFI at PRS 15-004(b,c), PRS 15-004(a,d), PRS 15-004(f), 15-008(a), 15-009(e), AOC-15-004, PRS 15-007(b), PRS 15-008(b), PRS 15-012(b), and PRS 15-009(j). Presampling activities at these PRSs included radioactivity, land, and HE surveys. At each PRS, samples were collected from locations estimated to be most likely to contain elevated concentrations of contaminants typical of the PRS. Grid sampling was used at Firing Sites A-B (PRS 15-004(b,c)), C (PRS 15-004(a,d)), and E-F Aggregate (PRSs 15-004(f), 15-008(a), 15-009(e), and AOC-15-004), and at material disposal area (MDA)-Z (PRS 15-007(b)). At the surface disposal area at R-44 (PRS 15-008(b)), the sample locations were chosen randomly based upon visual inspection. At the operational release site, 15-012(b), six locations were chosen according to the RFI Work Plan (LANL 1993, 1087) and radioactivity screening. At the septic systems (15-009(e) and (j)), the septic tank contents (liquid) were collected. Samples were analyzed in accordance with EPA-approved procedures for radioactivity, volatile and semivolatile organic compounds, metals, and HE. An X-ray fluorescence (XRF) analyzer was used to screen samples for metals (mercury, lead, and uranium). Laser-Induced Breakdown Spectroscopy (LIBS) was used to scan samples for beryllium. At all PRSs, a subset of collected samples was sent for fixed laboratory analysis based upon the results of field screening, which was a cost-effective method for biasing samples.

Sampling results from the RFI were evaluated to determine whether they provided enough information to make decisions regarding cleanup, no further action, or the need for a Phase II investigation. The following table lists proposed actions for each PRS based on the evaluation of the sampling results.

PROPOSED ACTIONS FOR TA-15

PRS	HSWA		NFA	Accelerated Cleanup		Further Investigation		Rationale
	YES	NO		VCA	EC	Phase II	CMS	
15-004(b)	X				X			Contaminants found require further action
15-004(c)	X		X					No RCRA contaminants found
15-004(a)	X		X					No RCRA contaminants found
15-004(d)		X	X					No RCRA contaminants found
15-004(f)	X				X			Contaminants found require further action
15-007(a)	X				X			Contaminants found require further action
15-009(e)	X			X				Contaminants found require further action
C-15-004		X	X					No RCRA contaminants found
15-007(b)	X				X			Contaminants found require further action
15-008(b)	X				X			Consider fully with Firing Site R-44, probable EC
15-012(b)	X				X			Contaminants found require further action
15-009(j)	X				X			Contaminants found require further action

Note: HSWA = PRS is listed in Hazardous and Solid Waste Amendments Module of the Laboratory's RCRA Permit
 NFA = no further action
 VCA = voluntary corrective action
 EC = expedited cleanup

Based on the analytical results from the Phase I investigation, the following recommendations are proposed for these PRSs:

Expedited Cleanup:

- PRS 15-004(b)
- PRS 15-004(l)
- PRS 15-007(b)
- PRS-15-008(a)
- PRS 15-008(b)
- PRS 15-009(j)
- PRS 15-012(b)

Voluntary Corrective Action:

- PRS 15-009(e)

No Further Action:

- PRS-004(a)
- PRS-004(c)
- PRS-004(d)
- AOC-15-004

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References for Executive Summary

LANL (Los Alamos National Laboratory), July 1993. "RFI Work Plan for Operable Unit 1066," Los Alamos National Laboratory Report LA-UR-92-3968, Los Alamos, New Mexico. (LANL 1993, 1087)

B-4-01005-014

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Acronyms

AOC	area of concern
CEARP	Comprehensive Environmental Assessment and Response Program
COPC	chemical of potential concern
CST	Chemical Science and Technology Division
DOE	U.S. Department of Energy
DU	depleted uranium
DX	Dynamic Experimentation Division
EC	expedited cleanup
EM	electromagnetic
EPA	U. S. Environmental Protection Agency
ESAL	ecotoxicological screening action level
FU	Field Unit
GPR	ground-penetrating radar
HE	high explosives
HMX	Cyclotetramethylenetrinitramine
HSWA	Hazardous and Solid Waste Amendments
INEL	Idaho National Engineering Laboratory
IWP	Installation Work Plan
LIBS	Laser-Induced Breakdown Spectroscopy
MCE	Multiple Chemical Evaluation
MCL	maximum contaminant levels
MDA	material disposal area
NFA	no further action
NOD	notice of deficiency
OU	Operable Unit
PAH	polycyclic aromatic hydrocarbons
PETN	Pentaerythritol tetranitrate
PRG	Preliminary Remediation Goals
PRS	potential release site
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
RDX	Cyclotrimethylenetrinitramine
RFI	RCRA Facility Investigation
RPF	Records Processing Facility

SAL	screening action level
SOP	Standard Operating Procedure
SVOC	semi-volatile organic compound
SWMU	solid waste management unit
SWSC	Sanitary Wastewater System Consolidation
TA	Technical Area
TAL	total analyte list
TATB	Triaminotrinitrobenzene
TCLP	Toxicity Characteristic Leaching Procedure
TNT	Trinitrotoluene
USATHMA	U. S. Army Toxic and Hazardous Materials Agency
UTL	upper tolerance limit
VCA	voluntary corrective action
VOC	volatile organic compound
XRF	x-ray fluorescence

1.0 INTRODUCTION

1.1 General Site History

Technical Area (TA)-15 is part of Field Unit (FU) 2. It was formerly designated as Operable Unit (OU) 1086 at Los Alamos National Laboratory (the Laboratory) in Los Alamos, New Mexico (NM) (Figure 1-1). TA-15 is bounded by TA-66 and -67 to the north, TA-14, -16, -37, and -49 to the west and south, and TA-36 to the east. Most of TA-15 occupies the relatively flat surface of Threemile Mesa, part of Pajarito Mesa. Steep-walled Water Canyon traverses the southern site boundary, and Potrillo Canyon intersects the main portion of Threemile Mesa, dividing the Mesa into two firing site areas, PHERMEX Mesa and Mesita del Potrillo (Figure 1-2). The history of TA-15 is discussed in detail in the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Work Plan for OU 1086 (LANL 1993, 1067) and summarized in the following paragraphs.

In 1944 a small control building and two firing sites—one for quantities of high explosives (HEs) up to 50 lbs and the second for larger amounts—were established on TA-15. The exact locations of these two firing sites and the types of tests carried out have not been determined definitively in a search of the archives, but it is probable that these became Firing Sites A and B. Firing Site A was probably in use by the end of 1944, and nearby Firing Site B shortly thereafter. In 1946, TA-15 was made into a permanent location for explosives experiments related to the design of nuclear weapons, involving experiments with up to 3/4 ton of HEs. By 1947, Firing Sites C, D, E, and F were in use. In 1948, Firing Sites E and F were designated as one firing site, E-F, and Firing Sites G and H were added. Today Firing Sites A through H are not used, and most of the structures associated with these firing sites have been decommissioned and dismantled.

The hazardous materials used in these explosives tests, such as uranium, beryllium, and lead, have largely been left in place at the firing sites where the materials were deposited by the explosion or pushed aside to clean the area. Other materials that may have been deposited in very small amounts include steel, aluminum, mercury, boron, cadmium, gold, and tritium. Many types of HEs have been used at these sites, and, while they may have left some residues, no unexploded HEs have been found in analyses of firing site soils. Firing Site E-F was used the most heavily and contains the largest quantities of hazardous materials. Up to 72 tons of uranium and approximately 800 lb of beryllium may have been expended in tests at Firing Site E-F.

In the 1950s, Firing Sites R-44 and R-45 were completed. These sites have been used for various explosives tests, R-45 for smaller tests and R-44 for larger ones.

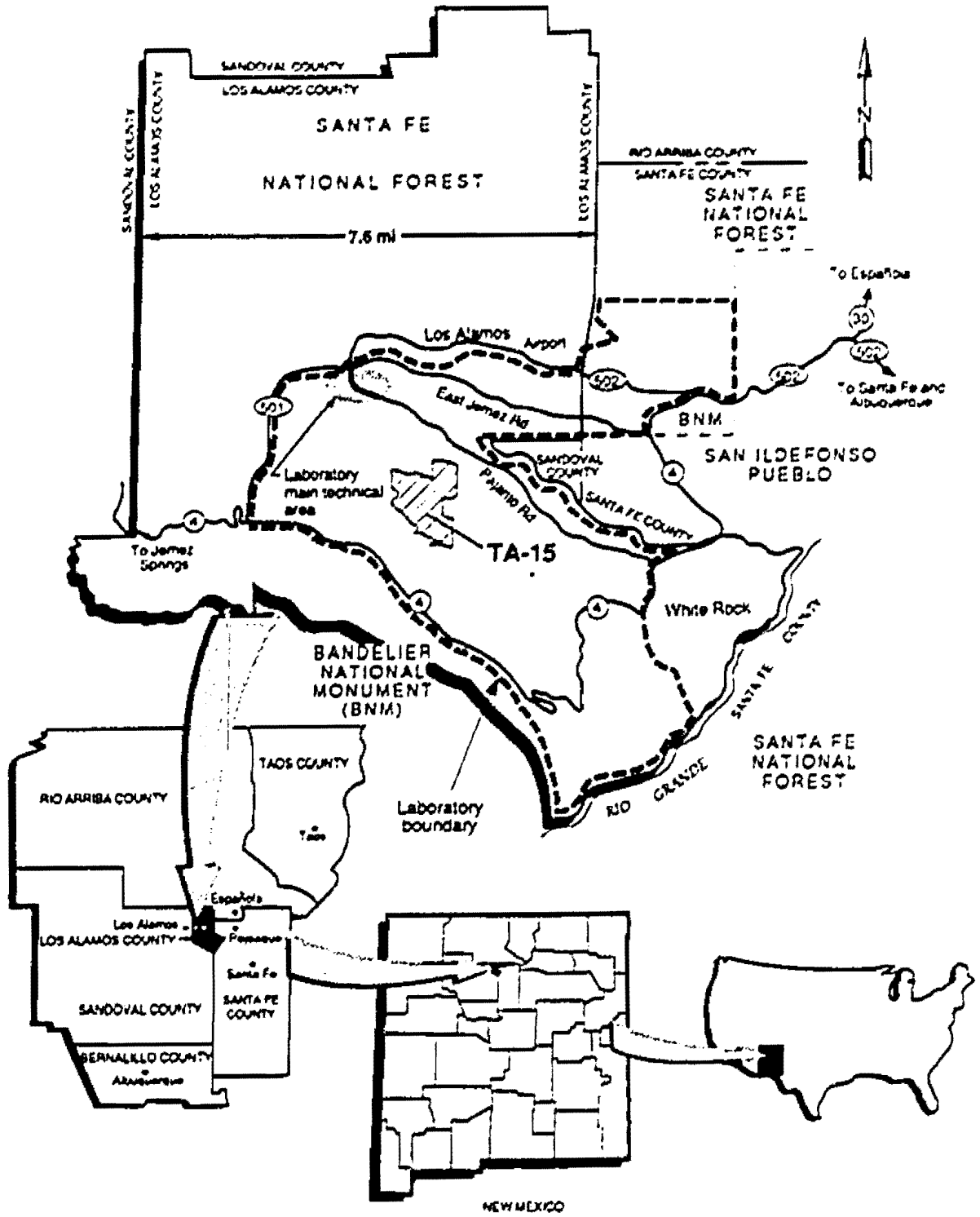


Figure 1-1. Location of Los Alamos National Laboratory and TA-15 (OU 1086)

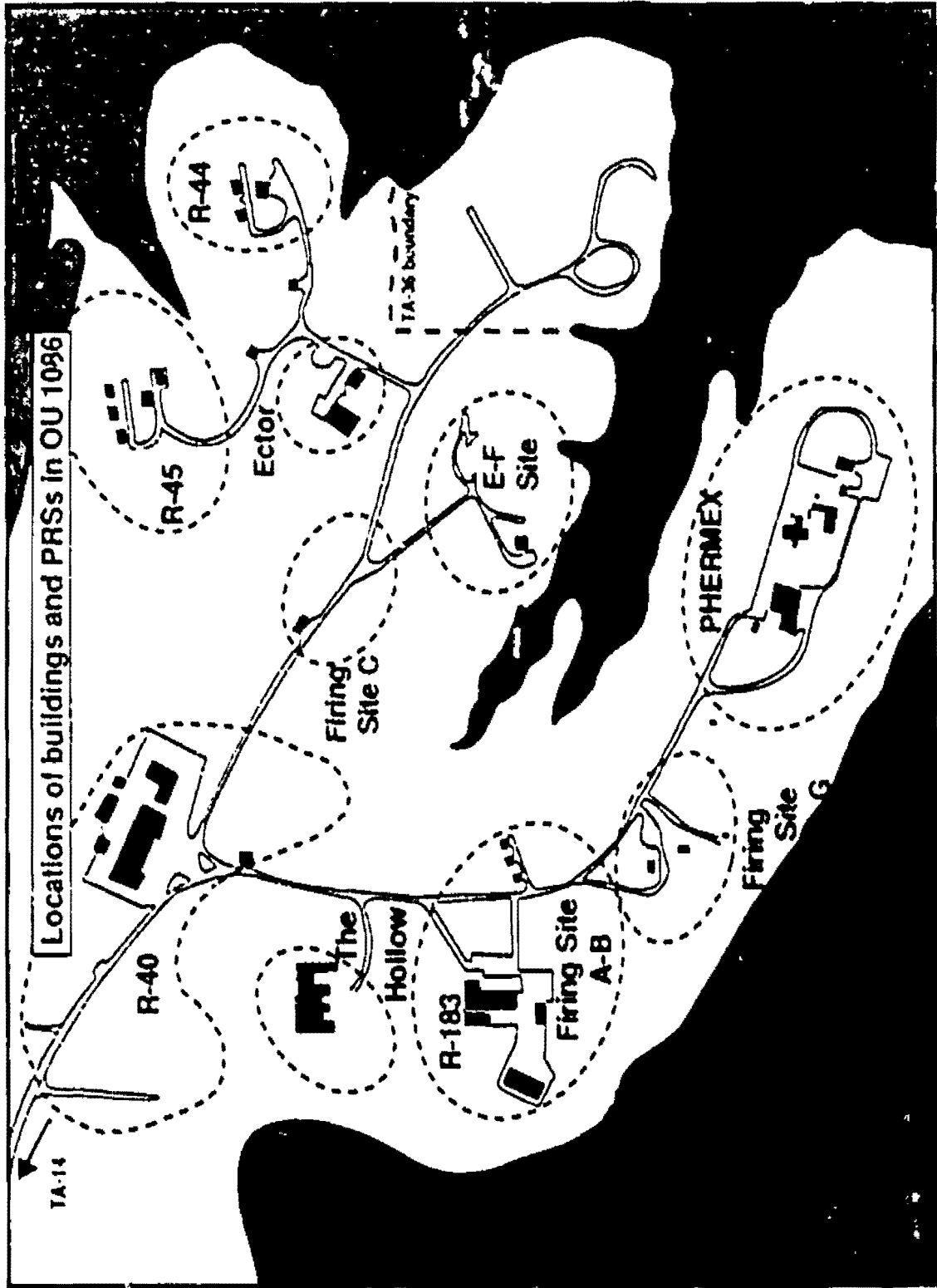


Figure 1-2. Locations of buildings and PRSs in OU 1086

The PHERMEX facility was built in the early 1960s to perform dynamic radiography of the components of nuclear weapons during the explosion. A second major dynamic radiographic machine named Ector, now called R-306, was installed in the early 1980s for studies similar to those at PHERMEX. A new facility known as DARHT (Dual-Axis Radiographic Hydrodynamics Test) is being planned.

Areas R-40, R-183, and The Hollow contain office buildings supporting TA-15 operations. The buildings in The Hollow were assembled in 1949 and are functionally connected. The buildings at R-40 have been in place since the early 1950s, and those at R-183 since the early 1960s. Related to those buildings and the areas surrounding them are a number of potential release sites (PRSs) that include septic tanks, sumps, drainage ditches, outfalls, container storage areas, and other operational releases (LANL 1990, 0145).

TA-15 is an active technical area of the Laboratory used by the Dynamic Experimentation (DX) Division for ongoing explosives research. Laboratory plans stipulate that the area will continue to be used for explosives research (Facilities Engineering Division Planning Group et al. 1990, 0655).

1.2 RFI Overview

The overall objectives of field investigations at OU 1086 during 1994, as stated in the RFI Work Plan (LANL 1993, 1087), were to:

- Determine whether contaminants were present at specified locations at each PRS;
- Identify the contaminants present;
- Determine the vertical and lateral extent of contamination;
- Identify contaminant migration pathways throughout the entire OU and for each PRS;
- Acquire sufficient information to allow quantitative migration pathways analysis and health-based baseline risk assessment (if necessary);
- Provide data necessary for assessing potential remedial alternatives; and
- Provide the basis for detailed planning of remedial action (if necessary).

The major hazardous materials within OU 1086 are uranium, beryllium, lead, and mercury. A combination of field soil screening and discrete soil sampling and analysis for these metals was used to define the areas and depths of contamination, and to specify migration pathways at individual PRSs. Additional samples (e.g., liquid from septic tanks) were used to characterize specific PRSs. Other contaminants potentially present in smaller quantities at a few PRSs include silver salts and acids (from photographic labs), degreasers, chromates, and general laboratory chemicals, including organic solvents.

For the firing sites, grid sampling was selected as the most effective method of site characterization. The typical pattern on such sites is for debris to be scattered over a wide area, with a higher concentration near the center of the blast.

This RFI report discusses the 1994 field investigations of 12 PRSs:

- 15-004(b,c) - Firing Site A-B
- 15-004(a,d) - Firing Site C
- 15-004(f), 15-008(a), 15-009(e), AOC-15-004 - E-F Aggregate
- 15-007(b) - Material Disposal Area (MDA) -Z
- 15-008(b) - Surface Disposal Area at R-44
- 15-012(b) - Operational Release (Containment Vessel Operational release)
- 15-009(j) - Inactive Soptic System

A Phase I investigation was conducted to determine the presence, concentration, and migration of chemicals of potential concern (COPCs) at these sites.

1.2.1 PRS 14-004(b,c) • Firing Site A-B

PRSs 15-004(b) and (c) are listed in Table A of the Hazardous and Solid Waste Amendments (HSWA) Module of the Laboratory's RCRA permit, requiring investigation. The conceptual model developed in the RFI Work Plan (LANL 1993, 1087) indicated that erosion by surface runoff and aerial resuspension were the principal migration pathways at these PRSs.

Phase I of the RFI Work Plan (LANL 1993, 1087) required collection of soil samples to determine whether COPCs were present in surface and subsurface soil at levels above Screening Action Levels (SALs) at these PRSs. Accordingly, samples were collected at specified grid points. See Appendix A for a list of analytical results. Figure 1-3 shows a map of the PRSs with sample locations and identifiers.

1.2.2 PRS 15-004(a,d) • Firing Site C

PRS 15-004(a) is listed in Table A of the HSWA Module of the Laboratory's RCRA permit, requiring investigation. PRS 15-004(d) is not listed, but was investigated as well because it is co-located with 15-004(a). The conceptual model developed in the RFI Work Plan (LANL 1993, 1087) indicated that erosion by surface runoff and aerial resuspension were the principal migration pathways at these PRSs.

Phase I of the RFI Work Plan (LANL 1993, 1087) required collection of soil samples to determine whether COPCs were present in surface and subsurface soil at levels above SALs at these PRSs. Accordingly, samples were collected at specified grid points. See Appendix A for a list of analytical results. Figure 1-4 shows a map of the PRSs with sample locations and identifiers.

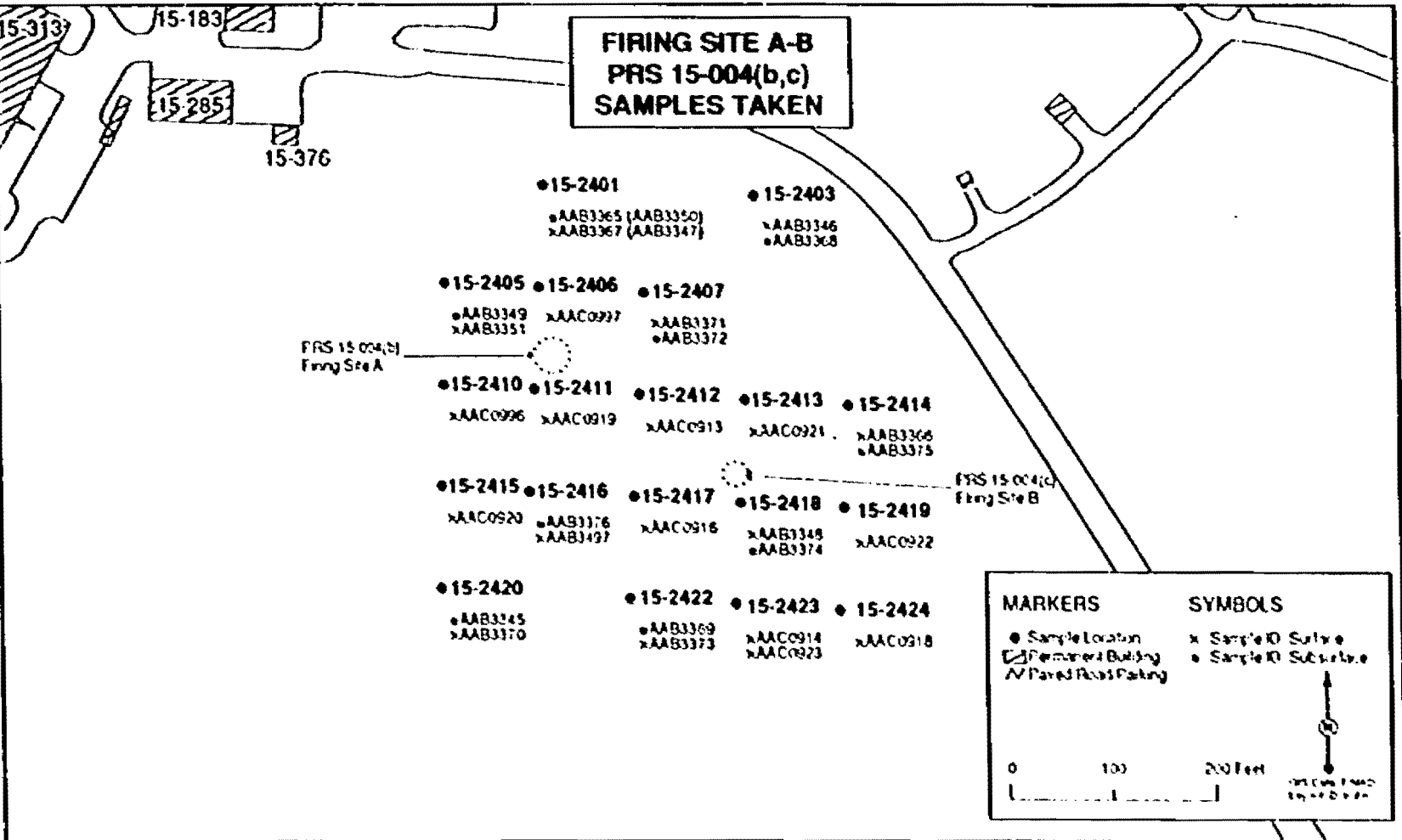


Figure 1-3. Sample locations at PRSs 15-004(b,c)

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1.2.3 PRSs 15-004(f), 15-008(a), 15-009(e), AOC-15-004 - E-F Aggregate

PRSs 15-004(f) (E-F Firing Site) and 15-009(e) (inactive septic system) are listed in Table A of the HSWA Module of the Laboratory's RCRA permit, requiring investigation. PRS 15-008(a) (surface disposal area) is listed in Table B of the HSWA Module of the Laboratory's RCRA Permit, requiring priority investigation. Area of Concern (AOC)-15-004 (transformer station) is not listed, but it was investigated as well because it is co-located with these PRSs at E-F site. The conceptual model developed in the RFI Work Plan (LANL 1993, 1087) indicated that erosion by surface runoff and aerial resuspension were the principal migration pathways at these PRSs. For the septic tank, the principal migration pathway would be release from the tank and migration through the soil vadose zone.

Phase I of the RFI Work Plan (LANL 1993, 1087) required collection of soil and liquid samples to determine whether COPCs were present in surface and subsurface soil and in the septic tank at levels above SALs at these PRSs. Accordingly, samples were collected at specified grid points and from the contents of the septic tank. See Appendix A for a list of analytical results. Figures 1-5 through 1-7 show the PRSs with sample locations and identifiers.

1.2.4 15-007(b) - MDA-Z

PRS 15-007(b) (Surface Disposal Area) is listed in Table B of the HSWA Module of the Laboratory's RCRA Permit, requiring priority investigation. The conceptual model developed in the RFI Work Plan (LANL 1993, 1087) indicated that erosion by surface runoff and aerial resuspension were the principal migration pathways at this PRS.

Phase I of the RFI Work Plan (LANL 1993, 1087) required collection of soil samples to determine whether COPCs were present in surface and subsurface soil at levels above SALs at this PRS. Accordingly, samples were collected at specified grid points. See Appendix A for a list of analytical results. Figure 1-8 shows a map of the PRS with sample locations and identifiers.

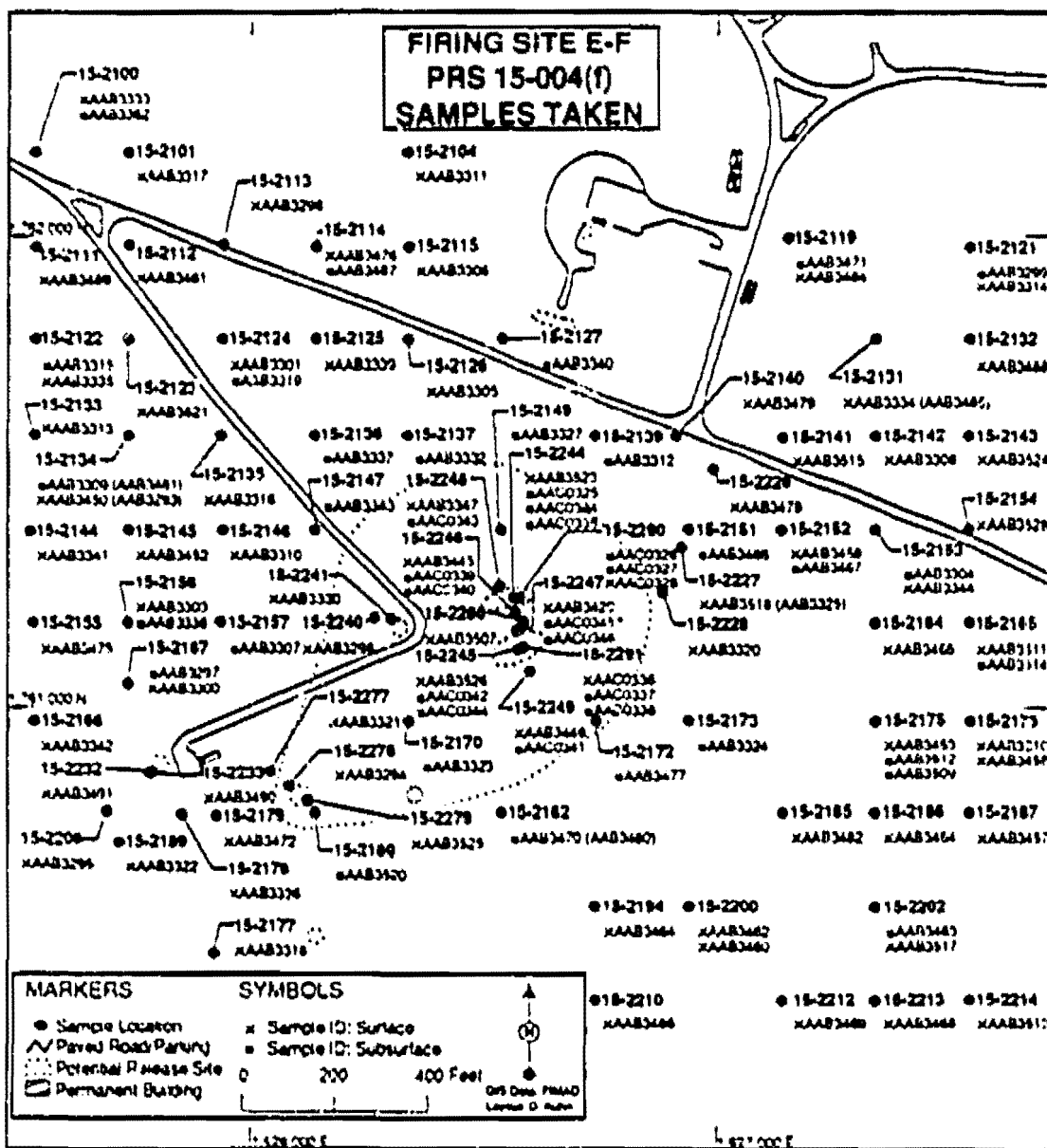


Figure 1-5. Sample locations at PRS 15-004(1)

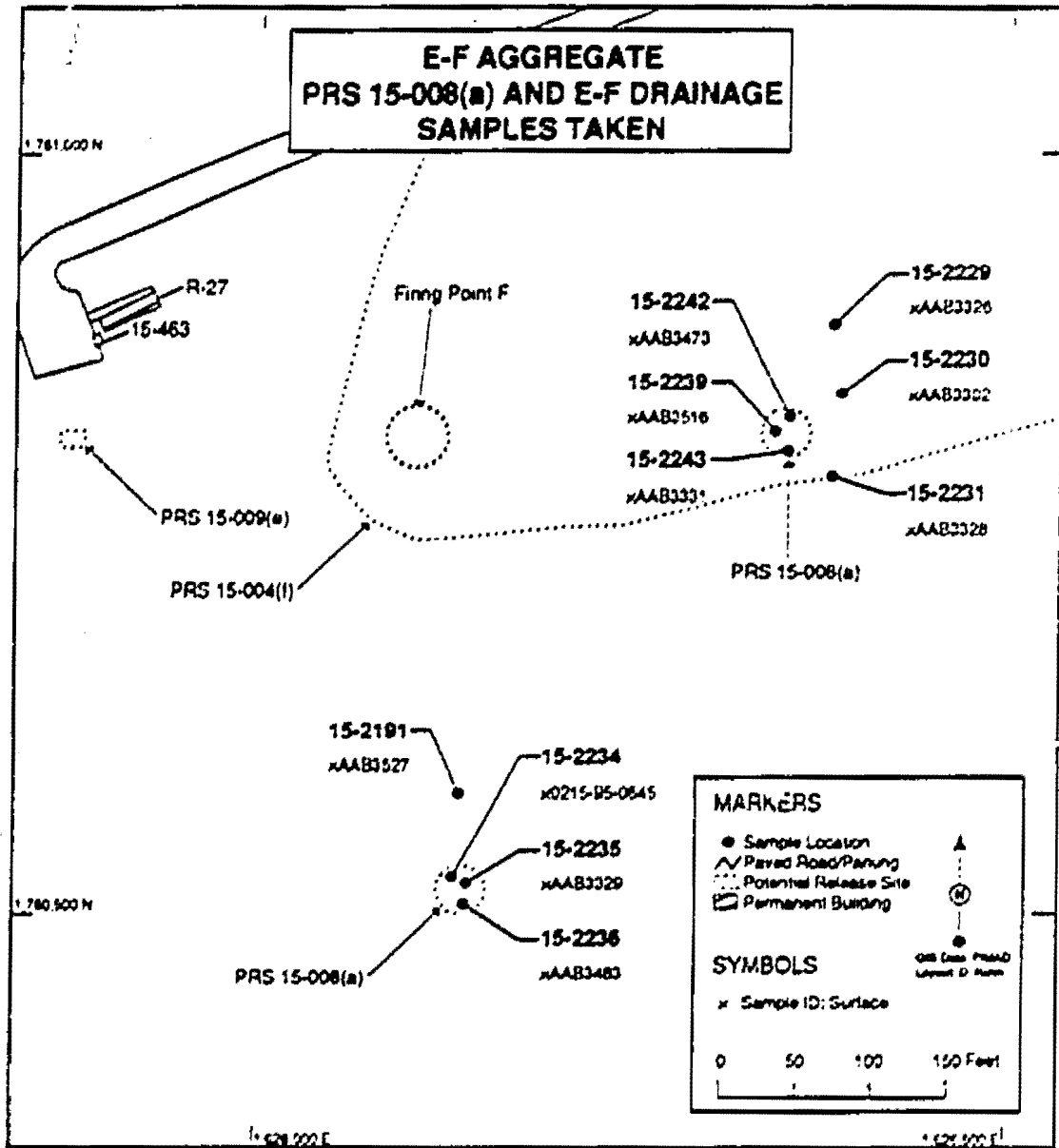


Figure 1-6. Sample locations at PRS 15-008(a)

037-5-01005-0-312

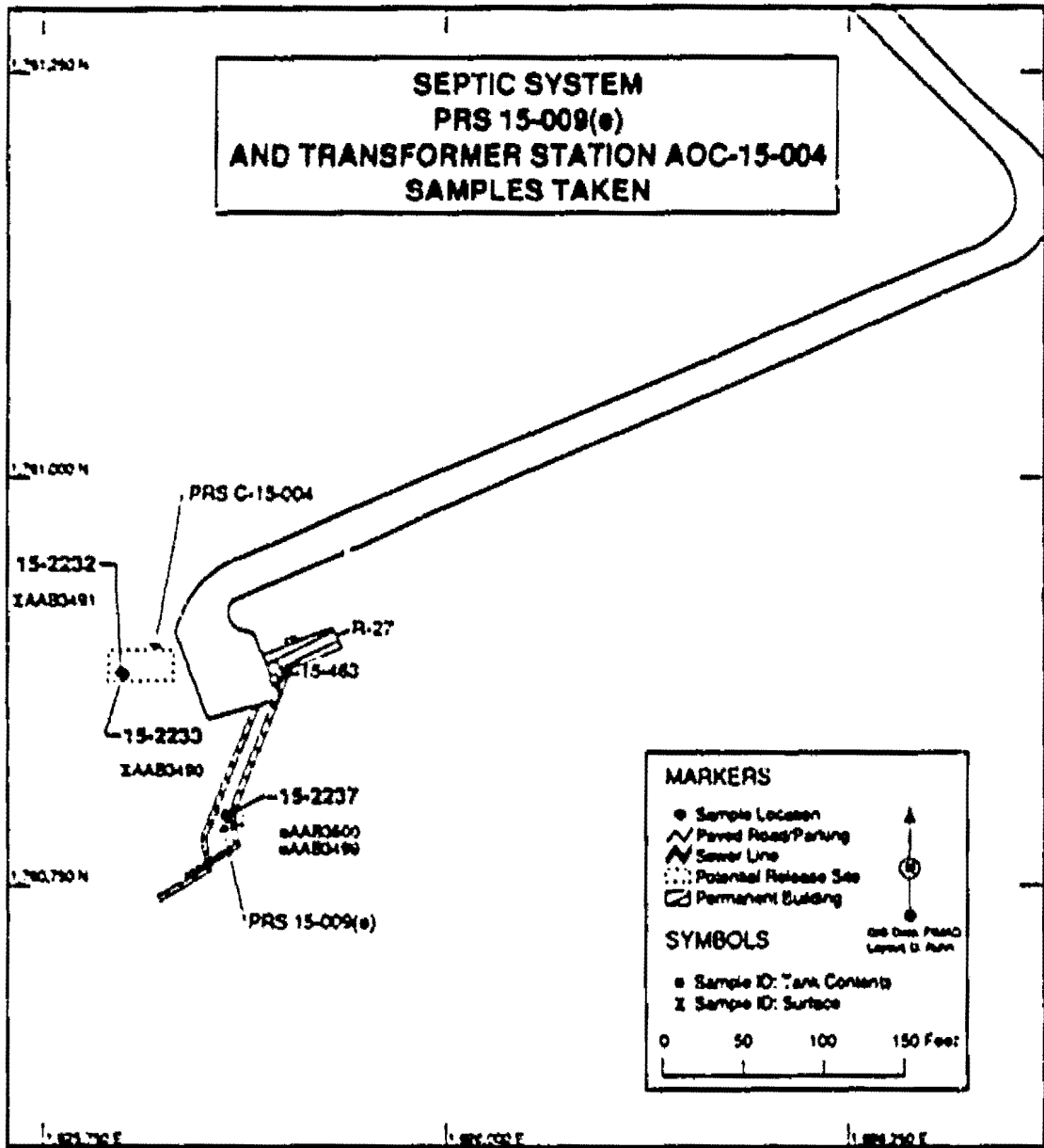


Figure 1-7. Sample locations at PRS 15-009(e) and AOC-15-004

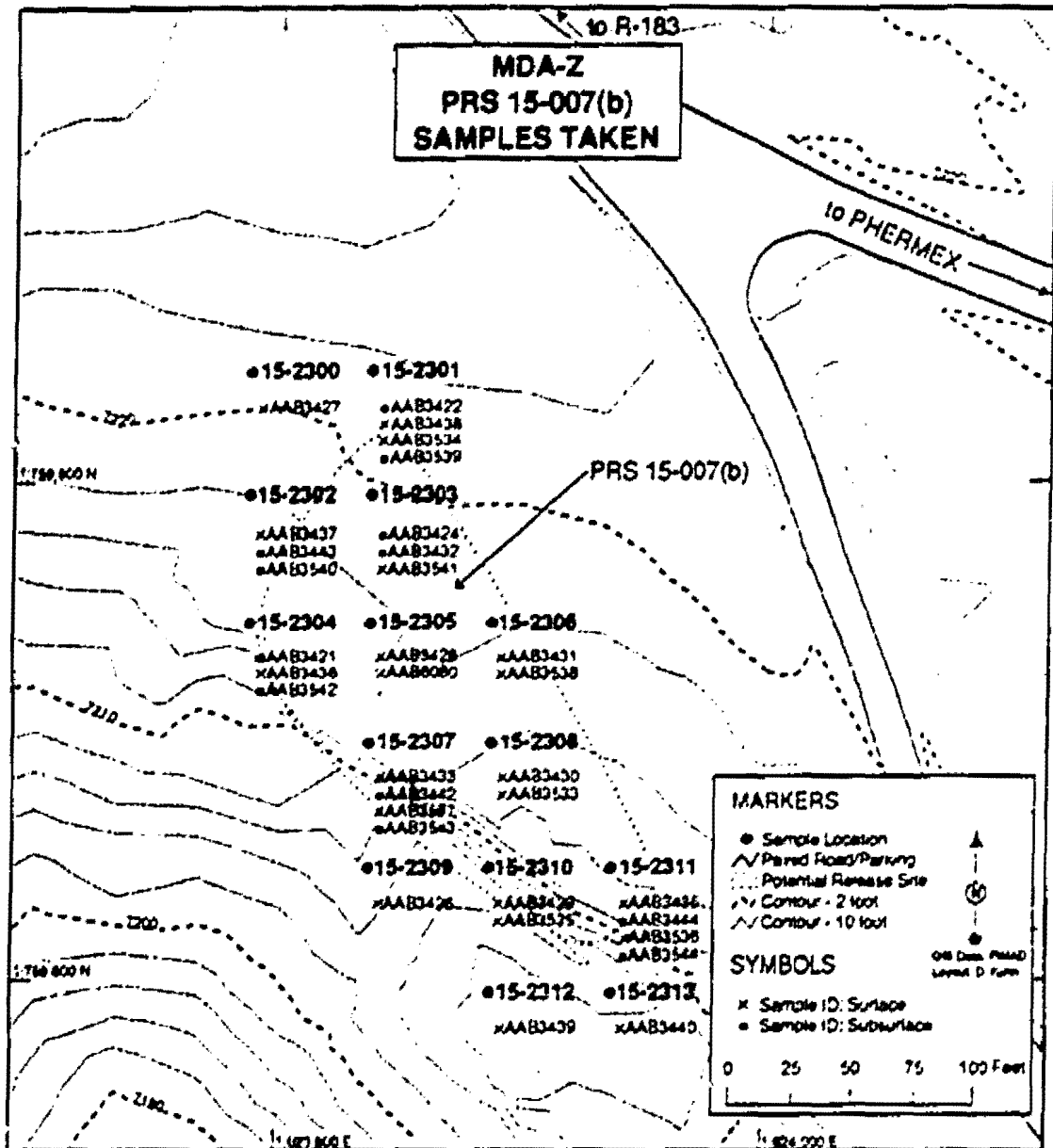


Figure 1-3. Sample locations at PRS 15-007(b)

1.2.5 15-008(b) - Surface Disposal Area at R-44

PRS 15-008(b) (Surface Disposal Area) is listed in Table B of the HSWA Module of the Laboratory's RCRA Permit, requiring priority investigation. The conceptual model developed in the RFI Work Plan (LANL 1993, 1087) indicated that erosion by surface runoff and aerial resuspension were the principal migration pathways at this PRS.

Phase I of the RFI Work Plan (LANL 1993, 1087) required collection of soil samples to determine whether COPCs were present in surface and subsurface soil at levels above SALs at this PRS. Accordingly, samples were collected at specified grid points. See Appendix A for a list of analytical results. Figure 1-9 shows a map of the PRS with sample locations and identifiers.

1.2.6 15-012(b) - Operational Release

PRS 15-012(b) (Operational Release) is listed in Table B of the HSWA Module of the Laboratory's RCRA Permit, requiring priority investigation. The conceptual model developed in the RFI Work Plan (LANL 1993, 1087) indicated that erosion by surface runoff and aerial resuspension were the principal migration pathways at this PRS.

Phase I of the RFI Work Plan (LANL 1993, 1087) required collection of soil samples to determine whether COPCs were present in surface and subsurface soil at levels above SALs at this PRS. Accordingly, samples were collected at specified grid points. See Appendix A for a list of analytical results. Figure 1-10 shows a map of the PRS with sample locations and identifiers.

1.2.7 15-009(j) - Inactive Septic System

PRS 15-009(j) (Inactive Septic System) is listed in Table A of the HSWA Module of the Laboratory's RCRA Permit, requiring investigation. The conceptual model developed in the RFI Work Plan (LANL 1993, 1087) indicated that the principal migration pathway would be release from the tank and migration through the soil vadose zone.

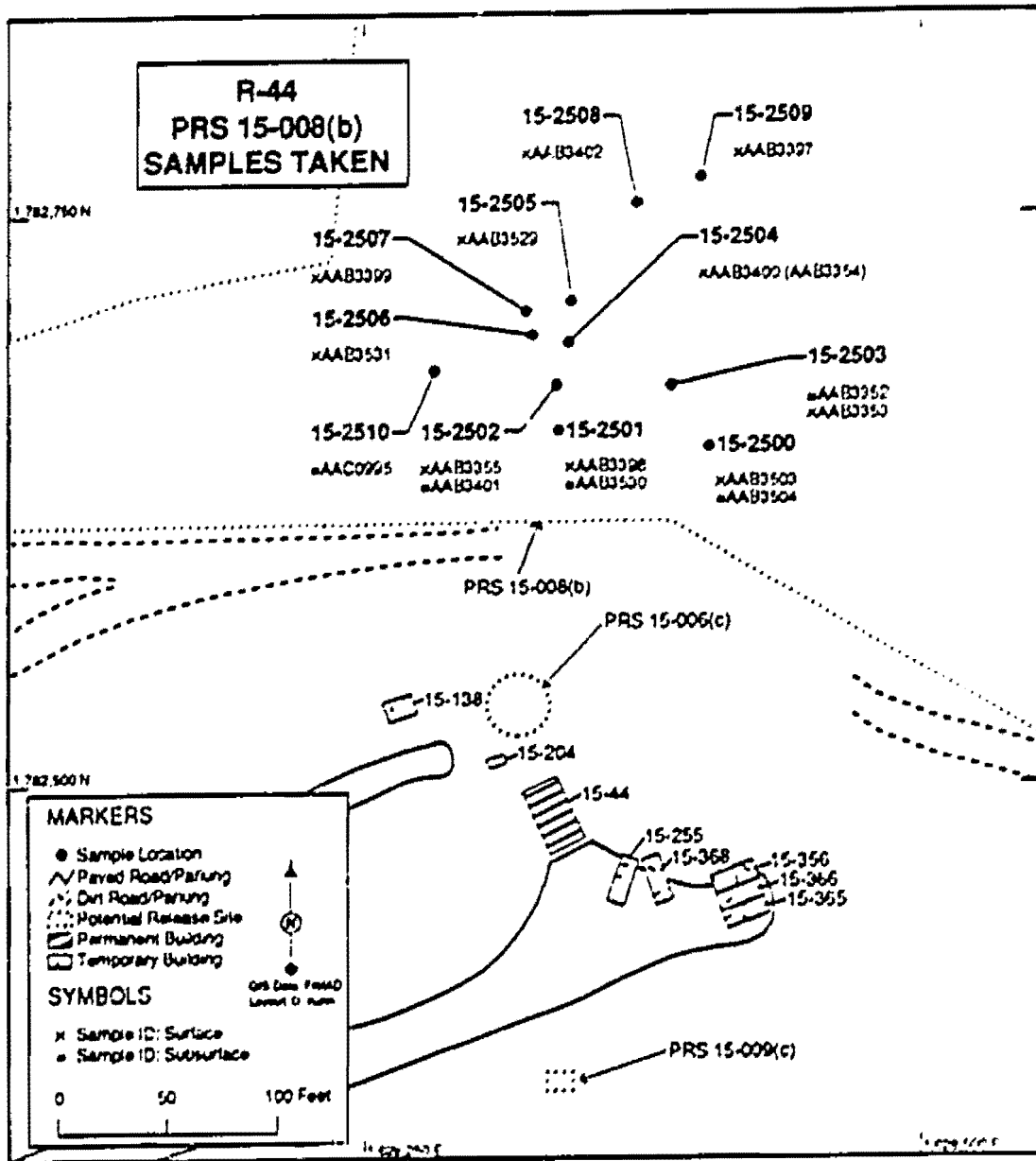


Figure 1-9. Sample locations at PRS 15-008(b)

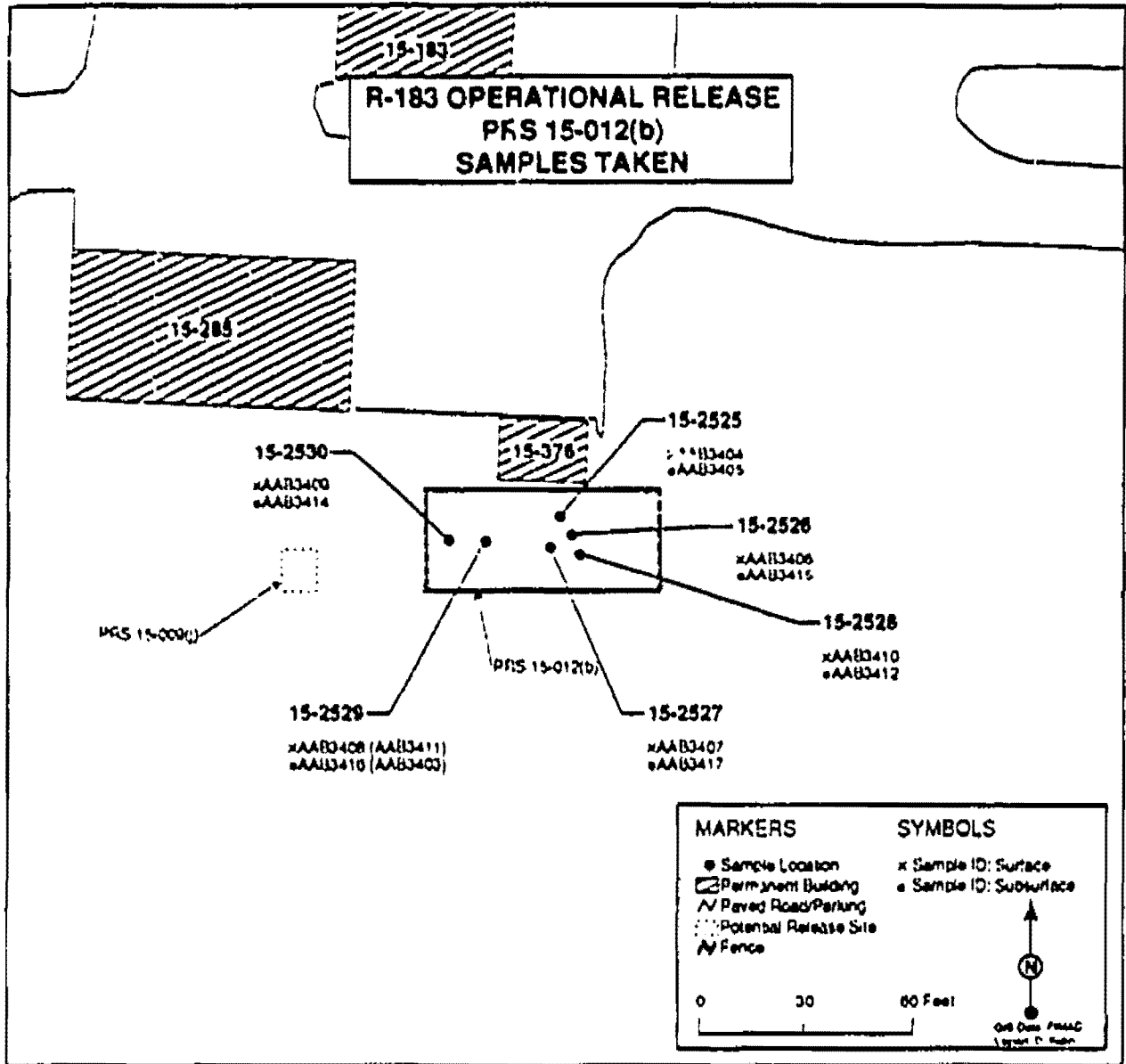


Figure 1-10. Sample locations at PRS 15-012(b)

Phase I of the RFI Work Plan (LANL 1993, 1087) required collection of liquid samples to determine whether COPCs were present above SALs at this PRS. During summer 1994, sampling was attempted of the liquid in the tank, but no samples could be collected. Another attempt to sample this tank was conducted during summer 1995, and adequate material was collected for a sample. See Appendix A for a list of analytical results. Figure 1-11 shows a map of the PRS with the sample location and identifier.

1.3 Field Activities

Sampling activities began on 24 June 1994 and were completed on 24 August 1994. In response to a Notice of Deficiency (NOD) from the U.S. Environmental Protection Agency (EPA), sampling activities resumed on 11 October 1994 and were completed on 9 November 1994. Table 1-1 shows the number of samples collected according to PRS and depth.

Several deviations from the RFI Work Plan (LANL 1993, 1087) occurred. The NOD to the RFI Work Plan (LANL 1993, 1087) stated that samples were to be collected from the soil/tuff interface within and next to the mounds at E-F site. Use of a remote-controlled drill rig was required by Laboratory policy because of the potential presence of HE in the soil. This rig was not powerful enough to drill completely through the mounds to the soil/tuff interface. The deepest it was able to penetrate was 16.5 ft, approximately 4 ft above the soil/tuff interface.

The NOD to the RFI Work Plan (LANL 1993, 1087) called for three samples to be collected from each debris pile at PRS 15-008(a), with one sample at depth. The sampling team collected three samples at each debris pile, all to the soil/tuff interface.

The RFI Work Plan (LANL 1993, 1087) stated that fourteen surface and fourteen subsurface samples would be collected at PRS 15-007(b), MDA-Z. All fourteen surface samples were collected; however, refusal of the hand auger occurred at eight locations, so only six subsurface samples could be collected.

The fourth deviation was in reference to the NOD issued by the EPA for the RFI Work Plan (LANL 1993, 1087) for AOC C-15-004: The two surface samples were collected at 0-4 in. and analyzed for PCBs only. The samples were field screened for radioactivity with HP 260 Eberline GM probes, but were not sent to the mobile radioanalysis or chemistry vans. The area just below the support structure that held the transformers is on a very steep slope towards the bottom of a drainage, so any contamination that may have been present in the past is unlikely to have remained there.

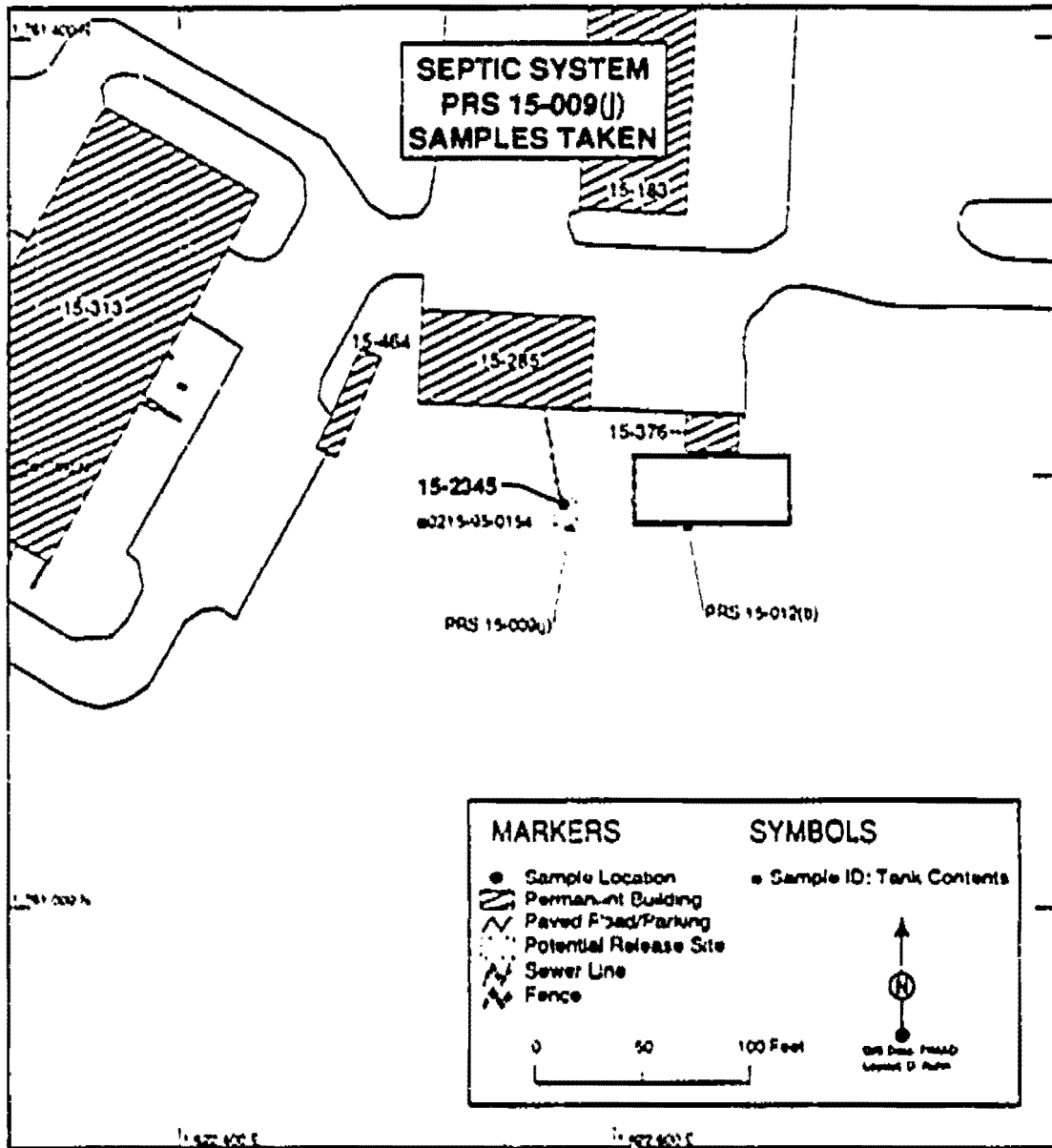


Figure 1-11. Sample location at PRS 15-009(J)

TABLE 1-1
TOTAL SAMPLES COLLECTED AT OU 1086

Name	PRS #	Surface Samples	Subsurface Samples	Total # of Samples
Firing Site A-B	15-004(b,c)	20	10	30
Firing Site C	15-004(a,d)	29	12	41
E-F Aggregate	15-004(f)	85	48	133
	15-008(a)	6	0	6
	C-15-004	2	0	2
	15-009(e)	2 sludge	0	0
R-183	15-012(b)	7	7	14
R-44	15-008(b)	11	5	16
MDA-2	15-007(b)	14	6	20
Septic Tank	15-009(j)	1 sludge	0	1
Total		175	88	263

1.3.1 Radiological Surveys

Radiological surveys were conducted using a 2x2 sodium iodide detector calibrated for uranium and 44-9 HP 26U Eberline GM probes. The sodium iodide detector was used at all grid points, and readings were collected at the ground surface and from 3 ft above the ground surface. The Eberline probes were used at the locations selected for sampling.

The Laboratory mobile radioanalysis van was used to screen all samples for radioactivity prior to X-ray Fluorescence (XRF) analyses or fixed lab analyses.

1.3.2 X-Ray Fluorescence and Laser-Induced Breakdown Spectroscopy

XRF and Laser-Induced Breakdown Spectroscopy (LIBS) were conducted to field screen all soil samples collected. XRF measures lead, uranium, and mercury, while LIBS measures beryllium. These elements were selected for screening based upon knowledge of past practices at the PRSs. In Section 4, where appropriate, the screening results are contoured to produce more complete areal estimates of the projected extent of contamination. According to screening results, samples were selected to be sent to a fixed laboratory for a full suite of analyses.

The XRF and LIBS results generally correlated quite well with the fixed laboratory results. Appendix C shows correlations between the field screening results and the fixed lab results on a site-by-site basis, as well as for the entire population of sites. Correlations showed some scatter, which is due to the differences between the techniques used: Both XRF and LIBS are surface techniques, which measure

the elements of interest in only the outermost few mm of the soil grains. The laboratory analysis utilizes a strong acid leaching procedure and thus measures more of the soil's total content. In general, the correlations give confidence that the higher concentrations of metals in samples picked for fixed lab analysis were confirmed. This lends credence to the use of field screening for biasing the samples sent for fixed lab analysis.

1.3.3 High Explosives Survey

Prior to sampling, all surface soil was field screened for HE using the Laboratory field spot-test kit for explosives, described below. All samples screened tested negative. The soil samples collected for analyses were sent to contracting laboratories for United States Army Toxic and Hazardous Materials Agency (USATHMA) HE analysis.

The HE Spot Test Kit was designed by LANL Group DX-11 (now DX-2) and discriminates between various HEs by color-producing reactions. Common HEs such as Composition B, RDX, HMX, nitroglycerine, nitrocellulose, TNT, and tetryl can be detected down to a concentration of 100 ppm. PETN can be detected down to 500 ppm; TATB can be detected, but its lower detection limit has not yet been established. The Test Kit was used on every sample location for field determination of any need for special sample handling procedures (Spontarelli, n.d.).

1.3.4 Personal Air Monitors

On several days during field operations, the samplers wore personal air monitors to check for radioactivity and metal contamination. All results were negative.

1.3.5 Organic-Vapor Screening

Organic-vapor screening was conducted at sites where sampling for semi-volatile organic compounds (SVOCs) occurred, PRSs 15-007(b) and 15-009(e). No organic vapors were detected.

1.3.6 Dust Monitoring

Dust monitoring was conducted at all sampling locations using a miniram. All results were less than 1.59 mg/m³.

1.3.7 Geophysical Survey

A geophysical survey of MDA-Z was conducted during October 1995 to delineate the boundaries of this area. Both electromagnetic (EM) and ground-penetrating radar (GPR) techniques were used. Appendix B describes this effort in detail. The results are summarized in Section 4.4.

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Spontarelli, T., n.d. "Explosive Spot Test" (Instructions), Los Alamos, New Mexico.



2.0 ENVIRONMENTAL SETTING

The environmental setting of the Laboratory is described in detail in Section 2.4 of the Installation Work Plan for Environmental Restoration (IWP) (LANL 1995, 1164). A discussion of the environmental setting of OU 1086, including climate, geology, hydrology, and a conceptual hydrogeologic model of the OU and the surrounding area, is presented in the RFI Work Plan for OU 1086 (LANL 1993, 1087). A summary is presented in the following sections. This information is required to evaluate potential contaminant transport pathways and conceptual exposure models at OU 1086.

2.1 Climate

Los Alamos County has a semiarid, temperate mountain climate. Summers are generally sunny with moderate, warm days and cool nights. The high altitude, light winds, clear skies, and dry atmosphere allow summer temperatures to range from 45° F to 95° F. During the winter, temperature typically ranges from 15° F to 50° F. The average annual rainfall at OU 1086 is estimated to be about 16 in. Of this total, 40% occurs as brief, intense thunderstorms during July and August. Stream flow in canyons can occur as a result of these storms. Spring snowmelt runoff may also induce stream flow in the area canyons.

2.2 Geology

2.2.1 General Geology

OU 1086 occupies a roughly rectangular area about 1.3 mi wide by 1.5 mi long (see Figure 1-2). The northern boundary is formed by the stream channels in Pajarito and Threemile canyons along TAs-46, -66, and -67. The area is bounded on the west by TA-14 and by the stream channel of Canon de Valle along TA-16 and TA-37. TA-49 on the southern margin of Water Canyon forms the southern boundary, and TA-36 forms the eastern boundary. The topography is rugged, characterized by relatively narrow mesa tops separated by elongated canyons; the predominant axis of both mesas and canyons is west-northwest to east-southeast. The maximum elevation of OU 1086 is 7329 ft on the mesa west of building TA-15-40, and the minimum elevation is 6719 ft in Water Canyon. Mesa tops are generally flat and gently slope to the east-southeast. Canyon walls are steep to nearly vertical, ending in large piles of talus at the canyon wall/canyon bottom junction. Canyon bottoms are generally narrow, with steep stream channel gradients.

OU 1086, both mesa tops and canyon bottoms, is situated within the Bandelier Tuff, a thick sequence of volcanic ash flows and ash falls on the Pajarito Plateau. In the absence of additional structures, such as faults and fractures, the horizontal uniformity in rock type implies relative uniformity in surface hydrologic and geologic properties throughout the area.

The mesa surfaces in OU 1086 are underlain by the upper member of the Bandelier Tuff. The Bandelier comprises two members: upper, or Tshirege, and lower, or Otowi. The younger Tshirege unit is about 1.1 million years old and is separated in time from the Otowi by about 400,000 years. Most of the soils in OU 1086 are derived from the Tshirege. The Tshirege forms the canyon walls throughout OU 1086 and is the only rock in the stratigraphic column exposed at this site.

The Tshirege (Smith and Bailey 1966, 0377) consists of multiple flow units of crystal-rich ash-flow tuff and displays significant variations in welding and vapor phase alteration. The Tshirege is underlain by the Tsankawi Pumice Bed (less than 3 ft thick) that, in turn, marks the boundary between the Tshirege and the Otowi. The Otowi Member is a nonwelded vitric ash-flow tuff also composed of many units. These two members are separated by an erosion surface that may contain extensive permeable channel gravels and sands (Gardner et al. 1993, 0848). Total thickness of the Bandelier Tuff in the TA-15 area is about 1000 ft. Although Cerro Toledo rhyolite is present in adjacent OUs, it is not present at OU 1086 to our knowledge.

A detailed discussion of the geology of the entire Los Alamos area can be found in Section 2.5.1 of the IWP (LANL 1995, 1164).

2.2.2 Soil Types

Soil in this context refers to surface deposits, which include colluvium and alluvium. OU 1086 contains at least 8 different kinds of soils, each of which is described and mapped by Nyhan et al. (1978, 0161). Coverage is highly variable over OU 1086; the progression from north to south is as follows:

The extreme northern portion of OU 1086 starts at the bottom of Pajarito Canyon and consists primarily of rock outcrops. The surface of Pajarito Mesa is covered with Frijoles very fine sandy loam. The southern part of this mesa shows exposures of Hackroy rock outcrop complex.

Threemile Canyon has steep rocky walls with some gravelly sandy loam (Totavi) in the bottom of the canyon. The eastern tip of Threemile Mesa exposes Hackroy rock outcrop complex, grading westward into Carjo loam and Pogna sandy loam. Still further to the west lie Seaby loam and the continuation of Carjo loam, which is generally central to the Mesa throughout its length.

The eastern portion of Mesita del Potrillo, which joins Threemile Mesa, is covered with Hackroy rock outcrop complex at the extreme eastern edge, grading into Carjo loam. This persists to the western edge of OU 1086, where it is joined on the eastern margin of Cañon de Valle by Pogna loam. The northeastern rim of Mesita del Potrillo is covered with Hackroy sandy loam.

The sequence of soils on the land bridge connecting Mesita del Potrillo with PHERMEX Mesa has the following progression from west to east: Pogna loam, a pod of Frijoles loam, Seaby loam, and Carjo loam, with typic eutroboralfs at the head of Potrillo Canyon. Grading west to east into Potrillo Canyon is Tocal loam and, in the bottom of the canyon, Totavi sandy loam.

The center of PHERMEX Mesa is covered with Nyjack loam. This grades to the north to Seaby loam and Hackroy loam on the northeast rim of Potrillo Canyon. Seaby loam grades to the west and east of PHERMEX site, with a small pod of Nyjack loam located on the extreme eastern edge of OU 1086 on this mesa. The northern rim of Water Canyon shows Pogna loam on the west and Hackroy loam on the east. A pod of Seaby loam is located in the bottom of Water Canyon at the eastern edge of OU 1086.

A detailed discussion of the soils in the Los Alamos area can be found in Section 2.5.1.3 of the IWP (LANL 1995, 1164).

2.2.3 Sedimentation and Erosion

At OU 1086, sediment deposition and erosion by surface water occurs in response to snowmelt and storm-water runoff events. Periods of runoff can produce erosion, sediment transport, and deposition. In areas like the firing sites, where the natural soil surface has been disturbed through use, erosion is generally accelerated (Graf 1975, 13-009; Nyhan & Lane 1986, 0159). Active erosional processes on the Pajarito Plateau are addressed in Section 2.5.1.6 of the IWP (LANL 1995, 1164).

Sediment accumulations in excess of 3 ft from a single event have been measured in the active channel in Potrillo Canyon east of OU 1086. There is preferential accumulation of the smaller particulates in the stream bank deposits, point bars, and alluvial fans. Therefore, these geomorphologic deposits may accumulate uranium and other possible contaminant metals, such as mercury, lead, and possibly beryllium. Uranium, a heavy metal used in dynamic weapons testing at OU 1086, was found to accumulate in particular geomorphologic deposits in Potrillo Canyon (Becker and Hoopes, 1993, in preparation).

2.3 Hydrology

The hydrology of the Pajarito Plateau is addressed in Section 2.5.2 of the IWP (LANL 1995, 1164). Summaries of surface water and groundwater hydrology are presented below.

2.3.1 Surface Water

Four separate watersheds, each with an established stream-channel drainage network, are present within OU 1086. These watersheds are Threemile Canyon, Potrillo Canyon, Water Canyon, and Cañon de Valle.

For locations and boundaries of these watersheds, see Appendix A of the RFI Work Plan for OU 1086 (LANL 1993, 1087). (A fifth watershed, Pajarito Canyon, receives runoff from a small, undeveloped area within OU 1086. Because this watershed is not expected to receive any contaminants from OU 1086, it is excluded from further discussion.) All surface water transport of contaminants at OU 1086 ultimately will flow into one of these four canyons.

Stream flow in Threemile and Potrillo canyons is ephemeral, occurring in response to rainfall and snowmelt events. Flow in Cañon de Valle in the vicinity of OU 1086 may occur at times from permitted wastewater discharge and from snowmelt and storm-water runoff. Water Canyon receives flow from springs upstream from West Jemez Road, from permitted wastewater discharge at TA-11, -15, and -16, and from snowmelt and storm water runoff. In years of heavy snow pack, all these channels may transport continuous flow during the spring; intermittent flow in response to heavy rainfall occurs during the spring, summer, and fall.

2.3.2 Groundwater

Saturated groundwater occurs in three modes on the Pajarito Plateau: shallow, alluvial groundwater bodies in canyon bottoms; isolated perched horizons in conglomerates and basalts at depths between 120 and 200 ft; and the main aquifer underlying the entire plateau.

The only aquifer in Los Alamos capable of providing a municipal and industrial water supply is the main aquifer. The water in the main aquifer generally moves eastward across the plateau toward the Rio Grande, with some discharge into the Rio Grande through seeps and springs (Purtyman 1984, 0196). The depth to the main aquifer varies from about 875 to over 1100 ft below ground surface in the vicinity of OU 1086 (Purtyman and Stoker 1988, 0205).

For a description of the vadose zone and its properties, see Section 3.5.2 of the RFI Work Plan for OU 1086 (LANL 1993, 1087). A discussion of groundwater on the Pajarito Plateau is presented in Section 2.5.2.2 of the IWP (LANL 1995, 1164).

2.4 Biological and Cultural Resources

Biological resource field surveys have been conducted at OU 1086 in compliance with the Federal Endangered Species Act of 1973; the New Mexico Wildlife Conservation Act; the New Mexico Endangered Plant Species Act; Executive Order 11990, "Protection of Wetlands"; Executive Order 11988, "Floodplain Management"; 10 CFR 1022: Compliance With Floodplain/Wetlands Environmental Review Requirements (DOE 1979, 0633); and DOE Order 5400.1, General Environmental Protection Program (DOE 1988, 0075).

Within OU 1086, 91 species of plants, 51 species of nesting birds, 24 species of wintering birds, 34 species of mammals, and 10 species of reptiles and amphibians have been identified. OU 1086 serves as an overwintering area for deer and elk. Other species that are known to occur on the site include a variety of small mammals (such as mice and coyotes).

A cultural resource survey has also been conducted at various areas in OU 1086, as required by the National Historic Preservation Act (amended).

Biological and cultural resources were extensively surveyed in the summer of 1992. Several threatened and endangered species were identified for which OU 1086 has a suitable ecology. Further, over 80 sites of cultural interest were located. For a summary of the results of these surveys, see Appendix E of the RFI Work Plan for OU 1086 (LANL 1993, 1037).

442-150005-0014

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3.0 APPROACH TO DATA ASSESSMENT AND ANALYSIS

Samples were collected, processed, and analyzed in accordance with the Environmental Restoration Quality Assurance/Quality Control (QA/QC) program presented in the Site-Specific Quality Assurance Project Plan (QAPjP), Annex II of the RFI Work Plan for OU 1086 (LANL 1993, 1987) and based upon the Los Alamos National Laboratory Environmental Restoration Program Generic QAPjP (LANL 1991, 0412). The data quality objectives for measured data given by the QAPjP are precision, accuracy, representativeness, sensitivity, completeness, and comparability.

Both analytical laboratory and field QA/QC samples are used to determine the usability of the data generated from the various analyses. These samples include, but are not limited to, laboratory blanks, duplicates (field and laboratory), blind and nonblind QC samples, surrogate spikes, matrix spikes, and internal laboratory samples. The information obtained from these samples provides measures of precision in the field (e.g., field duplicates) and of the accuracy of the laboratory analyses (e.g., percent recoveries and internal standards). The assessment of QA/QC samples and the potential effect these results may have on data usability were evaluated for each analytical report.

The QA/QC data associated with this investigation indicate that, with a few exceptions, sample analytical results are acceptable and defensible. The QA/QC measures were generally effective in ensuring the reliability of the data within the acceptable limits of sampling and analytical error.

3.1 Summary of QA/QC Activities

The QA/QC assessment of the sample analytical data associated with this investigation indicated that there were few problems with data quality. The QA/QC issues encountered in the analysis of the data for each PRS are summarized in Tables 3-1 through 3-8.

Prior to conducting the data assessment, the analytical data were validated with respect to the various QA/QC samples. Data were either unqualified, or qualified as either estimated undetected (UJ), estimated (J), or rejected (R). The data assessment process was designed to determine whether the usability of the data was affected by problems associated with the QA/QC procedures, e.g., contamination, bias due to percent recoveries outside control limits, or instrument reliability. For example, blank samples provide a measure of contamination that may have been introduced into a sample either in the field or in the laboratory.

TABLE 3-1
SUMMARY OF QUALITY CONTROL ISSUES FOR PRS 15-004(a,d)

Sample Number	Sample Type	Analytes	Quality Control Comments
AAB3358 AAB3362 AAB3386 AAB3387 AAB3388 AAB3394 AAB3395 AAB3396	Blind QC Sample	Aluminum Arsenic Beryllium Chromium Magnesium Nickel Thallium Vanadium	Data qualified as UJ or J. Arsenic recovers low by a factor of 5.5 relative to the nominal value for the QC sample. Low bias of arsenic indicates that arsenic may be at concentrations greater than background, and data are considered suspect. With the exception of arsenic, analyte recoveries low by a factor of 1.003 to 1.9 relative to the nominal value for the QC sample. Bias of all other analytes is not low enough to affect data usability and data are considered valid.
	Matrix Spike	Lead	Data qualified as J. Lead recovers high by a factor of 1.04 relative to the nominal value for the QC sample. Data valid.
		Uranium	Data qualified as J. Uranium recovers high by a factor of 1.05 relative to the nominal value for the QC sample. Data valid.
AAC0984 AAC0993 AAC0926	Blind QC Sample	Chromium	Data qualified as J. Chromium recovers low by a factor of 1.2 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
	N/A	Mercury	Data qualified as R. Recommended holding time exceeded.

Note: N/A = not applicable
 UJ = estimated undetected
 J = estimated
 R = rejected

TABLE 3-2
SUMMARY OF QUALITY CONTROL ISSUES FOR PRS 15-004(b,c)

Sample Number	Sample Type	Analytes	Quality Control Comments
AAB3349 AAB3365 AAB3367 AAB3371 AAB3372 AAB3376 AAB3497	Blind QC Sample	Aluminum Arsenic Chromium Magnesium Nickel Thallium Vanadium	Data qualified as UJ or J. Arsenic recovers low by a factor of 5.6 relative to the nominal value for the QC sample. Low bias of arsenic indicates that arsenic may be at concentrations greater than background, and data are considered suspect. With the exception of arsenic, analyte recoveries low by a factor of 1.003 to 1.9 relative to the nominal value for the QC sample. Bias of all other analytes is not low enough to affect data usability and data are considered valid.
		Beryllium Lead	Data qualified as J. Analyte recovers high by a factor of 1.04 or 1.05 relative to the nominal value for the QC sample. Data valid.
	Matrix Spike	Uranium	Data qualified as J. Uranium recovers high by a factor of 1.05 relative to the nominal value for the QC sample. Data valid.
AAB3351	Blind QC Sample	Magnesium	Data qualified as J. Magnesium recovers low by a factor of 1.4 or 1.9 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
		Arsenic	Data qualified as J. Arsenic recovers low by a factor of 5.6 relative to the nominal value for the QC sample. Low bias of arsenic indicates that arsenic may be at concentrations greater than background, and data are considered suspect.
	Matrix Spike	Uranium	Data qualified as J. Uranium recovers high by a factor of 1.05 relative to the nominal value for the QC sample. Data valid.
AAB3371	N/A	High Explosives	Data qualified as R. Recommended holding time exceeded.

Note: N/A = not applicable
 UJ = estimated undetected
 J = estimated
 R = rejected

TABLE 3-3
SUMMARY OF QUALITY CONTROL ISSUES FOR PRS 15-004(f)

Sample Number	Sample Type	Analytes	Quality Control Comments
AAB3320	N/A	Americium-241	Data qualified as J. Gamma emission characteristic of Am-241 close to those of Th-234. Large Thorium-234 may contribute to reported Americium-241 activity.
AAB3294* AAB3306 AAB3307 AAB3312 AAB3318 AAB3323 AAB3324 AAB3327 AAB3330 AAB3333 AAB3334 AAB3343 AAB3344 AAB3420 AAB3447 AAB3449 AAB3452 AAB3458 AAB3466 AAB3472 AAB3487 AAB3515* AAB3520 AAB3521 AAB3523 AAB3526 AAB3527	Matrix Spike	Antimony Barium Cadmium Manganese Mercury Selenium	Data qualified as R for antimony. Matrix spike recovery of antimony less than acceptable recovery for the QC sample. Data qualified as J for barium, cadmium, manganese, mercury, and selenium. Matrix spike recovery low by a factors ranging from 1.2 to 21.4 (cadmium) relative to the nominal value for QC sample. Low bias of cadmium indicates that cadmium may be at concentrations greater than SAL for two samples, and data for these samples (indicated by *) are considered suspect. Bias of barium, manganese, mercury, and selenium is not low enough to affect data usability and data are considered valid.
	Lab Duplicate	Calcium Chromium Copper Zinc	Data qualified as J. Laboratory duplicate analysis outside control window. Data estimated and considered valid.
AAC0336 AAB0346	Blind QC Sample	Chromium	Data qualified as J. Chromium recovers low by a factor of 1.1 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
AAB0326 AAB0327 AAC0334 AAC0336 AAB0346	N/A	Mercury	Data not qualified. Recommended holding time exceeded. Samples received at laboratory at temperatures greater than recommended. Data considered suspect and not usable.

TABLE 3-3
SUMMARY OF QUALITY CONTROL ISSUES FOR PRS 15-004(I)
 (continued)

Sample Number	Sample Type	Analytes	Quality Control Comments
AAB3294 AAB3420 AAB3447 AAB3449 AAB3466 AAB3520 AAB3523 AAB3526	Blind QC Sample	m-, o-, p- Nitrotoluene	Data qualified as UJ. Analyte recoveries low by factors ranging from 1.6 to 2 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
		Tetryl	Data qualified as R. Tetryl recovery below acceptable recovery for QC sample.
AAB3295 AAB3298 AAB3304 AAB3321 AAB3325 AAB3332 AAB3336 AAB3340 AAB3342 AAB3445 AAB3451 AAB3461 AAB3470 AAB3476 AAB3477 AAB3480 AAB3485 AAB3525	Blind QC Sample	Mercury	Data qualified as UJ or J. Mercury recoveries low by a factor of 1.02 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
		Vanadium	Data qualified as J. Vanadium recoveries high by a factor of 1.02 relative to the nominal value for the QC sample. Data valid.
AAB3304	Matrix Spike	Mercury	Data qualified as UJ or J. Mercury recoveries low by a factor of 1.02 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
		Vanadium	Data qualified as J. Vanadium recoveries high by a factor of 1.02 relative to the nominal value for the QC sample. Data valid.

TABLE 3-3
SUMMARY OF QUALITY CONTROL ISSUES FOR PRS 15-004(1)
 (concluded)

Sample Number	Sample Type	Analytes	Quality Control Comments
AAB3306 AAB3317 AAB3339 AAB3341 AAB345C AAB3528 AAC0346	N/A	Mercury	Data qualified as R. Recommended holding time exceeded.
	Blind QC Sample	Uranium	Data qualified as J. Uranium recovers low by a factor of 1.8 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
AAB3300 AAB3484	Matrix Spike	Uranium	Data qualified as J. Uranium recovers high by a factor of 1.13 relative to the nominal value for the QC sample. Data valid.
AAC0328 AAC0339 AAC0341 AAC0342	N/A	Mercury	Data qualified as UJ. Recommended holding time exceeded. Samples received at laboratory at concentrations greater than recommended. Data considered suspect and not usable.
	Blind QC Sample	Uranium	Data qualified as J. Uranium recovers low by a factor of 1.1 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
0215-9-5-0645	Laboratory Control	Aluminum Iron	Data qualified as J. Laboratory control sample recovers low by factors of 1.06 and 1.1. Bias is not low enough to affect data usability and data are considered valid.
		Antimony	Data qualified as J. Laboratory control sample recovers high by factors of 1.04. Data are valid.

Note: N/A = not applicable
 UJ = estimated undetected
 J = estimated
 R = rejected

TABLE 3-5
SUMMARY OF QUALITY CONTROL ISSUES FOR PRS 15-008(a)

Sample Number	Sample Type	Analytes	Quality Control Comments
AAB3329 AAB3483	N/A	Mercury	Data qualified as R. Recommended holding time exceeded.
AAB3329 AAB3483	Blind QC Sample	Nitrobenzene	Data qualified as UJ. Nitrobenzene recovers low by a factor of 4.1 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
AAB3331 AAB3516	Matrix Spike	Antimony Barium Cadmium Manganese Mercury Selenium	Data qualified as R for antimony. Matrix spike recovery of antimony less than acceptable recovery for the QC sample. Data qualified as J for barium, cadmium, manganese, mercury, and selenium. Matrix spike recovery low by factors ranging from 1.2 to 21.4 (cadmium) relative to the nominal value for the QC sample. Low bias of cadmium indicates that cadmium may be at concentrations greater than SAL, and data are considered suspect. Bias of barium, manganese, mercury, and selenium is not low enough to affect data usability and data are considered valid.
	Lab Duplicate	Calcium Chromium Copper	Data qualified as J. Laboratory duplicate analysis outside control window. Data valid.
	Blind QC Sample	Tetryl	Data qualified as R. Tetryl recovery below acceptable recovery for the QC sample.
AAB3473	Blind QC Sample	Mercury	Data qualified as UJ or J. Mercury recovers low by a factor of 1.02 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
AAB3473	Blind QC Sample	Vanadium	Data qualified as J. Vanadium recovery high by a factor of 1.02 relative to the nominal value for the QC sample. Data valid.

Note: N/A = not applicable
 UJ = estimated undetected
 J = estimated
 R = rejected

TABLE 3-6

SUMMARY OF QUALITY CONTROL ISSUES FOR PRS 15-008(b)

Sample Number	Sample Type	Analytes	Quality Control Comments
AAB3354 AAB3359 AAB3400 AAB3402 AAB3531	N/A	Mercury	Data qualified as R. Recommended holding time exceeded.
AAB3352 AAB3553 AAB3355 AAB3398 AAB3401 AAB3503 AAB3504 AAB3530	Blind QC Sample	Mercury	Data qualified as UJ or J. Mercury recoveries low by a factor of 1.02 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
AAB3355	Blind QC Sample	Vanadium	Data qualified as J. Vanadium recovery high by a factor of 1.02 relative to the nominal value for the QC sample. Data valid.
AAC0995	Blind QC Sample	Chromium	Data qualified as J. Chromium recovery low by a factor of 1.24 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.

Note: N/A = not applicable
 UJ = estimated undetected
 J = estimated
 R = rejected

TABLE 3-7
SUMMARY OF QUALITY CONTROL ISSUES FOR PRS 15-009(e)

Sample Number	Sample Type	Analytes	Quality Control Comments
AAB3499 AAB3500	Internal Standard	Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Di-n-octyl phthalate Dibenzo(a,h)anthracene	Data qualified as UJ. Internal standard low. Data biased low but considered valid.
	Matrix Spike	1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Naphthalene 1,2,4-Trichlorobenzene	Data qualified as UJ. Analyte recoveries low by factors ranging from 1.05 to of 1.3 relative to the nominal value for the QC sample. Bias is not low enough to affect data usability and data are considered valid.
	N/A	Mercury	Data qualified as R. Recommended holding time exceeded.
		Beryllium Lead	Data qualified as UJ or J. Recommended holding time exceeded by a few days. Data considered valid.

Note: N/A = not applicable
 UJ = estimated undetected
 J = estimated
 R = rejected

TABLE 3-8
SUMMARY OF QUALITY CONTROL ISSUES FOR PRS 15-009(J)

Sample Number	Sample Type	Analytes	Quality Control Comments
0215-95-0154	Laboratory Control	2-Amino-4,6-dinitrotoluene 4-Amino-2,6-dinitrotoluene m-Dinitrobenzene m-Nitrotoluene Nitrobenzene o-Nitrotoluene p-Nitrotoluene	Data qualified as UJ. Laboratory control sample recoveries low by factors ranging from 1.03 to 1.5. Bias is not low enough to affect data usability and data are considered valid.

Note: N/A = not applicable
UJ = estimated undetected
J = estimated
R = rejected

The laboratory QC samples (blinds, surrogates, laboratory control samples, matrix spikes, and internal standards) were used to determine whether analyte recovery was outside the control limits established for an analytical suite. The QA/QC assessment of the analytical data for this investigation found that these QC samples were occasionally above or below control limits for various analytes or analytical suites. As a result, the data associated with these types of QC samples were biased high or low and needed to be assessed to determine whether data usability was affected. For example, if the QA/QC data associated with an analyte were outside the control limits, it was necessary to determine whether the resulting bias may have caused the reported sample value to be greater than SALs. The data affected in this way are suspect because it was not possible to determine whether the analytical result was at a concentration of concern. In addition, data qualified as R were not incorporated into the data comparison due to QA/QC problems that made the sample values unusable.

3.1.1 Inorganic Analyses

For PRS 15-004(a,d) (Table 3-1), data usability was affected for some arsenic samples as a result of low percent recovery in the blind QC sample. These data indicate that arsenic may be at concentrations greater than background, and the data are considered suspect. However, arsenic is not considered to be present as a result of activities at this site. Mercury data for samples AAC0984, AAC0993, and AAC0926 were also unusable because the holding time was exceeded.

For PRS 15-004(b,c) (Table 3-2), data usability was affected for some arsenic samples as a result of low percent recovery in the blind QC sample. These data indicate that arsenic may be at concentrations greater than background, and the data are considered suspect. However, arsenic is not considered to be present as a result of activities at this site.

For PRS 15-004(f) (Table 3-3), data usability was affected for some antimony samples as a result of low percent recovery in the matrix spike. These data were unusable. Data usability was affected for two cadmium samples as a result of low percent recovery in the matrix spike. These data indicated that cadmium may be at concentrations greater than its SAL, and the data are considered suspect. Mercury data for twelve samples were also considered unusable because the holding time was exceeded.

For PRS 15-007(b) (Table 3-4), the inorganics that had QA/QC problems were qualified accordingly. Data usability was unaffected.

For PRS 15-008(a) (Table 3-5), data usability was affected for two cadmium samples as a result of low percent recovery in the matrix spike. These data indicate that cadmium may be at concentrations greater than its SAL, and the data are considered suspect. Data usability was affected for two antimony samples

as a result of low percent recovery in the blind QC sample. These data were unusable. Mercury data for two samples were also unusable because the holding time was exceeded.

For PRS 15-008(b) (Table 3-6), mercury data for five samples were unusable because the holding time was exceeded.

Only two samples in PRS 15-009(e) were affected by QA/QC problems (Table 3-7), and were qualified according to the uncertainty of the reported values. Two mercury samples were unusable as a result of exceeding holding times.

For PRS 15-009(j) (Table 3-8), data usability was unaffected.

No QA/QC problems were encountered with PRS 15-012(b).

3.1.2 Organic Analyses

Organic analysis was not conducted for PRS 15-004(a,d), PRS 15-004(b,c), PRS 15-004(f), or PRS 15-008(a). An organic PCB analysis was conducted for the two AOC 15-004 samples.

Some of the volatile and semivolatile organic data from PRS 15-007(b) were affected by QA/QC issues (Table 3-4). For the acid semivolatiles in three samples, data were unusable as a result of low surrogate recoveries.

Two samples from PRS 15-009(e) were affected by QA/QC issues (Table 3-7). Data usability was unaffected. QA/QC issues for PRS 15-009(j) are presented in Table 3-8. Data usability was unaffected. No QA/QC problems were encountered with PRS 15-012(b).

3.1.3 Radiochemistry Analyses

QA/QC examination of the radiochemistry data included identifying those analytes with concentrations reported within three times (3 sigma) the uncertainty of the results as nondetected. Those analytical results that were less than 3 sigma were considered to fall within the uncertainty of the radiochemistry counting statistic.

QA/QC issues were associated with percent recoveries of uranium in matrix spike and blind QC samples. Qualified data are presented in Table 3-1 through 3-8. Data usability was unaffected. There were no QC problems with PRS 15-012(b).

3.1.4 High Explosives Analyses

Holding times for approximately 90% of the high explosives (HE) samples in PRS 15-004(b,c) and PRS 15-004(f) were missed. However, no HE was detected in any samples, including the remaining 10% of the samples. In addition, field screening at all sites indicated that HE was not present. HEs were not analyzed for PRSs 15-004(a,d), PRS 15-007(b), or PRS 15-012(b).

3.2 Screening Assessment Methodology

3.2.1 Background Comparison

The initial screening assessment decision point is a comparison of analytical results with background soil concentrations. Analytes that occur naturally in soils (e.g., some metals) are statistically compared with concentrations measured in comparable uncontaminated soils. The method used is the hot measurement test, which is appropriate in an initial RFI screening assessment where a single high value can trigger further analysis. Each sample is compared with the upper tolerance limit (UTL), which is the 95% upper confidence limit for the 95th percentile of the background distribution (Ryti 1995).

Inorganics. The Laboratory's site-wide background database uses data from soil samples from exposed A, B, and C horizons at a variety of locations across Los Alamos County (Longmire et al. 1995, 1142). The soil horizon from which the environmental samples were collected is unknown. Therefore, background UTLs from all soil horizons were used in the data comparison for this report.

Radionuclides. The uranium data are reported as the total concentration detected in either $\mu\text{g/L}$ or $\mu\text{g/g}$. The Laboratory's site-wide background soil database includes measurement of total concentration of uranium. Background UTLs for all soil horizons were used for these comparisons. Other radionuclide results are reported by isotope in either pCi/L or pCi/g .

Organics. Comparison of the volatile organic compound (VOC), SVOC, and HE data to background could not be conducted because background data were not available for these analytes.

3.2.2 Screening Action Levels Comparison/Other Standards

The Laboratory has adopted the U.S. EPA's Region IX Preliminary Remediation Goals (PRGs) as soil SALs for comparative purposes. The PRGs are risk-based, media-specific action levels that are compared to maximum concentrations of an analyte in order to determine whether further evaluation of potential contamination is warranted. The SAL for lead in soil is derived from EPA guidance on establishing lead cleanup levels (LANL 1995, 1164). SALs for water are based on regulatory levels (e.g., maximum contaminant levels [MCLs] for surface water and groundwater), or are calculated using a risk-based methodology described in the proposed RCRA Subpart S, Corrective Action for Solid Waste Management Units (EPA 1990, 0432).

PRGs are calculated using the most current chemical-specific, route-specific toxicity values and default exposure parameters. They are based on average daily exposures that do not exceed those corresponding to target risk or hazard values (i.e., a cancer risk of 1 in a million for all Class A and B carcinogens, a cancer risk of 1 in 100,000 for all Class C carcinogens, and a hazard index of 1 for noncarcinogens). PRGs derived for carcinogenic constituents in soil are based on the assumption that a 70-kg adult is exposed to soil through inhalation of particulates and volatiles, incidental soil ingestion, and dermal exposure over a 70-year lifetime. SALs for noncarcinogenic constituents were calculated using the assumption that a 16-kg child is exposed (LANL 1995, 1164).

Neither RCRA nor the proposed Subpart S (EPA 1990, 0432) addresses radioactive constituents. To ensure that radioactive and nonradioactive compounds are addressed similarly, and to simplify integrating regulatory requirements for radioactive constituents, SALs for radioactive compounds were derived in a manner similar to that used for deriving action levels in the proposed Subpart S.

For radionuclides for which media-specific concentration limits are not specified in other regulations, the Laboratory has proposed SALs based on an annual dose of 10 mrem/year above background levels from a single radioactive constituent via all pathways (inhalation, ingestion, etc.) (LANL 1995, 1164).

3.2.2.1 Summary of Risk Screening Methodology

A screening assessment of potential risks to human health at a site is conducted for all analytes except those present at concentrations below detection limits. All detected analytes are considered COPCs. The assessment consists of three simple comparisons, after which each COPC either does not require further evaluation and is eliminated, or proceeds to the next comparison. Those constituents that remain of potential concern after the second comparison (with SALs) or after the third comparison (Multiple Chemical Evaluation [MCE]) are evaluated for subsequent actions, i.e., risk assessment or cleanup. A

detailed discussion of the screening assessment methodology is provided in the position paper entitled "Screening Assessment Methodology at Los Alamos National Laboratory" (LANL 1995a).

The first step in the screening assessment is the comparison of detected levels of analytes to background UTL concentrations. For analytes that occur naturally in soils (e.g., inorganics such as arsenic and beryllium), detected concentrations are compared to the background UTL for that analyte in Los Alamos County. Some of the metals analyzed as part of the analytical suite were not subjected to the data comparison because they were not considered to be COPCs at the sites investigated. If the detected value of an analyte is equal to or less than its background UTL, it is eliminated as a COPC. If the detected value of an analyte is greater than its background UTL, it is retained as a COPC and is submitted to the second step in the screening process. Those analytes that are detected but do not have background values are also subjected to the second step in the process.

The second step in the screening assessment is the comparison of detected concentrations with SALs. If the maximum detected concentration of an analyte is greater than the background UTL, the detected value is then compared with the SAL for that analyte. On the basis of this comparison, analytes are categorized as either equal to or exceeds SAL, below SAL, or no SAL, if a SAL value has not been calculated.

Chemicals that individually do not exceed their respective SALs but do exceed background UTLs (or detection limits if no UTLs are available) could, by virtue of combination, prove a potential risk to human health. To evaluate the potential risks posed by such combinations of analytes, a MCE is conducted whereby each analyte is categorized according to environmental medium (e.g., water or soil) and toxicological effects (i.e., radionuclide, carcinogen, or noncarcinogen). The maximum concentration value of each analyte in a given category is divided by the SAL for that analyte, and the resultant normalized values for all the analytes in a category are summed [*sum of the maximums* methodology; equation (1)]. If the sum is less than or equal to the target value of one, none of the analytes are considered to be COPCs. For a small site, if the sum is greater than one, the major contributors to the sum (i.e., those with SAL comparison ratios of 0.1 or more) are considered to be COPCs. For a larger site, if the sum is greater than one, a *maximum of sums* methodology is used [equation (2)], or, if appropriate, a preliminary risk assessment is conducted. If the MCE is conducted on the individual samples, each analyte is normalized as described previously and summed. If the sample sum is less than or equal to one, the analytes are eliminated as COPCs. If the sum is greater than one, the major contributors to the sum (i.e., those with SAL comparison ratios of 0.1 or more) are considered to be COPCs. This evaluation is used for screening purposes only and does not indicate a particular risk level.

The equations for calculating the appropriate normalized sum are

$$M = \sum(\max(C_{ij} / SAL)) \quad (\text{Equation 1})$$

where:

- M = sum of maximum normalized concentrations;
- i = COPC index;
- j = site index;
- C_{ij} = maximum concentration of COPC i at site j; and
- SAL = chemical-specific SAL for the ith COPC.

or

$$M = \max(\sum C_{ij} / SAL) \quad (\text{Equation 2})$$

where:

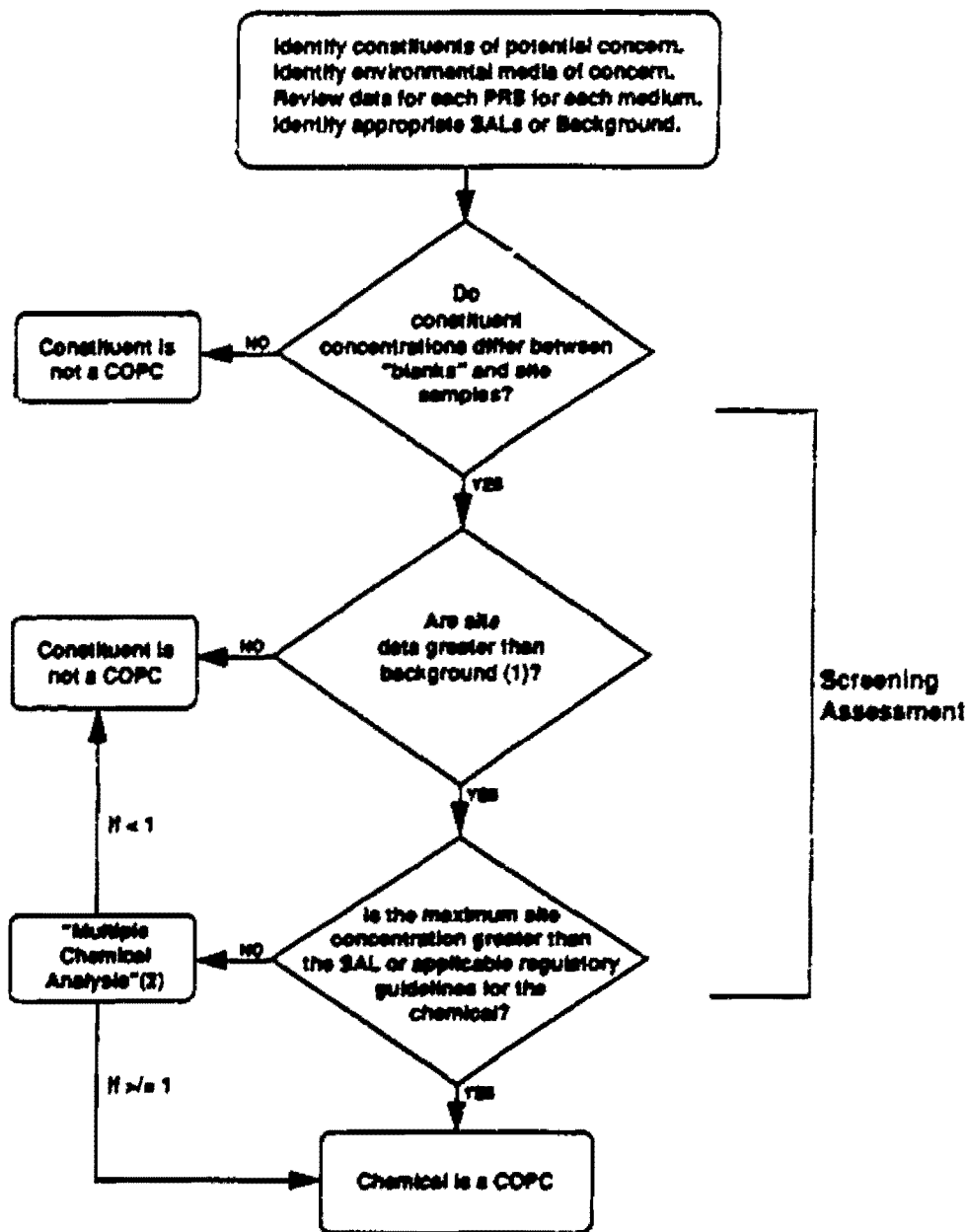
- M = maximum of the sum of normalized concentrations;
- i = COPC index;
- j = site index;
- C_{ij} = maximum concentration of COPC i in sample j; and
- SAL = chemical-specific SAL for the ith COPC.

For more information regarding this equation, see "Screening Assessment Methodology at Los Alamos National Laboratory" (LANL 1995a).

Figure 3-1 shows the decision logic used for the human health screening assessment.

3.2.3 Ecological Screening Assessment Methodology

The purpose of an ecotoxicological screening assessment is to determine whether chemicals should be retained as chemicals of potential ecotoxicological concern or eliminated from further consideration. The screening assessment is based on information collected during surveys conducted to evaluate the site for biological resources and sensitive habitats, site-specific information about exposure potential for ecological receptors, and chemical characterization results. Screening for ecotoxicological risk uses a phased approach wherein sites that have COPCs above background UTLs are evaluated for habitat quality, and then compared to Ecotoxicological Screening Action Levels (ESALs) if there is sufficient potential for exposure to ecological receptors. Figure 3-2 shows a flowchart of the decision logic embodied in the ecological screening assessment process. A detailed description of the screening



(1) Inorganics and metalloids are compared to LAMB, background concentrations and organics are compared with literature values (see ER Policy Papers: Making Comparisons with Natural Background Concentrations of Metals for the Los Alamos National Laboratory Environmental Restoration Project [Ryt, 1986]).

(2) Site data will be reviewed for multiple chemicals that are below SALs and above background.

Figure 3-1. Decision Logic for Human Health Screening

methodology is presented in Myers and Ferenbaugh, 1995. The methodology for determining ESALs is presented in Ebinger et al., 1994, in which ESALs are determined for birds, mammals, and reptiles based on body size and feeding habits.

If no COPCs remain after the screening process, NFA may be proposed. However, if sites cannot be eliminated from further consideration during the initial screening assessment, further investigation may be necessary.

To facilitate decision-making about individual PRSs, a model is used (Figure 3-3) to assign PRSs into groups that require no further action and into groups that should be subjected to ESAL-based screening. The potential for a PRS to contribute to the exposure of ecological receptors is evaluated by considering the general landscape conditions around the PRS and the habitat conditions at and immediately adjacent to the site. To evaluate exposure potential for ecological receptors, numerical rankings of landscape condition and of receptor accessibility are assigned to each PRS. When the two rankings are multiplied together, the high values indicate sites that are more likely to result in exposure to ecological receptors than those with lower scores.

HABITAT-BASED EXPOSURE RATING			
Receptor Access	Landscape Condition		
	1	2	3
0	NFA		
1	ESAL COMPARISON		
2			
3			

Figure 3-3. Habitat evaluation model for identifying PRSs that may be excluded from further consideration

3.2.3.1 Ranking of Landscape Condition and Receptor Accessibility to COPCs

The PRSs are embedded in landscapes having variable values for ecological receptors. The landscape condition score is an ordinal ranking of the ecological value of these landscapes. A PRS that lies within a highly disturbed landscape receives a lower score than one in a landscape with less extensive disturbances. Sites that are highly impacted by industrial development or are regularly disturbed by other human activities receive a score of one. Many TAs at the Laboratory fall into this category because much of the landscape is covered with buildings, roads, parking lots, and security fences. Many other PRSs at the Laboratory are in areas that are subject to disturbance from human activities. These sites receive a score of two, because the density of development and the frequency of disturbance are such that ecological receptors use the areas for portions of their life cycle. The boundaries of TAs or low-density

developments fall into this category. The final category of landscape condition pertains to areas where there is little or no human-caused disturbance or where the habitat has high ecological value, such as wetlands or other sensitive habitats. These areas receive a score of three. High scores may result in a recommendation for further investigation, whereas low scores may support proposing the PRS for NFA.

Each PRS also is given an ordinal score that reflects how accessible COPCs are to ecological receptors. Accessibility is evaluated based on whether ecological receptors have a reasonable potential for coming in contact with COPCs at the site and whether COPCs are likely to be transported away from the PRS. Receptor accessibility is judged by the habitat conditions immediately surrounding the PRS. Therefore, this measure is not completely independent of the landscape condition ranking. If the potential for access by receptors is highly unlikely, then the accessibility is scored as zero. If only current risk is considered, then contaminants buried below the zone of biological activity (depths > 5 ft) are scored as zero. Groundwater also does not represent a current ecotoxicological risk and is scored as zero. When the PRS or its associated affected media consist of small habitat patches within an industrial context, then the accessibility score is one. These patches are distinguished from those that follow by being completely surrounded by human structures (roads, fences, buildings, parking lots, etc.). A PRS will receive an accessibility ranking of two if there is access to open space. These areas are impacted by human activities, but some exposure to ecological receptors is likely. The final ranking value, three, is reserved for contamination of habitats of high ecological value or when the potential for COPC transport to other habitats is high (outfalls, for example). As with landscape condition, high scores may result in a recommendation for further investigation, whereas low scores may support a recommendation of NFA.

3.2.3.2 Comparison to ESALs

If the habitat model indicates that ecological exposures are likely, then ESALs are applied to each COPC. For COPCs that are below background UTLs, the UTL is used in place of the ESAL. Any COPC that has concentrations less than the minimum ESAL or UTL may be excluded from further consideration. Additional screening comparisons of the COPC values may be required before making decisions about recommendation of no further action, remedial actions, or Phase II sampling (see Section 3.3.2 below).

During the calculation of the ESALs, an uncertainty factor of 10-100 is incorporated into the equation to allow for extrapolation of toxicity data and other assumptions. If the Hazard Ratio (COPC value/ESAL) is equal to or only slightly greater than one, this factor can be taken into consideration in using the Hazard Ratio to make decisions. COPCs for which no ESAL exists, or for which the reporting limit exceeds the ESAL, should be retained as COPCs.

3.2.3.3 Ecological Risk Assessment Methodology

A second tier of ecotoxicological risk screening may be used to make decisions about a PRS. The screening criteria presented above are based on no-observable-adverse-effect toxicological criteria that may be more conservative than is desired. By substituting toxicological reference doses based on studies with reproduction and survival as endpoints (Opresko et al. 1994), a second tier of ESALs (ESAL2) were derived (following the methods of Ebinger et al., 1995). The ESAL2 values may be used to calculate hazard ratios to assist in making decisions about sites. Hazard ratios greater than one indicate that resident wildlife populations may be affected by a COPC. A final second-tier screening criteria that may be used to evaluate sites is the threshold for phytotoxicity (Phyto-ESAL) (Will and Suter 1994). The Phyto-ESALs also can be used to calculate hazard ratios such that hazard ratios greater than one indicate that some species of plants may be adversely affected by COPCs associated with the site.

COPCs that cannot be eliminated by the screening process will be evaluated by a more comprehensive ecological risk assessment for representative ecological receptors. The baseline ecological risk assessment incorporates the screening assessment results with other factors such as the actual amount of time that an animal spends on contaminated sites, the effects of multiple contaminant exposures over multiple sites, the disturbance effect of any remediation activities, and the effects that contaminant transport may have on future ecological risk. The spatial scale of the assessment conforms to some natural ecological unit that is defined by the ecological risk assessment endpoint. Within this framework (EPA 1992), each PRS within the exposure unit can be evaluated for its contribution to the overall ecological risk. Ecological risk assessment endpoints are being defined, and delineation of appropriate exposure units is in progress.

3.3 Risk Assessment Methodology

No human health risk assessments are presented in this report.

3.4 Development of Conclusions and Recommendations

Results from the field work were analyzed in a stepwise fashion. First, all fixed laboratory data was evaluated for usability, as outlined in Section 3.1. Data considered usable were then subjected to an initial screening assessment which involved comparison of analytical results with background soil concentrations, as described in Section 3.2.1. Results less than or equal to background are not considered COPCs, and are eliminated from further consideration.

A screening assessment of potential risks to human health at a site is conducted for all analytes except those present at concentrations below detection limits. The assessment consists of three simple

comparisons, after which each COPC either does not require further evaluation and is eliminated, or proceeds to the next comparison. Those constituents that remain of potential concern after the second comparison (with SALs) or after the third comparison (MCE) are evaluated for subsequent potential actions, i.e., risk assessment or cleanup. Analytes for which no SAL exists are conservatively retained as COPCs.

The nature and extent of contamination was analyzed by using field screening and fixed laboratory data in concert. The combination of field screening measurements and fixed-based laboratory measurements was used to make decisions regarding actions to take at the PRSs investigated. The conclusions and recommendations for each PRS are described in detail in Section 4. Field screening was used to bias samples sent for fixed laboratory analysis, as well as to determine the areal distribution of contamination. The fixed laboratory analysis was utilized to determine the quantitative nature of the contamination.

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4.0 SITE-SPECIFIC RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of sampling at the locations covered by this report was to determine whether any significant chemical, radioactive, or HE contamination could be found at TA-15.

The PRSs were identified based on research in the Laboratory archives, interviews with present and former employees, previously published reports such as the 1987 CEARP Report (DOE 1987, 0264) and the 1990 SWMU Report (LANL 1990, 0145), ground and aerial photos, onsite inspections, Health and Safety Division records, maps, structure and utility drawings, and engineering records. Much of this large body of data is now on file in the ER Program's Records Processing Facility (RPF).

This section presents the results of the site investigations, the conclusions that were drawn based on the data, and the recommendations for further actions for each PRS. The proposed actions for the following PRSs are listed in Table 4-1: 15-004(b,c) — Firing Site A-B; 15-004(a,d) — Firing Site C; 15-004(f), 15-008(a), 15-009(o), and AOC-15-004 — E-F Aggregate; 15-007(b) — Material Disposal Area (MDA)-Z; 15-008(b) — Surface Disposal Area at R-44; 15-012(b) — Operational Release; and 15-009(j) — Inactive Septic System.

TABLE 4-1

PROPOSED ACTIONS FOR TA-15

PRS	HSWA		NFA	Accelerated Cleanup		Further Investigation		Rationale
	YES	NO		VCA	EC	Phase II	CMS	
15-004(b)	X				X			Contaminants found require further action
15-004(c)	X		X					No RCRA contaminants found
15-004(a)	X		X					No RCRA contaminants found
15-004(d)		X	X					No RCRA contaminants found
15-004(i)	X				X			Contaminants found require further action
15-008(a)	X				X			Contaminants found require further action
15-009(e)	X			X				Contaminants found require further action
C-15-004		X	X					No RCRA contaminants found
15-007(b)	X				X			Contaminants found require further action
15-008(b)	X				X			Consider fully with Firing Site R-44, probable EC
15-012(b)	X				X			Contaminants found require further action
15-009(j)	X				X			Contaminants found require further action

Note: HSWA = PRS is listed in Hazardous and Solid Waste Amendments Module of the Laboratory's RCRA Permit
 NFA = no further action
 VCA = voluntary corrective action
 EC = expedited cleanup

4.1 PRS 15-004(b,c): Firing Site A-B

PRS 15-004(b,c) consists of two small, inactive firing sites located in the southwest part of TA-15 at one of the ten complexes scattered across the mesas of the Technical Area. Firing Sites A and B are in a flat, grassy meadow, respectively about 400 and 600 ft southeast of Building 15-183 (see Figure 1-3), not southwest as stated in the RFI Work Plan (LANL 1993, 1087).

Initial construction of the firing sites at TA-15, first called "R Site," was completed in 1944 during the Manhattan Project. Firing Site A, PRS 15-004(b), was first used in late 1944 and Firing Site B, PRS 15-004(c), shortly thereafter. The firing sites were 2000 ft south of the main TA-15 laboratory/office building, TA-15-40. Most of the experimental work was conducted at Firing Site A, where the sizes of the explosions were relatively small, using up to 50 pounds of HE. Firing Site B was used for larger shots. Firing Site A had a control bunker (TA-15-6) located about 100 ft northwest.

Firing Sites A and B were both in use until about 1953. Though they still appear on a 1957 site map, they were described there as no longer in use. A 1958 aerial photo shows that only a small area around each firing site had been visibly affected by the testing or by vegetation clearing. Control building TA-15-74 was listed as abandoned in 1962. Both it and bunker TA-15-14 were surveyed in 1965 prior to decommissioning and found to contain no detectable levels of either radioactive materials or HE (LANL 1993, 1087). Firing Sites A and B were decommissioned in 1967 and the surrounding land was regraded. No information is available regarding decommissioning of the other structures (LANL 1989, 0861).

Information regarding COPCs used at these firing sites is minimal, but suspected materials include natural uranium, beryllium, lead, and mercury in small quantities. Amounts of HE used in shots were said to be typically rather small, 10-20 pounds per shot, though a few larger shots were reported (LANL 1989, 0861).

4.1.1 Previous Investigations

An aerial radiological survey sensitive to gamma-emitting radionuclides was conducted in 1982 by EG&G (Fritzsche 1989, 10-0033), but no levels were detected above the background of 10 pCi/m^2 (approximately 100 pCi/g , assuming that the activity being measured is in the top centimeter of soil).

The discussion of SWMU 15-004 (firing sites) in the SWMU Report (LANL 1990, 0145) mentions that Firing Sites A and B were thought to have few residues left. Though the report discussed sampling previously done within the hazard radius of Firing Sites A and B, the locations were in areas subject to contamination from other sources than the firing sites.

Surface soil samples analyzed for the Sanitary Wastewater System Consolidation (SWSC) Project were collected in the area of this combined PRS in 1991. Gross alpha, beta, and gamma activity was at background levels for all samples, as were total beryllium and uranium concentrations. No SVOCs were detected, and Toxicity Characteristic Leaching Procedure (TCLP) test results for metals were below EPA guidelines (Fresquez 1991, 10-0003).

4.1.2 Field Investigation

Any contamination caused by tests at the two firing sites is expected to be commingled, not only because of the sites' proximity but also because of the surface disturbance caused by regrading of the area, a common practice after shots. Therefore, the two PRSs were sampled as one combined area. Upon this area, a 400-ft square grid with 100-ft spacing was laid out, centered on a position midway between the firing sites. Nineteen random grid intersections were chosen for surface soil screening in order to achieve a 95% confidence of detecting contamination above background occurring in at least 30% of the area.

For seven of the nineteen grid points, samples were collected of both surface soil (0-6 in. deep) and of subsurface soil (18-24 in. deep). Subsurface soil was sampled since regrading could have disturbed the original surface contamination. Bedrock is at a depth of approximately two ft. Surface soil was collected using a stainless steel spade or scoop according to LANL-ER-SOP-06.09, and subsurface soil was collected with a hand auger according to LANL-ER-SOP-06.10 (LANL 1993, 0875). Field screening samples were analyzed in the Chemical Science and Technology Division (CST)-3 mobile field labs for alpha, beta, and gamma radiation levels and for uranium, beryllium, and lead. This screening was done to find any "hotspots" to submit for full lab analyses. All samples were tested for HE with the HE Spot Test Kit, described in Section 1.3.3, with negative results (see LANL-ER-SOP-10.6; LANL 1992, 0875). Based on field screening results, ten of the samples were sent for fixed laboratory analysis for uranium, beryllium, mercury, and lead. VOCs and SVOCs were not expected at this PRS and were not included in analytical tests.

In order to more completely localize two hotspots north of Firing Site A detected on the 100-ft interval sampling grid, additional field sampling was conducted during the summer of 1995 around locations 15-2406 and 15-2401 and to the north and east of location 15-2401. The Spectrace 9000 Field-portable XRF instrument was used as described in LANL-ER-SOP-10.08 (LANL 1992, 0875). Seventy more soil samples were collected here and at additional points in the original grid area shown on Figure 1.3. The samples were analyzed locally and results were typically available in one day, allowing the sampling grid to be adjusted in spacing and direction as sampling proceeded in order to follow the pattern of lead contamination. Another lead hotspot was thus discovered north of the original 400-ft sampling grid (see Figure 4-1).

Lead Concentrations in Surface Soil (ppm) A-B Firing Site

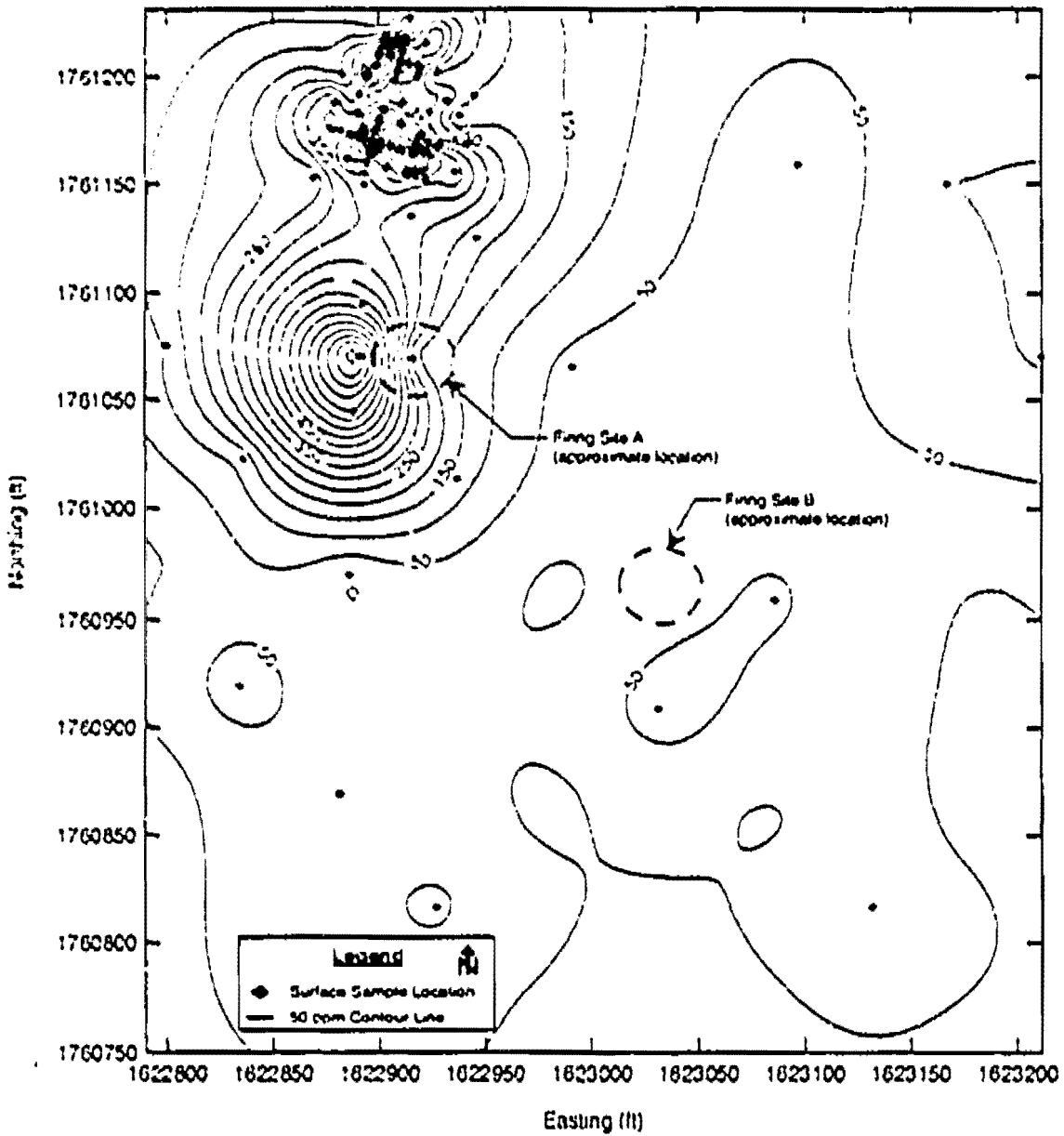


Figure 4-1. Lead Concentrations in Surface Soil (ppm) A-B Firing Site

4.1.2.1 Results of Field Surveys

A land survey was conducted to set grid points and sample locations using established survey monuments with coordinates published in the Laboratory Survey Procedures Manual (LANL 1993a). A Topcon GTS-3B Total Station was used to conduct the survey. The field notes were handwritten while in the field, then reduced and entered into an Autocad DCA computer system. All surveying data was prepared following the draft interim guidance on Geodetic Surveying for Townsite Operations (Vocke 1992).

4.1.2.2 Results of Field Screening

Surface soil screening samples collected during 1994 were analyzed in CST-3 mobile field labs for radiation levels and for uranium, beryllium, mercury, and lead concentrations. The screening samples chosen for fixed lab analysis were those with the highest levels of lead, since radioactivity levels and other metal concentrations did not significantly differ between samples. Results of the field screening are presented in Appendix D, and results from the fixed laboratory analysis are presented in Appendix A. Additional XRF field screening for lead was performed during summer 1995 to better define the areas of concern at A-B Site. These results are also presented in Appendix D. Two locations north of Firing Site A, 15-2401 and 15-2406, showed lead levels exceeding the PRG. An additional lead hotspot was discovered using the XRF method of soil analysis.

4.1.3 Screening Assessment

The QA/QC assessment of the data associated with the collected samples indicates that the analytical results were acceptable, except for eight samples in which arsenic may be present at concentrations greater than background and HE data that exceeded holding times. Arsenic is not considered to be present at the site as a result of site activities and is thus not considered in the screening assessment. HE data that exceeded holding times are not considered to affect the screening results (Section 3.1.4).

4.1.3.1 Comparison to Background/SALs

Inorganics. All inorganic COPCs detected in soil samples taken at Firing Site A-B were compared with their natural background UTLs.

- Lead was reported at concentrations over background in seven soil samples from Firing Site A-B. Two of the reported values are greater than the lead SAL; thus, lead is a COPC for this site.
- Barium, cadmium, copper, and mercury were observed at concentrations above their respective UTLs. These analytes were subjected to an MCE to determine any additive effects of concern

(see below). No other inorganics exceeded their background UTLs in soil samples from Firing Site A-B, and therefore they will not be considered COPCs.

Organics. Analyses for organic chemicals and HEs were not conducted on samples from Firing Site A-B.

Radionuclides. Radionuclides observed at Firing Site A-B were compared to their Laboratory background UTLs where available, and further to their respective SALs.

- Uranium was reported above its background UTL in six soil samples from Firing Site A-B. The highest recorded concentration is less than 15% of the total uranium SAL, so uranium, although elevated above background, will not continue to be considered a COPC for Firing Site A-B.
- No other radionuclides exceeded their background UTLs in soil samples from Firing Site A-B, and therefore they will not be considered COPCs.

The results from soil samples with concentrations exceeding background UTLs are presented in Table 4-2. The locations of samples with analyte values exceeding background UTLs are shown in Figure 4-2.

Multiple Chemical Evaluation. As discussed in Section 3.2.2, an MCE has been conducted on all inorganic and radionuclide chemicals observed above their respective background UTLs and below their respective SALs. For Firing Site A-B, only one radionuclide fits the criteria for inclusion in an MCE, so a radioactivity MCE was not conducted. Barium, cadmium, copper, and mercury are all non-carcinogenic chemicals, so they were included together in one MCE. The sum of the maximum normalized concentrations of these analytes is 0.5666, less than the target value of 1 (Table 4-3). Thus, the potential additive effects of these chemicals at Firing Site A-B are not of concern, and they will not be considered COPCs.

TABLE 4-2
FIRING SITE A-B PRS 15-004(b,c)

Major Analytes With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (Mg/Kg)	SAL (Mg/Kg)	UTL (Mg/Kg)	Depth (Inches)	> SAL
Barium	15-2401	AAB3367	1260	5300	315	0.5	
	15-2405	AAB3351	378			0.6	
	15-2406	AAC0997	1550			0.6	
	15-2407	AAB3371	558			0.6	
Cadmium	15-2401	AAB3367	5.3	38	2.7	0.5	
	15-2406	AAC0997	4.5			0.6	
Copper	15-2401	AAB3367	184	2800	30.7	0.5	
	15-2406	AAC0997	338			0.6	
	15-2407	AAB3371	56.1			0.6	
Lead	15-2401	AAB3365	37.6	400	23.3	18-24	X
	15-2401	AAB3367	782			0.5	
	15-2405	AAB3351	104			0.6	
	15-2406	AAC0997	921			0.6	
	15-2407	AAB3371	35.9			0.6	
	15-2407	AAB3372	37.7			18-24	
	15-2413	AAC0921	55.2			0.6	
	15-2416	AAB3497	28.3			0.6	
Mercury	15-2401	AAB3367	0.32	23	0.1	0.5	

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TABLE 4-2

FIRING SITE A-B PRS 15-004(b,c) (continued)

Radionuclides With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Uranium	15-2401	AAB3367	6.4	95	5.45	0.5	
	15-2405	AAB3351	6.3			0.6	
	15-2406	AAC0997	8.82			0.6	
	15-2407	AAB3371	20.8			0.6	
	15-2416	AAB3497	8.4			0.6	

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15-004(b,c) PRS

TABLE 4-3
MULTIPLE CHEMICAL EVALUATION - FIRING SITE A,B

Element	Normalized Concentration
Barium	0.2925
Cadmium	0.1395
Copper	0.1207
Mercury	0.0139
TOTAL	0.5666

4.1.3.2 Data Interpretation

Lead is the only COPC for Firing Site A-B. The initial sampling grid was positioned to include the area around the two PRSs, assuming that any COPCs would be radially dispersed around each firing site. Three lead hotspots were found in and beyond the northwest quadrant of the initial grid, revealing a different pattern that may be independent of the firing activities at these two PRSs.

Figure 4-1 shows contours of lead concentrations produced by computer-based Kriging of three sets of data. One set includes fixed lab results, the second includes chemistry van XRF results from 1994, and the third includes XRF results from 1995. The Kriged contours were linearly interpolated, smoothed, and plotted. Correlations between laboratory and XRF data are presented in Appendix C. The correlations were used to estimate laboratory values from XRF values for 1994 screening results. For 1995, analysis of PE samples revealed a constant low bias for lead; the 1995 XRF values were accordingly adjusted upward.

Extension of the XRF sampling northward has roughly bounded elevated lead concentrations. As shown in Figure 4-1, the hot spots are geographically nearer PRS 15-004(b) than 15-004(c).

Lead concentrations of up to 651, 885, and 1593 ppm for successively northward hotspots are revealed by XRF data. The highest value of lead discovered so far approaches 4 times the SAL and confirms the extent of lead on site at concentrations of potential concern.

4.1.3.3 Risk Assessment

A human health risk assessment will not be performed for Firing Site A-B.

4.1.3.4 Ecotoxicological Screening Assessment

Inorganics. All inorganic COPCs detected in soil samples taken at Firing Site A-B and exceeding their natural background UTLs (Section 4.1.3.1) were compared to ecotoxicological screening criteria (Table 4-4).

- Barium, cadmium, copper, lead, mercury, and uranium were observed at concentrations above ESALs. These inorganic COPCs also were compared to ESALs derived for reproduction/survival toxicological endpoints (ESAL2) and for toxicity to plants (phyto-ESAL).
- Cadmium and copper levels are up to 60 times the ESAL2 values. These analytes also exceeded the phyto-ESALs.
- The barium, lead, mercury, and uranium sample results contain some values that exceed the ESAL2 value by more than 100 times.

Organics. Analyses for organic chemicals and HEs were not conducted on samples from Firing Site A-B.

4.1.4 Conclusions and Recommendations

Additional field XRF screening in the vicinity of the three lead hotspots north of PRS 15-004(b) during 1995 has defined the extent of soil contamination, which seems to affect only small patches of surface soil north and west of PRS 15-004(b) (Firing Site A). Since COPC concentrations in other locations sampled are significantly below GALs, widespread cleanup of the combined PRSs is unwarranted. For these reasons, recommendations for PRSs 15-004(b) and (c) are made separately. An EC is proposed for PRS 15-004(b) (Firing Site A), whereas NFA is proposed for PRS 15-004(c) (Firing Site B).

Surface soils at Firing Site A-B contain barium, cadmium, copper, lead, mercury, and uranium levels that exceed screening criteria for reproductive and survival effects on vertebrates. Phytotoxicity criteria also were exceeded, and the size of the area is large enough that some individual animals may spend significant portions of their life cycle in contact with COPCs associated with the site. The proximity of the site to related sites also may contribute to cumulative adverse effects over the area. The significance that these COPCs hold for the long-term persistence of resident plant and animal populations cannot be adequately assessed in a screening assessment and must be addressed in a baseline ecological risk assessment.

TABLE 4-4
COMPARISONS OF ESALS WITH DATA FROM FIRING SITE A,B [PRS 15-004(b,c)]

Inorganic Analytes Greater Than Background

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Barium	AAB3351		378	mg/kg	315	0.0912	2.1888	500.0
	AAB3371		558	mg/kg	315	0.0912	2.1888	500.0
	AAB3367	0.5	1260	mg/kg	315	0.0912	2.1888	500.0
	AAC0997	0.6	1550	mg/kg	315	0.0912	2.1888	500.0
Cadmium	AAC0997	0.6	4.5	mg/kg	2.7	0.0022	0.0836	3.0
	AAB3367	0.5	5.7	mg/kg	2.7	0.0022	0.0836	3.0
Copper	AAB3371	0.6	56.1	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3367	0.5	184	mg/kg	30.7	0.0161	5.0778	60.0
	AAC0997	0.6	338	mg/kg	30.7	0.0161	5.0778	60.0
Lead	AAB3497		28.3	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3371		35.9	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3372		37.7	mg/kg	23.3	0.3910	1.6813	50.0
	AAC0921	0.6	55.2	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3351	0.6	104	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3367	0.5	782	mg/kg	23.3	0.3910	1.6813	50.0
	AAC0997	0.6	921	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3367	0.5	0.32	mg/kg	0.1	0.1390	0.0028	0.3
Mercury	AAB3351	0.6	6.3	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3367	0.6	6.4	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3497	0.6	8.4	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0997	0.6	8.82	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3371	0.6	16.9	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3371	0.6	20.8	mg/kg	5.45	0.1216	0.1338	5.0
	Uranium	AAB3371	0.6	20.8	mg/kg	5.45	0.1216	0.1338

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4.1.5 Further Investigations

An NFA is proposed for PRS 15-004(c). An EC will be conducted to reduce or eliminate the risk to human health from PRS 15-004(b). The EC plan will be submitted to the U.S. EPA, Region 6, for review, and to the Department of Energy (DOE) Los Alamos Area Office (LAO) for concurrence, before conducting the cleanup.

4.2 PRS 15-004(a,d) Firing Site C

Firing Site C was located at the "Y" of the road leading from the main TA-15 headquarters buildings to E-F Site and to I-J Site in TA-36. The x-unit (instrumental bunker), TA-15-35, was at ground level and partially covered with a berm. Explosions were conducted within 25 ft of the x-unit.

The firing platforms [PRS 15-004(a,d)] were concrete slabs at Firing Site C (ENG-C 12819, 1944, 10-0029), which were removed by 1947 (ENG-R 5110, 1983, 10-0022).

Firing Site C was in use from 1945 to perhaps 1948. A 1949 report (LASL 1949, 10-0047) does not mention C; thus, operations had probably been discontinued by that date. No written documentation on decommissioning has been found other than ENG-R 5110 (1983, 10-0022), where Firing Site C's x-unit was listed as having been removed in 1967 and the area regraded (LANL 1993, 1087).

4.2.1 Previous investigations

An aerial radiological survey conducted in 1982 did not detect any radionuclides around Firing Site C (Fritzsche 1989, 10-0033). A surface sample (PF-15C) was taken in the vicinity of the removed x-unit as part of the SWSC (Fresquez 1991, 10-0003). Gross alpha, beta, and gamma activity was at background levels, TCLP metals were below EPA guidelines, and no SVOCs were detected. Total beryllium and uranium levels were at approximately background levels.

4.2.2 Field Investigations

The objectives of the Phase I sampling were to determine the extent, concentration, and depth profile of any COPCs at this site. Twenty-eight sampling locations were selected according to the RFI Work Plan for OU 1086 (LANL 1993, 1087). Figure 1-4 shows the sample locations. Prior to sampling, all surface locations were screened for the presence of HEs with the HE spot test.

Samples were obtained from the surface (0-6 in) and subsurface (18-24 in) using the spade and scoop technique and hand auguring, respectively (LANL-ER-SOP 6.09 and 6.10; LANL 1993, 0875). All

samples collected were sent to the mobile radioanalysis van, then to the mobile chemistry van for XRF. LIBS was used to determine beryllium content. Samples for fixed laboratory analysis were selected based on these results.

4.2.2.1 Results of Field Surveys

A land survey was conducted to set grid points and sample locations using established survey monuments with coordinates published in the Laboratory Survey Procedures Manual (LANL 1993a). A Topcon GTS-3B Total Station was used to conduct the survey. The field notes were handwritten while in the field, then reduced and entered into an Autocad DCA computer system. All surveying data was prepared following the draft interim guidance on Geodetic Surveying for Townsite Operations (Vocke 1992).

4.2.2.2 Results of Field Screening

Field screening was performed to determine potential hazards, to establish health and safety conditions for on-site workers, and to screen samples for metals prior to choosing samples for fixed laboratory analysis. Portable field instruments for detecting alpha-, beta-, and gamma emitters were used to screen for gross alpha and gross beta/gamma. All samples were submitted to the mobile radioanalysis van for gross alpha, beta, and gamma screening. An XRF analyzer was used to screen samples for metals (Hg, Pb, and U). A portable LIBS instrument was used to screen the soil samples for Be.

All sampling locations were screened for HE using a field spot-test kit. The spot test revealed no samples positive for HE.

Appendix D presents results of the field screening for metals and radioactivity at the twenty-eight sample locations. Appendix A presents the results of the laboratory analysis.

4.2.3 Screening Assessment Results for Firing Site C (15-004(a,d))

Samples were collected from points on a grid that formed a rectangle around Firing Site C (15-004(a,d)). This area overlaps the northwest corner of the sampling grid for the E-F complex (15-004(f)). The three E-F grid points that were contained within the sampling rectangle of Firing Site C were included in the analyses of Firing Site C. Surface samples were collected at all locations and subsurface (18-24 in.) samples were taken at four locations. Based on the results of the field screening, nine sampling locations were selected for fixed laboratory analyses.

Appendix A presents the analytical results used in the screening assessment, showing a summary of samples collected and analyses performed, summaries of analyses performed for non-detected analytes, and specific data for all detected analytes.

The QA/QC assessment of the data associated with the collected samples indicates that the analytical results were acceptable, except for three mercury samples which were qualified as R, eight arsenic samples that may be present at concentrations greater than background, and HE data that exceeded holding times. Arsenic is not considered to be present at the site as a result of site activities, and is thus not included in the screening assessment. Data qualified as R are not used in the screening assessment.

4.2.3.1 Comparison to Background and SALs

Inorganics. All inorganic COPCs detected in soil samples taken at Firing Site C were compared with their natural background UTLs.

- Copper was observed above its UTL in only two samples. The reported values are well below the copper SAL, but were subjected to an MCE to determine any additive effects of concern (see below).
- Lead was reported at levels of slight elevation over background in seven soil samples from Firing Site C. The reported values are all significantly less than the lead SAL and was subjected to an MCE to determine any additive effects of concern (see below).
- One sample has a mercury value recorded that is greater than the UTL, but is only about 10% of the mercury SAL; it was subjected to an MCE to determine any additive effects of concern (see below).
- One sample has a nickel value recorded that is greater than the UTL, but is only about 1% of the nickel SAL; it was subjected to an MCE to determine any additive effects of concern (see below).
- No other inorganics exceeded their background UTLs in soil samples from Firing Site C, and therefore they will not be considered COPCs.

Organics. Analyses for organic chemicals and HEs were not conducted on samples from Firing Site C.

Radionuclides. Radionuclides observed at Firing Site C were compared to their Laboratory background UTLs where available, and further to their respective SALs.

- Uranium was reported above its background UTL in all surface soil samples (as well as in some subsurface samples) from Firing Site C. One sample also reported U-235 above background. Further comparison of uranium and U-235 with their SALs clarifies that the levels observed are

below the SALs. Therefore, uranium, although elevated above background, will not continue to be considered a COPC for Firing Site C.

- No other radionuclides exceeded their background UTLs in soil samples from Firing Site C, and therefore they will not be considered COPCs.

The results from soil samples with concentrations exceeding background UTLs are presented in Table 4-5. The locations of samples with analyte values exceeding background UTLs are shown in Figure 4-3.

Multiple Chemical Evaluation. As discussed in Section 3.2.2, a multiple chemical evaluation has been conducted on all inorganic and radionuclide chemicals observed above their respective background UTLs and below their respective SALs, as well as on all detected organic chemicals. For Firing Site C, only one radionuclide fits the criteria for inclusion in an MCE, so a radioactivity MCE was not conducted.

Copper, lead, and mercury are all non-carcinogenic chemicals, so they were included together in one MCE. The sum of the maximum normalized concentrations of these analytes is 0.1676, less than the target value of 1 (Table 4-6). Thus, the potential additive effects of these chemicals at Firing Site C are not of concern and they will not be considered COPCs.

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TABLE 4-5
FIRING SITE C PRS 15-004(a,d)

Heavy Metals Analytes With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Copper	15-2263	AAC0926	62.2	2800	30.7	0.6	
Lead	15-2253	AAB3388	24.9	400	23.3	0.6	
	15-2263	AAC0926	40			0.6	
	15-2264	AAB3386	25.1			0.6	
	15-2268	AAB3387	42.3			0.6	
	15-2281	AAC0984	32.4			0.6	
Mercury	15-2112	AAB3461	0.27	23	0.1	0.6	
Nickel	15-2263	AAC0926	19	1500	15.2	0.6	

Radionuclides With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Uranium	15-2101	AAB3317	45.6	95	5.45	0.6	
	15-2253	AAB3388	24.7			0.6	
	15-2255	AAC0993	6.75			0.6	
	15-2257	AAB3358	32.6			0.6	
	15-2263	AAC0926	29.2			0.6	
	15-2264	AAB3386	21.7			0.6	
	15-2268	AAB3387	36.9			0.6	
	15-2275	AAB3493	9.8			0.4	
	15-2276	AAB3494	9.3			0.6	
	15-2281	AAC0984	6.4			0.6	

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TABLE 4-5

FIRING SITE C PRS 15-004(a,d) (continued)

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (pci/g)	UTL (pci/g)	Depth (Inches)	> SAL
Uranium-235	15-2101	AAB3317	0.4029	10	0.084	0.6	

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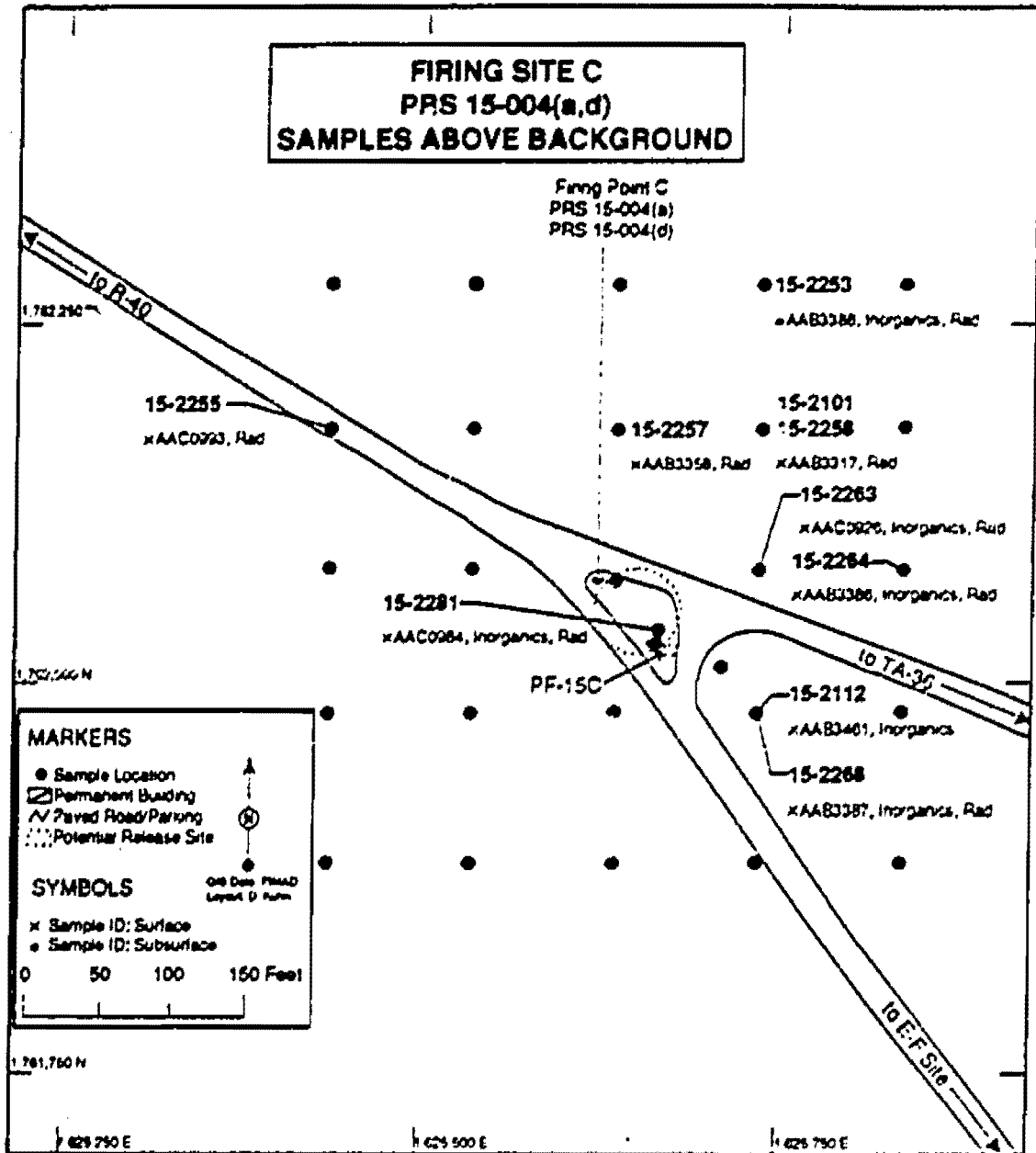


Figure 4-3. Locations of samples above background

TABLE 4-6
MULTIPLE CHEMICAL EVALUATION - FIRING SITE C

Soil Non-Hazardous Metals	Normalized Concentration
Copper	0.0222
Lead	0.1213
Mercury	0.0117
Nickel	0.0124
TOTAL	0.1676

4.2.3.2 Data Interpretation

The data for Firing Site C was collected in a grid pattern around the Firing Site. It is expected that the area covered by the grid should contain any remaining contamination from the use of this firing site. The data show elevated levels of copper, lead, mercury and uranium, but none at levels of concern for human health. There are no COPCs for this site.

4.2.3.3 Human Health Risk Assessment

A human health risk assessment will not be performed for Firing Site C.

4.2.3.4 Ecotoxicological Screening Assessment

Inorganics. All inorganic COPCs detected in soil samples taken at Firing Site C and exceeding their natural background UTLs (Section 4.2.3.1) were compared to ecotoxicological screening criteria (Table 4-7).

- Copper, lead, nickel, and uranium were observed at concentrations above ESALs. These inorganic COPCs also were compared to ESALs derived for reproduction/survival toxicological endpoints (ESAL2) and for toxicity to plants (phyto-ESAL).
- Copper and nickel were detected in only one sample. The measured nickel concentration is below the ESAL2 and phyto-ESAL criteria. The copper concentration is 12 times the ESAL2 criteria and only slightly above the phytotoxicity criteria.
- Lead levels are 15-25 times the ESAL2 criteria but are below the phyto-ESAL.
- The ESAL2 criteria are exceeded by uranium results by a factor of 53-303. The phyto-ESAL for uranium is also exceeded by the soil data.

Organics. Analyses for organic chemicals and HEs were not conducted on samples from Firing Site C.

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TABLE 4-7
COMPARISONS OF ESALS WITH DATA FROM FIRING SITE C, PRS 15-004(a,d).

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Copper	AAC0926	0-6	62.2	mg/kg	30.7	0.0161	5.0778	60.0
Lead	AAB3365		37.6	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3386		25.1	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3387	0-6	42.3	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3388		24.9	mg/kg	23.3	0.3910	1.6813	50.0
	AAC0926	0-6	40	mg/kg	23.3	0.3910	1.6813	50.0
	AAC0984		32.4	mg/kg	23.3	0.3910	1.6813	50.0
Nickel	AAC0926		18.6	mg/kg	15.2	2.1720	17.3760	25.0
Uranium	AAB3358		32.6	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3386		21.7	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3387		36.9	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3388		24.7	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3493	0-4	9.7	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3493	0-4	9.8	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3494	0-6	9.3	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0926	0-6	26.1	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0926	0-6	29.2	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0984	0-6	6.4	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0993	0-6	6.75	mg/kg	5.45	0.1216	0.1338	5.0

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4.2.4 Conclusions and Recommendations

15-004(a,d) is an inactive firing site with no COPCs based on human health concerns. No further action is proposed for this site based on human health screening.

Surface soils at Firing Site C contain lead and uranium levels that exceed screening criteria for reproductive and survival effects on vertebrates. Phytotoxicity criteria also were exceeded to a lesser degree. The size of the area is large enough that some individual animals may spend significant portions of their life cycle in contact with COPCs associated with the site, and the proximity of related sites may contribute to cumulative adverse effects. The significance that these COPCs hold for the long-term persistence of resident plant and animal populations cannot be adequately assessed in a PRS-specific screening assessment and must be addressed in a baseline ecological risk assessment.

4.2.5 Further Investigations

No further investigations are proposed for Firing Site C.

4.3 E-F Aggregate (15-004(f), 15-008(a), 15-009(e), C-15-004)

Firing Site E-F, located on TA-15, has been the most extensively used firing site at the Laboratory, in terms of both continuing length of use and quantities of uranium expended. E-F Site was established in 1947 for tests using up to 2500 pounds of explosives, and was used frequently through 1973. The site was last used in 1981. This is a large area; the sampling plan covered about 60 acres.

Initially, natural uranium metal was used in the devices that were tested. Between 1945 and 1957, an estimated 48 tons was expended on E-F Site. After 1957, approximately 22 tons of depleted uranium (DU) was expended (Venable 1990, 10-0010).

Firing Sites E and F were originally depressions in the soil. As tests were conducted, either the soil was regraded to level the disturbed earth, or new gravel was brought in to fill depressions. Eventually, nearby soil was mounded to the north and south of Firing Site E to protect some TA-15 buildings. Explosions were carried out between the mounds, which reduced the potential for shrapnel to be propelled in the direction of the buildings.

4.3.1 Previous Investigations

During the 1962 aerial radiological survey (Fritzsche 1989, 10-0033), the main gamma rays detected from the soils of TA-15 were the 765 and 1000 keV gamma rays attributable to Pa-234m, a daughter product in

the decay chain of U-238. E-F Site was discernible as one of three areas of increased activities of Pa-234m.

Firing Site E-F has been extensively studied in the past (Hansen and Miera 1976, 0769; Miera et al. 1980, 10-0045; Hansen and Miera 1977, 0128). Uranium concentrations recorded in these prior investigations ranged from less than 200 mg/kg to 4500 mg/kg at the Firing Site. White et al. (1990, 0771) have worked with these data to provide isopleths for various uranium concentrations across E-F Site.

4.3.2 Field Investigations

The objectives of the Phase I sampling were to determine the extent, concentration, and depth profile of any COPCs at this site. Ninety-four sampling locations were selected according to the RFI Work Plan for OU 1086 (LANL 1993, 1087). Figures 1-5 through 1-7 show these sample locations. Prior to sampling, all surface locations were screened for the presence of HEs with the HE spot test.

Samples were obtained from the surface (0-6 in) and/or subsurface or refusal (18-24 in) using the spade and scoop technique and hand auguring, respectively (LANL-ER-SOP 6.09 and 6.10; LANL 1993, 0875). All samples collected were sent to the mobile radioanalysis van, then to the mobile chemistry van for XRF. LIBS was used to determine beryllium content. Samples for fixed laboratory analysis were selected based on these results.

4.3.2.1 Results of Field Surveys

A land survey was conducted to set grid points and sample locations using established survey monuments with coordinates published in the Laboratory Survey Procedures Manual (LANL 1993a). A Topcon GTS-3B Total Station was used to conduct the survey. The field notes were handwritten while in the field, then reduced and entered into an Autocad DCA computer system. All surveying data was prepared following the draft interim guidance on Geodetic Surveying for Townsite Operations (Vocke 1992). A few of the surveyed grid points had to be moved slightly to accommodate the roadway and the Ector Firing Site (R-306) active HE region. Several of the southern grid samples were not surveyed or collected because they were over the edge of the mesa in a steep canyon and were inaccessible. (Because of the steepness of the canyon walls, no accumulation was expected.)

4.3.2.2 Results of Field Screening

Field screening was performed to determine potential hazards, to establish health and safety conditions for on-site workers, and to screen samples for metals prior to choosing samples for fixed laboratory analysis. Portable field instruments for detecting alpha-, beta-, and gamma emitters were used to screen

for gross alpha and gross beta/gamma. All samples were submitted to the mobile radioanalysis van for gross alpha, beta, and gamma screening. An XRF analyzer was used to screen samples for metals (mercury, lead, and uranium). A portable LIBS instrument was used to screen the soil samples for beryllium.

All sampling locations were screened for HE using a field spot-test kit. The spot test revealed no samples positive for HE.

Appendix D presents results of the field screening for metals and radioactivity at the ninety-four sample locations. Appendix A presents the results of the laboratory analysis.

4.3.3 Screening Assessment

The grid that was surveyed in for sampling E-F Site covers an area of approximately 60 acres. It includes Firing Site C in its northwestern corner, contains all of surface disposal area 15-008(a) within its southern boundaries, and envelops both septic tank 15-009(e) and the former transformer station, AOC 15-004.

Firing Site C is addressed in Section 4.2 of this report; thus it will not be included in E-F Aggregate as a PRS of interest. However, because Firing Site C overlaps entirely with the northwestern corner of E-F Site, the data from C Site is used to further characterize potential releases from E-F Site.

The sampling locations for surface disposal area 15-008(a) are located within the E-F aggregate grid sampling area. Samples were taken along the drainage into Potrillo Canyon on the southern edge of the E-F aggregate. One E-F aggregate grid point and three additional E-F sampling locations were closely located with the 15-008(a) samples. Due to the spatial integration of 15-008(a) with 15-004(f), it is expedient and logical to consider them concurrently.

Because 15-009(e) is an enclosed septic tank from which sludge samples were collected, it will be considered separately from the rest of E-F Aggregate.

The former transformer station, AOC 15-004, had only two samples taken. These samples were analyzed exclusively for PCBs, as these were the only potential chemicals of concern. The disposition of this PRS will therefore be considered separately from E-F Site because it has the only organic analyses (excepting HE), and will not be affected by the surrounding inorganic and radioactivity data.

The QA/QC assessment of the data associated with the collected samples indicates that the analytical results were acceptable except for twenty-seven antimony samples and ten mercury samples that were considered unusable, two cadmium samples that may be present at concentrations greater than its SAL.

15-008(a) 15-009(e) 15-004(f)

and HE data that exceeded holding time. Although the low bias of two cadmium samples indicates that cadmium may be present above its SAL, the majority of other sample results show that cadmium is below its SAL. Thus the very low bias (i.e., a factor of 21.4) for these two samples with QA/QC problems is not considered to be indicative of cadmium concentrations at the site, and the data are not considered in the screening assessment. HE data that exceeded holding times are also not considered to affect the screening results (Section 3.1.4). Data considered unusable are not used in the screening assessment.

4.3.3.1 Comparison to Background/SALs

Inorganics. All inorganic COPCs detected in soil samples taken at E-F Aggregate were compared with their natural background UTLs. Water samples taken from the septic tank at 15-009(e) were compared only to SALs, as UTLs are not available for water.

- The water sample from septic tank 15-009(e) was analyzed for beryllium, lead, and mercury. Lead was reported at a concentration of 462 µg/L, exceeding the lead SAL of 50 µg/L. Lead is retained as a COPC for the septic tank. Beryllium and mercury were reported only at concentrations below their respective SALs. Because only one carcinogen (beryllium) and one noncarcinogen (mercury) were below their SALs, no MCE was conducted for PFS 15-009(e).
- Beryllium concentrations over Laboratory background UTLs were reported for six samples. Natural background levels of beryllium in the Los Alamos area exceed the risk-based threshold that would otherwise be used as a screening value, so comparison with background is used to determine the presence of beryllium as a COPC. Further statistical tests show that beryllium levels are slightly elevated over natural background; thus, beryllium will continue to be considered a COPC for E-F Aggregate.
- Antimony, barium, cadmium, chromium, lead, mercury, nickel, silver, vanadium and zinc were observed above their UTLs in some samples. Further comparison of these analytes to their SALs clarifies that the levels observed are below SALs. Thus, these analytes were subjected to an MCE to determine any additive effects of concern (see below).
- Manganese concentrations over Laboratory background UTLs were reported for two samples. Natural background levels of manganese in the Los Alamos area exceed the risk-based threshold that would otherwise be used as a screening value, so comparison with background is used to determine the presence of manganese as a COPC. Further statistical tests confirm the presence of manganese over natural Los Alamos background; thus, manganese will continue to be considered a COPC for the E-F Aggregate.
- Copper was reported at levels of slight elevation over background, but below the SAL, in soil samples from Firing Site E-F. In the samples associated with PFS 15-008(a), copper was

reported at concentrations in exceedance of the SAL. Therefore, copper will continue to be considered a COPC for E-F Aggregate.

- No other inorganics exceeded their background UTLs in soil samples from E-F Aggregate, and therefore they will not be considered COPCs.

Organics. The two samples taken below the former transformer location at AOC 15-004 were analyzed for PCBs, and twenty other samples from E-F Aggregate were analyzed for HE. No PCBs or HE were detected at E-F Aggregate.

Radionuclides. Radionuclides observed at E-F Aggregate were compared to their Laboratory background UTLs where available, and further to their respective SALs.

Most of the radioisotopes that were reported through the gamma spectroscopy analyses are either within normal background or noise level, or are decay products of uranium (e.g., protactinium-234m), which is known to be prevalent at E-F site. Only those isotopes whose radioactivity is not factored into the SAL for uranium, or for which the data suggests that the reported values are outside normal background, will be considered in this screening assessment.

- Uranium is reported above the Los Alamos natural background UTL in every surface soil sample from E-F Aggregate. Two-thirds of the subsurface samples had reported concentrations above the background UTL. Analysis of the small amount of isotopic uranium data reported for E-F Site shows that the type of uranium in the soil at this site is most likely natural and not depleted. Comparison of these data to the natural uranium SAL clarifies that twenty-nine samples have reported concentrations greater than the SAL. Uranium is a COPC for E-F Aggregate. Amongst the isotopic analyses, U-234, U-235 and U-238 all exceed their individual background UTLs and their respective SALs.
- Protactinium-234m and thorium-234 were reported at high levels in the E-F Aggregate data. These radionuclides have half-lives of one minute or less. These radionuclides cannot be associated with historical releases at E-F Site unless they are daughter products of longer-lived radionuclides. Both protactinium-234m and thorium-234 are decay products of uranium, and thus expected to be present. Only longer-lived radionuclides associated with process activities at this site are evaluated in this report. Therefore, further evaluation of these radionuclides will not be performed.
- Americium-241 and cesium-137 were detected in samples at E-F Aggregate. Further comparison of the reported concentrations of these analytes with their SALs indicates that they are not present at levels of concern. They will not be considered COPCs for this site, unless a potentially unacceptable risk were implied by the results of an MCE conducted on these radionuclides.

The results from soil samples with concentrations exceeding background UTLs are presented in Tables 4-8 through 4-10. The locations of samples with analyte values exceeding background UTLs are shown in Figures 4-4 through 4-6.

Multiple Chemical Evaluation. As discussed in Section 3.2.2, an MCE has been conducted on all inorganic and radionuclide chemicals observed above their respective background UTLs and below their respective SALs. The MCEs were conducted separately for radionuclides, carcinogenic chemicals, and non-carcinogenic chemicals.

Antimony, barium, cadmium, chromium, lead, mercury, nickel, silver, vanadium and zinc are all non-carcinogenic chemicals, so they were included together in an MCE. The sum of the maximum normalized values of these analytes is 1.7154, greater than the target value of one (Table 4-11). Because of the large size of this site, it is appropriate to follow the first-stage MCE by a second, more accurate representation of the worst-case scenario. Rather than considering the sum of the maximum normalized values across the entire site, it is more accurate to consider the combined risk of the chemicals present at a single location within the site. The maximum sum of the normalized concentrations of these chemicals at one location is 0.8816 (Table 4-12). The location that presents the maximum combined risk is 15-2239. Because the normalized sum is less than the target value of one, these chemicals will not be retained as COPCs for E-F Aggregate.

TABLE 4-8

FIRING SITE E-F PRS 15-004(I)

Inorganic Analytes With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Barium	15-2137	AAB3332	650	5300	315	18-24	
	15-2147	AAB3343	393			18-24	
	15-2170	AAB3323	434			18-24	
	15-2182	AAB3470	387			18-24	
	15-2228	AAB3320	546			06	
	15-2241	AAB3330	397			06	
	15-2247	AAB3420	1070			06	
	15-2248	AAB3447	984			06	
	15-2249	AAB3449	335			06	
	15-2249	AAC0341	349			35-41	
Beryllium	15-2228	AAB3320	7.9	N/A	1.95	06	
	15-2246	AAB3445	2.5			06	
	15-2247	AAB3420	2.3			06	
	15-2249	AAB3449	3.6			06	
Cadmium	15-2228	AAB3320	3.2	38	27	06	
	15-2277	AAB3321	3.2			0-5	
	15-2278	AAB3294	5.7			06	
Chromium	15-2244	AAC0334	29.7	210	193	168	
	15-2290	AAC0326	31.6			192-204	
Copper	15-2114	AAB3476	17.3			06	
	15-2139	AAB3312	23.8			17-23	
	15-2141	AAB3515	93.8			04	
	15-2149	AAB3327	89.1			3-9	
	15-2152	AAB3459	77.2			05	
	15-2170	AAB3323	16.4			18-24	
	15-2177	AAB3318	18.9			06	
	15-2179	AAB3472	17			04	
	15-2226	AAB3478	50.1			06	

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TABLE 4-8
FIRING SITE E-F PRS 15-004(f) (continued)

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Copper	15-2227	AAB3325	40.9	2800	30.7	0-6	
	15-2227	AAB3518	39.7			0-6	
	15-2228	AAB3320	526			0-6	
	15-2240	AAB3298	53.1			0-6	
	15-2241	AAB3330	46.8			0-6	
	15-2244	AAB3523	1710			0-6	
	15-2244	AAC0334	55.1			16R	
	15-2245	AAB3526	23.4			0-6	
	15-2245	AAC0342	54.1			168-180	
	15-2246	AAB3445	147			0-6	
	15-2246	AAC0339	94.7			22-28	
	15-2247	AAB3420	833			0-6	
	15-2247	AAC0346	18.4			21-27	
	15-2248	AAB3447	606			0-6	
	15-2249	AAB3449	850			0-6	
	15-2249	AAC0341	1510			35-41	
	15-2277	AAB3321	43.9			0-5	
	15-2278	AAB3294	22.7			0-6	
	15-2279	AAB3525	22.2			0-5	
	15-2290	AAC0326	168			192-204	
15-2290	AAC0327	58.2	108-120				
15-2290	AAC0328	60.1	0-6				
Lead	15-2141	AAB3515	42.3	400	23.3	0-4	
	15-2149	AAB3327	51.7			3-9	
	15-2179	AAB3472	26.5			0-4	
	15-2226	AAB3478	34			0-6	
	15-2227	AAB3518	25.2			0-6	
	15-2228	AAB3320	155			0-6	
	15-2244	AAC0334	23.6			168	

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TABLE 4-8
FIRING SITE E-F PRS 15-004(I) (continued)

Inorganic Analytes With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Lead	15-2246	AAB3445	23.6			0-6	
	15-2247	AAB3420	44.9			0-6	
	15-2248	AAB3447	53.4			0-6	
	15-2249	AAB3449	190			0-6	
	15-2249	AAC0341	28			35-41	
	15-2277	AAB3321	91.2			0-5	
	15-2278	AAB3294	167			0-6	
	15-2279	AAB3525	30.1			0-5	
	15-2290	AAC0326	26.4			192-204	
	Manganese	15-2244	AAC0334	882	N/A	714	168
15-2249		AAC0341	729			35-41	
Mercury	15-2114	AAB3476	0.65			0-6	
	15-2114	AAB3487	0.11			18-24	
	15-2123	AAB3521	0.14			0-6	
	15-2131	AAB3334	0.19			0-6	
	15-2137	AAB3332	0.14			18-24	
	15-2145	AAB3452	0.16			0-6	
	15-2152	AAB3458	0.25			0-5	
	15-2153	AAB3304	0.28	23	0.1	12	
	15-2173	AAB3324	0.2			18-24	
	15-2178	AAB3336	0.53			0-6	
	15-2180	AAB3520	0.18			6-12	
	15-2182	AAB3470	1.8			18-24	
	15-2206	AAB3295	0.11			0-4	
	15-2240	AAB3298	0.21			0-6	
	15-2244	AAB3523	0.25			0-6	
	15-2245	AAB3526	0.24			0-6	
Nickel	15-2244	AAC0334	15.3	1600	15.2	168	
	15-2290	AAC0328	16.4			0-6	

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TABLE 4-8
FIRING SITE E-F PRS 15-004(I) (continued)

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Silver	15-2227	AAB3325	4.1	380	1.61	0-6	
	15-2228	AAB3320	8.2			0-6	
	15-2249	AAB3449	24.1			0-6	
Vanadium	15-2244	AAC0334	42.3	540	41.9	168	
Zinc	15-2141	AAB3515	66.4	23000	50.8	0-4	
	15-2152	AAB3458	51.6			0-5	
	15-2228	AAB3320	130			0-6	
	15-2244	AAC0334	55.5			168	
	15-2246	AAB3445	52.1			0-6	
	15-2247	AAB3420	251			0-6	
	15-2248	AAB3447	113			0-6	
	15-2249	AAB3449	73.5			0-6	
	15-2249	AAC0341	64.8			35-41	
	15-2290	AAC0328	57.4			0-6	

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	PRG (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL	
Uranium	15-2114	AAB3476	21.1			0-6		
	15-2115	AAB3306	23.7			0-6		
	15-2119	AAB3484	25.5			0-3		
	15-2123	AAB3521	14			0-6		
	15-2125	AAB3339	60.5			0-6		
	15-2131	AAB3334	26.9			0-6		
	15-2131	AAB3485	21.6			0-6		
	15-2134	AAB3450	5.46			0-6		
	15-2137	AAB3332	6.47			18-24		
	15-2139	AAB3312	26.9			17-23		
	15-2141	AAB3515	173			0-4		X
	15-2144	AAB3341	20.2			0-6		

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TABLE 4-8

FIRING SITE E-F PRS 15-004(I) (continued)

Radionuclides With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	PRG (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Uranium	15-2145	AAB3452	200	95	5.45	0-6	X
	15-2147	AAB3343	13			18-24	
	15-2149	AAB3327	131			3-9	X
	15-2151	AAB3466	9			18-24	
	15-2152	AAB3458	169			0-5	X
	15-2153	AAB3304	21.7			12	
	15-2153	AAB3344	533			0-5	X
	15-2154	AAB3528	23.4			0-3	
	15-2166	AAB3342	51.6			0-4	
	15-2167	AAB3300	10.2			0-6	
	15-2170	AAB3323	5.77			18-24	
	15-2172	AAB3477	10.3			18-24	
	15-2173	AAB3324	7.6			18-24	
	15-2177	AAB3318	112			0-6	X
	15-2178	AAB3336	46.1			0-6	
	15-2179	AAB3472	34.8			0-4	
	15-2180	AAB3520	23.7			6-12	
	15-2182	AAB3470	15.2			18-24	
	15-2182	AAB3480	12.7			18-24	
	15-2206	AAB3295	12.1			0-4	
	15-2226	AAB3478	170			0-6	X
	15-2227	AAB3325	190			0-6	X
	15-2227	AAB3518	185			0-6	X
	15-2228	AAB3320	1733			0-6	X
	15-2240	AAB3298	57.6			0-6	
	15-2241	AAB3330	34.4			0-6	
	15-2244	AAB3523	192			0-6	X
	15-2244	AAC0334	57			168	
	15-2245	AAB3526	177			0-6	X
	15-2245	AAC0342	366			168-160	X
	15-2246	AAB3445	2763			0-6	X
	15-2246	AAC0339	37.7			22-28	
	15-2247	AAB3420	3131			0-6	X
15-2247	AAC0346	114	21-27	X			
15-2248	AAB3447	987	0-6	X			

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TABLE 4-8
FIRING SITE E-F PRS 15-004(I) (continued)

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	PRG (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Uranium	15-2249	AAB3449	971			0-6	X
	15-2249	AAC0341	349			35-41	X
	15-2277	AAB3321	41.1			0-5	
	15-2278	AAB3294	10.1			0-6	
	15-2279	AAB3525	39.1			0-5	
	15-2290	AAC0326	162			192-204	X
	15-2290	AAC0327	48.9			108-120	
	15-2290	AAC0328	229			0-6	X
	15-2291	AAC0336	24.6			0-6	

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	PRG (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Actinium-228	15-2155	AAB3475	2.04			0-4	
	15-2226	AAB3478	2.45			0-6	
	15-2227	AAB3518	2.22			0-6	
	15-2228	AAB3320	1.89	N/A	N/A	0-6	
	15-2245	AAC0342	1.3			168-180	
	15-2246	AAC0339	1.83			22-28	
	15-2249	AAC0341	1.74			35-41	
	15-2290	AAC0328	1.32			0-6	
Americium-241	15-2155	AAB3475	3.9			0-4	
	15-2246	AAC0339	1.04	17	N/A	22-28	
	15-2247	AAC0346	0.098			21-27	
Bismuth-211	15-2155	AAB3475	3.37			0-4	
	15-2245	AAC0342	4.24	N/A	N/A	168-180	
	15-2246	AAC0339	4.03			22-28	
	15-2290	AAC0328	2.97			0-6	

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TABLE 4-8

FIRING SITE E-F PRS 15-004(I) (continued)

Radionuclides With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	PRG (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Bismuth-212	15-2245	AAC0342	1.76	N/A	N/A	168-180	
	15-2246	AAC0339	1.81			22-28	
Bismuth-214	15-2226	AAB3478	3.38	N/A	N/A	0-6	
	15-2245	AAC0342	1.23			168-180	
	15-2246	AAC0339	1.51			22-28	
	15-2249	AAC0341	1.06			35-41	
	15-2290	AAC0328	1.07			0-6	
Cesium-137	15-2155	AAB3475	1.46	4	1.47	0-4	
	15-2155	AAB3475	1.73			0-4	
Europium-152	15-2131	AAB3485	0.181	N/A	N/A	0	
	15-2152	AAB3458	0.164			0-5	
	15-2177	AAB3315	0.203			0-6	
	15-2183	AAB3344	0.263			0-5	
	15-2227	AAB3325	0.178			0-6	
	15-2244	AAC0334	0.189			168	
	15-2247	AAB3420	0.354			0-6	
	15-2278	AAB3294	0.124			0-6	
	15-2290	AAC0326	0.239			192-204	
Lead-210	15-2115	AAB3306	2.021	N/A	N/A	0-6	
	15-2125	AAB3339	3.484			0-6	
	15-2227	AAB3518	6.91			0-6	
	15-2246	AAC0339	3.01			22-28	
	15-2249	AAC0341	5.54			35-41	
Lead-212	15-2115	AAB3306	2.177			0-6	
	15-2119	AAB3484	1.76			0-3	
	15-2125	AAB3339	1.512			0-6	
	15-2134	AAB3450	1.572			0-6	
	15-2144	AAB3341	1.884			0-6	

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TABLE 4-8
FIRING SITE E-F PRS 15-004(f) (continued)

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	PRG (mg/kg)	UTL (mg/kg)	Depth (inches)	> SAL
Lead-212	15-2154	AAB3528	1.624	N/A	N/A	0-3	
	15-2155	AAB3475	1.78			0-4	
	15-2167	AAB3300	1.832			0-6	
	15-2245	AAC0342	1.57			168-180	
	15-2246	AAC0339	1.64			22-28	
	15-2249	AAC0341	1.56			35-41	
	15-2290	AAC0328	1.56			0-6	
Lead-214	15-2115	AAB3306	1.599	N/A	N/A	0-6	
	15-2119	AAB3484	1.352			0-3	
	15-2125	AAB3339	1.036			0-6	
	15-2134	AAB3450	1.279			0-6	
	15-2154	AAB3528	1.201			0-3	
	15-2155	AAB3475	0.67			0-4	
	15-2167	AAB3300	1.45			0-6	
	15-2226	AAB3478	0.98			0-6	
	15-2227	AAB3518	1.19			0-6	
	15-2228	AAB3320	1.32			0-6	
	15-2245	AAC0342	1.13			168-180	
	15-2246	AAC0339	1.51			22-28	
	15-2249	AAC0341	1.02			35-41	
	15-2290	AAC0328	2.19			0-6	
Protactinium-231	15-2290	AAC0328	2.49	N/A	N/A	0-6	
Protactinium-234	15-2155	AAB3475	23.43	N/A	N/A	0-4	
	15-2228	AAB3320	8.87			0-6	
Protactinium-234M	15-2155	AAB3475	2538.1	N/A	N/A	0-4	
	15-2226	AAB3478	173.53			0-6	
	15-2227	AAB3518	120.84			0-6	
	15-2228	AAB3320	1019.4			0-6	

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TABLE 4-8

FIRING SITE E-F PRS 15-004(I) (continued)

Radionuclides With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	PRG (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Protactinium-234M	15-2245	AAC0342	268			165-180	
	15-2246	AAC0339	185			22-28	
	15-2249	AAC0341	165			35-41	
	15-2290	AAC0328	26.9			0.6	
Radium-224	15-2155	AAB3475	4.89			0.4	
	15-2167	AAB3300	4.169			0.6	
	15-2246	AAC0339	4.87	N/A	N/A	22-28	
	15-2249	AAC0341	3.98			35-41	
	15-2290	AAC0328	3.69			0.6	
Radium-226	15-2115	AAB3306	1.954			0.6	
	15-2119	AAB3484	1.238			0.3	
	15-2125	AAB3339	1.055			0.6	
	15-2134	AAB3450	1.174			0.6	
	15-2154	AAB3528	0.9637			0.3	
	15-2167	AAB3300	1.328			0.6	
	15-2226	AAB3478	1.69	N/A	N/A	0.6	
	15-2227	AAB3518	1.42			0.6	
	15-2228	AAB3320	1.39			0.6	
	15-2245	AAC0342	136			168-180	
	15-2246	AAC0339	79.1			22-28	
15-2290	AAC0328	14.5			0.6		
Ruthenium-106	15-2183	AAB3344	0.664	N/A	0.187	0.5	
Thallium-208	15-2115	AAB3306	0.5891			0.6	
	15-2134	AAB3450	0.4963			0.6	
	15-2154	AAB3528	0.5988			0.3	
	15-2167	AAB3300	0.6876			0.6	
	15-2227	AAB3518	0.36	N/A	N/A	0.6	
	15-2245	AAC0342	0.545			168-180	

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TABLE 4-8

FIRING SITE E-F PRS 15-004(1) (continued)

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	PRG (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Thallium-208	15-2246	AAC0339	0.565			22-28	
	15-2249	AAC0341	0.516			35-41	
	15-2290	AAC0328	0.452			0-6	
Thorium-227	15-2245	AAC0342	12.8	N/A	N/A	168-180	
	15-2246	AAC0339	33.6			22-28	
	15-2249	AAC0341	18.6			35-41	
Thorium-228	15-2115	AAB3306	9.529			0-6	
	15-2125	AAB3339	4.982			0-6	
Thorium-234	15-2115	AAB3306	13.19	N/A	1.97	0-6	
	15-2125	AAB3339	19.33			0-6	
	15-2155	AAB3475	1939.7			0-4	
	15-2167	AAB3300	7.632			0-6	
	15-2226	AAB3478	68.16			0-6	
	15-2227	AAB3518	111.71			0-6	
	15-2228	AAB3320	900.57			0-6	
	15-2245	AAC0342	151			168-180	
	15-2246	AAC0339	110			22-28	
	15-2249	AAC0341	96.8			35-41	
	15-2290	AAC0328	15.5			0-6	
Uranium-235	15-2115	AAB3306	0.6634	18	0.084	0-6	
	15-2134	AAB3450	0.3652			0-6	
	15-2155	AAB3475	158.76			0-4	
	15-2167	AAB3300	0.5598			0-6	
	15-2226	AAB3478	2.17			0-6	
	15-2227	AAB3518	2.74			0-6	
	15-2228	AAB3320	18.89			0-6	
	15-2245	AAC0342	8.23			168-180	

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TABLE 4-8

FIRING SITE E-F PRS 15-004(I) (continued)

Radionuclides With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	PRG (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Uranium-235	15-2246	AAC0339	4.91			22-28	
	15-2249	AAC0341	4.61			35-41	
	15-2290	AAC0328	0.891			0-6	
Uranium-238	15-2155	AAB3475	1687.3	59	1.62	0-4	

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TABLE 4-2
E-F SITE PRS 15-000(a)

Element Exceeds UTL (Sample Value Exceeds Background UTL)

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Antimony	15-2234	0215-95-0645	1.77	31	1	0-10	
Barium	15-2191	AAB3527	359	5300	315	0-6	
	15-2239	AAB3516	915			0-12	
	15-2242	AAB3473	834			0-12	
Beryllium	15-2231	AAB3328	2.3			0-5	
	15-2239	AAB3516	2.3			0-12	
Cadmium	15-2239	AAB3516	12.8	38	2.7	0-12	
Copper	15-2191	AAB3527	1150	2800	30.7	0-6	
	15-2234	0215-95-0645	1300			0-10	
	15-2239	AAB3516	4140			0-12	X
	15-2242	AAB3473	7720			0-12	X
	15-2243	AAB3331	66.5			0-12	
Lead	15-2230	AAB3302	26.2	400	23.3	0-3	
	15-2231	AAB3328	31.5			0-5	
	15-2234	0215-95-0645	112			0-10	
	15-2235	AAB3329	279			0-8	
	15-2239	AAB3516	57.5			0-12	
	15-2242	AAB3473	58.2			0-12	
Mercury	15-2242	AAB3473	1.4	23	N/A	0-12	
Nickel	15-2242	AAB3473	57.3	1500	15.2	0-12	
	15-2239	AAB3516	16.9			0-12	
Silver	15-2234	0215-95-0645	1.83	380	1.61	0-10	
Zinc	15-2191	AAB3527	217	23000	50.8	0-6	
	15-2231	AAB3328	78			0-5	
	15-2234	0215-95-0645	173			0-10	
	15-2239	AAB3516	224			0-12	
	15-2242	AAB3473	309			0-12	

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TABLE 4-9

E-F SITE PRS 15-008(a) (continued)

Radionuclides With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (pci/g)	SAL (pci/g)	UTL (pci/g)	Depth (Inches)	> SAL
Americium 241	15-2235	AAB3329	5.82	17	N/A	0.8	
Protactinium-234	15-2234	0215-95-0645	1.32	N/A	N/A	0-10	
Protactinium-234M	15-2234	0215-95-0645	821	N/A	N/A	0-10	
Thorium-230	15-2234	0215-95-0645	0.817	N/A	N/A	0-10	
Thorium-231	15-2234	0215-95-0645	.21	N/A	N/A	0-10	
Thorium-234	15-2234	0215-95-0645	440	N/A	N/A	0-10	
Uranium-235	15-2234	0215-95-0645	19	18	0.084	0-10	X
Uranium-235	15-2231	AAB3328	11.05	18	0.084	0-5	
Uranium-238	15-2234	0215-95-0645	440	59	1.82	0-10	X

Radionuclides With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Uranium	15-2235	AAB3329	1669	95	5.45	0.8	X
	15-2236	AAB3463	19.5			0-12	
	15-2239	AAB3516	1918			0-12	X
	15-2242	AAB3473	2820			0-12	X
	15-2243	AAB3331	244			0-12	X

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TABLE 4-10
SEPTIC SYSTEM PRS 15-009(e)

Analyte	Location ID	Sample ID	Sample Value (ug/l)	SAL (ug/l)	> SAL
Beryllium	15-2237	AAB3499	0.29	4	
Lead	15-2237	AAB3499	23.4	50	
	15-2237	AAB3500	462		X
Mercury	15-2237	AAB3499	1.5	2	

Radioisotopes with concentrations greater than background UTL					
Analyte	Location ID	Sample ID	Sample Value (ug/l)	SAL (ug/l)	> SAL
Uranium	15-2237	AAB3499	251	20	X
	15-2237	AAB3500	65.3		X

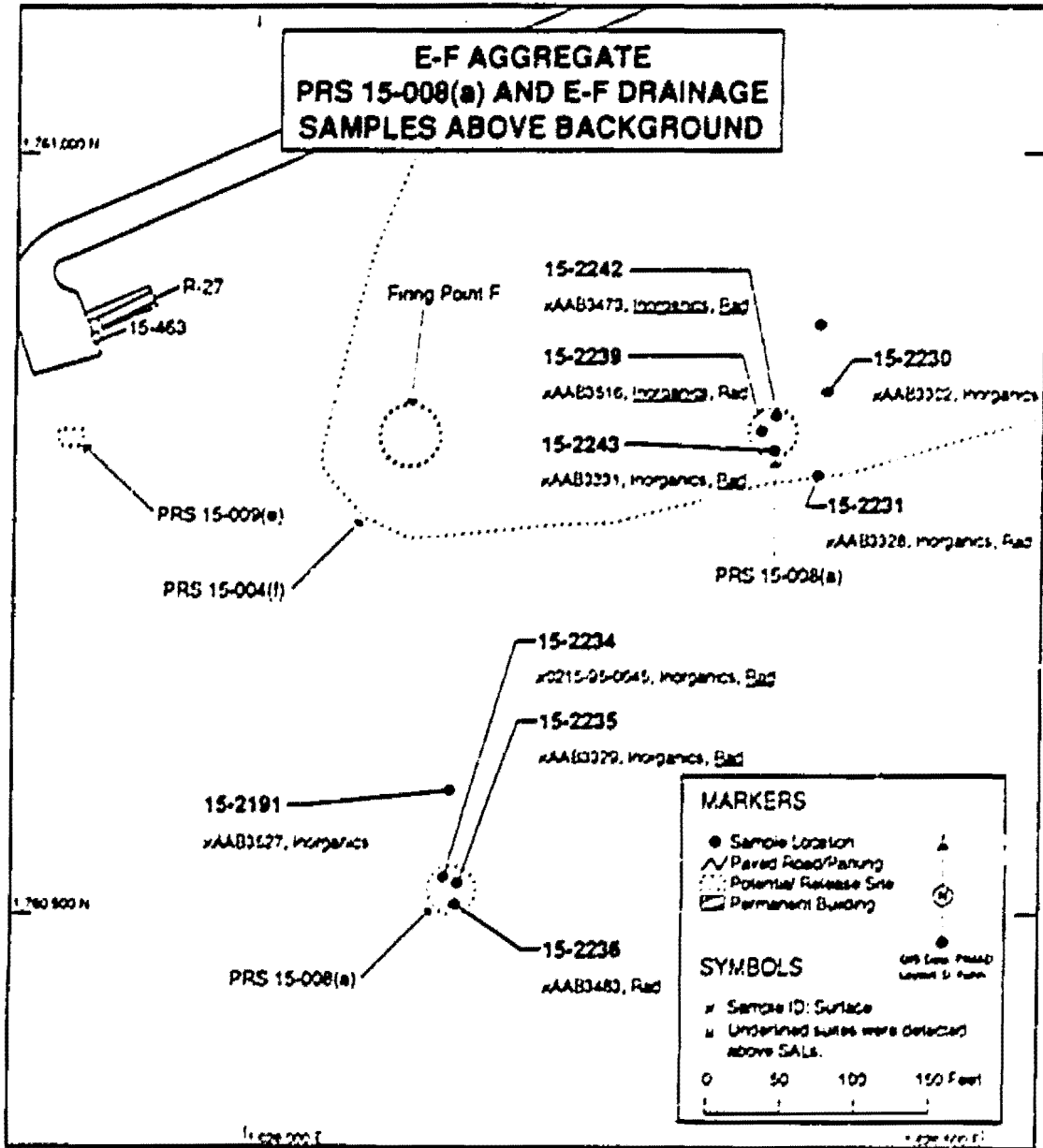


Figure 4-5. Locations of samples above background

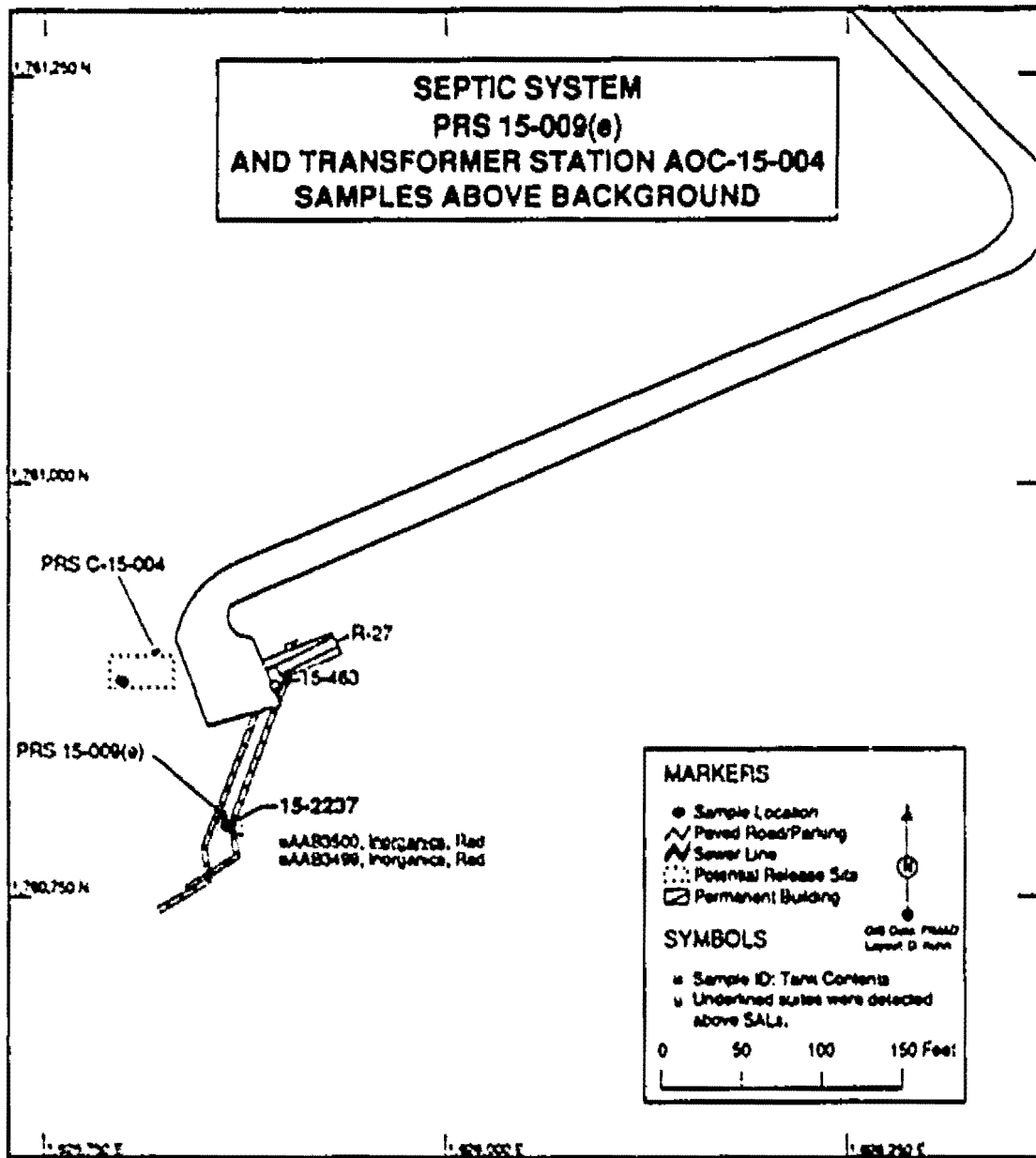


Figure 4.6. Locations of samples above background

TABLE 4-11
MULTIPLE CHEMICAL EVALUATION - EF AGGREGATE

Antimony	0.0571
Barium	0.2019
Cadmium	0.3368
Chromium	0.1505
Lead	0.6975
Mercury	0.0783
Nickel	0.0382
Silver	0.0634
Vanadium	0.0783
Zinc	0.0134
TOTAL	1.7154

TABLE 4-12
MULTIPLE CHEMICAL EVALUATION - EF AGGREGATE

Antimony	0.1226
Barium	0.1726
Cadmium	0.3368
Chromium	0.0467
Lead	0.1438
Mercury	0.0048
Nickel	0.0113
Silver	0.002
Vanadium	0.0313
Zinc	0.0097
TOTAL	0.8816

A separate MCE was performed for the radionuclides. The sum of the maximum normalized values of americium-241 and cesium-137 is 0.6619, less than the target value of one (Table 4-13). Based on this result, americium-241 and cesium-137 will not be retained as COPCs for E-F Aggregate.

TABLE 4-13
MULTIPLE CHEMICAL EVALUATION - EF AGGREGATE

Radionuclide	Normalized Concentration
Americium-241	0.2294
Cesium-137	0.4325
TOTAL	0.6619

4.3.3.2 Data Interpretation

The grid sampling pattern across E-F Site ensured characterization of the entire site. Additional samples supplemented the grid design near the Firing Sites because this area was known, from previous investigations and historical knowledge, to have the highest uranium concentrations.

Several COPCs have been identified for sites 15-004(f) and 15-008(a). Uranium is the most important COPC for E-F Aggregate. The concentrations of uranium are greatest near the firing mounds, decreasing with distance from the mounds. Figure 4-7 shows isopleths of uranium concentrations (generated using the Kriging technique) that demonstrate that the extent of uranium contamination has been adequately characterized. The values on the map are from fixed lab analyses wherever a sample was sent in for analysis, from the historical data used by White et al. (1980, 0771), and from predicted values of total uranium based on the XRF values reported by the chemistry van (see Appendix C). Although none of the surface samples was less than the Laboratory background threshold for total uranium, the figure shows that the worst of the contamination has been well-characterized by this sampling effort.

Lead and uranium are the only COPCs for Septic Tank 15-009(e), and AOC 15-004 has no COPCs.

4.3.3.3 Risk Assessment

A human health risk assessment will be performed in order to determine the extent of cleanup necessary at this site.

4.3.3.4 Ecotoxicological Screening Assessment

Inorganics. All inorganic COPCs detected in soil samples taken at the E-F Firing Site and exceeding their natural background UTLs (Section 4.3.3.1) were compared to ecotoxicological screening criteria (Tables 4-14 and 4-15).

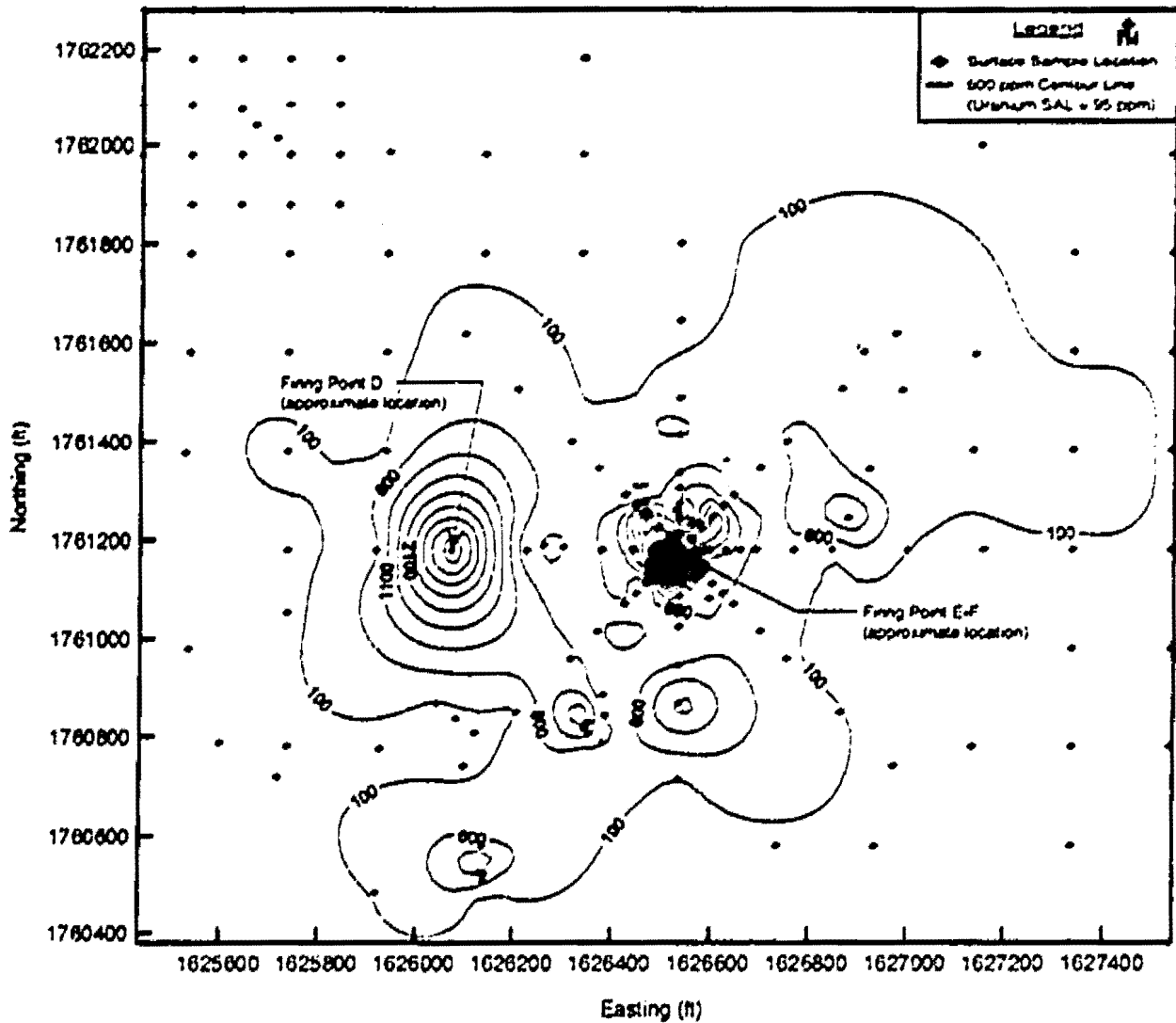
Uranium Concentrations in Surface Soil (ppm)
E-F Firing Site

Figure 4-7. Uranium concentrations in surface soil (ppm), E-F Firing Site

TABLE 4-14
COMPARISONS OF ESALS WITH DATA FROM E-F FIRING SITE, PRS 15-004(f) (continued)

Report Analytes Greater Than Background

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Copper	AAB3461	0-6	49.4	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3478	0-6	50.1	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3298	0-6	53	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3298	0-6	53.1	mg/kg	30.7	0.0161	5.0778	60.0
	AAC0342	14-15	54.1	mg/kg	30.7	0.0161	5.0778	60.0
	AAC0334	14-14	55.1	mg/kg	30.7	0.0161	5.0778	60.0
	AAC0327	9-10	58.2	mg/kg	30.7	0.0161	5.0778	60.0
	AAC0328	0-6	60.1	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3458	0-5	77.2	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3302	0-3	81.2	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3302	0-3	86.1	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3327	3-9	89.1	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3515	0-4	93.8	mg/kg	30.7	0.0161	5.0778	60.0
	AAC0339	22-28	94.7	mg/kg	30.7	0.0161	5.0778	60.0
	AAC0326	16-17	101	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3445	0-6	147	mg/kg	30.7	0.0161	5.0778	60.0
	AAC0326	16-17	168	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3328	0-5	223	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3320	0-6	526	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3447	0-6	606	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3326	0-4	796	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3420	0-6	833	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3449	0-6	850	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3527	0-6	1150	mg/kg	30.7	0.0161	5.0778	60.0
AAC0341	35-41	1510	mg/kg	30.7	0.0161	5.0778	60.0	
AAB3523	0-6	1710	mg/kg	30.7	0.0161	5.0778	60.0	
Lead	AAB3445		23.6	mg/kg	23.3	0.3910	1.6813	50.0
	AAC0334		23.6	mg/kg	23.3	0.3910	1.6813	50.0
	AAC0326		23.9	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3302		25.1	mg/kg	23.3	0.3910	1.6813	50.0

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TABLE 4-14
COMPARISONS OF ESALS WITH DATA FROM E-F FIRING SITE, PRS 15-004(I) (continued)

Inorganic Analytes Greater Than Background

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Lead	AAB3518		25.2	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3317		26	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3302		26.2	mg/kg	23.3	0.3910	1.6813	50.0
	AAC0326		26.4	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3472		26.5	mg/kg	23.3	0.3910	1.6813	50.0
	AAC0341		28	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3525		30.1	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3328		31.5	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3478		34	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3515	0.4	42.3	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3420	0.6	44.9	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3461	0.6	48.5	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3327	3.9	51.7	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3447	0.6	53.4	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3321	0.5	91.2	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3320	0.6	155	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3294	0.6	167	mg/kg	23.3	0.3910	1.6813	50.0
AAB3449	0.6	190	mg/kg	23.3	0.3910	1.6813	50.0	
Manganese	AAC0341		729	mg/kg	714	0.0022		500.0
	AAC0334		882	mg/kg	714	0.0022		500.0
Mercury	AAB3295	0.4	0.11	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3487	18-24	0.11	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3458	0.5	0.13	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3332	18-24	0.14	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3521	0.6	0.14	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3527	0.6	0.14	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3452	0.6	0.16	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3520	6-12	0.18	mg/kg	0.1	0.1390	0.0028	0.3
AAB3334	0.6	0.19	mg/kg	0.1	0.1390	0.0028	0.3	

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TABLE 4-14
COMPARISONS OF ESALS WITH DATA FROM E-F FIRING SITE, PRS 15-004(f) (continued)

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Mercury	AAB3324	18-24	0.2	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3298	0-6	0.21	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3526	0-6	0.24	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3458	0-5	0.25	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3523	0-6	0.25	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3461	0-6	0.27	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3304	1-1	0.28	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3336	0-6	0.53	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3476	0-6	0.65	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3470	18-24	1.8	mg/kg	0.1	0.1390	0.0028	0.3
Nickel	AAC0334		15.3	mg/kg	15.2	2.1720	17.3760	25.0
	AAC0328		16.4	mg/kg	15.2	2.1720	17.3760	25.0
	AAB3516		16.9	mg/kg	15.2	2.1720	17.3760	25.0
Silver	AAB3325	0-6	4.1	mg/kg		0.0006		
	AAB3320	0-6	8.2	mg/kg		0.0006		
	AAB3449	0-6	24.1	mg/kg		0.0006		
Uranium	AAB3450		5.46	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3323	18-24	5.77	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3332	18-24	6.47	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3324	18-24	7.6	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3466	18-24	9	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3294	0-6	10.1	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3300	0-6	10.2	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3477	18-24	10.3	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3295	0-4	12.1	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3480	18-24	12.7	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3343	18-24	13	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3521	0-6	14	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3470	18-24	15.2	mg/kg	5.45	0.1216	0.1338	5.0

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TABLE 4:14
COMPARISONS OF ESALS WITH DATA FROM E-F FIRING SITE, PRS 15-004(I) (continued)

Inorganic Analytes Greater Than Background

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Uranium	AAB3341	0.6	20.2	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3476	0.6	21.1	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3485	0.6	21.6	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3304	1-1	21.7	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3528	0.3	23.4	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3333	0.6	23.6	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3306	0.6	23.7	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3520	6-12	23.7	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0336	0.6	24.6	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3484	0.3	25.3	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3312	17-23	26.9	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3334	0.6	26.9	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3330	0.6	34.4	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3472	0.4	34.8	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0339	22-28	37.7	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3525	0.5	39.1	mg/kg	5.45	0.1216	0.1338	5.0
	AAB1321	0.5	41.1	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3317	0.6	45.6	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3336	0.6	46.1	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3298	0.6	47.5	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0327	9-10	48.9	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3342	0.4	49.2	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3342	0.4	51.6	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0334	14-14	57	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3298	0.6	57.6	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3339	0.6	60.5	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3451	0.6	66.3	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3318	0.6	112	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0346	21-27	114	mg/kg	5.45	0.1216	0.1338	5.0

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TABLE 4-14
COMPARISONS OF ESALS WITH DATA FROM E-F FIRING SITE, PRS 15-004(I) (continued)

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Uranium	AAB3327	3-9	131	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0326	16-17	162	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3526	0-6	168	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3458	0-5	169	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3478	0-6	170	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3515	0-4	173	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3526	0-6	177	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3518	0-6	185	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3325	0-6	190	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3523	0-6	192	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3452	0-6	200	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3326	0-4	208	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3302	0-3	217	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0328	0-6	229	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0341	35-41	349	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0342	14-15	366	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3344	0-5	533	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3527	0-6	535	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3328	0-5	691	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3449	0-6	971	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3447	0-6	977	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3447	0-6	987	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3320	0-6	1720	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3320	0-6	1733	mg/kg	5.45	0.1216	0.1338	5.0
AAB3445	0-6	2763	mg/kg	5.45	0.1216	0.1338	5.0	
AAB3420	0-6	3131	mg/kg	5.45	0.1216	0.1338	5.0	
Vanadium	AAC0334		42.3	mg/kg	41.9	0.0030	0.0911	2.5
Zinc	AAB3458		51.6	mg/kg	50.8	0.0434	6.9440	25.0
	AAB3445		52.1	mg/kg	50.8	0.0434	6.9440	25.0
	AAC0334		55.5	mg/kg	50.8	0.0434	6.9440	25.0

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TABLE 4-14
 COMPARISONS OF ESALS WITH DATA FROM E-F FIRING SITE, PRS 15-004(I) (continued)

Inorganic Analytes Greater Than Background

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Zinc	AAC0328		57.4	mg/kg	50.8	0.0434	6.9440	25.0
	AAC0341		64.8	mg/kg	50.8	0.0434	6.9440	25.0
	AAB3515		66.4	mg/kg	50.8	0.0434	6.9440	25.0
	AAB3449		73.5	mg/kg	50.8	0.0434	6.9440	25.0
	AAB3328		78	mg/kg	50.8	0.0434	6.9440	25.0
	AAB3447	0.6	113	mg/kg	50.8	0.0434	6.9440	25.0
	AAB3320	0.6	130	mg/kg	50.8	0.0434	6.9440	25.0
	AAB3527	0.6	217	mg/kg	50.8	0.0434	6.9440	25.0
	AAB3420	0.6	251	mg/kg	50.8	0.0434	6.9440	25.0

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TABLE 4-15
COMPARISONS OF ESALS WITH DATA FROM E-F SITE, PRS 15-008(a).

Inorganic Analytes Greater Than Background								
Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Cadmium	AAB3516	0-12	12.8	mg/kg	2.7	0.0022	0.0838	3.0
Copper	AAB3331	0-12	66.5	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3516	0-12	4140	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3473	0-12	7720	mg/kg	30.7	0.0161	5.0778	60.0
Lead	AAB3516	0-12	57.5	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3473	0-12	58.2	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3329	0-8	232	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3329	0-8	279	mg/kg	23.3	0.3910	1.6813	50.0
Mercury	AAB3473	0-12	1.4	mg/kg	0.1	0.1390	0.0028	0.3
Nickel	AAB3473	0-12	57.3	mg/kg	15.2	2.1720	17.3760	25.0
Uranium	AAB3483	0-12	19.5	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3331	0-12	244	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3329	0-8	1669	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3516	0-12	1918	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3473	0-12	2820	mg/kg	5.45	0.1216	0.1338	5.0
Zinc	AAB3516	0-12	224	mg/kg	50.8	0.0434	6.9440	25.0
	AAB3473	0-12	309	mg/kg	50.8	0.0434	6.9440	25.0

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- Barium, beryllium, cadmium, chromium, copper, lead, manganese, mercury, nickel, silver, and uranium were observed at concentrations above ESALs (Table 4-14 and 4-15). These inorganic COPCs also were compared to ESALs derived for reproduction/survival toxicological endpoints (ESAL2) and for toxicity to plants (phyto-ESAL).
- Beryllium, chromium and zinc concentrations in surface soils exceed the ESAL2 criteria by factors between 10 and 100. The chromium and zinc levels also exceed phytotoxicity screening criteria.
- Copper and lead levels exceed the ESAL2 criteria by factors of more than 100 but less than 500, and barium, cadmium, mercury, and uranium analytes have samples that exceed the ESAL2 criteria by more the 500 times.

Organics. No organic chemicals or HEs were detected in samples from the E-F Firing Site.

4.3.4 Conclusions and Recommendations

Surface soils at E-F Firing Site contain barium, beryllium, cadmium, chromium, zinc, copper, lead, mercury, and uranium levels that exceed screening criteria for reproductive and survival effects on vertebrates. Phytotoxicity criteria also were exceeded to a lesser degree. The size of the area is large enough that some individual animals may spend significant portions of their life cycle in contact with COPCs associated with the site, and the proximity of related sites may contribute to cumulative adverse effects. The significance that these COPCs hold for the long-term persistence of resident plant and animal populations cannot be adequately assessed in a screening assessment and must be addressed in a baseline ecological risk assessment.

No further action is proposed for AOC 15-004. The only suspected contaminant from the transformer station was PCBs, and none were detected.

A VCA is recommended for Septic Tank 15-009(e) to remove the sludge and liquid, removing the opportunity for leakage from the tank.

Copper wire is apparent on the surface in the vicinity of 15-008(a), and chunks of DU are visible in the immediate vicinity of the lining mounds at 15-004(i). A remedial activity is recommended for removing these potential hazards. The EC plan will be submitted to the U.S. EPA, Region 6, for review, and to the DOE/LAEO for concurrence, before conducting the cleanup.

A human health risk assessment should be conducted on E-F Aggregate in order to determine the necessity for any soil remediation. This assessment is proposed to be conducted as part of the EC Plan for this site.

4.3.5 Further Investigations

No further field sampling activities are proposed at this time.

4.4 PRS 15-007(b) MDA Z

MDA-Z (PRS 15-007(b)) is an inactive disposal area located south of the side road leading to TA-15-233. It is listed in the SMWU report as priority A (RFI Work Plan (LANL 1993, 1087)). The MDA-Z disposal area was used between 1965 and 1981 for construction debris, including pieces of cement and rebar of various sizes, used concrete sandbags, steel blast matting from tests at PHERMEX, and other debris. Pieces of partially burned wood are visible. The landfill is roughly rectangular and measures approximately 200 ft by 50 ft. It appears to have been filled in from a naturally occurring depression; concrete-filled sandbags are visible, which were probably piled as a retaining wall, and other debris may have been filled in behind it. Thus one face grades to native soil, and one face is approximately 15 ft high and easily visible. Most of the debris on the exposed face is not covered with soil and is therefore exposed to rain and snowmelt (Figure 4-8).

COPCs at this site include metals from wire, blast mats, etc.; VOCs and/or SVOCs from charred and burned wood; road and other construction debris; and radioactive substances from past Laboratory practices.

The major potential pathway to receptors would occur by direct contact if the land reverts to uncontrolled use. Because the debris is largely uncovered, it would be of possible souvenir value to recreational users. Minor pathways include air resuspension and potential erosion by surface water on the exposed face.

4.4.1 Previous Investigations

An aerial radiological survey in 1982 (Fritzsche 1989, 10-033) did not detect radioactive contamination at this PRS.

The 1989 environmental sampling study (DOE 1989, 0271) included samples from MDA-Z for various metals. The metals barium, beryllium, cadmium, chromium, copper, lead, nickel, silver, and zinc were analyzed using inductively coupled plasma-mass spectrometry (level III/IV). For some of the metals, elevated readings were obtained when compared to the overall background levels for the Laboratory in use at that time. For example, five samples for beryllium had values ranging from 4.0 to 29.4 mg/kg while the average background level for the Laboratory at that time was 2.4 mg/kg. The current background UTL for beryllium is 3.31 mg/kg.

4.4.2 Field Investigation

The objectives of the Phase I sampling were to determine whether COPCs were present at concentrations above SALs in surface and near-surface soils at the landfill, and to determine their extent. Because most of the materials in the landfill came from PHERMEX, the major contaminants were known, but the distribution was uncertain due to reworking of the debris by bulldozers. A total of twenty-eight samples were proposed for collection, fourteen surface and fourteen subsurface (24 in. or soil/tuff interface). Figure 1-8 shows the sample collection locations. The sample locations were chosen based on the grid system in the RFI Work Plan (LANL 1993, 1087), with minor adjustments for radiation. In addition, all sample locations were screened for the presence of HEs using the HE field spot test. Samples were obtained along the edge of the debris at approximate 50-ft intervals, at the edge of the canyon, and down the center of the debris.

Samples were obtained from the surface (0-6 in) and deep (18-24 in or refusal) using the surface scoop technique or hand augering, respectively (SOPs 6.09, 6.10; LANL 1993, 0875). Prior to sampling, a hand-held radiation survey was performed. All samples collected were sent to the mobile radioanalysis van, then to the chemistry van for XRF, and beryllium was detected using LIBS. Samples for fixed laboratory analysis were selected based upon these results.

4.4.2.1 Results of Field Surveys

A land survey was performed to set grid points and sample locations using established survey monuments with coordinates published in the Laboratory Survey Procedures Manual (LANL 1993a). A Topcon GTS-3B Total Station was used to conduct the survey. The field notes were handwritten while in the field, then reduced and entered into an Autocad DCA Computer system. All surveying data was prepared following the draft interim guidance on Geodetic Surveying for Townsite Operations (Vocke 1992).

A geophysical survey was conducted to estimate the volume of the disposal area. As described in Section 1.3.7 and Appendix B, the survey found a roughly triangular surface area, with a wedge shape grading from about 10 ft deep at the face to surface level at the landward edge. Using the rough dimensions found, a triangle 225 ft long by 50 ft wide yields an area of 11,250 ft² (area of a triangle is 1/2 base times height). If the depth were a uniform 10 ft, the volume would be roughly 4,000 yd³. However, the shape tapers from the face to the opposite boundary, so it is probably not more than half this amount, or 2,000 yd³.

4.4.2.2 Results of Field Screening

Field screening was performed to determine potential hazards, to establish health and safety conditions for on-site workers, and to screen samples for metals prior to choosing samples for fixed laboratory analysis. Portable field instruments for detecting alpha-, beta-, and gamma emitters were used to screen for gross alpha, gross beta, and gross gamma. An XRF analyzer was used to screen samples for lead, mercury, and uranium. A portable LIBS instrument was used to screen soil samples for beryllium, because it cannot be detected by XRF.

All field samples were screened for explosives using a field spot-test kit. The HE spot test revealed no positive samples for HE.

Appendix D presents the results of the field screening for metals and radioactivity. Appendix A presents the results of the laboratory analysis. Twenty-five samples showed metals exceeding PRGs; these were sent to a fixed analytical lab for analysis. Appendix C shows the correlation between chemistry via XRF or LIBS measurements and the fixed laboratory analysis.

4.4.3 Screening Assessment Results for Material Disposal Area Z (15-007(b))

The QA/QC assessment of the data associated with the collected samples indicated that the analytical results were acceptable, except for three acid semivolatile samples that were qualified as R. Those data were not used in the screening assessment.

4.4.3.1 Comparison to Background/SALs

Inorganics. All inorganic COPCs detected in soil samples taken at MDA-Z were compared with their natural background UTLs.

- Beryllium concentrations slightly greater than Laboratory background UTLs were reported for five samples. Natural background levels of beryllium in the Los Alamos area exceed the risk-based threshold that would otherwise be used as a screening value, so the background UTL is used to determine the presence of beryllium as a COPC. The data for this site show beryllium levels slightly elevated over natural background; thus, beryllium will continue to be considered a COPC.
- Copper, lead, mercury and silver were observed at concentrations above their respective UTLs. Further comparison of these analytes with their SALs clarifies that the levels observed are below SALs. Thus, these analytes were subjected to an MCE to determine any additive effects of concern (see below).

- No other inorganics exceeded their background UTLs in soil samples from MDA-Z, and therefore they will not be considered COPCs.

Organics. Several organic chemicals were detected in the soil samples collected at MDA-Z. All detected organics are discussed below.

- Bis(2-ethylhexyl)phthalate was detected in four samples, and di-n-butyl phthalate was detected in one sample. Since the concentrations detected were below SALs, these chemicals were subjected to an MCE to determine any additive effects of concern (see below).
- Ten polycyclic aromatic hydrocarbons (PAHs) were detected in MDA-Z soil samples (Table 4-16). Five of these chemicals were observed at concentrations below their respective SALs, and were subjected to an MCE to determine any additive effects of concern (see below). Benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene were reported at levels that exceed their SALs, and will be considered COPCs for this site. Two other PAHs that were detected, benzo(g,h,i)perylene and phenanthrene, do not have SALs for comparison. Because other PAHs are known to be present at this site, benzo(g,h,i)perylene and phenanthrene will also be considered COPCs for MDA-Z.
- No other organics exceeded their background UTLs in soil samples from MDA-Z, and therefore they will not be considered COPCs.

Radionuclides. Radionuclides observed at MDA-Z were compared to their Laboratory background UTLs where available, and further to their respective SALs.

- Uranium was reported above its background UTL in twelve samples from MDA-Z. Seven of the reported values are greater than the SAL for total uranium, so uranium will be considered a COPC for this site.
- No other radionuclides exceeded their background UTLs in soil samples from MDA-Z, and therefore they will not be considered COPCs.

The results from soil samples with concentrations exceeding background UTLs are presented in Table 4-16. The locations of samples with analyte values exceeding background UTLs are shown in Figure 4-9.

Multiple Chemical Evaluation. As discussed in Section 3.2.2, a multiple chemical evaluation has been conducted on all noncarcinogenic and carcinogenic chemicals observed above their respective background UTLs and below their respective SALs, as well as on all detected organic chemicals.

TABLE 4-16

MOA Z PRS 15-007(b)

Inorganic Analytes With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Beryllium	15-2303	AAB3424	3	N/A	1.95	18-24	
	15-2305	AAB3428	2.6			0.6	
	15-2308	AAB3430	3.6			0.6	
	15-2310	AAB3429	3.5			0.6	
	15-2311	AAB3435	2.1			0.6	
Copper	15-2303	AAB3424	105	2800	30.7	18-24	
	15-2305	AAB3428	49			0.6	
	15-2306	AAB3431	47.8			0.6	
	15-2307	AAB3433	127			0.6	
	15-2307	AAB3442	96.1			12--18	
	15-2308	AAB3430	111			0.6	
	15-2310	AAB3429	67.3			0.6	
	15-2311	AAB3435	33.6			0.6	
Lead	15-2305	AAB3428	38.6	400	23.3	0.6	
	15-2307	AAB3433	23.4			0.6	
	15-2307	AAB3442	32.6			12--18	
	15-2308	AAB3430	30.8			0.6	
	15-2310	AAB3429	52.9			0.6	
Mercury	15-2305	AAB3428	0.16	23	0.1	0.6	
	15-2307	AAB3433	0.78			0.6	
	15-2307	AAB3442	1.7			12--18	
	15-2308	AAB3430	0.17			0.6	
	15-2311	AAB3435	0.41			0.6	
	15-2311	AAB3444	0.13			18-24	
Silver	15-2303	AAB3424	3.8	380	1.61	18-24	

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TABLE 4-16
MOA Z PRS 15-007(b) (continued)

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	Depth (inches)	> SAL
Anthracene	15-2311	AAB3544	3.9	19	18-24	
Benzo[a]anthracene	15-2311	AAB3536	0.89	0.61	0-6	X
	15-2311	AAB3544	4.2		18-24	X
Benzo[a]pyrene	15-2311	AAB3536	0.49	0.06	0-6	X
Benzo[b]fluoranthene	15-2311	AAB3536	0.98	0.61	0-6	X
Benzo[g,h,i]perylene	15-2311	AAB3536	0.64	N/A	0-6	
Bis(2-ethylhexyl)phthalate	15-2307	AAB3537	4.7	32	0-6	
	15-2307	AAB3543	0.7		18-24	
	15-2310	AAB3535	0.67		0-6	
	15-2311	AAB3536	3		0-6	
Chrysene	15-2311	AAB3536	0.9	24	0-6	
	15-2311	AAB3544	3.6		18-24	
Di-n-butyl phthalate	15-2307	AAB3537	0.53	6500	0-6	
Fluoranthene	15-2305	AAB6080	0.5	2600	0-6	
	15-2306	AAB3538	0.54		0-6	
	15-2311	AAB3536	2.4		0-6	
	15-2311	AAB3544	15		18-24	
Indeno[1,2,3-cd]pyrene	15-2311	AAB3536	0.51	0.61	0-6	
Phenanthrene	15-2311	AAB3536	1.2	N/A	0-6	
	15-2311	AAB3544	17		18-24	
Pyrene	15-2305	AAB6080	0.46	2000	0-6	
	15-2306	AAB3538	0.65		0-6	
	15-2311	AAB3536	2.5		0-6	
	15-2311	AAB3544	14		18-24	

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TABLE 4-16

MDA Z PRS 15-007(b) (continued)

Radionuclides With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Uranium	15-2301	AAB3438	130	95	5.45	0-5	X
	15-2303	AAB3424	117			19-24	X
	15-2304	AAB3421	5.71			10-15	
	15-2305	AAB3428	161			0-6	X
	15-2306	AAB3431	57.4			0-6	
	15-2307	AAB3433	136			0-6	X
	15-2307	AAB3442	162			12-18	X
	15-2308	AAB3430	187			0-6	X
	15-2310	AAB3429	349			0-6	X
	15-2311	AAB3435	42			0-6	
	15-2311	AAB3444	25.6			18-24	

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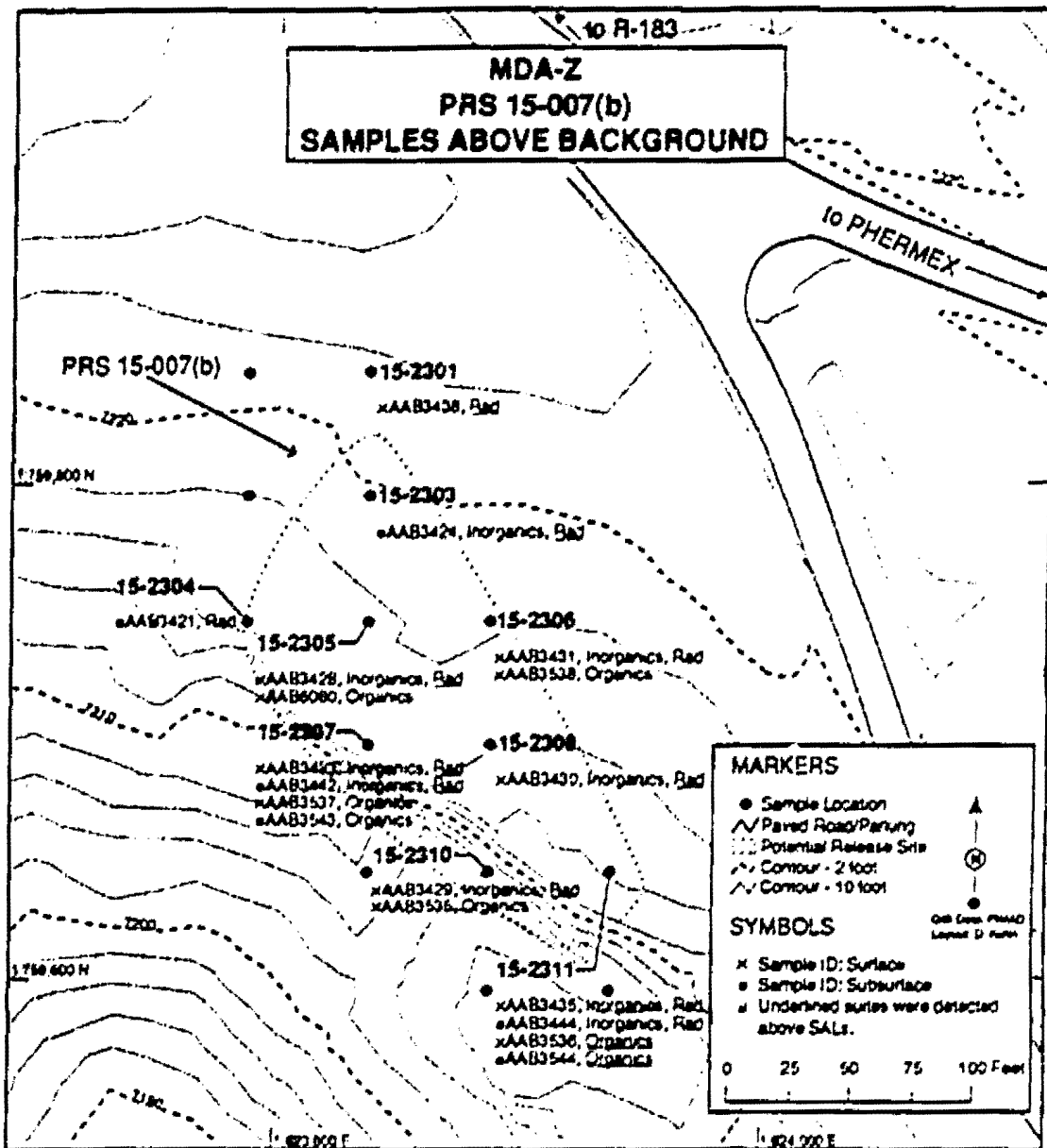


Figure 4-9. Locations of samples above background

The inorganic chemicals and anthracene, di-n-butyl phthalate, fluoranthene, and pyrene are non-carcinogenic. The sum of the maximum normalized values for these non-carcinogenic chemicals is 0.4798 (Table 4-17), less than the target value of one, so they will not be considered COPCs for this site.

TABLE 4-17
MULTIPLE CHEMICAL EVALUATION - MDA-Z

Soil Non-Carcinogenic Analyte	Normalized Concentration
Copper	0.0454
Lead	0.1323
Mercury	0.0739
Silver	0.0100
Anthracene	0.2053
Di-n-butyl phthalate	0.0001
Fluoranthene	0.0058
Pyrene	0.0070
TOTAL	0.4798

Chrysene, indeno(1,2,3-cd)pyrene and bis(2-ethylhexyl)phthalate are carcinogenic chemicals, and the sum of their maximum normalized concentrations is 1.1330 (Table 4-18). These PAHs are thus considered COPCs at MDA-Z.

TABLE 4-18
MULTIPLE CHEMICAL EVALUATION - MDA-Z

Soil Carcinogenic Analyte	Normalized Concentration
Bis(2-ethylhexyl)phthalate	0.1469
Chrysene	0.1500
Indeno(1,2,3-cd)pyrene	0.8361
TOTAL	1.1330

4.4.3.2 Data Interpretation

Table 4-16 shows the results of the surface and subsurface soil sampling conducted at PRS 15-007(b). Appendix B describes the inferred areal extent of the landfill, based upon visual examination of the exposed faces and disturbed soil and upon the geophysical survey. In general, fixed and mobile laboratory results show that concentrations of metals and other contaminants were elevated near the center portion of the landfill. The screening assessment results identified PAHs, phthalates, beryllium,

and uranium as COPCs in the surface and subsurface soil at PRS 15-007(b). Beryllium benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, phenanthrene, chrysene, indeno(1,2,3-cd)pyrene, bis (2-ethylhexyl) phthalate, and uranium remain as COPCs at MDA-Z.

These results, however, may not necessarily be representative of the entire landfill, as no samples were collected from the interior. The PAHs are likely to have resulted from disposal of charred wood, as could be seen by visual inspection. The landfill contents visible at the exposed face are extremely heterogeneous, ranging from contaminated soil to concrete structures on the order of 10 ft³. Because of this extreme heterogeneity, further sampling is not recommended. Instead, during remediation, a program of field screening should be sufficient to determine the extent of contamination of individual pieces of debris.

4.4.3.3 Risk Assessment

No risk assessment was performed for this PRS.

4.4.3.4 Ecotoxicological Screening Assessment

Inorganics. All inorganic COPCs detected in soil samples taken at MDA-Z and exceeding their natural background UTLs (Section 4.4.3.1) were compared to ecotoxicological screening criteria (Table 4-19).

- Beryllium, copper, lead, mercury, silver, and uranium were observed at concentrations above ESALs. These inorganic COPCs also were compared to ESALs derived for reproduction/survival toxicological endpoints (ESAL2) and for toxicity to plants (phyto-ESAL).
- ESAL2 criteria are exceeded by factors from 10-50 by beryllium, copper, and lead.
- The mercury results exceed the second-tier screening criteria by 47-612 times, and uranium results exceed the criteria by as much as 2000 times.

Organics. All detected COPCs detected in soil samples taken at MDA-Z (Section 4.4.3.1) were compared to ecotoxicological screening criteria if available (Table 4-19).

- Anthracene, fluoranthene, and pyrene results are below ESALs and can be eliminated as COPCs. Bis(2-ethylhexyl)phthalate could not be eliminated.
- Di-n-butyl phthalate has a phyto-ESAL. This analyte was only detected once and has low phytotoxicity, so it may be eliminated as a COPC.
- The remaining organic COPCs do not have screening criteria and cannot be evaluated.

4.4.4 Conclusions and Recommendations

The debris pile at MDA-Z contains mercury and uranium levels that exceed screening criteria for reproductive and survival effects on vertebrates. Other inorganic analytes and organic analytes also exceed second-tier screening criteria to a lesser degree. The location of the site makes it likely that COPCs may be transported to other locations, making them more available to ecological receptors. The proximity of the site to other related sites also may contribute to cumulative adverse effects. The significance that these COPCs hold for the long-term persistence of resident plant and animal populations cannot be adequately assessed in a screening assessment for this PRS and must be addressed in a baseline ecological risk assessment.

The contents of the landfill at PRS 15-007(b) pose a potential risk to human health, based upon the results of the screening assessment. The landfill occupies a volume of approximately 2000 yd³. The risks posed by the landfill contents will be reduced or eliminated by an EC, to be implemented in the late summer/fall of 1996 according to the guidance in "Accelerated Cleanup Process" (Glatzmaier and Fesmire 1995). The site is designated as an EC because the remedy is obvious — excavate, screen, sort, dispose — but the potential for mixed waste exists. In addition, implementation will be moderately difficult, as many unknowns exist (size of buried structures, extent of mixed waste contamination, etc.) The EC plan will be submitted to the U.S. EPA, Region 6, and to the DOE/LAO for concurrence, for review before conducting the cleanup.

TABLE 4-19
COMPARISONS OF ESALS WITH DATA FROM MDA 2, PRS 15-007(b).

Inorganic Analytes Greater Than Background

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Beryllium	AAB3435		2.1	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3428		2.6	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3424		3	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3429	0-6	3.5	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3430	0-6	3.6	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3435	0-6	33.6	mg/kg	30.7	0.0161	5.0778	60.0
Copper	AAB3431	0-6	47.8	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3428	0-6	49	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3429	0-6	67.3	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3442	12-18	96.1	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3424	18-24	105	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3430	0-6	111	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3433	0-6	127	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3433		23.4	mg/kg	23.3	0.3910	1.6813	50.0
Lead	AAB3430		30.8	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3442		32.6	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3428		38.6	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3429	0-6	52.9	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3444	18-24	0.13	mg/kg	0.1	0.1390	0.0028	0.3
Mercury	AAB3428	0-6	0.16	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3430	0-6	0.17	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3435	0-6	0.41	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3433	0-6	0.78	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3442	12-18	1.7	mg/kg	0.1	0.1390	0.0028	0.3
	AAB3424	18-24	3.8	mg/kg		0.0006		0.0
Silver	AAB3421		5.71	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3444	18-24	25.6	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3435	0-6	42	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3431	0-6	47.1	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3431	0-6	57.4	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3424	18-24	117	mg/kg	5.45	0.1216	0.1338	5.0

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TABLE 4-19
COMPARISONS OF ESALS WITH DATA FROM MDA 2, PRS 15-007(b). (continued)

Inorganic Analytes Greater Than Background

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Uranium	AAB3438	0.5	130	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3433	0.6	136	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3428	0.6	161	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3442	12-18	162	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3430	0.6	187	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3429	0.6	349	mg/kg	5.45	0.1216	0.1338	5.0

Selected Organic Analytes

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Anthracene	AAB3544	18-24	3.9	mg/kg	n/a	43.4400		
Benzo[a]anthracene	AAB3536	0.6	0.89	mg/kg	n/a			
	AAB3544	18-24	4.2	mg/kg	n/a			
Benzo[a]pyrene	AAB3536	0.6	0.49	mg/kg	n/a			
Benzo[b]fluoranthene	AAB3536	0.6	0.98	mg/kg	n/a			
Benzo[g,h,i]perylene	AAB3536	0.6	0.64	mg/kg	n/a			
Bis(2-ethylhexyl)phthalate	AAB3535	0.6	0.67	mg/kg	n/a	0.0087		
	AAB3543	18-30	0.7	mg/kg	n/a	0.0087		
	AAB3536	0.6	3	mg/kg	n/a	0.0087		
	AAB3537	0.6	4.7	mg/kg	n/a	0.0087		
Chrysene	AAB3536	0.6	0.9	mg/kg	n/a			
	AAB3544	18-24	3.6	mg/kg	n/a			
Di n butyl phthalate	AAB3537	0.6	0.53	mg/kg	n/a			200.0
Fluoranthene	AAB6080	0.6	0.5	mg/kg	n/a	54.30		
	AAB3538	0.6	0.54	mg/kg	n/a	54.30		
	AAB3536	0.6	2.4	mg/kg	n/a	54.30		

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TABLE 4-19
COMPARISONS OF ESALS WITH DATA FROM MDA Z, PRS 15-007(b). (continued)

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Fluoranthene	AAB3544	18-24	15	mg/kg	n/a	54.30		
Indeno[1,2,3-cd]pyrene	AAB3536	0-6	0.51	mg/kg	n/a			
Phenanthrene	AAB3536	0-6	1.2	mg/kg	n/a			
	AAB3544	18-24	17	mg/kg	n/a			
Pyrene	AAB6080	0-6	0.46	mg/kg	n/a	32.6		
	AAB3538	0-6	0.65	mg/kg	n/a	32.6		
	AAB3536	0-6	2.5	mg/kg	n/a	32.6		
	AAB3544	18-24	14	mg/kg	n/a	32.6		

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4.4.5 Further Investigations

An EC will be conducted to reduce or eliminate the risk to human health from PRS 15-007(b). No additional Phase II sampling is proposed, because the COPCs are known and the general area of the landfill is defined.

4.5 PRS 15-008(b) Surface Disposal Area at R-44

Disposal area PRS 15-008(b) is associated with the decommissioned firing site R-44 (Figure 1-9). This site was the third most extensively used firing site at TA-15 and was named for the control room at this site. It is listed on the EPA SWMU report as priority A, B (RFI Work Plan (LANL 1993, 1087)). The firing site was built in 1951 and was used extensively from 1951 through 1978 for diagnostic tests of weapons components. After the inception of PHERMEX and Ector, this site was used infrequently. It was decommissioned in 1993.

R-44 is located on a relatively open flat area on a narrow mesa. Consequently, some debris from the explosions has been scattered through the air into the canyons on either side of the firing site. A shelf of soil and debris (PRS 15-008(b)) was created on the north side of the firing site when remnants and debris from tests were pushed aside. Visual inspection reveals remaining pieces of materials ranging from less than one inch to several ft in diameter. In addition, some of the material in the debris pile was pushed over the edge of the canyon, as can be seen by visual inspection. COPCs at this site include metals from wire (such as copper), pieces of metal (such as beryllium and lead), residual explosives, and radioactive substances (such as uranium) from past Laboratory practices. This list of potential contaminants is identical to those to be evaluated at other sites within R-44.

The major potential pathway to receptors would occur by direct contact if the land reverts to uncontrolled use. Because the debris is largely uncovered, it would be of possible souvenir value to recreational users. A minor pathway is through air resuspension.

4.5.1 Previous Investigations

The ground-based radiological survey of 1991 (Schlapper 1991, 10-0009) found small pieces of uranium metal on the R-44 site area. Measured exposure rates ranged from 50 mR/h on contact (due to lumps of DU), to as low as 0.1 mR/h (background values). The area was partially cleaned up.

A more extensive sampling effort at the firing site itself was undertaken in the Idaho National Engineering Laboratory (INEL) Environmental Survey of 1987 (DOE 1989, 0271). Composite samples were taken at four radii from the center of the firing site (10, 100, 250, and 450 ft). None of the samples had detectable

quantities of HEs. Lead, beryllium, and uranium decreased roughly exponentially with distance from the center of the firing site. Lead decreased from 513 mg/kg in the center of the test area to 12 mg/kg at the greatest radius. Uranium-238 also decreased with distance from the center (725 to 45 mg/kg).

4.5.2 Field Investigation

The objectives of the Phase I sampling were to determine whether COPCs were present at concentrations above SALs in surface and near-surface soils at the disposal area. Because of the previous INEL investigation (DOE, 1989, 0271) the major contaminants were known, but the distribution was uncertain due to reworking of the debris by bulldozers. A total of ten samples were proposed for collection, two surface, two subsurface (24 in. or soil/tuff interface), and six surface samples from the canyon sides. A total of eleven locations were actually sampled, based upon field judgment (including one additional sample requested by EPA in a NOD). Figure 1-9 shows the sample collection locations. The sample locations were chosen in a biased fashion based upon the results from field screening for uranium, beryllium, and lead, and radiation screening. In addition, all sample locations were screened for the presence of HEs using the HE field spot test.

Samples were obtained from surface (0-6 in.) and subsurface (18-24 in. or refusal) using the surface scoop technique or hand auguring, respectively (SOPs 6.09, 6.10; LANL 1993, 0875). Prior to sampling, a hand-held radiation survey was performed. All samples collected were sent to the mobile radioanalysis van for radioactivity, chemistry van for XRF, and beryllium was determined by the LIBS. Samples for fixed laboratory analysis were selected based upon these results. A total of thirteen samples (and one additional duplicate) were submitted for fixed laboratory analysis.

4.5.2.1 Results of Field Surveys

A land survey was conducted to set the sample location using established survey monuments with coordinates published in the Laboratory Survey Procedures Manual (LANL 1993a). A Topcon GTS-3B Total Station was used to conduct the survey. The field notes were handwritten while in the field, then reduced and entered into an Autocad DCA computer system. All surveying data was prepared following the draft interim guidance on Geodetic Surveying for Townsite Operations (Vocke 1992).

4.5.2.2 Results of Field Screening

Field screening was performed to determine potential hazards, to establish health and safety conditions for on-site workers, and to screen samples for metals prior to selection of samples for fixed laboratory analysis. Portable field instruments for detecting alpha-, beta-, and gamma emitters were used to screen for gross alpha, gross beta, and gross gamma. A XRF analyzer was used to screen samples for mercury,

lead, and uranium. A portable LIBS instrument was used to screen soil samples for beryllium because it cannot be detected by XRF.

All field samples were screened for explosives using a field spot-test kit. The HE spot test revealed no positive samples for HE.

Appendix D presents the results of the field screening for metals and radioactivity. Appendix A presents the results of the laboratory analysis. Significant detection of metals occurred in thirteen samples; these were sent to a fixed analytical lab for analysis.

4.5.3 Screening Assessment

The QA/QC assessment of the data associated with the collected samples indicated that the analytical results were acceptable except for two antimony and seven mercury samples that were qualified as R, two cadmium samples that may be present at concentrations greater than its SAL, and HE data that exceeded holding times. Although the low bias (a factor of 21.4) of two cadmium samples indicates that cadmium may be present above its SAL, the majority of other sample results show that cadmium is below its SAL. Thus, the very low bias for these two samples with QA/QC problems is not considered to be indicative of cadmium concentrations at the site and the data are not considered in the screening assessment. HE data that exceeded holding times are also not considered to affect the screening results (Section 3.1.4). Data qualified as R are not used in the screening assessment.

4.5.3.1 Comparison to Background/SALs

Inorganics. All inorganic COPCs detected in soil samples taken at the 7-44 surface disposal area were compared with their natural background UTLs.

- Chromium, mercury, nickel, silver and zinc were observed at concentrations above their respective UTLs. Further comparison of these analytes with their SALs clarifies that the levels observed are significantly below SALs. Thus, these analytes were subjected to an MCE to determine any additive effects of concern (see below).
- Antimony was reported at concentrations over background in four soil samples. Two of the reported values are greater than the SAL; thus, antimony is a COPC for this site.
- Copper was reported at concentrations over background in thirteen soil samples. The reported value is greater than the SAL in one case; thus, copper is considered a COPC.
- Lead was reported at concentrations over background in twelve soil samples. Seven of the reported values are greater than the SAL; thus, lead is a COPC for this site.

- Arsenic values over Laboratory background UTLs were reported for two samples. Natural background levels of arsenic in the Los Alamos area exceed the risk-based threshold that would otherwise be used as a screening value, so the background UTL is used to determine the presence of arsenic as a COPC. The data for this site show arsenic levels elevated over natural background; thus, arsenic will continue to be considered a COPC.
- Beryllium values over Laboratory background UTLs were reported for thirteen samples. Natural background levels of beryllium in the Los Alamos area exceed the risk-based threshold that would otherwise be used as a screening value, so the background UTL is used to determine the presence of beryllium as a COPC. The data for this site show beryllium levels elevated over natural background; thus, beryllium will continue to be considered a COPC.
- No other inorganics exceeded their background UTLs in soil samples from the R-44 surface disposal area, and therefore they will not be considered COPCs.

Organics. Analyses for organic chemicals and HEs were not conducted on samples from the R-44 surface disposal area.

Radionuclides. Radionuclides observed at the R-44 surface disposal area were compared to their Laboratory background UTLs where available, and further to their respective SALs.

- Uranium was reported above its background UTL in sixteen soil samples from the surface disposal area at R-44. Eleven of the reported concentrations of uranium are greater than the SAL for total uranium in soil; thus, uranium will continue to be regarded as a COPC for this site.
- No other radionuclides exceeded their background UTLs in soil samples from this surface disposal area, and therefore they will not be considered COPCs.

The results from soil samples with concentrations exceeding background UTLs are presented in Table 4-20. The locations of samples with analyte values exceeding background UTLs are shown in Figure 4-10.

Multiple Chemical Evaluation. As discussed in Section 3.2.2, an MCE was conducted on all inorganic chemicals observed above their respective background UTLs and below their respective SALs. Chromium, mercury, nickel, silver and zinc are all non-carcinogenic chemicals, so they were included together in one MCE. The sum of the maximum normalized concentrations of these analytes is 0.0964, less than the target value of one (Table 4-21). Thus, the potential additive effects of these chemicals at this surface disposal area are not of concern and they will not be considered COPCs.

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TABLE 4-20

R-44 PRS 15-008(b)

Inorganic Analytes With Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	DEPTH (Inches)	> SAL
Antimony	15-2504	AAB3354	18.4	31	2.5	0.6	X
	15-2504	AAB3400	16.8			0.6	
	15-2506	AAB3531	1702			0.6	
	15-2510	AAC0995	457			18-24	
Arsenic	15-2506	AAB3531	700	N/A	11.6	0.6	
	15-2510	AAC0995	129			18-24	
Beryllium	15-2500	AAB3503	3.5	N/A	1.95	0.6	
	15-2501	AAB3398	10.6			0.6	
	15-2502	AAB3355	35.5			0.6	
	15-2502	AAB3401	11.9			18-24	
	15-2503	AAB3353	17.1			0.6	
	15-2504	AAB3354	18.3			0.6	
	15-2504	AAB3400	35.1			0.6	
	15-2506	AAB3531	15.3			0.6	
	15-2507	AAB3399	12.5			0.6	
	15-2508	AAB3402	6.4			0.6	
	15-2510	AAC0995	115			18-24	
Chromium	15-2502	AAB3355	20.2	210	19.3	0.6	
Copper	15-2500	AAB3503	1275	2800	30.7	0.6	X
	15-2501	AAB3398	1040			0.6	
	15-2502	AAB3355	550			0.6	
	15-2502	AAB3401	784			18-24	
	15-2503	AAB3353	4110			0.6	
	15-2504	AAB3354	1110			0.6	
	15-2504	AAB3400	1960			0.6	
	15-2506	AAB3531	447			0.6	
	15-2507	AAB3399	697			0.6	
	15-2508	AAB3402	79.6			0.6	
15-2510	AAC0995	292	18-24				
Lead	15-2500	AAB3503	575			0.6	X
	15-2501	AAB3398	77.9			0.6	
	15-2502	AAB3355	175			0.6	
	15-2502	AAB3401	67			18-24	

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TABLE 4-20

R-44 PRS 15-008(b) (continued)

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	DEPTH (inches)	> SAL
Lead	15-2503	AAB3353	1250	400	23.3	0.6	X
	15-2504	AAB3354	665			0.6	X
	15-2504	AAB3400	754			0.6	X
	15-2506	AAB3531	421			0.6	X
	15-2507	AAB3399	233			0.6	
	15-2508	AAB3402	61.8			0.6	
	15-2510	AAC0995	74400			18.24	X
Mercury	15-2502	AAB3401	1.1	23	0.1	18.24	
	15-2503	AAB3353	0.12			0.6	
Nickel	15-2502	AAB3355	15.9	1600	15.2	0.6	
Silver	15-2500	AAB3503	12	380	1.61	0.6	
	15-2504	AAB3354	3.1			0.6	
	15-2504	AAB3400	4.4			0.6	
	15-2506	AAB3531	6			0.6	
	15-2510	AAC0995	2.8			18.24	
Zinc	15-2500	AAB3503	77.6	23000	50.8	0.6	
	15-2501	AAB3398	71.7			0.6	
	15-2502	AAB3355	60.1			0.6	
	15-2503	AAB3353	71.2			18.24	
	15-2504	AAB3354	83.7			0.6	
	15-2504	AAB3400	147			0.6	
	15-2507	AAB3399	52.5			0.6	

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TABLE 4-20

R-44 PRS 15-008(b) (continued)

Radionuclides with Concentrations Greater Than Background UTL

Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	DEPTH (Inches)	> SAL
Uranium	15-2500	AAB3503	310	95	5.45	0.6	X
	15-2500	AAB3504	19.4			18-24	
	15-2501	AAB3398	282			0.6	X
	15-2501	AAB3530	93			18-24	
	15-2502	AAB3355	659			0.6	X
	15-2502	AAB3401	303			18-24	X
	15-2503	AAB3352	33			18-24	
	15-2503	AAB3353	400			0.6	X
	15-2504	AAB3354	865			0.6	X
	15-2504	AAB3400	890			0.6	X
	15-2506	AAB3531	417			0.6	X
	15-2507	AAB3399	536			0.6	X
	15-2508	AAB3402	184			0.6	X
	15-2510	AAC0995	160			18-24	X

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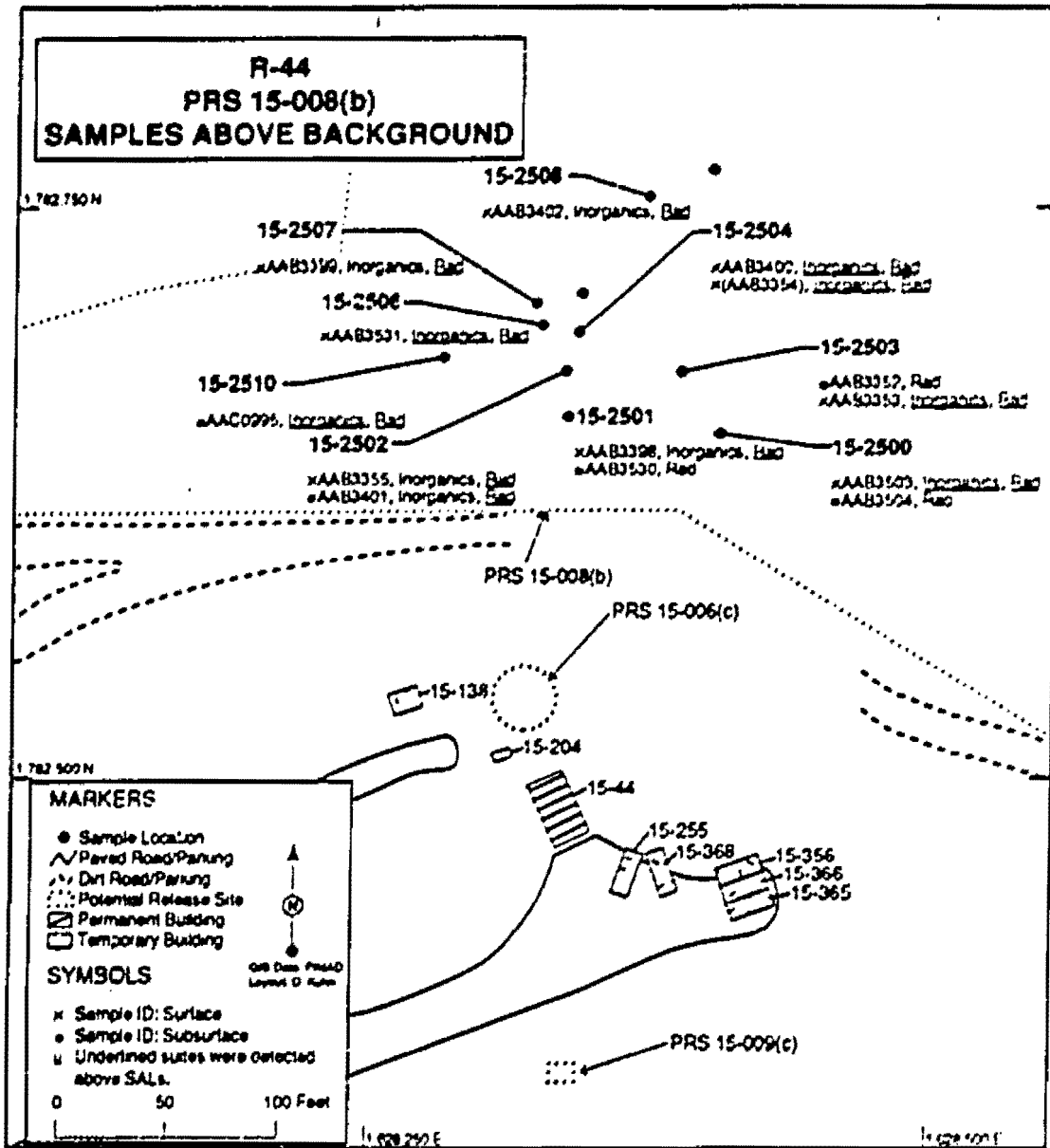


Figure 4-10. Locations of samples above background

TABLE 4-21
 MULTIPLE CHEMICAL EVALUATION - R-44 SURFACE DISPOSAL AREA

Soil: Non-Carcinogenic Analytes	Normalized Concentration
Chromium	0.0962
Mercury	0.0478
Nickel	0.0106
Silver	0.0316
Zinc	0.0064
TOTAL	0.0964

4.5.3.2 Data Interpretation

In general, concentrations of metals and uranium were elevated near the center portion of the disposal area (see Figure 4-10). The screening assessment results identified antimony, copper, lead, arsenic, beryllium, and uranium as COPCs in the surface and subsurface soil at PRS 15-008(b). These results, however, are not considered fully representative of the disposal area, as very few samples were collected from lower sections of the canyon or laterally along the face of the disposal area.

In spring 1995 the mesa was walked over, and it was determined that the disposal area, PRS 15-008(b), was much larger than shown in the RFI Work Plan (LANL 1993, 1087). A sampling plan for R-44/45 was submitted to the U.S. EPA on August 28, 1995. Additional sampling (including additional locations, depths, screening, and surveying) was performed during the summer of 1995 down the drainages of the canyon that drain PRS 15-008(b) as part of the firing site investigation. This sampling and field screening was necessary to fully understand the magnitude of the environmental concerns at the disposal area. Most of the radioactive contamination is in the original, smaller area, but it appears that debris was discarded throughout the entire area. The new, larger area overlaps the firing site areas. Accordingly, further evaluation of this site has been delayed until May 22, 1996, when the report for the entire R-44 firing site will be submitted. In that report, the entire firing site will be dealt with as a single integrated area, which will result in a better remedy than evaluating specific PRSs in separate reports.

4.5.3.3 Risk Assessment

No risk assessment was performed for this PRS.

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4.5.3.4 Ecotoxicological Screening Assessment

Inorganics. All inorganic COPCs detected in soil samples taken at Surface Disposal Area 15-008(b) and exceeding their natural background UTLs (Section 4.5.3.1) were compared to ecotoxicological screening criteria (Table 4-22).

- Antimony, arsenic, beryllium, chromium, copper, lead, mercury, nickel, silver, zinc, and uranium were measured at concentrations above ESALs. These inorganic COPCs also were compared to ESALs derived for reproduction/survival toxicological endpoints (ESAL2) and for toxicity to plants (phyto-ESAL).
- Antimony does not have an ESAL2, but its phyto-ESAL is exceeded by 3-340 times by the analyte results.
- Two sample results exceed second-tier screening criteria for mercury.
- Beryllium results exceed the ESAL2 value by 12-400 times, and copper exceeds its ESAL2 by 16-800 times.
- Lead and uranium analytes have samples that exceed the ESAL2s by more than 1,000 times.
- All zinc results but one are less than 50 times the ESAL2 value and less than 10 times the phyto-ESAL. A single result exceeds the ESAL2 screening criteria by more than a factor of 1,000.

Organics. Analyses for organic chemicals and HEs were not conducted on samples from the R-44 surface disposal area.

4.5.4 Conclusions and Recommendations

The Surface Disposal Area 15-008(b) contains several inorganic COPCs at levels that exceed screening criteria for reproductive and survival effects on vertebrates. Other inorganic COPCs also exceed second-tier screening criteria to a lesser degree. The location of the site makes it possible that COPCs may be transported to other locations, making them more available to ecological receptors, and the proximity of the site to other related sites may contribute to possible cumulative adverse effects. The significance that these COPCs hold for the long-term persistence of resident plant and animal populations cannot be adequately assessed in a screening assessment at one PRS and must be addressed in a baseline ecological risk assessment.

Further sampling, screening, surveying, etc. down the drainage areas of this site was performed during the summer of 1995. The preliminary results of the XRF and LIBS field screening indicated more extensive lead, uranium, and beryllium contamination than anticipated. The most likely source is the surface disposal area. Because the source and the drainages are continuous, they will be considered together in detail in the May 22, 1996 report.

TABLE 4-22
COMPARISONS OF ESALS WITH DATA FROM R-44 DISPOSAL AREA, PRS 15-008(b).

Inorganic Analytes Greater Than Background

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Antimony	AAB3400	0.6	16.8	mg/kg	1	0.0152		5.0
	AAB3354	0.6	18.4	mg/kg	1	0.0152		5.0
	AAC0995	18-24	457	mg/kg	1	0.0152		5.0
	AAB3531	0.6	1702	mg/kg	1	0.0152		5.0
Arsenic	AAC0995	18-24	129	mg/kg	7.82	0.0003	0.0474	10.0
	AAB3531	0.6	700	mg/kg	7.82	0.0003	0.0474	10.0
Beryllium	AAB3503		3.3	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3503	0.6	3.5	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3402	0.6	6.4	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3398	0.6	10.6	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3401	18-24	11.9	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3399	0.6	12.5	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3531	0.6	13.1	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3531	0.6	15.3	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3353	0.6	17.1	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3354	0.6	18.3	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3400	0.6	35.1	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3355	0.6	35.5	mg/kg	1.95	0.2346	0.2815	10.0
	AAC0995	18-24	115	mg/kg	1.95	0.2346	0.2815	10.0
	Chromium	AAB3355	0.6	20.2	mg/kg	19.3	1.0426	0.4170
Copper	AAB3402	0.6	79.6	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3531	0.6	290	mg/kg	30.7	0.0161	5.0778	60.0
	AAC0995	18-24	292	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3531	0.6	447	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3355	0.6	550	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3399	0.6	697	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3401	18-24	784	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3503	0.6	900	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3398	0.6	1040	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3354	0.6	1110	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3503	0.6	1275	mg/kg	30.7	0.0161	5.0778	60.0

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TABLE 4-22
COMPARISONS OF ESALS WITH DATA FROM R-44 DISPOSAL AREA, PRS 15-008(b) (continued)

Inorganic Analytes Greater Than Background								
Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Copper	AAB3400	0-6	1960	mg/kg	30.7	0.0161	5.0778	60.0
	AAB3353	0-6	4110	mg/kg	30.7	0.0161	5.0778	60.0
Lead	AAB3402	0-6	61.8	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3401	18-24	67	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3398	0-6	77.9	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3355	0-6	175	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3399	0-6	233	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3503	0-6	413	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3531	0-6	421	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3503	0-6	575	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3354	0-6	665	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3400	0-6	754	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3353	0-6	1250	mg/kg	23.3	0.3910	1.6813	50.0
	AAC0995	18-24	74400	mg/kg	23.3	0.3910	1.6813	50.0
	Mercury	AAB3353	0-6	0.12	mg/kg	0.1	0.1390	0.0028
AAB3401		18-24	1.1	mg/kg	0.1	0.1390	0.0028	0.3
Nickel	AAB3355		15.9	mg/kg	15.2	2.1720	17.3760	25.0
Silver	AAC0995	18-24	2.8	mg/kg		0.0006		
	AAB3354	0-6	3.1	mg/kg		0.0006		
	AAB3400	0-6	4.4	mg/kg		0.0006		
	AAB3531	0-6	6	mg/kg		0.0006		
	AAB3503	0-6	12	mg/kg		0.0006		
Uranium	AAB3504	18-24	19.4	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3352	18-24	31.8	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3352	18-24	33	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3530	18-24	93	mg/kg	5.45	0.1216	0.1338	5.0
	AAC0995	18-24	160	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3402	0-6	184	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3398	0-6	282	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3401	18-24	303	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3503	0-6	310	mg/kg	5.45	0.1216	0.1338	5.0

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TABLE 4-22
COMPARISONS OF ESALS WITH DATA FROM R-44 DISPOSAL AREA, PRS 15-008(b) (continued)

Inorganic Analytes Greater Than Background

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Uranium	AAB3353	0.6	400	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3531	0.6	402	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3531	0.6	417	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3399	0.6	536	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3355	0.6	659	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3354	0.6	865	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3400	0.6	890	mg/kg	5.45	0.1216	0.1338	5.0
	Zinc	AAB3399		52.5	mg/kg	50.8	0.0434	6.9440
AAB3503			58	mg/kg	50.8	0.0434	6.9440	25.0
AAB3355			60.1	mg/kg	50.8	0.0434	6.9440	25.0
AAB3353			71.2	mg/kg	50.8	0.0434	6.9440	25.0
AAB3398			71.7	mg/kg	50.8	0.0434	6.9440	25.0
AAB3503			77.6	mg/kg	50.8	0.0434	6.9440	25.0
AAB3400		0.6	147	mg/kg	50.8	0.0434	6.9440	25.0
AAB3354			8307	mg/kg	50.8	0.0434	6.9440	25.0

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4.5.5 Further Investigations

The results from investigations of the firing site and the drainages conducted during the summer of 1995 will be integrated with the results from this disposal area in the May 22, 1996 report. At that time, appropriate recommendations will be made concerning further action, probably an EC. If an EC is to be performed, the EC plan will be submitted to the U.S. EPA, Region 6, for review, and to the DOE/LAAO for concurrence, before conducting the cleanup.

4.6 PRS 15-012(b) Operational Release

PRS 15-012(b) is a sunken, soil-bermed area approximately 63 ft by 20 ft located southeast of building 15-285. In this area, the explosives groups at the Laboratory washed out vessels used for explosives testing. These vessels were heavy-walled steel spheres (diameter 6 ft) that contained the debris from the explosion. The debris would be similar to that found with noncontained explosions: uranium, beryllium, and lead. During the washing, the spheres were suspended from a boom truck, which remained on the macadam parking area east of TA-15-285; the suspended spheres were southeast of Building TA-15-285 (Figure 1-10). Personnel usually entered the vessels to clean them thoroughly. The water was then dumped in the bermed area at PRS 15-012(b), and the personnel showered in Building 15-285. The washed spheres were stored at the Boneyard, PRS 15-001.

The major potential pathway to receptors would occur by direct contact if the land reverts to uncontrolled use. A minor pathway is through air resuspension.

4.6.1 Previous Investigations

PRS 15-012(b) was surveyed with hand-held radiation meters and was found to be radioactively contaminated (Veverka 1988, 10-0011; Schlapper 1991, 10-0009), but contamination levels were not quantified.

4.6.2 Field Investigation

The objectives of the Phase I sampling were to determine the extent, concentration, and depth profile of the COPCs. Six locations were chosen based on the RFI Work Plan for OU 1086 (LANL 1993, 1087), the location map, and radiation screening. Figure 1-10 shows the sample locations. Prior to sampling, the six surface locations were screened for the presence of HEs with the HE spot test.

Samples were obtained from the surface (0-6 in.) and subsurface (18-24 in.) depths using the spade and scoop technique and hand auguring, respectively (LANL-ER-SOP 6.09 and 6.10; LANL 1993, 0875). All

samples collected were sent to the mobile radioanalysis van, then to the mobile chemistry van for XRF. LIBS was used to determine beryllium content. Samples for fixed laboratory analysis were selected based on these results.

While screening for radioactivity, the field team found higher levels in the bermed areas and around an anthill. The fence that surrounds the site runs along the top of the berm; the anthill is just outside the fence.

4.6.2.1 Results of Field Surveys

A land survey was conducted to set grid points and sample locations using established survey monuments with coordinates published in the Laboratory Survey Procedures Manual (LANL 1993a). A Topcon GTS-3B Total Station was used to conduct the survey. The field notes were handwritten while in the field, then reduced and entered into an Autocad DCA computer system. All surveying data was prepared following the draft interim guidance on Geodetic Surveying for Townsite Operations (Vocke 1992).

4.6.2.2 Results of Field Screening

Field screening was performed to determine potential hazards, to establish health and safety conditions for on-site workers, and to screen samples for metals prior to choosing samples for fixed laboratory analysis. Portable field instruments for detecting alpha-, beta-, and gamma emitters were used to screen for gross alpha and gross beta/gamma. All samples were submitted to the mobile radioanalysis van for gross alpha, beta, and gamma screening. An XRF analyzer was used to screen samples for metals (mercury, lead, and uranium). A portable LIBS instrument was used to screen the soil samples for beryllium.

All sampling locations were screened for explosives using a field spot-test kit. The HE spot test kit revealed no samples positive for HE.

Appendix D presents the results of the field screening for metals and radioactivity. Appendix A presents the results of the laboratory analysis. The RFI Work Plan (LANL 1993, 1087) required three surface and three subsurface samples to be submitted for fixed laboratory analyses. Three surface soil samples that showed elevated lead and uranium levels were sent to a fixed analytical laboratory for analysis. The highest values for subsurface soil were submitted; these corresponded to the locations of the high surface soil samples.

4.6.3 Screening Assessment Results for PRS 15-012(b)

There were no QA/QC problems associated with the data with PRS 15-012(b).

4.6.3.1 Comparison to Background/SALs

Inorganics. All inorganic COPCs detected in soil samples taken at the R-183 Operational Release were compared with their natural background UTLs.

- Beryllium was observed at concentrations over background in four samples. Natural background levels of beryllium in the Los Alamos area exceed the risk-based threshold that would otherwise be used as a screening value, so the background UTL is used to determine the presence of beryllium as a COPC. The data for this site shows beryllium levels elevated over natural background; thus, beryllium will continue to be considered a COPC.
- Copper was observed at a concentration over background in one sample. The level observed is significantly below the copper SAL. Thus, copper was subjected to an MCE to determine any additive effects of concern (see below).
- Lead was reported above its UTL in four soil samples from this site. The highest reported concentration is approximately 45% of the lead SAL; it was subjected to an MCE to determine any additive effects of concern (see below).
- One sample has a mercury value recorded that is greater than the UTL, but is less than 10% of the mercury SAL. Thus, mercury was subjected to an MCE to determine any additive effects of concern (see below).
- No other inorganics exceeded their background UTLs in soil samples from the R-183 Operational Release, and therefore they will not be considered COPCs.

Organics. Analyses for organic chemicals and HEs were not conducted on samples from the R-183 Operational Release.

Radionuclides. Radionuclides observed at the R-183 Operational Release were compared to Laboratory background UTLs where available, and further to their respective SALs.

- Uranium was reported above its background UTL in five of the six soil samples analyzed from the operational release at R-183. Three of the reported concentrations of uranium are greater than the SAL for total uranium in soil; thus, uranium will continue to be regarded as a COPC for this site.
- No other radionuclides exceeded their background UTLs in soil samples from this operational release, and therefore they will not be considered COPCs.

The results from soil samples with concentrations exceeding background UTLs are presented in Table 4-23. The locations of samples with analyte values exceeding background UTLs are shown in Figure 4-11.

Multiple Chemical Evaluation. As discussed in Section 3.2.2, a multiple chemical evaluation was conducted on all inorganic chemicals observed above their respective background UTLs and below their respective SALs. Copper, lead and mercury are all non-carcinogenic chemicals, so they were included together in one MCE. The sum of the maximum normalized concentrations of these analytes is 0.4788, below the target value of one (Table 4-24). Thus, potential additive effects of these chemicals at the R-183 Operational Release are not of concern and they will not be considered as COPCs.

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TABLE 4-23

R-183 OPERATIONAL RELEASE PRS 15-012(b)

Heavy Metals With Concentrations Greater Than Background UTL							
Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Beryllium	15-2526	AAB3406	8.2	N/A	1.95	0.6	
	15-2527	AAB3407	2.7			18-24	
	15-2527	AAB3417	27.6			0.6	
	15-2529	AAB3416	6.3			0.6	
Copper	15-2527	AAB3417	61.1	2800	30.7	0.6	
Lead	15-2526	AAB3406	27.3	400	23.3	0.6	
	15-2527	AAB3407	23.8			18-24	
	15-2527	AAB3417	180			0.6	
	15-2529	AAB3416	104			0.6	
Mercury	15-2527	AAB3407	0.16	23	0.1	18-24	

Radionuclides With Concentrations Greater Than Background UTL							
Analyte	Location ID	Sample ID	Sample Value (mg/kg)	SAL (mg/kg)	UTL (mg/kg)	Depth (Inches)	> SAL
Uranium	15-2526	AAB3406	190.35	95	5.45	0.6	X
	15-2527	AAB3407	53.02			18-24	
	15-2527	AAB3417	272.24			0.6	X
	15-2529	AAB3416	90.01			0.6	

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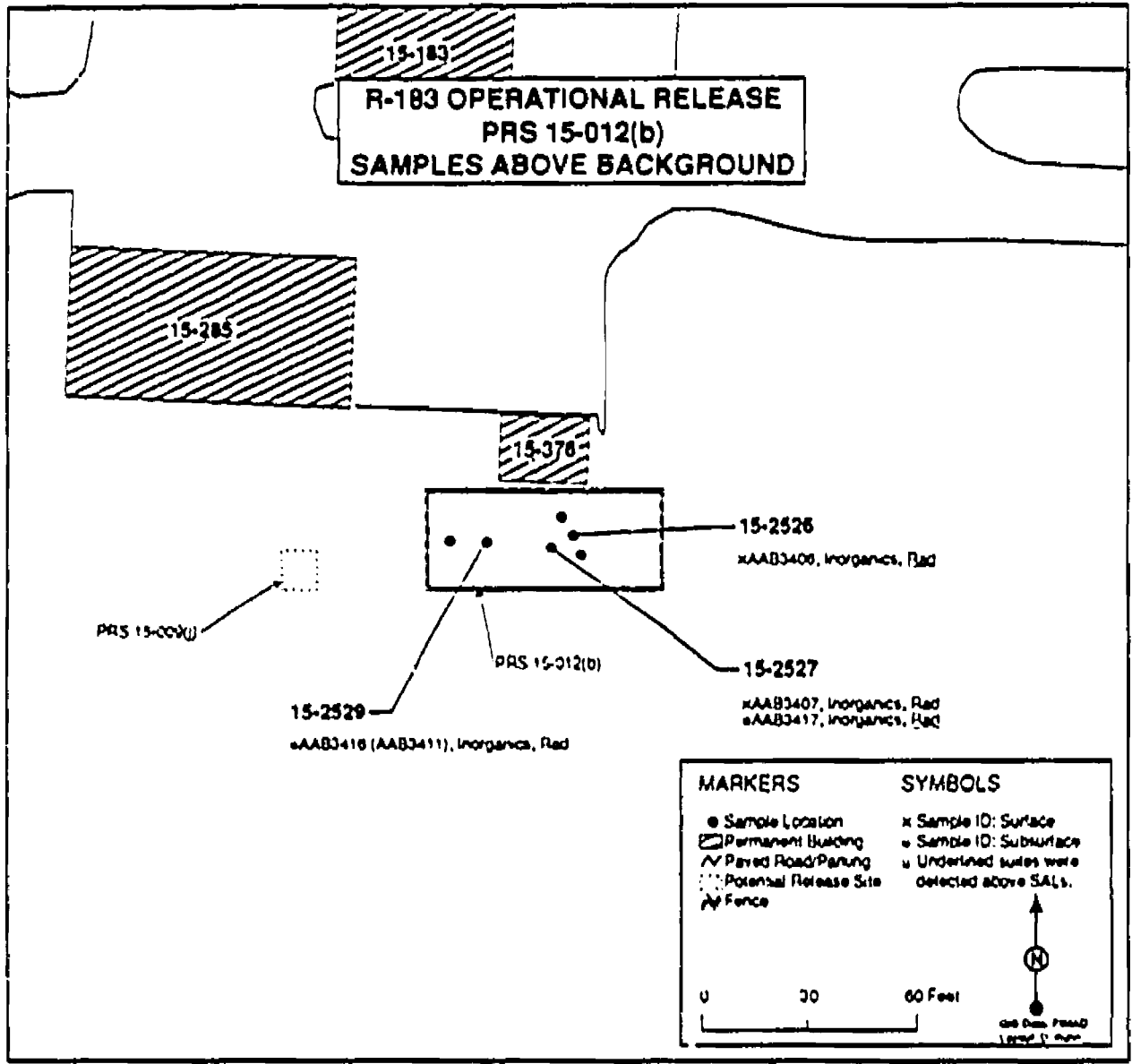


Figure 4-11. Locations of samples above background

TABLE 4-24
MULTIPLE CHEMICAL EVALUATION - R-183 OPERATIONAL RELEASE

Copper	0.0218
Lead	0.45
Mercury	0.007
TOTAL	0.4786

4.6.3.2 Data Interpretation

Table 4-23 shows the results of the surface and subsurface soil sampling conducted at PRS 15-012(b). In general, radiological contamination is a concern for the entire site and along the bermed area, based on the analytical and screening results. The screening assessment results identified beryllium and uranium as COPCs in the surface and subsurface soil at PRS 15-012(b) because they exceeded their respective UTLs.

4.6.3.3 Risk Assessment

No risk assessment was performed for this PRS.

4.6.3.4 Ecotoxicological Screening Assessment

Inorganics. All inorganic COPCs detected in soil samples taken at PRS 15-012(b) and exceeding their natural background UTLs (Section 4.7.3.1) were compared to ecotoxicological screening criteria (Table 4-25).

- Beryllium, copper, lead, mercury, and uranium were measured at concentrations above ESALs. These inorganic COPCs also were compared to ESALs derived for reproduction/survival toxicological endpoints (ESAL2) and for toxicity to plants (phyto-ESAL).
- A single copper result greater than background UTL was obtained. This value is 12 times the screening criteria for vertebrate reproduction and survival and less than the phyto-ESAL.
- A single mercury result greater than background UTL was obtained. This value is 58 times the screening criteria for vertebrate reproduction and survival and less than the phyto-ESAL.

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TABLE 4-25
COMPARISONS OF ESALS WITH DATA R-183 OPERATIONAL RELEASE, PRS 15-012(b).

Inorganic Analytes Greater Than Background

Analyte	Sample ID	Depth	Value	Units	UTL	ESAL	ESAL2	Phyto-toxicity ESAL
Beryllium	AAB3407		2.7	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3416	0.6	6.3	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3406	0.6	8.2	mg/kg	1.95	0.2346	0.2815	10.0
	AAB3417	0.6	27.6	mg/kg	1.95	0.2346	0.2815	10.0
Copper	AAB3417	0.6	61.1	mg/kg	30.7	0.0161	5.0778	60.0
Lead	AAB3407		23.8	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3406		27.3	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3416	0.6	104	mg/kg	23.3	0.3910	1.6813	50.0
	AAB3417	0.6	180	mg/kg	23.3	0.3910	1.6813	50.0
Mercury	AAB3407	18-24	0.16	mg/kg	0.1	0.1390	0.0028	0.3
Uranium	AAB3407	0.6	53.02	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3416	18-24	90.01	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3406	0.6	172.5	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3406	0.6	190.35	mg/kg	5.45	0.1216	0.1338	5.0
	AAB3417	0.6	272.24	mg/kg	5.45	0.1216	0.1338	5.0

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- Beryllium and lead results are all more than 10 times greater than the ESAL2 value. Both analytes also have a value that is approximately 100 times the ESAL2.
- Uranium results are all more than 100 times the ESAL2 screening criteria, including three results that are more than 1,000 times greater.

4.6.4 Conclusions and Recommendations

PRS 15-012(b) contains several inorganic COPCs at levels that exceed screening criteria for reproductive and survival effects on vertebrates. Other inorganic COPCs also exceed second-tier screening criteria to a lesser degree. The location of the site makes it possible that COPCs may come in contact with ecological receptors, and the proximity of the site to other related sites may contribute to cumulative adverse effects. However, the close proximity of the site to buildings may keep exposures to ecological receptors to low levels. The results of this screening assessment should be retained as part of the source term evaluation for a subsequent, larger-scale ecological risk assessment.

Based upon the results of the screening assessment, an EC is recommended for the soil at PRS 15-012(b). The COPCs are listed in Table 4-24, and the known extent of contamination is indicated in Figure 4-11. The depth of the contamination can be estimated as less than 24 in., based on the analytical results. This EC is proposed for implementation in the late spring/early summer of 1996. The site is designated as an EC because excavating the uranium-contaminated soil is the obvious remedy. In addition, the volume of soil would probably be less than 2,500 ft³. The EC plan will be submitted to the U.S. EPA, Region 5, for review, and to the DOE/LAAO for concurrence, before conducting the cleanup.

4.6.5 Future Investigations

An EC will be conducted to eliminate the risk to human health from the radioactive constituents. No additional Phase II sampling is proposed, since the COPCs are known.

4.7 PRS 15-009(j): Inactive Septic System

PRS 15-009(j) is an inactive septic system that was once connected to Building 15-285. Due to the proximity of this septic system to PRS 15-012(b) and its connection to Building 15-285, it was proposed for sampling in the RFI Work Plan (LANL 1993, 1087). The OU 1086 RFI Work Plan reported that no chemicals or radioactivity were used in Building 15-285. Conversations with personnel involved in past operations in the building indicated that silver soldering and use of a brightening tank occurred between 1979 and 1986. Cadmium is the main ingredient in brightening tanks. Also, it was indicated that personnel contaminated with beryllium, uranium, and lead from the vessel washing at PRS 15-012(b)

showered in Building 15-285 (McFarland 1995). The septic system, PRS 15-009(j), was abandoned in fall 1992 when the new Laboratory sewer system was completed.

4.7.1 Previous Investigations

No previous investigations have been performed at this site.

4.7.2 Field Investigation

The objectives of the Phase I sampling were to determine whether contamination was present. During the sampling effort in 1994, two sludge/water samples were proposed for collection. However, the septic tank contained less than one inch of liquid, which was not enough to collect a sample. During the sampling effort in 1995, the septic tank was again investigated and found to contain enough liquid to collect a sample. One sample was collected and analyzed for radioactivity, HEs, and total analyte list (TAL) metals. Figure 1-11 shows the septic tank location.

The liquid sample was obtained using a modified version of LANL-ER-SOP 6.15, Coliwasa Sampler for Liquids and Slurries (LANL 1993, 0875). The sample was sent to the mobile radioanalysis van to determine radioactivity. The sample was then sent for fixed laboratory analysis for high explosives, total uranium and gamma scan, and TAL metals. When the analytical report showed elevated levels of metals and uranium, three additional samples were collected and analyzed for TAL metals and total uranium. Preliminary analysis leads to similar conclusions; the results, when validated, will be included as an addendum to this report.

4.7.2.1 Results of Field Surveys

A land survey was conducted to set the sample location using established survey monuments with coordinates published in the Laboratory Survey Procedures Manual (LANL 1993a). A Sokkia Set IIIB Total station with SDR Data Collector was used to conduct the survey. Data were downloaded from the survey equipment to Sokkia Link and DCA 12.0 PC-based civil and surveying software. The data points were then adjusted, as required by New Mexico state surveying regulations.

4.7.2.2 Results of Field Screening

Field screening was performed to determine potential hazards for on-site workers. A photoionization device (PID) was used to screen for vapors. A portable field instrument for detecting beta and gamma emitters was used to screen for gross beta/gamma when the field team exited the exclusion zone. Mobile radioanalysis van results indicated no gross alpha, beta, or gamma contamination.

Appendix D presents the results of the field screening for metals and radioactivity at the sample locations. Appendix A presents the results of the laboratory analysis.

4.7.3 Screening Assessment Results for Septic Tank 15-293, PRS 15-009(j)

There were no data usability issues associated with the data with PRS 15-09(j).

4.7.3.1 Comparison to Background/SALs

Inorganics. Estimates for natural background levels of inorganic chemicals in water are not available for the Laboratory area. All inorganic COPCs detected in the liquid sample collected from Septic Tank 15-293, PRS 15-009(j), were compared with their SALs (Table 4-26).

Aluminum, antimony, arsenic, cadmium, chromium, copper, lead, manganese, mercury, nickel and zinc were detected at concentrations that exceed their respective SALs (Figure 4-12). All of these inorganic chemicals will be retained as COPCs for Septic Tank 15-009(j).

Organics. No organics or HEs were detected in the sample taken from Septic Tank 15-009(j).

Radionuclides. Analyses for radionuclides were performed on the water sample from Septic Tank 15-009(j). Total uranium was the only detected radionuclide. The reported concentration of uranium in the sample was 2.62 µg/L, which is significantly below the SAL for uranium, 20 µg/L. Therefore, uranium is no longer considered a COPC for this site.

Multiple Chemical Evaluation. Background concentration information is not available for water samples, so all detected analytes that do not exceed SALs were included in an MCE. Barium, cobalt, selenium, silver, and vanadium are all non-carcinogenic compounds, and were thus evaluated together in one MCE. The sum of the maximum normalized concentrations of these analytes is 2.8523 (Table 4-27), above the target value of one. The MCE result implies that the combined effect of these chemicals is of potential concern, so barium, cobalt, selenium, silver, and vanadium (with SAL comparison ratios greater than .1), will also be considered COPCs for Septic Tank 15-009(j).

Beryllium is the only carcinogenic chemical, so a carcinogenic MCE was not necessary. Beryllium will not be considered a COFC for this site.

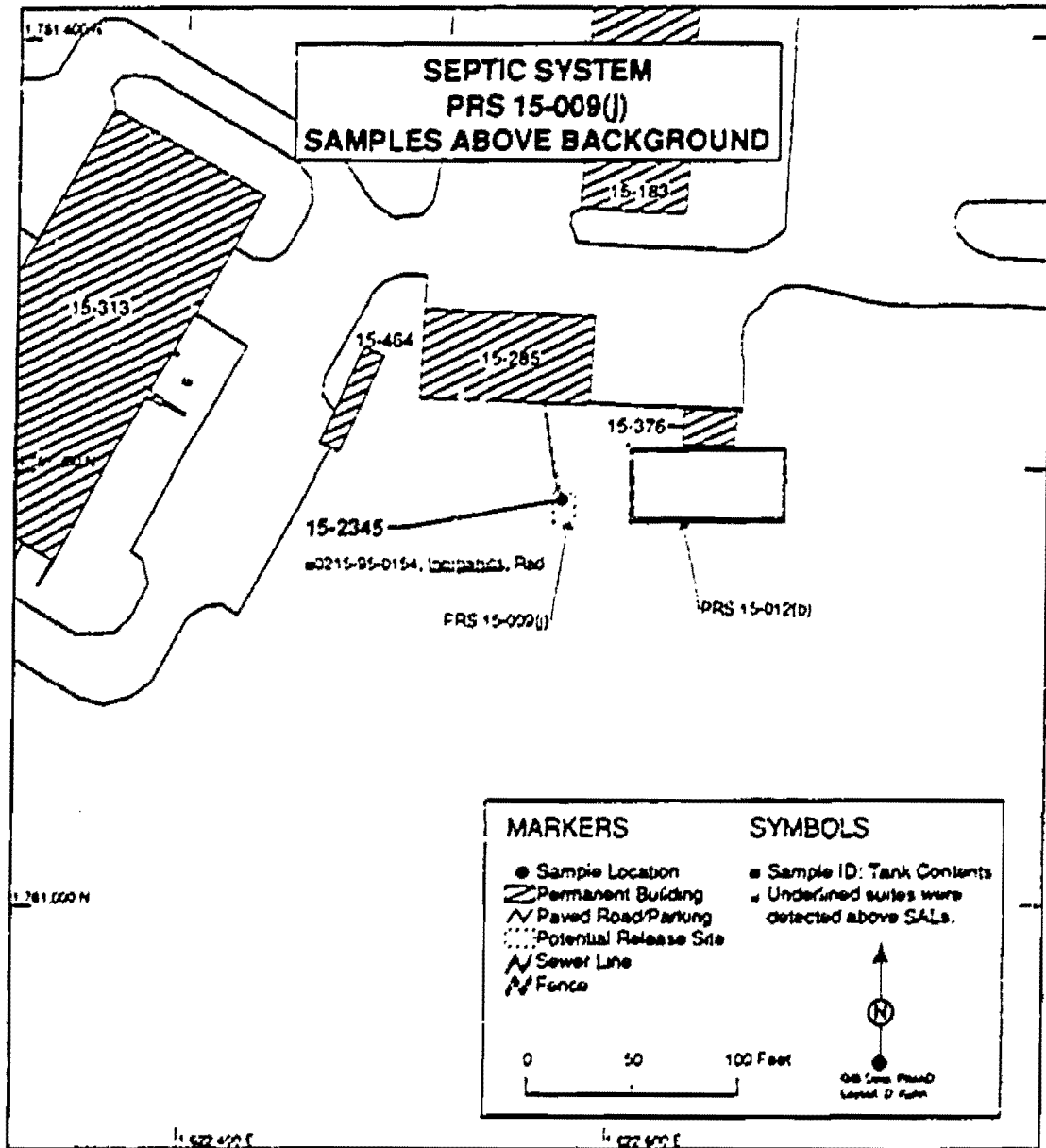


Figure 4-12. Locations of samples above background

TABLE 4-27
MULTIPLE CHEMICAL EVALUATION - SEPTIC TANK 15-009(j)

Water Non-Carcinogenic Analyte	Maximum Concentration
Barium	0.817
Cobalt	0.0265
Selenium	0.564
Silver	0.714
Vanadium	0.7308
TOTAL	2.0523

4.7.3.2 Data Interpretation

Table 4-26 shows the results of the water samples collected from the septic tank. The screening assessment results identified arsenic, antimony, cadmium, chromium, copper, lead, manganese, mercury, zinc, thallium, and uranium as COPCs in the liquid at PRS 15-009(j) that exceeded their respective SALs and/or did not have SALs. The presence of thallium can be explained, since it was contained in ant killers and rodenticides.

4.7.3.3 Risk Assessment

No human health risk assessment will be performed for this PRS.

4.7.3.4 Ecotoxicological Screening Assessment

An ecotoxicological screening assessment was not conducted for the contents of the tank because there is no pathway for exposure.

4.7.4 Conclusions and Recommendations

Based on the results of the screening assessment, an EC is recommended for the contents of the septic tank at PRS 15-009(j). This EC is proposed for implementation in late spring/summer 1996. The tank will be pumped of its 2 inches of sludge and liquid and backfilled. TCLP sampling and analysis will be performed at that time. The EC plan will be submitted to the U.S. EPA, Region 6, for review, and to the DOE/LAO for concurrence, before conducting the cleanup.

4.7.5 Future Investigations

An EC will be conducted to eliminate the potential risk to human health from PRS 15-009(j). No additional Phase II sampling is proposed, since the COPCs are known.

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Appendix A
Analytical Results



SAMPLING DATA FOR PRS 15-004 (b,c)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat S	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Q=	Sample Location	Tech Code	Request Number	Report Number	Site
Aluminum	15 2401	AAB3167	0	5	SS	SS	7550	38700	76674 7528	MGXG	FD	J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2401	AAB3167	0	5	SS	SS	7550	38700	76674 7528	MGXG	FD	J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2405	AAB3149	18	24	SS	SS	22500	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2405	AAB3149	18	24	SS	SS	22500	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2405	AAB3151	0	6	SS	SS	13400	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2405	AAB3151	0	6	SS	SS	13400	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2408	AAC0967	0	6	SS	SS	7550	38700	76674 7528	MGXG		J		EPES	20254	34614	INC RGJANC	
Aluminum	15 2408	AAC0967	0	6	SS	SS	7550	38700	76674 7528	MGXG		J		EPES	20254	34614	INC RGJANC	
Aluminum	15 2407	AAB3171	0	6	SS	SS	8130	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2407	AAB3171	0	6	SS	SS	8130	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2407	AAB3172	18	24	SS	SS	17200	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2407	AAB3172	18	24	SS	SS	17200	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2413	AAC0921	0	6	SS	SS	17400	38700	76674 7528	MGXG		J		EPES	20254	34614	INC RGJANC	
Aluminum	15 2413	AAC0921	0	6	SS	SS	17400	38700	76674 7528	MGXG		J		EPES	20254	34614	INC RGJANC	
Aluminum	15 2416	AAB3176	18	24	SS	SS	20400	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2416	AAB3176	18	24	SS	SS	20400	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2416	AAB3457	0	6	SS	SS	13700	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Aluminum	15 2416	AAB3457	0	6	SS	SS	13700	38700	76674 7528	MGXG		J		EPES	18454	25315	INC RGJANC	
Antimony	PRSGATE	AAB3185			W	W	100			UGL	BB			EPES	18485	27512	INC RGJANC	
Antimony	PRSGATE	AAB3185			W	W	100			UGL	BB			EPES	18485	27512	INC RGJANC	
Antimony	15 2401	AAB3167	0	5	SS	SS	0 27	1		MGXG	FD			EPES	18454	25315	INC RGJANC	
Antimony	15 2401	AAB3167	0	5	SS	SS	0 27	1		MGXG	FD			EPES	18454	25315	INC RGJANC	
Antimony	15 2405	AAB3149	18	24	SS	SS	0 29	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	15 2405	AAB3149	18	24	SS	SS	0 29	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	15 2405	AAB3151	0	6	SS	SS	0 27	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	15 2405	AAB3151	0	6	SS	SS	0 27	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	15 2406	AAC0967	0	6	SS	SS	0 5	1		MGXG				EPES	20254	34614	INC RGJANC	
Antimony	15 2406	AAC0967	0	6	SS	SS	0 5	1		MGXG				EPES	20254	34614	INC RGJANC	
Antimony	15 2407	AAB3171	0	6	SS	SS	0 5	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	15 2407	AAB3171	0	6	SS	SS	0 5	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	15 2407	AAB3172	18	24	SS	SS	0 33	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	15 2407	AAB3172	18	24	SS	SS	0 33	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	15 2413	AAC0921	0	6	SS	SS	0 51	1		MGXG				EPES	20254	34614	INC RGJANC	
Antimony	15 2413	AAC0921	0	6	SS	SS	0 51	1		MGXG				EPES	20254	34614	INC RGJANC	
Antimony	15 2416	AAB3176	18	24	SS	SS	0 46	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	15 2416	AAB3176	18	24	SS	SS	0 46	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	15 2416	AAB3457	0	6	SS	SS	0 28	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	15 2416	AAB3457	0	6	SS	SS	0 28	1		MGXG				EPES	18454	25315	INC RGJANC	
Antimony	PRSGATE	AAB3185			W	W	1			6 UGL	BB			EPES	18485	27512	INC RGJANC	
Antimony	PRSGATE	AAB3185			W	W	1			6 UGL	BB			EPES	18485	27512	INC RGJANC	
Arsenic	15 2401	AAB3167	0	5	SS	SS	2 7 82			0 38 MGXG	FD		U	GFAA	18454	25315	INC RGJANC	
Arsenic	15 2401	AAB3167	0	5	SS	SS	2 7 82			0 38 MGXG	FD		U	GFAA	18454	25315	INC RGJANC	
Arsenic	15 2405	AAB3149	18	24	SS	SS	3 9	7 82		0 38 MGXG			U	GFAA	18454	25315	INC RGJANC	
Arsenic	15 2405	AAB3149	18	24	SS	SS	3 9	7 82		0 38 MGXG			U	GFAA	18454	25315	INC RGJANC	

SAMPLING DATA FOR PFS 15-004 (b,c)

Analyte	Loc ID	Sample ID	Bag #	End Units	Mat #	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Manganese	15 2404	AAC0227	0	61	25	311	714	381 555054	MG/KG					EPES	20294	29315	NO RGANIC
Manganese	15 2406	AAC0227	0	61	25	311	714	381 555054	MG/KG					EPES	20294	29315	NO RGANIC
Manganese	15 2407	AAS3371	0	61	25	475	714	381 555054	MG/KG					EPES	18454	29315	NO RGANIC
Manganese	15 2407	AAB3372	18	241	25	527	714	381 555054	MG/KG					EPES	18454	29315	NO RGANIC
Manganese	15 2407	AAB3372	18	241	25	527	714	381 555054	MG/KG					EPES	18454	29315	NO RGANIC
Manganese	15 2413	AAC0921	0	61	25	481	714	381 555054	MG/KG					EPES	20294	29315	NO RGANIC
Manganese	15 2416	AAB3376	18	241	25	497	714	381 555054	MG/KG					EPES	20294	29315	NO RGANIC
Manganese	15 2416	AAB3376	18	241	25	497	714	381 555054	MG/KG					EPES	18454	29315	NO RGANIC
Manganese	15 2416	AAB3467	0	61	25	473	714	381 555054	MG/KG					EPES	18454	29315	NO RGANIC
Manganese	15 2416	AAB3467	0	61	25	473	714	381 555054	MG/KG					EPES	18454	29315	NO RGANIC
Manganese	PMGATE	AAB3385			W	3		180 UG/L		BB				EPES	18485	29315	NO RGANIC
Manganese	PMGATE	AAB3385			W	3		180 UG/L		BB				EPES	18485	29315	NO RGANIC
Mercury	15 2401	AAB3347	0	61	25	0 22	0 1	23 0033493	MG/KG	RO				CYAA	18454	29315	NO RGANIC
Mercury	15 2401	AAB3347	0	61	25	0 32	0 1	23 0033493	MG/KG	RO				CYAA	18454	29315	NO RGANIC
Mercury	15 2405	AAB3349	18	241	25	0 11	0 1	23 0033493	MG/KG					CYAA	18454	29315	NO RGANIC
Mercury	15 2405	AAB3349	18	241	25	0 11	0 1	23 0033493	MG/KG					CYAA	18454	29315	NO RGANIC
Mercury	15 2405	AAB3351	0	61	25	0 1	0 1	23 0033493	MG/KG					CYAA	18454	29315	NO RGANIC
Mercury	15 2405	AAB3351	0	61	25	0 1	0 1	23 0033493	MG/KG					CYAA	18454	29315	NO RGANIC
Mercury	15 2405	AAB3351	0	61	25	0 1	0 1	23 0033493	MG/KG					CYAA	18454	29315	NO RGANIC
Mercury	15 2405	AAC0967	0	61	25	0 04	0 1	23 0033493	MG/KG					CYAA	20294	29315	NO RGANIC
Mercury	15 2407	AAB3371	0	61	25	0 1	0 1	23 0033493	MG/KG					CYAA	18454	29315	NO RGANIC
Mercury	15 2407	AAB3372	18	241	25	0 11	0 1	23 0033493	MG/KG			U		CYAA	18454	29315	NO RGANIC
Mercury	15 2413	AAC0921	0	61	25	0 11	0 1	23 0033493	MG/KG			U		CYAA	18454	29315	NO RGANIC
Mercury	15 2416	AAB3376	18	241	25	0 11	0 1	23 0033493	MG/KG			U		CYAA	18454	29315	NO RGANIC
Mercury	15 2416	AAB3376	18	241	25	0 11	0 1	23 0033493	MG/KG			U		CYAA	18454	29315	NO RGANIC
Mercury	15 2416	AAB3467	0	61	25	0 01	0 1	23 0033493	MG/KG			U		CYAA	20294	29315	NO RGANIC
Mercury	15 2416	AAB3467	0	61	25	0 01	0 1	23 0033493	MG/KG			U		CYAA	20294	29315	NO RGANIC
Nickel	15 2401	AAB3367	0	61	25	4 3	15 2	1533 61109	MG/KG	RO				EPES	18454	29315	NO RGANIC
Nickel	15 2401	AAB3367	0	61	25	4 3	15 2	1533 61109	MG/KG	RO				EPES	18454	29315	NO RGANIC
Nickel	15 2405	AAB3349	18	241	25	6 7	15 2	1533 61109	MG/KG					EPES	18454	29315	NO RGANIC
Nickel	15 2405	AAB3351	0	61	25	5 0	15 2	1533 61109	MG/KG					EPES	18454	29315	NO RGANIC
Nickel	15 2405	AAC0967	0	61	25	5 0	15 2	1533 61109	MG/KG					EPES	18454	29315	NO RGANIC
Nickel	15 2407	AAB3371	0	61	25	6 5	15 2	1533 61109	MG/KG					EPES	20294	29315	NO RGANIC
Nickel	15 2407	AAB3371	0	61	25	6 5	15 2	1533 61109	MG/KG					EPES	18454	29315	NO RGANIC
Nickel	15 2407	AAB3372	18	241	25	6 7	15 2	1533 61109	MG/KG					EPES	18454	29315	NO RGANIC
Nickel	15 2407	AAB3372	18	241	25	6 7	15 2	1533 61109	MG/KG					EPES	18454	29315	NO RGANIC

SAMPLING DATA FOR PHS 15-004 (R.C)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met	Sample Value	Height Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Notes
Nickel	15 2413	AAC0921	0	6	SS	11.7	15.2	1533 61109	MGKG						CPES	20296	34914	INORGANIC
Nickel	15 2413	AAC0921	0	6	SS	11.7	15.2	1533 61109	MGKG						CPES	20296	34914	INORGANIC
Nickel	15 2416	AAB3376	18	24	SS	6.7	15.2	1533 61109	MGKG			UJ			CPES	18454	29315	INORGANIC
Nickel	15 2416	AAB3376	18	24	SS	6.7	15.2	1533 61109	MGKG			UJ			CPES	18454	29315	INORGANIC
Nickel	15 2416	AAB3497	0	6	SS	5.3	15.2	1533 61109	MGKG			UJ			CPES	18454	29315	INORGANIC
Nickel	15 2416	AAB3497	0	6	SS	5.3	15.2	1533 61109	MGKG			UJ			CPES	18454	29315	INORGANIC
Nickel	PWSGATE	AAB3395			W	10		100	UGL		SB				CPES	10685	27550	INORGANIC
Nickel	PWSGATE	AAB3395			W	10		100	UGL		SB				CPES	10685	27550	INORGANIC
Potassium	15 2401	AAB3367	0	5	SS	1620	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2401	AAB3367	0	5	SS	1620	3410		MGKG		FD				CPES	18454	29315	INORGANIC
Potassium	15 2405	AAB3349	18	24	SS	2670	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2405	AAB3349	18	24	SS	2670	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2405	AAB3351	0	6	SS	2510	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2405	AAB3351	0	6	SS	2510	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2406	AAC0997	0	6	SS	2100	3410		MGKG						CPES	20296	34914	INORGANIC
Potassium	15 2406	AAC0997	0	6	SS	2100	3410		MGKG						CPES	20296	34914	INORGANIC
Potassium	15 2407	AAB3371	6	6	SS	1730	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2407	AAB3371	6	6	SS	1730	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2407	AAB3372	18	24	SS	1730	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2407	AAB3372	18	24	SS	1730	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2407	AAB3372	18	24	SS	2290	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2407	AAB3372	18	24	SS	2290	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2413	AAC0921	0	6	SS	3480	3410		MGKG						CPES	20296	34914	INORGANIC
Potassium	15 2413	AAC0921	0	6	SS	3480	3410		MGKG						CPES	20296	34914	INORGANIC
Potassium	15 2416	AAB3376	18	24	SS	3460	3410		MGKG						CPES	20296	34914	INORGANIC
Potassium	15 2416	AAB3376	18	24	SS	3460	3410		MGKG						CPES	20296	34914	INORGANIC
Potassium	15 2416	AAB3376	18	24	SS	2760	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2416	AAB3376	18	24	SS	2760	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2416	AAB3497	0	6	SS	2720	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	15 2416	AAB3497	0	6	SS	2720	3410		MGKG						CPES	18454	29315	INORGANIC
Potassium	PWSGATE	AAB3385			W	600			UGL		SB				CPES	18485	27550	INORGANIC
Potassium	PWSGATE	AAB3385			W	600			UGL		SB				CPES	18485	27550	INORGANIC
Selenium	15 2401	AAB3367	0	5	SS	0.54	1.7	383 403214	MGKG			R			CPES	18485	27550	INORGANIC
Selenium	15 2401	AAB3367	0	5	SS	0.54	1.7	383 403214	MGKG			R			CPES	18485	27550	INORGANIC
Selenium	15 2405	AAB3349	18	24	SS	0.58	1.7	383 403214	MGKG			R			CPES	18454	29315	INORGANIC
Selenium	15 2405	AAB3349	18	24	SS	0.58	1.7	383 403214	MGKG			R			CPES	18454	29315	INORGANIC
Selenium	15 2405	AAB3351	0	6	SS	0.55	1.7	383 403214	MGKG			R			CPES	18454	29315	INORGANIC
Selenium	15 2405	AAB3351	0	6	SS	0.55	1.7	383 403214	MGKG			R			CPES	18454	29315	INORGANIC
Selenium	15 2406	AAC0997	0	6	SS	1.4	1.7	383 403214	MGKG			R			CPES	20296	34914	INORGANIC
Selenium	15 2406	AAC0997	0	6	SS	1.4	1.7	383 403214	MGKG			R			CPES	20296	34914	INORGANIC
Selenium	15 2406	AAC0997	0	6	SS	0.55	1.7	383 403214	MGKG			R			CPES	20296	34914	INORGANIC
Selenium	15 2406	AAC0997	0	6	SS	0.55	1.7	383 403214	MGKG			R			CPES	20296	34914	INORGANIC
Selenium	15 2407	AAB3371	6	6	SS	0.55	1.7	383 403214	MGKG			R			CPES	18454	29315	INORGANIC
Selenium	15 2407	AAB3371	6	6	SS	0.55	1.7	383 403214	MGKG			R			CPES	18454	29315	INORGANIC
Selenium	15 2407	AAB3372	18	24	SS	0.58	1.7	383 403214	MGKG			R			CPES	18454	29315	INORGANIC
Selenium	15 2407	AAB3372	18	24	SS	0.58	1.7	383 403214	MGKG			R			CPES	18454	29315	INORGANIC
Selenium	15 2413	AAC0921	0	6	SS	0.79	1.7	383 403214	MGKG			R			CPES	20296	34914	INORGANIC
Selenium	15 2413	AAC0921	0	6	SS	0.79	1.7	383 403214	MGKG			R			CPES	20296	34914	INORGANIC
Selenium	15 2416	AAB3376	18	24	SS	0.57	1.7	383 403214	MGKG			R			CPES	18454	29315	INORGANIC
Selenium	15 2416	AAB3376	18	24	SS	0.57	1.7	383 403214	MGKG			R			CPES	18454	29315	INORGANIC
Selenium	15 2416	AAB3376	18	24	SS	0.57	1.7	383 403214	MGKG			R			CPES	18454	29315	INORGANIC

SAMPLING DATA FOR PRS 15-004 (b,c)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Thallium	15 2405	AAB3340	18 24	0 6	SS	<	0.46			MGXG			U		GFAA	18454	29315	INORGANIC
Thallium	15 2405	AAB3340	18 24	0 6	SS	<	0.49			MGXG			U		GFAA	18454	29315	INORGANIC
Thallium	15 2405	AAB3351	0 6	0 6	SS	<	0.46			MGXG			U		CPES	18454	29315	INORGANIC
Thallium	15 2405	AAB3351	0 6	0 6	SS	<	0.46			MGXG			U		CPES	18454	29315	INORGANIC
Thallium	15 2406	AAC0997	0 6	0 6	SS	<	0.71			MGXG			U		CPES	20296	34914	INORGANIC
Thallium	15 2406	AAC0997	0 6	0 6	SS	<	0.71			MGXG			U		CPES	20296	34914	INORGANIC
Thallium	15 2407	AAB3371	0 6	0 6	SS	<	0.46			MGXG			U		GFAA	18454	29315	INORGANIC
Thallium	15 2407	AAB3372	18 24	0 6	SS	<	0.49			MGXG			U		GFAA	18454	29315	INORGANIC
Thallium	15 2407	AAB3372	18 24	0 6	SS	<	0.49			MGXG			U		GFAA	18454	29315	INORGANIC
Thallium	15 2413	AAC0921	0 6	0 6	SS	<	0.71			MGXG			U		CPES	20296	34914	INORGANIC
Thallium	15 2416	AAB3376	18 24	0 6	SS	<	0.48			MGXG			U		CPES	20296	34914	INORGANIC
Thallium	15 2416	AAB3376	18 24	0 6	SS	<	0.48			MGXG			U		GFAA	18454	29315	INORGANIC
Thallium	15 2416	AAG3497	0 6	0 6	SS	<	0.48			MGXG			U		GFAA	18454	29315	INORGANIC
Thallium	15 2416	AAG3497	0 6	0 6	SS	<	0.48			MGXG			U		GFAA	18454	29315	INORGANIC
Thallium	RRSATE	AAB3395			W	<	1			UGL	EB				CPMS	18485	27912	INORGANIC
Thallium	RRSATE	AAB3395			W	<	1			UGL	EB				CPMS	18485	27912	INORGANIC
Uranium	15 2401	AAB3367	0 5	0 5	SS	<	6.4	5.45		MGXG	FD		J		CPMS	18880	30887	RAD
Uranium	15 2401	AAB3367	0 5	0 5	SS	<	6.4	5.45		MGXG	FD		J		CPMS	18880	30887	RAD
Uranium	15 2405	AAB3349	18 24	0 6	SS	<	3.6	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2405	AAB3349	18 24	0 6	SS	<	3.6	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2405	AAB3351	0 6	0 6	SS	<	6.3	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2405	AAB3351	0 6	0 6	SS	<	6.3	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2407	AAB3371	0 6	0 6	SS	<	20.8	5.45		MGXG		D	J		CPMS	18880	30887	RAD
Uranium	15 2407	AAB3371	0 6	0 6	SS	<	16.9	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2407	AAB3371	0 6	0 6	SS	<	20.8	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2407	AAB3371	0 6	0 6	SS	<	16.9	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2407	AAB3372	18 24	0 6	SS	<	4.1	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2407	AAB3372	18 24	0 6	SS	<	4.1	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2416	AAB3376	18 24	0 6	SS	<	3.5	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2416	AAB3376	18 24	0 6	SS	<	3.5	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2416	AAB3497	0 6	0 6	SS	<	8.4	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	15 2416	AAB3497	0 6	0 6	SS	<	3.6	5.45		MGXG			J		CPMS	18880	30887	RAD
Uranium	RRSATE	AAB3385			W	<	1			UGL	EB				CPMS	18820	31155	RAD
Uranium	RRSATE	AAB3385			W	<	1			UGL	EB				CPMS	18820	31155	RAD
Vanadium	15 2401	AAB3367	0 5	0 5	SS	<	17.7	41.9	536.764418	MGXG	FD		J		CPES	18454	29315	INORGANIC
Vanadium	15 2401	AAB3367	0 5	0 5	SS	<	17.7	41.9	536.764418	MGXG	FD		J		CPES	18454	29315	INORGANIC
Vanadium	15 2405	AAB3349	18 24	0 6	SS	<	26.4	41.9	536.764418	MGXG			J		CPES	18454	29315	INORGANIC
Vanadium	15 2405	AAB3349	18 24	0 6	SS	<	26.4	41.9	536.764418	MGXG			J		CPES	18454	29315	INORGANIC
Vanadium	15 2405	AAB3351	0 6	0 6	SS	<	20.7	41.9	536.764418	MGXG			J		CPES	18454	29315	INORGANIC
Vanadium	15 2405	AAB3351	0 6	0 6	SS	<	20.7	41.9	536.764418	MGXG			J		CPES	18454	29315	INORGANIC
Vanadium	15 2406	AAC0997	0 6	0 6	SS	<	20.8	41.9	536.764418	MGXG			J		CPES	18454	29315	INORGANIC
Vanadium	15 2406	AAC0997	0 6	0 6	SS	<	20.8	41.9	536.764418	MGXG			J		CPES	18454	29315	INORGANIC
Vanadium	15 2406	AAC0997	0 6	0 6	SS	<	20.8	41.9	536.764418	MGXG			J		CPES	20296	34914	INORGANIC
Vanadium	15 2406	AAC0997	0 6	0 6	SS	<	20.8	41.9	536.764418	MGXG			J		CPES	20296	34914	INORGANIC

SAMPLING DATA FOR PHS 15 004 (b,c)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sampl. Location	Tech Code	Request Number	Report Number	Suite
Vanadium	15 2407	AAB3371	0	6		SS		18.3	41.9	516 764418	MG/KG		J		CPES	18454	29315	INORGANIC	
Vanadium	15 2407	AAB3371	0	6		SS		18.3	41.9	516 764418	MG/KG		J		CPES	18454	29315	INORGANIC	
Vanadium	15 2407	AAB3372	18	24		SS		27.5	41.9	516 764418	MG/KG		J		CPES	18454	29315	INORGANIC	
Vanadium	15 2407	AAB3372	18	24		SS		27.5	41.9	516 764418	MG/KG		J		CPES	18454	29315	INORGANIC	
Vanadium	15 2413	AAC0621	0	6		SS		29.5	41.9	516 764418	MG/KG				CPES	20264	34914	INORGANIC	
Vanadium	15 2413	AAC0621	0	6		SS		29.5	41.9	516 764418	MG/KG				CPES	20264	34914	INORGANIC	
Vanadium	15 2416	AAB3376	18	24		SS		25.6	41.9	516 764418	MG/KG		J		CPES	18454	29315	INORGANIC	
Vanadium	15 2416	AAB3376	18	24		SS		25.6	41.9	516 764418	MG/KG		J		CPES	18454	29315	INORGANIC	
Vanadium	15 2416	AAB3467	0	6		SS		19.7	41.9	516 764418	MG/KG		J		CPES	18454	29315	INORGANIC	
Vanadium	15 2416	AAB3467	0	6		SS		19.7	41.9	516 764418	MG/KG		J		CPES	18454	29315	INORGANIC	
Vanadium	RNSGATE	AAB3385				W	<	4		240	UG/L		BB		CPES	18685	27550	INORGANIC	
Vanadium	RNSGATE	AAB3385				W	<	4		240	UG/L		BB		CPES	18685	27550	INORGANIC	
Zinc	15 2401	AAB3367	0	5		SS		37.9	50.8	23003 6725	MG/KG	PD			CPES	18454	29315	INORGANIC	
Zinc	15 2401	AAB3367	0	5		SS		37.9	50.8	23003 6725	MG/KG	PD			CPES	18454	29315	INORGANIC	
Zinc	15 2405	AAB3349	18	24		SS		37	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	15 2405	AAB3349	18	24		SS		37	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	15 2405	AAB3351	0	6		SS		33	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	15 2405	AAB3351	0	6		SS		33	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	15 2406	AAC0667	0	6		SS		47.3	50.8	23003 6725	MG/KG				CPES	20264	34914	INORGANIC	
Zinc	15 2406	AAC0667	0	6		SS		47.3	50.8	23003 6725	MG/KG				CPES	20264	34914	INORGANIC	
Zinc	15 2407	AAS3371	0	6		SS		47.3	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	15 2407	AAB3371	0	6		SS		47.3	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	15 2407	AAB3372	18	24		SS		35.7	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	15 2407	AAB3372	18	24		SS		35.7	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	15 2413	AAC0621	0	6		SS		41.7	50.8	23003 6725	MG/KG				CPES	20264	34914	INORGANIC	
Zinc	15 2413	AAC0621	0	6		SS		41.7	50.8	23003 6725	MG/KG				CPES	20264	34914	INORGANIC	
Zinc	15 2416	AAB3376	18	24		SS		33.7	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	15 2416	AAB3376	18	24		SS		33.7	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	15 2416	AAB3467	0	6		SS		27.4	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	15 2416	AAB3467	0	6		SS		27.4	50.8	23003 6725	MG/KG				CPES	18454	29315	INORGANIC	
Zinc	RNSGATE	AAB3385				W		36		10000	UG/L		BB		CPES	18685	27550	INORGANIC	
Zinc	RNSGATE	AAB3385				W		36		10000	UG/L		BB		CPES	18685	27550	INORGANIC	
Amino 2,6 dinitrotoluene [4]	15 2407	AAB3371	0	6		SS	<	0.13			MG/KG		R		HPLC	18303	34932	ORGANIC	
Amino 2,6 dinitrotoluene [4]	15 2407	AAB3371	0	6		SS	<	0.13			MG/KG		R		HPLC	18303	34932	ORGANIC	
Amino 4,6 dinitrotoluene [2]	15 2407	AAB3371	0	6		SS	<	0.13			MG/KG		R		HPLC	18303	34932	ORGANIC	
Amino 4,6 dinitrotoluene [2]	15 2407	AAB3371	0	6		SS	<	0.13			MG/KG		R		HPLC	18303	34932	ORGANIC	
Dinitrobenzene [1,3]	15 2407	AAB3371	0	6		SS	<	0.13		6 5177585	MG/KG		R		HPLC	18303	34932	ORGANIC	
Dinitrobenzene [1,3]	15 2407	AAB3371	0	6		SS	<	0.13		6 5177585	MG/KG		R		HPLC	18303	34932	ORGANIC	
Dinitrotoluene [2,4]	15 2407	AAB3371	0	6		SS	<	0.13		130 35527	MG/KG		R		HPLC	18303	34932	ORGANIC	
Dinitrotoluene [2,4]	15 2407	AAB3371	0	6		SS	<	0.13		130 35527	MG/KG		R		HPLC	18303	34932	ORGANIC	
Dinitrotoluene [2,6]	15 2407	AAB3371	0	6		SS	<	0.13		65 1775848	MG/KG		R		HPLC	18303	34932	ORGANIC	
Dinitrotoluene [2,6]	15 2407	AAB3371	0	6		SS	<	0.13		65 1775848	MG/KG		R		HPLC	18303	34932	ORGANIC	
HBC	15 2407	AAB3371	0	6		SS	<	1.1		3258 89924	MG/KG		R		HPLC	18303	34932	ORGANIC	
HBC	15 2407	AAB3371	0	6		SS	<	1.1		3258 89924	MG/KG		R		HPLC	18303	34932	ORGANIC	

SAMPLING DATA FOR PWS 15-034 (D.C)

Analyte	Loc ID	Sample ID	Begin	End	Units	Meth	Sample Value	Max Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	State
Nitrobenzene	15 2407	AAB3371	0	6	SS	<	C 13		32.580291	MG/KG			R		MPLC	18303	34932	ORGANIC
Nitrobenzene	15 2407	AAB3371	0	6	SS	<	0.13		32.580291	MG/KG			R		MPLC	18303	34932	ORGANIC
Nitrobenzene [m]	15 2407	AAB3371	0	6	SS	<	0.13			MG/KG			R		MPLC	18303	34932	ORGANIC
Nitrobenzene [o]	15 2407	AAB3371	0	6	SS	<	0.13			MG/KG			R		MPLC	18303	34932	ORGANIC
Nitrobenzene [p]	15 2407	AAB3371	0	6	SS	<	0.13			MG/KG			R		MPLC	18303	34932	ORGANIC
Nitrobenzene [p]	15 2407	AAB3371	0	6	SS	<	0.13			MG/KG			R		MPLC	18303	34932	ORGANIC
RDX	15 2407	AAB3371	0	6	SS	<	0.5		4.0393159	MG/KG			R		MPLC	18303	34932	ORGANIC
RDX	15 2407	AAB3371	0	6	SS	<	0.5		4.0393159	MG/KG			R		MPLC	18303	34932	ORGANIC
Tetryl(methyl 2,4,6-trinitrophenylaziramine)	15 2407	AAB3371	0	6	SS	<	0.33		651.779849	MG/KG			R		MPLC	18303	34932	ORGANIC
Tetryl(methyl 2,4,6-trinitrophenylaziramine)	15 2407	AAB3371	0	6	SS	<	0.33		651.779849	MG/KG			R		MPLC	18303	34932	ORGANIC
Tetryl(methyl 2,4,6-trinitrophenylaziramine)	15 2407	AAB3371	0	6	SS	<	0.33		3.2588992	MG/KG			R		MPLC	18303	34932	ORGANIC
Tetryl(methyl 2,4,6-trinitrophenylaziramine)	15 2407	AAB3371	0	6	SS	<	0.33		3.2588992	MG/KG			R		MPLC	18303	34932	ORGANIC
Tetryl(methyl 2,4,6-trinitrophenylaziramine)	15 2407	AAB3371	0	6	SS	<	0.33		48.381938	MG/KG			R		MPLC	18303	34932	ORGANIC
Tetryl(methyl 2,4,6-trinitrophenylaziramine)	15 2407	AAB3371	0	6	SS	<	0.33		48.381938	MG/KG			R		MPLC	18303	34932	ORGANIC
Acetaminophen	15 2406	AAC0997	0	6	SS	<	1.23			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2406	AAC0997	0	6	SS	<	1.23			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	1.818			PC/KG		D	R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	1.56			PC/KG		D	R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	1.56			PC/KG		D	R		G	20326	35641	RAD
Acetaminophen	15 2406	AAC0997	0	6	SS	<	0.0724			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2406	AAC0997	0	6	SS	<	0.0724			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	0.033			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	0.033			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2406	AAC0997	0	6	SS	<	3.33			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2406	AAC0997	0	6	SS	<	3.33			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	4.161			PC/KG		D	R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	4.161			PC/KG		D	R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	4.161			PC/KG		D	R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	3.87			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2406	AAC0997	0	6	SS	<	0.816			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2406	AAC0997	0	6	SS	<	0.816			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	1.69			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	1.69			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	1.62			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2406	AAC0997	0	6	SS	<	1.07			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2406	AAC0997	0	6	SS	<	1.07			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	1.4			PC/KG			R		G	20326	35641	RAD
Acetaminophen	15 2413	AAC0921	0	6	SS	<	1.401			PC/KG			R		G	20326	35641	RAD

SAMPLING DATA FOR PRS 15-004 (b,c)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Barium 216	15 2413	AACC621	0	6	1	SS		1.431			PCIG		D		G		20326	35641	RAD
Barium 216	15 2413	AACC621	0	6	1	SS		1.4			PCIG				G		20326	35641	RAD
Cadmium 144	15 2406	AACC667	0	6	1	SS		0.352			56 PCIG				G		20326	35641	RAD
Cadmium 144	15 2406	AACC667	0	6	1	SS		0.322			56 PCIG				G		20326	35641	RAD
Cadmium 144	15 2413	AACC621	0	6	1	SS		0.151			56 PCIG				G		20326	35641	RAD
Cadmium 144	15 2413	AACC621	0	6	1	SS		0.151			56 PCIG				G		20326	35641	RAD
Cadmium 134	15 2406	AACC667	0	6	1	SS		0.0238			19 PCIG				G		20326	35641	RAD
Cadmium 134	15 2406	AACC667	0	6	1	SS		0.0238			19 PCIG				G		20326	35641	RAD
Cadmium 134	15 2413	AACC621	0	6	1	SS		0.442			19 PCIG				G		20326	35641	RAD
Cadmium 134	15 2413	AACC621	0	6	1	SS		0.442			19 PCIG				G		20326	35641	RAD
Cadmium 137	15 2406	AACC667	0	6	1	SS		0.772	1.4		4 PCIG				G		20326	35641	RAD
Cadmium 137	15 2406	AACC667	0	6	1	SS		0.772	1.4		4 PCIG				G		20326	35641	RAD
Cadmium 137	15 2413	AACC621	0	6	1	SS		0.266	1.4		4 PCIG				G		20326	35641	RAD
Cadmium 137	15 2413	AACC621	0	6	1	SS		0.2466	1.4		4 PCIG		D		G		20326	35641	RAD
Cadmium 137	15 2413	AACC621	0	6	1	SS		0.266	1.4		4 PCIG				G		20326	35641	RAD
Cadmium 137	15 2413	AACC621	0	6	1	SS		0.2466	1.4		4 PCIG		D		G		20326	35641	RAD
Cobalt 57	15 2406	AACC667	0	6	1	SS		0.0157			PCIG				G		20326	35641	RAD
Cobalt 57	15 2406	AACC667	0	6	1	SS		0.0157			PCIG				G		20326	35641	RAD
Cobalt 57	15 2413	AACC621	0	6	1	SS		0.0511			PCIG				G		20326	35641	RAD
Cobalt 57	15 2413	AACC621	0	6	1	SS		0.0511			PCIG				G		20326	35641	RAD
Cobalt 60	15 2406	AACC667	0	6	1	SS		0.373			1.1 PCIG				G		20326	35641	RAD
Cobalt 60	15 2406	AACC667	0	6	1	SS		0.373			1.1 PCIG				G		20326	35641	RAD
Cobalt 60	15 2413	AACC621	0	6	1	SS		0.0135			1.1 PCIG				G		20326	35641	RAD
Cobalt 60	15 2413	AACC621	0	6	1	SS		0.0135			1.1 PCIG				G		20326	35641	RAD
Lead 210	15 2406	AACC667	0	6	1	SS		8.62			2.6 PCIG				G		20326	35641	RAD
Lead 210	15 2406	AACC667	0	6	1	SS		8.62			2.6 PCIG				G		20326	35641	RAD
Lead 210	15 2413	AACC621	0	6	1	SS		0.402			2.6 PCIG				G		20326	35641	RAD
Lead 210	15 2413	AACC621	0	6	1	SS		0.402			2.6 PCIG				G		20326	35641	RAD
Lead 211	15 2406	AACC667	0	6	1	SS		311			PCIG				G		20326	35641	RAD
Lead 211	15 2406	AACC667	0	6	1	SS		311			PCIG				G		20326	35641	RAD
Lead 211	15 2413	AACC621	0	6	1	SS		621			PCIG				G		20326	35641	RAD
Lead 211	15 2413	AACC621	0	6	1	SS		621			PCIG				G		20326	35641	RAD
Lead 212	15 2406	AACC667	0	6	1	SS		1.33			PCIG				G		20326	35641	RAD
Lead 212	15 2406	AACC667	0	6	1	SS		1.33			PCIG				G		20326	35641	RAD
Lead 212	15 2413	AACC621	0	6	1	SS		1.84			PCIG		D		G		20326	35641	RAD
Lead 212	15 2413	AACC621	0	6	1	SS		1.92			PCIG				G		20326	35641	RAD
Lead 212	15 2413	AACC621	0	6	1	SS		1.84			PCIG		D		G		20326	35641	RAD
Lead 212	15 2413	AACC621	0	6	1	SS		1.92			PCIG				G		20326	35641	RAD
Lead 214	15 2406	AACC667	0	6	1	SS		1.12			PCIG				G		20326	35641	RAD
Lead 214	15 2406	AACC667	0	6	1	SS		1.12			PCIG				G		20326	35641	RAD
Lead 214	15 2413	AACC621	0	6	1	SS		1.508			PCIG		D		G		20326	35641	RAD
Lead 214	15 2413	AACC621	0	6	1	SS		2.42			PCIG				G		20326	35641	RAD
Lead 214	15 2413	AACC621	0	6	1	SS		1.508			PCIG		D		G		20326	35641	RAD
Lead 214	15 2413	AACC621	0	6	1	SS		2.42			PCIG				G		20326	35641	RAD

SAMPLING DATA FOR PRS 15-004 (b,c)

Analyte	Lec ID	Sample ID	Begin	End	Units	Mat S	Sample Value	Std Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Manganese 54	15 2406	AAC0997	0	6	SS	0.0399		3.5	PCVG						G	20326	35641	RAD
Manganese 54	15 2406	AAC0997	0	6	SS	0.0369		3.5	PCVG						G	20326	35641	RAD
Manganese 54	15 2413	AAC0921	0	6	SS	0.0359		3.5	PCVG						G	20326	35641	RAD
Manganese 54	15 2413	AAC0921	0	6	SS	0.0359		3.5	PCVG						G	20326	35641	RAD
Potassium 40	15 2406	AAC0997	0	6	SS	20.8	28.6	12	PCVG						G	20326	35641	RAD
Potassium 40	15 2406	AAC0997	0	6	SS	21.8	28.6	12	PCVG						G	20326	35641	RAD
Potassium 40	15 2413	AAC0921	0	6	SS	20.2	28.6	12	PCVG						G	20326	35641	RAD
Potassium 40	15 2413	AAC0921	0	6	SS	20.3	28.6	12	PCVG			D			G	20326	35641	RAD
Potassium 40	15 2413	AAC0921	0	6	SS	20.2	28.6	12	PCVG			D			G	20326	35641	RAD
Potassium 40	15 2413	AAC0921	0	6	SS	20.3	28.6	12	PCVG						G	20326	35641	RAD
Protactinium 231	15 2406	AAC0997	0	6	SS	1.84			PCVG						G	20326	35641	RAD
Protactinium 231	15 2406	AAC0997	0	6	SS	1.84			PCVG						G	20326	35641	RAD
Protactinium 231	15 2413	AAC0921	0	6	SS	3.04			PCVG						G	20326	35641	RAD
Protactinium 231	15 2413	AAC0921	0	6	SS	3.04			PCVG						G	20326	35641	RAD
Protactinium 234M	15 2406	AAC0997	0	6	SS	20.3			PCVG						G	20326	35641	RAD
Protactinium 234M	15 2406	AAC0997	0	6	SS	20.3			PCVG						G	20326	35641	RAD
Protactinium 234M	15 2413	AAC0921	0	6	SS	4.56			PCVG						G	20326	35641	RAD
Protactinium 234M	15 2413	AAC0921	0	6	SS	4.56			PCVG						G	20326	35641	RAD
Radium 223	15 2406	AAC0997	0	6	SS	0.153			PCVG						G	20326	35641	RAD
Radium 223	15 2406	AAC0997	0	6	SS	0.153			PCVG						G	20326	35641	RAD
Radium 223	15 2413	AAC0921	0	6	SS	0.323			PCVG						G	20326	35641	RAD
Radium 223	15 2413	AAC0921	0	6	SS	0.323			PCVG						G	20326	35641	RAD
Radium 224	15 2406	AAC0997	0	6	SS	3.64			PCVG						G	20326	35641	RAD
Radium 224	15 2406	AAC0997	0	6	SS	3.64			PCVG						G	20326	35641	RAD
Radium 224	15 2413	AAC0921	0	6	SS	5.05			PCVG						G	20326	35641	RAD
Radium 224	15 2413	AAC0921	0	6	SS	5.05			PCVG						G	20326	35641	RAD
Radium 226	15 2406	AAC0997	0	6	SS	4.08			PCVG						G	20326	35641	RAD
Radium 226	15 2406	AAC0997	0	6	SS	4.08			PCVG						G	20326	35641	RAD
Radium 226	15 2413	AAC0921	0	6	SS	3.826			PCVG						G	20326	35641	RAD
Radium 226	15 2413	AAC0921	0	6	SS	3.826			PCVG						G	20326	35641	RAD
Radium 226	15 2413	AAC0921	0	6	SS	2.63			PCVG			D			G	20326	35641	RAD
Radium 226	15 2413	AAC0921	0	6	SS	2.63			PCVG			D			G	20326	35641	RAD
Radium 226	15 2413	AAC0921	0	6	SS	2.63			PCVG						G	20326	35641	RAD
Radium 226	15 2406	AAC0997	0	6	SS	0.0242			PCVG						G	20326	35641	RAD
Radium 219	15 2406	AAC0997	0	6	SS	0.0242			PCVG						G	20326	35641	RAD
Radium 219	15 2406	AAC0997	0	6	SS	0.249			PCVG						G	20326	35641	RAD
Radium 219	15 2413	AAC0921	0	6	SS	0.249			PCVG						G	20326	35641	RAD
Radium 219	15 2413	AAC0921	0	6	SS	0.249			PCVG						G	20326	35641	RAD
Radium 219	15 2406	AAC0997	0	6	SS	1.31			PCVG						G	20326	35641	RAD
Radium 219	15 2406	AAC0997	0	6	SS	1.31			PCVG						G	20326	35641	RAD
Radium 219	15 2413	AAC0921	0	6	SS	2.56			PCVG						G	20326	35641	RAD
Radium 219	15 2413	AAC0921	0	6	SS	2.56			PCVG						G	20326	35641	RAD
Radium 219	15 2413	AAC0921	0	6	SS	0.0749			PCVG						G	20326	35641	RAD
Radium 219	15 2406	AAC0997	0	6	SS	0.0749			PCVG						G	20326	35641	RAD
Radium 219	15 2406	AAC0997	0	6	SS	0.029			PCVG						G	20326	35641	RAD
Radium 219	15 2413	AAC0921	0	6	SS	0.029			PCVG						G	20326	35641	RAD
Radium 219	15 2413	AAC0921	0	6	SS	0.029			PCVG						G	20326	35641	RAD

SAMPLING DATA FOR PRS 15-004 (b,c)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Owl	Sample Location	Tech Code	Request Number	Report Number	Spite
Thallium 208	15-2406	AAC0967	0	6		SS		0.400			PCIG				G		20326	35441	RAD
Thallium 208	15-2406	AAC0967	0	6		SS		0.400			PCIG				G		20326	35441	RAD
Thallium 208	15-2413	AAC0921	0	6		SS		0.5564			PCIG		D		G		20326	35441	RAD
Thallium 208	15-2413	AAC0921	0	6		SS		0.64			PCIG				G		20326	35441	RAD
Thallium 208	15-2413	AAC0921	0	6		SS		0.5564			PCIG		O		G		20326	35441	RAD
Thallium 208	15-2413	AAC0921	0	6		SS		0.64			PCIG				G		20326	35441	RAD
Thorium 227	15-2406	AAC0967	0	6		SS		30.6			PCIG				G		20326	35441	RAD
Thorium 227	15-2406	AAC0967	0	6		SS		30.6			PCIG				G		20326	35441	RAD
Thorium 227	15-2413	AAC0921	0	6		SS		24.3			PCIG				G		20326	35441	RAD
Thorium 227	15-2413	AAC0921	0	6		SS		24.3			PCIG				G		20326	35441	RAD
Thorium 234	15-2406	AAC0967	0	6		SS		4.45			PCIG				G		20326	35441	RAD
Thorium 234	15-2406	AAC0967	0	6		SS		4.45			PCIG				G		20326	35441	RAD
Thorium 234	15-2413	AAC0921	0	6		SS		3.15			PCIG				G		20326	35441	RAD
Thorium 234	15-2413	AAC0921	0	6		SS		2.971			PCIG		D		G		20326	35441	RAD
Thorium 234	15-2413	AAC0921	0	6		SS		2.971			PCIG		D		G		20326	35441	RAD
Thorium 234	15-2413	AAC0921	0	6		SS		3.15			PCIG				G		20326	35441	RAD
Uranium	15-2406	AAC0967	0	6		SS		8.82	5.45		MGKG			J	YPA		20326	35441	RAD
Uranium	15-2406	AAC0967	0	6		SS		8.82	5.45		MGKG			J	YPA		20326	35441	RAD
Uranium	15-2413	AAC0921	0	6		SS		4.22	5.45		MGKG		D		YPA		20326	35441	RAD
Uranium	15-2413	AAC0921	0	6		SS		4.3	5.45		MGKG			J	YPA		20326	35441	RAD
Uranium	15-2413	AAC0921	0	6		SS		4.22	5.45		MGKG		D		YPA		20326	35441	RAD
Uranium	15-2413	AAC0921	0	6		SS		4.3	5.45		MGKG			J	YPA		20326	35441	RAD
Uranium 235	15-2406	AAC0967	0	6		SS		0.4	0.084		18 PCIG				G		20326	35441	RAD
Uranium 235	15-2406	AAC0967	0	6		SS		0.4	0.084		18 PCIG				G		20326	35441	RAD
Uranium 235	15-2413	AAC0921	0	6		SS		0.0763	0.084		18 PCIG				G		20326	35441	RAD
Uranium 235	15-2413	AAC0921	0	6		SS		0.0763	0.084		18 PCIG				G		20326	35441	RAD

SAMPLING DATA FOR PRS 15-004(a,d)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Goal	Sample Location	Tech Code	Request Number	Report Number	State
Aluminium	15-2100	AAB3333	0	6		SS		15100	38700	76674.7928	MG/KG					CPES	18673	29796	INORGANIC
Aluminium	15-2100	AAB3451	18	24		SS		20400	38700	76674.7928	MG/KG					CPES	18681	29195	INORGANIC
Aluminium	15-2112	AAB3461	0	6		SS		16900	38700	76674.7928	MG/KG					CPES	18681	29195	INORGANIC
Aluminium	15-2253	AAB3388	0	6		SS		15500	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2253	AAB3388	0	6		SS		15500	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2253	AAB3394	18	24		SS		20300	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2253	AAB3394	18	24		SS		21800	38700	76674.7928	MG/KG		D			CPES	18454	29315	INORGANIC
Aluminium	15-2253	AAB3394	18	24		SS		20300	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2253	AAB3394	18	24		SS		21800	38700	76674.7928	MG/KG		D			CPES	18454	29315	INORGANIC
Aluminium	15-2255	AAC0993	0	6		SS		20300	38700	76674.7928	MG/KG					CPES	20347	34491	INORGANIC
Aluminium	15-2255	AAC0993	0	6		SS		20300	38700	76674.7928	MG/KG					CPES	20347	34491	INORGANIC
Aluminium	15-2257	AAB3358	0	6		SS		10100	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2257	AAB3358	0	6		SS		10100	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2257	AAB3362	18	24		SS		16600	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2257	AAB3362	18	24		SS		16500	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2263	AAC0926	0	6		SS		10600	38700	76674.7928	MG/KG					CPES	20347	34491	INORGANIC
Aluminium	15-2263	AAC0926	0	6		SS		10600	38700	76674.7928	MG/KG					CPES	20347	34491	INORGANIC
Aluminium	15-2264	AAB3386	0	6		SS		8800	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2264	AAB3386	0	6		SS		8800	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2264	AAB3396	18	24		SS		22100	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2264	AAB3396	18	24		SS		22100	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2268	AAB3387	0	6		SS		11900	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2268	AAB3387	0	6		SS		11900	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2268	AAB3395	18	24		SS		15400	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2268	AAB3395	18	24		SS		15400	38700	76674.7928	MG/KG			J		CPES	18454	29315	INORGANIC
Aluminium	15-2281	AAC0984	0	6		SS		16200	38700	76674.7928	MG/KG					CPES	20347	34491	INORGANIC
Aluminium	15-2281	AAC0984	0	6		SS		16200	38700	76674.7928	MG/KG					CPES	20347	34491	INORGANIC
Aluminium	15-2401	AAB3365	18	24		SS		19900	38700	76674.7928	MG/KG	FD		J		CPES	18454	29315	INORGANIC
Aluminium	15-2401	AAB3365	18	24		SS		19900	38700	76674.7928	MG/KG	FD		J		CPES	18454	29315	INORGANIC
Antimony	15-2100	AAB3333	0	6		SS	<	3.9	1		MG/KG			R		CPES	18673	29796	INORGANIC
Antimony	15-2100	AAB3451	18	24		SS	<	3.9	1		MG/KG					CPES	18681	29195	INORGANIC
Antimony	15-2112	AAB3461	0	6		SS	<	3.9	1		MG/KG					CPES	18681	29195	INORGANIC
Antimony	15-2253	AAB3388	0	6		SS	<	0.27	1		MG/KG					CPES	18454	29315	INORGANIC
Antimony	15-2253	AAB3388	0	6		SS	<	0.27	1		MG/KG					CPES	18454	29315	INORGANIC
Antimony	15-2253	AAB3394	18	24		SS	<	0.4	1		MG/KG		D			CPES	18454	29315	INORGANIC
Antimony	15-2253	AAB3394	18	24		SS	<	0.29	1		MG/KG					CPES	18454	29315	INORGANIC
Antimony	15-2253	AAB3394	18	24		SS	<	0.4	1		MG/KG		D			CPES	18454	29315	INORGANIC
Antimony	15-2253	AAB3394	18	24		SS	<	0.29	1		MG/KG					CPES	18454	29315	INORGANIC
Antimony	15-2255	AAC0993	0	6		SS	<	0.34	1		MG/KG					CPES	20347	34491	INORGANIC
Antimony	15-2255	AAC0993	0	6		SS	<	0.34	1		MG/KG					CPES	20347	34491	INORGANIC
Antimony	15-2257	AAB3358	0	6		SS	<	0.3	1		MG/KG					CPES	18454	29315	INORGANIC
Antimony	15-2257	AAB3358	0	6		SS	<	0.3	1		MG/KG					CPES	18454	29315	INORGANIC
Antimony	15-2257	AAB3362	18	24		SS	<	0.39	1		MG/KG					CPES	18454	29315	INORGANIC
Antimony	15-2257	AAB3362	18	24		SS	<	0.39	1		MG/KG					CPES	18454	29315	INORGANIC
Antimony	15-2263	AAC0926	0	6		SS	<	0.27	1		MG/KG					CPES	20347	34491	INORGANIC

SAMPLING DATA FOR PRS 15-004(a,d)

Analyte	Ecc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Digd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Beryllium	15 2263	AAC0926	0	6.1	SS	<	0.61	1.95	0.1420081	MGYK						CPES	20347	34451	INORGANIC
Beryllium	15 2264	AAB3316	0	6.1	SS	<	1.1	1.95	0.1420081	MGYK			J			CPES	18454	29315	INORGANIC
Beryllium	15 2264	AAB3316	0	6.1	SS	<	1.1	1.95	0.1420081	MGYK			J			CPES	18454	29315	INORGANIC
Beryllium	15 2264	AAB3358	18	24.1	SS	<	1.5	1.95	0.1420081	MGYK			J			CPES	18454	29315	INORGANIC
Beryllium	15 2264	AAB3356	18	24.1	SS	<	1.5	1.95	0.1420081	MGYK			J			CPES	18454	29315	INORGANIC
Beryllium	15 2268	AAB3387	0	6.1	SS	<	1.1	1.95	0.1420081	MGYK			J			CPES	18454	29315	INORGANIC
Beryllium	15 2268	AAB3387	0	6.1	SS	<	1.1	1.95	0.1420081	MGYK			J			CPES	18454	29315	INORGANIC
Beryllium	15 2269	AAB3365	18	24.1	SS	<	1.4	1.95	0.1420081	MGYK			J			CPES	18454	29315	INORGANIC
Beryllium	15 2268	AAB3395	18	24.1	SS	<	1.4	1.95	0.1420081	MGYK			J			CPES	18454	29315	INORGANIC
Beryllium	15 2281	AACC984	0	6.1	SS	<	0.98	1.95	0.1420081	MGYK			J			CPES	20347	34451	INORGANIC
Beryllium	15 2281	AACC984	0	6.1	SS	<	0.98	1.95	0.1420081	MGYK			J			CPES	20347	34451	INORGANIC
Beryllium	15 2401	AAB3365	18	24.1	SS	<	1.4	1.95	0.1420081	MGYK	FD		J			CPES	18454	29315	INORGANIC
Beryllium	15 2401	AAB3365	18	24.1	SS	<	1.4	1.95	0.1420081	MGYK	FD		J			CPES	18454	29315	INORGANIC
Beryllium	FKCATE	AAB3382			W	<	0.2		4	UGL	BB	BB	O			CPES	20145	34181	INORGANIC
Beryllium	FKCATE	AAB3382			W	<	0.2		4	UGL	BB	BB	O			CPES	20145	34181	INORGANIC
Beryllium	FKCATE	AAB3382			W	<	0.2		4	UGL	BB	BB	O			CPES	20145	34181	INORGANIC
Beryllium	FKCATE	AAB3382			W	<	0.2		4	UGL	BB	BB	O			CPES	20145	34181	INORGANIC
Cadmium	15 2100	AAB3333	0	6.1	SS	<	0.84	2.7	38.3403347	MGYK			R			CPES	18673	29764	INORGANIC
Cadmium	15 2100	AAB3451	18	24.1	SS	<	1	2.7	38.3403347	MGYK						CPES	18681	29155	INORGANIC
Cadmium	15 2112	AAB3461	0	6.1	SS	<	0.96	2.7	38.3403347	MGYK						CPES	18681	29155	INORGANIC
Cadmium	15 2253	AAB3389	0	6.1	SS	<	0.06	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2253	AAB3389	0	6.1	SS	<	0.06	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2253	AAB3394	18	24.1	SS	<	0.07	2.7	38.3403347	MGYK			O			CPES	18454	29315	INORGANIC
Cadmium	15 2253	AAB3394	18	24.1	SS	<	0.07	2.7	38.3403347	MGYK			O			CPES	18454	29315	INORGANIC
Cadmium	15 2253	AAB3394	18	24.1	SS	<	0.07	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2253	AAB3394	18	24.1	SS	<	0.07	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2255	AACC993	0	6.1	SS	<	0.22	2.7	38.3403347	MGYK						CPES	20347	34451	INORGANIC
Cadmium	15 2255	AACC993	0	6.1	SS	<	0.22	2.7	38.3403347	MGYK						CPES	20347	34451	INORGANIC
Cadmium	15 2257	AAB3358	0	6.1	SS	<	0.07	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2257	AAB3358	0	6.1	SS	<	0.07	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2257	AAB3362	18	24.1	SS	<	0.07	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2257	AAB3362	18	24.1	SS	<	0.07	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2263	AAC0926	0	6.1	SS	<	0.34	2.7	38.3403347	MGYK						CPES	20347	34451	INORGANIC
Cadmium	15 2263	AAC0926	0	6.1	SS	<	0.34	2.7	38.3403347	MGYK						CPES	20347	34451	INORGANIC
Cadmium	15 2264	AAB3386	0	6.1	SS	<	0.06	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2264	AAB3386	0	6.1	SS	<	0.06	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2264	AAB3396	18	24.1	SS	<	0.07	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2264	AAB3396	18	24.1	SS	<	0.07	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2268	AAB3387	0	6.1	SS	<	0.05	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2268	AAB3387	0	6.1	SS	<	0.05	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2268	AAB3395	18	24.1	SS	<	0.07	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2268	AAB3395	18	24.1	SS	<	0.07	2.7	38.3403347	MGYK						CPES	18454	29315	INORGANIC
Cadmium	15 2281	AACC984	0	6.1	SS	<	0.13	2.7	38.3403347	MGYK						CPES	20347	34451	INORGANIC
Cadmium	15 2281	AACC984	0	6.1	SS	<	0.13	2.7	38.3403347	MGYK						CPES	20347	34451	INORGANIC
Cadmium	15 2401	AAB3365	18	24.1	SS	<	0.07	2.7	38.3403347	MGYK	FD					CPES	18454	29315	INORGANIC

SAMPLING DATA FOR PRS 15-004(s,d)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met	S	Sample Value	Bkgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Cadmium	15-2401	AAB3365	18	24		SS		0.07	2.7	383403347	MG/KG	FD				CPES	18454	29315	INORGANIC
Calcium	15-2100	AAB3333	0	6		SS		2250	6120		MG/KG			J		CPES	18673	29796	INORGANIC
Calcium	15-2100	AAB3451	18	24		SS		2650	6120		MG/KG					CPES	18681	29195	INORGANIC
Calcium	15-2112	AAB3461	0	6		SS		2920	6120		MG/KG					CPES	18681	29195	INORGANIC
Calcium	15-2253	AAB3388	0	6		SS		2280	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2253	AAB3388	0	6		SS		2280	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2253	AAB3394	18	24		SS		2914	6120		MG/KG		D			CPES	18454	29315	INORGANIC
Calcium	15-2253	AAB3394	18	24		SS		2914	6120		MG/KG		D			CPES	18454	29315	INORGANIC
Calcium	15-2253	AAB3394	18	24		SS		2750	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2253	AAB3394	18	24		SS		2750	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2255	AAC0993	0	6		SS		2020	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2255	AAC0993	0	6		SS		2020	6120		MG/KG					CPES	20347	34491	INORGANIC
Calcium	15-2257	AAB3358	0	6		SS		2250	6120		MG/KG					CPES	20347	34491	INORGANIC
Calcium	15-2257	AAB3358	0	6		SS		2250	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2257	AAB3362	18	24		SS		2610	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2257	AAB3362	18	24		SS		2610	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2263	AAC0926	0	6		SS		2060	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2263	AAC0926	0	6		SS		2060	6120		MG/KG					CPES	20347	34491	INORGANIC
Calcium	15-2264	AAB3386	0	6		SS		1890	6120		MG/KG					CPES	20347	34491	INORGANIC
Calcium	15-2264	AAB3386	0	6		SS		1890	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2264	AAB3396	18	24		SS		2620	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2264	AAB3396	18	24		SS		2620	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2268	AAB3387	0	6		SS		2530	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2268	AAB3387	0	6		SS		2530	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2268	AAB3395	18	24		SS		2780	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2268	AAB3395	18	24		SS		2780	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2281	AAC0984	0	6		SS		5200	6120		MG/KG					CPES	18454	29315	INORGANIC
Calcium	15-2281	AAC0984	0	6		SS		5200	6120		MG/KG					CPES	20347	34491	INORGANIC
Calcium	15-2401	AAB3365	18	24		SS		2383	6120		MG/KG	FD				CPES	20347	34491	INORGANIC
Calcium	15-2401	AAB3365	18	24		SS		2380	6120		MG/KG	FD				CPES	18454	29315	INORGANIC
Chromium	15-2100	AAB3333	0	6		SS		8.3	19.3		MG/KG			J		CPES	18673	29796	INORGANIC
Chromium	15-2100	AAB3451	18	24		SS		11.4	19.3		MG/KG			J		CPES	18681	29195	INORGANIC
Chromium	15-2112	AAB3461	0	6		SS		10.4	19.3		MG/KG			J		CPES	18681	29195	INORGANIC
Chromium	15-2253	AAB3388	0	6		SS		7.5	19.3		MG/KG			J		CPES	18454	29315	INORGANIC
Chromium	15-2253	AAB3388	0	6		SS		7.5	19.3		MG/KG			J		CPES	18454	29315	INORGANIC
Chromium	15-2253	AAB3394	18	24		SS		11.5	19.3		MG/KG		D			CPES	18454	29315	INORGANIC
Chromium	15-2253	AAB3394	18	24		SS		11.5	19.3		MG/KG		D			CPES	18454	29315	INORGANIC
Chromium	15-2253	AAB3394	18	24		SS		9.6	19.3		MG/KG			J		CPES	18454	29315	INORGANIC
Chromium	15-2255	AAC0993	0	6		SS		6.7	19.3		MG/KG			J		CPES	18454	29315	INORGANIC
Chromium	15-2255	AAC0993	0	6		SS		6.7	19.3		MG/KG			J		CPES	20347	34491	INORGANIC
Chromium	15-2257	AAB3358	0	6		SS		5.4	19.3		MG/KG			J		CPES	18454	29315	INORGANIC
Chromium	15-2257	AAB3358	0	6		SS		5.4	19.3		MG/KG			J		CPES	18454	29315	INORGANIC
Chromium	15-2257	AAB3362	18	24		SS		8.2	19.3		MG/KG			J		CPES	18454	29315	INORGANIC
Chromium	15-2257	AAB3362	18	24		SS		8.2	19.3		MG/KG			J		CPES	18454	29315	INORGANIC

SAMPLING DATA FOR PRS 15-004(e,d)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met S	Sample Value	Depth Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Saline
Copper	15 2112	AAB31461	0	6		0	49.4	30.7	2848 13114	MG/KG					CPES	18481	29195	INORGANIC
Copper	15 2253	AAB31388	0	6		0	13.4	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2253	AAB31398	0	6		0	12.4	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2253	AAB31394	18	24		0	10.1	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2253	AAB31394	18	24		0	9.2	30.7	2848 13114	MG/KG		D			CPES	18454	29315	INORGANIC
Copper	15 2253	AAB31394	18	24		0	10.1	30.7	2848 13114	MG/KG		D			CPES	18454	29315	INORGANIC
Copper	15 2253	AAC0993	0	6		0	12.9	30.7	2848 13114	MG/KG					CPES	20347	34491	INORGANIC
Copper	15 2253	AAC0993	0	6		0	12.9	30.7	2848 13114	MG/KG					CPES	20347	34491	INORGANIC
Copper	15 2253	AAB31358	0	6		0	25.9	30.7	2848 13114	MG/KG					CPES	16454	29315	INORGANIC
Copper	15 2253	AAB31358	0	6		0	25.9	30.7	2848 13114	MG/KG					CPES	16454	29315	INORGANIC
Copper	15 2253	AAB31362	18	24		0	6.9	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2253	AAB31362	18	24		0	6.9	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2263	AAC0926	0	6		0	62.2	30.7	2848 13114	MG/KG					CPES	20347	34491	INORGANIC
Copper	15 2263	AAC0926	0	6		0	62.2	30.7	2848 13114	MG/KG					CPES	20347	34491	INORGANIC
Copper	15 2264	AAB31396	0	6		0	20.9	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2264	AAB31396	0	6		0	20.9	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2264	AAB31396	18	24		0	9.7	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2264	AAB31396	18	24		0	9.7	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2268	AAB31387	0	6		0	30.3	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2268	AAB31387	0	6		0	30.3	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2268	AAB31395	18	24		0	9	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2268	AAB31395	18	24		0	8	30.7	2848 13114	MG/KG					CPES	18454	29315	INORGANIC
Copper	15 2281	AAC0984	0	6		0	20.6	30.7	2848 13114	MG/KG					CPES	20247	34491	INORGANIC
Copper	15 2401	AAC0984	18	24		0	23.4	30.7	2848 13114	MG/KG	RD				CPES	20247	34491	INORGANIC
Copper	15 2401	AAB31365	18	24		0	10.3	30.7	2848 13114	MG/KG	RD				CPES	18454	29315	INORGANIC
Copper	15 2401	AAB31365	18	24		0	10.3	30.7	2848 13114	MG/KG	RD				CPES	18454	29315	INORGANIC
Iron	15 2100	AAB31373	0	6		0	12700	21350		MG/KG					CPES	18454	29315	INORGANIC
Iron	15 2100	AAB31351	18	24		0	13300	21350		MG/KG					CPES	18681	29796	INORGANIC
Iron	15 2112	AAB31461	0	6		0	13500	21350		MG/KG					CPES	18681	29195	INORGANIC
Iron	15 2253	AAB31388	0	6		0	12100	21350		MG/KG					CPES	18681	29195	INORGANIC
Iron	15 2253	AAB31394	18	24		0	12100	21350		MG/KG					CPES	18454	29315	INORGANIC
Iron	15 2253	AAB31394	18	24		0	16104	21350		MG/KG		D			CPES	18454	29315	INORGANIC
Iron	15 2253	AAB31394	18	24		0	15200	21350		MG/KG		D			CPES	18454	29315	INORGANIC
Iron	15 2253	AAB31394	18	24		0	14200	21350		MG/KG					CPES	18454	29315	INORGANIC
Iron	15 2253	AAC0993	0	6		0	14200	21350		MG/KG					CPES	20347	34491	INORGANIC
Iron	15 2253	AAC0993	0	6		0	14200	21350		MG/KG					CPES	20347	34491	INORGANIC
Iron	15 2253	AAB31358	0	6		0	9080	21350		MG/KG					CPES	20347	34491	INORGANIC
Iron	15 2253	AAB31358	0	6		0	9080	21350		MG/KG					CPES	20347	34491	INORGANIC
Iron	15 2253	AAB31362	18	24		0	12400	21350		MG/KG					CPES	18454	29315	INORGANIC
Iron	15 2253	AAB31362	18	24		0	12400	21350		MG/KG					CPES	18454	29315	INORGANIC
Iron	15 2263	AAC0926	0	6		0	10100	21350		MG/KG					CPES	20347	34491	INORGANIC
Iron	15 2263	AAC0926	0	6		0	10100	21350		MG/KG					CPES	20347	34491	INORGANIC
Iron	15 2268	AAB31396	0	6		0	10100	21350		MG/KG					CPES	18454	29315	INORGANIC

SAMPLING DATA FOR FRS 15-004(a,d)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Out	Sample Location	Tech Code	Request Number	Report Number	Suite
DES	15 2264	AAB3366	0	6.1		SS										EPES	18454	29315	INCORGANIC
DES	15 2264	AAB3366	18	24.1		SS		18300	21300		MGYG					EPES	18454	29315	INCORGANIC
DES	15 2264	AAB3366	12	24.1		SS		18300	21300		MGYG					EPES	18454	29315	INCORGANIC
DES	15 2268	AAB3387	0	6.1		SS		11100	21300		MGYG					EPES	18454	29315	INCORGANIC
DES	15 2268	AAB3387	0	6.1		SS		11100	21300		MGYG					EPES	18454	29315	INCORGANIC
DES	15 2268	AAB3365	18	24.1		SS		15500	21300		MGYG					EPES	18454	29315	INCORGANIC
DES	15 2268	AAB3365	18	24.1		SS		15500	21300		MGYG					EPES	18454	29315	INCORGANIC
DES	15 2281	AACC584	0	6.1		SS		11900	21300		MGYG					EPES	20347	34451	INCORGANIC
DES	15 2281	AACC584	0	6.1		SS		11900	21300		MGYG					EPES	20347	34451	INCORGANIC
DES	15 2401	AAB3365	18	24.1		SS		16400	21300		MGYG	FD				EPES	18454	29315	INCORGANIC
DES	15 2401	AAB3365	18	24.1		SS		16400	21300		MGYG	FD				EPES	18454	29315	INCORGANIC
LEAD	15 2100	AAB3333	0	6.1		SS		17.5	23.3	400	MGYG					GFAA	18454	29315	INCORGANIC
LEAD	15 2100	AAB3451	18	24.1		SS		13.6	23.3	400	MGYG					EPES	18454	29315	INCORGANIC
LEAD	15 2101	AAB3317	0	6.1		SS		26	23.3	400	MGYG					EPES	20293	34933	INCORGANIC
LEAD	15 2112	AAB3461	0	6.1		SS		48.5	23.3	400	MGYG					EPES	18454	29315	INCORGANIC
LEAD	15 2253	AAB3388	0	6.1		SS		24.9	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2253	AAB3328	0	6.1		SS		24.9	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2253	AAB3354	18	24.1		SS		18.1	23.3	400	MGYG		0			EPES	18454	29315	INCORGANIC
LEAD	15 2253	AAB3354	18	24.1		SS		18.1	23.3	400	MGYG		0			EPES	18454	29315	INCORGANIC
LEAD	15 2253	AAB3354	18	24.1		SS		14.9	23.3	400	MGYG		0			GFAA	18454	29315	INCORGANIC
LEAD	15 2253	AAB3354	18	24.1		SS		17.6	23.3	400	MGYG		0	J		GFAA	18454	29315	INCORGANIC
LEAD	15 2253	AAB3354	18	24.1		SS		14.9	23.3	400	MGYG		0			GFAA	18454	29315	INCORGANIC
LEAD	15 2253	AAB3354	18	24.1		SS		17.6	23.3	400	MGYG		0	J		GFAA	18454	29315	INCORGANIC
LEAD	15 2255	AACC593	0	6.1		SS		15.4	23.3	400	MGYG					EPES	20347	34451	INCORGANIC
LEAD	15 2255	AACC593	0	6.1		SS		15.4	23.3	400	MGYG					EPES	20347	34451	INCORGANIC
LEAD	15 2257	AAB3358	0	6.1		SS		20.3	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2257	AAB3358	0	6.1		SS		20.3	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2257	AAB3362	18	24.1		SS		14.9	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2257	AAB3362	18	24.1		SS		14.9	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2263	AACC526	0	6.1		SS		40	23.3	400	MGYG					EPES	20347	34451	INCORGANIC
LEAD	15 2263	AACC526	0	6.1		SS		40	23.3	400	MGYG					EPES	20347	34451	INCORGANIC
LEAD	15 2264	AAB3365	0	6.1		SS		25.1	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2264	AAB3386	0	6.1		SS		25.1	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2264	AAB3396	18	24.1		SS		19.5	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2264	AAB3396	18	24.1		SS		19.5	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2268	AAB3387	0	6.1		SS		42.3	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2268	AAB3387	0	6.1		SS		42.3	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2268	AAB3365	18	24.1		SS		23	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2268	AAB3365	18	24.1		SS		23	23.3	400	MGYG			J		GFAA	18454	29315	INCORGANIC
LEAD	15 2281	AACC584	0	6.1		SS		32.4	23.3	400	MGYG					EPES	20347	34451	INCORGANIC
LEAD	15 2281	AACC584	0	6.1		SS		32.4	23.3	400	MGYG					EPES	20347	34451	INCORGANIC
LEAD	15 2401	AAB3365	18	24.1		SS		37.6	23.3	400	MGYG	FD		J		GFAA	18454	29315	INCORGANIC
LEAD	15 2401	AAB3365	18	24.1		SS		37.6	23.3	400	MGYG	FD		J		GFAA	18454	29315	INCORGANIC
LEAD	FMGATE	AAB3382				N		1.5		50	UGL	EB		J		EPES	20145	34181	INCORGANIC
LEAD	FMGATE	AAB3382				N		1.5		50	UGL	EB	0			EPES	20145	34181	INCORGANIC

SAMPLING DATA FOR PRS 15-004(e,d)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat S	Sample	Value	Bagd	SAL	Units	Field	Lab	EPA	Sample	Tech	Request	Report	Suite
Lead	FRSATE	AAB3382			W	W	1.5			50	UG/L	BB	D	J		EPES	20145	34181	NOORGANC
Lead	FRSATE	AAB3382			W	W	1.5			50	UG/L	BB	D	J		EPES	20145	34181	NOORGANC
Magnesium	15 2100	AAB3333	0	6	S	S	2130	4610		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Magnesium	15 2100	AAB3451	18	24	S	S	2740	4610		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Magnesium	15 2112	AAB3461	0	6	S	S	2480	4610		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Magnesium	15 2253	AAB3386	0	6	S	S	2240	4610		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Magnesium	15 2253	AAB3384	0	6	S	S	2210	4610		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Magnesium	15 2253	AAB3394	0	6	S	S	2552	4610		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Magnesium	15 2253	AAB3394	18	24	S	S	2810	4610		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Magnesium	15 2253	AAB3394	18	24	S	S	2552	4610		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Magnesium	15 2253	AAB3394	0	6	S	S	2440	4610		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Magnesium	15 2255	AAC0993	0	6	S	S	1850	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2255	AAC0993	0	6	S	S	1850	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2257	AAB3358	0	6	S	S	1850	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2257	AAB3362	0	6	S	S	1850	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2257	AAB3362	18	24	S	S	2600	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2257	AAB3362	18	24	S	S	2600	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2263	AAC0926	0	6	S	S	1800	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2263	AAC0926	0	6	S	S	1800	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2263	AAC0926	0	6	S	S	1800	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2264	AAB3386	0	6	S	S	1850	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2264	AAB3386	0	6	S	S	1850	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2264	AAB3396	0	6	S	S	1850	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2264	AAB3396	18	24	S	S	2950	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2264	AAB3396	18	24	S	S	2950	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2268	AAB3387	0	6	S	S	2040	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2268	AAB3387	0	6	S	S	2040	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2268	AAB3387	0	6	S	S	2040	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2268	AAB3395	18	24	S	S	2600	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2268	AAB3395	18	24	S	S	2600	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2268	AAB3395	18	24	S	S	2600	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2281	AAC0994	0	6	S	S	2800	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2281	AAC0994	0	6	S	S	2800	4610		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Magnesium	15 2401	AAB3365	18	24	S	S	2610	4610		381.959094	MG/KG	FD		J		EPES	20147	34491	NOORGANC
Magnesium	15 2401	AAB3365	18	24	S	S	2610	4610		381.959094	MG/KG	FD		J		EPES	20147	34491	NOORGANC
Manganese	15 2100	AAB3451	0	6	S	S	471	714		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Manganese	15 2100	AAB3451	18	24	S	S	520	714		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Manganese	15 2112	AAB3461	0	6	S	S	371	714		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Manganese	15 2253	AAB3386	0	6	S	S	372	714		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Manganese	15 2253	AAB3388	0	6	S	S	372	714		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Manganese	15 2253	AAB3394	0	6	S	S	359	714		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Manganese	15 2253	AAB3394	18	24	S	S	359	714		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Manganese	15 2253	AAB3394	18	24	S	S	359	714		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Manganese	15 2253	AAB3394	18	24	S	S	359	714		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Manganese	15 2253	AAC0993	0	6	S	S	359	714		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Manganese	15 2253	AAC0993	0	6	S	S	359	714		381.959094	MG/KG			J		EPES	20145	29195	NOORGANC
Manganese	15 2257	AAB3358	0	6	S	S	351	714		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Manganese	15 2257	AAB3358	0	6	S	S	351	714		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Manganese	15 2257	AAB3358	0	6	S	S	351	714		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Manganese	15 2257	AAB3358	18	24	S	S	239	714		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC
Manganese	15 2257	AAB3362	18	24	S	S	239	714		381.959094	MG/KG			J		EPES	20147	34491	NOORGANC

SAMPLING DATA FOR FRS 15-2013(d)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat S	Sample Value	Bits Value	SAL Value	Units	Fac Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Suite	
Manganese	15 2257	AAB3102	18	241	SS	SS	255	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2261	AAC6526	0	61	SS	SS	441	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2263	AAC6526	0	61	SS	SS	441	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2264	AAC6526	0	61	SS	SS	476	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2264	AAB3106	0	61	SS	SS	476	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2264	AAB3106	18	241	SS	SS	324	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2264	AAB3106	18	241	SS	SS	324	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2268	AAB3107	0	61	SS	SS	315	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2268	AAB3107	0	61	SS	SS	315	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2268	AAB3107	18	241	SS	SS	345	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2281	AAC6584	0	61	SS	SS	272	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2281	AAC6584	0	61	SS	SS	272	714	381 555 54	M3P0				EPES	18454	20347	25115	200	RO
Manganese	15 2401	AAB3165	18	241	SS	SS	525	714	381 555 54	M3P0	RD			EPES	18454	20347	25115	200	RO
Manganese	15 2401	AAB3165	18	241	SS	SS	525	714	381 555 54	M3P0	RD			EPES	18454	20347	25115	200	RO
Mercury	15 2100	AAB3133	0	61	SS	SS	011	011	21 033 1453	M3P0			U	CYAA	18454	20347	25115	200	RO
Mercury	15 2100	AAB3451	18	241	SS	SS	011	011	21 033 1453	M3P0			U	CYAA	18481	18481	25115	200	RO
Mercury	15 2101	AAB3117	0	61	SS	SS	005	005	21 033 1453	M3P0			R	CYAA	18454	20293	25115	200	RO
Mercury	15 2112	AAB3461	0	61	SS	SS	027	011	21 033 1453	M3P0			U	CYAA	18481	18481	25115	200	RO
Mercury	15 2253	AAB3188	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2253	AAB3188	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2253	AAB3188	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2253	AAB3188	18	241	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2253	AAB3188	18	241	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2253	AAB3188	18	241	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2255	AAC6593	0	61	SS	SS	011	011	21 033 1453	M3P0			R	CYAA	20347	20347	25115	200	RO
Mercury	15 2257	AAB3158	0	61	SS	SS	011	011	21 033 1453	M3P0			R	CYAA	20347	20347	25115	200	RO
Mercury	15 2257	AAB3158	0	61	SS	SS	011	011	21 033 1453	M3P0			R	CYAA	20347	20347	25115	200	RO
Mercury	15 2257	AAB3158	0	61	SS	SS	011	011	21 033 1453	M3P0			R	CYAA	20347	20347	25115	200	RO
Mercury	15 2257	AAB3158	18	241	SS	SS	011	011	21 033 1453	M3P0			R	CYAA	18454	18454	25115	200	RO
Mercury	15 2257	AAB3158	18	241	SS	SS	011	011	21 033 1453	M3P0			R	CYAA	18454	18454	25115	200	RO
Mercury	15 2261	AAC6526	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2261	AAC6526	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2261	AAC6526	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2264	AAC6526	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2264	AAC6526	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2264	AAB3186	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2264	AAB3186	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2264	AAB3186	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2264	AAB3186	18	241	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2264	AAB3186	18	241	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2268	AAB3107	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2268	AAB3107	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2268	AAB3107	0	61	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2268	AAB3107	18	241	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2268	AAB3107	18	241	SS	SS	011	011	21 033 1453	M3P0				CYAA	18454	18454	25115	200	RO
Mercury	15 2281	AAC6584	0	61	SS	SS	012	011	21 033 1453	M3P0				CYAA	20347	20347	25115	200	RO
Mercury	15 2281	AAC6584	0	61	SS	SS	012	011	21 033 1453	M3P0				CYAA	20347	20347	25115	200	RO
Mercury	15 2401	AAB3165	18	241	SS	SS	011	011	21 033 1453	M3P0	RD			CYAA	18454	18454	25115	200	RO
Mercury	15 2401	AAB3165	18	241	SS	SS	011	011	21 033 1453	M3P0	RD			CYAA	18454	18454	25115	200	RO
Mercury	15 2100	AAB3133	0	61	SS	SS	011	011	1533 61105	M3P0				EPES	18473	18473	25115	200	RO
Mercury	15 2100	AAB3133	0	61	SS	SS	011	011	1533 61105	M3P0				EPES	18481	18481	25115	200	RO

SAMPLING DATA FOR PRS 15-004(a,d)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Nickel	15-2112	AAB3461	0	6		15	15	9.6	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2253	AAB3388	0	6		15	15	5	15.2	1533 61109	MG/KG			W		CPES	18454	29315	INORGANIC
Nickel	15-2253	AAB3388	0	6		15	15	5	15.2	1533 61109	MG/KG			W		CPES	18454	29315	INORGANIC
Nickel	15-2253	AAB3394	18	24		15	15	9.2	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2253	AAB3394	18	24		15	15	9.2	15.2	1533 61109	MG/KG			O		CPES	18454	29315	INORGANIC
Nickel	15-2253	AAB3394	18	24		15	15	11	15.2	1533 61109	MG/KG			O		CPES	18454	29315	INORGANIC
Nickel	15-2253	AAB3394	18	24		15	15	11	15.2	1533 61109	MG/KG			J		CPES	18454	29315	INORGANIC
Nickel	15-2255	AAC0993	0	6		15	15	8.4	15.2	1533 61109	MG/KG					CPES	20347	34491	INORGANIC
Nickel	15-2255	AAC0993	0	6		15	15	8.4	15.2	1533 61109	MG/KG					CPES	20347	34491	INORGANIC
Nickel	15-2257	AAB3358	0	6		15	15	4.4	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2257	AAB3358	0	6		15	15	4.4	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2257	AAB3362	18	24		15	15	5.8	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2257	AAB3362	18	24		15	15	5.8	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2263	AAC0926	0	6		15	15	18.6	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2263	AAC0926	0	6		15	15	18.6	15.2	1533 61109	MG/KG					CPES	20347	34491	INORGANIC
Nickel	15-2264	AAB3386	0	6		15	15	4.7	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2264	AAB3386	0	6		15	15	4.7	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2264	AAB3396	18	24		15	15	6.8	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2264	AAB3396	18	24		15	15	6.8	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2268	AAB3387	0	6		15	15	4.6	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2268	AAB3387	0	6		15	15	4.6	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2268	AAB3395	18	24		15	15	5.6	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2268	AAB3395	18	24		15	15	5.6	15.2	1533 61109	MG/KG					CPES	18454	29315	INORGANIC
Nickel	15-2281	AAC0984	0	6		15	15	7.8	15.2	1533 61109	MG/KG					CPES	20347	34491	INORGANIC
Nickel	15-2281	AAC0984	0	6		15	15	7.8	15.2	1533 61109	MG/KG					CPES	20347	34491	INORGANIC
Nickel	15-2401	AAB3365	18	24		15	15	6.7	15.2	1533 61109	MG/KG	FD				CPES	18454	29315	INORGANIC
Nickel	15-2401	AAB3365	18	24		15	15	6.7	15.2	1533 61109	MG/KG	FD				CPES	18454	29315	INORGANIC
Potassium	15-2100	AAB3333	0	6		15	15	2610	3410		MG/KG					CPES	18454	29315	INORGANIC
Potassium	15-2100	AAB3451	18	24		15	15	2840	3410		MG/KG					CPES	18454	29315	INORGANIC
Potassium	15-2112	AAB3461	0	6		15	15	2500	3410		MG/KG					CPES	18454	29315	INORGANIC
Potassium	15-2253	AAB3388	0	6		15	15	2660	3410		MG/KG					CPES	18454	29315	INORGANIC
Potassium	15-2253	AAB3388	0	6		15	15	2660	3410		MG/KG					CPES	18454	29315	INORGANIC
Potassium	15-2253	AAB3394	18	24		15	15	2506	3410		MG/KG					CPES	18454	29315	INORGANIC
Potassium	15-2253	AAB3394	18	24		15	15	2506	3410		MG/KG			O		CPES	18454	29315	INORGANIC
Potassium	15-2253	AAB3394	18	24		15	15	2430	3410		MG/KG			O		CPES	18454	29315	INORGANIC
Potassium	15-2253	AAB3394	18	24		15	15	2430	3410		MG/KG					CPES	18454	29315	INORGANIC
Potassium	15-2255	AAC0993	0	6		15	15	3020	3410		MG/KG					CPES	20347	34491	INORGANIC
Potassium	15-2255	AAC0993	0	6		15	15	3020	3410		MG/KG					CPES	20347	34491	INORGANIC
Potassium	15-2257	AAB3358	0	6		15	15	2170	3410		MG/KG					CPES	18454	29315	INORGANIC
Potassium	15-2257	AAB3358	0	6		15	15	2170	3410		MG/KG					CPES	18454	29315	INORGANIC
Potassium	15-2257	AAB3362	18	24		15	15	2670	3410		MG/KG					CPES	18454	29315	INORGANIC
Potassium	15-2257	AAB3362	18	24		15	15	2670	3410		MG/KG					CPES	18454	29315	INORGANIC
Potassium	15-2263	AAC0926	0	6		15	15	2360	3410		MG/KG					CPES	20347	34491	INORGANIC
Potassium	15-2263	AAC0926	0	6		15	15	2360	3410		MG/KG					CPES	20347	34491	INORGANIC
Potassium	15-2264	AAB3386	0	6		15	15	2300	3410		MG/KG					CPES	18454	29315	INORGANIC

SAMPLING DATA FOR FRS 15-004(s.d)

Analyte	Loc ID	Sample ID	Depth	End	Unit	Mat	Sample Value	Bigd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Potassium	15 2248	AAB3114	0	61	SS		2100	3410		MG/KG					EPES	18454	29315	WORGANG
Potassium	15 2254	AAB3114	18	241	SS		2170	3410		MG/KG					EPES	18454	29315	WORGANG
Potassium	15 2264	AAB3114	18	241	SS		2170	3410		MG/KG					EPES	18454	29315	WORGANG
Potassium	15 2268	AAB3117	0	61	SS		2050	3410		MG/KG					EPES	18454	29315	WORGANG
Potassium	15 2268	AAB3117	0	61	SS		2050	3410		MG/KG					EPES	18454	29315	WORGANG
Potassium	15 2268	AAB3115	18	241	SS		1530	3410		MG/KG					EPES	18454	29315	WORGANG
Potassium	15 2268	AAB3115	18	241	SS		1530	3410		MG/KG					EPES	18454	29315	WORGANG
Potassium	15 2281	AAC6544	0	61	SS		1550	3410		MG/KG					EPES	20347	34491	WORGANG
Potassium	15 2281	AAC6544	0	61	SS		1550	3410		MG/KG					EPES	20347	34491	WORGANG
Potassium	15 2431	AAB3141	18	241	SS		2440	3410		MG/KG					EPES	18454	29315	WORGANG
Potassium	15 2431	AAB3141	18	241	SS		2440	3410		MG/KG					EPES	18454	29315	WORGANG
Potassium	15 2431	AAB3145	18	241	SS		2440	3410		MG/KG					EPES	18454	29315	WORGANG
Selenium	15 2100	AAB3113	0	61	SS		0.56	1.7	383	433214	MG/KG	W			EPES	18673	29756	WORGANG
Selenium	15 2100	AAB3141	18	241	SS		0.56	1.7	383	433214	MG/KG				EPES	18681	29195	WORGANG
Selenium	15 2112	AAB3141	0	61	SS		0.55	1.7	383	433214	MG/KG				EPES	18681	29195	WORGANG
Selenium	15 2253	AAB3118	0	61	SS		0.55	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2253	AAB3118	0	61	SS		0.55	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2253	AAB3118	0	61	SS		0.55	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2253	AAB3118	0	61	SS		0.54	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2253	AAB3118	0	61	SS		0.54	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2253	AAB3118	0	61	SS		0.54	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2253	AAB3118	0	61	SS		0.5	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2253	AAB3118	0	61	SS		0.5	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2255	AAC6528	0	61	SS		1	1.7	383	433214	MG/KG				EPES	20347	34491	WORGANG
Selenium	15 2255	AAC6528	0	61	SS		1	1.7	383	433214	MG/KG				EPES	20347	34491	WORGANG
Selenium	15 2257	AAB3118	0	61	SS		0.81	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2257	AAB3118	0	61	SS		0.81	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2257	AAB3118	0	61	SS		0.6	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2257	AAB3118	0	61	SS		0.6	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2257	AAB3118	0	61	SS		0.5	1.7	383	433214	MG/KG				EPES	20347	34491	WORGANG
Selenium	15 2263	AAC6528	0	61	SS		0.9	1.7	383	433214	MG/KG				EPES	20347	34491	WORGANG
Selenium	15 2263	AAC6528	0	61	SS		0.9	1.7	383	433214	MG/KG				EPES	20347	34491	WORGANG
Selenium	15 2264	AAB3118	0	61	SS		0.55	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2264	AAB3118	0	61	SS		0.55	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2264	AAB3118	0	61	SS		0.55	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2264	AAB3118	0	61	SS		0.58	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2264	AAB3118	0	61	SS		0.58	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2268	AAB3117	0	61	SS		0.56	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2268	AAB3117	0	61	SS		0.56	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2268	AAB3115	18	241	SS		0.58	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2268	AAB3115	18	241	SS		0.58	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2281	AAC6544	0	61	SS		1.1	1.7	383	433214	MG/KG				EPES	20347	34491	WORGANG
Selenium	15 2281	AAC6544	0	61	SS		1.1	1.7	383	433214	MG/KG				EPES	20347	34491	WORGANG
Selenium	15 2431	AAB3145	18	241	SS		0.57	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2431	AAB3145	18	241	SS		0.57	1.7	383	433214	MG/KG				GFAA	18454	29315	WORGANG
Selenium	15 2100	AAB3113	0	61	SS		0.64	1.61	383	433214	MG/KG				EPES	18673	29756	WORGANG
Selenium	15 2100	AAB3113	0	61	SS		0.64	1.61	383	433214	MG/KG				EPES	18681	29195	WORGANG
Selenium	15 2112	AAB3141	0	61	SS		0.63	1.61	383	433214	MG/KG				EPES	18681	29195	WORGANG
Selenium	15 2253	AAB3118	0	61	SS		0.51	1.61	383	433214	MG/KG				EPES	18454	29315	WORGANG
Selenium	15 2253	AAB3118	0	61	SS		0.51	1.61	383	433214	MG/KG				EPES	18454	29315	WORGANG

SAMPLING DATA FOR PRS 15-004(a,c)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	Sample Value	Bgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Silver	15 2253	AAB3194	18 24	18 24	SS	<	0.66	1.61	383.403214	MG/KG		0			DPES	18454	29315	INORGANIC
Silver	15 2253	AAB3194	18 24	18 24	SS	<	0.66	1.61	383.403214	MG/KG		0			DPES	18454	29315	INORGANIC
Silver	15 2253	AAB3194	18 24	18 24	SS	<	0.61	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2253	AAB3194	18 24	18 24	SS	<	0.61	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2253	AAC0993	0 61	0 61	SS	<	0.24	1.61	383.403214	MG/KG					DPES	20347	34491	INORGANIC
Silver	15 2253	AAC0993	0 61	0 61	SS	<	0.24	1.61	383.403214	MG/KG					DPES	20347	34491	INORGANIC
Silver	15 2257	AAB3158	0 61	0 61	SS	<	0.41	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2257	AAB3158	0 61	0 61	SS	<	0.41	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2257	AAB3162	18 24	18 24	SS	<	0.56	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2257	AAB3162	18 24	18 24	SS	<	0.56	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2263	AAC0926	0 61	0 61	SS	<	0.21	1.61	383.403214	MG/KG					DPES	20347	34491	INORGANIC
Silver	15 2263	AAC0926	0 61	0 61	SS	<	0.21	1.61	383.403214	MG/KG					DPES	20347	34491	INORGANIC
Silver	15 2264	AAB3196	0 61	0 61	SS	<	0.39	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2264	AAB3196	0 61	0 61	SS	<	0.39	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2264	AAB3196	18 24	18 24	SS	<	0.68	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2264	AAB3196	18 24	18 24	SS	<	0.68	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2268	AAB3187	0 61	0 61	SS	<	0.54	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2268	AAB3187	0 61	0 61	SS	<	0.54	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2268	AAB3195	18 24	18 24	SS	<	0.6	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2268	AAB3195	18 24	18 24	SS	<	0.6	1.61	383.403214	MG/KG					DPES	18454	29315	INORGANIC
Silver	15 2281	AAC0984	0 61	0 61	SS	<	0.26	1.61	383.403214	MG/KG					DPES	20347	34491	INORGANIC
Silver	15 2281	AAC0984	0 61	0 61	SS	<	0.26	1.61	383.403214	MG/KG					DPES	20347	34491	INORGANIC
Silver	15 2401	AAB3165	18 24	18 24	SS	<	0.55	1.61	383.403214	MG/KG	FD				DPES	18454	29315	INORGANIC
Silver	15 2401	AAB3165	18 24	18 24	SS	<	0.55	1.61	383.403214	MG/KG	FD				DPES	18454	29315	INORGANIC
Sodium	15 2100	AAB3133	0 61	0 61	SS	<	89.0	915		MG/KG					DPES	18673	29296	INORGANIC
Sodium	15 2100	AAB3133	0 61	0 61	SS	<	129	915		MG/KG					DPES	18681	29195	INORGANIC
Sodium	15 2112	AAB3161	0 61	0 61	SS	<	115	915		MG/KG					DPES	18681	29195	INORGANIC
Sodium	15 2253	AAB3188	0 61	0 61	SS	<	105	915		MG/KG					DPES	18681	29195	INORGANIC
Sodium	15 2253	AAB3188	0 61	0 61	SS	<	105	915		MG/KG					DPES	18681	29195	INORGANIC
Sodium	15 2253	AAB3194	18 24	18 24	SS	<	129	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2253	AAB3194	18 24	18 24	SS	<	129	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2253	AAB3194	18 24	18 24	SS	<	123	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2253	AAB3194	18 24	18 24	SS	<	123	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2253	AAC0993	0 61	0 61	SS	<	526	915		MG/KG					DPES	20347	34491	INORGANIC
Sodium	15 2253	AAC0993	0 61	0 61	SS	<	526	915		MG/KG					DPES	20347	34491	INORGANIC
Sodium	15 2257	AAB3158	0 61	0 61	SS	<	82.3	915		MG/KG					DPES	20347	34491	INORGANIC
Sodium	15 2257	AAB3158	0 61	0 61	SS	<	82.3	915		MG/KG					DPES	20347	34491	INORGANIC
Sodium	15 2257	AAB3158	0 61	0 61	SS	<	508	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2257	AAB3158	0 61	0 61	SS	<	508	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2257	AAB3162	18 24	18 24	SS	<	508	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2257	AAB3162	18 24	18 24	SS	<	508	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2263	AAC0926	0 61	0 61	SS	<	58.6	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2263	AAC0926	0 61	0 61	SS	<	58.6	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2263	AAC0926	0 61	0 61	SS	<	98.6	915		MG/KG					DPES	20347	34491	INORGANIC
Sodium	15 2263	AAC0926	0 61	0 61	SS	<	98.6	915		MG/KG					DPES	20347	34491	INORGANIC
Sodium	15 2264	AAB3186	0 61	0 61	SS	<	68.7	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2264	AAB3186	0 61	0 61	SS	<	68.7	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2264	AAB3196	18 24	18 24	SS	<	166	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2264	AAB3196	18 24	18 24	SS	<	166	915		MG/KG					DPES	18454	29315	INORGANIC
Sodium	15 2264	AAB3196	18 24	18 24	SS	<	166	915		MG/KG					DPES	18454	29315	INORGANIC

SAMPLING DATA FOR FRS 15-CO3(a,d)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat S	Sample Value	Blgd Value	SBL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Suite
Sodium	15-2268	AAB3387	0	6	SS	<	108	915		MS3YG				EPES	18456	25315	INC	ROJANNC
Sodium	15-2268	AAB3387	0	6	SS	<	108	915		MS3YG				EPES	18456	25315	INC	ROJANNC
Sodium	15-2268	AAB3355	18	24	SS	<	187	915		MS3YG				EPES	18456	25315	INC	ROJANNC
Sodium	15-2268	AAB3355	18	24	SS	<	187	915		MS3YG				EPES	18456	25315	INC	ROJANNC
Sodium	15-2281	AAC0584	0	6	SS	<	235	915		MS3YG				EPES	20347	24451	INC	ROJANNC
Sodium	15-2281	AAC0584	0	6	SS	<	235	915		MS3YG				EPES	20347	24451	INC	ROJANNC
Sodium	15-2401	AAB3365	18	24	SS	<	122	915		MS3YG	FD			EPES	18454	25315	INC	ROJANNC
Sodium	15-2401	AAB3365	18	24	SS	<	122	915		MS3YG	FD			EPES	18454	25315	INC	ROJANNC
Thallium	15-2160	AAB3333	0	6	SS	<	0.66	1		MS3YG				EPES	18454	25315	INC	ROJANNC
Thallium	15-2160	AAB3351	18	24	SS	<	0.66	1		MS3YG				EPES	18454	25315	INC	ROJANNC
Thallium	15-2112	AAB3461	0	6	SS	<	0.65	1		MS3YG				EPES	18481	25315	INC	ROJANNC
Thallium	15-2253	AAB3388	0	6	SS	<	0.46	1		MS3YG			U	EPES	18454	25315	INC	ROJANNC
Thallium	15-2253	AAB3388	0	6	SS	<	0.46	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2253	AAB3374	18	24	SS	<	0.45	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2253	AAB3364	18	24	SS	<	0.45	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2253	AAB3354	18	24	SS	<	0.45	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2253	AAC0593	0	6	SS	<	0.97	1		MS3YG				EPES	20347	24451	INC	ROJANNC
Thallium	15-2253	AAC0593	0	6	SS	<	0.97	1		MS3YG				EPES	20347	24451	INC	ROJANNC
Thallium	15-2257	AAB3358	0	6	SS	<	0.5	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2257	AAB3358	0	6	SS	<	0.5	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2257	AAB3362	18	24	SS	<	0.5	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2257	AAB3362	18	24	SS	<	0.5	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2263	AAC0526	0	6	SS	<	0.86	1		MS3YG				EPES	18454	25315	INC	ROJANNC
Thallium	15-2263	AAC0526	0	6	SS	<	0.86	1		MS3YG				EPES	18454	25315	INC	ROJANNC
Thallium	15-2264	AAB3386	0	6	SS	<	0.46	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2264	AAB3386	0	6	SS	<	0.46	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2264	AAB3366	0	6	SS	<	0.46	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2264	AAB3366	0	6	SS	<	0.46	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2268	AAB3396	18	24	SS	<	4.5	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2268	AAB3396	18	24	SS	<	4.5	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2268	AAB3387	0	6	SS	<	4.7	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2268	AAB3387	0	6	SS	<	4.7	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2268	AAB3395	18	24	SS	<	0.45	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2268	AAB3395	18	24	SS	<	0.45	1		MS3YG			U	GFAA	18454	25315	INC	ROJANNC
Thallium	15-2281	AAC0544	0	6	SS	<	1.1	1		MS3YG			U	EPES	20347	24451	INC	ROJANNC
Thallium	15-2281	AAC0544	0	6	SS	<	1.1	1		MS3YG			U	EPES	20347	24451	INC	ROJANNC
Thallium	15-2401	AAB3365	18	24	SS	<	0.53	1		MS3YG	FD			GFAA	18454	25315	INC	ROJANNC
Thallium	15-2401	AAB3365	18	24	SS	<	0.53	1		MS3YG	FD			GFAA	18454	25315	INC	ROJANNC
Vanadium	15-2160	AAB3333	0	6	SS	<	23.9	41.9	536.764418	MS3YG			U	EPES	18673	25754	INC	ROJANNC
Vanadium	15-2160	AAB3351	18	24	SS	<	28.6	41.9	536.764418	MS3YG			J	EPES	18481	25315	INC	ROJANNC
Vanadium	15-2112	AAB3461	0	6	SS	<	26.7	41.9	536.764418	MS3YG			J	EPES	18481	25315	INC	ROJANNC
Vanadium	15-2253	AAB3388	0	6	SS	<	20.7	41.9	536.764418	MS3YG			J	EPES	18454	25315	INC	ROJANNC
Vanadium	15-2253	AAB3388	0	6	SS	<	20.7	41.9	536.764418	MS3YG			J	EPES	18454	25315	INC	ROJANNC
Vanadium	15-2253	AAB3364	18	24	SS	<	24.1	41.9	536.764418	MS3YG			J	EPES	18454	25315	INC	ROJANNC
Vanadium	15-2253	AAB3364	18	24	SS	<	24.1	41.9	536.764418	MS3YG			J	EPES	18454	25315	INC	ROJANNC
Vanadium	15-2253	AAB3354	18	24	SS	<	24.1	41.9	536.764418	MS3YG			J	EPES	18454	25315	INC	ROJANNC
Vanadium	15-2253	AAB3354	18	24	SS	<	24.1	41.9	536.764418	MS3YG			J	EPES	18454	25315	INC	ROJANNC

SAMPLING DATA FOR PRS 15-004(a,d)

Analyte	Loc ID	Sample ID	Begin	End	Unit	Mat S	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Setid
Vanadium	15-2253	AAB3354	18 24	24	SS	SS	26.3	41.9	536.784418	MGKG					CPES	18454	29315	NOORGANC
Vanadium	15-2255	AAC0993	0 6	6	SS	SS	25.7	41.9	536.784418	MGKG					CPES	20347	34491	NOORGANC
Vanadium	15-2255	AAC0993	0 6	6	SS	SS	25.7	41.9	536.784418	MGKG					CPES	20347	34491	NOORGANC
Vanadium	15-2257	AAB3358	0 6	6	SS	SS	15.9	41.9	536.784418	MGKG			J		CPES	18454	29315	NOORGANC
Vanadium	15-2257	AAB3362	18 24	24	SS	SS	20.2	41.9	536.784418	MGKG			J		CPES	18454	29315	NOORGANC
Vanadium	15-2257	AAB3362	18 24	24	SS	SS	20.2	41.9	536.784418	MGKG			J		CPES	18454	29315	NOORGANC
Vanadium	15-2263	AAC0926	0 6	6	SS	SS	19.8	41.9	536.784418	MGKG					CPES	20347	34491	NOORGANC
Vanadium	15-2264	AAB3386	0 6	6	SS	SS	19.8	41.9	536.784418	MGKG					CPES	18454	29315	NOORGANC
Vanadium	15-2264	AAB3386	0 6	6	SS	SS	21.5	41.9	536.784418	MGKG					CPES	18454	29315	NOORGANC
Vanadium	15-2264	AAB3386	18 24	24	SS	SS	20.9	41.9	536.784418	MGKG			J		CPES	18454	29315	NOORGANC
Vanadium	15-2264	AAB3386	18 24	24	SS	SS	20.9	41.9	536.784418	MGKG			J		CPES	18454	29315	NOORGANC
Vanadium	15-2268	AAB3387	0 6	6	SS	SS	19.7	41.9	536.784418	MGKG					CPES	18454	29315	NOORGANC
Vanadium	15-2268	AAB3387	0 6	6	SS	SS	19.7	41.9	536.784418	MGKG					CPES	18454	29315	NOORGANC
Vanadium	15-2268	AAB3395	18 24	24	SS	SS	28.3	41.9	536.784418	MGKG					CPES	18454	29315	NOORGANC
Vanadium	15-2268	AAB3395	18 24	24	SS	SS	28.3	41.9	536.784418	MGKG					CPES	18454	29315	NOORGANC
Vanadium	15-2281	AAC0984	0 6	6	SS	SS	22	41.9	536.784418	MGKG					CPES	20347	34491	NOORGANC
Vanadium	15-2401	AAB3365	18 24	24	SS	SS	28.6	41.9	536.784418	MGKG	FD				CPES	20347	34491	NOORGANC
Vanadium	15-2401	AAB3365	18 24	24	SS	SS	28.6	41.9	536.784418	MGKG	FD				CPES	18454	29315	NOORGANC
Zinc	15-2100	AAB3333	0 6	6	SS	SS	30.1	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2112	AAB3461	18 24	24	SS	SS	34.8	50.8	23003.6725	MGKG			J		CPES	18473	29796	NOORGANC
Zinc	15-2253	AAB3388	0 6	6	SS	SS	28.1	50.8	23003.6725	MGKG					CPES	18681	29195	NOORGANC
Zinc	15-2253	AAB3388	0 6	6	SS	SS	28.1	50.8	23003.6725	MGKG					CPES	18681	29195	NOORGANC
Zinc	15-2253	AAB3388	0 6	6	SS	SS	28.1	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2253	AAB3388	0 6	6	SS	SS	28.1	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2253	AAB3394	18 24	24	SS	SS	32.6	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2253	AAB3394	18 24	24	SS	SS	32.6	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2253	AAB3394	18 24	24	SS	SS	30.2	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2253	AAB3394	18 24	24	SS	SS	30.2	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2255	AAC0933	0 6	6	SS	SS	35.1	50.8	23003.6725	MGKG					CPES	20347	34491	NOORGANC
Zinc	15-2255	AAC0933	0 6	6	SS	SS	35.1	50.8	23003.6725	MGKG					CPES	20347	34491	NOORGANC
Zinc	15-2257	AAB3358	0 6	6	SS	SS	26.2	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2257	AAB3358	0 6	6	SS	SS	26.2	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2257	AAB3362	18 24	24	SS	SS	25.1	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2257	AAB3362	18 24	24	SS	SS	25.1	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2263	AAC0926	0 6	6	SS	SS	30.6	50.8	23003.6725	MGKG					CPES	20347	34491	NOORGANC
Zinc	15-2263	AAC0926	0 6	6	SS	SS	30.6	50.8	23003.6725	MGKG					CPES	20347	34491	NOORGANC
Zinc	15-2264	AAB3386	0 6	6	SS	SS	26.7	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2264	AAB3386	0 6	6	SS	SS	26.7	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2264	AAB3386	18 24	24	SS	SS	31.9	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2264	AAB3386	18 24	24	SS	SS	31.9	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2266	AAB3387	0 6	6	SS	SS	30.8	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2266	AAB3387	0 6	6	SS	SS	30.8	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC
Zinc	15-2268	AAB3395	18 24	24	SS	SS	28.9	50.8	23003.6725	MGKG					CPES	18454	29315	NOORGANC

SAMPLING DATA FOR PRRS 15-Oct-94.d

Analyte	Loc ID	Sample ID	Bag	End	Units	Mat S	Sample	Blgd	SAL	Units	Field	Lab	EPA	Sample	Tech	Request	Report	
							Value	Value	Value	Code	Code	Code	Code	Location	Code	Number	Number	
Zrc	15 2308	AAB3155	18	24	SS	215	50.8		21503 6725	MSYGO					EFES	18454	29315	MORGANIC
Zrc	15 2281	AAC0948	0	6	SS	38.8	50.8		21503 6725	MSYGO					EFES	20387	34421	MORGANIC
Zrc	15 2281	AAC0948	0	6	SS	38.8	50.8		21503 6725	MSYGO					EFES	20347	34421	MORGANIC
Zrc	15 2401	AAB3155	18	24	SS	38.8	50.8		21503 6725	MSYGO	FD			EFES	18454	29315	MORGANIC	
Zrc	15 2401	AAB3155	18	24	SS	38.8	50.8		21503 6725	MSYGO	FD			EFES	18454	29315	MORGANIC	
Americium 241	15 2100	AAB3133	0	6	SS	0.075	0.075			PC1G				G	15511	31121	RAD	
Americium 241	15 2100	AAB3151	18	24	SS	0.012	0.012			PC1G				G	15506	35828	RAD	
Americium 241	15 2100	AAB3151	18	24	SS	0.154	0.154			PC1G				G	15509	35828	RAD	
Americium 241	15 2112	AAB3451	0	6	SS	0.219	0.219			PC1G				G	15506	35828	RAD	
Americium 241	15 2255	AAC0943	0	6	SS	0.185	0.185			PC1G				G	20383	34038	RAD	
Americium 241	15 2255	AAC0943	0	6	SS	0.185	0.185			PC1G				G	20383	34038	RAD	
Americium 241	15 2255	AAC0943	0	6	SS	0.649	0.649			PC1G				G	20383	34038	RAD	
Americium 241	15 2263	AAC0926	0	6	SS	0.649	0.649			PC1G				G	20383	34038	RAD	
Americium 241	15 2283	AAC0946	0	6	SS	0.621	0.621			PC1G				G	20383	34038	RAD	
Americium 241	15 2283	AAC0946	0	6	SS	0.621	0.621			PC1G				G	20383	34038	RAD	
Americium 241	15 2281	AAC0944	0	6	SS	0.671	0.671			PC1G				G	20383	34038	RAD	
Americium 241	15 2291	AAC0944	0	6	SS	0.665	0.665			PC1G				G	20383	34038	RAD	
Americium 241	15 2281	AAC0944	0	6	SS	0.669	0.669			PC1G				G	20383	34038	RAD	
Americium 241	15 2100	AAB3133	0	6	SS	2.54	2.54			PC1G				G	15511	31121	RAD	
Barium 140	15 2100	AAB3451	18	24	SS	282	282			PC1G				G	15509	35828	RAD	
Barium 140	15 2100	AAB3451	18	24	SS	10.9	10.9			PC1G				G	15506	35828	RAD	
Barium 140	15 2112	AAB3461	0	6	SS	11.3	11.3			PC1G				G	15509	35828	RAD	
Barium 140	15 2255	AAC0943	0	6	SS	0.681	0.681			PC1G				G	20383	34038	RAD	
Barium 140	15 2255	AAC0943	0	6	SS	0.685	0.685			PC1G				G	20383	34038	RAD	
Barium 140	15 2253	AAC0926	0	6	SS	0.783	0.783			PC1G				G	20383	34038	RAD	
Barium 140	15 2263	AAC0926	0	6	SS	0.782	0.782			PC1G				G	20383	34038	RAD	
Barium 140	15 2281	AAC0944	0	6	SS	0.842	0.842			PC1G				G	20383	34038	RAD	
Barium 140	15 2281	AAC0944	0	6	SS	0.287	0.287			PC1G				G	20383	34038	RAD	
Barium 140	15 2281	AAC0944	0	6	SS	0.542	0.542			PC1G				G	20383	34038	RAD	
Barium 140	15 2281	AAC0944	0	6	SS	2.207	2.207			PC1G				G	20383	34038	RAD	
Cesium 137	15 2100	AAB3133	0	6	SS	0.077	0.077			PC1G				G	15511	33134	RAD	
Cesium 137	15 2100	AAB3451	18	24	SS	0.081	0.081			PC1G				G	15509	35828	RAD	
Cesium 137	15 2100	AAB3451	18	24	SS	0.015	0.015			PC1G				G	15509	35828	RAD	
Cesium 137	15 2112	AAB3461	0	6	SS	0.111	0.111			PC1G				G	15509	35828	RAD	
Cesium 137	15 2255	AAC0943	0	6	SS	0.018	0.018			PC1G				G	20383	34038	RAD	
Cesium 137	15 2255	AAC0943	0	6	SS	0.018	0.018			PC1G				G	20383	34038	RAD	
Cesium 137	15 2263	AAC0926	0	6	SS	0.011	0.011			PC1G				G	20383	34038	RAD	
Cesium 137	15 2263	AAC0926	0	6	SS	0.011	0.011			PC1G				G	20383	34038	RAD	
Cesium 137	15 2281	AAC0944	0	6	SS	0.051	0.051			PC1G				G	20383	34038	RAD	
Cesium 137	15 2281	AAC0944	0	6	SS	0.051	0.051			PC1G				G	20383	34038	RAD	
Cesium 137	15 2281	AAC0944	0	6	SS	0.163	0.163			PC1G				G	20383	34038	RAD	
Cesium 137	15 2281	AAC0944	0	6	SS	0.163	0.163			PC1G				G	20383	34038	RAD	
Cesium 137	15 2100	AAB3133	0	6	SS	1.4	1.4			PC1G				G	15511	33134	RAD	
Cesium 137	15 2100	AAB3451	18	24	SS	0.603	0.603			PC1G				G	15509	35828	RAD	
Cesium 137	15 2100	AAB3451	18	24	SS	0.603	0.603			PC1G				G	15509	35828	RAD	
Cesium 137	15 2203	AAB3137	0	6	SS	0.555	0.555			PC1G				G	20168	14688	RAD	

SAMPLING DATA FOR PHS 15-004(a,d)

Analyte	Loc ID	Sample ID	Depth	End	Units	Meth	S	Sample Values	Dilut Values	SAL Values	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Site
Cadmium 137	15 2112	AAB3461	0	6	SS	SS		0.419	1.4	4	PC1G					G	19509	35828	RAD
Cadmium 137	15 2255	AAC0963	0	6	SS	SS		0.063	1.4	4	PC1G					G	20383	34038	RAD
Cadmium 137	15 2255	AAC0963	0	6	SS	SS		0.063	1.4	4	PC1G					G	20383	34038	RAD
Cadmium 137	15 2283	AAC0926	0	6	SS	SS		0.506	1.4	4	PC1G					G	20383	34038	RAD
Cadmium 137	15 2283	AAC0926	0	6	SS	SS		0.506	1.4	4	PC1G					G	20383	34038	RAD
Cadmium 137	15 2281	AAC0964	0	6	SS	SS		0.007	1.4	4	PC1G		D			G	20383	34038	RAD
Cadmium 137	15 2281	AAC0964	0	6	SS	SS		0.007	1.4	4	PC1G		D			G	20383	34038	RAD
Cadmium 137	15 2281	AAC0964	0	6	SS	SS		0.074	1.4	4	PC1G					G	20383	34038	RAD
Cadmium 137	15 2281	AAC0964	0	6	SS	SS		0.074	1.4	4	PC1G					G	20383	34038	RAD
Cadmium 60	15 2100	AAB3333	0	6	SS	SS		0.015		1.1	PC1G					G	19511	33134	RAD
Cadmium 60	15 2100	AAB3451	18	24	SS	SS		0.003		1.1	PC1G		D			G	19509	35828	RAD
Cadmium 60	15 2100	AAB3451	18	24	SS	SS		0.021		1.1	PC1G					G	19509	35828	RAD
Cadmium 60	15 2112	AAB3461	0	6	SS	SS		0.004		1.1	PC1G					G	19509	35828	RAD
Cadmium 60	15 2255	AAC0963	0	6	SS	SS		0.005		1.1	PC1G					G	20383	34038	RAD
Cadmium 60	15 2255	AAC0963	0	6	SS	SS		0.005		1.1	PC1G					G	20383	34038	RAD
Cadmium 60	15 2283	AAC0926	0	6	SS	SS		0.004		1.1	PC1G					G	20383	34038	RAD
Cadmium 60	15 2283	AAC0926	0	6	SS	SS		0.004		1.1	PC1G					G	20383	34038	RAD
Cadmium 60	15 2281	AAC0964	0	6	SS	SS		0.027		1.1	PC1G		D			G	20383	34038	RAD
Cadmium 60	15 2281	AAC0964	0	6	SS	SS		0.052		1.1	PC1G		D			G	20383	34038	RAD
Cadmium 60	15 2281	AAC0964	0	6	SS	SS		0.052		1.1	PC1G					G	20383	34038	RAD
Cadmium 60	15 2281	AAC0964	0	6	SS	SS		0.372		1.1	PC1G					G	19511	33134	RAD
Europium 152	15 2100	AAB3333	0	6	SS	SS		0.18			PC1G					G	19509	35828	RAD
Europium 152	15 2100	AAB3451	18	24	SS	SS		0.056			PC1G		D			G	19509	35828	RAD
Europium 152	15 2112	AAB3461	0	6	SS	SS		0.223			PC1G					G	19509	35828	RAD
Europium 152	15 2255	AAC0963	0	6	SS	SS		0.05			PC1G					G	20383	34038	RAD
Europium 152	15 2255	AAC0963	0	6	SS	SS		0.05			PC1G					G	20383	34038	RAD
Europium 152	15 2283	AAC0926	0	6	SS	SS		0.149			PC1G					G	20383	34038	RAD
Europium 152	15 2283	AAC0926	0	6	SS	SS		0.149			PC1G					G	20383	34038	RAD
Europium 152	15 2281	AAC0964	0	6	SS	SS		0.005			PC1G		D			G	20383	34038	RAD
Europium 152	15 2281	AAC0964	0	6	SS	SS		0.005			PC1G		D			G	20383	34038	RAD
Europium 152	15 2281	AAC0964	0	6	SS	SS		0.018			PC1G					G	20383	34038	RAD
Europium 152	15 2281	AAC0964	0	6	SS	SS		0.018			PC1G					G	20383	34038	RAD
Lead 210	15 2101	AAB3317	0	6	SS	SS		2.842		2.6	PC1G					G	20106	34688	RAD
Lead 210	15 2101	AAB3317	0	6	SS	SS		1.741			PC1G					G	20106	34688	RAD
Lead 210	15 2101	AAB3317	0	6	SS	SS		1.303			PC1G					G	20106	34688	RAD
Lead 210	15 2101	AAB3317	0	6	SS	SS		0.014			PC1G		D			G	19511	33134	RAD
Naphthium 237	15 2100	AAB3451	18	24	SS	SS		0.007		1.9	PC1G					G	19509	35828	RAD
Naphthium 237	15 2100	AAB3451	18	24	SS	SS		0.036		1.9	PC1G					G	19509	35828	RAD
Naphthium 237	15 2112	AAB3461	0	6	SS	SS		0		1.9	PC1G					G	19509	35828	RAD
Naphthium 237	15 2255	AAC0963	0	6	SS	SS		0.012		1.9	PC1G					G	20383	34038	RAD
Naphthium 237	15 2255	AAC0963	0	6	SS	SS		0.012		1.9	PC1G					G	20383	34038	RAD
Naphthium 237	15 2283	AAC0926	0	6	SS	SS		0.005		1.9	PC1G					G	20383	34038	RAD
Naphthium 237	15 2283	AAC0926	0	6	SS	SS		0.005		1.9	PC1G					G	20383	34038	RAD
Naphthium 237	15 2281	AAC0964	0	6	SS	SS		0.005		1.9	PC1G		D			G	20383	34038	RAD
Naphthium 237	15 2281	AAC0964	0	6	SS	SS		0.005		1.9	PC1G		D			G	20383	34038	RAD

SAMPLING DATA FOR PRS 15-004(e,d)

Analyte	Lec ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Legal Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Setting
Uranium	15-2263	AAC0926	0	6	l	SS		26.1	5.45		MG/KG		D			NPA	20383	34044	RAD
Uranium	15-2263	AAC0926	0	6	l	SS		26.1	5.45		MG/KG		D			NPA	20383	34044	RAD
Uranium	15-2263	AAC0926	0	6	l	SS		29.2	5.45		MG/KG					NPA	20383	34044	RAD
Uranium	15-2263	AAC0926	0	6	l	SS		29.2	5.45		MG/KG					NPA	20383	34044	RAD
Uranium	15-2264	AAB3306	0	6	l	SS		21.7	5.45		MG/KG			J		CPMS	18880	30887	RAD
Uranium	15-2264	AAB3306	0	6	l	SS		21.7	5.45		MG/KG			J		CPMS	18880	30887	RAD
Uranium	15-2264	AAB3306	18	24	l	SS		3.3	5.45		MG/KG			J		CPMS	18880	30887	RAD
Uranium	15-2264	AAB3306	18	24	l	SS		3.3	5.45		MG/KG			J		CPMS	18880	30887	RAD
Uranium	15-2268	AAB3387	0	6	l	SS		36.9	5.45		MG/KG			J		CPMS	18880	30887	RAD
Uranium	15-2268	AAB3387	0	6	l	SS		36.9	5.45		MG/KG			J		CPMS	18880	30887	RAD
Uranium	15-2268	AAB3395	18	24	l	SS		4.3	5.45		MG/KG			J		CPMS	18880	30887	RAD
Uranium	15-2268	AAB3395	18	24	l	SS		4.3	5.45		MG/KG			J		CPMS	18880	30887	RAD
Uranium	15-2281	AAC0904	0	6	l	SS		6.4	5.45		MG/KG					NPA	20383	34044	RAD
Uranium	15-2281	AAC0904	0	6	l	SS		6.4	5.45		MG/KG					NPA	20383	34044	RAD
Uranium	15-2401	AAB3365	18	24	l	SS		3.6	5.45		MG/KG	FD		J		CPMS	18880	30887	RAD
Uranium	15-2401	AAB3365	18	24	l	SS		3.6	5.45		MG/KG	FD		J		CPMS	18880	30887	RAD
Uranium	PRNSATE	AAB3382				W		0.16			UK/L	EB		J		NPA	20148	31377	RAD
Uranium	PRNSATE	AAB3382				W		0.16			UK/L	EB		J		NPA	20148	31377	RAD
Uranium 235	15-2101	AAB3317	0	6	l	SS		0.4029	0.084		18 PC/G					Q	20106	34888	RAD

SAMPLING DATA FOR PPS 15-064.0

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat S	Sample Value	Bagg Value	SAL Value	Units	Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Aluminum	15 2114	AAB3474	0	6	1	25	15533	38700	76674 7528	MG/KG					DPES	18481	29155	NOORGANIC
Aluminum	15 2114	AAB3487	10	24	1	25	27550	38700	76674 7528	MG/KG					DPES	18473	29156	NOORGANIC
Aluminum	15 2123	AAB3531	0	4	1	25	14425	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2127	AAB3345	10	24	1	25	20250	38700	76674 7528	MG/KG					DPES	18481	29155	NOORGANIC
Aluminum	15 2131	AAB3334	0	4	1	25	15520	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2137	AAB3332	10	24	1	25	30700	38700	76674 7528	MG/KG					DPES	18481	29155	NOORGANIC
Aluminum	15 2139	AAB3312	17	23	1	25	37250	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2141	AAB3515	0	4	1	25	17700	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2145	AAB3452	0	4	1	25	19500	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2147	AAB3343	10	24	1	25	14768	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2149	AAB3337	3	9	1	25	10420	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2151	AAB3446	10	24	1	25	20000	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2152	AAB3458	0	4	1	25	17800	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2152	AAB3364	1	7	1	25	29207	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2153	AAB3364	1	7	1	25	17469	38700	76674 7528	MG/KG					DPES	18481	29195	NOORGANIC
Aluminum	15 2153	AAB3344	0	4	1	25	16500	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2157	AAB3307	10	24	1	25	17100	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2166	AAB3342	0	4	1	25	7080	38700	76674 7528	MG/KG					DPES	18481	29195	NOORGANIC
Aluminum	15 2170	AAB3323	10	24	1	25	23900	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2172	AAB3477	10	24	1	25	21450	38700	76674 7528	MG/KG					DPES	18481	29195	NOORGANIC
Aluminum	15 2173	AAB3376	10	24	1	25	17450	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2177	AAB3318	0	4	1	25	3190	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2178	AAB3334	0	4	1	25	3040	38700	76674 7528	MG/KG					DPES	18481	29195	NOORGANIC
Aluminum	15 2179	AAB3472	0	4	1	25	9750	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2180	AAB3520	4	10	1	25	17500	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2182	AAB3470	10	24	1	25	22450	38700	76674 7528	MG/KG					DPES	18481	29195	NOORGANIC
Aluminum	15 2186	AAB3485	0	4	1	25	12450	38700	76674 7528	MG/KG					DPES	18481	29195	NOORGANIC
Aluminum	15 2206	AAB3295	0	4	1	25	3510	38700	76674 7528	MG/KG					DPES	18481	29195	NOORGANIC
Aluminum	15 2227	AAB3478	0	4	1	25	22200	38700	76674 7528	MG/KG					DPES	18457	28413	NOORGANIC
Aluminum	15 2228	AAB3518	0	4	1	25	11500	38700	76674 7528	MG/KG					DPES	18457	28413	NOORGANIC
Aluminum	15 2228	AAB3329	6	12	1	25	32100	38700	76674 7528	MG/KG					DPES	18457	28413	NOORGANIC
Aluminum	15 2240	AAB3294	0	4	1	25	8187	38700	76674 7528	MG/KG					DPES	18481	29195	NOORGANIC
Aluminum	15 2241	AAB3330	0	4	1	25	8840	38700	76674 7528	MG/KG					DPES	18481	29195	NOORGANIC
Aluminum	15 2245	AAB3258	0	4	1	25	5970	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2245	AAC0342	14	15	1	25	13600	38700	76674 7528	MG/KG					DPES	20294	29194	NOORGANIC
Aluminum	15 2246	AAB3445	0	4	1	25	18100	38700	76674 7528	MG/KG					DPES	18481	29195	NOORGANIC
Aluminum	15 2246	AAC0330	22	23	1	25	17000	38700	76674 7528	MG/KG					DPES	20294	29194	NOORGANIC
Aluminum	15 2247	AAB3450	0	4	1	25	16900	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2247	AAC0346	21	21	1	25	18200	38700	76674 7528	MG/KG					DPES	20294	29194	NOORGANIC
Aluminum	15 2248	AAB3447	0	4	1	25	16400	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2249	AAB3449	0	4	1	25	12400	38700	76674 7528	MG/KG					DPES	18473	29154	NOORGANIC
Aluminum	15 2249	AAC0341	35	41	1	25	10400	38700	76674 7528	MG/KG					DPES	20294	29194	NOORGANIC
Aluminum	15 2277	AAB3321	0	4	1	25	14300	38700	76674 7528	MG/KG					DPES	18481	29195	NOORGANIC

SAMPLING DATA FOR PMS 15-004(M)

Analyte	Loc ID	Sample ID	Depth	End	Units	Mat	Sample Values	Wtdg Values	SAL Values	Units	Field Codes	Lab Codes	EPA Qual	Sample Location	Tech Code	Report Number	Series
Aluminum	15-2278	AAB3204	0	6	F	SS	9030	38700	76474 7928	MG/KG					CPES	29796	INORGANIC
Aluminum	15-2279	AAB3205	0	5	F	SS	16200	38700	76474 7928	MG/KG					CPES	29195	INORGANIC
Aluminum	15-2290	AAC0326	16	17	F	SS	19155	38700	76474 7928	MG/KG					CPES	34497	INORGANIC
Aluminum	15-2290	AAC0326	16	17	F	SS	14300	38700	76474 7928	MG/KG					CPES	34497	INORGANIC
Aluminum	15-2290	AAC0327	9	10	F	SS	19200	38700	76474 7928	MG/KG					CPES	34497	INORGANIC
Aluminum	15-2290	AAC0328	0	6	F	SS	21600	38700	76474 7928	MG/KG					CPES	34914	INORGANIC
Aluminum	15-2291	AAC0336	0	6	F	SS	25000	38700	76474 7928	MG/KG					CPES	20347	INORGANIC
Aluminum	15-2295	AAB3325	0	6	F	SS	13000	38700	76474 7928	MG/KG					CPES	19481	INORGANIC
Aluminum	15-2295	AAB3460	18	24	F	SS	19900	38700	76474 7928	MG/KG					CPES	19481	INORGANIC
Aluminum	FRNSATE	AAB3379				W	61.5			UG/L					CPES	18817	INORGANIC
Aluminum	FRNSATE	AAB3379				W	65.5			UG/L					CPES	18817	INORGANIC
Aluminum	FRNSATE	AAB3380				W	31.1			UG/L					CPES	18448	INORGANIC
Aluminum	FRNSATE	AAB3381				W	31.1			UG/L					CPES	18457	INORGANIC
Antimony	15-2114	AAB3476	0	6	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2114	AAB3487	18	24	F	SS	4	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2123	AAB3521	0	6	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2127	AAB3340	18	24	F	SS	4	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2131	AAB3334	0	6	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2137	AAB3332	18	24	F	SS	4	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2139	AAB3312	17	23	F	SS	3.9	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2141	AAB3315	0	6	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2145	AAB3452	0	6	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2147	AAB3343	18	24	F	SS	3.9	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2149	AAB3327	3	5	F	SS	3.8	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2151	AAB3466	18	24	F	SS	3.8	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2152	AAB3454	0	5	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2152	AAB3458	0	5	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2153	AAB3304	1	1	F	SS	3.9	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2153	AAB3344	0	5	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2157	AAB3307	18	24	F	SS	3.5	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2168	AAB3342	0	4	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2170	AAB3327	18	24	F	SS	4	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2172	AAB3477	18	24	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2173	AAB3324	18	24	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2177	AAB3318	0	6	F	SS	3.6	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2178	AAB3336	0	6	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2179	AAB3472	0	4	F	SS	3.8	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2190	AAB3550	6	12	F	SS	3.8	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2182	AAB3470	18	24	F	SS	4	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2198	AAB3485	0	6	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2206	AAB3295	0	4	F	SS	3.7	1		MG/KG					CPES	19481	INORGANIC
Antimony	15-2228	AAB3478	0	6	F	SS	3.9	1		MG/KG					CPES	18457	INORGANIC
Antimony	15-2227	AAB3518	0	6	F	SS	3.8	1		MG/KG					CPES	18457	INORGANIC
Antimony	15-2229	AAB3330	0	6	F	SS	3.8	1		MG/KG					CPES	18457	INORGANIC

SAMPLING DATA FOR PRS 15-004(f)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bigd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Antimony	15 2243	AAB3258	0	6	I	SS	<	3.9	1		MG/KG		D			CPES	18681	29155	INORGANIC
Antimony	15 2243	AAB3258	0	6	I	SS	<	3.9	1		MG/KG					CPES	18681	29155	INORGANIC
Antimony	15 2241	AAB3333	0	6	I	SS	<	3.7	1		MG/KG			R		CPES	18673	29756	INORGANIC
Antimony	15 2245	AAB3526	0	6	I	SS	<	4	1		MG/KG			R		CPES	18673	29756	INORGANIC
Antimony	15 2245	AAC0342	14	15	F	SS	<	0.5	1		MG/KG					CPES	20296	34314	INORGANIC
Antimony	15 2248	AAB3445	0	6	I	SS	<	3.9	1		MG/KG					CPES	18681	29155	INORGANIC
Antimony	15 2246	AAC0339	22	24	I	SS	<	0.53	1		MG/KG					CPES	20296	34314	INORGANIC
Antimony	15 2247	AAB3420	0	6	I	SS	<	4.1	1		MG/KG			R		CPES	18673	29756	INORGANIC
Antimony	15 2247	AAC0346	21	27	I	SS	<	0.33	1		MG/KG					CPES	20347	34461	INORGANIC
Antimony	15 2248	AAB3447	0	6	I	SS	<	4.1	1		MG/KG			R		CPES	18673	29756	INORGANIC
Antimony	15 2249	AAB3449	0	6	I	SS	<	4.1	1		MG/KG			R		CPES	18673	29756	INORGANIC
Antimony	15 2249	AAC0341	35	41	I	SS	<	0.53	1		MG/KG					CPES	20296	34314	INORGANIC
Antimony	15 2277	AAB3321	0	5	I	SS	<	3.6	1		MG/KG					CPES	18681	29195	INORGANIC
Antimony	15 2278	AAB3264	0	6	I	SS	<	3.7	1		MG/KG			R		CPES	18673	29756	INORGANIC
Antimony	15 2279	AAB3525	0	5	I	SS	<	3.7	1		MG/KG					CPES	18681	29155	INORGANIC
Antimony	15 2260	AAC0326	16	17	F	SS	<	0.29	1		MG/KG		D			CPES	20774	34457	INORGANIC
Antimony	15 2260	AAC0326	16	17	F	SS	<	0.29	1		MG/KG					CPES	20774	34457	INORGANIC
Antimony	15 2260	AAC0327	5	10	F	SS	<	0.29	1		MG/KG					CPES	20774	34457	INORGANIC
Antimony	15 2260	AAC0328	0	6	I	SS	<	0.54	1		MG/KG					CPES	20296	34914	INORGANIC
Antimony	15 2261	AAC0336	0	6	I	SS	<	0.53	1		MG/KG					CPES	20347	34451	INORGANIC
Antimony	15 2265	AAB3325	0	6	I	SS	<	3.7	1		MG/KG	FD				CPES	18681	29155	INORGANIC
Antimony	15 2269	AAB3480	18	24	I	SS	<	4	1		MG/KG	FD				CPES	18681	29155	INORGANIC
Antimony	PKSATE	AAB3379				W	<	1		6	UG/L	EB	D			CPES	18817	32537	INORGANIC
Antimony	PKSATE	AAB3379				W	<	1		6	UG/L	EB				CPES	18817	32537	INORGANIC
Antimony	PKSATE	AAB3380				W	<	20		6	UG/L	EB				CPES	18444	28236	INORGANIC
Antimony	PKSATE	AAB3381				W	<	20		6	UG/L	EB				CPES	18457	28412	INORGANIC
Arsenic	15 2114	AAB3476	0	6	I	SS	<	3.6	7.82	0.38	MG/KG					CPES	18681	29195	INORGANIC
Arsenic	15 2114	AAB3487	18	24	I	SS	<	4.4	7.82	0.38	MG/KG					CPES	18673	29756	INORGANIC
Arsenic	15 2123	AAB3521	0	6	I	SS	<	3.7	7.82	0.38	MG/KG					CPES	18673	29756	INORGANIC
Arsenic	15 2127	AAB3340	18	24	I	SS	<	3.5	7.82	0.38	MG/KG					CPES	18681	29155	INORGANIC
Arsenic	15 2131	AAB3334	0	6	I	SS	<	3.1	7.82	0.38	MG/KG	FD				CPES	18673	29786	INORGANIC
Arsenic	15 2137	AAB3332	18	24	I	SS	<	5.2	7.82	0.38	MG/KG					CPES	18681	29155	INORGANIC
Arsenic	15 2139	AAB3312	17	23	I	SS	<	3.7	7.82	0.38	MG/KG					CPES	18673	29756	INORGANIC
Arsenic	15 2141	AAB3515	0	4	I	SS	<	5.1	7.82	0.38	MG/KG					CPES	18673	29756	INORGANIC
Arsenic	15 2145	AAB3452	0	6	I	SS	<	4.1	7.82	0.38	MG/KG					CPES	18673	29756	INORGANIC
Arsenic	15 2147	AAB3343	18	24	I	SS	<	3.4	7.82	0.38	MG/KG			D		CPES	18673	29756	INORGANIC
Arsenic	15 2147	AAB3343	18	24	I	SS	<	3.6	7.82	0.38	MG/KG					CPES	18673	29756	INORGANIC
Arsenic	15 2149	AAB3327	3	9	I	SS	<	4.1	7.82	0.38	MG/KG					CPES	18673	29756	INORGANIC
Arsenic	15 2151	AAB3466	18	24	I	SS	<	3.6	7.82	0.38	MG/KG					CPES	18673	29756	INORGANIC
Arsenic	15 2152	AAB3458	0	5	I	SS	<	4.7	7.82	0.38	MG/KG			D		CPES	18673	29756	INORGANIC
Arsenic	15 2152	AAB3458	0	5	I	SS	<	4.4	7.82	0.38	MG/KG					CPES	18673	29756	INORGANIC
Arsenic	15 2153	AAB3304	1	1	F	SS	<	4.3	7.82	0.38	MG/KG					CPES	18681	29155	INORGANIC
Arsenic	15 2153	AAB3344	0	5	I	SS	<	4.3	7.82	0.38	MG/KG					CPES	18673	29756	INORGANIC
Arsenic	15 2157	AAB3307	18	24	I	SS	<	3.7	7.82	0.38	MG/KG					CPES	18673	29756	INORGANIC
Arsenic	15 2166	AAB3342	0	4	I	SS	<	2.8	7.82	0.38	MG/KG					CPES	18681	29155	INORGANIC

SAMPLING DATA FOR PFS 15-004(7)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat'l	Sample Value	Skid Value	SAL Value	Units	Field Code	Lab Code	EPA Quid	Sample Location	Tech Code	Request Number	Report Number	Series
Arsenic	15 2170	AAB3323	18 24	1	SS	4.4	7.82	0.38	MG/KG						CPES	18673	29195	INORGANIC
Arsenic	15 2172	AAB3477	18 24	1	SS	3.8	7.82	0.38	MG/KG						CPES	18681	29195	INORGANIC
Arsenic	15 2173	AAB3324	18 24	1	SS	3.6	7.82	0.38	MG/KG						CPES	18673	29195	INORGANIC
Arsenic	15 2177	AAB3318	0 6	1	SS	3.3	7.82	0.38	MG/KG						CPES	18673	29195	INORGANIC
Arsenic	15 2178	AAB3316	0 6	1	SS	2.4	7.82	0.38	MG/KG						CPES	18681	29195	INORGANIC
Arsenic	15 2179	AAB3472	0 4	1	SS	3.1	7.82	0.38	MG/KG						CPES	18673	29195	INORGANIC
Arsenic	15 2180	AAB3529	6 12	1	SS	3.9	7.82	0.38	MG/KG						CPES	18673	29195	INORGANIC
Arsenic	15 2182	AAB3470	18 24	1	SS	4.6	7.82	0.38	MG/KG	RD					CPES	18681	29195	INORGANIC
Arsenic	15 2198	AAB3485	0 6	1	SS	3.6	7.82	0.38	MG/KG	RD					CPES	18681	29195	INORGANIC
Arsenic	15 2206	AAB3295	0 4	1	SS	2.9	7.82	0.38	MG/KG						CPES	18681	29195	INORGANIC
Arsenic	15 2226	AAB3478	0 6	1	SS	3.9	7.82	0.38	MG/KG						CPES	18457	28413	INORGANIC
Arsenic	15 2227	AAB3518	0 6	1	SS	3.3	7.82	0.38	MG/KG	RD					ETVAA	18457	28413	INORGANIC
Arsenic	15 2228	AAB3320	0 6	1	SS	3.2	7.82	0.38	MG/KG						ETVAA	18457	28413	INORGANIC
Arsenic	15 2240	AAB3298	0 6	1	SS	1.4	7.82	0.38	MG/KG						ETVAA	18457	28413	INORGANIC
Arsenic	15 2240	AAB3298	0 6	1	SS	1.4	7.82	0.38	MG/KG						ETVAA	18457	28413	INORGANIC
Arsenic	15 2241	AAB3330	0 6	1	SS	1.5	7.82	0.38	MG/KG			D			CPES	18681	29195	INORGANIC
Arsenic	15 2245	AAB3526	0 6	1	SS	4.3	7.82	0.38	MG/KG						CPES	18673	29195	INORGANIC
Arsenic	15 2245	AAC0342	14 15	F	SS	3.3	7.82	0.38	MG/KG						CPES	20296	34914	INORGANIC
Arsenic	15 2246	AAB3445	0 6	1	SS	4.1	7.82	0.38	MG/KG						CPES	18681	29195	INORGANIC
Arsenic	15 2246	AAC0339	22 28	1	SS	4.6	7.82	0.38	MG/KG						CPES	20296	34914	INORGANIC
Arsenic	15 2247	AAB3420	0 6	1	SS	3.7	7.82	0.38	MG/KG						CPES	18673	29195	INORGANIC
Arsenic	15 2247	AAC0346	21 27	1	SS	3.3	7.82	0.38	MG/KG						CPES	20347	34491	INORGANIC
Arsenic	15 2248	AAB3447	0 6	1	SS	4.2	7.82	0.38	MG/KG						CPES	18673	29195	INORGANIC
Arsenic	15 2249	AAB3449	0 6	1	SS	3.5	7.82	0.38	MG/KG						CPES	18673	29195	INORGANIC
Arsenic	15 2249	AAC0341	35 41	1	SS	4.4	7.82	0.38	MG/KG						CPES	20296	34914	INORGANIC
Arsenic	15 2277	AAB3321	0 6	1	SS	3.1	7.82	0.38	MG/KG						CPES	18681	29195	INORGANIC
Arsenic	15 2278	AAB3294	0 6	1	SS	2.6	7.82	0.38	MG/KG						CPES	18673	29195	INORGANIC
Arsenic	15 2279	AAB3525	0 5	1	SS	3.4	7.82	0.38	MG/KG						CPES	18681	29195	INORGANIC
Arsenic	15 2290	AAC0326	16 17	F	SS	3.5	7.82	0.38	MG/KG						CPES	20774	34497	INORGANIC
Arsenic	15 2290	AAC0326	16 17	F	SS	4.2	7.82	0.38	MG/KG			D			CPES	20774	34497	INORGANIC
Arsenic	15 2290	AAC0327	9 10	F	SS	4	7.82	0.38	MG/KG						CPES	20774	34497	INORGANIC
Arsenic	15 2290	AAC0328	0 6	1	SS	4.9	7.82	0.38	MG/KG						CPES	20296	34914	INORGANIC
Arsenic	15 2291	AAC0336	0 6	1	SS	3.6	7.82	0.38	MG/KG						CPES	20347	34491	INORGANIC
Arsenic	15 2295	AAB3325	0 6	1	SS	3.5	7.82	0.38	MG/KG						CPES	18681	29195	INORGANIC
Arsenic	15 2295	AAB3480	18 24	1	SS	4.7	7.82	0.38	MG/KG	RD					CPES	18681	29195	INORGANIC
Arsenic	PN3A5E	AAB3379			W	3		50	UG/L	BB		D			GFAA	18817	32537	INORGANIC
Arsenic	PN3A5E	AAB3379			W	3		50	UG/L	BB					GFAA	18817	32537	INORGANIC
Arsenic	PN3A5E	AAB3390			W	2.4		50	UG/L	BB					ETVAA	18444	28238	INORGANIC
Arsenic	PN3A5E	AAB3391			W	2.4		50	UG/L	BB					ETVAA	18457	28413	INORGANIC
Barium	15 2114	AAB3476	0 6	1	SS	179	315	5339	94439	MG/KG					LFES	18681	29195	INORGANIC
Barium	15 2114	AAB3487	18 24	1	SS	187	315	5339	94439	MG/KG			J		LFES	18673	29195	INORGANIC
Barium	15 2123	AAB3521	0 6	1	SS	185	315	5339	94439	MG/KG			J		LFES	18673	29195	INORGANIC
Barium	15 2127	AAB3340	18 24	1	SS	214	315	5339	94439	MG/KG					LFES	18681	29195	INORGANIC
Barium	15 2131	AAB3334	0 6	1	SS	112	315	5339	94439	MG/KG	RD				LFES	18673	29195	INORGANIC
Barium	15 2137	AAB3332	18 24	1	SS	650	315	5339	94439	MG/KG					LFES	18681	29195	INORGANIC

SAMPLING DATA FOR PRS 15-004(1)

Analyte	Loc ID	Sample ID	Begin	End	Unit	Mil S	Sample Value	Bagg Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Barium	15 2139	AAB3312	17	23	25	25	315	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2141	AAB3315	0	4	25	25	315	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2145	AAB3452	0	6	25	25	315	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2147	AAB3343	16	24	25	25	315	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2149	AAB3327	3	9	25	25	245	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2151	AAB3446	18	24	25	25	188	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2152	AAB3458	0	5	25	25	273	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2153	AAB3504	1	17	25	25	215	315	5339 54435	MG/KG			J		CPES	18681	29754	NOORGANIC
Barium	15 2153	AAB3344	0	5	25	25	116	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2157	AAB3307	18	24	25	25	181	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2166	AAB3342	0	4	25	25	102	315	5339 54435	MG/KG			J		CPES	18681	29754	NOORGANIC
Barium	15 2170	AAB3321	18	24	25	25	414	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2172	AAB3477	18	24	25	25	159	315	5339 54435	MG/KG			J		CPES	18681	29754	NOORGANIC
Barium	15 2173	AAB3324	18	24	25	25	233	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2177	AAB3336	0	6	25	25	97.5	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2179	AAB3472	0	6	25	25	55.7	315	5339 54435	MG/KG			J		CPES	18681	29754	NOORGANIC
Barium	15 2180	AAB3509	6	12	25	25	177	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2182	AAB3470	18	24	25	25	307	315	5339 54435	MG/KG	FD		J		CPES	18681	29754	NOORGANIC
Barium	15 2184	AAB3485	0	6	25	25	122	315	5339 54435	MG/KG	FD		J		CPES	18681	29754	NOORGANIC
Barium	15 2206	AAB3295	0	4	25	25	34.6	315	5339 54435	MG/KG			J		CPES	18681	29754	NOORGANIC
Barium	15 2226	AAB3478	0	6	25	25	292	315	5339 54435	MG/KG			J		CPES	18457	28413	NOORGANIC
Barium	15 2227	AAB3518	0	6	25	25	154	315	5339 54435	MG/KG	FD		J		CPES	18457	28413	NOORGANIC
Barium	15 2228	AAB3320	0	6	25	25	548	315	5339 54435	MG/KG			J		CPES	18457	28413	NOORGANIC
Barium	15 2240	AAB3268	0	6	25	25	232	315	5339 54435	MG/KG			J		CPES	18481	29195	NOORGANIC
Barium	15 2241	AAB3330	0	6	25	25	235	315	5339 54435	MG/KG			J		CPES	18481	29195	NOORGANIC
Barium	15 2245	AAB3525	0	6	25	25	337	315	5339 54435	MG/KG			J		CPES	18473	29754	NOORGANIC
Barium	15 2245	AAC0342	14	15	F	25	161	315	5339 54435	MG/KG			J		CPES	20254	34914	NOORGANIC
Barium	15 2246	AAB3445	0	6	25	25	238	315	5339 54435	MG/KG			J		CPES	18681	29195	NOORGANIC
Barium	15 2246	AAC0339	22	28	25	25	219	315	5339 54435	MG/KG			J		CPES	20254	34914	NOORGANIC
Barium	15 2247	AAB3420	0	6	25	25	1070	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2247	AAC0346	21	27	25	25	194	315	5339 54435	MG/KG			J		CPES	20347	34491	NOORGANIC
Barium	15 2248	AAB3447	0	6	25	25	584	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2249	AAB3449	0	6	25	25	315	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2249	AAC0341	35	41	25	25	349	315	5339 54435	MG/KG			J		CPES	20254	34914	NOORGANIC
Barium	15 2277	AAB3371	0	5	25	25	235	315	5339 54435	MG/KG			J		CPES	18681	29195	NOORGANIC
Barium	15 2278	AAB3264	0	6	25	25	318	315	5339 54435	MG/KG			J		CPES	18673	29754	NOORGANIC
Barium	15 2278	AAB3525	0	5	25	25	173	315	5339 54435	MG/KG			J		CPES	18681	29195	NOORGANIC
Barium	15 2280	AAC0326	16	17	F	25	277	315	5339 54435	MG/KG			J		CPES	20774	34497	NOORGANIC
Barium	15 2290	AAC0325	16	17	F	25	284	315	5339 54435	MG/KG			J		CPES	20774	34497	NOORGANIC
Barium	15 2290	AAC0327	8	10	F	25	219	315	5339 54435	MG/KG			J		CPES	20774	34497	NOORGANIC
Barium	15 2290	AAC0328	0	6	25	25	233	315	5339 54435	MG/KG			J		CPES	20254	34914	NOORGANIC

SAMPLING DATA FOR PRRS 15-004(4)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met	Sample Value	Stage Value	SAL Value	Units	Field Code	Lat Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Selfe
Carbon	15 2152	AAB3454	0	5	5	SS	1.2	2.7	38 3403347	MGKG					DPES	18673	29794	INORGANIC
Carbon	15 2152	AAB3454	0	5	5	SS	1.5	2.7	38 3403347	MGKG			J		DPES	18673	29794	INORGANIC
Carbon	15 2153	AAB3504	1	1	F	SS	0.70	2.7	38 3403347	MGKG					DPES	18681	29195	INORGANIC
Carbon	15 2153	AAB3244	0	5	1	SS	0.41	2.7	38 3403347	MGKG			R		DPES	18673	29794	INORGANIC
Carbon	15 2157	AAB3307	10	24	1	SS	0.93	2.7	38 3403347	MGKG			R		DPES	18673	20794	INORGANIC
Carbon	15 2164	AAB3342	0	4	1	SS	0.68	2.7	38 3403347	MGKG			J		DPES	18681	29195	INORGANIC
Carbon	15 2170	AAB3323	18	24	1	SS	1.4	2.7	38 3403347	MGKG					DPES	18673	29794	INORGANIC
Carbon	15 2172	AAB3477	18	24	1	SS	1	2.7	38 3403347	MGKG					DPES	18681	29195	INORGANIC
Carbon	15 2173	AAB3124	18	24	1	SS	0.7	2.7	38 3403347	MGKG			R		DPES	18673	29794	INORGANIC
Carbon	15 2177	AAB3318	0	6	1	SS	0.41	2.7	38 3403347	MGKG			R		DPES	18673	29794	INORGANIC
Carbon	15 2179	AAB3338	0	6	1	SS	0.6	2.7	38 3403347	MGKG					DPES	18681	29195	INORGANIC
Carbon	15 2180	AAB3520	0	4	1	SS	0.6	2.7	38 3403347	MGKG			R		DPES	18673	29794	INORGANIC
Carbon	15 2182	AAB3470	0	6	1	SS	0.99	2.7	38 3403347	MGKG			R		DPES	18673	29794	INORGANIC
Carbon	15 2194	AAB3485	18	24	1	SS	1.2	2.7	38 3403347	MGKG	RD				DPES	18681	29195	INORGANIC
Carbon	15 2204	AAB3295	0	6	1	SS	0.87	2.7	38 3403347	MGKG	RD				DPES	18681	29195	INORGANIC
Carbon	15 2224	AAB3478	0	6	1	SS	0.78	2.7	38 3403347	MGKG					DPES	18681	29195	INORGANIC
Carbon	15 2227	AAB3518	0	6	1	SS	2.2	2.7	38 3403347	MGKG					DPES	18457	28413	INORGANIC
Carbon	15 2228	AAB3320	0	6	1	SS	3.2	2.7	38 3403347	MGKG	RD				DPES	18457	28413	INORGANIC
Carbon	15 2240	AAB3298	0	6	1	SS	0.76	2.7	38 3403347	MGKG					DPES	18681	29195	INORGANIC
Carbon	15 2240	AAB3298	0	6	1	SS	0.96	2.7	38 3403347	MGKG					DPES	18681	29195	INORGANIC
Carbon	15 2241	AAB3330	0	6	1	SS	0.88	2.7	38 3403347	MGKG			R		DPES	18673	29794	INORGANIC
Carbon	15 2245	AAB3526	0	6	1	SS	1	2.7	38 3403347	MGKG			R		DPES	18673	29794	INORGANIC
Carbon	15 2245	AAC0342	14	15	F	SS	1.3	2.7	38 3403347	MGKG					DPES	20294	34914	INORGANIC
Carbon	15 2248	AAB3445	0	6	1	SS	0.43	2.7	38 3403347	MGKG					DPES	18681	29195	INORGANIC
Carbon	15 2248	AAC0339	22	28	1	SS	0.84	2.7	38 3403347	MGKG					DPES	20294	34914	INORGANIC
Carbon	15 2248	AAB3420	0	6	1	SS	0.45	2.7	38 3403347	MGKG			R		DPES	18673	29794	INORGANIC
Carbon	15 2247	AAC0346	21	27	1	SS	0.29	2.7	38 3403347	MGKG					DPES	20147	34491	INORGANIC
Carbon	15 2248	AAB3448	0	6	1	SS	0.57	2.7	38 3403347	MGKG			R		DPES	18673	29794	INORGANIC
Carbon	15 2249	AAC0341	35	41	1	SS	1.1	2.7	38 3403347	MGKG			J		DPES	18673	29794	INORGANIC
Carbon	15 2277	AAB3321	0	5	1	SS	1.2	2.7	38 3403347	MGKG					DPES	20294	34914	INORGANIC
Carbon	15 2276	AAB3294	0	6	1	SS	3.2	2.7	38 3403347	MGKG					DPES	18681	29195	INORGANIC
Carbon	15 2279	AAB3525	0	5	1	SS	5.7	2.7	38 3403347	MGKG			J		DPES	18673	29794	INORGANIC
Carbon	15 2290	AAC0326	16	17	F	SS	1.4	2.7	38 3403347	MGKG					DPES	18681	29195	INORGANIC
Carbon	15 2290	AAC0326	16	17	F	SS	0.31	2.7	38 3403347	MGKG					DPES	20774	34497	INORGANIC
Carbon	15 2290	AAC0327	9	10	F	SS	0.18	2.7	38 3403347	MGKG					DPES	20774	34497	INORGANIC
Carbon	15 2290	AAC0328	0	6	1	SS	0.28	2.7	38 3403347	MGKG					DPES	20294	34914	INORGANIC
Carbon	15 2291	AAC0316	0	6	1	SS	1.5	2.7	38 3403347	MGKG					DPES	20347	34491	INORGANIC
Carbon	15 2295	AAB3325	0	6	1	SS	0.25	2.7	38 3403347	MGKG					DPES	18681	29195	INORGANIC
Carbon	15 2299	AAB3480	18	24	1	SS	1	2.7	38 3403347	MGKG	RD				DPES	18681	29195	INORGANIC
Carbon	PRISATE	AAB3379				W	0.98	2.7	38 3403347	MGKG	RD				DPES	18617	32537	INORGANIC
Carbon	PRISATE	AAB3379				W	1	2.7	38 3403347	MGKG	RD				DPES	18617	32537	INORGANIC
Carbon	PRISATE	AAB3380				W	2.2	2.7	38 3403347	MGKG	RD				DPES	18444	28238	INORGANIC
Carbon	PRISATE	AAB3381				W	2.2	2.7	38 3403347	MGKG	RD				DPES	18457	28413	INORGANIC

SAMPLING DATA FOR PRS 15-04-0

Analyte	Loc ID	Sample ID	Begin	End	Units	M/S	Sample Value	Biog Value	SAL Value	Units	Fix Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Site
Calcium	15-2114	AAB3476	0	6	SS	SS	1500	6120		MSXG			J	EPES	18477	29155	MOORGAMC	
Calcium	15-2116	AAB3487	18	24	SS	SS	2830	6120		MSXG			J	EPES	18477	29156	MOORGAMC	
Calcium	15-2123	AAB3521	0	6	SS	SS	2150	6120		MSXG			J	EPES	18477	29157	MOORGAMC	
Calcium	15-2127	AAB3460	18	24	SS	SS	3430	6120		MSXG			J	EPES	18477	29158	MOORGAMC	
Calcium	15-2131	AAB3114	0	6	SS	SS	2450	6120		MSXG	FD		J	EPES	18477	29159	MOORGAMC	
Calcium	15-2137	AAB3132	18	24	SS	SS	1000	6120		MSXG			J	EPES	18477	29160	MOORGAMC	
Calcium	15-2139	AAB3112	17	23	SS	SS	6620	6120		MSXG			J	EPES	18477	29161	MOORGAMC	
Calcium	15-2141	AAB3515	0	6	SS	SS	4500	6120		MSXG			J	EPES	18477	29162	MOORGAMC	
Calcium	15-2145	AAB3452	0	6	SS	SS	3550	6120		MSXG			J	EPES	18477	29163	MOORGAMC	
Calcium	15-2147	AAB3143	18	24	SS	SS	18700	6120		MSXG			J	EPES	18477	29164	MOORGAMC	
Calcium	15-2147	AAB3143	18	24	SS	SS	5715	6120		MSXG			J	EPES	18477	29165	MOORGAMC	
Calcium	15-2149	AAB3127	3	9	SS	SS	4735	6120		MSXG			J	EPES	18477	29166	MOORGAMC	
Calcium	15-2151	AAB3466	18	24	SS	SS	2550	6120		MSXG			J	EPES	18477	29167	MOORGAMC	
Calcium	15-2152	AAB3458	0	6	SS	SS	3025	6120		MSXG			J	EPES	18477	29168	MOORGAMC	
Calcium	15-2152	AAB3458	0	6	SS	SS	3010	6120		MSXG			J	EPES	18477	29169	MOORGAMC	
Calcium	15-2153	AAB3104	1	15	SS	SS	2600	6120		MSXG			J	EPES	18477	29170	MOORGAMC	
Calcium	15-2153	AAB3144	0	6	SS	SS	1710	6120		MSXG			J	EPES	18477	29171	MOORGAMC	
Calcium	15-2157	AAB3107	18	24	SS	SS	2470	6120		MSXG			J	EPES	18477	29172	MOORGAMC	
Calcium	15-2166	AAB3142	0	6	SS	SS	1400	6120		MSXG			J	EPES	18477	29173	MOORGAMC	
Calcium	15-2170	AAB3123	18	24	SS	SS	4800	6120		MSXG			J	EPES	18477	29174	MOORGAMC	
Calcium	15-2172	AAB3477	18	24	SS	SS	3530	6120		MSXG			J	EPES	18477	29175	MOORGAMC	
Calcium	15-2172	AAB3124	18	24	SS	SS	8270	6120		MSXG			J	EPES	18477	29176	MOORGAMC	
Calcium	15-2177	AAB3118	0	6	SS	SS	1630	6120		MSXG			J	EPES	18477	29177	MOORGAMC	
Calcium	15-2178	AAB3116	0	6	SS	SS	1520	6120		MSXG			J	EPES	18477	29178	MOORGAMC	
Calcium	15-2179	AAB3472	0	6	SS	SS	2370	6120		MSXG			J	EPES	18477	29179	MOORGAMC	
Calcium	15-2180	AAB3520	6	12	SS	SS	2600	6120		MSXG	FD		J	EPES	18477	29180	MOORGAMC	
Calcium	15-2182	AAB3470	18	24	SS	SS	5820	6120		MSXG	FD		J	EPES	18477	29181	MOORGAMC	
Calcium	15-2198	AAB3485	0	6	SS	SS	2810	6120		MSXG			J	EPES	18477	29182	MOORGAMC	
Calcium	15-2206	AAB3295	0	6	SS	SS	826	6120		MSXG			J	EPES	18477	29183	MOORGAMC	
Calcium	15-2226	AAB3478	0	6	SS	SS	3160	6120		MSXG			J	EPES	18477	29184	MOORGAMC	
Calcium	15-2227	AAB3518	0	6	SS	SS	1870	6120		MSXG			J	EPES	18477	29185	MOORGAMC	
Calcium	15-2240	AAB3120	0	6	SS	SS	2150	6120		MSXG	FD		J	EPES	18477	29186	MOORGAMC	
Calcium	15-2240	AAB3264	6	6	SS	SS	2640	6120		MSXG			J	EPES	18477	29187	MOORGAMC	
Calcium	15-2240	AAB3268	0	6	SS	SS	2530	6120		MSXG			J	EPES	18477	29188	MOORGAMC	
Calcium	15-2241	AAB3130	0	6	SS	SS	2650	6120		MSXG			J	EPES	18477	29189	MOORGAMC	
Calcium	15-2245	AAB3526	0	6	SS	SS	3820	6120		MSXG			J	EPES	18477	29190	MOORGAMC	
Calcium	15-2245	AAC0142	14	15	F	SS	3150	6120		MSXG			J	EPES	18477	29191	MOORGAMC	
Calcium	15-2246	AAB3445	0	6	SS	SS	5140	6120		MSXG			J	EPES	18477	29192	MOORGAMC	
Calcium	15-2246	AAC0119	22	28	SS	SS	2340	6120		MSXG			J	EPES	18477	29193	MOORGAMC	
Calcium	15-2247	AAB3420	0	6	SS	SS	2710	6120		MSXG			J	EPES	18477	29194	MOORGAMC	
Calcium	15-2247	AAC0146	21	27	SS	SS	3140	6120		MSXG			J	EPES	18477	29195	MOORGAMC	
Calcium	15-2248	AAB3447	0	6	SS	SS	2700	6120		MSXG			J	EPES	18477	29196	MOORGAMC	
Calcium	15-2249	AAC0141	35	41	SS	SS	3450	6120		MSXG			J	EPES	18477	29197	MOORGAMC	
Calcium	15-2277	AAB3121	0	6	SS	SS	3150	6120		MSXG			J	EPES	18477	29198	MOORGAMC	

SAMPLING DATA FOR PRRS 15-004(N)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Site
Calcium	15-2278	AAB1284	0	6	SS	SS	3210	6120		MG/KG			J		CPES	18673	29794	MORGANIC
Calcium	15-2278	AAB3525	0	5	SS	SS	2180	6120		MG/KG					CPES	18681	29794	MORGANIC
Calcium	15-2290	AAC0326	16	17	SS	SS	3867	6120		MG/KG		D			CPES	20774	34487	MORGANIC
Calcium	15-2290	AAC0326	16	17	SS	SS	3580	6120		MG/KG					CPES	20774	34487	MORGANIC
Calcium	15-2290	AAC0327	9	10	SS	SS	3040	6120		MG/KG					CPES	20774	34487	MORGANIC
Calcium	15-2290	AAC0328	0	6	SS	SS	3783	6120		MG/KG					CPES	20344	34487	MORGANIC
Calcium	15-2291	AAC0326	0	6	SS	SS	2940	6120		MG/KG					CPES	20344	34487	MORGANIC
Calcium	15-2295	AAB3325	0	6	SS	SS	1960	6120		MG/KG	FD				CPES	18681	29195	MORGANIC
Calcium	15-2299	AAB3480	18	24	SS	SS	5910	6120		MG/KG	FD				CPES	18681	29195	MORGANIC
Calcium	PM-SATE	AAB3379			W	W	231			UG/L	EB	D			CPES	18617	32537	MORGANIC
Calcium	PM-SATE	AAB3379			W	W	240			UG/L	EB				CPES	18617	32537	MORGANIC
Calcium	PM-SATE	AAB3380			W	W	189			UG/L	EB				CPES	18444	28236	MORGANIC
Calcium	PM-SATE	AAB3381			W	W	189			UG/L	EB				CPES	18457	28411	MORGANIC
Chromium	15-2114	AAB1476	0	6	SS	SS	10.9	19.3		MG/KG					CPES	18481	29125	MORGANIC
Chromium	15-2114	AAB3487	18	24	SS	SS	15.4	19.3		MG/KG			J		CPES	18473	29794	MORGANIC
Chromium	15-2123	AAB3521	0	6	SS	SS	10.5	19.3		MG/KG			J		CPES	18473	29794	MORGANIC
Chromium	15-2127	AAB3340	18	24	SS	SS	9.7	19.3		MG/KG			J		CPES	18481	29195	MORGANIC
Chromium	15-2131	AAB3334	0	6	SS	SS	6.6	19.3		MG/KG	FD				CPES	18473	29794	MORGANIC
Chromium	15-2137	AAB3332	18	24	SS	SS	13.7	19.3		MG/KG			J		CPES	18481	29195	MORGANIC
Chromium	15-2139	AAB3312	17	23	SS	SS	9.9	19.3		MG/KG			J		CPES	18473	29794	MORGANIC
Chromium	15-2141	AAB1515	0	6	SS	SS	11.5	19.3		MG/KG			J		CPES	18473	29794	MORGANIC
Chromium	15-2143	AAB1452	0	6	SS	SS	10.1	19.3		MG/KG			J		CPES	18473	29794	MORGANIC
Chromium	15-2147	AAB3343	18	24	SS	SS	6.8	19.3		MG/KG			J		CPES	18473	29794	MORGANIC
Chromium	15-2149	AAB3327	3	9	SS	SS	9.9	19.3		MG/KG		D			CPES	18473	29794	MORGANIC
Chromium	15-2151	AAB1466	18	24	SS	SS	9.3	19.3		MG/KG			J		CPES	18473	29794	MORGANIC
Chromium	15-2152	AAB1458	0	5	SS	SS	12.8	19.3		MG/KG			J		CPES	18673	29794	MORGANIC
Chromium	15-2152	AAB1458	0	5	SS	SS	13.2	19.3		MG/KG			J		CPES	18673	29794	MORGANIC
Chromium	15-2153	AAB3304	1	1	SS	SS	13.8	19.3		MG/KG		D			CPES	18681	29195	MORGANIC
Chromium	15-2153	AAB3344	1	1	SS	SS	11.9	19.3		MG/KG			J		CPES	18681	29195	MORGANIC
Chromium	15-2157	AAB3307	0	5	SS	SS	8.3	19.3		MG/KG			J		CPES	18673	29794	MORGANIC
Chromium	15-2166	AAB3342	0	4	SS	SS	8.2	19.3		MG/KG			J		CPES	18681	29195	MORGANIC
Chromium	15-2170	AAB3323	18	24	SS	SS	4.7	19.3		MG/KG			J		CPES	18673	29794	MORGANIC
Chromium	15-2172	AAB3477	18	24	SS	SS	13.6	19.3		MG/KG			J		CPES	18681	29195	MORGANIC
Chromium	15-2173	AAB3324	18	24	SS	SS	13.7	19.3		MG/KG			J		CPES	18681	29195	MORGANIC
Chromium	15-2177	AAB3318	0	6	SS	SS	10	19.3		MG/KG			J		CPES	18673	29794	MORGANIC
Chromium	15-2178	AAB3376	0	6	SS	SS	2	19.3		MG/KG			J		CPES	18681	29195	MORGANIC
Chromium	15-2179	AAB3472	0	4	SS	SS	2.5	19.3		MG/KG			J		CPES	18681	29195	MORGANIC
Chromium	15-2180	AAB3520	6	12	SS	SS	6.2	19.3		MG/KG			J		CPES	18673	29794	MORGANIC
Chromium	15-2182	AAB3470	18	24	SS	SS	10.4	19.3		MG/KG			J		LFLS	18473	29794	MORGANIC
Chromium	15-2198	AAB3485	0	6	SS	SS	13.3	19.3		MG/KG	FD				LFLS	18681	29195	MORGANIC
Chromium	15-2206	AAB3295	0	4	SS	SS	8.1	19.3		MG/KG	FD				LFLS	18681	29195	MORGANIC
Chromium	15-2226	AAB3478	0	6	SS	SS	3.5	19.3		MG/KG					CPES	18681	29195	MORGANIC
Chromium	15-2227	AAB3318	0	6	SS	SS	13.4	19.3		MG/KG					CPES	18457	28411	MORGANIC
Chromium	15-2228	AAB3320	0	6	SS	SS	9.9	19.3		MG/KG	FD				CPES	18457	28411	MORGANIC
Chromium	15-2228	AAB3320	0	6	SS	SS	8.7	19.3		MG/KG					CPES	18457	28411	MORGANIC

SAMPLING DATA FOR PRRS 15-004(1)

Analyte	Loc ID	Sample ID	Region	End	Units	Mat	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Cobalt	15 2170	AAB3327	18	24	SS	<	6.3	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2172	AAB3477	18	24	SS	<	5.8	19.2	4600	MGKG					CPES	18681	29195	MORGANIC
Cobalt	15 2173	AAB3325	18	24	SS	<	3.5	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2177	AAB3318	0	6	SS	<	1.9	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2178	AAB3336	0	6	SS	<	1.7	19.2	4600	MGKG					CPES	18681	29195	MORGANIC
Cobalt	15 2179	AAB3472	0	6	SS	<	4.6	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2180	AAB3520	6	12	SS	<	6.1	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2182	AAB3470	18	24	SS	<	5.3	19.2	4600	MGKG	FD				CPES	18681	29195	MORGANIC
Cobalt	15 2198	AAB3485	0	6	SS	<	4.7	19.2	4600	MGKG	FD				CPES	18681	29195	MORGANIC
Cobalt	15 2206	AAB3295	0	6	SS	<	1.6	19.2	4600	MGKG					CPES	18681	29195	MORGANIC
Cobalt	15 2227	AAB3478	0	6	SS	<	7.8	19.2	4600	MGKG					CPES	18457	28413	MORGANIC
Cobalt	15 2228	AAB3518	0	6	SS	<	7.0	19.2	4600	MGKG	FD				CPES	18457	28413	MORGANIC
Cobalt	15 2228	AAB3320	0	6	SS	<	5.7	19.2	4600	MGKG					CPES	18457	28413	MORGANIC
Cobalt	15 2240	AAB3298	0	6	SS	<	4.4	19.2	4600	MGKG					CPES	18681	29195	MORGANIC
Cobalt	15 2240	AAB3298	0	6	SS	<	4.7	19.2	4600	MGKG					CPES	18681	29195	MORGANIC
Cobalt	15 2241	AAB3330	0	6	SS	<	4.8	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2245	AAB3526	0	6	SS	<	7.7	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2245	AAB3526	0	6	SS	<	4	19.2	4600	MGKG					CPES	20296	34914	MORGANIC
Cobalt	15 2245	AAC0342	14	15	SS	<	8.3	19.2	4600	MGKG					CPES	18681	29195	MORGANIC
Cobalt	15 2246	AAB3445	0	6	SS	<	8.5	19.2	4600	MGKG					CPES	20296	34914	MORGANIC
Cobalt	15 2246	AAC0339	22	28	SS	<	7.1	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2247	AAB3420	0	6	SS	<	7.8	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2247	AAC0346	21	27	SS	<	7.8	19.2	4600	MGKG					CPES	20347	34481	MORGANIC
Cobalt	15 2248	AAB3447	0	6	SS	<	7.8	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2248	AAB3448	0	6	SS	<	6.5	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2249	AAC0341	35	41	SS	<	10.1	19.2	4600	MGKG					CPES	20296	34914	MORGANIC
Cobalt	15 2277	AAB3321	0	6	SS	<	5.6	19.2	4600	MGKG					CPES	18681	29195	MORGANIC
Cobalt	15 2278	AAB3294	0	6	SS	<	4.6	19.2	4600	MGKG					CPES	18673	29796	MORGANIC
Cobalt	15 2279	AAB3325	0	6	SS	<	7.5	19.2	4600	MGKG					CPES	18681	29195	MORGANIC
Cobalt	15 2290	AAC0328	16	17	SS	<	7.9	19.2	4600	MGKG					CPES	20774	34497	MORGANIC
Cobalt	15 2290	AAC0327	9	10	SS	<	8.5	19.2	4600	MGKG					CPES	20774	34497	MORGANIC
Cobalt	15 2290	AAC0328	0	6	SS	<	8.7	19.2	4600	MGKG					CPES	20296	34914	MORGANIC
Cobalt	15 2291	AAC0326	0	6	SS	<	6	19.2	4600	MGKG					CPES	20147	34491	MORGANIC
Cobalt	15 2295	AAB3325	0	6	SS	<	7.8	19.2	4600	MGKG	FD				CPES	18681	29195	MORGANIC
Cobalt	15 2299	AAB3480	18	24	SS	<	5.1	19.2	4600	MGKG	FD				CPES	18681	29195	MORGANIC
Cobalt	PRNGATE	AAB3379			W	<	5.9			UGL	EB				CPES	18817	32537	MORGANIC
Cobalt	PRNGATE	AAB3378			W	<	4			UGL	EB				CPES	18817	32537	MORGANIC
Cobalt	PRNGATE	AAB3390			W	<	6.7			UGL	EB				CPES	18444	28216	MORGANIC
Copper	15 2114	AAB3478	0	6	SS	<	12.3	30.7	2848	3114	MGKG				CPES	18681	29195	MORGANIC
Copper	15 2114	AAB3487	18	24	SS	<	14.2	30.7	2848	3114	MGKG				CPES	18673	29796	MORGANIC
Copper	15 2123	AAB3521	0	6	SS	<	12.6	30.7	2848	3114	MGKG				CPES	18673	29796	MORGANIC
Copper	15 2127	AAB3340	18	24	SS	<	8.6	30.7	2848	3114	MGKG				CPES	18681	29195	MORGANIC
Copper	15 2131	AAB3374	0	6	SS	<	9.4	30.7	2848	3114	MGKG				CPES	18673	29796	MORGANIC
Copper	15 2137	AAB3332	18	24	SS	<	12	30.7	2848	3114	MGKG				CPES	18681	29195	MORGANIC

SAMPLING DATA FOR PRS 15-004(J)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bgkd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Copper	15 2139	AAB3312	17	23		SS		23.8	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2141	AAB3315	0	4		SS		63.6	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2145	AAB3452	0	6		SS		14.7	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2147	AAB3343	18	24		SS		7.6	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2147	AAB3343	18	24		SS		9.4	39.7	2848	13114	MGYQ		D		CPES	18673	26794	INORGANIC
Copper	15 2149	AAB3327	3	9		SS		89.1	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2151	AAB3466	18	24		SS		14.9	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2152	AAB3458	0	5		SS		44.3	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2152	AAB3458	0	5		SS		77.2	39.7	2848	13114	MGYQ		D		CPES	18673	26794	INORGANIC
Copper	15 2153	AAB3304	1	1	F	SS		9.2	39.7	2848	13114	MGYQ		J		CPES	18681	26195	INORGANIC
Copper	15 2153	AAB3344	0	5		SS		11.3	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2157	AAB3307	18	24		SS		8.8	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2166	AAB3342	0	4		SS		15.4	39.7	2848	13114	MGYQ		J		CPES	18681	26195	INORGANIC
Copper	15 2170	AAB3323	18	24		SS		16.4	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2172	AAB3477	18	24		SS		11.1	39.7	2848	13114	MGYQ		J		CPES	18681	26195	INORGANIC
Copper	15 2173	AAB3324	18	24		SS		8.1	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2177	AAB3318	0	6		SS		18.9	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2178	AAB3316	0	6		SS		8.4	39.7	2848	13114	MGYQ		J		CPES	18681	26195	INORGANIC
Copper	15 2179	AAB3472	0	4		SS		17	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2180	AAB3526	6	12		SS		13	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2182	AAB3470	18	24		SS		11.5	39.7	2848	13114	MGYQ	FD			CPES	18681	26195	INORGANIC
Copper	15 2198	AAB3485	0	6		SS		9.7	39.7	2848	13114	MGYQ	FD			CPES	18681	26195	INORGANIC
Copper	15 2206	AAB3295	0	4		SS		6.7	39.7	2848	13114	MGYQ		J		CPES	18681	26195	INORGANIC
Copper	15 2226	AAB3478	0	6		SS		50.1	39.7	2848	13114	MGYQ		J		CPES	18457	28413	INORGANIC
Copper	15 2227	AAB3518	9	8		SS		39.7	39.7	2848	13114	MGYQ	FD			CPES	18457	28413	INORGANIC
Copper	15 2228	AAB3320	0	6		SS		526	39.7	2848	13114	MGYQ		J		CPES	18457	28413	INORGANIC
Copper	15 2240	AAB3298	0	6		SS		53.1	39.7	2848	13114	MGYQ		J		CPES	18681	26195	INORGANIC
Copper	15 2240	AAB3298	0	6		SS		53	39.7	2848	13114	MGYQ		G		CPES	18681	26195	INORGANIC
Copper	15 2241	AAB3350	0	6		SS		46.8	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2245	AAB3526	0	6		SS		23.4	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2245	AAC0342	14	15	F	SS		54.1	39.7	2848	13114	MGYQ		J		CPES	20256	34514	INORGANIC
Copper	15 2246	AAB3445	0	6		SS		147	39.7	2848	13114	MGYQ		J		CPES	18681	26195	INORGANIC
Copper	15 2246	AAC0339	22	28		SS		94.7	39.7	2848	13114	MGYQ		J		CPES	20256	34514	INORGANIC
Copper	15 2247	AAB3420	0	6		SS		833	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2247	AAC0346	21	27		SS		18.4	39.7	2848	13114	MGYQ		J		CPES	20347	34481	INORGANIC
Copper	15 2248	AAB3447	0	6		SS		606	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2249	AAB3449	0	6		SS		850	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2249	AAC0341	35	41		SS		1510	39.7	2848	13114	MGYQ		J		CPES	20256	34514	INORGANIC
Copper	15 2277	AAB3321	0	5		SS		43.9	39.7	2848	13114	MGYQ		J		CPES	18681	26195	INORGANIC
Copper	15 2278	AAB3294	0	6		SS		22.7	39.7	2848	13114	MGYQ		J		CPES	18673	26794	INORGANIC
Copper	15 2279	AAB3525	0	5		SS		22.2	39.7	2848	13114	MGYQ		J		CPES	18681	26195	INORGANIC
Copper	15 2290	AAC0326	16	17	F	SS		168	39.7	2848	13114	MGYQ		D		CPES	20774	34497	INORGANIC
Copper	15 2290	AAC0326	16	17	F	SS		101	39.7	2848	13114	MGYQ		J		CPES	20774	34497	INORGANIC
Copper	15 2290	AAC0327	9	10	F	SS		58.2	39.7	2848	13114	MGYQ		J		CPES	20774	34497	INORGANIC
Copper	15 2290	AAC0328	0	6		SS		60.1	39.7	2848	13114	MGYQ		J		CPES	20256	34514	INORGANIC

SAMPLING DATA FOR PRS 15-004(F)

Analyte	Loc ID	Sample ID	Region	End	Units	Met	S	Sample Values	Bkgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Setts
Copper	15-2291	AAC0336	0	6	SS	SS		11.5	30.7	2848	MG/KG					CPES	18673	34491	MORGANIC
Copper	15-2295	AAB3325	0	6	SS	SS		40.9	30.7	2348	MG/KG	FD				CPES	18681	29195	MORGANIC
Copper	15-2298	AAB3490	18	24	SS	SS		11.3	30.7	2848	MG/KG	FD				CPES	18681	29195	MORGANIC
Copper	FNRSATE	AAB3379			W	W		23.2		1300	UG/L	EB	D			CPES	18617	32537	MORGANIC
Copper	FNRSATE	AAB3379			W	W		27.8		1300	UG/L	EB				CPES	18617	32537	MORGANIC
Copper	FNRSATE	AAB338C			W	W		1.0		1300	UG/L	EB				CPES	18444	28238	MORGANIC
Copper	FNRSATE	AAB3381			W	W		1.6		1300	UG/L	EB				CPES	18457	28413	MORGANIC
Iron	15-2114	AAB3476	0	6	SS	SS		14000	21300		MG/KG					CPES	18681	29195	MORGANIC
Iron	15-2114	AAB3487	18	24	SS	SS		19500	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2123	AAB3521	0	6	SS	SS		14000	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2127	AAB3340	18	24	SS	SS		12000	21300		MG/KG					CPES	18681	29195	MORGANIC
Iron	15-2131	AAB3354	0	6	SS	SS		10500	21300		MG/KG	FD				CPES	18673	29794	MORGANIC
Iron	15-2137	AAB3332	18	24	SS	SS		19300	21300		MG/KG					CPES	18681	29195	MORGANIC
Iron	15-2139	AAB3312	17	23	SS	SS		13900	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2141	AAB3515	0	4	SS	SS		16000	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2145	AAB3452	0	6	SS	SS		14700	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2147	AAB3343	18	24	SS	SS		11933	21300		MG/KG		D			CPES	18673	29794	MORGANIC
Iron	15-2147	AAB3343	18	24	SS	SS		8850	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2149	AAB3327	3	9	SS	SS		14906	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2151	AAB3466	18	24	SS	SS		16300	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2152	AAB3458	0	5	SS	SS		17678	21300		MG/KG		D			CPES	18673	29794	MORGANIC
Iron	15-2152	AAB3458	0	5	SS	SS		15900	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2153	AAB3304	1	1	SS	SS		17400	21300		MG/KG					CPES	18681	29195	MORGANIC
Iron	15-2159	AAB3344	0	5	SS	SS		12100	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2157	AAB3307	18	24	SS	SS		13000	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2166	AAB3342	0	4	SS	SS		8400	21300		MG/KG					CPES	18681	29195	MORGANIC
Iron	15-2170	AAB3323	18	24	SS	SS		17600	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2172	AAB3477	18	24	SS	SS		13800	21300		MG/KG					CPES	18681	29195	MORGANIC
Iron	15-2173	AAB3324	18	24	SS	SS		13300	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2177	AAB3318	0	6	SS	SS		8190	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2178	AAB3336	0	6	SS	SS		5790	21300		MG/KG					CPES	18681	29195	MORGANIC
Iron	15-2179	AAB3472	0	4	SS	SS		9730	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2180	AAB3520	6	12	SS	SS		14800	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2182	AAB3470	18	24	SS	SS		17000	21300		MG/KG	FD				CPES	18681	29195	MORGANIC
Iron	15-2198	AAB3485	0	6	SS	SS		11400	21300		MG/KG	FD				CPES	18681	29195	MORGANIC
Iron	15-2206	AAB3295	0	4	SS	SS		6500	21300		MG/KG					CPES	18681	29195	MORGANIC
Iron	15-2206	AAB3478	0	6	SS	SS		17900	21300		MG/KG					CPES	18457	28413	MORGANIC
Iron	15-2247	AAB3518	0	6	SS	SS		12700	21300		MG/KG	FD				CPES	18457	28413	MORGANIC
Iron	15-2248	AAB3320	0	6	SS	SS		10700	21300		MG/KG					CPES	18681	29195	MORGANIC
Iron	15-2249	AAB3298	0	6	SS	SS		8419	21300		MG/KG		D			CPES	18681	29195	MORGANIC
Iron	15-2240	AAB3298	0	6	SS	SS		8840	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2241	AAB3330	0	6	SS	SS		8570	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2245	AAB3526	0	6	SS	SS		14600	21300		MG/KG					CPES	18673	29794	MORGANIC
Iron	15-2245	AAC0342	14	15	SS	SS		10300	21300		MG/KG					CPES	20246	34911	MORGANIC
Iron	15-2245	AAB3445	0	6	SS	SS		16100	21300		MG/KG					CPES	18681	33192	MORGANIC

SAMPLING DATA FOR PRS 15-004-1

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat S	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Iron	15 2248	AAC0313	22	24	SS		18103	21320		MG/KG					EPES	20264	20264	20264
Iron	15 2247	AAB3429	0	6	SS		13760	21320		MG/KG					EPES	18473	20264	20264
Iron	15 2247	AAC0316	21	23	SS		13100	21320		MG/KG					EPES	20267	20267	20267
Iron	15 2248	AAB3447	0	6	SS		15500	21320		MG/KG					EPES	18473	20264	20264
Iron	15 2249	AAB3449	0	6	SS		12000	21320		MG/KG					EPES	18473	20264	20264
Iron	15 2249	AAC0318	35	41	SS		14500	21320		MG/KG					EPES	20264	20264	20264
Iron	15 2277	AAB3321	0	5	SS		13100	21320		MG/KG					EPES	18481	20264	20264
Iron	15 2278	AAB3254	0	6	SS		10700	21320		MG/KG					EPES	18473	20264	20264
Iron	15 2279	AAB3425	0	5	SS		14500	21320		MG/KG					EPES	18481	20264	20264
Iron	15 2290	AAC0324	16	17	F		14200	21320		MG/KG					EPES	20274	20274	20274
Iron	15 2290	AAC0326	14	17	F		13500	21320		MG/KG					EPES	20274	20274	20274
Iron	15 2290	AAC0327	9	10	F		12000	21320		MG/KG					EPES	20274	20274	20274
Iron	15 2290	AAC0328	0	6	SS		20800	21320		MG/KG					EPES	20264	20264	20264
Iron	15 2291	AAC0324	0	6	SS		17000	21320		MG/KG					EPES	20264	20264	20264
Iron	15 2295	AAB3325	0	6	SS		13600	21320		MG/KG					EPES	18481	20264	20264
Iron	15 2299	AAB3480	0	6	SS		15000	21320		MG/KG					EPES	18481	20264	20264
Iron	PRGATE	AAB3322	19	24	W		593			UG/L	BB				EPES	18481	20264	20264
Iron	PRGATE	AAB3379			W		532			UG/L	BB				EPES	18481	20264	20264
Iron	PRGATE	AAB3162			W		165			UG/L	BB				EPES	18481	20264	20264
Iron	15 2116	AAB3278	0	6	SS		154	233		MG/KG					EPES	18481	20264	20264
Lead	15 2114	AAB3487	18	24	SS		163	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2115	AAB3254	0	6	SS		148	233		MG/KG					EPES	20293	20293	20293
Lead	15 2119	AAB3484	0	3	SS		14	233		MG/KG					EPES	20260	20260	20260
Lead	15 2122	AAB3221	0	6	SS		149	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2125	AAB3319	0	6	SS		203	233		MG/KG					EPES	20264	20264	20264
Lead	15 2127	AAB3340	18	24	SS		115	233		MG/KG					EPES	18481	20264	20264
Lead	15 2131	AAB3334	0	6	SS		186	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2134	AAB3450	0	6	SS		162	233		MG/KG					EPES	20293	20293	20293
Lead	15 2137	AAB3312	18	24	SS		183	233		MG/KG					EPES	18481	20264	20264
Lead	15 2139	AAB3312	17	23	SS		145	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2141	AAB3515	0	4	SS		423	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2144	AAB3341	0	6	SS		146	233		MG/KG					EPES	20293	20293	20293
Lead	15 2145	AAB3452	0	6	SS		158	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2147	AAB3343	18	24	SS		66	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2147	AAB3343	18	24	SS		96	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2149	AAB3327	3	9	SS		517	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2151	AAB3464	18	24	SS		152	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2152	AAB3454	0	5	SS		233	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2152	AAB3454	0	5	SS		22	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2153	AAB3364	1	1	F		126	233		MG/KG					EPES	18481	20264	20264
Lead	15 2153	AAB3344	0	5	SS		158	233		MG/KG					GFAA	18473	20264	20264
Lead	15 2154	AAB3524	0	3	SS		166	233		MG/KG					EPES	20281	20281	20281
Lead	15 2155	AAB3475	0	4	SS		188	233		MG/KG					EPES	18473	20264	20264
Lead	15 2155	AAB3475	0	4	SS		191	233		MG/KG					EPES	18473	20264	20264

SAMPLING DATA FOR PRS 15-000(M)

Lead	Analysis	Loc ID	Sample ID	Begin	End	Units	Mat	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Salts
Lead		15 2157	AAB3307	18 24	0 4	6	SS	11.4	23.3	400 MG/KG						GFAA	18473	29794	NORGANIC
Lead		15 2166	AAB3342	0 6	0 4	6	SS	15.7	23.3	400 MG/KG						CPES	18481	29195	NORGANIC
Lead		15 2167	AAB3300	0 6	0 6	6	SS	11	23.3	400 MG/KG						CPES	20290	30340	NORGANIC
Lead		15 2167	AAB3900	0 6	0 6	6	SS	14	23.3	400 MG/KG						CPES	20290	30340	NORGANIC
Lead		15 2170	AAB3323	18 24	0 6	6	SS	11.3	23.3	400 MG/KG						GFAA	18473	29794	NORGANIC
Lead		15 2172	AAB3477	18 24	0 6	6	SS	8.1	23.3	400 MG/KG						CPES	18481	29195	NORGANIC
Lead		15 2173	AAB3324	18 24	0 6	6	SS	16.2	23.3	400 MG/KG						GFAA	18473	29794	NORGANIC
Lead		15 2177	AAB3318	0 6	0 6	6	SS	9.4	23.3	400 MG/KG						GFAA	18473	29794	NORGANIC
Lead		15 2178	AAB3316	0 6	0 6	6	SS	26.5	23.3	400 MG/KG						CPES	18481	29195	NORGANIC
Lead		15 2179	AAB3472	0 6	0 4	6	SS	17	23.3	400 MG/KG						GFAA	18473	29794	NORGANIC
Lead		15 2180	AAB3520	0 6	0 12	6	SS	9.7	23.3	400 MG/KG						GFAA	18473	29794	NORGANIC
Lead		15 2182	AAB3470	18 24	0 6	6	SS	6.7	23.3	400 MG/KG						CPES	18481	29195	NORGANIC
Lead		15 2197	AAB3378				W	6		50 U/L						CPES	20154	35034	NORGANIC
Lead		15 2197	AAB3378				W	6		50 U/L						CPES	20154	35034	NORGANIC
Lead		15 2198	AAB3485	0 6	0 6	6	SS	23.3	23.3	400 MG/KG						CPES	18481	29195	NORGANIC
Lead		15 2206	AAB3295	0 6	0 4	6	SS	11.3	23.3	400 MG/KG						CPES	18481	29195	NORGANIC
Lead		15 2226	AAB3478	0 6	0 6	6	SS	34	23.3	400 MG/KG						CPES	18481	29195	NORGANIC
Lead		15 2227	AAB3518	0 6	0 6	6	SS	25.2	23.3	400 MG/KG						ETVAA	18457	28413	NORGANIC
Lead		15 2228	AAB3320	0 6	0 6	6	SS	15.5	23.3	400 MG/KG						ETVAA	18457	28413	NORGANIC
Lead		15 2240	AAB3248	0 6	0 6	6	SS	10.9	23.3	400 MG/KG						CPES	18481	29195	NORGANIC
Lead		15 2240	AAB3248	0 6	0 6	6	SS	10	23.3	400 MG/KG						CPES	18481	29195	NORGANIC
Lead		15 2241	AAB3170	0 6	0 6	6	SS	8.7	23.3	400 MG/KG						GFAA	18473	29794	NORGANIC
Lead		15 2245	AAB3526	0 6	0 6	6	SS	17	23.3	400 MG/KG						CPES	20298	34914	NORGANIC
Lead		15 2245	AAC0742	14 15	15	F	SS	11.4	23.3	400 MG/KG						CPES	18481	29195	NORGANIC
Lead		15 2246	AAC0379	0 6	0 6	6	SS	23.6	23.3	400 MG/KG						CPES	20298	34914	NORGANIC
Lead		15 2247	AAB3420	22 28	0 6	6	SS	16.9	23.3	400 MG/KG						CPES	20298	34914	NORGANIC
Lead		15 2247	AAC0346	21 27	0 6	6	SS	44.9	23.3	400 MG/KG						CPES	20298	34914	NORGANIC
Lead		15 2248	AAB3447	0 6	0 6	6	SS	16.9	23.3	400 MG/KG						GFAA	18473	29794	NORGANIC
Lead		15 2248	AAB3447	0 6	0 6	6	SS	53.4	23.3	400 MG/KG						GFAA	18473	29794	NORGANIC
Lead		15 2249	AAC0341	0 6	0 6	6	SS	190	23.3	400 MG/KG						GFAA	18473	29794	NORGANIC
Lead		15 2277	AAB3321	35 41	0 6	6	SS	28	23.3	400 MG/KG						CPES	20298	34914	NORGANIC
Lead		15 2278	AAB3294	0 6	0 5	6	SS	91.2	23.3	400 MG/KG						CPES	18681	29195	NORGANIC
Lead		15 2279	AAB3525	0 6	0 6	6	SS	16.7	23.3	400 MG/KG						GFAA	18473	29794	NORGANIC
Lead		15 2290	AAC0328	0 6	0 5	6	SS	30.1	23.3	400 MG/KG						CPES	18681	29195	NORGANIC
Lead		15 2290	AAC0328	16 17	17	F	SS	23.9	23.3	400 MG/KG						CPES	20774	34497	NORGANIC
Lead		15 2297	AAC0326	16 17	17	F	SS	26.4	23.3	400 MG/KG						CPES	20774	34497	NORGANIC
Lead		15 2299	AAC0327	9 10	10	F	SS	19.3	23.3	400 MG/KG						CPES	20774	34497	NORGANIC
Lead		15 2299	AAC0328	0 6	0 6	6	SS	20.5	23.3	400 MG/KG						CPES	20298	34914	NORGANIC
Lead		15 2299	AAC0328	0 6	0 6	6	SS	15.5	23.3	400 MG/KG						CPES	20307	34914	NORGANIC
Lead		15 2345	AAB3123	0 6	0 6	6	SS	20.4	23.3	400 MG/KG						CPES	18681	29195	NORGANIC
Lead		15 2559	AAB3489	18 24	0 6	6	SS	10.7	23.3	400 MG/KG						CPES	18681	29195	NORGANIC
Lead		PRNSATE	AAB3379				W	13.6		50 U/L						CPES	18617	32537	NORGANIC
Lead		PRNSATE	AAB3379				W	14.1		50 U/L						CPES	18617	32537	NORGANIC
Lead		PRNSATE	AAB3380				W	2.8		50 U/L						ETVAA	18454	28236	NORGANIC
Lead		PRNSATE	AAB3381				W	2.5		50 U/L						ETVAA	18457	28413	NORGANIC

SAMPLING DATA FOR PRS 15-004(f)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat. S	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Magnesium	15 2114	AAB3476	0	6		SS	2280	4610		MGKG					CPES	18681	29155	INORGANIC
Magnesium	15 2114	AAB3487	18	24		SS	3620	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2123	AAB3521	0	6		SS	2250	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2127	AAB3349	18	24		SS	2530	4610		MGKG					CPES	18681	29155	INORGANIC
Magnesium	15 2131	AAB3334	0	6		SS	1750	4610		MGKG	FD				CPES	18673	29756	INORGANIC
Magnesium	15 2137	AAB3332	18	24		SS	3680	4610		MGKG					CPES	18681	29155	INORGANIC
Magnesium	15 2139	AAB3312	17	23		SS	2840	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2141	AAB3515	0	6		SS	3160	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2145	AAB3452	0	6		SS	2670	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2147	AAB3343	18	24		SS	2441	4610		MGKG		0			CPES	18673	29756	INORGANIC
Magnesium	15 2147	AAB3343	18	24		SS	2000	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2149	AAB3327	3	9		SS	2750	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2151	AAB3444	18	24		SS	2620	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2152	AAB3458	0	5		SS	3081	4610		MGKG		0			CPES	18673	29756	INORGANIC
Magnesium	15 2152	AAB3458	0	5		SS	2750	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2153	AAB3504	1	1		SS	2760	4610		MGKG					CPES	18681	29155	INORGANIC
Magnesium	15 2153	AAB3344	0	5		SS	1660	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2157	AAB3307	18	24		SS	2380	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2166	AAB3342	0	4		SS	1120	4610		MGKG					CPES	18681	29155	INORGANIC
Magnesium	15 2170	AAB3323	18	24		SS	4140	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2172	AAB3477	18	24		SS	3950	4610		MGKG					CPES	18681	29155	INORGANIC
Magnesium	15 2173	AAB3324	18	24		SS	2840	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2177	AAB3318	0	6		SS	1010	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2178	AAB3336	0	6		SS	658	4610		MGKG					CPES	18681	29195	INORGANIC
Magnesium	15 2179	AAB3472	0	4		SS	1710	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2180	AAB3520	6	12		SS	2500	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2182	AAB3470	18	24		SS	4240	4610		MGKG	FD				CPES	18681	29155	INORGANIC
Magnesium	15 2198	AAB3485	0	6		SS	1850	4610		MGKG	FD				CPES	18681	29195	INORGANIC
Magnesium	15 2206	AAB3295	0	4		SS	552	4610		MGKG					CPES	18681	29195	INORGANIC
Magnesium	15 2226	AAB3478	0	6		SS	3160	4610		MGKG					CPES	18457	28413	INORGANIC
Magnesium	15 2227	AAB3518	0	6		SS	1850	4610		MGKG	FD				CPES	18457	28413	INORGANIC
Magnesium	15 2228	AAB3320	0	6		SS	1730	4610		MGKG					CPES	18457	28413	INORGANIC
Magnesium	15 2240	AAB3296	0	6		SS	1945	4610		MGKG		0			CPES	18681	29155	INORGANIC
Magnesium	15 2240	AAB3296	0	6		SS	1760	4610		MGKG					CPES	18681	29195	INORGANIC
Magnesium	15 2241	AAB3330	0	6		SS	1880	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2245	AAB3526	0	6		SS	2250	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2245	AAC0342	14	15	F	SS	1970	4610		MGKG					CPES	20296	34914	INORGANIC
Magnesium	15 2246	AAB3445	0	6		SS	2850	4610		MGKG					CPES	18681	29195	INORGANIC
Magnesium	15 2246	AAC0359	22	28		SS	2910	4610		MGKG					CPES	20296	34914	INORGANIC
Magnesium	15 2247	AAB3420	0	6		SS	1970	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2247	AAC0346	21	27		SS	2620	4610		MGKG					CPES	20347	34491	INORGANIC
Magnesium	15 2248	AAB3447	0	6		SS	2350	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2249	AAB3449	0	6		SS	2070	4610		MGKG					CPES	18673	29756	INORGANIC
Magnesium	15 2249	AAC0341	35	41		SS	2270	4610		MGKG					CPES	20296	34914	INORGANIC
Magnesium	15 2277	AAB3321	0	5		SS	2640	4610		MGKG					CPES	18681	29155	INORGANIC

SAMPLING DATA FOR PRS 15-004(7)

Analyte	Loc ID	Sample ID	Depth	End	Units	Mol	S	Sample Value	Depth Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Setting
Magnesium	15-2278	AAB3204	0	6	SS	SS	2000	4610			MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2278	AAB3525	0	5	SS	SS	2320	4610			MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2290	AAC0326	16	17	F	SS	2999	4610			MG/KG		D			CPES	20774	34497	INORGANIC
Magnesium	15-2290	AAC0327	16	17	F	SS	2560	4610			MG/KG					CPES	20774	34497	INORGANIC
Magnesium	15-2290	AAC0328	9	10	F	SS	3390	4610			MG/KG					CPES	20774	34497	INORGANIC
Magnesium	15-2291	AAC0326	0	6	SS	SS	3050	4610			MG/KG					CPES	20296	34914	INORGANIC
Magnesium	15-2295	AAB3325	0	6	SS	SS	1980	4610			MG/KG					CPES	20347	34491	INORGANIC
Magnesium	15-2299	AAB3440	18	24	I	SS	3760	4610			MG/KG	RD				CPES	18681	29195	INORGANIC
Magnesium	FRNGATE	AAB3379			W	W	85.2				UG/L	BB				CPES	18617	32537	INORGANIC
Magnesium	FRNGATE	AAB3379			W	W	74				UG/L	BB	D			CPES	18617	32537	INORGANIC
Magnesium	FRNGATE	AAB3380			W	W	117				UG/L	BB				CPES	18444	28236	INORGANIC
Magnesium	FRNGATE	AAB3381			W	W	117				UG/L	BB				CPES	18457	28413	INORGANIC
Magnesium	15-2114	AAB3476	0	6	SS	SS	541	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2114	AAB3487	18	24	SS	SS	508	714		381.959094	MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2123	AAB3521	0	6	SS	SS	485	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2127	AAB3340	18	24	SS	SS	326	714		381.959094	MG/KG	RD				CPES	18673	29796	INORGANIC
Magnesium	15-2131	AAB3334	0	6	SS	SS	311	714		381.959094	MG/KG					CPES	18601	29195	INORGANIC
Magnesium	15-2137	AAB3332	18	24	SS	SS	589	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2139	AAB3312	17	23	SS	SS	468	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2141	AAB3515	0	4	SS	SS	430	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2145	AAB3452	0	6	SS	SS	390	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2147	AAB3343	18	24	SS	SS	271	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2147	AAB3343	18	24	SS	SS	233	714		381.959094	MG/KG		O			CPES	18673	29796	INORGANIC
Magnesium	15-2149	AAB3327	3	9	SS	SS	376	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2151	AAB3466	18	24	SS	SS	595	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2152	AAB3458	0	5	SS	SS	601	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2152	AAB3458	0	5	SS	SS	560	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2153	AAB3304	1	1	F	SS	429	714		381.959094	MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2153	AAB3344	0	5	SS	SS	482	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2157	AAB3307	18	24	SS	SS	336	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2166	AAB3342	0	4	SS	SS	303	714		381.959094	MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2170	AAB3323	18	24	SS	SS	349	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2172	AAB3477	18	24	SS	SS	388	714		381.959094	MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2173	AAB3324	18	24	SS	SS	160	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2177	AAB3318	0	6	SS	SS	325	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2178	AAB3316	0	6	SS	SS	242	714		381.959094	MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2179	AAB3472	0	4	SS	SS	303	714		381.959094	MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2180	AAB3520	6	12	SS	SS	303	714		381.959094	MG/KG					CPES	18673	29796	INORGANIC
Magnesium	15-2182	AAB3470	18	24	SS	SS	255	714		381.959094	MG/KG	RD				CPES	18681	29195	INORGANIC
Magnesium	15-2188	AAB3485	0	6	SS	SS	347	714		381.959094	MG/KG	RD				CPES	18681	29195	INORGANIC
Magnesium	15-2206	AAB3235	0	4	SS	SS	165	714		381.959094	MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2226	AAB3478	0	6	SS	SS	434	714		381.959094	MG/KG					CPES	18457	28413	INORGANIC
Magnesium	15-2227	AAB3518	0	6	SS	SS	481	714		381.959094	MG/KG	RD				CPES	18457	28413	INORGANIC
Magnesium	15-2228	AAB3522	0	6	SS	SS	491	714		381.959094	MG/KG					CPES	18457	28413	INORGANIC

SAMPLING DATA FOR PRS 15-004(T)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met	S	Sample Value	Dgld Value	SAL Value	Units	Field Code	Lab Code	EPA Goal	Sample Location	Tech Code	Request Number	Report Number	Setts
Mercury	15-2153	AAB3304	1	1	F	SS	<	0.28	0.1	23 0033493	MGKG		J			CVAA	18681	29195	INORGANIC
Mercury	15-2153	AAB3344	0	5	I	SS	<	0.1	0.1	23 0033493	MGKG		W			CVAA	18673	29796	INORGANIC
Mercury	15-2154	AAB3528	0	3	I	SS	<	0.05	0.1	23 0033493	MGKG		R			CVAA	20223	34813	INORGANIC
Mercury	15-2155	AAB3475	0	4	I	SS	<	0.02	0.1	23 0033493	MGKG		D			CVAA	18024	27114	INORGANIC
Mercury	15-2155	AAB3475	0	4	I	SS	<	0.02	0.1	23 0033493	MGKG					CVAA	18024	27114	INORGANIC
Mercury	15-2157	AAB3307	18	24	I	SS	<	0.11	0.1	23 0033493	MGKG		W			CVAA	18673	29796	INORGANIC
Mercury	15-2166	AAB3342	0	4	I	SS	<	0.1	0.1	23 0033493	MGKG		J			CVAA	18681	29195	INORGANIC
Mercury	15-2170	AAB3323	18	24	I	SS	<	0.09	0.1	23 0033493	MGKG		W			CVAA	18673	29796	INORGANIC
Mercury	15-2172	AAB3477	19	24	I	SS	<	0.11	0.1	23 0033493	MGKG		W			CVAA	18681	29195	INORGANIC
Mercury	15-2173	AAB3324	18	24	I	SS	<	0.2	0.1	23 0033493	MGKG		J			CVAA	18673	29796	INORGANIC
Mercury	15-2177	AAB3318	0	6	I	SS	<	0.1	0.1	23 0033493	MGKG		W			CVAA	18673	29796	INORGANIC
Mercury	15-2178	AAB3336	0	6	I	SS	<	0.53	0.1	23 0033493	MGKG		J			CVAA	18681	29195	INORGANIC
Mercury	15-2179	AAB3472	0	4	I	SS	<	0.11	0.1	23 0033493	MGKG		W			CVAA	18673	29796	INORGANIC
Mercury	15-2180	AAB3520	6	12	I	SS	<	0.18	0.1	23 0033493	MGKG		J			CVAA	18673	29796	INORGANIC
Mercury	15-2182	AAB3470	18	24	I	SS	<	1.8	0.1	23 0033493	MGKG	FD	J			CVAA	18681	29195	INORGANIC
Mercury	15-2197	AAB3378				W	<	0.12			2 UGL	BB		R		CVAA	20154	35034	INORGANIC
Mercury	15-2197	AAB3378				W	<	0.13			2 UGL	BB	D			CVAA	20154	35034	INORGANIC
Mercury	15-2198	AAB3485	0	6	I	SS	<	0.1	0.1	23 0033493	MGKG	FD			W	CVAA	18681	29195	INORGANIC
Mercury	15-2206	AAB3295	0	4	I	SS	<	0.11	0.1	23 0033493	MGKG		J			CVAA	18681	29195	INORGANIC
Mercury	15-2226	AAB3478	0	6	I	SS	<	0.1	0.1	23 0033493	MGKG					CVAA	18457	28413	INORGANIC
Mercury	15-2227	AAB3518	0	6	I	SS	<	0.1	0.1	23 0033493	MGKG	FD				CVAA	18457	28413	INORGANIC
Mercury	15-2228	AAB3320	0	6	I	SS	<	0.1	0.1	23 0033493	MGKG					CVAA	18457	28413	INORGANIC
Mercury	15-2240	AAB3298	0	6	I	SS	<	0.21	0.1	23 0033493	MGKG				J	CVAA	18681	29195	INORGANIC
Mercury	15-2241	AAB3330	0	6	I	SS	<	0.1	0.1	23 0033493	MGKG		W			CVAA	18673	29796	INORGANIC
Mercury	15-2245	AAB3526	0	6	I	SS	<	0.24	0.1	23 0033493	MGKG		J			CVAA	18673	29796	INORGANIC
Mercury	15-2245	AAC0342	14	15	F	SS	<	0.05	0.1	23 0033493	MGKG		W			CVAA	20296	34914	INORGANIC
Mercury	15-2246	AAB3445	0	6	I	SS	<	0.11	0.1	23 0033493	MGKG		W			CVAA	18681	29195	INORGANIC
Mercury	15-2246	AAC0339	22	28	I	SS	<	0.06	0.1	23 0033493	MGKG		W			CVAA	20296	34914	INORGANIC
Mercury	15-2247	AAB3420	0	6	I	SS	<	0.1	0.1	23 0033493	MGKG		W			CVAA	18673	29796	INORGANIC
Mercury	15-2247	AAC0346	21	27	I	SS	<	0.1	0.1	23 0033493	MGKG		R			CVAA	20347	34491	INORGANIC
Mercury	15-2248	AAB3447	0	6	I	SS	<	0.1	0.1	23 0033493	MGKG		W			CVAA	18673	29796	INORGANIC
Mercury	15-2249	AAB3449	0	6	I	SS	<	0.1	0.1	23 0033493	MGKG		W			CVAA	18673	29796	INORGANIC
Mercury	15-2249	AAC0341	35	41	I	SS	<	0.06	0.1	23 0033493	MGKG		W			CVAA	20296	34914	INORGANIC
Mercury	15-2277	AAB3321	0	5	I	SS	<	0.11	0.1	23 0033493	MGKG		W			CVAA	18681	29195	INORGANIC
Mercury	15-2278	AAB3294	0	6	I	SS	<	0.1	0.1	23 0033493	MGKG		W			CVAA	18673	29796	INORGANIC
Mercury	15-2279	AAB3525	0	5	I	SS	<	0.1	0.1	23 0033493	MGKG		W			CVAA	18681	29195	INORGANIC
Mercury	15-2290	AAC0326	16	17	F	SS	<	0.1	0.1	23 0033493	MGKG		D			CVAA	20774	34497	INORGANIC
Mercury	15-2290	AAC0326	16	17	F	SS	<	0.1	0.1	23 0033493	MGKG					CVAA	20774	34497	INORGANIC
Mercury	15-2290	AAC0327	9	10	F	SS	<	0.1	0.1	23 0033493	MGKG					CVAA	20774	34497	INORGANIC
Mercury	15-2290	AAC0328	0	6	I	SS	<	0.06	0.1	23 0033493	MGKG		W			CVAA	20296	34914	INORGANIC
Mercury	15-2291	AAC0336	0	6	I	SS	<	0.11	0.1	23 0033493	MGKG					CVAA	20347	34491	INORGANIC
Mercury	15-2295	AAB3325	0	6	I	SS	<	0.1	0.1	23 0033493	MGKG	FD			W	CVAA	18681	29195	INORGANIC
Mercury	15-2299	AAB3480	18	24	I	SS	<	0.11	0.1	23 0033493	MGKG	FD			W	CVAA	18681	29195	INORGANIC
Mercury	PRISATE	AAB3379				W	<	0.2			2 UGL	BB		W		CVAA	18817	32537	INORGANIC
Mercury	PRISATE	AAB3379				W	<	0.2			2 UGL	BB	D			CVAA	18817	32537	INORGANIC

SAMPLING DATA FOR FRS 15 (04.1)

Agency	Site ID	Sample ID	Begin	End	Units	Met S	Sample Value	Begin Value	SAT Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Suite
Nichol	FRATE	AAB3183				W	0.2			2 UST	EB				CVAA	18454	28216	NOORGANC
Nichol	FRATE	AAB3181				W	0.2			2 UST	EB				CVAA	18457	28413	NOORGANC
Nichol	FRATE	AAB3476	0	6.1	0.1	25	5.5	15.2	1533	61165	MG/KG				EPES	18461	28155	NOORGANC
Nichol	FRATE	AAB3487	18	24.1	0.1	25	12.9	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3421	0	6.1	0.1	25	5.3	15.2	1533	61165	MG/KG				EPES	18473	28155	NOORGANC
Nichol	FRATE	AAB3343	18	24.1	0.1	25	5.4	15.2	1533	61165	MG/KG				EPES	18481	28155	NOORGANC
Nichol	FRATE	AAB3314	9	6.1	0.1	25	5.5	15.2	1533	61165	MG/KG	RD			EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3332	18	24.1	0.1	25	13.2	15.2	1533	61165	MG/KG				EPES	18481	28155	NOORGANC
Nichol	FRATE	AAB3312	17	23.1	0.1	25	10.5	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3515	0	6.1	0.1	25	10.5	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3452	0	6.1	0.1	25	6.7	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3343	18	24.1	0.1	25	5.4	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3343	18	24.1	0.1	25	5.4	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3466	18	24.1	0.1	25	18.6	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB 56	0	5.1	0.1	25	11.6	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3458	0	5.1	0.1	25	11.2	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3304	1	1.1	0.1	25	9.8	15.2	1533	61165	MG/KG				EPES	18481	28155	NOORGANC
Nichol	FRATE	AAB3344	0	5.1	0.1	25	6.5	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3307	18	24.1	0.1	25	8.2	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3342	0	4.1	0.1	25	12.5	15.2	1533	61165	MG/KG				EPES	18481	28155	NOORGANC
Nichol	FRATE	AAB3323	18	24.1	0.1	25	12.1	15.2	1533	61165	MG/KG				EPES	18481	28155	NOORGANC
Nichol	FRATE	AAB3477	18	24.1	0.1	25	8.3	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3324	18	24.1	0.1	25	8.3	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3316	0	6.1	0.1	25	3.1	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3336	0	6.1	0.1	25	2.2	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3472	0	4.1	0.1	25	6.2	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3520	6	12.1	0.1	25	10	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3470	18	24.1	0.1	25	12	15.2	1533	61165	MG/KG	RD			EPES	18481	28155	NOORGANC
Nichol	FRATE	AAB3465	0	6.1	0.1	25	7	15.2	1533	61165	MG/KG	RD			EPES	18481	28155	NOORGANC
Nichol	FRATE	AAB3295	0	4.1	0.1	25	2.7	15.2	1533	61165	MG/KG				EPES	18481	28155	NOORGANC
Nichol	FRATE	AAB3478	0	6.1	0.1	25	11	15.2	1533	61165	MG/KG				EPES	18457	28413	NOORGANC
Nichol	FRATE	AAB3518	0	6.1	0.1	25	8.3	15.2	1533	61165	MG/KG	RD			EPES	18457	28413	NOORGANC
Nichol	FRATE	AAB3320	0	6.1	0.1	25	11.5	15.2	1533	61165	MG/KG				EPES	18457	28413	NOORGANC
Nichol	FRATE	AAB3298	0	6.1	0.1	25	7.2	15.2	1533	61165	MG/KG				EPES	18481	28155	NOORGANC
Nichol	FRATE	AAB3298	0	6.1	0.1	25	7.3	15.2	1533	61165	MG/KG				EPES	18481	28155	NOORGANC
Nichol	FRATE	AAB3330	9	6.1	0.1	25	6.2	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3526	0	6.1	0.1	25	8.9	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAC0342	14	15.1	0.1	25	8.7	15.2	1533	61165	MG/KG				EPES	20246	34914	NOORGANC
Nichol	FRATE	AAB3445	0	6.1	0.1	25	11.7	15.2	1533	61165	MG/KG				EPES	18481	28155	NOORGANC
Nichol	FRATE	AAC0330	22	28.1	0.1	25	10.3	15.2	1533	61165	MG/KG				EPES	20246	34914	NOORGANC
Nichol	FRATE	AAB3420	0	6.1	0.1	25	13.9	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAC0346	21	27.1	0.1	25	9.1	15.2	1533	61165	MG/KG				EPES	20147	34491	NOORGANC
Nichol	FRATE	AAB3427	0	6.1	0.1	25	11	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC
Nichol	FRATE	AAB3449	0	6.1	0.1	25	6.6	15.2	1533	61165	MG/KG				EPES	18473	28156	NOORGANC

SAMPLING DATA FOR PRRS 15-004(K)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mst S	Sample Value	Depth Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Setts
Metals	15 2249	AAC0341	35	41	SS	<	7.6	15.2	1533 61109	MG/KG					CPES	20294	29194	INORGANIC
Metals	15 2277	AAB3321	0	5	SS	<	8.5	15.2	1533 61109	MG/KG					CPES	18681	29195	INORGANIC
Metals	15 2278	AAB3254	0	6	SS	<	6.5	15.2	1533 61109	MG/KG					CPES	18679	29196	INORGANIC
Metals	15 2279	AAB3525	0	5	SS	<	9.2	15.2	1533 61109	MG/KG					CPES	18681	29195	INORGANIC
Metals	15 2290	AAC0326	16	17	F	<	12.4	15.2	1533 61109	MG/KG		D			CPES	20774	34497	INORGANIC
Metals	15 2290	AAC0326	16	17	F	<	11.4	15.2	1533 61109	MG/KG					CPES	20774	34497	INORGANIC
Metals	15 2290	AAC0326	9	10	F	<	11.9	15.2	1533 61109	MG/KG					CPES	20774	34497	INORGANIC
Metals	15 2290	AAC0326	0	6	SS	<	16.4	15.2	1533 61109	MG/KG					CPES	20294	34914	INORGANIC
Metals	15 2291	AAC0336	0	6	SS	<	11.1	15.2	1533 61109	MG/KG					CPES	20347	34491	INORGANIC
Metals	15 2295	AAB3325	0	6	SS	<	9.8	15.2	1533 61109	MG/KG	FD				CPES	18681	29195	INORGANIC
Metals	15 2299	AAB3460	18	21	SS	<	11.3	15.2	1533 61109	MG/KG	FD				CPES	18681	29195	INORGANIC
Metals	RNSGATE	AAB3378			W	<	6		100 U/L		BE				CPES	16817	32537	INORGANIC
Metals	RNSGATE	AAB3379			W	<	6		100 U/L		BE				CPES	16817	32537	INORGANIC
Metals	RNSGATE	AAB3380			W	<	7.8		100 U/L		BE				CPES	18444	28236	INORGANIC
Metals	RNSGATE	AAB3381			W	<	7.8		100 U/L		BE				CPES	18457	28413	INORGANIC
Potassium	15 2114	AAB3478	0	6	SS	<	2580	3410		MG/KG					CPES	18681	29195	INORGANIC
Potassium	15 2114	AAB3487	19	24	SS	<	2460	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2123	AAB3521	0	6	SS	<	2210	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2127	AAB3340	18	24	SS	<	2520	3410		MG/KG					CPES	18681	29195	INORGANIC
Potassium	15 2131	AAB3334	0	6	SS	<	2040	3410		MG/KG	FD				CPES	18673	29796	INORGANIC
Potassium	15 2137	AAB3332	18	24	SS	<	1890	3410		MG/KG					CPES	18681	29195	INORGANIC
Potassium	15 2139	AAB3312	17	23	SS	<	1490	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2141	AAB3515	0	4	SS	<	2880	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2145	AAB3452	0	6	SS	<	2820	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2147	AAB3343	18	24	SS	<	1250	3410		MG/KG		D			CPES	18673	29796	INORGANIC
Potassium	15 2149	AAB3327	3	9	SS	<	1680	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2151	AAB3468	18	24	SS	<	2590	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2152	AAB3458	0	5	SS	<	3362	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2152	AAB3458	0	5	SS	<	3010	3410		MG/KG					CPES	18681	29195	INORGANIC
Potassium	15 2153	AAB3304	1	1	F	<	1690	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2153	AAB3344	0	5	SS	<	1760	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2157	AAB3307	19	24	SS	<	2560	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2168	AAB3342	0	4	SS	<	1220	3410		MG/KG					CPES	18681	29195	INORGANIC
Potassium	15 2170	AAB3323	19	24	SS	<	3460	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2172	AAB3477	19	24	SS	<	2320	3410		MG/KG					CPES	18681	29195	INORGANIC
Potassium	15 2173	AAB3324	19	24	SS	<	1850	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2177	AAB3318	0	6	SS	<	934	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2178	AAB3336	0	6	SS	<	719	3410		MG/KG					CPES	18681	29195	INORGANIC
Potassium	15 2179	AAB3472	0	4	SS	<	1780	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2180	AAB3520	6	12	SS	<	2830	3410		MG/KG					CPES	18673	29796	INORGANIC
Potassium	15 2182	AAB3470	19	24	SS	<	3940	3410		MG/KG	FD				CPES	18681	29195	INORGANIC
Potassium	15 2198	AAB3485	0	6	SS	<	2230	3410		MG/KG	FD				CPES	18681	29195	INORGANIC
Potassium	15 2206	AAB3295	0	4	SS	<	563	3410		MG/KG					CPES	18681	29195	INORGANIC
Potassium	15 2226	AAB3478	0	6	SS	<	2550	3410		MG/KG					CPES	18437	28413	INORGANIC

SAMPLING DATA FOR PRS 15-004(i)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Potassium	15 2227	AAB3318	0	6	I	SS		1590	3410		MG/KG	FD				CPES	18457	28413	INORGANIC
Potassium	15 2228	AAB3320	0	6	I	SS		1420	3410		MG/KG					CPES	18457	28413	INORGANIC
Potassium	15 2240	AAB3258	0	6	I	SS		1517	3410		MG/KG		0			CPES	18481	28195	INORGANIC
Potassium	15 2240	AAB3258	0	6	I	SS		1420	3410		MG/KG					CPES	18481	28195	INORGANIC
Potassium	15 2241	AAB3330	0	6	I	SS		1200	3410		MG/KG					CPES	18673	28796	INORGANIC
Potassium	15 2245	AAB3526	0	6	I	SS		1690	3410		MG/KG					CPES	18673	28796	INORGANIC
Potassium	15 2245	AAC0342	14	15	F	SS		1280	3410		MG/KG					CPES	20256	34914	INORGANIC
Potassium	15 2246	AAB3445	0	6	I	SS		2250	3410		MG/KG					CPES	18481	28195	INORGANIC
Potassium	15 2246	AAC0319	22	28	I	SS		1970	3410		MG/KG					CPES	20256	34914	INORGANIC
Potassium	15 2247	AAB3420	0	6	I	SS		1740	3410		MG/KG					CPES	18673	28796	INORGANIC
Potassium	15 2247	AAC0348	21	27	I	SS		2290	3410		MG/KG					CPES	20247	34491	INORGANIC
Potassium	15 2248	AAB3447	0	6	I	SS		1750	3410		MG/KG					CPES	18673	28796	INORGANIC
Potassium	15 2249	AAB3449	0	6	I	SS		1660	3410		MG/KG					CPES	18673	28796	INORGANIC
Potassium	15 2249	AAC0341	35	41	I	SS		1590	3410		MG/KG					CPES	20256	34914	INORGANIC
Potassium	15 2277	AAB3321	0	5	I	SS		2710	3410		MG/KG					CPES	18481	28195	INORGANIC
Potassium	15 2278	AAB3294	0	6	I	SS		1580	3410		MG/KG					CPES	18673	28796	INORGANIC
Potassium	15 2279	AAB3525	0	5	I	SS		2470	3410		MG/KG					CPES	18481	28195	INORGANIC
Potassium	15 2290	AAC0326	16	17	F	SS		2359	3410		MG/KG		D			CPES	20774	34497	INORGANIC
Potassium	15 2290	AAC0326	16	17	F	SS		1900	3410		MG/KG					CPES	20774	34497	INORGANIC
Potassium	15 2290	AAC0327	9	10	F	SS		2900	3410		MG/KG					CPES	20774	34497	INORGANIC
Potassium	15 2290	AAC0328	0	6	I	SS		2150	3410		MG/KG					CPES	20256	34914	INORGANIC
Potassium	15 2291	AAC0336	0	6	I	SS		2120	3410		MG/KG					CPES	20247	34491	INORGANIC
Potassium	15 2295	AAB3325	0	6	I	SS		2170	3410		MG/KG	FU				CPES	18681	28195	INORGANIC
Potassium	15 2299	AAB3480	18	24	I	SS		3150	3410		MG/KG	FD				CPES	18681	28195	INORGANIC
Potassium	FINSTATE	AAB3379				W	<	99			UGL	EB	D			CPES	18817	32537	INORGANIC
Potassium	FINSTATE	AAB3379				W	<	99			UGL	EB				CPES	18817	32537	INORGANIC
Potassium	FINSTATE	AAB3380				W	<	207			UGL	EB				CPES	18444	28236	INORGANIC
Potassium	FINSTATE	AAB3381				W	<	207			UGL	EB				CPES	18457	28413	INORGANIC
Selenium	15 2114	AAB3476	0	6	I	SS	<	0.54	1.7	383.403214	MG/KG					CPES	18681	28195	INORGANIC
Selenium	15 2114	AAB3487	18	24	I	SS	<	0.58	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC
Selenium	15 2123	AAB3521	0	6	I	SS	<	0.53	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC
Selenium	15 2127	AAB3340	18	24	I	SS	<	0.57	1.7	383.403214	MG/KG					CPES	18681	28195	INORGANIC
Selenium	15 2131	AAB3334	0	6	I	SS	<	0.53	1.7	383.403214	MG/KG	FD		LU		CPES	18673	28796	INORGANIC
Selenium	15 2137	AAB3332	18	24	I	SS	<	0.58	1.7	383.403214	MG/KG					CPES	18681	28195	INORGANIC
Selenium	15 2139	AAB3312	17	23	I	SS	<	0.56	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC
Selenium	15 2141	AAB3515	0	4	I	SS	<	0.54	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC
Selenium	15 2145	AAB3452	0	6	I	SS	<	0.54	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC
Selenium	15 2147	AAB3343	18	24	I	SS	<	0.56	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC
Selenium	15 2147	AAB3343	18	24	I	SS	<	0.56	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC
Selenium	15 2149	AAB3327	3	9	I	SS	<	0.55	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC
Selenium	15 2151	AAB3466	18	24	I	SS	<	0.55	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC
Selenium	15 2152	AAB3458	0	5	I	SS	<	0.53	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC
Selenium	15 2152	AAB3458	0	5	I	SS	<	0.53	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC
Selenium	15 2152	AAB3458	0	5	I	SS	<	0.53	1.7	383.403214	MG/KG			D		CPES	18673	28796	INORGANIC
Selenium	15 2153	AAB3304	1	1	F	SS	<	0.56	1.7	383.403214	MG/KG					CPES	18681	28195	INORGANIC
Selenium	15 2153	AAB3344	0	5	I	SS	<	0.53	1.7	383.403214	MG/KG			LU		CPES	18673	28796	INORGANIC

SAMPLING DATA FOR PRS 15-004(7)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mst's	Sample Value	Bkgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Site
Selenium	15-2157	AAB3307	18	24	1	SS	0.56	1.7	383.403214	MGKG			U		CPES	18673	29796	INORGANIC
Selenium	15-2166	AAB3342	0	4	1	SS	0.53	1.7	383.403214	MGKG			U		CPES	18691	29195	INORGANIC
Selenium	15-2170	AAB3323	18	24	1	SS	0.57	1.7	383.403214	MGKG			U		CPES	18673	29796	INORGANIC
Selenium	15-2172	AAB3477	18	24	1	SS	0.63	1.7	383.403214	MGKG			U		CPES	18681	29195	INORGANIC
Selenium	15-2173	AAB3324	18	24	1	SS	0.54	1.7	383.403214	MGKG			U		CPES	18673	29796	INORGANIC
Selenium	15-2177	AAB3316	0	6	1	SS	0.53	1.7	383.403214	MGKG			U		CPES	18681	29195	INORGANIC
Selenium	15-2178	AAB3336	0	6	1	SS	0.53	1.7	383.403214	MGKG			U		CPES	18681	29195	INORGANIC
Selenium	15-2179	AAB3472	0	4	1	SS	0.55	1.7	383.403214	MGKG			U		CPES	18673	29796	INORGANIC
Selenium	15-2180	AAB3520	6	12	1	SS	0.55	1.7	383.403214	MGKG			U		CPES	18673	29796	INORGANIC
Selenium	15-2182	AAB3470	18	24	1	SS	0.59	1.7	383.403214	MGKG	FD				CPES	18681	29195	INORGANIC
Selenium	15-2198	AAB3485	0	6	1	SS	0.53	1.7	383.403214	MGKG	FD				CPES	18681	29195	INORGANIC
Selenium	15-2206	AAB3395	0	4	1	SS	0.53	1.7	383.403214	MGKG					CPES	18681	29195	INORGANIC
Selenium	15-2226	AAB3478	0	6	1	SS	0.57	1.7	383.403214	MGKG					ETVAA	18457	28413	INORGANIC
Selenium	15-2227	AAB3518	0	6	1	SS	0.55	1.7	383.403214	MGKG	FD				ETVAA	18457	28413	INORGANIC
Selenium	15-2228	AAB3320	0	6	1	SS	0.55	1.7	383.403214	MGKG					ETVAA	18457	28413	INORGANIC
Selenium	15-2240	AAB3329	0	6	1	SS	0.56	1.7	383.403214	MGKG					ETVAA	18681	29195	INORGANIC
Selenium	15-2240	AAB3294	0	6	1	SS	0.56	1.7	383.403214	MGKG					CPES	18681	29195	INORGANIC
Selenium	15-2241	AAB3330	0	6	1	SS	0.54	1.7	383.403214	MGKG			U		CPES	18673	29796	INORGANIC
Selenium	15-2245	AAB3526	0	6	1	SS	0.58	1.7	383.403214	MGKG			U		CPES	20296	29796	INORGANIC
Selenium	15-2245	AAC0342	14	15	F	SS	1.4	1.7	383.403214	MGKG					CPES	18681	29195	INORGANIC
Selenium	15-2248	AAB3445	0	6	1	SS	0.56	1.7	383.403214	MGKG					CPES	18681	29195	INORGANIC
Selenium	15-2246	AAC0339	22	28	1	SS	1.3	1.7	383.403214	MGKG					CPES	20296	34914	INORGANIC
Selenium	15-2247	AAB3420	0	6	1	SS	0.59	1.7	383.403214	MGKG			U		CPES	18673	29796	INORGANIC
Selenium	15-2247	AAC0346	21	27	1	SS	0.96	1.7	383.403214	MGKG					CPES	20296	34914	INORGANIC
Selenium	15-2248	AAB3447	0	6	1	SS	0.59	1.7	383.403214	MGKG			U		CPES	18673	29796	INORGANIC
Selenium	15-2249	AAB3449	0	6	1	SS	0.59	1.7	383.403214	MGKG			U		CPES	18673	29796	INORGANIC
Selenium	15-2249	AAC0341	35	41	1	SS	1.3	1.7	383.403214	MGKG					CPES	20296	34914	INORGANIC
Selenium	15-2277	AAB3321	0	5	1	SS	0.55	1.7	383.403214	MGKG			U		CPES	18681	29195	INORGANIC
Selenium	15-2278	AAB3294	0	6	1	SS	0.54	1.7	383.403214	MGKG			U		CPES	18673	29796	INORGANIC
Selenium	15-2279	AAB3525	0	5	1	SS	0.54	1.7	383.403214	MGKG			U		CPES	18681	29195	INORGANIC
Selenium	15-2290	AAC0326	16	17	F	SS	0.95	1.7	383.403214	MGKG					CPES	20774	34497	INORGANIC
Selenium	15-2290	AAC0326	16	17	F	SS	0.95	1.7	383.403214	MGKG					CPES	20774	34497	INORGANIC
Selenium	15-2290	AAC0327	9	10	F	SS	0.95	1.7	383.403214	MGKG					CPES	20774	34497	INORGANIC
Selenium	15-2290	AAC0328	0	6	1	SS	1.4	1.7	383.403214	MGKG					CPES	20296	34914	INORGANIC
Selenium	15-2291	AAC0336	0	6	1	SS	0.54	1.7	383.403214	MGKG					CPES	20347	34497	INORGANIC
Selenium	15-2295	AAB3325	0	6	1	SS	0.54	1.7	383.403214	MGKG					CPES	18681	29195	INORGANIC
Selenium	15-2299	AAB3496	18	24	1	SS	0.58	1.7	383.403214	MGKG	FD				CPES	18681	29195	INORGANIC
Selenium	PRISATE	AAB3379				W	3		50	UGL	FD				CPES	20774	34497	INORGANIC
Selenium	PRISATE	AAB3379				W	3		50	UGL	FD				CPES	20774	34497	INORGANIC
Selenium	PRISATE	AAB3389				W	2.9		50	UGL	FD				CPES	18444	29236	INORGANIC
Selenium	PRISATE	AAB3381				W	2.9		50	UGL	FD				CPES	18457	28413	INORGANIC
Selenium	15-2114	AAB3478	0	6	1	SS	0.62	1.61	383.403214	MGKG					CPES	18681	29195	INORGANIC
Selenium	15-2114	AAB3478	18	24	1	SS	0.67	1.61	383.403214	MGKG					CPES	18673	29796	INORGANIC
Selenium	15-2123	AAB3521	0	6	1	SS	0.62	1.61	383.403214	MGKG					CPES	18673	29796	INORGANIC
Selenium	15-2127	AAB3340	18	24	1	SS	0.66	1.61	383.403214	MGKG					CPES	18681	29195	INORGANIC

SAMPLING DATA FOR PRS 15 004.7)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Silver	15 2131	AAB3334	0	6		SS	<	0.61	1.61	383 403214	MG/KG	FD				CPES	18473	25754	INORGANIC
Silver	15 2137	AAB3332	18	24		SS	<	0.67	1.61	383 403214	MG/KG					CPES	18481	25755	INORGANIC
Silver	15 2139	AAB3332	17	23		SS	<	0.65	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2141	AAB33515	0	6		SS	<	0.62	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2145	AAB3452	0	6		SS	<	0.62	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2147	AAB3343	18	24		SS	<	0.65	1.61	383 403214	MG/KG		0			CPES	18473	25754	INORGANIC
Silver	15 2147	AAB3343	18	24		SS	<	0.65	1.61	383 403214	MG/KG		0			CPES	18473	25754	INORGANIC
Silver	15 2149	AAB3327	3	9		SS	<	0.64	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2151	AAB3466	18	24		SS	<	0.64	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2152	AAB3458	0	5		SS	<	0.62	1.61	383 403214	MG/KG		0			CPES	18473	25754	INORGANIC
Silver	15 2152	AAB3458	0	5		SS	<	0.61	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2153	AAB3364	1	1	F	SS	<	0.65	1.61	383 403214	MG/KG					CPES	18481	25755	INORGANIC
Silver	15 2153	AAB3344	0	5		SS	<	0.61	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2157	AAB3307	18	24		SS	<	0.65	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2164	AAB3342	0	6		SS	<	0.61	1.61	383 403214	MG/KG					CPES	18481	25755	INORGANIC
Silver	15 2170	AAB3323	18	24		SS	<	0.64	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2172	AAB3477	18	24		SS	<	0.72	1.61	383 403214	MG/KG					CPES	18481	25755	INORGANIC
Silver	15 2173	AAB3324	18	24		SS	<	0.62	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2177	AAB3318	0	6		SS	<	0.61	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2178	AAB3335	0	6		SS	<	0.61	1.61	383 403214	MG/KG					CPES	18481	25755	INORGANIC
Silver	15 2179	AAB3472	0	6		SS	<	0.63	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2180	AAB3520	6	12		SS	<	0.64	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2182	AAB3470	18	24		SS	<	0.67	1.61	383 403214	MG/KG	FD				CPES	18481	25755	INORGANIC
Silver	15 2184	AAB3485	0	6		SS	<	0.61	1.61	383 403214	MG/KG	FD				CPES	18481	25755	INORGANIC
Silver	15 2206	AAB3265	0	6		SS	<	0.64	1.61	383 403214	MG/KG					CPES	18481	25755	INORGANIC
Silver	15 2226	AAB3478	0	6		SS	<	0.66	1.61	383 403214	MG/KG					CPES	18457	28413	INORGANIC
Silver	15 2227	AAB3518	0	6		SS	<	0.63	1.61	383 403214	MG/KG	FD				CPES	18457	28413	INORGANIC
Silver	15 2228	AAB3320	0	6		SS	<	0.2	1.61	383 403214	MG/KG					CPES	18457	28413	INORGANIC
Silver	15 2240	AAB3268	0	6		SS	<	0.65	1.61	383 403214	MG/KG		0			CPES	18481	25755	INORGANIC
Silver	15 2240	AAB3268	0	6		SS	<	0.65	1.61	383 403214	MG/KG		0			CPES	18481	25755	INORGANIC
Silver	15 2241	AAB3330	0	6		SS	<	0.62	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2245	AAB3526	0	6		SS	<	0.67	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2245	AAC0342	14	15	F	SS	<	0.77	1.61	383 403214	MG/KG					CPES	20256	34814	INORGANIC
Silver	15 2246	AAB3445	0	6		SS	<	0.65	1.61	383 403214	MG/KG					CPES	18481	25755	INORGANIC
Silver	15 2246	AAC0339	22	28		SS	<	0.81	1.61	383 403214	MG/KG					CPES	20256	34814	INORGANIC
Silver	15 2247	AAB3420	0	6		SS	<	0.68	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2247	AAC0346	21	27		SS	<	0.23	1.61	383 403214	MG/KG					CPES	20347	34491	INORGANIC
Silver	15 2248	AAB3447	0	6		SS	<	0.68	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2249	AAB3449	0	6		SS	<	24.1	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2249	AAC0341	35	41		SS	<	0.82	1.61	383 403214	MG/KG					CPES	20256	34814	INORGANIC
Silver	15 2277	AAB3321	0	5		SS	<	0.53	1.61	383 403214	MG/KG					CPES	18481	25755	INORGANIC
Silver	15 2278	AAB3264	0	6		SS	<	0.62	1.61	383 403214	MG/KG					CPES	18473	25754	INORGANIC
Silver	15 2278	AAB3525	0	5		SS	<	0.62	1.61	383 403214	MG/KG					CPES	18481	25755	INORGANIC
Silver	15 2280	AAC0326	16	17	F	SS	<	0.81	1.61	383 403214	MG/KG					CPES	20774	34497	INORGANIC
Silver	15 2280	AAC0326	16	17	F	SS	<	0.81	1.61	383 403214	MG/KG		0			CPES	20774	34497	INORGANIC

SAMPLING DATA FOR PRS 15-004(T)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met	S	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Notes
Silver	15-2290	AAC0327	9	10	F	SS	<	0.66	1.61	383.403214	MG/KG					CPES	20774	34497	INORGANIC
Silver	15-2290	AAC0328	0	6		SS	<	0.84	1.61	383.403214	MG/KG					CPES	20298	34914	INORGANIC
Silver	15-2291	AAC0336	0	6		SS	<	0.23	1.61	383.403214	MG/KG					CPES	20347	34481	INORGANIC
Silver	15-2295	AAB3325	0	6		SS	<	4.1	1.61	383.403214	MG/KG	FD		J		CPES	18681	29195	INORGANIC
Silver	15-2296	AAB3480	18	24		SS	<	0.67	1.61	383.403214	MG/KG	FD				CPES	18681	29195	INORGANIC
Silver	RIMSATE	AAB3379				W	<	3		170	UG/L	EB	O			CPES	18817	32537	INORGANIC
Silver	RIMSATE	AAB3379				W	<	3		170	UG/L	EB				CPES	18817	32537	INORGANIC
Silver	RIMSATE	AAB3380				W	<	3.3		170	UG/L	EB				CPES	18444	28236	INORGANIC
Silver	RIMSATE	AAB3381				W	<	3.3		170	UG/L	EB				CPES	18457	28413	INORGANIC
Sodium	15-2114	AAB3476	0	6		SS	<	94.8	915		MG/KG					CPES	18681	29195	INORGANIC
Sodium	15-2114	AAB3487	18	24		SS	<	361	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2123	AAB3521	0	6		SS	<	81.8	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2127	AAB3340	18	24		SS	<	146	915		MG/KG					CPES	18681	29195	INORGANIC
Sodium	15-2131	AAB3334	0	6		SS	<	106	915		MG/KG	FD				CPES	18673	29796	INORGANIC
Sodium	15-2137	AAB3332	18	24		SS	<	1340	915		MG/KG			J		CPES	18681	29195	INORGANIC
Sodium	15-2139	AAB3312	17	23		SS	<	1290	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2141	AAB3515	0	4		SS	<	122	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2145	AAB3452	0	6		SS	<	117	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2147	AAB3343	18	24		SS	<	202	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2147	AAB3343	18	24		SS	<	238	915		MG/KG		O			CPES	18673	29796	INORGANIC
Sodium	15-2149	AAB3327	3	9		SS	<	234	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2151	AAB3466	18	24		SS	<	117	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2152	AAB3458	0	5		SS	<	133	915		MG/KG		O			CPES	18673	29796	INORGANIC
Sodium	15-2152	AAB3458	0	5		SS	<	143	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2153	AAB3304	1	3	F	SS	<	194	915		MG/KG					CPES	18681	29195	INORGANIC
Sodium	15-2153	AAB3344	0	5		SS	<	81.7	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2157	AAB3307	18	24		SS	<	189	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2166	AAB3342	0	4		SS	<	96.1	915		MG/KG					CPES	18681	29195	INORGANIC
Sodium	15-2170	AAB3323	18	24		SS	<	685	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2172	AAB3477	18	24		SS	<	1240	915		MG/KG			J		CPES	18681	29195	INORGANIC
Sodium	15-2173	AAB3324	18	24		SS	<	433	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2177	AAB3318	0	6		SS	<	112	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2178	AAB3336	0	6		SS	<	86.5	915		MG/KG					CPES	18681	29195	INORGANIC
Sodium	15-2179	AAB3472	0	4		SS	<	101	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2180	AAB3520	6	12		SS	<	137	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2182	AAB3470	18	24		SS	<	1290	915		MG/KG	FD		J		CPES	18681	29195	INORGANIC
Sodium	15-2198	AAB3485	0	6		SS	<	111	915		MG/KG	FD				CPES	18681	29195	INORGANIC
Sodium	15-2208	AAB3295	0	4		SS	<	128	915		MG/KG					CPES	18681	29195	INORGANIC
Sodium	15-2226	AAB3478	0	6		SS	<	141	915		MG/KG					CPES	18457	28413	INORGANIC
Sodium	15-2227	AAB3518	0	6		SS	<	93.4	915		MG/KG	FD				CPES	18457	28413	INORGANIC
Sodium	15-2228	AAB3329	0	6		SS	<	143	915		MG/KG					CPES	18457	28413	INORGANIC
Sodium	15-2240	AAB3298	0	6		SS	<	139	915		MG/KG			O		CPES	18681	29195	INORGANIC
Sodium	15-2240	AAB3298	0	6		SS	<	110	915		MG/KG					CPES	18681	29195	INORGANIC
Sodium	15-2241	AAB3330	0	6		SS	<	146	915		MG/KG					CPES	18673	29796	INORGANIC
Sodium	15-2245	AAB3526	0	6		SS	<	166	915		MG/KG					CPES	18673	29796	INORGANIC

SAMPLING DATA FOR PRRS 15-064(J)

Analyte	Loc ID	Sample ID	Begin	End	Units	Rate	Sample Value	Spkg Value	SAL Value	Unit	Field Code	Lab Code	EPA Our	Sample Location	Tech Code	Request Number	Report Number	Soils
Sodium	15 2245	AAB3147	14	15	F	25	3.8	915		MSYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2246	AAB1445	0	6	F	25	156	915		MSYD				EFES	18681	29796	20256	INORGANIC
Sodium	15 2246	AAC0339	22	24	F	25	332	915		MSYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2247	AAB1423	0	6	F	25	256	915		MSYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2247	AAC0344	21	27	F	25	188	915		MSYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2248	AAB1447	0	6	F	25	172	915		MSYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2248	AAB1449	0	6	F	25	111	915		MSYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2248	AAC0341	35	41	F	25	233	915		MSYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2277	AAB3321	0	5	F	25	325	915		MGYD				EFES	18681	29796	20256	INORGANIC
Sodium	15 2278	AAB1294	0	6	F	25	115	915		MGYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2279	AAB1525	0	5	F	25	186	915		MGYD				EFES	18681	29796	20256	INORGANIC
Sodium	15 2290	AAC0224	16	17	F	25	440	915		MGYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2290	AAC0326	16	17	F	25	448	915		MGYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2290	AAC0327	0	10	F	25	337	915		MGYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2290	AAC0328	0	10	F	25	267	915		MGYD				EFES	18673	29796	20256	INORGANIC
Sodium	15 2291	AAC0334	0	6	F	25	351	915		MGYD				EFES	18681	29796	20256	INORGANIC
Sodium	15 2295	AAB3325	0	6	F	25	87.4	915		MGYD	PO			EFES	18681	29796	20256	INORGANIC
Sodium	15 2296	AAB1446	18	24	F	25	1160	915		UGL	BB			EFES	18681	29796	20256	INORGANIC
Sodium	FWGATE	AAB3379				W	1160			UGL	BB			EFES	18681	29796	20256	INORGANIC
Sodium	FWGATE	AAB3379				W	1125			UGL	BB			EFES	18681	29796	20256	INORGANIC
Sodium	FWGATE	AAB3380				W	211			UGL	BB			EFES	18644	28216	20256	INORGANIC
Sodium	FWGATE	AAB3381				W	211			UGL	BB			EFES	18657	28413	20256	INORGANIC
Thallium	15 2114	AAB1476	0	6	F	25	0.64	1		MGYD				EFES	18681	29796	20256	INORGANIC
Thallium	15 2114	AAB2487	18	24	F	25	1	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2123	AAB1521	0	6	F	25	1	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2123	AAB1540	18	24	F	25	0.68	1		MGYD				EFES	18681	29796	20256	INORGANIC
Thallium	15 2131	AAB3334	0	6	F	25	0.93	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2137	AAB3332	18	24	F	25	0.69	1		MGYD				EFES	18681	29796	20256	INORGANIC
Thallium	15 2139	AAB3312	17	23	F	25	0.94	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2141	AAB1515	0	4	F	25	1.4	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2145	AAB3452	0	6	F	25	0.67	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2147	AAB3343	18	24	F	25	0.59	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2149	AAB3327	3	5	F	25	0.66	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2151	AAB1446	18	24	F	25	1.1	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2152	AAB3458	0	5	F	25	0.64	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2152	AAB3458	0	5	F	25	0.64	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2153	AAB3454	1	1	F	25	0.67	1		MGYD				EFES	18681	29796	20256	INORGANIC
Thallium	15 2153	AAB3444	0	5	F	25	0.74	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2166	AAB3327	18	24	F	25	0.97	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2166	AAB3342	0	4	F	25	0.63	1		MGYD				EFES	18681	29796	20256	INORGANIC
Thallium	15 2170	AAB3323	18	24	F	25	1	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2172	AAB1477	18	24	F	25	0.75	1		MGYD				EFES	18681	29796	20256	INORGANIC
Thallium	15 2173	AAB3324	18	24	F	25	2	1		MGYD				EFES	18673	29796	20256	INORGANIC
Thallium	15 2177	AAB3318	0	6	F	25	0.63	1		MSYD				EFES	18673	29796	20256	INORGANIC

SAMPLING DATA FOR PRS 15-004(7)

Analyte	Loc ID	Sample ID	Depth	End	Unit	Mel	S	Sample Values	Depth Values	SAL Values	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Salts
Thallium	15 2178	AAB3336	0	6		SS	<	0.63			MG/KG					CPES	18681	29195	INORGANIC
Thallium	15 2179	AAB3472	0	4		SS	<	0.89			MG/KG					CPES	18673	29796	INORGANIC
Thallium	15 2180	AAB3520	6	12		SS	<	1.1			MG/KG					CPES	18673	29796	INORGANIC
Thallium	15 2182	AAB3470	18	24		SS	<	0.69			MG/KG	FD				CPES	18681	29195	INORGANIC
Thallium	15 2184	AAB3485	0	6		SS	<	0.63			MG/KG	FD				CPES	18681	29195	INORGANIC
Thallium	15 2206	AAB3295	0	4		SS	<	0.63			MG/KG					CPES	18681	29195	INORGANIC
Thallium	15 2226	AAB3478	0	6		SS	<	0.48			MG/KG					ETVAA	18457	28411	INORGANIC
Thallium	15 2227	AAB3518	0	6		SS	<	0.46			MG/KG	FD				ETVAA	18457	28411	INORGANIC
Thallium	15 2228	AAB3329	0	6		SS	<	0.46			MG/KG		D			ETVAA	18457	28411	INORGANIC
Thallium	15 2240	AAB3296	0	6		SS	<	0.67			MG/KG					CPES	18681	29195	INORGANIC
Thallium	15 2240	AAB3299	0	6		SS	<	0.67			MG/KG					CPES	18681	29195	INORGANIC
Thallium	15 2241	AAB3330	0	6		SS	<	0.9			MG/KG					CPES	18673	29796	INORGANIC
Thallium	15 2244	AAC0334	14	14	F	SS	<	0.9			MG/KG					CPES	20296	34914	INORGANIC
Thallium	15 2245	AAB3526	0	6		SS	<	2.2			MG/KG					CPES	18673	29796	INORGANIC
Thallium	15 2245	AAC0342	14	15	F	SS	<	0.71			MG/KG					CPES	20296	34914	INORGANIC
Thallium	15 2246	AAB3445	0	6		SS	<	0.67			MG/KG					CPES	18681	29195	INORGANIC
Thallium	15 2246	AAC0339	22	28		SS	<	0.75			MG/KG					CPES	20296	34914	INORGANIC
Thallium	15 2247	AAB3429	0	6		SS	<	0.7			MG/KG					CPES	18673	29796	INORGANIC
Thallium	15 2247	AAC0346	21	27		SS	<	0.91			MG/KG					CPES	20347	34491	INORGANIC
Thallium	15 2248	AAB3447	0	6		SS	<	0.7			MG/KG					CPES	18673	29796	INORGANIC
Thallium	15 2249	AAB3449	0	6		SS	<	0.7			MG/KG					CPES	18673	29796	INORGANIC
Thallium	15 2249	AAC0341	33	41		SS	<	0.76			MG/KG					CPES	20296	34914	INORGANIC
Thallium	15 2277	AAB3321	0	6		SS	<	0.65			MG/KG					CPES	18681	29195	INORGANIC
Thallium	15 2278	AAB3594	0	6		SS	<	0.64			MG/KG					CPES	18673	29796	INORGANIC
Thallium	15 2279	AAB3525	0	6		SS	<	0.84			MG/KG		D			CPES	18681	29195	INORGANIC
Thallium	15 2290	AAC0326	16	17	F	SS	<	0.9			MG/KG					CPES	20774	34497	INORGANIC
Thallium	15 2290	AAC0327	16	17	F	SS	<	0.9			MG/KG					CPES	20774	34497	INORGANIC
Thallium	15 2290	AAC0328	9	10	F	SS	<	0.9			MG/KG					CPES	20774	34497	INORGANIC
Thallium	15 2290	AAC0328	0	6		SS	<	0.77			MG/KG					CPES	20296	34914	INORGANIC
Thallium	15 2291	AAC0336	0	6		SS	<	0.95			MG/KG					CPES	20347	34491	INORGANIC
Thallium	15 2295	AAB3325	0	6		SS	<	0.84			MG/KG					CPES	18681	29195	INORGANIC
Thallium	15 2299	AAB3480	18	24		SS	<	0.89			MG/KG	FD				CPES	18681	29195	INORGANIC
Thallium	PRNSATE	AAB3379	0	6		W	<	1			2 UGL	BB				CPMS	18812	32517	INORGANIC
Thallium	PRNSATE	AAB3379	0	6		W	<	1			2 UGL	BB				CPMS	18817	32517	INORGANIC
Thallium	PRNSATE	AAB3380	0	6		W	<	2.4			2 UGL	BB				ETVAA	18444	28236	INORGANIC
Thallium	PRNSATE	AAB3381	0	6		W	<	2.4			2 UGL	BB				ETVAA	18457	28411	INORGANIC
Vanadium	15 2114	AAB3476	0	6		SS	<	58.1	41.9	535 764418	MG/KG			J		CPES	18681	29195	INORGANIC
Vanadium	15 2114	AAB3487	19	24		SS	<	36.3	41.9	535 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2123	AAB3521	0	6		SS	<	29.9	41.9	535 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2127	AAB3340	19	24		SS	<	22.7	41.9	535 764418	MG/KG					CPES	18681	29195	INORGANIC
Vanadium	15 2131	AAB3334	0	6		SS	<	16.7	41.9	535 764418	MG/KG	FD				CPES	18673	29796	INORGANIC
Vanadium	15 2137	AAB3332	18	24		SS	<	33.7	41.9	535 764418	MG/KG					CPES	18681	29195	INORGANIC
Vanadium	15 2139	AAB3332	17	23		SS	<	24.2	41.9	535 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2141	AAB3515	0	4		SS	<	30.1	41.9	535 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2145	AAB3452	0	6		SS	<	2.7	41.9	535 764418	MG/KG					CPES	18673	29796	INORGANIC

SAMPLING DATA FOR PRS 15-004(f)

Analyte	Loc ID	Sample ID	Segtn	Ernd	Units	Mat	S	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Vanadium	15 2147	AAB3343	18	24	1	SS		21.4	41.9	536 764418	MG/KG		D			CPES	18673	29796	INORGANIC
Vanadium	15 2147	AAB3343	18	24	1	SS		16.3	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2149	AAB3327	3	9	1	SS		22	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2151	AAB3445	18	24	1	SS		31.5	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2152	AAB3458	0	5	1	SS		34.8	41.9	536 764418	MG/KG		D			CPES	18673	29796	INORGANIC
Vanadium	15 2152	AAB3458	0	5	1	SS		30.7	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2153	AAB3304	1	1	F	SS		31.5	41.9	536 764418	MG/KG		J			CPES	18681	29195	INORGANIC
Vanadium	15 2151	AAB3344	0	5	1	SS		24.8	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2157	AAB3307	18	24	1	SS		23.6	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2164	AAB3342	0	4	1	SS		12.4	41.9	536 764418	MG/KG		J			CPES	18681	29195	INORGANIC
Vanadium	15 2170	AAB3323	18	24	1	SS		25.5	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2172	AAB3477	18	24	1	SS		22.2	41.9	536 764418	MG/KG		J			CPES	18681	29195	INORGANIC
Vanadium	15 2173	AAB3324	18	24	1	SS		18.7	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2177	AAB3318	0	6	1	SS		8.9	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2178	AAB3336	0	6	1	SS		6.5	41.9	536 764418	MG/KG					CPES	18681	29195	INORGANIC
Vanadium	15 2179	AAB3472	0	4	1	SS		15.7	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2180	AAB3520	0	12	1	SS		20.1	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2182	AAB3470	18	24	1	SS		26	41.9	536 764418	MG/KG	FD		J		CPES	18681	29195	INORGANIC
Vanadium	15 2168	AAB3485	0	6	1	SS		18	41.9	536 764418	MG/KG	FD		J		CPES	18681	29195	INORGANIC
Vanadium	15 2206	AAB3295	0	4	1	SS		7.3	41.9	536 764418	MG/KG					CPES	18681	29195	INORGANIC
Vanadium	15 2226	AAB3478	0	6	1	SS		29.5	41.9	536 764418	MG/KG					CPES	18457	28413	INORGANIC
Vanadium	15 2227	AAB3518	0	6	1	SS		24	41.9	536 764418	MG/KG	FD				CPES	18457	28413	INORGANIC
Vanadium	15 2228	AAB3320	0	6	1	SS		11.6	41.9	536 764418	MG/KG					CPES	18457	28413	INORGANIC
Vanadium	15 2240	AAB3258	0	6	1	SS		20.1	41.9	536 764418	MG/KG			J		CPES	18681	29195	INORGANIC
Vanadium	15 2240	AAB3258	0	6	1	SS		22	41.9	536 764418	MG/KG		D			CPES	18681	29195	INORGANIC
Vanadium	15 2241	AAB3330	0	6	1	SS		20.9	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2244	AAC0334	14	14	F	SS		42.3	41.9	536 764418	MG/KG					CPES	20774	34497	INORGANIC
Vanadium	15 2245	AAB3526	0	6	1	SS		31.7	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2245	AAC0342	14	15	F	SS		16	41.9	536 764418	MG/KG					CPES	20296	34914	INORGANIC
Vanadium	15 2246	AAB3445	0	6	1	SS		25.6	41.9	536 764418	MG/KG			J		CPES	18681	29195	INORGANIC
Vanadium	15 2246	AAC0339	22	28	1	SS		28.9	41.9	536 764418	MG/KG					CPES	20296	34914	INORGANIC
Vanadium	15 2247	AAB3420	0	6	1	SS		18	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2257	AAC0346	21	27	1	SS		24.2	41.9	536 764418	MG/KG					CPES	20347	34491	INORGANIC
Vanadium	15 2248	AAB3447	0	6	1	SS		27.3	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2249	AAB3449	0	6	1	SS		21.2	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2249	AAC0341	35	41	1	SS		25.9	41.9	536 764418	MG/KG					CPES	20296	34914	INORGANIC
Vanadium	15 2277	AAB3321	0	5	1	SS		25.1	41.9	536 764418	MG/KG			J		CPES	18681	29195	INORGANIC
Vanadium	15 2278	AAB3254	0	6	1	SS		23.6	41.9	536 764418	MG/KG					CPES	18673	29796	INORGANIC
Vanadium	15 2279	AAB3525	0	5	1	SS		28.1	41.9	536 764418	MG/KG			J		CPES	18681	29195	INORGANIC
Vanadium	15 2290	AAC0326	16	17	F	SS		31.6	41.9	536 764418	MG/KG		D			CPES	20774	34497	INORGANIC
Vanadium	15 2293	AAC0326	16	17	F	SS		27.9	41.9	536 764418	MG/KG					CPES	20774	34497	INORGANIC
Vanadium	15 2290	AAC0327	9	10	F	SS		35.3	41.9	536 764418	MG/KG					CPES	20774	34497	INORGANIC
Vanadium	15 2290	AAC0328	0	6	1	SS		33.8	41.9	536 764418	MG/KG					CPES	20296	34914	INORGANIC
Vanadium	15 2291	AAC0336	0	6	1	SS		30.8	41.9	536 764418	MG/KG					CPES	20347	34491	INORGANIC
Vanadium	15 2295	AAB3325	0	6	1	SS		27.8	41.9	536 764418	MG/KG	FD		J		CPES	18681	29195	INORGANIC

SAMPLING DATA FOR PRS 15-004(1)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Std Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Site
Vanadium	15 2299	AAB3480	18	24		SS		23.4	41.9	536 764418	MG/KG	FD		J		CPES	18681	29195	INORGANIC
Vanadium	RMSATE	AAB3379				W		5		240	UG/L	EB	D			CPES	18617	32537	INORGANIC
Vanadium	RMSATE	AAB3379				W		5		240	UG/L	EB				CPES	18617	32537	INORGANIC
Vanadium	RMSATE	AAB3380				W		8.9		240	UG/L	EB				CPES	18444	28236	INORGANIC
Vanadium	RMSATE	AAB3381				W		8.9		240	UG/L	EB				CPES	18457	28413	INORGANIC
Zinc	15 2114	AAB3476	0	6		SS		33.6	50.8	23003.6725	MG/KG					CPES	18681	29195	INORGANIC
Zinc	15 2114	AAB3487	18	24		SS		37.7	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2123	AAB3521	0	6		SS		32.2	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2127	AAB3340	18	24		SS		25.5	50.8	23003.6725	MG/KG					CPES	18681	29195	INORGANIC
Zinc	15 2131	AAB3334	0	6		SS		28.6	50.8	23003.6725	MG/KG	FD		J		CPES	18673	29796	INORGANIC
Zinc	15 2137	AAB3332	18	24		SS		31.3	50.8	23003.6725	MG/KG					CPES	18681	29195	INORGANIC
Zinc	15 2139	AAB3312	17	23		SS		30.9	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2141	AAB3515	0	4		SS		66.4	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2145	AAB3452	0	6		SS		34.2	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2147	AAB3343	18	24		SS		26.9	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2147	AAB3343	18	24		SS		21	50.8	23003.6725	MG/KG			D		CPES	18673	29796	INORGANIC
Zinc	15 2149	AAB3327	3	9		SS		40.3	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2151	AAB3466	18	24		SS		44.5	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2152	AAB3458	0	5		SS		51.6	50.8	23003.6725	MG/KG			D		CPES	18673	29796	INORGANIC
Zinc	15 2152	AAB3458	0	5		SS		48.5	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2153	AAB3304	1	1	F	SS		30	50.8	23003.6725	MG/KG					CPES	18681	29195	INORGANIC
Zinc	15 2153	AAB3344	0	5		SS		26.7	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2157	AAB3307	18	24		SS		26.8	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2166	AAB3342	0	4		SS		30.7	50.8	23003.6725	MG/KG					CPES	18681	29195	INORGANIC
Zinc	15 2170	AAB3323	18	24		SS		45.6	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2172	AAB3477	18	24		SS		31.5	50.8	23003.6725	MG/KG					CPES	18681	29195	INORGANIC
Zinc	15 2173	AAB3324	18	24		SS		32.8	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2177	AAB3318	0	6		SS		39.7	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2178	AAB3336	0	6		SS		28.2	50.8	23003.6725	MG/KG			J		CPES	18681	29195	INORGANIC
Zinc	15 2179	AAB3472	0	4		SS		33.6	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2180	AAB3520	6	12		SS		33.3	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2182	AAB3470	18	24		SS		40.7	50.8	23003.6725	MG/KG	FD				CPES	18681	29195	INORGANIC
Zinc	15 2190	AAB3485	0	6		SS		32.5	50.8	23003.6725	MG/KG	FD				CPES	18681	29195	INORGANIC
Zinc	15 2206	AAB3295	0	4		SS		28.3	50.8	23003.6725	MG/KG					CPES	18681	29195	INORGANIC
Zinc	15 2226	AAB3478	0	3		SS		48.8	50.8	23003.6725	MG/KG					CPES	18457	28413	INORGANIC
Zinc	15 2227	AAB3518	0	6		SS		35.7	50.8	23003.6725	MG/KG	FD				CPES	18457	28413	INORGANIC
Zinc	15 2228	AAB3320	0	6		SS		130	50.8	23003.6725	MG/KG					CPES	18681	29195	INORGANIC
Zinc	15 2240	AAB3298	0	6		SS		31.2	50.8	23003.6725	MG/KG					CPES	18681	29195	INORGANIC
Zinc	15 2240	AAB3298	0	6		SS		31	50.8	23003.6725	MG/KG			D		CPES	18691	29195	INORGANIC
Zinc	15 2241	AAB3330	0	6		SS		28.9	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2244	AAC0334	14	14	F	SS		55.5	50.8	23003.6725	MG/KG					CPES	20774	34497	INORGANIC
Zinc	15 2245	AAB3526	0	6		SS		32.8	50.8	23003.6725	MG/KG			J		CPES	18673	29796	INORGANIC
Zinc	15 2245	AAC0342	14	15	F	SS		45.2	50.8	23003.6725	MG/KG					CPES	20296	34914	INORGANIC
Zinc	15 2246	AAB3445	0	6		SS		52.1	50.8	23003.6725	MG/KG					CPES	18681	29195	INORGANIC
Zinc	15 2246	AAC0339	22	28		SS		47.9	50.8	23003.6725	MG/KG					CPES	20296	34914	INORGANIC

SAMPLING DATA FOR PWS 15-004(J)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bagg Value	SAL Value	Units	F-Mat Code	Lab Code	EPA Qual	Sample Location	Yach Code	Request Number	Report Number	Suite
Zinc	15-2247	AAB3420	0	61	SS		SS	251	50.8	21503	6725	MG/KG		J		EPES	18473	28774	INCORGANIC
Zinc	15-2247	AAC0322	21	27	SS		SS	415	50.8	21503	6725	MG/KG		J		EPES	20187	34451	INCORGANIC
Zinc	15-2248	AAB3447	0	61	SS		SS	113	50.8	21503	6725	MG/KG		J		EPES	18473	28774	INCORGANIC
Zinc	15-2249	AAB3449	0	61	SS		SS	715	50.8	21503	6725	MG/KG		J		EPES	18473	28774	INCORGANIC
Zinc	15-2249	AAC0341	35	41	SS		SS	64.8	50.8	21503	6725	MG/KG		J		EPES	20224	34514	INCORGANIC
Zinc	15-2277	AAB3321	0	51	SS		SS	41.6	50.8	21503	6725	MG/KG		J		EPES	18469	28725	INCORGANIC
Zinc	15-2278	AAB3254	0	61	SS		SS	27.3	50.8	21503	6725	MG/KG		J		EPES	18473	28774	INCORGANIC
Zinc	15-2279	AAB3525	0	51	SS		SS	31.2	50.8	21503	6725	MG/KG		J		EPES	18481	28754	INCORGANIC
Zinc	15-2280	AAC0326	16	17	F		SS	37.4	50.8	21503	6725	MG/KG		J		EPES	20774	34457	INCORGANIC
Zinc	15-2280	AAC0326	16	17	F		SS	38.6	50.8	21503	6725	MG/KG		J		EPES	20774	34457	INCORGANIC
Zinc	15-2280	AAC0327	9	10	F		SS	46.6	50.8	21503	6725	MG/KG		J		EPES	20774	34457	INCORGANIC
Zinc	15-2280	AAC0328	6	61	SS		SS	57.4	50.8	21503	6725	MG/KG		J		EPES	20224	34514	INCORGANIC
Zinc	15-2281	AAC0334	0	61	SS		SS	38.8	50.8	21503	6725	MG/KG		J		EPES	18481	28755	INCORGANIC
Zinc	15-2285	AAB3325	0	61	SS		SS	34.4	50.8	21503	6725	MG/KG	RD			EPES	18481	28755	INCORGANIC
Zinc	15-2285	AAB3440	18	24	SS		SS	32.7	50.8	21503	6725	MG/KG	RD			EPES	18481	28755	INCORGANIC
Zinc	PNSEATE	AAB3379			W		W	145		10000	UG/L	BB				EPES	18417	32517	INCORGANIC
Zinc	PNSEATE	AAB3379			W		W	147		10000	UG/L	BB				EPES	18417	32517	INCORGANIC
Zinc	PNSEATE	AAB3380			W		W	23.2		10000	UG/L	BB				EPES	18444	32316	INCORGANIC
Zinc	PNSEATE	AAB3381			W		W	8.0		10000	UG/L	BB				EPES	18457	28413	INCORGANIC
Amino 2,6 dihydroxybenzene [1]	15-2137	AAB3322	18	24	SS		SS	0.952			MG/KG					HPLC	18469	31503	ORGANIC
Amino 2,6 dihydroxybenzene [1]	15-2151	AAB3466	18	24	SS		SS	0.952			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [1]	15-2172	AAB3477	18	24	SS		SS	0.952			MG/KG					HPLC	18469	31503	ORGANIC
Amino 2,6 dihydroxybenzene [1]	15-2180	AAB3520	6	12	SS		SS	0.953			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [1]	15-2245	AAB3254	0	61	SS		SS	0.952			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [1]	15-2246	AAB3445	0	61	SS		SS	0.952			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [1]	15-2247	AAB3420	0	61	SS		SS	0.952			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [1]	15-2248	AAB3449	0	61	SS		SS	0.952			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [1]	15-2278	AAB3254	0	61	SS		SS	0.951			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [1]	15-2137	AAB3322	18	24	SS		SS	0.976			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [2]	15-2172	AAB3466	18	24	SS		SS	0.977			MG/KG					HPLC	18469	31503	ORGANIC
Amino 2,6 dihydroxybenzene [2]	15-2180	AAB3520	6	12	SS		SS	0.977			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [2]	15-2245	AAB3254	0	61	SS		SS	0.977			MG/KG					HPLC	18469	31503	ORGANIC
Amino 2,6 dihydroxybenzene [2]	15-2246	AAB3445	0	61	SS		SS	0.977			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [2]	15-2247	AAB3420	0	61	SS		SS	0.976			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [2]	15-2248	AAB3447	0	61	SS		SS	0.977			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [2]	15-2249	AAB3449	0	61	SS		SS	0.976			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [2]	15-2278	AAB3254	0	61	SS		SS	0.976			MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [2]	15-2137	AAB3322	18	24	SS		SS	0.951			MG/KG					HPLC	18469	31503	ORGANIC
Amino 2,6 dihydroxybenzene [1,3]	15-2151	AAB3466	18	24	SS		SS	0.951		6.517245	MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [1,3]	15-2172	AAB3477	18	24	SS		SS	0.951		6.517585	MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [1,3]	15-2180	AAB3520	6	12	SS		SS	0.951		6.517585	MG/KG					HPLC	18469	31503	ORGANIC
Amino 2,6 dihydroxybenzene [1,3]	15-2245	AAB3254	0	61	SS		SS	0.951		6.517585	MG/KG					HPLC	18450	24625	ORGANIC
Amino 2,6 dihydroxybenzene [1,3]	15-2246	AAB3445	0	61	SS		SS	0.951		6.517585	MG/KG					HPLC	18469	31503	ORGANIC
Amino 2,6 dihydroxybenzene [1,3]	15-2247	AAB3420	0	61	SS		SS	0.951		6.517585	MG/KG					HPLC	18450	24625	ORGANIC

SAMPLING DATA FOR PRS 15-004(f)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Detgd Value	SAL Value	Units	Field Code	Lab Code	EPA Quid	Sample Location	Tech Code	Request Number	Report Number	State
Dinitrobenzene [1,3]	15 2240	AAB3298	0	6		SS	<	0.06		6 5177985	MG/KG					HPLC	18469	31503	ORGANIC
Dinitrobenzene [1,3]	15 2245	AAB3526	0	6		SS	<	0.061		6 5177985	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrobenzene [1,3]	15 2246	AAB3445	0	6		SS	<	0.061		6 5177985	MG/KG					HPLC	18469	31503	ORGANIC
Dinitrobenzene [1,3]	15 2247	AAB3420	0	6		SS	<	0.061		6 5177985	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrobenzene [1,3]	15 2248	AAB3447	0	6		SS	<	0.061		6 5177985	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrobenzene [1,3]	15 2249	AAB3449	0	6		SS	<	0.061		6 5177985	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrobenzene [1,3]	15 2278	AAB3294	0	6		SS	<	0.06		6 5177985	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,4]	15 2137	AAB3332	18	24		SS	<	0.055		130 35597	MG/KG					HPLC	18469	31503	ORGANIC
Dinitrotoluene [2,4]	15 2151	AAB3466	18	24		SS	<	0.055		130 35597	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,4]	15 2172	AAB3477	18	24		SS	<	0.055		130 35597	MG/KG					HPLC	18469	31503	ORGANIC
Dinitrotoluene [2,4]	15 2180	AAB3520	6	12		SS	<	0.056		130 35597	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,4]	15 2240	AAB3298	0	6		SS	<	0.054		130 35597	MG/KG					HPLC	18469	31503	ORGANIC
Dinitrotoluene [2,4]	15 2245	AAB3526	0	6		SS	<	0.055		130 35597	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,4]	15 2246	AAB3445	0	6		SS	<	0.055		130 35597	MG/KG					HPLC	18469	31503	ORGANIC
Dinitrotoluene [2,4]	15 2247	AAB3420	0	6		SS	<	0.055		130 35597	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,4]	15 2248	AAB3447	0	6		SS	<	0.055		130 35597	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,4]	15 2249	AAB3449	0	6		SS	<	0.055		130 35597	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,4]	15 2278	AAB3294	0	6		SS	<	0.054		130 35597	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,6]	15 2137	AAB3332	18	24		SS	<	0.082		65 1779849	MG/KG					HPLC	18469	31503	ORGANIC
Dinitrotoluene [2,6]	15 2151	AAB3466	18	24		SS	<	0.082		65 1779849	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,6]	15 2172	AAB3477	18	24		SS	<	0.082		65 1779849	MG/KG					HPLC	18469	31503	ORGANIC
Dinitrotoluene [2,6]	15 2180	AAB3520	6	12		SS	<	0.083		65 1779849	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,6]	15 2240	AAB3298	0	6		SS	<	0.081		65 1779849	MG/KG					HPLC	18469	31503	ORGANIC
Dinitrotoluene [2,6]	15 2245	AAB3526	0	6		SS	<	0.082		65 1779849	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,6]	15 2246	AAB3445	0	6		SS	<	0.082		65 1779849	MG/KG					HPLC	18469	31503	ORGANIC
Dinitrotoluene [2,6]	15 2247	AAB3420	0	6		SS	<	0.082		65 1779849	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,6]	15 2248	AAB3447	0	6		SS	<	0.082		65 1779849	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,6]	15 2249	AAB3449	0	6		SS	<	0.082		65 1779849	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,6]	15 2278	AAB3294	0	6		SS	<	0.081		65 1779849	MG/KG					HPLC	18450	29629	ORGANIC
MXC	15 2137	AAB3332	18	24		SS	<	0.167		3258 89924	MG/KG					HPLC	18469	31503	ORGANIC
MXC	15 2151	AAB3466	18	24		SS	<	0.168		3258 89924	MG/KG					HPLC	18450	29629	ORGANIC
MXC	15 2172	AAB3477	18	24		SS	<	0.166		3258 89924	MG/KG					HPLC	18469	31503	ORGANIC
MXC	15 2180	AAB3520	6	12		SS	<	0.169		3258 89924	MG/KG					HPLC	18450	29629	ORGANIC
MXC	15 2240	AAB3298	0	6		SS	<	0.164		3258 89924	MG/KG					HPLC	18469	31503	ORGANIC
MXC	15 2245	AAB3526	0	6		SS	<	0.168		3258 89924	MG/KG					HPLC	18450	29629	ORGANIC
MXC	15 2246	AAB3445	0	6		SS	<	0.168		3258 89924	MG/KG					HPLC	18469	31503	ORGANIC
MXC	15 2247	AAB3420	0	6		SS	<	0.167		3258 89924	MG/KG					HPLC	18450	29629	ORGANIC
MXC	15 2248	AAB3447	0	6		SS	<	0.167		3258 89924	MG/KG					HPLC	18450	29629	ORGANIC
MXC	15 2249	AAB3449	0	6		SS	<	0.167		3258 89924	MG/KG					HPLC	18450	29629	ORGANIC
MXC	15 2278	AAB3294	0	6		SS	<	0.165		3258 89924	MG/KG					HPLC	18450	29629	ORGANIC
Nitrobenzene	15 2137	AAB3332	18	24		SS	<	0.193		32 5890291	MG/KG					HPLC	18469	31503	ORGANIC
Nitrobenzene	15 2151	AAB3466	18	24		SS	<	0.193		32 5890291	MG/KG					HPLC	18450	29629	ORGANIC
Nitrobenzene	15 2172	AAB3477	18	24		SS	<	0.192		32 5890291	MG/KG					HPLC	18469	31503	ORGANIC
Nitrobenzene	15 2180	AAB3520	6	12		SS	<	0.194		32 5890291	MG/KG					HPLC	18450	29629	ORGANIC
Nitrobenzene	15 2240	AAB3298	0	6		SS	<	0.191		32 5890291	MG/KG					HPLC	18469	31503	ORGANIC

SAMPLING DATA FOR PRS 15-00417

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat. S	Sample Value	Bad Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Site
RDX	15 2246	AA83445	0	6		<	0.168		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
RDX	15 2247	AA83443	0	6		<	0.166		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
RDX	15 2248	AA83449	0	6		<	0.167		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
RDX	15 2278	AA83294	0	6		<	0.165		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2137	AA83332	18	24		<	0.092		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2151	AA83466	18	24		<	0.093		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2172	AA83477	18	24		<	0.092		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2189	AA83520	0	12		<	0.093		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2249	AA83298	0	6		<	0.091		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2245	AA83526	0	6		<	0.093		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2246	AA83445	0	6		<	0.093		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2247	AA83429	0	6		<	0.092		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2248	AA83447	0	6		<	0.093		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2249	AA83449	0	6		<	0.092		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2278	AA83294	0	6		<	0.091		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2137	AA83332	18	24		<	0.096		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2151	AA83466	18	24		<	0.096		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2172	AA83477	18	24		<	0.095		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2189	AA83520	0	12		<	0.097		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2249	AA83298	0	6		<	0.094		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2245	AA83528	0	6		<	0.096		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2246	AA83145	0	6		<	0.095		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2247	AA83429	0	6		<	0.096		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2248	AA83447	0	6		<	0.095		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2249	AA83449	0	6		<	0.095		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2278	AA83294	0	6		<	0.095		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2137	AA83332	18	24		<	0.081		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2151	AA83466	18	24		<	0.081		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2172	AA83477	18	24		<	0.082		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2189	AA83520	0	12		<	0.082		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2249	AA83298	0	6		<	0.081		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2245	AA83526	0	6		<	0.081		651 776849	MA3XG			R		HTC	18469	31503	ORGANIC
Tetra(methyl 2,4,6-trinitrophenyl)amine)	15 2246	AA83145	0	6		<	0.081		651 776849	MA3XG			R		HTC	18469	28629	ORGANIC

SAMPLING DATA FOR PPS 15-004(f)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met	Sample Value	Org Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Trichloroethane [2,4,6]	15 2247	AAB3443	0	6	1	25	0.081		48 381538	MAVG					HPLC	18450	26629	ORGANIC
Trichloroethane [2,4,6]	15 2248	AAB3447	0	6	1	25	0.081		48 381538	MAVG					HPLC	18450	26629	ORGANIC
Trichloroethane [2,4,6]	15 2249	AAB3449	0	6	1	25	0.081		48 381538	MAVG					HPLC	18450	26629	ORGANIC
Trichloroethane [2,4,6]	15 2278	AAB3474	0	6	1	25	0.08		48 381538	MAVG					HPLC	18450	26629	ORGANIC
Actinium 228	15 2155	AAB3475	0	4	1	25	2.04			PCIG					G	18025	27223	RAD
Actinium 228	15 2155	AAB3475	0	4	1	25	0.47			PCIG		O			G	18025	27223	RAD
Actinium 228	15 2226	AAB3478	0	6	1	25	2.45			PCIG					G	18881	30337	RAD
Actinium 228	15 2227	AAB3518	0	6	1	25	2.22			PCIG	FD				G	18881	30337	RAD
Actinium 228	15 2228	AAB3320	0	6	1	25	1.89			PCIG		O			G	18881	30337	RAD
Actinium 228	15 2228	AAB3321	0	6	1	25	1.52			PCIG					G	18881	30337	RAD
Actinium 228	15 2245	AAC0342	14	15	F	25	1.9			PCIG					G	20326	35641	RAD
Actinium 228	15 2244	AAC0339	22	28	F	25	1.83			PCIG					G	20326	35641	RAD
Actinium 228	15 2248	AAC0341	35	41	F	25	1.74			PCIG					G	20326	35641	RAD
Actinium 228	15 2290	AAC0328	0	6	1	25	1.32			PCIG					G	20326	35641	RAD
Actinium 228	FORMATE	AAB3379				25	2.29			PCIL	BB				G	18819	31126	RAD
Actinium 228	FORMATE	AAB3380				25	1.95			PCIL	BB				G	18823	30633	RAD
Americium 241	15 2114	AAB3476	0	6	1	25	0.03			PCIG					G	19509	35828	RAD
Americium 241	15 2114	AAB3487	18	24	F	25	0.03			PCIG					G	19511	33134	RAD
Americium 241	15 2123	AAB3521	0	6	1	25	0.033			PCIG					G	19511	33134	RAD
Americium 241	15 2127	AAB3340	18	24	F	25	0.06			PCIG					G	19509	35828	RAD
Americium 241	15 2131	AAB3334	0	6	1	25	0.185			PCIG	FD				G	19511	33134	RAD
Americium 241	15 2137	AAB3332	18	24	F	25	0.03			PCIG					G	19509	35828	RAD
Americium 241	15 2139	AAB3312	17	23	F	25	0.086			PCIG					G	19511	33134	RAD
Americium 241	15 2141	AAB3515	0	4	1	25	0.005			PCIG					G	19511	33134	RAD
Americium 241	15 2145	AAB3452	0	6	1	25	0.103			PCIG					G	19511	33134	RAD
Americium 241	15 2147	AAB3343	18	24	F	25	0.102			PCIG					G	19511	33134	RAD
Americium 241	15 2148	AAB3327	3	9	F	25	0.028			PCIG					G	19511	33134	RAD
Americium 241	15 2151	AAB3446	18	24	F	25	0.007			PCIG					G	19511	33134	RAD
Americium 241	15 2152	AAB3458	0	5	1	25	0.002			PCIG					G	19511	33134	RAD
Americium 241	15 2153	AAB3304	1	1	F	25	0.006			PCIG					G	19509	35828	RAD
Americium 241	15 2153	AAB3344	0	5	1	25	0.378			PCIG		O			G	19511	33134	RAD
Americium 241	15 2153	AAB3344	0	5	1	25	0.007			PCIG					G	19511	33134	RAD
Americium 241	15 2155	AAB3475	0	4	1	25	3.07			PCIG		O			G	18025	27223	RAD
Americium 241	15 2155	AAB3475	0	4	1	25	3.9			PCIG					G	18025	27223	RAD
Americium 241	15 2157	AAB3307	18	24	F	25	0.045			PCIG					G	19511	33134	RAD
Americium 241	15 2166	AAB3342	0	4	1	25	0.048			PCIG					G	19509	35828	RAD
Americium 241	15 2170	AAB3323	18	24	F	25	0.002			PCIG					G	19511	33134	RAD
Americium 241	15 2172	AAB3477	18	24	F	25	0.12			PCIG					G	19509	35828	RAD
Americium 241	15 2173	AAB3324	18	24	F	25	0.002			PCIG					G	19511	33134	RAD
Americium 241	15 2177	AAB3318	0	6	1	25	0.212			PCIG					G	19511	33134	RAD
Americium 241	15 2178	AAB3336	0	6	1	25	0.041			PCIG					G	19509	35828	RAD
Americium 241	15 2179	AAB3472	0	4	1	25	0.004			PCIG					G	19511	33134	RAD
Americium 241	15 2180	AAB3520	6	12	F	25	0.11			PCIG					G	19511	33134	RAD
Americium 241	15 2182	AAB3470	18	24	F	25	0.009			PCIG	FD				G	19509	35828	RAD
Americium 241	15 2197	AAB3376	1	1	F	25	0.317			PCIL	BB				G	20161	31487	RAD

SAMPLING DATA FOR PHS 15-004(F)

Analyte	Loc ID	Sample ID	Depth	End	Units	Mat S	Sample Value	Std Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Americium 241	15 2184	AAB3485	0	6	SS	0.015				PCIG	FD				G	19509	35428	RAD
Americium 241	15 2206	AAB3295	0	4	SS	0.031				PCIG					G	19509	35428	RAD
Americium 241	15 2228	AAB3320	0	6	SS	2.18				PCIG			J		G	18881	30337	RAD
Americium 241	15 2228	AAB3320	0	6	SS	1.8				PCIG		D			G	18881	30337	RAD
Americium 241	15 2240	AAB3298	0	6	SS	0.146				PCIG					G	19509	35428	RAD
Americium 241	15 2241	AAB3330	0	6	SS	0.003				PCIG					G	19511	31134	RAD
Americium 241	15 2241	AAB3330	0	6	SS	0.01				PCIG					G	19511	31134	RAD
Americium 241	15 2245	AAB3326	0	6	SS	0.083				PCIG					G	19511	31134	RAD
Americium 241	15 2245	AAC0342	14	15 F	SS	0.442				PCIG					G	20326	35441	RAD
Americium 241	15 2246	AAB3445	0	6	SS	0.446				PCIG					G	19509	35428	RAD
Americium 241	15 2246	AAB3445	0	6	SS	0.1				PCIG		D			G	19509	35428	RAD
Americium 241	15 2246	AAC0339	22	28	SS	1.04				PCIG					G	20326	35441	RAD
Americium 241	15 2247	AAB3420	0	6	SS	0.114				PCIG					G	19511	31134	RAD
Americium 241	15 2247	AAC0346	21	27	SS	0.098				PCIG					G	20383	34038	RAD
Americium 241	15 2248	AAB3447	0	6	SS	0.007				PCIG					G	19511	31134	RAD
Americium 241	15 2249	AAB3449	0	6	SS	0.046				PCIG					G	19511	31134	RAD
Americium 241	15 2249	AAC0341	35	41	SS	0.408				PCIG					G	20326	35441	RAD
Americium 241	15 2277	AAB3321	0	5	SS	0.005				PCIG					G	19509	35428	RAD
Americium 241	15 2278	AAB3294	0	6	SS	0.037				PCIG					G	19511	31134	RAD
Americium 241	15 2279	AAB3625	0	5	SS	0.012				PCIG					G	19509	35428	RAD
Americium 241	15 2290	AAC0328	18	17 F	SS	0.048				PCIG					G	20776	35814	RAD
Americium 241	15 2290	AAC0328	9	10 F	SS	0.041				PCIG					G	20776	35814	RAD
Americium 241	15 2291	AAC0328	0	6	SS	0.115				PCIG					G	20326	35441	RAD
Americium 241	15 2295	AAB3325	0	6	SS	0.023				PCIG					G	20383	34038	RAD
Americium 241	15 2299	AAB3480	18	24	SS	0.039				PCIG					G	19509	35428	RAD
Americium 241	NEGATE	AAB3379			SS	0.029				PCIG					G	19509	35428	RAD
Americium 241	NEGATE	AAB3380			W	156				15 PCIL	BB				G	18819	31126	RAD
Barium 140	15 2114	AAB3478	0	6	SS	94.5				15 PCIL	BB				G	18823	30933	RAD
Barium 140	15 2114	AAB3487	18	24	SS	45.7				PCIG					G	19509	35428	RAD
Barium 140	15 2123	AAB3621	0	6	SS	12				PCIG					G	19511	31134	RAD
Barium 140	15 2127	AAB3360	18	24	SS	91.3				PCIG					G	19511	31134	RAD
Barium 140	15 2131	AAB3394	0	6	SS	21.9				PCIG					G	19509	35428	RAD
Barium 140	15 2137	AAB3332	18	24	SS	46.6				PCIG					G	19511	31134	RAD
Barium 140	15 2138	AAB3312	17	23	SS	11.7				PCIG					G	19509	35428	RAD
Barium 140	15 2141	AAB3515	0	6	SS	28				PCIG					G	19511	31134	RAD
Barium 140	15 2145	AAB3452	0	6	SS	13.4				PCIG					G	19511	31134	RAD
Barium 140	15 2147	AAB3383	0	6	SS	27.7				PCIG					G	19511	31134	RAD
Barium 140	15 2149	AAB3327	18	24	SS	50				PCIG					G	19511	31134	RAD
Barium 140	15 2151	AAB3464	3	9	SS	9.55				PCIG					G	19511	31134	RAD
Barium 140	15 2152	AAB3459	18	24	SS	45.6				PCIG					G	19511	31134	RAD
Barium 140	15 2153	AAB3304	0	5	SS	60.8				PCIG					G	19511	31134	RAD
Barium 140	15 2153	AAB3344	1	1 F	SS	33.62				PCIG					G	19509	35428	RAD
Barium 140	15 2153	AAB3348	0	5	SS	2.23				PCIG					G	19511	31134	RAD
Barium 140	15 2157	AAB3307	18	24	SS	28.1				PCIG					G	19511	31134	RAD
Barium 140	15 2157	AAB3307	18	24	SS	16.3				PCIG					G	19511	31134	RAD

SAMPLING DATA FOR PRS 15-064.(1)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bkgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Barium 140	15 2166	AAB33142	0	4		SS		18.061			PCIG				G	19509	35829	RAD	
Barium 140	15 2170	AAB3323	18	24		SS		38.3			PCIG				G	19511	33134	RAD	
Barium 140	15 2172	AAB3477	18	24		SS		80.7			PCIG				G	19509	35829	RAD	
Barium 140	15 2173	AAB3324	18	24		SS		16.7			PCIG				G	19511	33134	RAD	
Barium 140	15 2177	AAB3318	0	6		SS		17.5			PCIG				G	19511	33134	RAD	
Barium 140	15 2178	AAB3336	0	6		SS		9.31			PCIG				G	19509	35826	RAD	
Barium 140	15 2179	AAB3472	0	4		SS		6.54			PCIG				G	19511	33134	RAD	
Barium 140	15 2180	AAB3520	6	12		SS		1.68			PCIG				G	19511	33134	RAD	
Barium 140	15 2182	AAB3470	18	24				12.107			PCIG	FD			G	19509	35826	RAD	
Barium 140	15 2197	AAB3378				W		1620			PCIL	FB			G	20161	33487	RAD	
Barium 140	15 2198	AAB3485	0	6		SS		5			PCIG	FD			G	19509	35829	RAD	
Barium 140	15 2206	AAB3295	0	4		SS		22.7			PCIG				G	19509	35828	RAD	
Barium 140	15 2240	AAB3298	0	6		SS		9.84			PCIG				G	19509	35828	RAD	
Barium 140	15 2241	AAB3330	0	6		SS		13.5			PCIG				G	19511	33134	RAD	
Barium 140	15 2241	AAB3330	0	6		SS		5.85			PCIG		0		G	19511	33134	RAD	
Barium 140	15 2245	AAB3526	0	6		SS		17.6			PCIG				G	19511	33134	RAD	
Barium 140	15 2246	AAB3445	0	6		SS		8.41			PCIG		0		G	19509	35828	RAD	
Barium 140	15 2246	AAB3445	0	6		SS		7.09			PCIG				G	19509	35828	RAD	
Barium 140	15 2247	AAB3420	0	6		SS		51.9			PCIG				G	19511	33134	RAD	
Barium 140	15 2247	AAC0346	21	27		SS		0.153			PCIG				G	20383	34038	RAD	
Barium 140	15 2248	AAB3447	0	6		SS		16.8			PCIG				G	19511	33134	RAD	
Barium 140	15 2249	AAB3449	0	6		SS		0			PCIG				G	19511	33134	RAD	
Barium 140	15 2277	AAB3321	0	5		SS		38.4			PCIG				G	19509	35826	RAD	
Barium 140	15 2278	AAB3294	0	6		SS		19			PCIG				G	19511	33134	RAD	
Barium 140	15 2279	AAB3525	0	5		SS		51			PCIG				G	19509	35826	RAD	
Barium 140	15 2260	AAC0326	16	17	F	SS		2.82			PCIG				G	20776	35814	RAD	
Barium 140	15 2260	AAC0327	9	10	F	SS		1.04			PCIG				G	20776	35814	RAD	
Barium 140	15 2261	AAC0336	0	6		SS		0.638			PCIG				G	20383	34038	RAD	
Barium 140	15 2265	AAB3325	0	6		SS		0			PCIG	FD			G	19509	35828	RAD	
Barium 140	15 2299	AAB3480	18	24		SS		41.2			PCIG	FD			G	19509	35826	RAD	
Barium 211	15 2155	AAB3475	0	4		SS		3.42			PCIG		0		G	18025	27223	RAD	
Barium 211	15 2155	AAB3475	0	4		SS		3.37			PCIG				G	18025	27223	RAD	
Barium 211	15 2245	AAC0342	14	15	F	SS		4.24			PCIG				G	20326	35641	RAD	
Barium 211	15 2246	AAC0339	22	28		SS		4.03			PCIG				G	20326	35641	RAD	
Barium 211	15 2248	AAC0341	35	41		SS		0.866			PCIG				G	20326	35641	RAD	
Barium 211	15 2290	AAC0328	0	6		SS		2.97			PCIG				G	20326	35641	RAD	
Barium 211	RMSATE	AAB3379				W		50			PCIL	FB			G	18819	31126	RAD	
Barium 211	RMSATE	AAB3380				W		60.6			PCIL	FB			G	18823	30933	RAD	
Barium 212	15 2226	AAB3478	0	6		SS		1.6			PCIG				G	18881	30337	RAD	
Barium 212	15 2228	AAB3320	0	6		SS		1.85			PCIG				G	18881	30337	RAD	
Barium 212	15 2245	AAC0342	14	15	F	SS		1.76			PCIG				G	20326	35641	RAD	
Barium 212	15 2246	AAC0339	22	28		SS		1.81			PCIG				G	20326	35641	RAD	
Barium 212	15 2249	AAC0341	35	41		SS		0.814			PCIG				G	20326	35641	RAD	
Barium 212	15 2260	AAC0328	0	6		SS		0.584			PCIG				G	20326	35641	RAD	
Barium 212	RMSATE	AAB3379				W		51.6			PCIL	FB			G	18819	31126	RAD	

SAMPLING DATA FOR PRS 15-004(f)

Analyte	Lac ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Shipd Value	SAL Value	Units	Field Code	Lab Code	EPA Outl	Sample Location	Tech Code	Request Number	Report Number	Salto
Bismuth 212	PRSGATE	AAB3380	0	6	L	W	c	500			PCVL	BB			G	18823	30933	RAD	
Bismuth 214	PRSGATE	AAB3178	0	6	L	SS		3.38			PCVG				G	18881	30937	RAD	
Bismuth 214	15-2245	AAC0342	14	15	F	SS		1.23			PCVG				G	20326	35641	RAD	
Bismuth 214	15-2246	AAC0339	22	28	L	SS		1.51			PCVG				G	20329	35641	RAD	
Bismuth 214	15-2249	AAC0341	35	41	L	SS		1.06			PCVG				G	20326	35641	RAD	
Bismuth 214	15-2290	AAC0328	0	6	L	SS		1.07			PCVG				G	20328	35641	RAD	
Bismuth 214	PRSGATE	AAB3379				W	c	121			PCVL	BB			G	18819	31126	RAD	
Bismuth 214	PRSGATE	AAB3380				W	c	202			PCVL	BB			G	18823	30933	RAD	
Bismuth 214	PRSGATE	AAB3381				W		1003.4			PCVL	BB	J		G	18881	30937	RAD	
Cerium-144	15-2114	AAB3476	0	6	L	SS		0.018		56	PCVG				G	19509	35828	RAD	
Cerium-144	15-2123	AAB3521	18	24	L	SS		0.135		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2127	AAB3349	18	24	L	SS		0.026		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2131	AAB3394	0	6	L	SS		0.158		56	PCVG				G	19509	35828	RAD	
Cerium-144	15-2137	AAB3332	18	24	L	SS		0.007		56	PCVG	FD			G	19511	31134	RAD	
Cerium-144	15-2139	AAB3312	17	23	L	SS		0.033		56	PCVG				G	19509	35828	RAD	
Cerium-144	15-2141	AAB3515	0	4	L	SS		0.025		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2145	AAB3452	0	6	L	SS		0.061		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2147	AAB3343	18	24	L	SS		0.095		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2149	AAB3327	3	9	L	SS		0.103		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2151	AAB3466	18	24	L	SS		0.039		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2152	AAB3458	0	5	L	SS		0.004		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2153	AAB3304	0	5	L	SS		0.011		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2153	AAB3344	0	5	L	SS		0.05		56	PCVG				G	19509	35828	RAD	
Cerium-144	15-2153	AAB3344	0	5	L	SS		0.014		56	PCVG	D			G	19511	31134	RAD	
Cerium-144	15-2157	AAB3307	18	24	L	SS		0.388		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2157	AAB3318	0	6	L	SS		0.039		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2166	AAB3342	0	4	L	SS		0.007		56	PCVG				G	19509	35828	RAD	
Cerium-144	15-2170	AAB3323	18	24	L	SS		0.004		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2172	AAB3477	18	24	L	SS		0.002		56	PCVG				G	19509	35828	RAD	
Cerium-144	15-2173	AAB3324	18	24	L	SS		0.134		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2177	AAB3318	0	6	L	SS		0.089		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2178	AAB3336	0	6	L	SS		0.07		56	PCVG				G	19509	35828	RAD	
Cerium-144	15-2179	AAB3472	0	4	L	SS		0.17		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2180	AAB3520	6	12	L	SS		0.098		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2182	AAB3470	18	24	L	SS		0.051		56	PCVG	FD			G	19509	35828	RAD	
Cerium-144	15-2197	AAB3378				W		2.4			PCVL	BB			G	20161	33487	RAD	
Cerium-144	15-2198	AAB3485	0	6	L	SS		0.032		56	PCVG	FD			G	19509	35828	RAD	
Cerium-144	15-2206	AAB3295	0	4	L	SS		0.039		56	PCVG				G	19509	35828	RAD	
Cerium-144	15-2240	AAB3296	0	6	L	SS		0.123		56	PCVG				G	19509	35828	RAD	
Cerium-144	15-2241	AAB3330	0	6	L	SS		0.019		56	PCVG		D		G	19511	31134	RAD	
Cerium-144	15-2241	AAB3330	0	6	L	SS		0.106		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2245	AAB3526	0	6	L	SS		0.111		56	PCVG				G	19511	31134	RAD	
Cerium-144	15-2245	AAC0342	14	15	F	SS		0.511		56	PCVG				G	20326	35641	RAD	
Cerium-144	15-2246	AAB3445	0	6	L	SS		2.05		56	PCVG		D		G	19509	35828	RAD	
Cerium-144	15-2246	AAB3445	0	6	L	SS		1.65		56	PCVG				G	19509	35828	RAD	

SAMPLING DATA FOR PRRS 15-004(R)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mt	S	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Site No
Cesium 137	15-2166	AAB3142	0	4	1	SS	0.66	1.4		4	PCIG					G	19509	35428	RAD
Cesium 137	15-2170	AAB3121	18	24	1	SS	0.022	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2172	AAB3477	18	24	1	SS	0.011	1.4		4	PCIG					G	19505	35428	RAD
Cesium 137	15-2173	AAB3124	18	24	1	SS	0.042	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2177	AAB3118	0	6	1	SS	1.23	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2178	AAB3336	0	6	1	SS	0.352	1.4		4	PCIG					G	19509	35428	RAD
Cesium 137	15-2179	AAB3472	0	4	1	SS	0.549	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2180	AAB3520	6	12	1	SS	0.04	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2182	AAB3470	18	24	1	SS	0.13	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2197	AAB3178	0	6	1	W	1.61	1.4		110	PCIL	FU				G	19509	35428	RAD
Cesium 137	15-2198	AAB3485	0	6	1	SS	0.389	1.4		4	PCIG					G	20161	31487	RAD
Cesium 137	15-2206	AAB3295	0	4	1	SS	0.435	1.4		4	PCIG					G	19509	35428	RAD
Cesium 137	15-2227	AAB3518	0	6	1	SS	0.44	1.4		4	PCIG					G	19509	35428	RAD
Cesium 137	15-2240	AAB3298	0	6	1	SS	0.187	1.4		4	PCIG					G	19509	35428	RAD
Cesium 137	15-2241	AAB3130	0	6	1	SS	0.079	1.4		4	PCIG					G	19509	35428	RAD
Cesium 137	15-2245	AAB3526	0	6	1	SS	0.096	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2246	AAC0342	14	15	F	SS	0.003	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2246	AAB3445	0	6	1	SS	0.0381	1.4		4	PCIG					G	20326	35441	RAD
Cesium 137	15-2246	AAB3445	0	6	1	SS	0.022	1.4		4	PCIG					G	19509	35428	RAD
Cesium 137	15-2246	AAC0339	22	28	1	SS	0.0691	1.4		4	PCIG					G	19509	35428	RAD
Cesium 137	15-2247	AAB3420	0	6	1	SS	0.013	1.4		4	PCIG					G	20326	35441	RAD
Cesium 137	15-2248	AAC0346	21	27	1	SS	0.016	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2249	AAB3449	0	6	1	SS	0.07	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2249	AAC0341	35	41	1	SS	0.062	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2277	AAB3321	0	5	1	SS	0.0284	1.4		4	PCIG					G	20326	35441	RAD
Cesium 137	15-2278	AAB3294	0	5	1	SS	0.384	1.4		4	PCIG					G	19509	35428	RAD
Cesium 137	15-2279	AAB3525	0	5	1	SS	0.076	1.4		4	PCIG					G	19511	31134	RAD
Cesium 137	15-2290	AAC0328	18	17	F	SS	0.158	1.4		4	PCIG					G	19509	35428	RAD
Cesium 137	15-2290	AAC0327	9	10	F	SS	0.002	1.4		4	PCIG					G	20326	35441	RAD
Cesium 137	15-2290	AAC0328	0	6	1	SS	0.003	1.4		4	PCIG					G	20326	35441	RAD
Cesium 137	15-2291	AAC0336	0	6	1	SS	0.002	1.4		4	PCIG					G	20326	35441	RAD
Cesium 137	15-2295	AAB3325	0	6	1	SS	0.217	1.4		4	PCIG					G	20326	35441	RAD
Cesium 137	15-2298	AAB3480	18	24	1	SS	0.006	1.4		4	PCIG					G	19509	35428	RAD
Cesium 137	PRNSATE	AAB3379				W	63.6			119	PCIL	EB				G	19509	35428	RAD
Cesium 137	PRNSATE	AAB3380				W	28.3			110	PCIL	EB				G	19509	35428	RAD
Cobalt 57	15-2245	AAC0342	14	15	F	SS	0.0023				PCIG					G	19509	35428	RAD
Cobalt 57	15-2246	AAC0339	22	28	1	SS	0.0198				PCIG					G	20326	35441	RAD
Cobalt 57	15-2249	AAC0341	35	41	1	SS	0.0047				PCIG					G	20326	35441	RAD
Cobalt 57	15-2290	AAC0328	0	6	1	SS	0.0319				PCIG					G	20326	35441	RAD
Cobalt 57	PRNSATE	AAB3379				W	51.7			4600	PCIL	EB				G	19509	35428	RAD
Cobalt 57	PRNSATE	AAB3380				W	52.2			4600	PCIL	EB				G	19509	35428	RAD
Cobalt 60	15-2114	AAB3476	0	6	1	SS	0.02			1.1	PCIG					G	19509	35428	RAD
Cobalt 60	15-2114	AAB3487	18	24	1	SS	0.015			1.1	PCIG					G	19511	31134	RAD

SAMPLING DATA FOR PRS 15-004.(1)

Analyte	LocID	Sample ID	Begin	End	Utility	Mat. S	Sample Value	MSGD Value	SAL Value	Units	Field Code	Lab Code	EPA Chm	Sample Location	Tech Code	Request Number	Report Number	Suite
Cobalt 60	15 2123	AAB3521	0 61	25	25	0 013	0 013		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2127	AAB3113	18 241	25	25	0 024	0 024		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2131	AAB3114	0 61	25	25	0 012	0 012		11	PC10	FD				0	15511	31134	RAD
Cobalt 60	15 2137	AAB3112	18 241	25	25	0 028	0 028		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2139	AAB3112	17 231	25	25	0 028	0 028		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2141	AAB3515	0 61	25	25	0 013	0 013		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2145	AAB3452	0 61	25	25	0 025	0 025		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2147	AAB3343	18 241	25	25	0 015	0 015		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2149	AAB3137	3 91	25	25	0 028	0 028		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2151	AAB3466	18 241	25	25	0 024	0 024		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2152	AAB3458	0 61	25	25	0 024	0 024		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2153	AAB3364	1 17	25	25	0 003	0 003		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2153	AAB3344	0 61	25	25	0 003	0 003		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2153	AAB3344	0 61	25	25	0 022	0 022		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2157	AAB3302	18 241	25	25	0 023	0 023		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2166	AAB3342	0 61	25	25	0 007	0 007		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2170	AAB3323	18 241	25	25	0 016	0 016		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2172	AAB3477	18 241	25	25	0 015	0 015		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2173	AAB3324	18 241	25	25	0	0		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2177	AAB3318	0 61	25	25	0 017	0 017		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2178	AAB3336	0 61	25	25	0 006	0 006		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2179	AAB3472	0 61	25	25	0 017	0 017		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2180	AAB3520	0 61	25	25	0 032	0 032		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2182	AAB3470	18 241	25	25	0 014	0 014		11	PC10	FD				0	15509	35028	RAD
Cobalt 60	15 2187	AAB3378	18 241	25	25	2 22	2 22		200	PC1L	BB				20161	31087	RAD	
Cobalt 60	15 2198	AAB3405	0 61	25	25	0 013	0 013		11	PC10	FD				0	15509	35028	RAD
Cobalt 60	15 2200	AAB3295	0 61	25	25	0 003	0 003		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2200	AAB3295	0 61	25	25	0 019	0 019		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2240	AAB3248	0 61	25	25	0 007	0 007		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2241	AAB3390	0 61	25	25	0 017	0 017		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2241	AAB3330	0 61	25	25	0 004	0 004		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2245	AAB3508	0 61	25	25	0 061	0 061		11	PC10					0	20126	35041	RAD
Cobalt 60	15 2245	AAC3242	14 15 F	25	25	0 001	0 001		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2246	AAB3445	0 61	25	25	0 002	0 002		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2246	AAB3445	0 61	25	25	0 006	0 006		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2246	AAC3339	22 28 F	25	25	0 008	0 008		11	PC10					0	20126	35041	RAD
Cobalt 60	15 2247	AAB3420	0 61	25	25	0 001	0 001		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2247	AAC3348	21 27 F	25	25	0 011	0 011		11	PC10					0	20101	14030	RAD
Cobalt 60	15 2248	AAB3447	0 61	25	25	0 002	0 002		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2248	AAB3449	0 61	25	25	0 002	0 002		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2249	AAC3341	35 41 F	25	25	0 004	0 004		11	PC10					0	20126	35041	RAD
Cobalt 60	15 2272	AAB3331	0 61	25	25	0 013	0 013		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2278	AAB3284	0 61	25	25	0 015	0 015		11	PC10					0	15511	31134	RAD
Cobalt 60	15 2278	AAB3525	0 61	25	25	0 026	0 026		11	PC10					0	15509	35028	RAD
Cobalt 60	15 2260	AAC3028	14 17 F	25	25	0 025	0 025		11	PC10					0	20776	35014	RAD
Cobalt 60	15 2290	AAC3032	9 10 F	25	25	0 003	0 003		11	PC10					0	20776	35014	RAD

SAMPLING DATA FOR PRS 15-004(Y)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	State
Cobalt 60	15 2290	AAC0128	0	6		08/08	0.0451			1.1	PCIG			G		20326	35641	RAD
Cobalt 60	15 2291	AAC0136	0	6		08/08	0.016			1.1	PCIG			G		20383	34038	RAD
Cobalt 60	15 2295	AAB3325	0	6		08/08	0.215			1.1	PCIG	FD		G		19509	35828	RAD
Cobalt 60	15 2298	AAB3480	18	24		08/08	0			1.1	PCIG	FD		G		19509	35828	RAD
Cobalt 60	RINGSATE	AAB3379				08/08	28.5		200	PCIL	BB			G		18819	31126	RAD
Cobalt 60	RINGSATE	AAB3360				08/08	26		200	PCIL	BB			G		18823	30933	RAD
Europium 152	15 2114	AAB3476	0	6		08/08	0.069				PCIG			G		19509	35828	RAD
Europium 152	15 2114	AAB3487	18	24		08/08	0.066				PCIG			G		19511	33134	RAD
Europium 152	15 2123	AAB3521	0	6		08/08	0.036				PCIG			G		19511	33134	RAD
Europium 152	15 2127	AAB3340	18	24		08/08	0.138				PCIG			G		19509	35828	RAD
Europium 152	15 2131	AAB3334	0	6		08/08	0.069				PCIG	FD		G		19511	33134	RAD
Europium 152	15 2137	AAB3332	18	24		08/08	0.054				PCIG			G		19509	35828	RAD
Europium 152	15 2139	AAB3312	17	23		08/08	0.175				PCIG			G		19511	33134	RAD
Europium 152	15 2141	AAB3515	0	4		08/08	0.169				PCIG			G		19511	33134	RAD
Europium 152	15 2145	AAB3452	0	6		08/08	0.164				PCIG			G		19511	33134	RAD
Europium 152	15 2147	AAB3343	18	24		08/08	0.019				PCIG			G		19511	33134	RAD
Europium 152	15 2149	AAB3327	1	9		08/08	0.036				PCIG			G		19511	33134	RAD
Europium 152	15 2151	AAB3466	18	24		08/08	0.159				PCIG			G		19511	33134	RAD
Europium 152	15 2152	AAB3458	0	5		08/08	0.164				PCIG			G		19511	33134	RAD
Europium 152	15 2153	AAB3306	1	1	F	08/08	0.182				PCIG			G		19509	35828	RAD
Europium 152	15 2153	AAB3344	0	5		08/08	0.022				PCIG	0		G		19511	33134	RAD
Europium 152	15 2153	AAB3344	0	5		08/08	0.263				PCIG			G		19511	33134	RAD
Europium 152	15 2157	AAB3307	18	24		08/08	0.134				PCIG			G		19511	33134	RAD
Europium 152	15 2166	AAB3342	0	4		08/08	0.056				PCIG			G		19509	35828	RAD
Europium 152	15 2170	AAB3323	18	24		08/08	0.047				PCIG			G		19511	33134	RAD
Europium 152	15 2172	AAB3477	18	24		08/08	0.114				PCIG			G		19509	35828	RAD
Europium 152	15 2173	AAB3324	18	24		08/08	0.045				PCIG			G		19511	33134	RAD
Europium 152	15 2177	AAB3319	0	6		08/08	0.203				PCIG			G		19511	33134	RAD
Europium 152	15 2178	AAB3336	0	6		08/08	0.007				PCIG			G		19509	35828	RAD
Europium 152	15 2178	AAB3472	0	4		08/08	0.178				PCIG			G		19511	33134	RAD
Europium 152	15 2180	AAB3520	6	12		08/08	0.129				PCIG			G		19511	33134	RAD
Europium 152	15 2182	AAB3470	18	24		08/08	0.122				PCIG	FD		G		19509	35828	RAD
Europium 152	15 2187	AAB3378				08/08	6.95				PCIL	BB		G		20161	33487	RAD
Europium 152	15 2198	AAB3485	0	6		08/08	0.181				PCIG	FD		G		19509	35828	RAD
Europium 152	15 2206	AAB3295	0	4		08/08	0.068				PCIG			G		19509	35828	RAD
Europium 152	15 2240	AAB3298	0	6		08/08	0.005				PCIG			G		19509	35828	RAD
Europium 152	15 2241	AAB3330	0	6		08/08	0.026				PCIG	0		G		19511	33134	RAD
Europium 152	15 2241	AAB3330	0	6		08/08	0.101				PCIG			G		19511	33134	RAD
Europium 152	15 2245	AAB3526	0	6		08/08	0.16				PCIG			G		19511	33134	RAD
Europium 152	15 2246	AAB3445	0	6		08/08	0.104				PCIG	0		G		19509	35828	RAD
Europium 152	15 2246	AAB3445	0	6		08/08	0.175				PCIG			G		19509	35828	RAD
Europium 152	15 2247	AAB3420	0	6		08/08	0.354				PCIG			G		19511	33134	RAD
Europium 152	15 2247	AAC0346	21	27		08/08	0.042				PCIG			G		20383	34038	RAD
Europium 152	15 2248	AAB3447	0	6		08/08	0.051				PCIG			G		19511	33134	RAD
Europium 152	15 2249	AAB3449	0	6		08/08	0.068				PCIG			G		19511	33134	RAD

SAMPLING DATA FOR PRS 15-004 (f)

Analyte	Loc ID	Sample ID	Depth	End Units	Mat S	Sample Value	Bagd Value	SAL Value	Units	FCID Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Europium 152	15 2277	AAB3121	0	5.1	SS	0.623			PCIG					G	15555	35878	RAD
Europium 152	15 2278	AAB3124	0	6.1	SS	0.124			PCIG					G	15511	31134	RAD
Europium 152	15 2275	AAB3125	0	5.1	SS	0.632			PCIG					G	15522	35828	RAD
Europium 152	15 2259	AAC0320	10	17.7	SS	9.235			PCIG					G	20776	35814	RAD
Europium 152	15 2259	AAC0327	5	10.7	SS	0.071			PCIG					G	20776	35814	RAD
Europium 152	15 2281	AAC0316	9	6.1	SS	0.242			PCIG					G	20883	34038	RAD
Europium 152	15 2255	AAB3125	0	6.1	SS	5.178			PCIG					G	15509	35828	RAD
Europium 152	15 2259	AAB3140	18	24.1	SS	0.168			PCIG	RD				G	15505	35828	RAD
Lead 210	15 2115	AAB3124	0	6.1	SS	2.021		2.6	PCIG					G	20106	34688	RAD
Lead 210	15 2227	AAB3118	0	6.1	SS	6.91		2.6	PCIG					G	20106	34688	RAD
Lead 210	15 2245	AAC0342	14	15.7	SS	2.57		2.6	PCIG	RD				G	18881	30327	RAD
Lead 210	15 2248	AAC0335	22	28.1	SS	3.01		2.6	PCIG					G	20326	35641	RAD
Lead 210	15 2249	AAC0341	35	41.1	SS	5.54		2.6	PCIG					G	20326	35641	RAD
Lead 210	15 2259	AAC0328	6	6.1	SS	0.584		2.6	PCIG					G	20326	35641	RAD
Lead 210	FWGATE	AAB3179	0	6.1	W	7.45			PCIL	EB				G	18819	31126	RAD
Lead 210	FWGATE	AAB3180	0	6.1	W	7.83			PCIL	EB				G	18823	30531	RAD
Lead 211	15 2245	AAC0342	14	15.7	SS	1.66			PCIG					G	20326	35641	RAD
Lead 211	15 2248	AAC0339	22	28.1	SS	2.07			PCIG					G	20326	35641	RAD
Lead 211	15 2249	AAC0341	35	41.1	SS	2.14			PCIG					G	20326	35641	RAD
Lead 211	15 2259	AAC0322	6	6.1	SS	5.95			PCIL	EB				G	20326	35641	RAD
Lead 211	FWGATE	AAB3179	0	6.1	W	126			PCIL	EB				G	18819	31126	RAD
Lead 211	FWGATE	AAB3180	0	6.1	W	177			PCIL	EB				G	18823	30531	RAD
Lead 212	15 2115	AAB3156	0	6.1	SS	2.177			PCIG					G	20106	34688	RAD
Lead 212	15 2118	AAB3484	0	3.1	SS	1.78			PCIG					G	20106	34688	RAD
Lead 212	15 2125	AAB3339	0	6.1	SS	1.512			PCIG					G	20106	34688	RAD
Lead 212	15 2134	AAB3450	0	6.1	SS	1.572			PCIG					G	20106	34688	RAD
Lead 212	15 2144	AAB3341	0	6.1	SS	1.884			PCIG					G	20106	34688	RAD
Lead 212	15 2154	AAB3528	0	3.1	SS	1.624			PCIG					G	18925	27223	RAD
Lead 212	15 2155	AAB3475	2	4.1	SS	1.65			PCIG					G	18925	27223	RAD
Lead 212	15 2155	AAB3475	2	4.1	SS	1.78			PCIG					G	18925	27223	RAD
Lead 212	15 2157	AAB3350	0	6.1	SS	1.812			PCIG					G	20107	33732	RAD
Lead 212	15 2227	AAB3518	0	6.1	SS	0.38			PCIG	RD				G	18881	30327	RAD
Lead 212	15 2245	AAC0342	14	15.7	SS	1.57			PCIG					G	20326	35641	RAD
Lead 212	15 2248	AAC0339	22	28.1	SS	1.64			PCIG					G	20326	35641	RAD
Lead 212	15 2249	AAC0341	35	41.1	SS	1.56			PCIG					G	20326	35641	RAD
Lead 212	15 2259	AAC0326	6	6.1	SS	1.56			PCIG					G	20326	35641	RAD
Lead 212	FWGATE	AAB3179	0	6.1	W	2.64			PCIL	EB				G	18819	31126	RAD
Lead 212	FWGATE	AAB3180	0	6.1	W	2.10			PCIL	EB				G	18823	30531	RAD
Lead 214	15 2115	AAB3156	0	6.1	SS	1.559			PCIG					G	20106	34688	RAD
Lead 214	15 2118	AAB3484	0	3.1	SS	1.152			PCIG					G	20107	33732	RAD
Lead 214	15 2125	AAB3339	0	6.1	SS	1.036			PCIG					G	20106	34688	RAD
Lead 214	15 2134	AAB3450	0	6.1	SS	1.279			PCIG					G	20106	34688	RAD
Lead 214	15 2154	AAB3518	0	3.1	SS	1.201			PCIG					G	20106	34688	RAD
Lead 214	15 2155	AAB3475	0	4.1	SS	0.36			PCIG					G	18925	27223	RAD

SAMPLING DATA FOR PPS 15-0047

Loc ID	Sample ID	Depth	End	Units	Mat	Sample Value	Blgd Value	SAT Value	Units	Field Code	EPA Code	Sample Location	Tech Code	Request Number	Report Suite
Lead 214	AAB3475	0	0	4	0	0.67		0.67	PCIG					27223	RAD
Lead 214	AAB3300	0	0	0	0	1.45		1.45	PCIG					20107	RAD
Lead 214	AAB3478	0	0	0	0	0.98		0.98	PCIG					18881	RAD
Lead 214	AAB3518	0	0	0	0	1.19		1.19	PCIG					18881	RAD
Lead 214	AAB3350	0	0	0	0	1.32		1.32	PCIG					18881	RAD
Lead 214	AAB3320	0	0	0	0	0.87		0.87	PCIG					18881	RAD
Lead 214	AAC0342	14	15	15	F	1.13		1.13	PCIG					20326	RAD
Lead 214	AAC0339	22	28	28	F	1.51		1.51	PCIG					20326	RAD
Lead 214	AAC0341	35	41	41	F	1.02		1.02	PCIG					20326	RAD
Lead 214	AAC0328	0	0	0	0	2.19		2.19	PCIG					20326	RAD
Lead 214	AAB3379	PM&ATE				149		149	PCIL					18819	RAD
Lead 214	AAB3380	PM&ATE				178		178	PCIL					18823	RAD
Montgrose S4	AAC0342	14	15	15	F	0.0059		0.0059	3.5	PCIG				20326	RAD
Montgrose S4	AAC0339	22	28	28	F	0.0004		0.0004	3.5	PCIG				20326	RAD
Montgrose S4	AAC0341	35	41	41	F	0.045		0.045	3.5	PCIG				20326	RAD
Montgrose S4	AAC0328	0	0	0	0	0.0096		0.0096	3.5	PCIG				20326	RAD
Montgrose S4	AAB3379	PM&ATE				52.5		52.5	2000	PCIL				18819	RAD
Montgrose S4	AAB3380	PM&ATE				21.2		21.2	2000	PCIL				18823	RAD
Montgrose S4	AAB3487	19	24	24	F	0.012		0.012	1.9	PCIG				18509	RAD
Montgrose S4	AAB3521	0	0	0	0	0.01		0.01	1.9	PCIG				18511	RAD
Montgrose S4	AAB3340	18	24	24	F	0.007		0.007	1.9	PCIG				18509	RAD
Montgrose S4	AAB3334	0	0	0	0	0.003		0.003	1.9	PCIG				18511	RAD
Montgrose S4	AAB3332	18	24	24	F	0.017		0.017	1.9	PCIG				18509	RAD
Montgrose S4	AAB3312	17	23	23	F	0.017		0.017	1.9	PCIG				18511	RAD
Montgrose S4	AAB3515	0	0	0	0	0.007		0.007	1.9	PCIG				18511	RAD
Montgrose S4	AAB3452	0	0	0	0	0.012		0.012	1.9	PCIG				18511	RAD
Montgrose S4	AAB3343	18	24	24	F	0.009		0.009	1.9	PCIG				18511	RAD
Montgrose S4	AAB3327	3	9	9	F	0.037		0.037	1.9	PCIG				18511	RAD
Montgrose S4	AAB3466	18	24	24	F	0.007		0.007	1.9	PCIG				18511	RAD
Montgrose S4	AAB3458	0	0	0	0	0.021		0.021	1.9	PCIG				18511	RAD
Montgrose S4	AAB3304	1	1	1	F	0.002		0.002	1.9	PCIG				18509	RAD
Montgrose S4	AAB3344	0	0	0	0	0.003		0.003	1.9	PCIG				18509	RAD
Montgrose S4	AAB3344	0	0	0	0	0.003		0.003	1.9	PCIG				18511	RAD
Montgrose S4	AAB3344	0	0	0	0	0.055		0.055	1.9	PCIG				18511	RAD
Montgrose S4	AAB3307	18	24	24	F	0.023		0.023	1.9	PCIG				18511	RAD
Montgrose S4	AAB3342	0	0	0	0	0.008		0.008	1.9	PCIG				18509	RAD
Montgrose S4	AAB3323	18	24	24	F	0.019		0.019	1.9	PCIG				18511	RAD
Montgrose S4	AAB3477	18	24	24	F	0.018		0.018	1.9	PCIG				18509	RAD
Montgrose S4	AAB3324	18	24	24	F	0.001		0.001	1.9	PCIG				18511	RAD
Montgrose S4	AAB3318	0	0	0	0	0.09		0.09	1.9	PCIG				18511	RAD
Montgrose S4	AAB3336	0	0	0	0	0.001		0.001	1.9	PCIG				18509	RAD
Montgrose S4	AAB3472	0	0	0	0	0.029		0.029	1.9	PCIG				18511	RAD
Montgrose S4	AAB3520	6	12	12	F	0.032		0.032	1.9	PCIG				18511	RAD
Montgrose S4	AAB3470	18	24	24	F	0.002		0.002	1.9	PCIG				18509	RAD
Montgrose S4	AAB3378	0	0	0	0	0.67		0.67	PCIL					20161	RAD

SAMPLING DATA FOR PRS 15-004(J)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bkgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Neptunium 237	15 2158	AAB3485	0	6	I	SS		0.025		1.9	PCIG	FD				G	15509	35828	RAD
Neptunium 237	15 2206	AAB3295	0	4	I	SS		0.023		1.9	PCIG					G	15509	35828	RAD
Neptunium 237	15 2240	AAB3258	0	6	I	SS		0.031		1.9	PCIG					G	15509	35828	RAD
Neptunium 237	15 2241	AAB3330	0	3	I	SS		0.024		1.9	PCIG		O			G	15511	33134	RAD
Neptunium 237	15 2241	AAB3330	0	6	I	SS		0.016		1.9	PCIG					G	15511	33134	RAD
Neptunium 237	15 2245	AAB3526	0	6	I	SS		0.091		1.9	PCIG					G	15511	33134	RAD
Neptunium 237	15 2246	AAB3445	0	6	I	SS		0.038		1.9	PCIG		O			G	15509	35828	RAD
Neptunium 237	15 2246	AAB3445	0	5	I	SS		0.057		1.9	PCIG					G	15509	35828	RAD
Neptunium 237	15 2247	AAB3420	0	6	I	SS		0.02		1.9	PCIG					G	15511	33134	RAD
Neptunium 237	15 2247	AAC0346	21	27	I	SS		0.044		1.9	PCIG					G	20383	34034	RAD
Neptunium 237	15 2248	AAB3447	0	6	I	SS		0.047		1.9	PCIG					G	15511	33134	RAD
Neptunium 237	15 2249	AAB3449	0	6	I	SS		0.012		1.9	PCIG					G	15511	33134	RAD
Neptunium 237	15 2277	AAB3321	0	5	I	SS		0.01		1.9	PCIG					G	15509	35828	RAD
Neptunium 237	15 2278	AAB3294	0	6	I	SS		0.039		1.9	PCIG					G	15511	33134	RAD
Neptunium 237	15 2279	AAB3525	0	5	I	SS		0.035		1.9	PCIG					G	15509	35828	RAD
Neptunium 237	15 2290	AAC0326	16	17	F	SS		0.018		1.9	PCIG					G	20776	35814	RAD
Neptunium 237	15 2290	AAC0327	9	10	F	SS		0.01		1.9	PCIG					G	20776	35814	RAD
Neptunium 237	15 2291	AAC0336	0	6	I	SS		0.022		1.9	PCIG					G	20383	34034	RAD
Neptunium 237	15 2295	AAB3325	0	6	I	SS		0.005		1.9	PCIG	FD				G	15509	35828	RAD
Neptunium 237	15 2299	AAB3480	18	24	I	SS		0.015		1.9	PCIG	FD				G	15509	35828	RAD
Potassium 40	15 2119	AAB3484	0	3	I	SS		19.64	28.6	12	PCIG					G	20107	33792	RAD
Potassium 40	15 2125	AAB3339	0	6	I	SS		17.99	28.6	12	PCIG					G	20106	34688	RAD
Potassium 40	15 2134	AAB3450	0	6	I	SS		17.31	28.6	12	PCIG	FD				G	20106	34688	RAD
Potassium 40	15 2144	AAB3341	0	6	I	SS		18.85	28.6	12	PCIG					G	20106	34688	RAD
Potassium 40	15 2154	AAB3528	0	3	I	SS		24.29	28.6	12	PCIG					G	20106	34688	RAD
Potassium 40	15 2155	AAB3475	0	4	I	SS		6.39	28.6	12	PCIG		O			G	18025	27223	RAD
Potassium 40	15 2155	AAB3475	0	4	I	SS		9.75	28.6	12	PCIG					G	18025	27223	RAD
Potassium 40	15 2167	AAB3300	0	6	I	SS		20.74	28.6	12	PCIG					G	20107	33792	RAD
Potassium 40	15 2245	AAC0342	14	15	F	SS		31.6	28.6	12	PCIG					G	20326	35441	RAD
Potassium 40	15 2246	AAC0339	22	28	I	SS		23.3	28.6	12	PCIG					G	20326	35441	RAD
Potassium 40	15 2249	AAC0341	35	41	I	SS		23.4	28.6	12	PCIG					G	20326	35441	RAD
Potassium 40	15 2290	AAC0328	0	6	I	SS		18.2	28.6	12	PCIG					G	20326	35441	RAD
Potassium 40	RMSATE	AAB3376				W	<	2070			PCIL	EB				G	18819	31126	RAD
Potassium 40	RMSATE	AAB3380				W	<	2070			PCIL	EB				G	18823	30933	RAD
Protactinium 231	15 2245	AAC0342	14	15	F	SS		0.731			PCIG					G	20326	35441	RAD
Protactinium 231	15 2246	AAC0339	22	28	I	SS		2.13			PCIG					G	20326	35441	RAD
Protactinium 231	15 2249	AAC0341	35	41	I	SS		0.171			PCIG					G	20326	35441	RAD
Protactinium 231	15 2290	AAC0328	0	6	I	SS		2.49			PCIG					G	20326	35441	RAD
Protactinium 231	RMSATE	AAB3379				W	<	2600			PCIL	EB				G	18819	31126	RAD
Protactinium 231	RMSATE	AAB3380				W	<	2570			PCIL	EB				G	18823	30933	RAD
Protactinium 234	15 2155	AAB3475	0	4	I	SS		23.43			PCIG		O			G	18025	27223	RAD
Protactinium 234	15 2155	AAB3475	0	4	I	SS		23.41			PCIG					G	18025	27223	RAD
Protactinium 234	15 2228	AAB3320	0	6	I	SS		6.91			PCIG		O			G	18881	30337	RAD
Protactinium 234	15 2228	AAB3320	0	6	I	SS		9.87			PCIG					G	18881	30337	RAD
Protactinium 234	RMSATE	AAB3379				W	<	373			PCIL	EB				G	18819	31126	RAD

SAMPLING DATA FOR PRS 15-004(F)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bkgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Protactinium 234	RNSATE	AAB3380				W	<	425			PCIL	EB				G	18823	30933	RAD
Protactinium 234M	15-2155	AAB3475	0	4	I	SS		2538.1			PCIG		D			G	18025	27223	RAD
Protactinium 234M	15-2155	AAB3475	0	4	I	SS		2527.4			PCIG					G	18025	27223	RAD
Protactinium 234M	15-2226	AAB3478	0	6	I	SS		173.53			PCIG					G	18881	30337	RAD
Protactinium 234M	15-2227	AAB3518	0	6	I	SS		120.84			PCIG	FD				G	18881	30337	RAD
Protactinium 234M	15-2228	AAB3320	0	6	I	SS		1019.4			PCIG		D			G	18881	30337	RAD
Protactinium 234M	15-2228	AAB3320	0	6	I	SS		944.92			PCIG					G	18881	30337	RAD
Protactinium 234M	15-2245	AAC0342	14	15	F	SS		268			PCIG					G	20326	35641	RAD
Protactinium 234M	15-2246	AAC0339	22	28	I	SS		185			PCIG					G	20326	35641	RAD
Protactinium 234M	15-2249	AAC0341	35	41	I	SS		165			PCIG					G	20326	35641	RAD
Protactinium 234M	15-2290	AAC0328	0	6	I	SS		26.9			PCIG					G	20326	35641	RAD
Protactinium 234M	RNSATE	AAB3379				W	<	5840			PCIL	EB				G	18819	31126	RAD
Protactinium 234M	RNSATE	AAB3380				W	<	7700			PCIL	EB				G	18823	30933	RAD
Radium 223	15-2245	AAC0342	14	15	F	SS		0.403			PCIG					G	20326	35641	RAD
Radium 223	15-2246	AAC0339	22	28	I	SS		0.542			PCIG					G	20326	35641	RAD
Radium 223	15-2249	AAC0341	35	41	I	SS		0.369			PCIG					G	20326	35641	RAD
Radium 223	15-2290	AAC0328	0	6	I	SS		0.274			PCIG					G	20326	35641	RAD
Radium 223	RNSATE	AAB3379				W	<	482			PCIL	EB				G	18819	31126	RAD
Radium 223	RNSATE	AAB3380				W	<	439			PCIL	EB				G	18823	30933	RAD
Radium 224	15-2155	AAB3475	0	4	I	SS		4.25			PCIG		D			G	18025	27223	RAD
Radium 224	15-2155	AAB3475	0	4	I	SS		4.89			PCIG					G	18025	27223	RAD
Radium 224	15-2167	AAB3300	0	6	I	SS		4.169			PCIG					G	20107	33792	RAD
Radium 224	15-2227	AAB3518	0	6	I	SS		3.4			PCIG	FD				G	18881	30337	RAD
Radium 224	15-2245	AAC0342	14	15	F	SS		2.12			PCIG					G	20326	35641	RAD
Radium 224	15-2246	AAC0339	22	28	I	SS		4.87			PCIG					G	20326	35641	RAD
Radium 224	15-2249	AAC0341	35	41	I	SS		3.98			PCIG					G	20326	35641	RAD
Radium 224	15-2290	AAC0328	0	6	I	SS		3.89			PCIG					G	20326	35641	RAD
Radium 224	RNSATE	AAB3379				W	<	2580			PCIL	EB				G	18819	31126	RAD
Radium 224	RNSATE	AAB3380				W	<	2180			PCIL	EB				G	18823	30933	RAD
Radium 226	15-2115	AAB3306	0	6	I	SS		1.434		0.1	PCIG					G	20106	34688	RAD
Radium 226	15-2119	AAB3464	0	3	I	SS		1.239		0.1	PCIG					G	20107	33792	RAD
Radium 226	15-2125	AAB3339	0	6	I	SS		1.055		0.1	PCIG					G	20106	34688	RAD
Radium 226	15-2134	AAB3450	0	6	I	SS		1.174		0.1	PCIG	FD				G	20106	34688	RAD
Radium 226	15-2154	AAB3528	0	3	I	SS		0.9637		0.1	PCIG					G	20106	34688	RAD
Radium 226	15-2167	AAB3300	0	6	I	SS		1.328		0.1	PCIG					G	20107	33792	RAD
Radium 226	15-2226	AAB3478	0	6	I	SS		1.69		0.1	PCIG					G	18881	30337	RAD
Radium 226	15-2227	AAB3518	0	6	I	SS		1.42		0.1	PCIG	FD				G	18881	30337	RAD
Radium 226	15-2228	AAB3320	0	6	I	SS		1.39		0.1	PCIG		D			G	18881	30337	RAD
Radium 226	15-2228	AAB3320	0	6	I	SS		1.54		0.1	PCIG					G	18881	30337	RAD
Radium 226	15-2245	AAC0342	14	15	F	SS		136		0.1	PCIG					G	20326	35641	RAD
Radium 226	15-2246	AAC0339	22	28	I	SS		79.1		0.1	PCIG					G	20326	35641	RAD
Radium 226	15-2249	AAC0341	35	41	I	SS		6.28		0.1	PCIG					G	20326	35641	RAD
Radium 226	15-2290	AAC0328	0	6	I	SS		14.5		0.1	PCIG					G	20326	35641	RAD
Radium 226	RNSATE	AAB3379				W	<	161		20	PCIL	EB				G	18819	31126	RAD
Radium 226	RNSATE	AAB3380				W	<	1780		20	PCIL	EB				G	18823	30933	RAD

SAMPLING DATA FOR PHS 15-004(1)

Analyte	LegID	Sample ID	Begin	End	Units	Vol 5	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Units
Ruthenium 106	15 2115	AA81114	0	6.1			1.548			13 PCIG				Q	2016	34441	RAD	
Ruthenium 106	15 2245	AA81142	14	15.6			0.145			13 PCIG				Q	2016	34441	RAD	
Ruthenium 106	15 2246	AA81118	32	28.1			0.746			13 PCIG				Q	2016	34441	RAD	
Ruthenium 106	15 2245	AA81141	35	41.1			0.225			13 PCIG				Q	2016	34441	RAD	
Ruthenium 106	15 2250	AA81128	0	6.1			0.113			13 PCIG				Q	2016	34441	RAD	
Ruthenium 106	PGATE	AA81129					585			PCIL	BB			Q	18415	31134	RAD	
Ruthenium 106	PGATE	AA81180					513			PCIL	BB			Q	18421	31134	RAD	
Ruthenium 106	15 2114	AA81176	0	6.1			0.174			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2114	AA81147	18	24.1			0.24			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2122	AA81121	0	6.1			0.215			13 PCIG				Q	15505	34826	RAD	
Ruthenium 106	15 2127	AA81140	18	24.1			0.077			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2111	AA81124	0	6.1			0.168			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2107	AA81102	18	24.1			0.244			13 PCIG				Q	15505	34826	RAD	
Ruthenium 106	15 2115	AA81112	17	23.1			0.11			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2145	AA81115	0	4.1			0.164			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2145	AA81142	0	6.1			0.024			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2147	AA81143	18	24.1			0.237			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2149	AA81127	3	9.1			0.145			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2151	AA81146	18	24.1			0.111			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2152	AA81154	0	5.1			0.078			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2153	AA81144	0	5.1			0.245			13 PCIG				Q	15506	34826	RAD	
Ruthenium 106	15 2153	AA81144	0	5.1			0.184			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2153	AA81144	0	5.1			0.244			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2157	AA81107	18	24.1			0.137			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2158	AA81142	0	4.1			0.141			13 PCIG				Q	15505	34826	RAD	
Ruthenium 106	15 2176	AA81121	16	24.1			0.078			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2172	AA81177	18	24.1			0.087			13 PCIG				Q	15505	34826	RAD	
Ruthenium 106	15 2172	AA81124	18	24.1			0.111			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2177	AA81118	0	6.1			0.024			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2178	AA81116	0	6.1			0.015			13 PCIG				Q	15506	34826	RAD	
Ruthenium 106	15 2179	AA81172	0	4.1			0.103			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2180	AA81150	6	12.1			0.214			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2180	AA81170	18	24.1			0.114			13 PCIG				Q	15506	34826	RAD	
Ruthenium 106	15 2187	AA81178					4.04			200 PCIL	BB			Q	2016	34441	RAD	
Ruthenium 106	15 2188	AA81145	0	6.1			0.024			13 PCIG				Q	15505	34826	RAD	
Ruthenium 106	15 2206	AA81205	0	4.1			0.145			13 PCIG				Q	15509	34441	RAD	
Ruthenium 106	15 2240	AA81204	0	4.1			0.024			13 PCIG				Q	15505	34826	RAD	
Ruthenium 106	15 2241	AA81110	0	6.1			0.018			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2241	AA81110	0	6.1			0.032			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2245	AA81154	0	6.1			0.032			13 PCIG				Q	15511	31134	RAD	
Ruthenium 106	15 2245	AA81142	14	15.6			0.182			13 PCIG				Q	2016	34441	RAD	
Ruthenium 106	15 2246	AA81145	0	6.1			0.165			13 PCIG				Q	15505	34826	RAD	
Ruthenium 106	15 2246	AA81145	0	6.1			0.247			13 PCIG				Q	2016	34441	RAD	
Ruthenium 106	15 2246	AA81119	22	28.1			2.72			13 PCIG				Q	2016	34441	RAD	
Ruthenium 106	15 2247	AA81120	0	6.1			0.241			13 PCIG				Q	15511	31134	RAD	

SAMPLING DATA FOR PRS 15-004(V)

Analyte	Lec ID	Sample ID	Begin	End	Units	Met S	Sample Value	Blgd Value	24L Value	Units	Field Code	Lab Code	EPA Cust	Sample Location	Tech Code	Request Number	Report Number	Series
Ruthenium 106	15 2247	AAC0348	21	27	SS	0.175			13	PC10				G	20303	34030	RAD	
Ruthenium 106	15 2248	AAB3447	0	6	SS	0.681			13	PC10				G	19511	31134	RAD	
Ruthenium 106	15 2249	AAB3448	0	6	SS	0.026			13	PC10				G	19511	31134	RAD	
Ruthenium 106	15 2249	AAC0341	35	41	SS	0.664			17	PC10				G	20326	35641	RAD	
Ruthenium 106	15 2277	AAB3321	0	5	SS	0.043			13	PC10				G	19505	35828	RAD	
Ruthenium 106	15 2278	AAB3284	0	6	SS	0.101			13	PC10				G	19511	31134	RAD	
Ruthenium 106	15 2279	AAB3525	0	5	SS	0.158			13	PC10				G	19509	35828	RAD	
Ruthenium 106	15 2290	AAC0326	16	17	F	0.033			13	PC10				G	20776	35814	RAD	
Ruthenium 106	15 2290	AAC0327	9	10	F	0			13	PC10				G	20776	35814	RAD	
Ruthenium 106	15 2290	AAC0328	0	6	SS	0.149			13	PC10				G	20324	35641	RAD	
Ruthenium 106	15 2291	AAC0336	0	6	SS	0.002			13	PC10				G	20383	34030	RAD	
Ruthenium 106	15 2295	AAB3325	0	6	SS	0.064			13	PC10	FD			G	19509	35828	RAD	
Ruthenium 106	15 2299	AAB3480	18	24	SS	0.09			13	PC10	FD			G	19509	35828	RAD	
Ruthenium 106	RESATE	AAB3379			W	466			200	PC1L	FB			G	18819	31128	RAD	
Ruthenium 106	RESATE	AAB3380			W	421			200	PC1L	FB			G	18823	30933	RAD	
Sodium 22	15 2114	AAB3476	0	6	SS	0.014			13	PC10				G	19509	35828	RAD	
Sodium 22	15 2114	AAB3487	18	24	SS	0.016			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2123	AAB3521	0	6	SS	0.01			13	PC10				G	19509	35828	RAD	
Sodium 22	15 2127	AAB3340	18	24	SS	0.01			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2131	AAB3334	0	6	SS	0.019			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2137	AAB3332	18	24	SS	0.002			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2139	AAB3312	17	23	SS	0.013			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2141	AAB3515	0	4	SS	0.01			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2145	AAB3452	0	6	SS	0.008			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2147	AAB3343	18	24	SS	0.011			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2148	AAB3327	3	9	SS	0.007			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2151	AAB3466	15	24	SS	0.033			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2152	AAB3458	1	5	SS	0.008			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2153	AAB3304	1	1	F	0.003			13	PC10				G	19509	35828	RAD	
Sodium 22	15 2153	AAB3344	0	5	SS	0.018			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2153	AAB3344	0	5	SS	0.037			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2157	AAB3307	18	24	SS	0.001			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2166	AAB3342	0	4	SS	0.018			13	PC10				G	19509	35828	RAD	
Sodium 22	15 2170	AAB3323	14	20	SS	0.012			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2172	AAB3477	18	24	SS	0.002			13	PC10				G	19509	35828	RAD	
Sodium 22	15 2173	AAB3324	18	24	SS	0.01			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2177	AAB3318	0	6	SS	0.005			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2178	AAB3338	0	6	SS	0.011			13	PC10				G	19509	35828	RAD	
Sodium 22	15 2179	AAB3472	0	4	SS	0			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2190	AAB3500	6	12	SS	0.001			13	PC10				G	19511	31134	RAD	
Sodium 22	15 2192	AAB3470	18	24	SS	0.013			13	PC10				G	19509	35828	RAD	
Sodium 22	15 2197	AAB3378	0	6	SS	0			480	PC1L	FD			G	20161	33487	RAD	
Sodium 22	15 2198	AAB3485	0	6	SS	0.006			13	PC10				G	19509	35828	RAD	
Sodium 22	15 2206	AAB3295	0	4	SS	0.016			13	PC10				G	19509	35828	RAD	
Sodium 22	15 2240	AAB3298	0	6	SS	0.032			13	PC10				G	19509	35828	RAD	

SAMPLING DATA FOR PRS 15-004(7)

Analyte	Loc ID	Sample ID	Depth	End	Units	Mat	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Suite
Thorium 234	15 2155	AAB3475	0	4	SS	1927.5				PCIG					G	18025	27223	RAD
Thorium 234	15 2167	AAB3300	0	6	SS	7.632				PCIG					G	20107	33782	RAD
Thorium 234	15 2226	AAB3478	0	6	SS	48.16				PCIG					G	18481	30337	RAD
Thorium 234	15 2227	AAB3518	0	6	SS	111.71				PCIG	FD				G	18481	30337	RAD
Thorium 234	15 2228	AAB3329	0	6	SS	50.57				PCIG		D			G	18481	30337	RAD
Thorium 234	15 2245	AAC0342	14	15	SS	131				PCIG					G	18481	30337	RAD
Thorium 234	15 2246	AAC0339	22	26	SS	110				PCIG					G	20326	35641	RAD
Thorium 234	15 2249	AAC0341	35	41	SS	96.8				PCIG					G	20326	35641	RAD
Thorium 234	15 2290	AAC0328	0	6	SS	15.5				PCIG					G	20326	35641	RAD
Thorium 234	NEGATE	AAB3379			W	1760				PCIL	BB				G	18419	31126	RAD
Thorium 234	NEGATE	AAB3380			W	1510				PCIL	BB				G	18423	30933	RAD
Uranium	15 2114	AAB3476	0	6	SS	21.1	5.45			MGKG					KPA	19509	35825	RAD
Uranium	15 2114	AAB3487	18	24	SS	2.89	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2114	AAB3487	16	24	SS	2.75	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2115	AAB3306	0	6	SS	23.7	5.45			MGKG			J		KPA	20106	34684	RAD
Uranium	15 2119	AAB3484	0	6	SS	25.5	5.45			MGKG			J		KPA	20107	33795	RAD
Uranium	15 2123	AAB3521	0	6	SS	14	5.45			MGKG			J		KPA	19511	33138	RAD
Uranium	15 2125	AAB3339	0	6	SS	60.5	5.45			MGKG					KPA	20108	34684	RAD
Uranium	15 2127	AAB3340	18	24	SS	3.93	5.45			MGKG					KPA	19509	35825	RAD
Uranium	15 2131	AAB3334	0	6	SS	26.9	5.45			MGKG	FD				KPA	19511	33138	RAD
Uranium	15 2134	AAB3450	0	6	SS	5.46	5.45			MGKG	FD				KPA	20106	34684	RAD
Uranium	15 2137	AAB3332	18	24	SS	6.47	5.45			MGKG			J		KPA	19509	35825	RAD
Uranium	15 2139	AAB3312	17	23	SS	56.9	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2141	AAB3515	0	6	SS	173	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2144	AAB3341	0	6	SS	20.2	5.95			MGKG			J		KPA	20106	34684	RAD
Uranium	15 2145	AAB3452	0	6	SS	260	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2147	AAB3243	18	24	SS	13	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2149	AAB3327	3	9	SS	131	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2151	AAB3466	18	24	SS	9	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2152	AAB3458	0	6	SS	169	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2153	AAB3304	1	1	SS	21.7	5.45			MGKG					KPA	19509	35825	RAD
Uranium	15 2153	AAB3344	0	6	SS	531	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2154	AAB3528	0	6	SS	23.4	5.45			MGKG			J		KPA	20106	34684	RAD
Uranium	15 2157	AAB3307	18	24	SS	231	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2166	AAB3342	0	6	SS	31.6	5.45			MGKG					KPA	19509	35825	RAD
Uranium	15 2166	AAB3342	0	6	SS	69.2	5.45			MGKG			J		KPA	19509	35825	RAD
Uranium	15 2167	AAB3360	0	6	SS	10.2	5.45			MGKG					KPA	20107	33795	RAD
Uranium	15 2170	AAB3323	18	24	SS	5.77	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2172	AAB3477	18	24	SS	10.3	5.45			MGKG					KPA	19509	35825	RAD
Uranium	15 2173	AAB3324	18	24	SS	7.6	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2177	AAB3318	0	6	SS	112	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2178	AAB3336	0	6	SS	46.1	5.45			MGKG					KPA	19509	35825	RAD
Uranium	15 2179	AAB3472	0	6	SS	34.8	5.45			MGKG					KPA	19511	33138	RAD
Uranium	15 2180	AAB3520	6	12	SS	23.7	5.45			MGKG					KPA	19511	33138	RAD

SAMPLING DATA FOR PHS 15-004(J)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Cnal	Sample Location	Tech Code	Request Number	Report Number	Scite
Uranium	15 2182	AAB3170	18	24	I	SS		152	5 45		MG/KG	FD				IFA	15505	35825	RAD
Uranium	15 2197	AAB3178				N		0 11			UG/L	FB				IFA	20181	31162	RAD
Uranium	15 2198	AAB1445	0	6	I	SS		21 6	5 45		MG/KG	FD				IFA	15505	35825	RAD
Uranium	15 2206	AAB3295	0	4	I	SS		12 1	5 45		MG/KG					IFA	15505	35825	RAD
Uranium	15 2226	AAB3178	0	6	I	SS		170	5 45		MG/KG					IFAG	18881	30346	RAD
Uranium	15 2227	AAB3518	0	6	I	SS		185	5 45		MG/KG	FD				IFMS	18881	30346	RAD
Uranium	15 2228	AAB3320	0	6	I	SS		1733	5 45		MG/KG		D			IFMS	18881	30346	RAD
Uranium	15 2228	AAB3320	0	6	I	SS		1720	5 45		MG/KG					IFMS	18881	30346	RAD
Uranium	15 2240	AAB3298	0	6	I	SS		57 6	5 45		MG/KG		D			KPA	15505	35825	RAD
Uranium	15 2240	AAB3298	0	6	I	SS		47 5	5 45		MG/KG					KPA	15505	35825	RAD
Uranium	15 2241	AAB3330	0	6	I	SS		34 4	5 45		MG/KG					KPA	19511	33138	RAD
Uranium	15 2244	AAC0334	18	14	F	SS		57	5 45		MG/KG					KPA	20776	35809	RAD
Uranium	15 2245	AAB3526	0	6	I	SS		177	5 45		MG/KG		D			KPA	19511	33138	RAD
Uranium	15 2245	AAB3526	0	6	I	SS		168	5 45		MG/KG					KPA	19511	33138	RAD
Uranium	15 2245	AAC0342	14	15	F	SS		366	5 45		MG/KG		J			KPA	20326	35461	RAD
Uranium	15 2246	AAB3445	0	6	I	SS		2763	5 45		MG/KG					KPA	19505	35825	RAD
Uranium	15 2246	AAC0339	22	28	I	SS		37 7	5 45		MG/KG		J			KPA	20326	35461	RAD
Uranium	15 2247	AAB3420	0	6	I	SS		3131	5 45		MG/KG					KPA	19511	33138	RAD
Uranium	15 2247	AAC0346	21	27	I	SS		114	5 45		MG/KG					KPA	20383	34044	RAD
Uranium	15 2248	AAB3447	0	6	I	SS		987	5 45		MG/KG		D			KPA	19511	33138	RAD
Uranium	15 2248	AAB3447	0	6	I	SS		977	5 45		MG/KG					KPA	19511	33138	RAD
Uranium	15 2249	AAB3449	0	6	I	SS		971	5 45		MG/KG					KPA	19511	33138	RAD
Uranium	15 2249	AAC0341	35	41	I	SS		349	5 45		MG/KG		J			KPA	20326	35461	RAD
Uranium	15 2277	AAB3321	0	5	I	SS		41 1	5 45		MG/KG					KPA	19509	35825	RAD
Uranium	15 2278	AAB3294	0	6	I	SS		10 1	5 45		MG/KG					KPA	19511	33138	RAD
Uranium	15 2279	AAB3525	0	5	I	SS		39 1	5 45		MG/KG					KPA	19509	35825	RAD
Uranium	15 2290	AAC0328	16	17	F	SS		162	5 45		MG/KG					KPA	20776	35809	RAD
Uranium	15 2290	AAC0327	9	10	F	SS		48 9	5 45		MG/KG					KPA	20776	35809	RAD
Uranium	15 2290	AAC0328	0	6	I	SS		229	5 45		MG/KG		J			KPA	20326	35461	RAD
Uranium	15 2291	AAC0336	0	6	I	SS		24 6	5 45		MG/KG					KPA	20383	34044	RAD
Uranium	15 2295	AAB3325	0	6	I	SS		150	5 45		MG/KG	FD				KPA	19509	35825	RAD
Uranium	15 2299	AAB3460	18	24	I	SS		127	5 45		MG/KG	FD				KPA	19505	35825	RAD
Uranium	RINGSATE	AAB3379				N		1			UG/L	FB				IFMS	18819	31128	RAD
Uranium	RINGSATE	AAB3380				N		1			UG/L	FB				IFMS	18823	31162	RAD
Uranium	RINGSATE	AAB3381				N		3 2			UG/L	FB				IFMS	18881	30346	RAD
Uranium	RINGSATE	AAB3381				N		4 1			UG/L	FB	D			IFMS	18881	30346	RAD
Uranium 234	15 2155	AAB3475	0	4	I	SS		1664 39	1 94	86	PC/G		D			RAS	18025	27234	RAD
Uranium 234	15 2155	AAB3475	0	4	I	SS		1652 33	1 94	86	PC/G					RAS	18025	27234	RAD
Uranium 235	15 2115	AAB3306	0	6	I	SS		0 6634	0 084	18	PC/G					G	20106	34688	RAD
Uranium 235	15 2125	AAB3339	0	5	I	SS		0 7885	0 084	18	PC/G					G	20106	34688	RAD
Uranium 235	15 2134	AAB3450	0	6	I	SS		0 3652	0 084	18	PC/G	FD				G	20106	34688	RAD
Uranium 235	15 2155	AAB3475	0	4	I	SS		158 76	0 084	18	PC/G		D			RAS	18025	27234	RAD
Uranium 235	15 2155	AAB3475	0	4	I	SS		86 59	0 084	18	PC/G		J			RAS	18025	27234	RAD
Uranium 235	15 2155	AAB3475	0	4	I	SS		78 27	0 084	18	PC/G		D			G	18025	27223	RAD
Uranium 235	15 2155	AAB3475	0	4	I	SS		78 74	0 084	18	PC/G					G	18025	27223	RAD

SAMPLING DATA FOR PRS 15-004(I)

Analyte	Loc 10	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bkgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Seiba
Uranium 235	15 2167	AAB3300	0	6	I	SS		0.5598	0.084		18	PCIG				G	20187	33792	RAD
Uranium 235	15 2226	AAB3473	0	6	I	SS		2.17	0.084		18	PCIG				G	18881	30337	RAD
Uranium 235	15 2227	AAB3518	0	6	I	SS		2.74	0.084		18	PCIG	FD			G	18881	30337	RAD
Uranium 235	15 2228	AAB3320	0	6	I	SS		17.13	0.084		18	PCIG		D		G	18881	30337	RAD
Uranium 235	15 2228	AAB3320	0	6	I	SS		13.89	0.084		18	PCIG				G	18881	30337	RAD
Uranium 235	15 2245	AAC0342	14	15	F	SS		8.23	0.084		18	PCIG				G	20326	35641	RAD
Uranium 235	15 2246	AAC0339	22	28	I	SS		4.91	0.084		18	PCIG				G	20326	35641	RAD
Uranium 235	15 2249	AAC0341	35	41	I	SS		4.61	0.084		18	PCIG				G	20326	35641	RAD
Uranium 235	15 2290	AAC0328	0	6	I	SS		0.891	0.084		18	PCIG				G	20326	35641	RAD
Uranium 235	RMSATE	AAB3379				W	<	100				PCIL	EB			G	18819	31126	RAD
Uranium 235	RMSATE	AAB3380				W	<	133				PCIL	EB			G	18823	30933	RAD
Uranium 238	15 2155	AAB3475	0	4	I	SS		1629.88	1.82		59	PCIG		D		RAS	18025	27234	RAD
Uranium 238	15 2155	AAB3475	0	4	I	SS		1687.3	1.82		59	PCIG				RAS	18025	27234	RAD

SAMPLING DATA FOR PWS 15-C08(e)

Analyte	Loc ID	Sample ID	Begin End	Units	Mat S	Sample Value	Big4 Value	SEL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Aluminum	15 2181	AAB3127	0 6	4	25	1665	38750	76678 7928	MG/D					EPES	18457	29756	MORGANIC
Aluminum	15 2219	AAB3124	0 4	4	25	1635	38750	76678 7928	MG/D					EPES	18457	28413	MORGANIC
Aluminum	15 2219	AAB3122	0 3	1	25	1665	38750	76678 7928	MG/D				D	EPES	18457	28413	MORGANIC
Aluminum	15 2219	AAB3122	0 3	1	25	14750	38750	76678 7928	MG/D					EPES	18457	28413	MORGANIC
Aluminum	15 2219	AAB3128	0 5	4	25	1365	38750	76678 7928	MG/D					EPES	18457	28413	MORGANIC
Aluminum	15 2219	AAB3114	0 12	1	25	1465	38750	76678 7928	MG/D					EPES	18473	29756	MORGANIC
Aluminum	15 2244	AAB3123	0 6	1	25	1495	38750	76678 7928	MG/D					EPES	18473	29756	MORGANIC
Aluminum	15 2244	AAC0314	14 14 F	14	25	2710	38750	76678 7928	MG/D					EPES	20774	34497	MORGANIC
Antimony	15 2181	AAB3127	0 6	1	25	37	1		MG/D			R		EPES	18473	29756	MORGANIC
Antimony	15 2219	AAB3124	0 4	1	25	38	1		MG/D					EPES	18457	28413	MORGANIC
Antimony	15 2219	AAB3122	0 3	1	25	41	1		MG/D				D	EPES	18457	28413	MORGANIC
Antimony	15 2219	AAB3122	0 3	1	25	41	1		MG/D					EPES	18457	28413	MORGANIC
Antimony	15 2219	AAB3128	0 5	1	25	39	1		MG/D					EPES	18457	28413	MORGANIC
Antimony	15 2219	AAB3116	0 12	1	25	38	1		MG/D					EPES	18473	29756	MORGANIC
Antimony	15 2244	AAB3123	0 6	1	25	38	1		MG/D			R		EPES	18473	29756	MORGANIC
Antimony	15 2244	AAC0314	14 14 F	14	25	0 25	1		MG/D			R		EPES	20774	34497	MORGANIC
Antimony	15 2181	AAB3127	0 6	1	25	31	7 82	0 38	MG/D					EPES	18473	29756	MORGANIC
Arsenic	15 2219	AAS3124	0 4	1	25	3	7 82	0 38	MG/D					ETVAA	18457	28413	MORGANIC
Arsenic	15 2219	AAB3122	0 3	1	25	3	7 82	0 38	MG/D					ETVAA	18457	28413	MORGANIC
Arsenic	15 2219	AAB3122	0 3	1	25	3	7 82	0 38	MG/D				D	ETVAA	18457	28413	MORGANIC
Arsenic	15 2219	AAB3128	0 5	1	25	29	7 82	0 38	MG/D					ETVAA	18457	28413	MORGANIC
Arsenic	15 2219	AAB3116	0 12	1	25	55	7 82	0 38	MG/D					EPES	18473	29756	MORGANIC
Arsenic	15 2244	AAB3123	0 6	1	25	34	7 82	0 38	MG/D					EPES	18473	29756	MORGANIC
Arsenic	15 2244	AAC0314	14 14 F	14	25	43	7 82	0 38	MG/D					EPES	20774	34497	MORGANIC
Barium	15 2181	AAB3127	0 6	1	25	358	315	5335 54439	MG/D			J		EPES	18473	29756	MORGANIC
Barium	15 2219	AAB3124	0 4	1	25	19	315	5335 54439	MG/D					EPES	18457	28413	MORGANIC
Barium	15 2219	AAB3122	0 3	1	25	200	315	5335 54439	MG/D				D	EPES	18457	28413	MORGANIC
Barium	15 2219	AAB3122	0 3	1	25	215	315	5335 54439	MG/D					EPES	18457	28413	MORGANIC
Barium	15 2219	AAB3128	0 5	1	25	282	315	5335 54439	MG/D					EPES	18457	28413	MORGANIC
Barium	15 2219	AAB3116	0 12	1	25	513	315	5335 54439	MG/D					EPES	18473	29756	MORGANIC
Barium	15 2244	AAB3123	0 6	1	25	226	315	5335 54439	MG/D				J	EPES	18473	29756	MORGANIC
Barium	15 2244	AAC0314	14 14 F	14	25	316	315	5335 54439	MG/D			J		EPES	20774	34497	MORGANIC
Beryllium	15 2181	AAB3127	0 6	1	25	0 81	1 55	0 14260 81	MG/D					EPES	18473	29756	MORGANIC
Beryllium	15 2219	AAB3124	0 4	1	25	14	1 55	0 14260 81	MG/D					EPES	18457	28413	MORGANIC
Beryllium	15 2219	AAB3122	0 3	1	25	14	1 55	0 14260 81	MG/D				D	EPES	18457	28413	MORGANIC
Beryllium	15 2219	AAB3128	0 5	1	25	2	1 55	0 14260 81	MG/D					EPES	18457	28413	MORGANIC
Beryllium	15 2219	AAB3116	0 12	1	25	12	1 55	0 14260 81	MG/D					EPES	18457	28413	MORGANIC
Beryllium	15 2244	AAB3123	0 6	1	25	1	1 55	0 14260 81	MG/D				D	EPES	20774	34497	MORGANIC
Beryllium	15 2244	AAC0314	14 14 F	14	25	0 43	2 2	38 340 327	MG/D			R		EPES	18473	29756	MORGANIC
Cadmium	15 2181	AAB3127	0 6	1	25	0 43	2 2	38 340 327	MG/D					EPES	18473	29756	MORGANIC

SAMPLING DATA FOR PWS 15-000(a)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	Sample Value	Step Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Matrix	
Calcium	15 2229	AAB3526	0	4	SS	2.2	2.7	38 3403347	MGKG						CPES	18457	28413	SS	INORGANIC
Calcium	15 2230	AAB3502	0	3	SS	2.6	2.7	38 3403347	MGKG						CPES	18457	28413	SS	INORGANIC
Calcium	15 2231	AAB3502	0	3	SS	2	2.7	38 3403347	MGKG						CPES	18457	28413	SS	INORGANIC
Calcium	15 2231	AAB3528	0	5	SS	1.8	2.7	38 3403347	MGKG						CPES	18457	28413	SS	INORGANIC
Calcium	15 2230	AAB3515	0	12	SS	12.8	2.7	38 3403347	MGKG						CPES	18673	29796	SS	INORGANIC
Calcium	15 2244	AAB3523	0	6	SS	0.98	2.7	38 3403347	MGKG						CPES	18673	29796	SS	INORGANIC
Calcium	15 2244	AAC0334	14	14	F	0.2	2.7	38 3403347	MGKG						CPES	20774	34497	F	INORGANIC
Calcium	15 2191	AAB3527	0	6	SS	2050	6120		MGKG						CPES	18457	28413	SS	INORGANIC
Calcium	15 2229	AAB3526	0	4	SS	2010	6120		MGKG						CPES	18457	28413	SS	INORGANIC
Calcium	15 2230	AAB3502	0	3	SS	2370	6120		MGKG						CPES	18457	28413	SS	INORGANIC
Calcium	15 2230	AAB3502	0	3	SS	2360	6120		MGKG						CPES	18457	28413	SS	INORGANIC
Calcium	15 2231	AAB3528	0	5	SS	2490	6120		MGKG						CPES	18457	28413	SS	INORGANIC
Calcium	15 2239	AAB3516	0	12	SS	2580	6120		MGKG						CPES	18457	28413	SS	INORGANIC
Calcium	15 2244	AAB3523	0	6	SS	3250	6120		MGKG						CPES	18673	29796	SS	INORGANIC
Calcium	15 2244	AAC0334	14	14	F	3590	6120		MGKG						CPES	20774	34497	F	INORGANIC
Chromium	15 2191	AAB3527	0	6	SS	5.7	19.3		MGKG						CPES	18673	29796	SS	INORGANIC
Chromium	15 2229	AAB3526	0	4	SS	10.4	19.3		MGKG						CPES	18457	28413	SS	INORGANIC
Chromium	15 2230	AAB3502	0	3	SS	11.4	19.3		MGKG						CPES	18457	28413	SS	INORGANIC
Chromium	15 2230	AAB3502	0	3	SS	9.1	19.3		MGKG						CPES	18457	28413	SS	INORGANIC
Chromium	15 2231	AAB3528	0	5	SS	8.3	19.3		MGKG						CPES	18457	28413	SS	INORGANIC
Chromium	15 2239	AAB3516	0	12	SS	9.8	19.3		MGKG						CPES	18457	28413	SS	INORGANIC
Chromium	15 2244	AAB3523	0	6	SS	10.3	19.3		MGKG						CPES	18673	29796	SS	INORGANIC
Chromium	15 2244	AAC0334	14	14	F	29.7	19.3		MGKG						CPES	20774	34497	F	INORGANIC
Cobalt	15 2191	A73527	0	6	SS	4.5	19.2	4600	MGKG						CPES	18673	29796	SS	INORGANIC
Cobalt	15 2229	AAB3526	0	4	SS	8.2	19.2	4600	MGKG						CPES	18457	28413	SS	INORGANIC
Cobalt	15 2230	AAB3502	0	3	SS	8.7	19.2	4600	MGKG						CPES	18457	28413	SS	INORGANIC
Cobalt	15 2230	AAB3502	0	3	SS	7.7	19.2	4600	MGKG						CPES	18457	28413	SS	INORGANIC
Cobalt	15 2231	AAB3528	0	5	SS	6.6	19.2	4600	MGKG						CPES	18457	28413	SS	INORGANIC
Cobalt	15 2230	AAB3516	0	12	SS	9.2	19.2	4600	MGKG						CPES	18673	29796	SS	INORGANIC
Cobalt	15 2244	AAB3523	0	6	SS	6.5	19.2	4600	MGKG						CPES	18457	28413	SS	INORGANIC
Copper	15 2244	AAC0334	14	14	F	12.1	19.2	4600	MGKG						CPES	20774	34497	F	INORGANIC
Copper	15 2191	AAB3527	0	6	SS	1150	30.7	2848 33114	MGKG						CPES	18673	29796	SS	INORGANIC
Copper	15 2229	AAB3526	0	4	SS	796	30.7	2848 33114	MGKG						CPES	18457	28413	SS	INORGANIC
Copper	15 2230	AAB3502	0	3	SS	81.2	30.7	2848 33114	MGKG						CPES	18457	28413	SS	INORGANIC
Copper	15 2230	AAB3502	0	3	SS	66.1	30.7	2848 33114	MGKG						CPES	18457	28413	SS	INORGANIC
Copper	15 2231	AAB3528	0	5	SS	22.3	30.7	2848 33114	MGKG						CPES	18457	28413	SS	INORGANIC
Copper	15 2239	AAB3516	0	12	SS	4140	30.7	2848 33114	MGKG						CPES	18673	29796	SS	INORGANIC
Copper	15 2244	AAB3523	0	6	SS	1710	30.7	2848 33114	MGKG						CPES	18673	29796	SS	INORGANIC
Copper	15 2244	AAC0334	14	14	F	55.1	30.7	2848 33114	MGKG						CPES	20774	34497	F	INORGANIC
Iron	15 2191	AAB3527	0	6	SS	9940	21350		MGKG						CPES	18673	29796	SS	INORGANIC
Iron	15 2229	AAB3526	0	4	SS	14400	21350		MGKG						CPES	18457	28413	SS	INORGANIC
Iron	15 2230	AAB3502	0	3	SS	16370	21350		MGKG						CPES	18457	28413	SS	INORGANIC
Iron	15 2230	AAB3502	0	3	SS	13900	21350		MGKG						CPES	18457	28413	SS	INORGANIC
Iron	15 2231	AAB3528	0	5	SS	13400	21350		MGKG						CPES	18457	28413	SS	INORGANIC

SAMPLING DATA FOR PRS 15-C08(A)

ANALYTE	LOC ID	SAMPLE ID	BEGIN	END	UNITS	MAI S	SAMPLE VALUE	BLGD VALUE	SAL VALUE	UNITS	FIELD CODE	LAB CODE	EPA QUAL	SAMPLE LOCATION	TRCH CODE	REQUEST NUMBER	REPORT NUMBER	SUITE
As	15 2235	AAB3516	0	12	SS	30100	21300			MG/KG					DPES	18457	29756	INORGANIC
As	15 2244	AAB3523	0	6	SS	33500	21300			MG/KG					DPES	18457	29756	INORGANIC
As	15 2244	AAC0334	14	14 F	SS	21200	21300			MG/KG					DPES	20774	14457	INORGANIC
Cadm	15 2191	AAB3527	0	6	SS	23	23			400					CFAA	18457	29756	INORGANIC
Cadm	15 2229	AAB3326	0	4	SS	23	23			400					ETVAA	18457	28413	INORGANIC
Cadm	15 2230	AAB3302	0	3	SS	262	23			400					ETVAA	18457	28413	INORGANIC
Cadm	15 2231	AAB3328	0	3	SS	25	23			400					ETVAA	18457	28413	INORGANIC
Cadm	15 2235	AAB3329	0	5	SS	31	23			400					ETVAA	18457	28413	INORGANIC
Cadm	15 2235	AAB3329	0	8	SS	232	23			400					DPES	20349	35073	INORGANIC
Cadm	15 2236	AAB3443	0	8	SS	279	23			400					DPES	20349	35073	INORGANIC
Cadm	15 2236	AAB3443	0	12	SS	8	23			400					DPES	20349	35073	INORGANIC
Cadm	15 2235	AAB3516	0	12	SS	57	23			400					CFAA	18473	29756	INORGANIC
Cadm	15 2244	AAB3523	0	6	SS	18	23			400					CFAA	18473	29756	INORGANIC
Cadm	15 2244	AAC0334	14	14 F	SS	23	23			400					CFAA	18473	29756	INORGANIC
Cadm	15 2191	AAB3527	0	6	SS	1670	4610			MG/KG					DPES	18473	24457	INORGANIC
Magnesium	15 2229	AAB3326	0	4	SS	2260	4610			MG/KG					DPES	18473	29756	INORGANIC
Magnesium	15 2230	AAB3302	0	3	SS	2284	4610			MG/KG					DPES	18457	28413	INORGANIC
Magnesium	15 2230	AAB3322	0	3	SS	2220	4610			MG/KG					DPES	18457	28413	INORGANIC
Magnesium	15 2231	AAB3328	0	3	SS	2110	4610			MG/KG					DPES	18457	28413	INORGANIC
Magnesium	15 2235	AAB3329	0	5	SS	1830	4610			MG/KG					DPES	18457	28413	INORGANIC
Magnesium	15 2235	AAB3329	0	12	SS	2660	4610			MG/KG					DPES	18473	29756	INORGANIC
Magnesium	15 2244	AAC0334	14	14 F	SS	3710	4610			MG/KG					DPES	20774	14457	INORGANIC
Manganese	15 2191	AAB3527	0	6	SS	263	714			381					DPES	18473	29756	INORGANIC
Manganese	15 2229	AAB3326	0	4	SS	484	714			381					DPES	18457	28413	INORGANIC
Manganese	15 2230	AAB3302	0	3	SS	511	714			381					DPES	18457	28413	INORGANIC
Manganese	15 2231	AAB3328	0	3	SS	450	714			381					DPES	18457	28413	INORGANIC
Manganese	15 2235	AAB3329	0	5	SS	450	714			381					DPES	18457	28413	INORGANIC
Manganese	15 2235	AAB3329	0	12	SS	412	714			381					DPES	18473	29756	INORGANIC
Manganese	15 2244	AAB3523	0	6	SS	356	714			381					DPES	18473	29756	INORGANIC
Manganese	15 2244	AAC0334	14	14 F	SS	682	714			381					DPES	20774	14457	INORGANIC
Mercury	15 2191	AAB3527	0	6	SS	0.14	0.1			23.0033493					DPES	18473	29756	INORGANIC
Mercury	15 2229	AAB3326	0	4	SS	0.11	0.1			23.0033493					DPES	18457	28413	INORGANIC
Mercury	15 2230	AAB3302	0	3	SS	0.11	0.1			23.0033493					DPES	18457	28413	INORGANIC
Mercury	15 2231	AAB3328	0	3	SS	0.11	0.1			23.0033493					DPES	18457	28413	INORGANIC
Mercury	15 2235	AAB3329	0	5	SS	0.11	0.1			23.0033493					DPES	18457	28413	INORGANIC
Mercury	15 2235	AAB3329	0	12	SS	0.04	0.1			23.0033493					DPES	18473	29756	INORGANIC
Mercury	15 2236	AAB3443	0	8	SS	0.04	0.1			23.0033493					DPES	18473	29756	INORGANIC
Mercury	15 2239	AAB3516	0	12	SS	0.04	0.1			23.0033493					DPES	20349	35073	INORGANIC
Mercury	15 2244	AAB3523	0	6	SS	0.11	0.1			23.0033493					DPES	20349	35073	INORGANIC
Mercury	15 2244	AAC0334	14	14 F	SS	0.25	0.1			23.0033493					DPES	18473	29756	INORGANIC
Mercury	15 2235	AAB3329	0	8	SS	0.11	0.1			23.0033493					DPES	18473	29756	INORGANIC
Nickel	15 2191	AAB3527	0	6	SS	0.11	0.1			23.0033493					DPES	18473	29756	INORGANIC
Nickel	15 2229	AAB3326	0	4	SS	9.3	152			1533					DPES	18457	28413	INORGANIC
Nickel	15 2230	AAB3302	0	3	SS	10	152			1533					DPES	18457	28413	INORGANIC

SAMPLING DATA FOR PRS 15-006(a)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat S	Sample Value	Bkgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	State
Nickel	15 2230	AAB3302	0 3	0 3	I	SS	9	152	1533.61109	MGKG					CPES	18457	28413	INDORGANIC
Nickel	15 2231	AAB3328	0 5	0 5	I	SS	11.1	152	1533.61109	MGKG					CPES	18457	28413	INDORGANIC
Nickel	15 2239	AAB3316	0 12	0 12	I	SS	15.9	152	1533.61109	MGKG					CPES	18673	29796	INDORGANIC
Nickel	15 2244	AAB3523	0 6	0 6	I	SS	9.3	152	1533.61109	MGKG					CPES	18673	29796	INDORGANIC
Nickel	15 2244	AAC0334	14 14	14 14	F	SS	15.3	152	1533.61109	MGKG					CPES	20774	34497	INDORGANIC
Potassium	15 2191	AAB3527	0 6	0 6	I	SS	130.0	3410		MGKG					CPES	18673	29796	INDORGANIC
Potassium	15 2229	AAB3326	0 4	0 4	I	SS	272.0	3410		MGKG					CPES	18457	28413	INDORGANIC
Potassium	15 2230	AAB3302	0 3	0 3	I	SS	275.2	3410		MGKG	D				CPES	18457	28413	INDORGANIC
Potassium	15 2230	AAB3302	0 3	0 3	I	SS	262.0	3410		MGKG					CPES	18457	28413	INDORGANIC
Potassium	15 2231	AAB3328	0 5	0 5	I	SS	230.0	3410		MGKG					CPES	18457	28413	INDORGANIC
Potassium	15 2239	AAB3316	0 12	0 12	I	SS	167.0	3410		MGKG					CPES	18673	29796	INDORGANIC
Potassium	15 2244	AAB3523	0 6	0 6	I	SS	215.0	3410		MGKG					CPES	18673	29796	INDORGANIC
Potassium	15 2244	AAC0334	14 14	14 14	F	SS	33.0	3410		MGKG					CPES	20774	34497	INDORGANIC
Selenium	15 2191	AAB3527	0 6	0 6	I	SS	0.54	1.7	383.403214	MGKG		U			CPES	18673	29796	INDORGANIC
Selenium	15 2229	AAB3326	0 4	0 4	I	SS	0.65	1.7	383.403214	MGKG					ETVAA	18457	28413	INDORGANIC
Selenium	15 2230	AAB3302	0 3	0 3	I	SS	0.59	1.7	383.403214	MGKG	O				ETVAA	18457	28413	INDORGANIC
Selenium	15 2231	AAB3328	0 5	0 5	I	SS	0.56	1.7	383.403214	MGKG					ETVAA	18457	28413	INDORGANIC
Selenium	15 2239	AAB3316	0 12	0 12	I	SS	0.55	1.7	383.403214	MGKG		U			CPES	18673	29796	INDORGANIC
Selenium	15 2244	AAB3523	0 6	0 6	I	SS	0.55	1.7	383.403214	MGKG	U				CPES	18673	29796	INDORGANIC
Selenium	15 2244	AAC0334	14 14	14 14	F	SS	0.95	1.7	383.403214	MGKG					CPES	20774	34497	INDORGANIC
Silver	15 2191	AAB3527	0 6	0 6	I	SS	0.62	1.61	383.403214	MGKG					CPES	18673	29796	INDORGANIC
Silver	15 2229	AAB3326	0 4	0 4	I	SS	0.65	1.61	383.403214	MGKG					CPES	18457	28413	INDORGANIC
Silver	15 2230	AAB3302	0 3	0 3	I	SS	0.68	1.61	383.403214	MGKG	D				CPES	18457	28413	INDORGANIC
Silver	15 2231	AAB3328	0 5	0 5	I	SS	0.68	1.61	383.403214	MGKG					CPES	18457	28413	INDORGANIC
Silver	15 2239	AAB3316	0 12	0 12	I	SS	0.65	1.61	383.403214	MGKG					CPES	18457	28413	INDORGANIC
Silver	15 2244	AAB3523	0 6	0 6	I	SS	0.75	1.61	383.403214	MGKG					CPES	18673	29796	INDORGANIC
Silver	15 2244	AAC0334	14 14	14 14	F	SS	0.64	1.61	383.403214	MGKG					CPES	18673	29796	INDORGANIC
Sulfur	15 2191	AAB3527	0 6	0 6	I	SS	0.69	1.61	383.403214	MGKG					CPES	20774	34497	INDORGANIC
Sulfur	15 2229	AAB3326	0 4	0 4	I	SS	1.35	915		MGKG					CPES	16673	29796	INDORGANIC
Sulfur	15 2230	AAB3302	0 3	0 3	I	SS	129	915		MGKG					CPES	18457	28413	INDORGANIC
Sulfur	15 2231	AAB3328	0 5	0 5	I	SS	139	915		MGKG	D				CPES	18457	28413	INDORGANIC
Sulfur	15 2239	AAB3316	0 12	0 12	I	SS	133	915		MGKG					CPES	18457	28413	INDORGANIC
Sulfur	15 2244	AAB3523	0 6	0 6	I	SS	134	915		MGKG					CPES	18457	28413	INDORGANIC
Sulfur	15 2239	AAB3516	0 12	0 12	I	SS	157	915		MGKG					CPES	18673	29796	INDORGANIC
Sulfur	15 2244	AAC0334	14 14	14 14	F	SS	140	915		MGKG					CPES	18673	29796	INDORGANIC
Sulfur	15 2191	AAB3527	0 6	0 6	I	SS	0.65	1		MGKG					CPES	20774	34497	INDORGANIC
Thallium	15 2229	AAB3326	0 4	0 4	I	SS	0.47	1		MGKG					CPES	18673	29796	INDORGANIC
Thallium	15 2230	AAB3302	0 3	0 3	I	SS	0.5	1		MGKG	D				ETVAA	18457	28413	INDORGANIC
Thallium	15 2231	AAB3328	0 5	0 5	I	SS	0.5	1		MGKG					ETVAA	18457	28413	INDORGANIC
Thallium	15 2239	AAB3316	0 12	0 12	I	SS	0.47	1		MGKG					ETVAA	18457	28413	INDORGANIC
Thallium	15 2244	AAB3523	0 6	0 6	I	SS	0.97	1		MGKG					ETVAA	18457	28413	INDORGANIC
Thallium	15 2244	AAB3523	0 6	0 6	I	SS	0.66	1		MGKG					CPES	18673	29796	INDORGANIC

SAMPLING DATA FOR PRS 15-008(a)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met	S	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Notes
Dinitrotoluene [2,6]	15-2235	AAB3329	0	8	µg	<		0.093		65.1779849	MG/KG					HPLC	18194	30637	ORGANIC
Dinitrotoluene [2,6]	15-2236	AAB3483	0	12	µg	<		0.093		65.1779849	MG/KG					HPLC	18194	30637	ORGANIC
Dinitrotoluene [2,6]	15-2236	AAB3483	0	12	µg	<		0.093		65.1779849	MG/KG					HPLC	18194	30637	ORGANIC
Dinitrotoluene [2,6]	15-2239	AAB3516	0	12	µg	<		0.082		65.1779849	MG/KG					HPLC	18450	29629	ORGANIC
Dinitrotoluene [2,6]	15-2244	AAB3523	0	6	µg	<		0.082		65.1779849	MG/KG					HPLC	18450	29629	ORGANIC
HAX	15-2230	AAB3302	0	3	µg	<		0.168		3258.89924	MG/KG					HPLC	18387	32675	ORGANIC
HAX	15-2235	AAB3329	0	8	µg	<		0.165		3258.89924	MG/KG					HPLC	18194	30637	ORGANIC
HAX	15-2235	AAB3329	0	8	µg	<		0.165		3258.89924	MG/KG					HPLC	18194	30637	ORGANIC
HAX	15-2236	AAB3483	0	12	µg	<		0.166		3258.89924	MG/KG					HPLC	18194	30637	ORGANIC
HAX	15-2236	AAB3483	0	12	µg	<		0.166		3258.89924	MG/KG					HPLC	18194	30637	ORGANIC
HAX	15-2239	AAB3516	0	12	µg	<		0.167		3258.89924	MG/KG					HPLC	18450	29629	ORGANIC
HAX	15-2244	AAB3523	0	6	µg	<		0.168		3258.89924	MG/KG					HPLC	18450	29629	ORGANIC
Nitrobenzene	15-2230	AAB3302	0	3	µg	<		0.076		32.5890291	MG/KG					HPLC	18387	32675	ORGANIC
Nitrobenzene	15-2235	AAB3329	0	8	µg	<		0.073		32.5890291	MG/KG			LU		HPLC	18194	30637	ORGANIC
Nitrobenzene	15-2235	AAB3329	0	8	µg	<		0.075		32.5890291	MG/KG			LU		HPLC	18194	30637	ORGANIC
Nitrobenzene	15-2236	AAB3483	0	12	µg	<		0.075		32.5890291	MG/KG			LU		HPLC	18194	30637	ORGANIC
Nitrobenzene	15-2236	AAB3483	0	12	µg	<		0.075		32.5890291	MG/KG			LU		HPLC	18194	30637	ORGANIC
Nitrobenzene	15-2239	AAB3516	0	12	µg	<		0.103		32.5890291	MG/KG					HPLC	18450	29629	ORGANIC
Nitrobenzene	15-2244	AAB3523	0	6	µg	<		0.103		32.5890291	MG/KG					HPLC	18450	29629	ORGANIC
Nitrotoluene [m]	15-2230	AAB3302	0	3	µg	<		0.163			MG/KG					HPLC	18387	32675	ORGANIC
Nitrotoluene [m]	15-2235	AAB3329	0	8	µg	<		0.16			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [m]	15-2235	AAB3329	0	8	µg	<		0.16			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [m]	15-2236	AAB3483	0	12	µg	<		0.161			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [m]	15-2236	AAB3483	0	12	µg	<		0.161			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [m]	15-2239	AAB3516	0	12	µg	<		0.162			MG/KG			LU		HPLC	18450	29629	ORGANIC
Nitrotoluene [m]	15-2244	AAB3523	0	6	µg	<		0.163			MG/KG			LU		HPLC	18450	29629	ORGANIC
Nitrotoluene [o]	15-2230	AAB3302	0	3	µg	<		0.141			MG/KG					HPLC	18387	32675	ORGANIC
Nitrotoluene [o]	15-2235	AAB3329	0	8	µg	<		0.139			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [o]	15-2235	AAB3329	0	8	µg	<		0.139			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [o]	15-2236	AAB3483	0	12	µg	<		0.139			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [o]	15-2236	AAB3483	0	12	µg	<		0.139			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [o]	15-2239	AAB3516	0	12	µg	<		0.14			MG/KG			LU		HPLC	18450	29629	ORGANIC
Nitrotoluene [o]	15-2244	AAB3523	0	6	µg	<		0.141			MG/KG			LU		HPLC	18450	29629	ORGANIC
Nitrotoluene [p]	15-2230	AAB3302	0	3	µg	<		0.189			MG/KG					HPLC	18387	32675	ORGANIC
Nitrotoluene [p]	15-2235	AAB3329	0	8	µg	<		0.186			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [p]	15-2235	AAB3329	0	8	µg	<		0.186			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [p]	15-2236	AAB3483	0	12	µg	<		0.187			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [p]	15-2236	AAB3483	0	12	µg	<		0.187			MG/KG					HPLC	18194	30637	ORGANIC
Nitrotoluene [p]	15-2239	AAB3516	0	12	µg	<		0.188			MG/KG			LU		HPLC	18450	29629	ORGANIC
Nitrotoluene [p]	15-2244	AAB3523	0	6	µg	<		0.189			MG/KG			LU		HPLC	18450	29629	ORGANIC
PEX	15-2230	AAB3302	0	3	µg	<		0.172		4.0393159	MG/KG					HPLC	18387	32675	ORGANIC
PEX	15-2235	AAB3329	0	8	µg	<		0.17		4.0393159	MG/KG					HPLC	18194	30637	ORGANIC
PEX	15-2235	AAB3329	0	8	µg	<		0.17		4.0393159	MG/KG					HPLC	18194	30637	ORGANIC
PEX	15-2236	AAB3483	0	12	µg	<		0.171		4.0393159	MG/KG					HPLC	18194	30637	ORGANIC

SAMPLING DATA FOR PRS 15-006(a)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Lead 214	15 2230	AAB3322	0	3	1	08		1.34			PCIG				0		18881	30337	FAD
Lead 214	15 2231	AAB3324	0	5	1	08		1.27			PCIG				0		18881	30337	FAD
Neptunium 237	15 2191	AAB3527	0	6	1	08		0.008			13 PCIG				0		15511	33134	FAD
Neptunium 237	15 2235	AAB3329	0	8	1	08		0.027			13 PCIG				0		20351	35508	FAD
Neptunium 237	15 2236	AAB3483	0	12	1	08		0.014			13 PCIG				0		20351	35508	FAD
Neptunium 237	15 2239	AAB3516	0	12	1	08		0.005			13 PCIG				0		15511	33134	FAD
Neptunium 237	15 2244	AAB3523	0	6	1	08		0.048			13 PCIG		D		0		15511	33134	FAD
Neptunium 237	15 2244	AAB3523	0	6	1	08		0.033			13 PCIG				0		15511	33134	FAD
Neptunium 237	15 2244	AAC0334	14	14	F	08		0.004			13 PCIG		D		0		20776	35814	FAD
Neptunium 237	15 2244	AAC0334	14	14	F	08		0.012			13 PCIG				0		20776	35814	FAD
Protactinium 231	15 2230	AAB3322	0	3	1	08		2.74			PCIG				0		18881	30337	FAD
Protactinium 234	15 2231	AAB3328	0	5	1	08		4.43			PCIG				0		18881	30337	FAD
Protactinium 234M	15 2229	AAB3326	0	4	1	08		177.83			PCIG				0		18881	30337	FAD
Protactinium 234M	15 2230	AAB3322	0	3	1	08		177.53			PCIG				0		18881	30337	FAD
Protactinium 234M	15 2231	AAB3328	0	5	1	08		439.92			PCIG				0		18881	30337	FAD
Radium 226	15 2229	AAB3326	0	4	1	08		1.91		0.1	PCIG				0		18881	30337	FAD
Radium 226	15 2231	AAB3328	0	5	1	08		1.82		0.1	PCIG				0		18881	30337	FAD
Ruthenium 106	15 2191	AAB3527	0	6	1	08		0.035			13 PCIG				0		15511	33134	FAD
Ruthenium 106	15 2235	AAB3329	0	8	1	08		0.397			13 PCIG				0		20351	35508	FAD
Ruthenium 106	15 2236	AAB3483	0	12	1	08		0.398			13 PCIG				0		20351	35508	FAD
Ruthenium 106	15 2239	AAB3516	0	12	1	08		0.175			13 PCIG				0		15511	33134	FAD
Ruthenium 106	15 2244	AAB3523	0	6	1	08		0.094			13 PCIG		D		0		15511	33134	FAD
Ruthenium 106	15 2244	AAB3523	0	6	1	08		0.048			13 PCIG				0		15511	33134	FAD
Ruthenium 106	15 2244	AAC0334	14	14	F	08		0.037			13 PCIG		D		0		20776	35814	FAD
Ruthenium 106	15 2244	AAC0334	14	14	F	08		0.006			13 PCIG				0		20776	35814	FAD
Sodium 22	15 2191	AAB3527	0	6	1	08		0.004			13 PCIG				0		15511	33134	FAD
Sodium 22	15 2235	AAB3329	0	8	1	08		0.008			13 PCIG				0		20351	35508	FAD
Sodium 22	15 2236	AAB3483	0	12	1	08		0.005			13 PCIG				0		20351	35508	FAD
Sodium 22	15 2239	AAB3516	0	12	1	08		0.001			13 PCIG				0		15511	33134	FAD
Sodium 22	15 2244	AAB3523	0	6	1	08		0.024			13 PCIG		D		0		15511	33134	FAD
Sodium 22	15 2244	AAB3523	0	6	1	08		0.007			13 PCIG				0		15511	33134	FAD
Sodium 22	15 2244	AAC0334	14	14	F	08		0.118			13 PCIG		D		0		20776	35814	FAD
Sodium 22	15 2244	AAC0334	14	14	F	08		0.006			13 PCIG				0		20776	35814	FAD
Thallium 208	15 2229	AAB3326	0	4	1	08		0.19			PCIG				0		18881	30337	FAD
Thallium 208	15 2230	AAB3322	0	3	1	08		0.29			PCIG				0		18881	30337	FAD
Thallium 208	15 2231	AAB3328	0	5	1	08		0.37			PCIG				0		18881	30337	FAD
Thorium 234	15 2229	AAB3326	0	4	1	08		94.13			PCIG				0		18881	30337	FAD
Thorium 234	15 2230	AAB3322	0	3	1	08		77.16			PCIG				0		18881	30337	FAD
Thorium 234	15 2231	AAB3328	0	5	1	08		353.53			PCIG				0		18881	30337	FAD
Uranium	15 2191	AAB3527	0	6	1	08		535	5.45		MGKG				NFA	15511	33134	FAD	
Uranium	15 2229	AAB3326	0	4	1	08		208	5.45		MGKG				OPMS	18881	30346	FAD	
Uranium	15 2230	AAB3322	0	3	1	08		217	5.45		MGKG				OPMS	18881	30346	FAD	
Uranium	15 2231	AAB3328	0	5	1	08		691	5.45		MGKG				OPMS	18881	30346	FAD	
Uranium	15 2235	AAB3329	0	8	1	08		1669	5.45		MGKG				NFA	20351	35503	FAD	

SAMPLING DATA FOR PPS 15-008(a)

Analyte	Loc ID	Sample ID	Depth	End	Unit	Met	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Suite
Uranium	15-2236	AAB3483	0	12	1	SS	19.5	5.45		MG/KG					KFA	20351	35503	RAD
Uranium	15-2239	AAB3516	0	12	1	SS	19.18	5.45		MG/KG					KFA	19511	33138	RAD
Uranium	15-2244	AAB3523	0	6	1	SS	19.2	5.45		MG/KG					KFA	19511	33138	RAD
Uranium 235	15-2229	AAB3326	0	4	1	SS	2.74	0.084	18	PC/G					G	18881	30337	RAD
Uranium 235	15-2230	AAB3302	0	3	1	SS	2.72	0.084	18	PC/G					G	18881	30337	RAD
Uranium 235	15-2231	AAB3328	0	5	1	SS	11.05	0.084	18	PC/G					G	18881	30337	RAD

SAMPLING DATA FOR PHS 15-CG(1)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	Value	Bagd Value	SAL Value	Units	EPA Com	Prop	Suite
Aluminum	15 2214	1B	0	10	1	55	35.4			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	241500			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	275000			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	916000	10700	76374 7928	UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	91000			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	10000			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	1770	1		UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	10			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	71803			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	74000			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	1000	7.82	0.18	UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	0 (548)			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	24000			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	281000			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	62000	315	5000 54615	UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	5			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	8800			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	100000			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	760	1.55	0.142081	UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	14000			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	0.81			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	18500			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	1550	2.7	18.0403147	UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	240000			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	230000			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	30			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	150000	6000		UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	15			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	8000			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	8400			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	5000	15.0		UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	10			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	14000			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	15000			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	2400	19.2	400	UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	10			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	11000			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	11500			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	11000			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	110000	10.0		UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	14.8			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	450000			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	570000			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	100000	2100		UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	5			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	18000			UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	11000			UP-3	J	71803	NR09AW
Aluminum	15 2214	0215 55 0445	0	10	1	55	11000	23.0	400	UP-3	J	71803	NR09AW
Aluminum	15 2214	1B	0	10	1	55	1.61			UP-3	J	71803	NR09AW

SAMPLING DATA FOR PHS 15-08(e)

Analysis	Loc ID	Sample ID	Begin	End	Units	Mat	Value	Magd Value	SAL Value	Units	EPA Qual	Prep Batch	Suite
Magnesium	15 2234	LB	0	10	1	25	306000			LEMG		71803	NORGANIC
Magnesium	15 2234	LB	0	10	1	25	324000			LEMG		71803	NORGANIC
Magnesium	15 2234	0215 95 0645	0	10	1	25	841000	4610		LEMG		71803	NORGANIC
Manganese	15 2234	LB	0	10	1	25	0 204			LEMG	J	71803	NORGANIC
Manganese	15 2234	LB	0	10	1	25	136000			LEMG		71803	NORGANIC
Manganese	15 2234	LB	0	10	1	25	210000			LEMG		71803	NORGANIC
Manganese	15 2234	0215 95 0645	0	10	1	25	210000	714	381 952094	LEMG		71803	NORGANIC
Mercury	15 2234	LB	0	10	1	25	2560			LEMG		71864	NORGANIC
Mercury	15 2234	LB	0	10	1	25	1830			LEMG		71864	NORGANIC
Mercury	15 2234	0215 95 0645	0	10	1	25	0 2	0.1	21 0033493	LEMG	U	71864	NORGANIC
Nickel	15 2234	LB	0	10	1	25	15 5			LEMG	J	71864	NORGANIC
Nickel	15 2234	LB	0	10	1	25	10			LEMG	U	71803	NORGANIC
Nickel	15 2234	LB	0	10	1	25	74500			LEMG		71803	NORGANIC
Nickel	15 2234	LB	0	10	1	25	78000			LEMG		71803	NORGANIC
Nickel	15 2234	0215 95 0645	0	10	1	25	7300	15.2	3533 61109	LEMG		71803	NORGANIC
Potassium	15 2234	LB	0	10	1	25	1970000			LEMG		71803	NORGANIC
Potassium	15 2234	LB	0	10	1	25	8 43			LEMG	J	71803	NORGANIC
Potassium	15 2234	LB	0	10	1	25	1850000			LEMG		71803	NORGANIC
Potassium	15 2234	0215 95 0645	0	10	1	25	520000	3410		LEMG	J	71803	NORGANIC
Selenium	15 2234	LB	0	10	1	25	4 78			LEMG		71803	NORGANIC
Selenium	15 2234	LB	0	10	1	25	84500			LEMG		71803	NORGANIC
Selenium	15 2234	LB	0	10	1	25	85500			LEMG		71803	NORGANIC
Selenium	15 2234	0215 95 0645	0	10	1	25	509	1.7	383 403214	LEMG		71803	NORGANIC
Silver	15 2234	LB	0	10	1	25	131000			LEMG		71803	NORGANIC
Silver	15 2234	LB	0	10	1	25	120000			LEMG		71803	NORGANIC
Silver	15 2234	0215 95 0645	0	10	1	25	1830	1.61	383 403214	LEMG	U	71803	NORGANIC
Sodium	15 2234	LB	0	10	1	25	22 9			LEMG	J	71803	NORGANIC
Sodium	15 2234	LB	0	10	1	25	260000			LEMG		71803	NORGANIC
Sodium	15 2234	LB	0	10	1	25	278000			LEMG		71803	NORGANIC
Sodium	15 2234	0215 95 0645	0	10	1	25	35800	915		LEMG		71803	NORGANIC
Thallium	15 2234	LB	0	10	1	25	10			LEMG	U	71803	NORGANIC
Thallium	15 2234	LB	0	10	1	25	34800			LEMG		71803	NORGANIC
Thallium	15 2234	LB	0	10	1	25	97100			LEMG		71803	NORGANIC
Thallium	15 2234	0215 95 0645	0	10	1	25	490	1		LEMG	U	71803	NORGANIC
Vanadium	15 2234	LB	0	10	1	25	10			LEMG	U	71803	NORGANIC
Vanadium	15 2234	LB	0	10	1	25	249000			LEMG		71803	NORGANIC
Vanadium	15 2234	LB	0	10	1	25	203000			LEMG		71803	NORGANIC
Vanadium	15 2234	0215 95 0645	0	10	1	25	10400	41.9	536 764418	LEMG	J	71803	NORGANIC
Zinc	15 2234	LB	0	10	1	25	3 82			LEMG		71803	NORGANIC
Zinc	15 2234	LB	0	10	1	25	245000			LEMG		71803	NORGANIC
Zinc	15 2234	LB	0	10	1	25	280000			LEMG		71803	NORGANIC
Zinc	15 2234	0215 95 0645	0	10	1	25	173000	50.8	23006 6725	LEMG		71803	NORGANIC
1,2 Dichlorobenzene	15 2234	LB	0	10	1	25	158			LEMG		72011	ORGANIC
1,2 Dichlorobenzene	15 2234	LB	0	10	1	25	210			LEMG		72011	ORGANIC
1,2 Dichlorobenzene	15 2234	0215 95 0645	0	10	1	25	221			LEMG	J	72011	ORGANIC
1,2 Dichlorobenzene	15 2234	LB	0	10	1	25	215			LEMG	J	72011	ORGANIC
1,2 Dichlorobenzene	15 2234	0215 95 0645	0	10	1	25	219			LEMG		72011	ORGANIC

SAMPLING DATA FOR PRS 15-006(a)

Analyte	Loc ID	Sample Id	Begin	End	Units	Mat	Value	Bagd Value	SAT Value	Units	EPA Class	Prop	Suite
2,4,6 Trinitrobenzene	15 2234	LB	0	10	1	SS	188			UPD3	U	72011	CGA28C
2,4,6 Trinitrobenzene	15 2234	LB	0	10	1	SS	654			UPD3	U	72011	CGA28C
2,4,6 Trinitrobenzene	15 2234	LB	0	10	1	SS	654			UPD3	U	72011	CGA28C
2,4,6 Trinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188		45	UPD3	W	72011	CGA28C
2,4,6 Trinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188		45	UPD3	W	72011	CGA28C
2,4,6 Trinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	624		45	UPD3	U	72011	CGA28C
2,4 Dinitrobenzene	15 2234	LB	0	10	1	SS	188			UPD3	U	72011	CGA28C
2,4 Dinitrobenzene	15 2234	LB	0	10	1	SS	623			UPD3	U	72011	CGA28C
2,4 Dinitrobenzene	15 2234	LB	0	10	1	SS	685			UPD3	U	72011	CGA28C
2,4 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188		130 35557	UPD3	W	72011	CGA28C
2,4 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188		130 35557	UPD3	W	72011	CGA28C
2,4 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	562		130 35557	UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	188			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	659			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	753			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188		65 1775845	UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	644		65 1775845	UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188		65 1775845	UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	670			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	657			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	188			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	608			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	729			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	682			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	188			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	555			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	670			UPD3	J	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	750			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	714			UPD3	J	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	750		3258 85925	UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	613			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	723			UPD3	J	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	188			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	687			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	556		6 5177585	UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188		6 5177585	UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188		6 5177585	UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	188			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	664			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	675			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	631			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	188			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	664			UPD3	U	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	631			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	0215 55 CG45	0	10	1	SS	188			UPD3	W	72011	CGA28C
2,6 Dinitrobenzene	15 2234	LB	0	10	1	SS	188			UPD3	U	72011	CGA28C

SAMPLING DATA FOR PRS 15-008(e)

Analyte	Loc ID	Sample Id	Begin	End	Units	Met	Value	Bkgd Value	SAL Value	Units	EPA Qual	Prep Batch	Suite
Nitrobenzene	15-2234	LB	0	10	I	SS	669			UORG		72011	ORGANIC
Nitrobenzene	15-2234	LB	0	10	I	SS	635			UORG		72011	ORGANIC
Nitrobenzene	15-2234	0215 95 0645	0	10	I	SS	188		32 5890291	UORG	W	72011	ORGANIC
Nitrobenzene	15-2234	0215 95 0645	0	10	I	SS	188			UORG	W	72011	ORGANIC
Nitrobenzene	15-2234	0215 95 0645	0	10	I	SS	580			UORG		72011	ORGANIC
o Nitrotoluene	15-2234	LB	0	10	I	SS	188			UORG	U	72011	ORGANIC
o Nitrotoluene	15-2234	LB	0	10	I	SS	672			UORG		72011	ORGANIC
o Nitrotoluene	15-2234	LB	0	10	I	SS	630			UORG		72011	ORGANIC
o Nitrotoluene	15-2234	0215 95 0645	0	10	I	SS	577			UORG		72011	ORGANIC
o Nitrotoluene	15-2234	0215 95 0645	0	10	I	SS	188			UORG	W	72011	ORGANIC
o Nitrotoluene	15-2234	0215 95 0645	0	10	I	SS	188			UORG	W	72011	ORGANIC
p Nitrotoluene	15-2234	LB	0	10	I	SS	188			UORG	U	72011	ORGANIC
p Nitrotoluene	15-2234	LB	0	10	I	SS	669			UORG		72011	ORGANIC
p Nitrotoluene	15-2234	LB	0	10	I	SS	625			UORG		72011	ORGANIC
p Nitrotoluene	15-2234	0215 95 0645	0	10	I	SS	188			UORG	W	72011	ORGANIC
p Nitrotoluene	15-2234	0215 95 0645	0	10	I	SS	188			UORG	W	72011	ORGANIC
p Nitrotoluene	15-2234	0215 95 0645	0	10	I	SS	573			UORG		72011	ORGANIC
RIX	15-2234	LB	0	10	I	SS	750			UORG	U	72011	ORGANIC
RIX	15-2234	LB	0	10	I	SS	672			UORG	J	72011	ORGANIC
RIX	15-2234	LB	0	10	I	SS	641			UORG	J	72011	ORGANIC
RIX	15-2234	0215 95 0645	0	10	I	SS	750			UORG	W	72011	ORGANIC
RIX	15-2234	0215 95 0645	0	10	I	SS	603			UORG	J	72011	ORGANIC
RIX	15-2234	0215 95 0645	0	10	I	SS	750		4 0393159	UORG	W	72011	ORGANIC
sym Trinitrobenzene	15-2234	LB	0	10	I	SS	660			UORG		72011	ORGANIC
sym Trinitrobenzene	15-2234	LB	0	10	I	SS	695			UORG		72011	ORGANIC
sym Trinitrobenzene	15-2234	LB	0	10	I	SS	188			UORG	U	72011	ORGANIC
sym Trinitrobenzene	15-2234	0215 95 0645	0	10	I	SS	188			UORG	W	72011	ORGANIC
sym Trinitrobenzene	15-2234	0215 95 0645	0	10	I	SS	609			UORG		72011	ORGANIC
sym Trinitrobenzene	15-2234	0215 95 0645	0	10	I	SS	188			UORG	W	72011	ORGANIC
TETRYL	15-2234	LB	0	10	I	SS	375			UORG	U	72011	ORGANIC
TETRYL	15-2234	LB	0	10	I	SS	675			UORG		72011	ORGANIC
TETRYL	15-2234	LB	0	10	I	SS	681			UORG		72011	ORGANIC
TETRYL	15-2234	0215 95 0645	0	10	I	SS	375			UORG	W	72011	ORGANIC
TETRYL	15-2234	0215 95 0645	0	10	I	SS	553		800	UORG		72011	ORGANIC
TETRYL	15-2234	0215 95 0645	0	10	I	SS	375		800	UORG	W	72011	ORGANIC
Protactinium 231	15-2234	0215 95 0645	0	10	I	SS	0.016			ROG	U	71356	RAD
Protactinium 234	15-2234	0215 95 0645	0	10	I	SS	1.32			ROG		71356	RAD
Protactinium 234M	15-2234	0215 95 0645	0	10	I	SS	821			ROG		71356	RAD
Thorium 230	15-2234	0215 95 0645	0	10	I	SS	0.817			ROG		71356	RAD
Thorium 231	15-2234	0215 95 0645	0	10	I	SS	0.21			ROG		71356	RAD
Thorium 234	15-2234	0215 95 0645	0	10	I	SS	440			ROG		71356	RAD
Total Uranium	15-2234	LB	0	10	I	SS	1.02			UCU		71668	RAD
Total Uranium	15-2234	LB	0	10	I	SS	0			UCU	U	71668	RAD
Total Uranium	15-2234	0215 95 0645	0	10	I	SS	2180	5.45		UCU		71668	RAD
Uranium 234	15-2234	0215 95 0645	0	10	I	SS	0.759	1.94		ROG		71356	RAD
Uranium 235	15-2234	0215 95 0645	0	10	I	SS	19	0.084		ROG		71356	RAD
Uranium 238	15-2234	0215 95 0645	0	10	I	SS	440	1.82		ROG		71356	RAD

SAMPLING DATA FOR PRS 15-000(e)

Analyte	Loc ID	Sample ID	Depth	Ecd	Units	Mol	S	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Goal	Sample Location	Tech Code	Request Number	Report Number	Notes
Trichloropropane [1,2,3]	15-2237	AAB3500				W	<	5		210	UG/L					GCMS	18194	30364	ORGANIC
Trichloropropane [1,2,3]	TRIP BLANK	AAB3498				W	<	5		210	UG/L	FB				GCMS	18194	30364	ORGANIC
Trimethylbenzene [1,2,4]	15-2237	AAB3499				W	<	0.053		8	MG/KG					GCMS	18194	30364	ORGANIC
Trimethylbenzene [1,2,4]	15-2237	AAB3500				W	<	5		18	UG/L					GCMS	18194	30364	ORGANIC
Trimethylbenzene [1,2,4]	TRIP BLANK	AAB3498				W	<	5		18	UG/L	FB				GCMS	18194	30364	ORGANIC
Trimethylbenzene [1,3,5]	15-2237	AAB3498				W	<	0.053		6.4	MG/KG					GCMS	18194	30364	ORGANIC
Trimethylbenzene [1,3,5]	15-2237	AAE3500				W	<	5		14	UG/L					GCMS	18194	30364	ORGANIC
Trimethylbenzene [1,3,5]	TRIP BLANK	AAB3498				W	<	5		14	UG/L	FB				GCMS	18194	30364	ORGANIC
Trinitrobenzene [1,3,5]	15-2237	AAB3499				W	<	0.053		1.8	UG/L					HPLC	18194	30637	ORGANIC
Trinitrobenzene [1,3,5]	15-2237	AAB3500				W	<	0.053		1.8	UG/L					HPLC	18194	30637	ORGANIC
Trinitrotoluene [2,4,6]	15-2237	AAB3499				W	<	0.05		12	UG/L					HPLC	18194	30637	ORGANIC
Trinitrotoluene [2,4,6]	15-2237	AAB3500				W	<	0.05		12	UG/L					HPLC	18194	30637	ORGANIC
Vinyl chloride	15-2237	AAB3499				W	<	0.01		0.051653	MG/KG					GCMS	18194	30364	ORGANIC
Vinyl chloride	15-2237	AAB3500				W	<	10		2	UG/L					GCMS	18194	30364	ORGANIC
Vinyl chloride	TRIP BLANK	AAB3498				W	<	10		2	UG/L	FB				GCMS	18194	30364	ORGANIC
Xylenes (o, m, p) [Mixed]	15-2237	AAB3499				W	<	0.053		880	MG/KG					GCMS	18194	30364	ORGANIC
Xylenes (o, m, p) [Mixed]	15-2237	AAB3500				W	<	5		10000	UG/L					GCMS	18194	30364	ORGANIC
Xylenes (o, m, p) [Mixed]	TRIP BLANK	AAB3498				W	<	5		10000	UG/L	FB				GCMS	18194	30364	ORGANIC
Uranium	15-2237	AAB3499				W		251			UG/L					NPA	20351	35503	RAD
Uranium	15-2237	AAB3500				W		648			UG/L		D			NPA	20351	35503	RAD
Uranium	15-2237	AAB3500				W		653			UG/L					NPA	20351	35503	RAD

SAMPLING DATA FOR PWS 15-007(b)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met	\$	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Notes
Aluminum	15-2301	AA83422	18	24	mg/L	SS	<	16600	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2301	AA83438	0	5	mg/L	SS	<	14200	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2302	AA83443	18	24	mg/L	SS	<	10300	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2303	AA83424	18	24	mg/L	SS	<	18000	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2304	AA83421	10	15	mg/L	SS	<	37000	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2305	AA83428	0	6	mg/L	SS	<	8260	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2306	AA83431	0	6	mg/L	SS	<	7510	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2307	AA83433	0	6	mg/L	SS	<	3780	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2308	AA83430	12	18	mg/L	SS	<	3110	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2310	AA83428	0	6	mg/L	SS	<	4850	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2311	AA83435	0	6	mg/L	SS	<	4270	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2311	AA83444	18	24	mg/L	SS	<	10000	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	15-2311	AA83444	18	24	mg/L	SS	<	12672	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	PKGATE	AA83418	18	24	mg/L	W	<	13100	38700	76674.7878	MGNG					07ES	16487	2094	NORGANG
Aluminum	PKGATE	AA83419			mg/L	W	<	213			UGL	CB				07ES	16487	2094	NORGANG
Antimony	15-2301	AA83422	18	24	mg/L	W	<	160			UGL	CB				07ES	16487	2094	NORGANG
Antimony	15-2301	AA83438	0	5	mg/L	SS	<	39	1		MGNG					07ES	16487	2094	NORGANG
Antimony	15-2302	AA83443	18	24	mg/L	SS	<	38	1		MGNG					07ES	16487	2094	NORGANG
Antimony	15-2303	AA83424	18	24	mg/L	SS	<	38	1		MGNG					07ES	16487	2094	NORGANG
Antimony	15-2304	AA83421	10	15	mg/L	SS	<	4	1		MGNG					07ES	16487	2094	NORGANG
Antimony	15-2305	AA83428	0	6	mg/L	SS	<	4	1		MGNG					07ES	16487	2094	NORGANG
Antimony	15-2306	AA83431	0	6	mg/L	SS	<	37	1		MGNG					07ES	16487	2094	NORGANG
Antimony	15-2307	AA83433	0	6	mg/L	SS	<	37	1		MGNG					07ES	16487	2094	NORGANG
Antimony	15-2308	AA83430	12	18	mg/L	SS	<	37	1		MGNG					07ES	16487	2094	NORGANG
Antimony	15-2310	AA83428	0	6	mg/L	SS	<	37	1		MGNG					07ES	16487	2094	NORGANG
Antimony	15-2311	AA83435	0	6	mg/L	SS	<	37	1		MGNG					07ES	16487	2094	NORGANG
Antimony	15-2311	AA83444	18	24	mg/L	SS	<	39	1		MGNG					07ES	16487	2094	NORGANG
Antimony	15-2311	AA83444	18	24	mg/L	SS	<	39	1		MGNG					07ES	16487	2094	NORGANG
Antimony	PKGATE	AA83418			mg/L	W	<	4			UGL	CB				07ES	16487	2094	NORGANG
Antimony	PKGATE	AA83419			mg/L	W	<	20			UGL	CB				07ES	16487	2094	NORGANG
Arsonic	15-2301	AA83422	18	24	mg/L	SS	<	36	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2301	AA83438	0	5	mg/L	SS	<	5	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2302	AA83443	18	24	mg/L	SS	<	29	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2303	AA83424	18	24	mg/L	SS	<	34	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2304	AA83421	10	15	mg/L	SS	<	4	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2305	AA83428	0	6	mg/L	SS	<	22	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2306	AA83431	0	6	mg/L	SS	<	23	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2307	AA83433	0	6	mg/L	SS	<	23	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2308	AA83430	12	18	mg/L	SS	<	29	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2310	AA83428	0	6	mg/L	SS	<	23	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2311	AA83435	0	6	mg/L	SS	<	22	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2311	AA83435	0	6	mg/L	SS	<	22	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2311	AA83444	18	24	mg/L	SS	<	29	782	0.38	MGNG					07ES	16487	2094	NORGANG
Arsonic	15-2311	AA83444	18	24	mg/L	SS	<	29	782	0.38	MGNG					07ES	16487	2094	NORGANG
Barium	PKGATE	AA83418			mg/L	W	<	24			UGL	CB				07ES	16487	2094	NORGANG
Barium	15-2301	AA83422	18	24	mg/L	SS	<	217	315	5339.5139	MGNG					07ES	16487	2094	NORGANG
Barium	15-2301	AA83422	18	24	mg/L	SS	<	143	315	5339.5139	MGNG					07ES	16487	2094	NORGANG

SAMPLING DATA FOR PRS 15-007(b)

Asst's	Loc ID	Sample ID	Begin	End	Units	Met	S	Sample Value	Blgd Value	SAL Value	Units	Fluid Code	Lab Code	EPA Out	Sample Location	Tech Code	Request Number	Report Number	Soils
Calcium	15 2303	AAR3424	10 24	10 24	SS	SS	2730	6120			UGNG					UGS	16687	26964	MORGANIC
Calcium	15 2304	AAR3425	10 24	10 24	SS	SS	3110	6120			UGNG					UGS	16687	26964	MORGANIC
Calcium	15 2305	AAR3426	0 6	0 6	SS	SS	13200	6120			UGNG					UGS	16681	26195	MORGANIC
Calcium	15 2306	AAR3427	0 6	0 6	SS	SS	2850	6120			UGNG					UGS	16681	26195	MORGANIC
Calcium	15 2307	AAR3428	10 24	10 24	SS	SS	35200	6120			UGNG					UGS	16681	26195	MORGANIC
Calcium	15 2308	AAR3429	0 6	0 6	SS	SS	32800	6120			UGNG					UGS	16687	26964	MORGANIC
Calcium	15 2309	AAR3430	0 6	0 6	SS	SS	15120	6120			UGNG					UGS	16681	26195	MORGANIC
Calcium	15 2310	AAR3431	0 6	0 6	SS	SS	12800	6120			UGNG					UGS	16681	26195	MORGANIC
Calcium	15 2311	AAR3432	0 6	0 6	SS	SS	8100	6120			UGNG					UGS	16687	26964	MORGANIC
Calcium	15 2311	AAR3433	10 24	10 24	SS	SS	10500	6120			UGNG					UGS	16687	26964	MORGANIC
Calcium	15 2311	AAR3434	10 24	10 24	SS	SS	6100	6120			UGNG					UGS	16687	26964	MORGANIC
Calcium	PRGATE	AAR3435			W	W	361				UGL	IB				UGS	16457	26413	MORGANIC
Calcium	PRGATE	AAR3436			W	W	420				UGL	IB				UGS	16457	26413	MORGANIC
Calcium	15 2301	AAR3422	10 24	10 24	SS	SS	11	193			UGNG					UGS	16594	27321	MORGANIC
Calcium	15 2301	AAR3423	0 6	0 6	SS	SS	113	193			UGNG					UGS	16687	26964	MORGANIC
Calcium	15 2302	AAR3424	10 24	10 24	SS	SS	73	193			UGNG					UGS	16681	26195	MORGANIC
Calcium	15 2303	AAR3425	10 24	10 24	SS	SS	163	193			UGNG					UGS	16597	26964	MORGANIC
Calcium	15 2304	AAR3426	10 19	10 19	SS	SS	124	193			UGNG					UGS	16597	26964	MORGANIC
Calcium	15 2305	AAR3427	0 6	0 6	SS	SS	91	193			UGNG					UGS	16681	26195	MORGANIC
Calcium	15 2306	AAR3428	0 6	0 6	SS	SS	89	193			UGNG					UGS	16681	26195	MORGANIC
Calcium	15 2307	AAR3429	0 6	0 6	SS	SS	119	193			UGNG					UGS	16681	26195	MORGANIC
Calcium	15 2308	AAR3430	0 6	0 6	SS	SS	99	193			UGNG					UGS	16687	26964	MORGANIC
Calcium	15 2310	AAR3431	0 6	0 6	SS	SS	83	193			UGNG					UGS	16687	26964	MORGANIC
Calcium	15 2311	AAR3432	0 6	0 6	SS	SS	85	193			UGNG					UGS	16681	26195	MORGANIC
Calcium	15 2311	AAR3433	0 6	0 6	SS	SS	66	193			UGNG					UGS	16681	26195	MORGANIC
Calcium	15 2311	AAR3434	10 24	10 24	SS	SS	103	193			UGNG					UGS	16597	26964	MORGANIC
Calcium	PRGATE	AAR3435			W	W	56				UGL	IB				UGS	16687	26964	MORGANIC
Calcium	PRGATE	AAR3436			W	W	4				UGL	IB				UGS	16457	26413	MORGANIC
Cobalt	15 2301	AAR3422	10 24	10 24	SS	SS	39	192			4600	UGNG				UGS	16594	27321	MORGANIC
Cobalt	15 2301	AAR3423	0 6	0 6	SS	SS	22	192			4600	UGNG				UGS	16687	26964	MORGANIC
Cobalt	15 2302	AAR3424	10 24	10 24	SS	SS	25	192			4600	UGNG				UGS	16594	27321	MORGANIC
Cobalt	15 2303	AAR3425	10 24	10 24	SS	SS	64	192			4600	UGNG				UGS	16687	26964	MORGANIC
Cobalt	15 2304	AAR3426	10 19	10 19	SS	SS	55	192			4600	UGNG				UGS	16597	26964	MORGANIC
Cobalt	15 2305	AAR3427	0 6	0 6	SS	SS	37	192			4600	UGNG				UGS	16681	26195	MORGANIC
Cobalt	15 2306	AAR3428	0 6	0 6	SS	SS	26	192			4600	UGNG				UGS	16681	26195	MORGANIC
Cobalt	15 2307	AAR3429	0 6	0 6	SS	SS	23	192			4600	UGNG				UGS	16687	26964	MORGANIC
Cobalt	15 2308	AAR3430	0 6	0 6	SS	SS	21	192			4600	UGNG				UGS	16681	26195	MORGANIC
Cobalt	15 2310	AAR3431	0 6	0 6	SS	SS	42	192			4600	UGNG				UGS	16681	26195	MORGANIC
Cobalt	15 2311	AAR3432	10 24	10 24	SS	SS	36	192			4600	UGNG				UGS	16597	26964	MORGANIC
Cobalt	15 2311	AAR3433	10 24	10 24	SS	SS	67	192			4600	UGNG				UGS	16687	26964	MORGANIC
Cobalt	PRGATE	AAR3434			W	W	4				UGL	IB				UGS	16457	26413	MORGANIC
Cobalt	PRGATE	AAR3435			W	W	69	307			UGL	IB				UGS	16457	26413	MORGANIC
Copper	15 2301	AAR3422	10 24	10 24	SS	SS	19	307			2010	UGNG				UGS	16594	27321	MORGANIC
Copper	15 2301	AAR3423	0 6	0 6	SS	SS	51	307			2010	UGNG				UGS	16687	26964	MORGANIC
Copper	15 2302	AAR3424	10 24	10 24	SS	SS	307	307			2010	UGNG				UGS	16681	26195	MORGANIC
Copper	15 2303	AAR3425	10 24	10 24	SS	SS	103	307			2010	UGNG				UGS	16597	26964	MORGANIC

SAMPLING DATA FOR PRS 15-007(b)

Analyte	Loc ID	Sample ID	Angle	End	Units	Mat	S	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Site
Wagonite	15 2302	AAB3428	0	6	1	55	<	1745	4510		WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2306	AAB3431	0	6	1	55	<	1575	4610		WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2307	AAB3433	0	6	1	55	<	1520	4610		WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2307	AAB3443	12	18	1	55	<	1470	4610		WGNG					DYS	14807	2155	NORGANIC
Wagonite	15 2308	AAB3430	0	6	1	55	<	1360	4610		WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2310	AAS3429	0	6	1	55	<	1230	4610		WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2311	AAB3445	0	6	1	55	<	1870	4610		WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2311	AAB3444	18	24	1	55	<	1840	4610		WGNG					DYS	14807	2155	NORGANIC
Wagonite	PRCATE	AAB3448	18	24	1	55	<	117			UGL	EB				DYS	14807	2155	NORGANIC
Wagonite	PRCATE	AAB3419	18	24	1	55	<	40			UGL	EB				DYS	14804	2151	NORGANIC
Wagonite	15 2301	AAB3422	0	5	1	55	<	412	214	211 555294	WGNG					DYS	14807	2155	NORGANIC
Wagonite	15 2301	AAB3438	0	5	1	55	<	215	214	211 555294	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2309	AAB3443	18	24	1	55	<	282	214	211 555294	WGNG					DYS	14807	2155	NORGANIC
Wagonite	15 2309	AAB3424	18	24	1	55	<	215	214	211 555294	WGNG					DYS	14807	2155	NORGANIC
Wagonite	15 2304	AAB3421	18	15	1	55	<	220	214	211 555294	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2305	AAB3424	0	6	1	55	<	270	214	211 555294	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2302	AAB3432	12	18	1	55	<	159	214	211 555294	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2302	AAB3442	0	6	1	55	<	157	214	211 555294	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2310	AAB3439	0	6	1	55	<	270	214	211 555294	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2311	AAB3435	0	6	1	55	<	240	214	211 555294	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2311	AAB3444	18	24	1	55	<	220	214	211 555294	WGNG					DYS	14807	2155	NORGANIC
Wagonite	PRCATE	AAB3418	18	24	1	55	<	25			UGL	EB				DYS	14807	2155	NORGANIC
Wagonite	PRCATE	AAB3419	18	24	1	55	<	3			UGL	EB				DYS	14804	2151	NORGANIC
Wagonite	15 2301	AAB3428	18	24	1	55	<	0.1	0.1	21 603192	WGNG					DYS	14804	2151	NORGANIC
Wagonite	15 2301	AAB3438	0	5	1	55	<	0.11	0.1	21 603192	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2302	AAB3443	18	24	1	55	<	0.1	0.1	21 603192	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2309	AAB3424	18	24	1	55	<	0.1	0.1	21 603192	WGNG					DYS	14807	2155	NORGANIC
Wagonite	15 2302	AAB3421	18	15	1	55	<	0.11	0.1	21 603192	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2305	AAB3424	0	6	1	55	<	0.16	0.1	21 603192	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2306	AAB3431	0	6	1	55	<	0.1	0.1	21 603192	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2307	AAB3433	0	6	1	55	<	0.18	0.1	21 603192	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2302	AAB3442	12	18	1	55	<	1.7	0.1	21 603192	WGNG					DYS	14807	2155	NORGANIC
Wagonite	15 2304	AAB3430	0	6	1	55	<	0.11	0.1	21 603192	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2310	AAB3439	0	6	1	55	<	0.1	0.1	21 603192	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2311	AAB3435	0	6	1	55	<	0.41	0.1	21 603192	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2311	AAB3444	18	24	1	55	<	0.13	0.1	21 603192	WGNG					DYS	14807	2155	NORGANIC
Wagonite	PRCATE	AAB3418	18	24	1	55	<	0.2	0.1	21 603192	WGNG					DYS	14807	2155	NORGANIC
Wagonite	PRCATE	AAB3419	18	24	1	55	<	0.2	0.1	21 603192	WGNG					DYS	14804	2151	NORGANIC
Wagonite	15 2301	AAB3432	18	24	1	55	<	9.9	15.2	1533 61102	WGNG					DYS	14807	2155	NORGANIC
Wagonite	15 2301	AAB3438	18	24	1	55	<	9.9	15.2	1533 61102	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2302	AAB3443	18	24	1	55	<	6	15.2	1533 61102	WGNG					DYS	14807	2155	NORGANIC
Wagonite	15 2309	AAB3424	18	24	1	55	<	1.9	15.2	1533 61102	WGNG					DYS	14807	2155	NORGANIC
Wagonite	15 2304	AAB3421	18	15	1	55	<	9.9	15.2	1533 61102	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2305	AAB3424	0	6	1	55	<	6.8	15.2	1533 61102	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2306	AAB3431	0	6	1	55	<	6.8	15.2	1533 61102	WGNG					DYS	14801	2115	NORGANIC
Wagonite	15 2307	AAB3433	0	6	1	55	<	10.1	15.2	1533 61102	WGNG					DYS	14807	2155	NORGANIC

SAMPLING DATA FOR PFRS 15-007(B)

Sample	Loc ID	Sample ID	Depth	Units	Meth	Sample	Range	SAL	Units	Flow	Lab	EPA	Sample	Techn	Request	Request
Characteristics						Yr	Value	Value	Code	Code	Code	Code	Location	Code	Number	Year
Chlorobenzene	15 2301	AAB3148	18 24	W	5	14		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2301	AAB3152	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2302	AAB3150	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2303	AAB3151	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2304	AAB3152	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2307	AAB3153	18 30	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2311	AAB3154	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2301	AAB3155	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2302	AAB3150	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2303	AAB3151	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2304	AAB3152	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2307	AAB3153	18 30	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2311	AAB3154	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2301	AAB3155	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2302	AAB3150	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2303	AAB3151	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2304	AAB3152	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2307	AAB3153	18 30	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2311	AAB3154	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2301	AAB3155	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2302	AAB3150	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2303	AAB3151	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2304	AAB3152	18 24	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2307	AAB3153	18 30	S	5	0.05		100 UG/L	15					016	10055	1993
Chlorobenzene	15 2311	AAB3154	18 24	S	5	0.05		100 UG/L	15					016	10055	1993

SAMPLING DATA FOR PRRS 15-007(b)

Analyte	Loc ID	Sample ID	Depth	End	Units	Mat S	Sample Value	Ship Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Subst
Dichloropropene [cis 1,2]	15-2301	AAB3539	18	24	55	<	0.006			MG/KG					COAS	18658	31530	ORGANIC
Dichloropropene [cis 1,2]	15-2302	AAB3540	18	24	55	<	0.003			MG/KG					COAS	18658	31530	ORGANIC
Dichloropropene [cis 1,2]	15-2303	AAB3541	18	24	55	<	0.006			MG/KG					COAS	18658	31530	ORGANIC
Dichloropropene [cis 1,2]	15-2304	AAB3542	10	15	55	<	0.006			MG/KG			U		COAS	18658	31530	ORGANIC
Dichloropropene [cis 1,2]	15-2305	AAB3543	18	30	55	<	0.003			MG/KG					COAS	18658	31530	ORGANIC
Dichloropropene [cis 1,2]	15-2311	AAB3544	18	24	55	<	0.006			MG/KG					COAS	18658	31530	ORGANIC
Dichloropropene [cis 1,2]	PKSATE	AAB3544	18	24	W	<			0.19	UG/L	EB				COAS	18658	31530	ORGANIC
Dichloropropene [trans 1,2]	15-2301	AAB3539	18	24	55	<	0.006			MG/KG					COAS	18658	30369	ORGANIC
Dichloropropene [trans 1,2]	15-2302	AAB3540	18	24	55	<	0.003			MG/KG					COAS	18658	31530	ORGANIC
Dichloropropene [trans 1,2]	15-2303	AAB3541	18	24	55	<	0.006			MG/KG					COAS	18658	31530	ORGANIC
Dichloropropene [trans 1,2]	15-2304	AAB3542	10	15	55	<	0.006			MG/KG			U		COAS	18658	31530	ORGANIC
Dichloropropene [trans 1,2]	15-2305	AAB3543	18	30	55	<	0.003			MG/KG					COAS	18658	31530	ORGANIC
Dichloropropene [trans 1,2]	15-2311	AAB3544	18	24	55	<	0.006			MG/KG					COAS	18658	31530	ORGANIC
Dichloropropene [trans 1,2]	PKSATE	AAB3544	18	24	W	<			0.19	UG/L	EB				COAS	18658	31530	ORGANIC
Diethyl phthalate	15-2301	AAB3534	0	6	55	<	0.36		32142 3878	MG/KG					COAS	18658	28389	ORGANIC
Diethyl phthalate	15-2301	AAB3539	18	24	55	<	0.39		32142 3878	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2302	AAB3540	18	24	55	<	0.34		32142 3878	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2303	AAB3541	18	24	55	<	0.33		32142 3878	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2304	AAB3542	10	15	55	<	0.33		32142 3878	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2305	AAB3543	0	6	55	<	0.35		32142 3878	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2307	AAB3537	0	6	55	<	0.33		32142 3878	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2308	AAB3538	18	30	55	<	0.33		32142 3878	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2310	AAB3535	0	6	55	<	0.35		32142 3878	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2311	AAB3536	0	6	55	<	0.36		32142 3878	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2311	AAB3544	18	24	55	<	0.34		32142 3878	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	PKSATE	AAB3544	18	24	W	<			5000	UG/L	EB				COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2301	AAB3534	0	6	55	<	0.36		160000	MG/KG					COAS	18658	28241	ORGANIC
Diethyl phthalate	15-2301	AAB3539	18	24	55	<	0.36		160000	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2302	AAB3540	18	24	55	<	0.34		160000	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2303	AAB3541	18	24	55	<	0.33		160000	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2304	AAB3542	10	15	55	<	0.33		160000	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2305	AAB3543	0	6	55	<	0.33		160000	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2307	AAB3537	0	6	55	<	0.33		160000	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2308	AAB3538	18	30	55	<	0.33		160000	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2310	AAB3535	0	6	55	<	0.35		160000	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2311	AAB3536	0	6	55	<	0.36		160000	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	15-2311	AAB3544	18	24	55	<	0.34		160000	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate	PKSATE	AAB3544	18	24	W	<			30000	UG/L	EB				COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2301	AAB3539	0	6	55	<	0.36		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2301	AAB3539	18	24	55	<	0.36		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2302	AAB3540	18	24	55	<	0.34		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2303	AAB3541	18	24	55	<	0.33		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2304	AAB3542	10	15	55	<	0.33		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2305	AAB3543	0	6	55	<	0.33		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2307	AAB3537	0	6	55	<	0.33		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2308	AAB3538	18	30	55	<	0.33		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2310	AAB3535	0	6	55	<	0.35		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2311	AAB3536	0	6	55	<	0.36		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2311	AAB3544	18	24	55	<	0.34		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	PKSATE	AAB3544	18	24	W	<			30000	UG/L	EB				COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2301	AAB3534	0	6	55	<	0.36		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2301	AAB3539	18	24	55	<	0.36		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2302	AAB3540	18	24	55	<	0.34		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2303	AAB3541	18	24	55	<	0.33		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2304	AAB3542	10	15	55	<	0.33		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2305	AAB3543	0	6	55	<	0.33		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2307	AAB3537	0	6	55	<	0.33		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2308	AAB3538	18	30	55	<	0.33		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2310	AAB3535	0	6	55	<	0.35		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2311	AAB3536	0	6	55	<	0.36		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	15-2311	AAB3544	18	24	55	<	0.34		133 5597	MG/KG					COAS	18658	32190	ORGANIC
Diethyl phthalate [2,4]	PKSATE	AAB3544	18	24	W	<			30000	UG/L	EB				COAS	18658	32190	ORGANIC

SAMPLING DATA FOR PRRS 15-007(b)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Blgd Value	SAL Value	Units	Field Code	Lab Code	EPA	Sample Location	Tech Code	Request Number	Report Number	
Metaphos [2]	15-2306	AA63318	0	6	6	SS	C	0.33		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2307	AA63319	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2308	AA63320	18	24	30	SS	C	0.33		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2309	AA63321	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2310	AA63322	0	6	6	SS	C	0.32		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2311	AA63323	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2311	AA63324	18	24	24	SS	C	3.4		325.85924	UGXG	LB				GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2311	AA63325	18	24	24	SS	C	1.4		1700	UGA	LB				GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2301	AA63314	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2301	AA63315	18	24	24	SS	C	0.36		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2302	AA63316	18	24	24	SS	C	0.34		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2303	AA63317	18	24	24	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2304	AA63318	10	15	15	SS	C	0.33		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2305	AA63319	0	6	6	SS	C	0.33		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2306	AA63320	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2307	AA63321	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2308	AA63322	0	6	6	SS	C	0.33		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2309	AA63323	0	6	6	SS	C	0.32		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2310	AA63324	0	6	6	SS	C	0.36		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2311	AA63325	18	24	24	SS	C	3.4		325.85924	UGXG	LB				GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2311	AA63326	18	24	24	SS	C	1.4		1400	UGA	LB				GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2301	AA63314	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2301	AA63315	18	24	24	SS	C	0.36		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2302	AA63316	18	24	24	SS	C	0.34		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2303	AA63317	18	24	24	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2304	AA63318	10	15	15	SS	C	0.33		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2305	AA63319	0	6	6	SS	C	0.33		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2306	AA63320	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2307	AA63321	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2308	AA63322	0	6	6	SS	C	0.33		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2309	AA63323	0	6	6	SS	C	0.32		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2310	AA63324	0	6	6	SS	C	0.36		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2311	AA63325	18	24	24	SS	C	3.4		325.85924	UGXG	LB				GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2311	AA63326	18	24	24	SS	C	1.4		1400	UGA	LB				GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2301	AA63314	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2301	AA63315	18	24	24	SS	C	0.36		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2302	AA63316	18	24	24	SS	C	0.34		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2303	AA63317	18	24	24	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2304	AA63318	10	15	15	SS	C	0.33		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2305	AA63319	0	6	6	SS	C	0.33		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2306	AA63320	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2307	AA63321	0	6	6	SS	C	0.35		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2308	AA63322	0	6	6	SS	C	0.33		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2309	AA63323	0	6	6	SS	C	0.32		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2310	AA63324	0	6	6	SS	C	0.36		325.85924	UGXG					GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2311	AA63325	18	24	24	SS	C	3.4		325.85924	UGXG	LB				GMAS	18558	32190	ORGANIC
Metaphos [2]	15-2311	AA63326	18	24	24	SS	C	1.4		1400	UGA	LB				GMAS	18558	32190	ORGANIC

SAMPLING DATA FOR PWS 15-007(9)

Analyte	Lot ID	Sample ID	Depth	End	Units	Mat	S	Sample Volume	Depth Value	S.M. Value	Units	Field Lab Code	BPA Code	Sample Location	Tech Code	Request Number	Request Member	Spills
Trichlorobenzene [1,2,4]	15-2311	AA93536	0	6		SS	C	0.34		621.194737	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,2,4]	15-2311	AA93544	18	24		SS	C	3.4		621.194737	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,2,4]	PKSATE	AA93418				W	C	14		21	UG/L				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,1]	15-2301	AA93539	18	24		SS	C	0.006		3160.82325	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,1]	15-2302	AA93540	18	24		SS	C	0.005		3160.82325	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,1]	15-2303	AA93541	18	24		SS	C	0.004		3160.82325	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,1]	15-2304	AA93542	10	15		SS	C	0.006		3160.82325	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,1]	15-2307	AA93543	18	30		SS	C	0.005		3160.82325	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,1]	15-2311	AA93544	18	24		SS	C	0.006		3160.82325	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,1]	PKSATE	AA93419				W	C	5		500	UG/L				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,2]	15-2301	AA93539	18	24		SS	C	0.006		1.4111669	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,2]	15-2302	AA93540	18	24		SS	C	0.005		1.4111669	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,2]	15-2303	AA93541	18	24		SS	C	0.005		1.4111669	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,2]	15-2304	AA93542	10	15		SS	C	0.006		1.4111669	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,2]	15-2307	AA93543	18	30		SS	C	0.005		1.4111669	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,2]	15-2311	AA93544	18	24		SS	C	0.006		1.4111669	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene [1,1,2]	PKSATE	AA93419				W	C	5		5	UG/L				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2301	AA93539	18	24		SS	C	0.006		7.069878	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2302	AA93540	18	24		SS	C	0.005		7.069878	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2303	AA93541	18	24		SS	C	0.006		7.069878	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2304	AA93542	10	15		SS	C	0.004		7.069878	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2307	AA93543	18	30		SS	C	0.005		7.069878	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2311	AA93544	18	24		SS	C	0.006		7.069878	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	PKSATE	AA93419				W	C	5		5	UG/L				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2301	AA93539	18	24		SS	C	0.006		707.902748	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2302	AA93540	18	24		SS	C	0.005		707.902748	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2303	AA93541	18	24		SS	C	0.006		707.902748	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2304	AA93542	10	15		SS	C	0.004		707.902748	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2307	AA93543	18	30		SS	C	0.005		707.902748	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2311	AA93544	18	24		SS	C	0.006		707.902748	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	PKSATE	AA93419				W	C	5		11000	UG/L				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2301	AA93539	0	6		SS	C	0.006		6517.78849	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2302	AA93540	18	24		SS	C	0.007		6517.78849	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2303	AA93541	18	24		SS	C	0.006		6517.78849	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2304	AA93542	10	15		SS	C	0.004		6517.78849	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2307	AA93543	18	30		SS	C	0.005		6517.78849	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2311	AA93544	18	24		SS	C	0.006		6517.78849	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	PKSATE	AA93419				W	C	5		3500	UG/L				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2301	AA93539	0	6		SS	C	0.006		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2302	AA93540	18	24		SS	C	0.006		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2303	AA93541	18	24		SS	C	0.004		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2304	AA93542	10	15		SS	C	0.004		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2307	AA93543	18	30		SS	C	0.005		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2311	AA93544	18	24		SS	C	0.006		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	PKSATE	AA93419				W	C	5		5	UG/L				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2301	AA93539	0	6		SS	C	0.006		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2302	AA93540	18	24		SS	C	0.006		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2303	AA93541	18	24		SS	C	0.004		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2304	AA93542	10	15		SS	C	0.004		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2307	AA93543	18	30		SS	C	0.005		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2311	AA93544	18	24		SS	C	0.006		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	PKSATE	AA93419				W	C	5		5	UG/L				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2301	AA93539	0	6		SS	C	0.006		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2302	AA93540	18	24		SS	C	0.006		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2303	AA93541	18	24		SS	C	0.004		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2304	AA93542	10	15		SS	C	0.004		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2307	AA93543	18	30		SS	C	0.005		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	15-2311	AA93544	18	24		SS	C	0.006		40.3931852	MG/KG				0345	10454	31193	ORGANIC
Trichlorobenzene	PKSATE	AA93419				W	C	5		5	UG/L				0345	10454	31193	ORGANIC

SAMPLING DATA FOR PRS 15-007(S)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat S	Sample Value	Reqd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Test Cycle	Request Number	Report Number	Site
Uranium	15-2324	AAB3421	10	11		SS	5.71	5.45		UG/G					7A	15416	32323	RAO
Uranium	15-2324	AAB3421	0	6		SS	1.91	5.45		UG/G					7A	15416	32323	RAO
Uranium	15-2324	AAB3431	0	6		SS	37.4	5.45		UG/G	0				7A	15416	32323	RAO
Uranium	15-2324	AAB3431	0	6		SS	17.1	5.45		UG/G					7A	15416	32323	RAO
Uranium	15-2327	AAB3432	0	6		SS	136	5.45		UG/G					7A	15416	32323	RAO
Uranium	15-2327	AAB3442	17	18		SS	162	5.45		UG/G					7A	15416	32323	RAO
Uranium	15-2328	AAB3452	0	6		SS	187	5.45		UG/G					7A	15416	32323	RAO
Uranium	15-2310	AAB3422	0	6		SS	349	5.45		UG/G					7A	15416	32323	RAO
Uranium	15-2311	AAB3433	0	6		SS	42	5.45		UG/G					7A	15416	32323	RAO
Uranium	15-2311	AAB3444	18	24		SS	25.6	5.45		UG/G					7A	15416	32323	RAO
Uranium	REGATE	AAB3418				W	3			UG/L					7A	15416	32323	RAO
Uranium	REGATE	AAB3412				W	1			UG/L					7A	15416	32323	RAO

SAMPLING DATA FOR PRS15-008(b)

Analyte	Lec ID	Sample ID	Begin	End	Units	Mat S	Sample Value	Stage Value	SAL Value	Ratio	Field Code	Lab Code	EPA Qual	Sample Location	Teach Code	Request Number	Report Number	Series
Aluminum	15-2500	AAB3503	0	6		SS	5600	38700	76674 7928	MG/KG					CPES	18481	29195	INORGANIC
Aluminum	15-2502	AAB3503	0	6		SS	5810	38700	76674 7928	MG/KG					CPES	18481	29195	INORGANIC
Aluminum	15-2500	AAB3504	18	24		SS	1700	38700	76674 7928	MG/KG					CPES	18481	29195	INORGANIC
Aluminum	15-2501	AAB3398	0	6		SS	4850	38700	76674 7928	MG/KG					CPES	18481	29195	INORGANIC
Aluminum	15-2501	AAB3530	18	24		SS	2060	38700	76674 7928	MG/KG					CPES	18481	29195	INORGANIC
Aluminum	15-2502	AAB3355	0	6		SS	3000	38700	76674 7928	MG/KG					CPES	18481	29195	INORGANIC
Aluminum	15-2502	AAB3401	18	24		SS	2230	38700	76674 7928	MG/KG					CPES	18481	29195	INORGANIC
Aluminum	15-2503	AAB3352	18	24		SS	6010	38700	76674 7928	MG/KG					CPES	18481	29195	INORGANIC
Aluminum	15-2503	AAB3353	0	6		SS	4650	38700	76674 7928	MG/KG	FD				CPES	18481	29195	INORGANIC
Aluminum	15-2504	AAB3400	0	6		SS	5070	38700	76674 7928	MG/KG	FD				CPES	20562	34358	INORGANIC
Aluminum	15-2506	AAB3531	0	6		SS	1927	38700	76674 7928	MG/KG					CPES	20562	34358	INORGANIC
Aluminum	15-2506	AAB3531	0	6		SS	2260	38700	76674 7928	MG/KG					CPES	20562	34358	INORGANIC
Aluminum	15-2507	AAB3399	0	6		SS	1840	38700	76674 7928	MG/KG					CPES	20562	34358	INORGANIC
Aluminum	15-2508	AAB3402	0	6		SS	3220	38700	76674 7928	MG/KG					CPES	20562	34358	INORGANIC
Aluminum	15-2510	AAC0995	18	24		SS	1550	38700	76674 7928	MG/KG	FD				CPES	20347	34481	INORGANIC
Aluminum	15-2596	AAB3354	0	6		SS	2810	38700	76674 7928	MG/KG	FD				CPES	20562	34358	INORGANIC
Antimony	PRISATE	AAB3383				W	134			UG/L	EB				CPES	18449	28238	INORGANIC
Antimony	15-2500	AAB3503	0	6		SS	3.4	1		MG/KG					CPES	18481	29195	INORGANIC
Antimony	15-2500	AAB3503	0	6		SS	4.5	1		MG/KG					CPES	18481	29195	INORGANIC
Antimony	15-2500	AAB3504	18	24		SS	3.9	1		MG/KG					CPES	18481	29195	INORGANIC
Antimony	15-2501	AAB3398	0	6		SS	3.9	1		MG/KG					CPES	18481	29195	INORGANIC
Antimony	15-2501	AAB3510	18	24		SS	3.9	1		MG/KG					CPES	18481	29195	INORGANIC
Antimony	15-2502	AAB3355	0	6		SS	3.7	1		MG/KG					CPES	18481	29195	INORGANIC
Antimony	15-2502	AAB3401	18	24		SS	4	1		MG/KG					CPES	18481	29195	INORGANIC
Antimony	15-2503	AAB3352	18	24		SS	4	1		MG/KG					CPES	18481	29195	INORGANIC
Antimony	15-2503	AAB3353	0	6		SS	8.6	1		MG/KG					CPES	18481	29195	INORGANIC
Antimony	15-2504	AAB3400	0	6		SS	16.8	1		MG/KG	FD				CPES	20562	34358	INORGANIC
Antimony	15-2506	AAB3531	0	6		SS	1702	1		MG/KG					CPES	20562	34358	INORGANIC
Antimony	15-2507	AAB3399	0	6		SS	2.8	1		MG/KG					CPES	20562	34358	INORGANIC
Antimony	15-2508	AAB3402	0	6		SS	1.1	1		MG/KG					CPES	20562	34358	INORGANIC
Antimony	15-2510	AAC0995	18	24		SS	4.4	1		MG/KG					CPES	20562	34358	INORGANIC
Antimony	15-2596	AAB3354	0	6		SS	4.4	1		MG/KG					CPES	20562	34358	INORGANIC
Antimony	PRISATE	AAB3383				W	18.4	1		MG/KG	FD				CPES	18449	28238	INORGANIC
Arsenic	15-2500	AAB3503	0	6		SS	2.0	7.82		UG/L	EB				CPES	18481	29195	INORGANIC
Arsenic	15-2500	AAB3503	0	6		SS	3.1	7.82		MG/KG					CPES	18481	29195	INORGANIC
Arsenic	15-2500	AAB3504	18	24		SS	3.1	7.82		MG/KG					CPES	18481	29195	INORGANIC
Arsenic	15-2501	AAB3398	0	6		SS	1.7	7.82		MG/KG					CPES	18481	29195	INORGANIC
Arsenic	15-2501	AAB3530	18	24		SS	2.4	7.82		MG/KG					CPES	18481	29195	INORGANIC
Arsenic	15-2502	AAB3355	0	6		SS	1.1	7.82		MG/KG					CPES	18481	29195	INORGANIC
Arsenic	15-2502	AAB3401	18	24		SS	1.8	7.82		MG/KG					CPES	18481	29195	INORGANIC
Arsenic	15-2503	AAB3352	18	24		SS	1.5	7.82		MG/KG					CPES	18481	29195	INORGANIC
Arsenic	15-2503	AAB3352	0	6		SS	2.8	7.82		MG/KG					CPES	18481	29195	INORGANIC
Arsenic	15-2502	AAB3353	0	6		SS	6.6	7.82		MG/KG					CPES	18481	29195	INORGANIC
Arsenic	15-2504	AAB3400	0	6		SS	1.8	7.82		MG/KG	FD				CPES	20562	34358	INORGANIC
Arsenic	15-2506	AAB3531	0	6		SS	7.00	7.82		MG/KG					CPES	20562	34358	INORGANIC

SAMPLING DATA FOR PRS15-006(B)

Analyte	LocID	Sample ID	Begin	End	Units	Meth	Sample Value	Blgd Value	TAL Value	Uclite	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Soil
Arsenic	15 2556	AAB3151	0	6	1	25	2.2	7.82	0.38	MG/KG					CPES	20562	24358	MORGANIC
Arsenic	15 2557	AAB3152	0	6	1	25	1	7.82	0.38	MG/KG					CPES	20562	24358	MORGANIC
Arsenic	15 2558	AAB3153	0	6	1	25	1.1	7.82	0.38	MG/KG					CPES	20562	24358	MORGANIC
Arsenic	15 2559	AAC0965	18	24	1	25	123	7.82	0.38	MG/KG					CPES	20367	24358	MORGANIC
Arsenic	15 2560	AAB3154	0	6	1	25	1.2	7.82	0.38	MG/KG	FD				CPES	20562	24358	MORGANIC
BERYLLIUM	PRELATE	AAB3155	0	6	1	25	2.4		50	UCL	BB				ETVAL	18449	24358	MORGANIC
Barium	15 2569	AAB3153	0	6	1	25	127	315	3339	54439	MG/KG	D			CPES	18481	24358	MORGANIC
Barium	15 2570	AAB3153	0	6	1	25	116	315	3339	54439	MG/KG				CPES	18481	24358	MORGANIC
Barium	15 2560	AAB3154	18	24	1	25	28.7	315	3339	54439	MG/KG				CPES	18481	24358	MORGANIC
Barium	15 2561	AAB3154	0	6	1	25	110	315	3339	54439	MG/KG				CPES	18481	24358	MORGANIC
Barium	15 2561	AAB3150	18	24	1	25	19.6	315	3339	54439	MG/KG				CPES	18481	24358	MORGANIC
Barium	15 2562	AAB3155	0	6	1	25	10.8	315	3339	54439	MG/KG				CPES	18481	24358	MORGANIC
Barium	15 2562	AAB3151	18	24	1	25	28.1	315	3339	54439	MG/KG				CPES	18481	24358	MORGANIC
Barium	15 2563	AAB3153	18	24	1	25	52.8	315	3339	54439	MG/KG				CPES	18481	24358	MORGANIC
Barium	15 2564	AAB3155	0	6	1	25	81.2	315	3339	54439	MG/KG	FD			CPES	18481	24358	MORGANIC
Barium	15 2564	AAB3150	0	6	1	25	159	315	3339	54439	MG/KG				CPES	20562	24358	MORGANIC
Barium	15 2564	AAB3151	0	6	1	25	64.3	315	3339	54439	MG/KG				CPES	20562	24358	MORGANIC
Barium	15 2566	AAB3151	0	6	1	25	20.1	315	3339	54439	MG/KG				CPES	20562	24358	MORGANIC
Barium	15 2567	AAB3159	0	6	1	25	41.4	315	3339	54439	MG/KG				CPES	20562	24358	MORGANIC
Barium	15 2568	AAB3152	0	6	1	25	38.8	315	3339	54439	MG/KG				CPES	20562	24358	MORGANIC
Barium	15 2568	AAC0965	18	24	1	25	88.5	315	3339	54439	MG/KG	FD			CPES	20367	24358	MORGANIC
Barium	15 2568	AAB3154	0	6	1	25	6.7		2000	UCL	BB				CPES	20562	24358	MORGANIC
Beryllium	15 2560	AAB3153	0	6	1	25	3.5	1.55	6.14	6.81	MG/KG	D			CPES	18481	24358	MORGANIC
Beryllium	15 2560	AAB3153	0	6	1	25	3.3	1.55	6.14	6.81	MG/KG				CPES	18481	24358	MORGANIC
Beryllium	15 2560	AAB3154	18	24	1	25	0.41	1.55	6.14	6.81	MG/KG				CPES	18481	24358	MORGANIC
Beryllium	15 2561	AAB3158	0	6	1	25	10.6	1.55	6.14	6.81	MG/KG				CPES	18481	24358	MORGANIC
Beryllium	15 2561	AAB3153	18	24	1	25	0.36	1.55	6.14	6.81	MG/KG				CPES	18481	24358	MORGANIC
Beryllium	15 2562	AAB3155	0	6	1	25	35.5	1.55	6.14	6.81	MG/KG				CPES	18481	24358	MORGANIC
Beryllium	15 2562	AAB3151	18	24	1	25	11.5	1.55	6.14	6.81	MG/KG				CPES	18481	24358	MORGANIC
Beryllium	15 2563	AAB3152	18	24	1	25	0.93	1.55	6.14	6.81	MG/KG				CPES	18481	24358	MORGANIC
Beryllium	15 2563	AAB3153	0	6	1	25	17.1	1.55	6.14	6.81	MG/KG				CPES	18481	24358	MORGANIC
Beryllium	15 2564	AAB3150	0	6	1	25	35.1	1.55	6.14	6.81	MG/KG	FD			CPES	20562	24358	MORGANIC
Beryllium	15 2564	AAB3151	0	6	1	25	13.1	1.55	6.14	6.81	MG/KG				CPES	20562	24358	MORGANIC
Beryllium	15 2564	AAB3151	0	6	1	25	15.3	1.55	6.14	6.81	MG/KG				CPES	20562	24358	MORGANIC
Beryllium	15 2567	AAB3159	0	6	1	25	12.5	1.55	6.14	6.81	MG/KG				CPES	20562	24358	MORGANIC
Beryllium	15 2568	AAB3152	0	6	1	25	6.4	1.55	6.14	6.81	MG/KG				CPES	20562	24358	MORGANIC
Beryllium	15 2510	AAC0965	18	24	1	25	115	1.55	6.14	6.81	MG/KG				CPES	20367	24358	MORGANIC
Beryllium	15 2564	AAB3154	0	6	1	25	18.1	1.55	6.14	6.81	MG/KG	FD			CPES	20562	24358	MORGANIC
Beryllium	PRELATE	AAB3153	0	6	1	25	1.1		4	UCL	BB				CPES	18449	24358	MORGANIC
Beryllium	15 2569	AAB3153	0	6	1	25	0.43	2.7	38.340	3347	MG/KG				CPES	18481	24358	MORGANIC
Cadmium	15 2560	AAB3153	0	6	1	25	2.5	2.7	38.340	3347	MG/KG	D			CPES	18481	24358	MORGANIC
Cadmium	15 2560	AAB3154	18	24	1	25	0.43	2.7	38.340	3347	MG/KG				CPES	18481	24358	MORGANIC
Cadmium	15 2561	AAB3154	0	6	1	25	0.43	2.7	38.340	3347	MG/KG				CPES	18481	24358	MORGANIC
Cadmium	15 2561	AAB3154	0	6	1	25	0.43	2.7	38.340	3347	MG/KG				CPES	18481	24358	MORGANIC
Cadmium	15 2561	AAB3150	18	24	1	25	0.43	2.7	38.340	3347	MG/KG				CPES	18481	24358	MORGANIC

SAMPLING DATA FOR PRS15-008(b)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bgnd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Chromium	RRSGATE	AAB3383				W	<	10.8		100	UG/L	EB				CPES	18449	28238	INORGANIC
Cobalt	15 2500	AAB3503	0	6		SS	<	2.4	19.2	4600	MG/KG		D			CPES	18681	29195	INORGANIC
Cobalt	15 2500	AAB3503	0	6		SS	<	1.8	19.2	4600	MG/KG					CPES	18681	29195	INORGANIC
Cobalt	15 2500	AAB3504	18	24		SS	<	1.3	19.2	4600	MG/KG					CPES	18681	29195	INORGANIC
Cobalt	15 2501	AAB3358	0	6		SS	<	1.4	19.2	4600	MG/KG					CPES	18681	29195	INORGANIC
Cobalt	15 2501	AAB3530	18	24		SS	<	1.3	19.2	4600	MG/KG					CPES	18681	29195	INORGANIC
Cobalt	15 2502	AAB3355	0	6		SS	<	2.2	19.2	4600	MG/KG					CPES	18681	29195	INORGANIC
Cobalt	15 2502	AAB3401	18	24		SS	<	5.2	19.2	4600	MG/KG					CPES	18681	29195	INORGANIC
Cobalt	15 2503	AAB3352	18	24		SS	<	1.7	19.2	4600	MG/KG					CPES	18681	29195	INORGANIC
Cobalt	15 2503	AAB3353	0	6		SS	<	1.8	19.2	4600	MG/KG					CPES	18681	29195	INORGANIC
Cobalt	15 2504	AAB3400	0	6		SS	<	1.7	19.2	4600	MG/KG	FD				CPES	20562	34358	INORGANIC
Cobalt	15 2506	AAB3531	0	6		SS	<	1.6	19.2	4600	MG/KG		D			CPES	20562	34358	INORGANIC
Cobalt	15 2506	AAB3531	0	6		SS	<	4.1	19.2	4600	MG/KG					CPES	20562	34358	INORGANIC
Cobalt	15 2507	AAB3399	0	6		SS	<	1.9	19.2	4600	MG/KG					CPES	20562	34358	INORGANIC
Cobalt	15 2508	AAB3402	0	6		SS	<	1.2	19.2	4600	MG/KG					CPES	20562	34358	INORGANIC
Cobalt	15 2510	AAC0995	18	24		SS	<	0.77	19.2	4600	MG/KG					CPES	20347	34461	INORGANIC
Cobalt	15 2506	AAB3354	0	6		SS	<	1.2	19.2	4600	MG/KG	FD				CPES	20562	34358	INORGANIC
Cobalt	RRSGATE	AAB3383				W	<	6.7			UG/L	EB				CPES	18449	28238	INORGANIC
Copper	15 2500	AAB3503	0	6		SS	<	1275	30.7	2848 13114	MG/KG		D			CPES	18681	29195	INORGANIC
Copper	15 2500	AAB3503	0	6		SS	<	500	30.7	2848 13114	MG/KG					CPES	18681	29195	INORGANIC
Copper	15 2500	AAB3504	18	24		SS	<	12.4	30.7	2848 13114	MG/KG					CPES	18681	29195	INORGANIC
Copper	15 2501	AAB3358	0	6		SS	<	1040	30.7	2848 13114	MG/KG					CPES	18681	29195	INORGANIC
Copper	15 2501	AAB3530	18	24		SS	<	3.6	30.7	2848 13114	MG/KG					CPES	18681	29195	INORGANIC
Copper	15 2502	AAB3355	0	6		SS	<	550	30.7	2848 13114	MG/KG					CPES	18681	29195	INORGANIC
Copper	15 2502	AAB3401	18	24		SS	<	784	30.7	2848 13114	MG/KG					CPES	18681	29195	INORGANIC
Copper	15 2503	AAB3352	18	24		SS	<	14.6	30.7	2848 13114	MG/KG					CPES	18681	29195	INORGANIC
Copper	15 2503	AAB3353	0	6		SS	<	4110	30.7	2848 13114	MG/KG					CPES	18681	29195	INORGANIC
Copper	15 2504	AAB3400	0	6		SS	<	1560	30.7	2848 13114	MG/KG	FD				CPES	20562	34358	INORGANIC
Copper	15 2506	AAB3531	0	6		SS	<	290	30.7	2848 13114	MG/KG		D			CPES	20562	34358	INORGANIC
Copper	15 2506	AAB3531	0	6		SS	<	447	30.7	2848 13114	MG/KG					CPES	20562	34358	INORGANIC
Copper	15 2507	AAB3399	0	6		SS	<	697	30.7	2848 13114	MG/KG					CPES	20562	34358	INORGANIC
Copper	15 2508	AAB3402	0	6		SS	<	75.6	30.7	2848 13114	MG/KG					CPES	20562	34358	INORGANIC
Copper	15 2510	AAC0995	18	24		SS	<	292	30.7	2848 13114	MG/KG					CPES	20347	34461	INORGANIC
Copper	15 2506	AAB3354	0	6		SS	<	1110	30.7	2848 13114	MG/KG	FD				CPES	20562	34358	INORGANIC
Copper	RRSGATE	AAB3383				W	<	11.8		1300	UG/L	EB				CPES	18449	28238	INORGANIC
Iron	15 2500	AAB3503	0	6		SS	<	7471	21300		MG/KG		D			CPES	18681	29195	INORGANIC
Iron	15 2500	AAB3503	0	6		SS	<	6820	21300		MG/KG					CPES	18681	29195	INORGANIC
Iron	15 2500	AAB3504	18	24		SS	<	4250	21300		MG/KG					CPES	18681	29195	INORGANIC
Iron	15 2501	AAB3358	0	6		SS	<	5900	21300		MG/KG					CPES	18681	29195	INORGANIC
Iron	15 2501	AAB3530	18	24		SS	<	6110	21300		MG/KG					CPES	18681	29195	INORGANIC
Iron	15 2502	AAB3355	0	6		SS	<	5260	21300		MG/KG					CPES	18681	29195	INORGANIC
Iron	15 2502	AAB3401	18	24		SS	<	5250	21300		MG/KG					CPES	18681	29195	INORGANIC
Iron	15 2503	AAB3352	18	24		SS	<	6980	21300		MG/KG					CPES	18681	29195	INORGANIC
Iron	15 2503	AAB3353	0	6		SS	<	5700	21300		MG/KG					CPES	18681	29195	INORGANIC
Iron	15 2504	AAB3400	0	6		SS	<	5050	21300		MG/KG	FD				CPES	20562	34358	INORGANIC

SAMPLING DATA FOR PRS15-008(b)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bkgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Iron	15-2506	AAB3531	0	6		SS		3590	21300		MG/KG		D			CPES	20562	34358	INORGANIC
Iron	15-2506	AAB3531	0	6		SS		4290	21300		MG/KG					CPES	20562	34358	INORGANIC
Iron	15-2507	AAB3399	0	6		SS		5590	21300		MG/KG					CPES	20562	34358	INORGANIC
Iron	15-2508	AAB3402	0	6		SS		4850	21300		MG/KG					CPES	20562	34358	INORGANIC
Iron	15-2510	AAC0995	18	24		SS		2260	21300		MG/KG					CPES	20347	34491	INORGANIC
Iron	15-2596	AAB3354	0	6		SS		3200	21300		MG/KG	FD				CPES	20562	34358	INORGANIC
Iron	FINSTATE	AAB3383				W		120			UG/L	EB				CPES	18449	28238	INORGANIC
Lead	15-2500	AAB3503	0	6		SS		575	233	400	MG/KG		D			CPES	18681	29195	INORGANIC
Lead	15-2500	AAB3503	0	6		SS		413	233	400	MG/KG					CPES	18681	29195	INORGANIC
Lead	15-2500	AAB3504	18	24		SS		12.4	233	400	MG/KG					CPES	18681	29195	INORGANIC
Lead	15-2501	AAB3398	0	6		SS		77.9	233	400	MG/KG					CPES	18681	29195	INORGANIC
Lead	15-2501	AAB3530	18	24		SS		3.1	233	400	MG/KG					CPES	18681	29195	INORGANIC
Lead	15-2502	AAB3355	0	6		SS		175	233	400	MG/KG					CPES	18681	29195	INORGANIC
Lead	15-2502	AAB3401	18	24		SS		67	233	400	MG/KG					CPES	18681	29195	INORGANIC
Lead	15-2503	AAB3352	18	24		SS		14	233	400	MG/KG					CPES	18681	29195	INORGANIC
Lead	15-2503	AAB3353	0	6		SS		1250	233	400	MG/KG					CPES	18681	29195	INORGANIC
Lead	15-2504	AAB3400	0	6		SS		754	233	400	MG/KG	FD				CPES	20562	34358	INORGANIC
Lead	15-2506	AAB3531	0	6		SS		0.11032	233	400	MG/KG		D			CPES	20562	34358	INORGANIC
Lead	15-2506	AAB3531	0	6		SS		421	233	400	MG/KG					CPES	20562	34358	INORGANIC
Lead	15-2507	AAB3399	0	6		SS		233	233	400	MG/KG					CPES	20562	34358	INORGANIC
Lead	15-2508	AAB3402	0	6		SS		61.8	233	400	MG/KG					CPES	20562	34358	INORGANIC
Lead	15-2510	AAC0995	18	24		SS		74400	233	400	MG/KG					CPES	20347	34491	INORGANIC
Lead	15-2596	AAB3354	0	6		SS		665	233	400	MG/KG	FD				CPES	20562	34358	INORGANIC
Lead	FINSTATE	AAB3383				W		8.4		50	UG/L	EB				ETVAA	18449	28238	INORGANIC
Magnesium	15-2500	AAB3503	0	6		SS	<	940	4610		MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2500	AAB3503	0	6		SS	<	910	4610		MG/KG		D			CPES	18681	29195	INORGANIC
Magnesium	15-2500	AAB3504	18	24		SS	<	217	4610		MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2501	AAB3398	0	6		SS	<	913	4610		MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2501	AAB3530	18	24		SS	<	333	4610		MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2502	AAB3355	0	6		SS	<	902	4610		MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2502	AAB3401	18	24		SS	<	576	4610		MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2503	AAB3352	18	24		SS	<	955	4610		MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2503	AAB3353	0	6		SS	<	863	4610		MG/KG					CPES	18681	29195	INORGANIC
Magnesium	15-2504	AAB3400	0	6		SS	<	820	4610		MG/KG	FD				CPES	20562	34358	INORGANIC
Magnesium	15-2506	AAB3531	0	6		SS	<	747	4610		MG/KG					CPES	20562	34358	INORGANIC
Magnesium	15-2506	AAB3531	0	6		SS	<	754	4610		MG/KG		D			CPES	20562	34358	INORGANIC
Magnesium	15-2507	AAB3399	0	6		SS	<	736	4610		MG/KG					CPES	20562	34358	INORGANIC
Magnesium	15-2508	AAB3402	0	6		SS	<	508	4610		MG/KG					CPES	20562	34358	INORGANIC
Magnesium	15-2510	AAC0995	18	24		SS	<	486	4610		MG/KG					CPES	20347	34491	INORGANIC
Magnesium	15-2596	AAB3354	0	6		SS	<	623	4610		MG/KG	FD				CPES	20562	34358	INORGANIC
Magnesium	FINSTATE	AAB3383				W	<	117			UG/L	EB				CPES	18449	28238	INORGANIC
Manganese	15-2500	AAB3503	0	6		SS		217	714	381.959094	MG/KG		D			CPES	18681	29195	INORGANIC
Manganese	15-2500	AAB3503	0	6		SS		185	714	381.959094	MG/KG					CPES	18681	29195	INORGANIC
Manganese	15-2500	AAB3504	18	24		SS		270	714	381.959094	MG/KG					CPES	18681	29195	INORGANIC
Manganese	15-2501	AAB3398	0	6		SS		156	714	381.959094	MG/KG					CPES	18681	29195	INORGANIC

SAMPLING DATA FOR PRSIS (CAA-1)

Analyte	LocID	Sample ID	Begin	End	Units	Mat S	Sample Value	Bigg Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Project Number	Site
Manganese	15 2501	AAB3333	18 241	0	61	25	155	714	381 555054 M3333					EPES	18481	28155	NO RGANDC	
Manganese	15 2502	AAB3335	18 241	0	61	25	162	714	381 555054 M3333					EPES	18481	28155	NO RGANDC	
Manganese	15 2503	AAB3331	18 241	0	61	25	166	714	381 555054 M3333					EPES	18481	28155	NO RGANDC	
Manganese	15 2504	AAB3332	18 241	0	61	25	185	714	381 555054 M3333					EPES	18481	28155	NO RGANDC	
Manganese	15 2505	AAB3333	0	0	61	25	163	714	381 555054 M3333					EPES	18481	28155	NO RGANDC	
Manganese	15 2506	AAB3330	0	0	61	25	173	714	381 555054 M3333					EPES	20582	34358	NO RGANDC	
Manganese	15 2507	AAB3331	0	0	61	25	87	714	381 555054 M3333					EPES	20582	34358	NO RGANDC	
Manganese	15 2508	AAB3339	0	0	61	25	55	714	381 555054 M3333					EPES	20582	34358	NO RGANDC	
Manganese	15 2509	AAB3342	0	0	61	25	107	714	381 555054 M3333					EPES	20582	34358	NO RGANDC	
Manganese	15 2510	AAC6995	18 241	0	61	25	683	714	381 555054 M3333					EPES	20307	34451	NO RGANDC	
Manganese	15 2556	AAB3354	0	0	61	25	894	714	381 555054 M3333					EPES	20582	34358	NO RGANDC	
Manganese	SPR-ATE	AAB3388				W	3		189 UGL EB					EPES	18489	28238	NO RGANDC	
Mercury	15 2500	AAB3503	0	0	61	25	0	0	23 0333493 M3333				U	CYAA	18481	28155	NO RGANDC	
Mercury	15 2501	AAS3504	18 241	0	61	25	0	0	23 0333493 M3333				U	CYAA	18481	28155	NO RGANDC	
Mercury	15 2502	AAB3354	0	0	61	25	0	0	23 0333493 M3333				U	CYAA	18481	28155	NO RGANDC	
Mercury	15 2503	AAB3355	18 241	0	61	25	0	0	23 0333493 M3333				U	CYAA	18481	28155	NO RGANDC	
Mercury	15 2504	AAB3352	18 241	0	61	25	0	0	23 0333493 M3333				U	CYAA	18481	28155	NO RGANDC	
Mercury	15 2505	AAB3353	0	0	61	25	0	0	23 0333493 M3333				J	CYAA	18481	28155	NO RGANDC	
Mercury	15 2506	AAB3350	0	0	61	25	0	0	23 0333493 M3333				U	CYAA	18481	28155	NO RGANDC	
Mercury	15 2507	AAB3351	0	0	61	25	0	0	23 0333493 M3333				J	CYAA	18481	28155	NO RGANDC	
Mercury	15 2508	AAB3452	0	0	61	25	0	0	23 0333493 M3333				U	CYAA	18481	28155	NO RGANDC	
Mercury	15 2510	AAC6995	18 241	0	61	25	0	0	23 0333493 M3333				U	CYAA	20307	34451	NO RGANDC	
Mercury	15 2556	AAB3354	0	0	61	25	0	0	23 0333493 M3333				R	CYAA	20582	34358	NO RGANDC	
Mercury	SPR-ATE	AAB3388				W	0	0	2 UGL EB					CYAA	18489	28238	NO RGANDC	
Nickel	15 2500	AAB3503	0	0	61	25	714	152	1533 61105 M3333				O	EPES	18481	28155	NO RGANDC	
Nickel	15 2501	AAB3503	0	0	61	25	7	152	1533 61105 M3333					EPES	18481	28155	NO RGANDC	
Nickel	15 2502	AAB3504	18 241	0	61	25	7	152	1533 61105 M3333					EPES	18481	28155	NO RGANDC	
Nickel	15 2503	AAB3354	0	0	61	25	84	152	1533 61105 M3333					EPES	18481	28155	NO RGANDC	
Nickel	15 2504	AAB3359	18 241	0	61	25	28	152	1533 61105 M3333					EPES	18481	28155	NO RGANDC	
Nickel	15 2505	AAB3355	0	0	61	25	154	152	1533 61105 M3333					EPES	18481	28155	NO RGANDC	
Nickel	15 2506	AAB3421	18 241	0	61	25	106	152	1533 61105 M3333					EPES	18481	28155	NO RGANDC	
Nickel	15 2507	AAB3352	18 241	0	61	25	54	152	1533 61105 M3333					EPES	18481	28155	NO RGANDC	
Nickel	15 2508	AAB3353	0	0	61	25	10	152	1533 61105 M3333					EPES	18481	28155	NO RGANDC	
Nickel	15 2509	AAB3450	0	0	61	25	71	152	1533 61105 M3333					EPES	20582	34358	NO RGANDC	
Nickel	15 2506	AAB3351	0	0	61	25	66	152	1533 61105 M3333					EPES	20582	34358	NO RGANDC	
Nickel	15 2507	AAB3359	0	0	61	25	72	152	1533 61105 M3333					EPES	20582	34358	NO RGANDC	
Nickel	15 2508	AAB3422	0	0	61	25	54	152	1533 61105 M3333					EPES	20582	34358	NO RGANDC	
Nickel	15 2510	AAC6995	18 241	0	61	25	43	152	1533 61105 M3333					EPES	20307	34451	NO RGANDC	
Nickel	15 2556	AAB3354	0	0	61	25	55	152	1533 61105 M3333					EPES	20582	34358	NO RGANDC	

SAMPLING DATA FOR PRS15-008(B)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat S	Sample Value	Bagd Value	SAL Value	Units	Field Code	Lab Code	EPA Cmt	Sample Location	Tech Code	Request Number	Report Number	Settle
Nickel	PRRSATE	AAB3181	0	6		W	7.0		15.0	UG/L	BB				DPES	18449	28238	INDORGANIC
Potassium	15 2500	AAB3153	0	6		SS	681	3410		MG/KG					DPES	18481	28195	INDORGANIC
Potassium	15 2500	AAB3153	0	6		SS	676	3410		MG/KG					DPES	18481	28195	INDORGANIC
Potassium	15 2500	AAB3154	18	24		SS	325	3410		MG/KG					DPES	18481	28195	INDORGANIC
Potassium	15 2501	AAB3166	0	6		SS	759	3410		MG/KG					DPES	18481	28195	INDORGANIC
Potassium	15 2501	AAB3150	18	24		SS	278	3410		MG/KG					DPES	18481	28195	INDORGANIC
Potassium	15 2502	AAB3155	0	6		SS	454	3410		MG/KG					DPES	18481	28195	INDORGANIC
Potassium	15 2502	AAB3401	18	24		SS	337	3410		MG/KG					DPES	18481	28195	INDORGANIC
Potassium	15 2503	AAB3153	0	6		SS	763	3410		MG/KG					DPES	18481	28195	INDORGANIC
Potassium	15 2504	AAB3400	0	6		SS	697	3410		MG/KG					DPES	18481	28195	INDORGANIC
Potassium	15 2506	AAB3151	0	6		SS	622	3410		MG/KG	ID				DPES	20562	34358	INDORGANIC
Potassium	15 2508	AAB3151	0	6		SS	529	3410		MG/KG					DPES	20562	34358	INDORGANIC
Potassium	15 2507	AAB3199	0	6		SS	531	3410		MG/KG					DPES	20562	34358	INDORGANIC
Potassium	15 2508	AAB3402	0	6		SS	476	3410		MG/KG					DPES	20562	34358	INDORGANIC
Potassium	15 2510	AAC0995	18	24		SS	471	3410		MG/KG					DPES	20562	34358	INDORGANIC
Potassium	15 2506	AAB3154	0	6		SS	463	3410		MG/KG	FD				DPES	20562	34358	INDORGANIC
Potassium	PRRSATE	AAB3183	0	6		W	207			UG/L	BB				DPES	18449	28238	INDORGANIC
Selenium	15 2500	AAB3150	0	6		SS	0.56	1.7	383	403214					DPES	18481	28195	INDORGANIC
Selenium	15 2500	AAB3150	0	6		SS	0.58	1.7	383	403214					DPES	18481	28195	INDORGANIC
Selenium	15 2500	AAB3150	18	24		SS	0.51	1.7	383	403214					DPES	18481	28195	INDORGANIC
Selenium	15 2501	AAB3194	0	6		SS	0.51	1.7	383	403214					DPES	18481	28195	INDORGANIC
Selenium	15 2501	AAB3150	18	24		SS	0.57	1.7	383	403214					DPES	18481	28195	INDORGANIC
Selenium	15 2502	AAB3155	0	6		SS	0.54	1.7	383	403214					DPES	18481	28195	INDORGANIC
Selenium	15 2502	AAB3401	18	24		SS	0.58	1.7	383	403214					DPES	18481	28195	INDORGANIC
Selenium	15 2503	AAB3152	18	24		SS	0.57	1.7	383	403214					DPES	18481	28195	INDORGANIC
Selenium	15 2503	AAB3153	0	6		SS	0.55	1.7	383	403214					DPES	18481	28195	INDORGANIC
Selenium	15 2504	AAB3160	0	6		SS	0.89	1.7	383	403214					DPES	18481	28195	INDORGANIC
Selenium	15 2506	AAB3151	0	6		SS	0.87	1.7	383	403214					DPES	20562	34358	INDORGANIC
Selenium	15 2506	AAB3151	0	6		SS	0.87	1.7	383	403214					DPES	20562	34358	INDORGANIC
Selenium	15 2507	AAB3199	0	6		SS	0.87	1.7	383	403214					DPES	20562	34358	INDORGANIC
Selenium	15 2508	AAB3402	0	6		SS	0.89	1.7	383	403214					DPES	20562	34358	INDORGANIC
Selenium	15 2510	AAC0995	18	24		SS	0.89	1.7	383	403214					DPES	20562	34358	INDORGANIC
Selenium	15 2506	AAB3154	0	6		SS	0.88	1.7	383	403214					DPES	20562	34358	INDORGANIC
Selenium	PRRSATE	AAB3183	0	6		W	2.0		50	UG/L	BB				ETVAL	18449	28238	INDORGANIC
Silver	15 2500	AAB3150	0	6		SS	0.65	1.61	383	403214					UFES	18481	28195	INDORGANIC
Silver	15 2500	AAB3150	0	6		SS	1.2	1.61	383	403214					UFES	18481	28195	INDORGANIC
Silver	15 2500	AAB3154	18	24		SS	0.65	1.61	383	403214					UFES	18481	28195	INDORGANIC
Silver	15 2501	AAB3198	0	6		SS	0.65	1.61	383	403214					UFES	18481	28195	INDORGANIC
Silver	15 2501	AAB3150	18	24		SS	0.65	1.61	383	403214					UFES	18481	28195	INDORGANIC
Silver	15 2502	AAB3155	0	6		SS	0.7	1.61	383	403214					UFES	18481	28195	INDORGANIC
Silver	15 2502	AAB3401	18	24		SS	1.1	1.61	383	403214					UFES	18481	28195	INDORGANIC
Silver	15 2503	AAB3152	18	24		SS	0.65	1.61	383	403214					UFES	18481	28195	INDORGANIC
Silver	15 2503	AAB3153	0	6		SS	0.77	1.61	383	403214					UFES	18481	28195	INDORGANIC
Silver	15 2504	AAB3400	0	6		SS	4.4	1.61	383	403214					UFES	20562	34358	INDORGANIC

SAMPLING DATA FOR PRS15-008(b)

Analyte	Lec ID	Sample ID	Begin	End	Units	Mat #	Sample Value	Std Value	SAL Value	Units	Field Code	Lab Code	EPA Code	Sample Location	Tech Code	Request Number	Report Number	Site
Vanadium	15 2501	AAB3356	18	24	SS	<	3.7	41.8	536 764418	MGKG					CPES	18681	29195	ORGANIC
Vanadium	15 2502	AAB3355	0	6	SS	<	7.8	41.9	536 764418	MGKG			J		CPES	18681	29195	ORGANIC
Vanadium	15 2502	AAB3401	18	24	SS	<	4.7	41.9	536 764418	MGKG					CPES	18681	29195	ORGANIC
Vanadium	15 2503	AAB3352	18	24	SS	<	8.8	41.9	536 764418	MGKG					CPES	18681	29195	ORGANIC
Vanadium	15 2503	AAB3353	0	6	SS	<	8.4	41.9	536 764418	MGKG					CPES	18681	29195	ORGANIC
Vanadium	15 2503	AAB3402	0	6	SS	<	10.2	41.9	536 764418	MGKG	FD				CPES	20562	34358	ORGANIC
Vanadium	15 2506	AAB3531	0	6	SS	<	8.9	41.9	536 764418	MGKG					CPES	20562	34358	ORGANIC
Vanadium	15 2506	AAB3531	0	6	SS	<	9.7	41.9	536 764418	MGKG					CPES	20562	34358	ORGANIC
Vanadium	15 2507	AAB3399	0	6	SS	<	13.2	41.9	536 764418	MGKG					CPES	20562	34358	ORGANIC
Vanadium	15 2508	AAB3402	0	6	SS	<	5.3	41.9	536 764418	MGKG					CPES	20562	34358	ORGANIC
Vanadium	15 2510	AAC0995	18	24	SS	<	4.9	41.9	536 764418	MGKG					CPES	20347	34491	ORGANIC
Vanadium	15 2506	AAB3354	0	6	SS	<	6.3	41.9	536 764418	MGKG	FD				CPES	20562	34358	ORGANIC
Vanadium	NEGATE	AAB3383			W	<	8.9		240	UGL	EB				CPES	18449	28238	ORGANIC
Zinc	15 2500	AAB3503	0	6	SS	<	77.6	50.8	23003 6725	MGKG					CPES	18681	29195	ORGANIC
Zinc	15 2500	AAB3503	0	6	SS	<	59	50.8	23003 6725	MGKG					CPES	18681	29195	ORGANIC
Zinc	15 2500	AAB3504	18	24	SS	<	25.9	50.8	23003 6725	MGKG					CPES	18681	29195	ORGANIC
Zinc	15 2501	AAB3398	0	6	SS	<	71.7	50.8	23003 6725	MGKG					CPES	18681	29195	ORGANIC
Zinc	15 2501	AAB3530	18	24	SS	<	26.3	50.8	23003 6725	MGKG					CPES	18681	29195	ORGANIC
Zinc	15 2502	AAB3355	0	6	SS	<	60.1	50.8	23003 6725	MGKG					CPES	18681	29195	ORGANIC
Zinc	15 2502	AAB3401	18	24	SS	<	47.4	50.8	23003 6725	MGKG					CPES	18681	29195	ORGANIC
Zinc	15 2503	AAB3352	18	24	SS	<	28.8	50.8	23003 6725	MGKG					CPES	18681	29195	ORGANIC
Zinc	15 2503	AAB3353	0	6	SS	<	71.2	50.8	23003 6725	MGKG					CPES	18681	29195	ORGANIC
Zinc	15 2504	AAB3400	0	6	SS	<	12.7	50.8	23003 6725	MGKG	FD				CPES	20562	34358	ORGANIC
Zinc	15 2506	AAB3531	0	6	SS	<	28.8	50.8	23003 6725	MGKG					CPES	20562	34358	ORGANIC
Zinc	15 2506	AAB3531	0	6	SS	<	43.2	50.8	23003 6725	MGKG					CPES	20562	34358	ORGANIC
Zinc	15 2507	AAB3399	0	6	SS	<	52.5	50.8	23003 6725	MGKG					CPES	20562	34358	ORGANIC
Zinc	15 2508	AAB3402	0	6	SS	<	29.6	50.8	23003 6725	MGKG					CPES	20562	34358	ORGANIC
Zinc	15 2510	AAC0995	18	24	SS	<	28.6	50.8	23003 6725	MGKG					CPES	20347	34491	ORGANIC
Zinc	15 2506	AAB3354	0	6	SS	<	83.7	50.8	23003 6725	MGKG	FD				CPES	20562	34358	ORGANIC
Zinc	NEGATE	AAB3383			W	<	19.7		10000	UGL	EB				CPES	18449	28238	ORGANIC
Amino 2,6 dimethylolene [4]	15 2502	AAB3355	0	6	SS	<	0.09			MGKG					HPLC	18469	31503	ORGANIC
Amino 4,6 dimethylolene [2]	15 2502	AAB3355	0	6	SS	<	0.073			MGKG					HPLC	18469	31503	ORGANIC
Orthobromolene [1,3]	15 2502	AAB3355	0	6	SS	<	0.06		6 5177985	MGKG					HPLC	18469	31503	ORGANIC
Orthobromolene [2,4]	15 2502	AAB3355	0	6	SS	<	0.054		130 35597	MGKG					HPLC	18469	31503	ORGANIC
Orthobromolene [2,6]	15 2502	AAB3355	0	6	SS	<	0.08		65 1779840	MGKG					HPLC	18469	31503	ORGANIC
HMK	15 2502	AAB3355	0	6	SS	<	0.164		3258 89924	MGKG					HPLC	18469	31503	ORGANIC
Hexobromolene	15 2502	AAB3355	0	6	SS	<	0.101		32 5890291	MGKG					HPLC	18469	31503	ORGANIC
Hexobromolene [m]	15 2502	AAB3355	0	6	SS	<	0.159			MGKG					HPLC	18469	31503	ORGANIC
Hexobromolene [o]	15 2502	AAB3355	0	6	SS	<	0.137			MGKG					HPLC	18469	31503	ORGANIC
Hexobromolene [p]	15 2502	AAB3355	0	6	SS	<	0.185			MGKG					HPLC	18469	31503	ORGANIC
HDK	15 2502	AAB3355	0	6	SS	<	0.164		4 0393159	MGKG					HPLC	18469	31503	ORGANIC
Tetra methyl 2,4,6 indrophenylmethanimine	15 2502	AAB3355	0	6	SS	<	0.091		651 779849	MGKG					HPLC	18469	31503	ORGANIC
Tribromobenzene [1,3,5]	15 2502	AAB3355	0	6	SS	<	0.094		3 2588992	MGKG					HPLC	18469	31503	ORGANIC
Tribromobenzene [2,4,6]	15 2502	AAB3355	0	6	SS	<	0.079		48 381938	MGKG					HPLC	18469	31503	ORGANIC

SAMPLING DATA FOR PRS15-006(b)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bkgd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Americium 241	15 2510	AAC0995	18	24		SS		0.013			PCIG					G	20383	34038	RA0
Barium 140	15 2510	AAC0995	18	24		SS		0.359			PCIG					G	20383	34038	RA0
Cerium 144	15 2510	AAC0995	18	24		SS		0.027		56	PCIG					G	20383	34038	RA0
Cesium 137	15 2510	AAC0995	18	24		SS		0.057	1.4		PCIG					G	20383	34038	RA0
Cobalt 60	15 2510	AAC0995	18	24		SS		0.012			PCIG					G	20383	34038	RA0
Europium 152	15 2510	AAC0995	18	24		SS		0.039			PCIG					G	20383	34038	RA0
Neptunium 237	15 2510	AAC0995	18	24		SS		0.012		19	PCIG					G	20383	34038	RA0
Ruthenium 106	15 2510	AAC0995	18	24		SS		0.018		13	PCIG					G	20383	34038	RA0
Sodium 22	15 2510	AAC0995	18	24		SS		0.014		13	PCIG					G	20383	34038	RA0
Uranium	15 2500	AAB3503	0	6		SS		310	5.45		MGKO					NFA	15506	35825	RA0
Uranium	15 2500	AAB3504	18	24		SS		19.4	5.45		MGKO					NFA	15506	35825	RA0
Uranium	15 2501	AAB3368	0	6		SS		282	5.45		MGKO					NFA	15506	35825	RA0
Uranium	15 2501	AAB3530	18	24		SS		93	5.45		MGKO					NFA	15506	35825	RA0
Uranium	15 2502	AAB3355	0	6		SS		659	5.45		MGKO					NFA	15506	35825	RA0
Uranium	15 2502	AAB3401	18	24		SS		303	5.45		MGKO					NFA	15506	35825	RA0
Uranium	15 2503	AAB3352	18	24		SS		31.8	5.45		MGKO					NFA	15506	35825	RA0
Uranium	15 2503	AAB3352	18	24		SS		33	5.45		MGKO		0			NFA	15506	35825	RA0
Uranium	15 2503	AAB3353	0	6		SS		400	5.45		MGKO					NFA	15506	35825	RA0
Uranium	15 2504	AAB3400	0	6		SS		850	5.45		MGKO	FD				NFA	20570	34033	RA0
Uranium	15 2506	AAB3531	0	6		SS		402	5.45		MGKO		0			NFA	20570	34033	RA0
Uranium	15 2506	AAB3531	0	6		SS		417	5.45		MGKO					NFA	20570	34033	RA0
Uranium	15 2507	AAB3399	0	6		SS		536	5.45		MGKO					NFA	20570	34033	RA0
Uranium	15 2508	AAB3402	0	6		SS		184	5.45		MGKO					NFA	20570	34033	RA0
Uranium	15 2510	AAC0995	18	24		SS		160	5.45		MGKO					NFA	20383	34044	RA0
Uranium	15 2556	AAB3354	0	6		SS		865	5.45		MGKO	FD				NFA	20570	34033	RA0
Uranium	PRIVATE	AAB3383				W		2.5			UGL	EB				CPMG	18825	31163	RA0

SAMPLING DATA FOR PRS 15-012(b)

Analyte	Loc ID	Sample ID	Begin	End	Units	Mat	S	Sample Value	Bigd Value	SAL Value	Units	Field Code	Lab Code	EPA Oesl	Sample Location	Tech Code	Request Number	Report Number	Suite
Aluminium	15-2526	AAB3406	0	6	l	SS		20300	38700	76674.7928	MG/KG					CPES	18688	28894	INORGANIC
Aluminium	15-2526	AAB3415	18	24	l	SS		19000	38700	76674.7928	MG/KG					CPES	18688	28894	INORGANIC
Aluminium	15-2527	AAB3407	18	24	l	SS		18400	38700	76674.7928	MG/KG					CPES	18688	28894	INORGANIC
Aluminium	15-2527	AAB3417	0	6	l	SS		19200	38700	76674.7928	MG/KG					CPES	18688	28894	INORGANIC
Aluminium	15-2529	AAB3408	18	24	l	SS		25700	38700	76674.7928	MG/KG	FD				CPES	18688	28894	INORGANIC
Aluminium	15-2529	AAB3416	0	6	l	SS		18600	38700	76674.7928	MG/KG					CPES	18688	28894	INORGANIC
Aluminium	RINSATE	AAB3384				W	<	31.1			UG/L	EB				CPES	18448	28525	INORGANIC
Antimony	15-2526	AAB3406	0	6	l	SS	<	3.9	1		MG/KG					CPES	18688	28894	INORGANIC
Antimony	15-2526	AAB3415	18	24	l	SS	<	3.9	1		MG/KG					CPES	18688	28894	INORGANIC
Antimony	15-2527	AAB3407	18	24	l	SS	<	3.9	1		MG/KG					CPES	18688	28894	INORGANIC
Antimony	15-2527	AAB3417	0	6	l	SS	<	4.1	1		MG/KG					CPES	18688	28894	INORGANIC
Antimony	15-2529	AAB3408	18	24	l	SS	<	4.1	1		MG/KG	FD				CPES	18688	28894	INORGANIC
Antimony	15-2529	AAB3416	0	6	l	SS	<	4.1	1		MG/KG					CPES	18688	28894	INORGANIC
Antimony	RINSATE	AAB3384				W	<	20		6	UG/L	EB				CPES	18448	28525	INORGANIC
Arsenic	15-2526	AAB3406	0	6	l	SS	<	3.5	7.82	0.38	MG/KG					CPES	18688	28894	INORGANIC
Arsenic	15-2526	AAB3415	18	24	l	SS	<	3.3	7.82	0.38	MG/KG					CPES	18688	28894	INORGANIC
Arsenic	15-2527	AAB3407	18	24	l	SS	<	3.6	7.82	0.38	MG/KG					CPES	18688	28894	INORGANIC
Arsenic	15-2527	AAB3417	0	6	l	SS	<	4	7.82	0.38	MG/KG					CPES	18688	28894	INORGANIC
Arsenic	15-2529	AAB3408	18	24	l	SS	<	4.6	7.82	0.38	MG/KG	FD				CPES	18688	28894	INORGANIC
Arsenic	15-2529	AAB3416	0	6	l	SS	<	3.6	7.82	0.38	MG/KG					CPES	18688	28894	INORGANIC
Arsenic	RINSATE	AAB3384				W	<	2.5		50	UG/L	EB				ETVAA	18448	28525	INORGANIC
Barium	15-2526	AAB3406	0	6	l	SS		209	315	5339.94439	MG/KG					CPES	18688	28894	INORGANIC
Barium	15-2526	AAB3415	18	24	l	SS		209	315	5339.94439	MG/KG					CPES	18688	28894	INORGANIC
Barium	15-2527	AAB3407	18	24	l	SS		198	315	5339.94439	MG/KG					CPES	18688	28894	INORGANIC
Barium	15-2527	AAB3417	0	6	l	SS		201	315	5339.94439	MG/KG					CPES	18688	28894	INORGANIC
Barium	15-2529	AAB3408	18	24	l	SS		224	315	5339.94439	MG/KG	FD				CPES	18688	28894	INORGANIC
Barium	15-2529	AAB3416	0	6	l	SS		193	315	5339.94439	MG/KG					CPES	18688	28894	INORGANIC
Barium	RINSATE	AAB3384				W	<	6.7		2000	UG/L	EB				CPES	18448	28525	INORGANIC
Beryllium	15-2526	AAB3406	0	6	l	SS	<	8.2	1.95	0.1426081	MG/KG					CPES	18688	28894	INORGANIC
Beryllium	15-2526	AAB3415	18	24	l	SS	<	1.3	1.95	0.1426081	MG/KG					CPES	18688	28894	INORGANIC
Beryllium	15-2527	AAB3407	18	24	l	SS	<	2.7	1.95	0.1426081	MG/KG					CPES	18688	28894	INORGANIC
Beryllium	15-2527	AAB3417	0	6	l	SS	<	27.6	1.95	0.1426081	MG/KG					CPES	18688	28894	INORGANIC
Beryllium	15-2529	AAB3408	18	24	l	SS	<	1.4	1.95	0.1426081	MG/KG	FD				CPES	18688	28894	INORGANIC
Beryllium	15-2529	AAB3416	0	6	l	SS	<	6.3	1.95	0.1426081	MG/KG					CPES	18688	28894	INORGANIC
Beryllium	RINSATE	AAB3384				W	<	1.1		4	UG/L	EB				CPES	18448	28525	INORGANIC
Cadmium	15-2526	AAB3406	0	6	l	SS	<	1.3	2.7	38.3403347	MG/KG					CPES	18688	28894	INORGANIC
Cadmium	15-2526	AAB3415	18	24	l	SS	<	0.92	2.7	38.3403347	MG/KG					CPES	18688	28894	INORGANIC
Cadmium	15-2527	AAB3407	18	24	l	SS	<	0.99	2.7	38.3403347	MG/KG					CPES	18688	28894	INORGANIC
Cadmium	15-2527	AAB3417	0	6	l	SS	<	0.81	2.7	38.3403347	MG/KG					CPES	18688	28894	INORGANIC
Cadmium	15-2529	AAB3408	18	24	l	SS	<	1.2	2.7	38.3403347	MG/KG	FD				CPES	18688	28894	INORGANIC
Cadmium	15-2529	AAB3416	0	6	l	SS	<	0.68	2.7	38.3403347	MG/KG					CPES	18688	28894	INORGANIC
Cadmium	RINSATE	AAB3384				W	<	2.2		5	UG/L	EB				CPES	18448	28525	INORGANIC
Calcium	15-2526	AAB3406	0	6	l	SS		3050	6120		MG/KG					CPES	18688	28894	INORGANIC
Calcium	15-2526	AAB3415	18	24	l	SS		2570	6120		MG/KG					CPES	18688	28894	INORGANIC
Calcium	15-2527	AAB3407	18	24	l	SS		2470	6120		MG/KG					CPES	18688	28894	INORGANIC

SAMPLING DATA FOR FRS 15 G12 B

Analyte	Loc ID	Sample ID	Bag'n End	Units Mat S	Sample Value	Units	SAL Value	Units	F's Code	EPA Code	Sample Location	Test Code	Project Number	Report Number	Unit
Cadmium	15 2527	AAS1617	0	61	265	0.22	4000	0.22	MSD			ESES	28154	28154	PPM
Cadmium	15 2529	AAS1618	18	241	275	0.23	4000	0.23	MSD			ESES	28154	28154	PPM
Cadmium	15 2528	AAS1616	0	61	252	0.21	4000	0.21	MSD			ESES	28154	28154	PPM
Cadmium	RECALC	AAS1618			182		4000		MSD			ESES	28154	28154	PPM
Chromium	15 2526	AAS1615	0	61	133	193	4000	193	MSD			ESES	28154	28154	PPM
Chromium	15 2526	AAS1615	18	241	114	193	4000	193	MSD			ESES	28154	28154	PPM
Chromium	15 2527	AAS1617	18	241	109	193	4000	193	MSD			ESES	28154	28154	PPM
Chromium	15 2527	AAS1617	0	61	124	193	4000	193	MSD			ESES	28154	28154	PPM
Chromium	15 2529	AAS1618	18	241	136	193	4000	193	MSD			ESES	28154	28154	PPM
Chromium	15 2529	AAS1618	0	61	103	193	4000	193	MSD			ESES	28154	28154	PPM
Chromium	RECALC	AAS1618			56		4000		MSD			ESES	28154	28154	PPM
Cobalt	15 2526	AAS1615	0	61	83	192	4000	192	MSD			ESES	28154	28154	PPM
Cobalt	15 2526	AAS1615	18	241	8	192	4000	192	MSD			ESES	28154	28154	PPM
Cobalt	15 2527	AAS1617	18	241	73	192	4000	192	MSD			ESES	28154	28154	PPM
Cobalt	15 2527	AAS1617	0	61	77	192	4000	192	MSD			ESES	28154	28154	PPM
Cobalt	15 2529	AAS1618	18	241	85	192	4000	192	MSD			ESES	28154	28154	PPM
Cobalt	15 2529	AAS1618	0	61	72	192	4000	192	MSD			ESES	28154	28154	PPM
Cobalt	RECALC	AAS1618			67		4000		MSD			ESES	28154	28154	PPM
Copper	15 2526	AAS1615	0	61	274	397	2888	3311	MSD			ESES	28154	28154	PPM
Copper	15 2526	AAS1615	18	241	128	397	2888	3311	MSD			ESES	28154	28154	PPM
Copper	15 2527	AAS1617	18	241	127	397	2888	3311	MSD			ESES	28154	28154	PPM
Copper	15 2527	AAS1617	0	61	811	397	2888	3311	MSD			ESES	28154	28154	PPM
Copper	15 2529	AAS1618	18	241	112	397	2888	3311	MSD			ESES	28154	28154	PPM
Copper	15 2529	AAS1618	0	61	22	397	2888	3311	MSD			ESES	28154	28154	PPM
Copper	RECALC	AAS1618			16		2888		MSD			ESES	28154	28154	PPM
Iron	15 2526	AAS1615	0	61	1492	2100	1492	2100	MSD			ESES	28154	28154	PPM
Iron	15 2526	AAS1615	18	241	1460	2100	1460	2100	MSD			ESES	28154	28154	PPM
Iron	15 2527	AAS1617	18	241	1430	2100	1430	2100	MSD			ESES	28154	28154	PPM
Iron	15 2527	AAS1617	0	61	1400	2100	1400	2100	MSD			ESES	28154	28154	PPM
Iron	15 2529	AAS1618	18	241	1650	2100	1650	2100	MSD			ESES	28154	28154	PPM
Iron	15 2529	AAS1618	0	61	1320	2100	1320	2100	MSD			ESES	28154	28154	PPM
Iron	RECALC	AAS1618			9		1492		MSD			ESES	28154	28154	PPM
Lead	15 2526	AAS1615	0	61	273	233	400	233	MSD			ESES	28154	28154	PPM
Lead	15 2526	AAS1615	18	241	146	233	400	233	MSD			ESES	28154	28154	PPM
Lead	15 2527	AAS1617	18	241	236	233	400	233	MSD			ESES	28154	28154	PPM
Lead	15 2527	AAS1617	0	61	182	233	400	233	MSD			ESES	28154	28154	PPM
Lead	15 2529	AAS1618	18	241	17	233	400	233	MSD			ESES	28154	28154	PPM
Lead	15 2529	AAS1618	0	61	164	233	400	233	MSD			ESES	28154	28154	PPM
Lead	RECALC	AAS1618			24		59		MSD			ESES	28154	28154	PPM
Magnesium	15 2526	AAS1615	0	61	288	488	59	488	MSD			ESES	28154	28154	PPM
Magnesium	15 2526	AAS1615	18	241	250	488	59	488	MSD			ESES	28154	28154	PPM
Magnesium	15 2527	AAS1617	18	241	250	488	59	488	MSD			ESES	28154	28154	PPM
Magnesium	15 2527	AAS1617	0	61	250	488	59	488	MSD			ESES	28154	28154	PPM
Magnesium	15 2529	AAS1618	18	241	300	488	59	488	MSD			ESES	28154	28154	PPM
Magnesium	15 2529	AAS1618	0	61	230	488	59	488	MSD			ESES	28154	28154	PPM

SAMPLING DATA FOR PRS 15-012(D)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met S	Sample Value	Bigd Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Magnesium	RRSGATE	AAB3124	0	6	SS	W	117			UCL	EB				EPES	18442	28525	INDORGANIC
Magnesium	15 2526	AAB3406	0	6	SS	SS	524	710	381 659064	MGNO					EPES	18442	28525	INDORGANIC
Manganese	15 2526	AAB3415	18	24	SS	SS	536	710	381 659094	MGNO					EPES	18442	28525	INDORGANIC
Manganese	15 2527	AAB3407	18	24	SS	SS	459	710	381 659084	MGNO					EPES	18442	28525	INDORGANIC
Manganese	15 2527	AAB3417	0	6	SS	SS	501	710	381 659094	MGNO					EPES	18442	28525	INDORGANIC
Manganese	15 2529	AAB3408	18	24	SS	SS	507	710	381 659094	MGNO					EPES	18442	28525	INDORGANIC
Manganese	15 2529	AAB3416	0	6	SS	SS	451	710	381 659094	MGNO					EPES	18442	28525	INDORGANIC
Manganese	RRSGATE	AAB3124	0	6	SS	W	22		189 UCL		EB				EPES	18442	28525	INDORGANIC
Mercury	15 2526	AAB3406	0	6	SS	SS	0.11	0.1	23 0033493	MGNO					EPES	18442	28525	INDORGANIC
Mercury	15 2526	AAB3415	18	24	SS	SS	0.11	0.1	23 0033493	MGNO					EPES	18442	28525	INDORGANIC
Mercury	15 2527	AAB3407	18	24	SS	SS	0.16	0.1	23 0033493	MGNO					CVAA	18442	28525	INDORGANIC
Mercury	15 2527	AAB3417	0	6	SS	SS	0.12	0.1	23 0033493	MGNO					CVAA	18442	28525	INDORGANIC
Mercury	15 2529	AAB3408	18	24	SS	SS	0.12	0.1	23 0033493	MGNO					CVAA	18442	28525	INDORGANIC
Mercury	15 2529	AAB3416	0	6	SS	SS	0.12	0.1	23 0033493	MGNO					CVAA	18442	28525	INDORGANIC
Mercury	RRSGATE	AAB3124	0	6	SS	W	0.2		2 UCL		EB				CVAA	18442	28525	INDORGANIC
Nickel	15 2526	AAB3406	0	6	SS	SS	11.1	152	1533 61109	MGNO					EPES	18442	28525	INDORGANIC
Nickel	15 2526	AAB3415	18	24	SS	SS	10.2	152	1533 61109	MGNO					EPES	18442	28525	INDORGANIC
Nickel	15 2527	AAB3407	18	24	SS	SS	10.2	152	1533 61109	MGNO					EPES	18442	28525	INDORGANIC
Nickel	15 2527	AAB3417	0	6	SS	SS	12.5	152	1533 61109	MGNO					EPES	18442	28525	INDORGANIC
Nickel	15 2529	AAB3408	18	24	SS	SS	11.6	152	1533 61109	MGNO					EPES	18442	28525	INDORGANIC
Nickel	15 2529	AAB3416	0	6	SS	SS	9.9	152	1533 61109	MGNO					EPES	18442	28525	INDORGANIC
Nickel	RRSGATE	AAB3124	0	6	SS	W	7.8		109 UCL		EB				EPES	18442	28525	INDORGANIC
Potassium	15 2526	AAB3406	0	6	SS	SS	2690	3410		MGNO					EPES	18442	28525	INDORGANIC
Potassium	15 2526	AAB3415	18	24	SS	SS	2590	3410		MGNO					EPES	18442	28525	INDORGANIC
Potassium	15 2527	AAB3407	18	24	SS	SS	2590	3410		MGNO					EPES	18442	28525	INDORGANIC
Potassium	15 2527	AAB3417	0	6	SS	SS	2820	3410		MGNO					EPES	18442	28525	INDORGANIC
Potassium	15 2529	AAB3408	18	24	SS	SS	2820	3410		MGNO					EPES	18442	28525	INDORGANIC
Potassium	15 2529	AAB3416	0	6	SS	SS	2720	3410		MGNO					EPES	18442	28525	INDORGANIC
Potassium	RRSGATE	AAB3124	0	6	SS	W	207			UCL	EB				EPES	18442	28525	INDORGANIC
Selenium	15 2526	AAB3406	0	6	SS	SS	0.56	17	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Selenium	15 2526	AAB3415	18	24	SS	SS	0.57	17	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Selenium	15 2527	AAB3407	18	24	SS	SS	0.56	17	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Selenium	15 2527	AAB3417	0	6	SS	SS	0.59	17	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Selenium	15 2529	AAB3408	18	24	SS	SS	0.59	17	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Selenium	15 2529	AAB3416	0	6	SS	SS	0.6	17	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Selenium	RRSGATE	AAB3124	0	6	SS	W	2.9		50 UCL		EB				ETVAA	18442	28525	INDORGANIC
Silver	15 2526	AAB3406	0	6	SS	SS	0.65	161	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Silver	15 2526	AAB3415	18	24	SS	SS	0.65	161	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Silver	15 2527	AAB3407	18	24	SS	SS	0.65	161	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Silver	15 2527	AAB3417	0	6	SS	SS	0.68	161	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Silver	15 2529	AAB3408	18	24	SS	SS	0.68	161	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Silver	15 2529	AAB3416	0	6	SS	SS	0.69	161	383 403214	MGNO					EPES	18442	28525	INDORGANIC
Silver	RRSGATE	AAB3124	0	6	SS	W	3.3		170 UCL		EB				EPES	18442	28525	INDORGANIC
Sodium	15 2526	AAB3406	0	6	SS	SS	162	915		MGNO					EPES	18442	28525	INDORGANIC
Sodium	15 2526	AAB3415	18	24	SS	SS	170	915		MGNO					EPES	18442	28525	INDORGANIC

SAMPLING DATA FOR PRS 15 012,b)

Analyte	Loc ID	Sample ID	Begin	End	Units	Met S	Sample Value	Bigg Value	SAL Value	Units	Field Code	Lab Code	EPA Qual	Sample Location	Tech Code	Request Number	Report Number	Suite
Cadmium	15 2527	AAS3407	18	24	US		154	515		MLYG					EPES	18088	28894	INORGANIC
Cadmium	15 2527	AAS3417	0	6	US		171	515		MLYG					EPES	18088	28894	INORGANIC
Cadmium	15 2529	AAS3418	18	24	US		179	515		MLYG	FD				EPES	18088	28894	INORGANIC
Cadmium	15 2529	AAS3416	0	6	US		145	515		MLYG					EPES	18088	28894	INORGANIC
Cadmium	SPGATE	AAS3384			N		211			UGL	EB				EPES	18448	28894	INORGANIC
Thallium	15 2526	AAS3406	0	6	US		0.67	1		MLYG					EPES	18088	28894	INORGANIC
Thallium	15 2528	AAS3415	18	24	US		0.68	1		MLYG					EPES	18088	28894	INORGANIC
Thallium	15 2527	AAS3407	18	24	US		0.67	1		MLYG					EPES	18088	28894	INORGANIC
Thallium	15 2527	AAS3417	0	6	US		0.7	1		MLYG					EPES	18088	28894	INORGANIC
Thallium	15 2529	AAS3418	18	24	US		0.7	1		MLYG	FD				EPES	18088	28894	INORGANIC
Thallium	15 2529	AAS3416	0	6	US		0.71	1		MLYG					EPES	18088	28894	INORGANIC
Thallium	SPGATE	AAS3384			N		2.4			2 UGL	EB			ETVAA	18448	28894	INORGANIC	
Vanadium	15 2526	AAS3406	0	6	US		27.2	41.9	516 764418	MLYG					EPES	18088	28894	INORGANIC
Vanadium	15 2526	AAS3415	18	24	US		26.4	41.9	516 764418	MLYG					EPES	18088	28894	INORGANIC
Vanadium	15 2527	AAS3407	18	24	US		26.1	41.9	516 764418	MLYG					EPES	18088	28894	INORGANIC
Vanadium	15 2527	AAS3417	0	6	US		25.5	41.9	516 764418	MLYG					EPES	18088	28894	INORGANIC
Vanadium	15 2529	AAS3418	18	24	US		31	41.9	516 764418	MLYG	FD				EPES	18088	28894	INORGANIC
Vanadium	15 2529	AAS3416	0	6	US		23	41.9	516 764418	MLYG					EPES	18088	28894	INORGANIC
Vanadium	SPGATE	AAS3384			N		8.9			245 UGL	EB				EPES	18448	28894	INORGANIC
Zinc	15 2526	AAS3406	0	6	US		37.5	50.8	23003 6725	MLYG					EPES	18088	28894	INORGANIC
Zinc	15 2526	AAS3415	18	24	US		32.4	50.8	23003 6725	MLYG					EPES	18088	28894	INORGANIC
Zinc	15 2527	AAS3407	18	24	US		31.9	50.8	23003 6725	MLYG					EPES	18088	28894	INORGANIC
Zinc	15 2527	AAS3417	0	6	US		38.5	50.8	23003 6725	MLYG					EPES	18088	28894	INORGANIC
Zinc	15 2529	AAS3418	18	24	US		37	50.8	23003 6725	MLYG	FD				EPES	18088	28894	INORGANIC
Zinc	15 2529	AAS3416	0	6	US		32.3	50.8	23003 6725	MLYG					EPES	18088	28894	INORGANIC
Zinc	SPGATE	AAS3384			N		13.9		10000	UGL	EB				EPES	18448	28894	INORGANIC
Uranium	15 2526	AAS3406	0	6	US		150.35	5.45		MLYG		0			NFA	19508	31639	RAD
Uranium	15 2526	AAS3415	18	24	US		172.5	5.45		MLYG					NFA	19508	31639	RAD
Uranium	15 2526	AAS3415	18	24	US		4.1	5.45		MLYG					NFA	19508	31639	RAD
Uranium	15 2527	AAS3407	18	24	US		53.02	5.45		MLYG					NFA	19508	31639	RAD
Uranium	15 2527	AAS3417	0	6	US		272.24	5.45		MLYG					NFA	19508	31639	RAD
Uranium	15 2529	AAS3418	18	24	US		3.88	5.45		MLYG	FD				NFA	19508	31639	RAD
Uranium	15 2529	AAS3416	0	6	US		10.01	5.45		MLYG					NFA	19508	31639	RAD
Uranium	SPGATE	AAS3384			N		1			UGL	EB				ETVAA	18448	31164	RAD

SAMPLING DATA FOR PRS 15-009(J)

Analyte	Loc ID	Sample Id	Mat	Value	SAL Value	Units	EPA QUAL	Prep Batch	Suite
Aluminum	15-2345	LB	W	50		UGL	U	70471	NORGANIC
Aluminum	15-2345	LB	W	1040		UGL		70471	NORGANIC
Aluminum	15-2345	LB	W	1040		UGL		70471	NORGANIC
Aluminum	15-2345	0215-95-0154	W	29000	200	UGL		70471	NORGANIC
Antimony	15-2345	LB	W	10		UGL	U	70471	NORGANIC
Antimony	15-2345	LB	W	1040		UGL		70471	NORGANIC
Antimony	15-2345	LB	W	1050		UGL		70471	NORGANIC
Antimony	15-2345	0215-95-0154	W	16.7	6	UGL		70471	NORGANIC
Arsenic	15-2345	LB	W	10		UGL	U	70471	NORGANIC
Arsenic	15-2345	LB	W	1030		UGL		70471	NORGANIC
Arsenic	15-2345	LB	W	1030		UGL		70471	NORGANIC
Arsenic	15-2345	0215-95-0154	W	54.5	50	UGL		70471	NORGANIC
Barium	15-2345	LB	W	1000		UGL		70471	NORGANIC
Barium	15-2345	LB	W	10		UGL	U	70471	NORGANIC
Barium	15-2345	LB	W	998		UGL		70471	NORGANIC
Barium	15-2345	0215-95-0154	W	817	1000	UGL		70471	NORGANIC
Beryllium	15-2345	LB	W	0.0867		UGL	J	70471	NORGANIC
Beryllium	15-2345	LB	W	1080		UGL		70471	NORGANIC
Beryllium	15-2345	LB	W	1070		UGL		70471	NORGANIC
Beryllium	15-2345	0215-95-0154	W	1.06	4	UGL	J	70471	NORGANIC
Cadmium	15-2345	LB	W	1030		UGL		70471	NORGANIC
Cadmium	15-2345	LB	W	1020		UGL		70471	NORGANIC
Cadmium	15-2345	LB	W	5		UGL	U	70471	NORGANIC
Cadmium	15-2345	0215-95-0154	W	44.3	5	UGL		70471	NORGANIC
Calcium	15-2345	LB	W	5310		UGL		70471	NORGANIC
Calcium	15-2345	LB	W	5260		UGL		70471	NORGANIC
Calcium	15-2345	LB	W	100		UGL	U	70471	NORGANIC
Calcium	15-2345	0215-95-0154	W	262000	5000	UGL		70471	NORGANIC
Chromium	15-2345	LB	W	1060		UGL		70471	NORGANIC
Chromium	15-2345	LB	W	10		UGL	U	70471	NORGANIC
Chromium	15-2345	LB	W	1070		UGL		70471	NORGANIC
Chromium	15-2345	0215-95-0154	W	351	50	UGL		70471	NORGANIC
Cobalt	15-2345	LB	W	0.352		UGL	J	70471	NORGANIC
Cobalt	15-2345	LB	W	1040		UGL		70471	NORGANIC
Cobalt	15-2345	LB	W	1050		UGL		70471	NORGANIC
Cobalt	15-2345	0215-95-0154	W	59.4	2200	UGL		70471	NORGANIC
Copper	15-2345	LB	W	0.81		UGL	J	70471	NORGANIC
Copper	15-2345	LB	W	1040		UGL		70471	NORGANIC
Copper	15-2345	LB	W	1050		UGL		70471	NORGANIC
Copper	15-2345	0215-95-0154	W	2110	1300	UGL		70471	NORGANIC

SAMPLING DATA FOR PRS 15-009(J)

Analyte	Loc ID	Sample Id	Mat	Value	SAL Value	Units	EPA QUAL	Prep Batch	Suite
Iron	15-2345	LB	W	1060		UQL		70471	INORGANIC
Iron	15-2345	LB	W	50		UQL	U	70471	INORGANIC
Iron	15-2345	LB	W	1050		UQL		70471	INORGANIC
Iron	15-2345	0215-95-0154	W	98600	100	UQL		70471	INORGANIC
Lead	15-2345	LB	W	1040		UQL		70471	INORGANIC
Lead	15-2345	LB	W	1030		UQL		70471	INORGANIC
Lead	15-2345	LB	W	5		UQL	U	70471	INORGANIC
Lead	15-2345	0215-95-0154	W	850	50	UQL		70471	INORGANIC
Magnesium	15-2345	LB	W	1020		UQL		70471	INORGANIC
Magnesium	15-2345	LB	W	10		UQL	U	70471	INORGANIC
Magnesium	15-2345	LB	W	1030		UQL		70471	INORGANIC
Magnesium	15-2345	0215-95-0154	W	74800	5000	UQL		70471	INORGANIC
Manganese	15-2345	LB	W	10		UQL	U	70471	INORGANIC
Manganese	15-2345	LB	W	1040		UQL		70471	INORGANIC
Manganese	15-2345	LB	W	1050		UQL		70471	INORGANIC
Manganese	15-2345	0215-95-0154	W	1560	180	UQL		70471	INORGANIC
Mercury	15-2345	LB	W	0.2		UQL	U	70696	INORGANIC
Mercury	15-2345	LB	W	2.28		UQL		70696	INORGANIC
Mercury	15-2345	LB	W	2.31		UQL		70696	INORGANIC
Mercury	15-2345	LB	W	2.31		UQL		70696	INORGANIC
Mercury	15-2345	LB	W	2.28		UQL		70696	INORGANIC
Mercury	15-2345	LB	W	0.2		UQL	U	70696	INORGANIC
Mercury	15-2345	0215-95-0154	W	8.42	2	UQL		70696	INORGANIC
Mercury	15-2345	0215-95-0154	W	8.42		UQL		70696	INORGANIC
Nickel	15-2345	LB	W	0.827		UQL	J	70471	INORGANIC
Nickel	15-2345	LB	W	995		UQL		70471	INORGANIC
Nickel	15-2345	LB	W	987		UQL		70471	INORGANIC
Nickel	15-2345	0215-95-0154	W	258	100	UQL		70471	INORGANIC
Potassium	15-2345	LB	W	100		UQL	U	70471	INORGANIC
Potassium	15-2345	LB	W	4700		UQL		70471	INORGANIC
Potassium	15-2345	LB	W	4700		UQL		70471	INORGANIC
Potassium	15-2345	0215-95-0154	W	92300	5000	UQL		70471	INORGANIC
Selenium	15-2345	LB	W	5		UQL	U	70471	INORGANIC
Selenium	15-2345	LB	W	1050		UQL		70471	INORGANIC
Selenium	15-2345	LB	W	1060		UQL		70471	INORGANIC
Selenium	15-2345	0215-95-0154	W	28.2	50	UQL		70471	INORGANIC
Silver	15-2345	LB	W	10		UQL	U	70471	INORGANIC
Silver	15-2345	LB	W	1040		UQL		70471	INORGANIC
Silver	15-2345	LB	W	1040		UQL		70471	INORGANIC
Silver	15-2345	0215-95-0154	W	35.7	50	UQL		70471	INORGANIC

SAMPLING DATA FOR PRS 15-009(J)

Analyte	Loc ID	Sample ID	Met	Value	SAL Value	Units	EPA QUAL	Prep Batch	Suite
Sodium	15-2345	LB	W	100		UGL	U	70471	INORGANIC
Sodium	15-2345	LB	W	8170		UGL		70471	INORGANIC
Sodium	15-2345	LB	W	8130		UGL		70471	INORGANIC
Sodium	15-2345	0215-95-0154	W	152000	5000	UGL		70471	INORGANIC
Thallium	15-2345	LB	W	3.85		UGL	J	70471	INORGANIC
Thallium	15-2345	LB	W	1060		UGL		70471	INORGANIC
Thallium	15-2345	LB	W	1070		UGL		70471	INORGANIC
Thallium	15-2345	0215-95-0154	W	10	2	UGL	UV	70471	INORGANIC
Vanadium	15-2345	LB	W	10		UGL	U	70471	INORGANIC
Vanadium	15-2345	LB	W	1050		UGL		70471	INORGANIC
Vanadium	15-2345	LB	W	1060		UGL		70471	INORGANIC
Vanadium	15-2345	0215-95-0154	W	190	255.5	UGL		70471	INORGANIC
Zinc	15-2345	LB	W	20		UGL	U	70471	INORGANIC
Zinc	15-2345	LB	W	1010		UGL		70471	INORGANIC
Zinc	15-2345	LB	W	1010		UGL		70471	INORGANIC
Zinc	15-2345	0215-95-0154	W	18000	10950	UGL		70471	INORGANIC
1,2-Dinitrobenzene	15-2345	LB	W	0.301		UGL		70208	ORGANIC
1,2-Dinitrobenzene	15-2345	LB	W	0.305		UGL		70208	ORGANIC
1,2-Dinitrobenzene	15-2345	LB	W	0.324		UGL		70208	ORGANIC
1,2-Dinitrobenzene	15-2345	0215-95-0154	W	0		UGL	R	70208	ORGANIC
2,4,6-Trinitrotoluene	15-2345	LB	W	0.967		UGL		70208	ORGANIC
2,4,6-Trinitrotoluene	15-2345	LB	W	0.906		UGL		70208	ORGANIC
2,4,6-Trinitrotoluene	15-2345	LB	W	0.195		UGL	U	70208	ORGANIC
2,4,6-Trinitrotoluene	15-2345	0215-95-0154	W	1.95		UGL	U	70208	ORGANIC
2,4-Dinitrotoluene	15-2345	LB	W	0.798		UGL		70208	ORGANIC
2,4-Dinitrotoluene	15-2345	LB	W	0.751		UGL		70208	ORGANIC
2,4-Dinitrotoluene	15-2345	LB	W	0.195		UGL	U	70208	ORGANIC
2,4-Dinitrotoluene	15-2345	0215-95-0154	W	1.95		UGL	U	70208	ORGANIC
2,6-Dinitrotoluene	15-2345	LB	W	0.843		UGL		70208	ORGANIC
2,6-Dinitrotoluene	15-2345	LB	W	0.799		UGL		70208	ORGANIC
2,6-Dinitrotoluene	15-2345	LB	W	0.195		UGL	U	70208	ORGANIC
2,6-Dinitrotoluene	15-2345	0215-95-0154	W	1.95		UGL	U	70208	ORGANIC
2-Amino-4,6-dinitrotoluene	15-2345	LB	W	0.687		UGL		70208	ORGANIC
2-Amino-4,6-dinitrotoluene	15-2345	LB	W	0.616		UGL		70208	ORGANIC
2-Amino-4,6-dinitrotoluene	15-2345	LB	W	0.195		UGL	U	70208	ORGANIC
2-Amino-4,6-dinitrotoluene	15-2345	0215-95-0154	W	1.95		UGL	W	70208	ORGANIC
4-Amino-2,6-dinitrotoluene	15-2345	LB	W	0.415		UGL		70208	ORGANIC
4-Amino-2,6-dinitrotoluene	15-2345	LB	W	0.41		UGL		70208	ORGANIC
4-Amino-2,6-dinitrotoluene	15-2345	LB	W	0.195		UGL	U	70208	ORGANIC
4-Amino-2,6-dinitrotoluene	15-2345	0215-95-0154	W	1.95		UGL	W	70208	ORGANIC

SAMPLING DATA FOR PRS 15-009(J)

Analyte	Loc ID	Sample Id	Mat	Value	SAL Value	Units	EPA QUAL	Prep Batch	Suite
HMX	15-2345	LB	W	0.584		UQL	U	70208	ORGANIC
HMX	15-2345	LB	W	0.791		UQL		70208	ORGANIC
HMX	15-2345	LB	W	0.763		UQL		70208	ORGANIC
HMX	15-2345	0215-95-0154	W	5.84		UQL	U	70208	ORGANIC
m-Dinitrobenzene	15-2345	LB	W	0.787		UQL		70208	ORGANIC
m-Dinitrobenzene	15-2345	LB	W	0.709		UQL		70208	ORGANIC
m-Dinitrobenzene	15-2345	LB	W	0.195		UQL	U	70208	ORGANIC
m-Dinitrobenzene	15-2345	0215-95-0154	W	1.95		UQL	W	70208	ORGANIC
m-Nitrotoluene	15-2345	LB	W	0.567		UQL		70208	ORGANIC
m-Nitrotoluene	15-2345	LB	W	0.687		UQL		70208	ORGANIC
m-Nitrotoluene	15-2345	LB	W	0.195		UQL	U	70208	ORGANIC
m-Nitrotoluene	15-2345	0215-95-0154	W	1.95		UQL	W	70208	ORGANIC
Nitrobenzene	15-2345	LB	W	0.595		UQL		70208	ORGANIC
Nitrobenzene	15-2345	LB	W	0.477		UQL		70208	ORGANIC
Nitrobenzene	15-2345	LB	W	0.195		UQL	U	70208	ORGANIC
Nitrobenzene	15-2345	0215-95-0154	W	1.95		UQL	W	70208	ORGANIC
o-Nitrotoluene	15-2345	LB	W	0.639		UQL		70208	ORGANIC
o-Nitrotoluene	15-2345	LB	W	0.506		UQL		70208	ORGANIC
o-Nitrotoluene	15-2345	LB	W	0.195		UQL	U	70208	ORGANIC
o-Nitrotoluene	15-2345	0215-95-0154	W	1.95		UQL	W	70208	ORGANIC
p-Nitrotoluene	15-2345	LB	W	0.739		UQL		70208	ORGANIC
p-Nitrotoluene	15-2345	LB	W	0.633		UQL		70208	ORGANIC
p-Nitrotoluene	15-2345	LB	W	0.195		UQL	U	70208	ORGANIC
p-Nitrotoluene	15-2345	0215-95-0154	W	1.95		UQL	W	70208	ORGANIC
RDX	15-2345	LB	W	0.757		UQL		70208	ORGANIC
RDX	15-2345	LB	W	0.737		UQL		70208	ORGANIC
RDX	15-2345	LB	W	0.584		UQL	U	70208	ORGANIC
RDX	15-2345	0215-95-0154	W	5.84		UQL	U	70208	ORGANIC
sym-Trinitrobenzene	15-2345	LB	W	0.796		UQL		70208	ORGANIC
sym-Trinitrobenzene	15-2345	LB	W	0.785		UQL		70208	ORGANIC
sym-Trinitrobenzene	15-2345	LB	W	0.195		UQL	U	70208	ORGANIC
sym-Trinitrobenzene	15-2345	0215-95-0154	W	1.95		UQL	U	70208	ORGANIC
TETRYL	15-2345	LB	W	0.801		UQL		70208	ORGANIC
TETRYL	15-2345	LB	W	0.762		UQL		70208	ORGANIC
TETRYL	15-2345	LB	W	0.584		UQL	U	70208	ORGANIC
TETRYL	15-2345	0215-95-0154	W	5.84		UQL	U	70208	ORGANIC
Cesium-134	15-2345	LB	W	-11.2		POL	U	71044	RAO
Cesium-134	15-2345	LB	W	46.1		POL		71044	RAO
Cesium-137	15-2345	LB	W	15.8		POL	U	71044	RAO
Protactinium-231	15-2345	LB	W	71.4		POL	U	71044	RAO

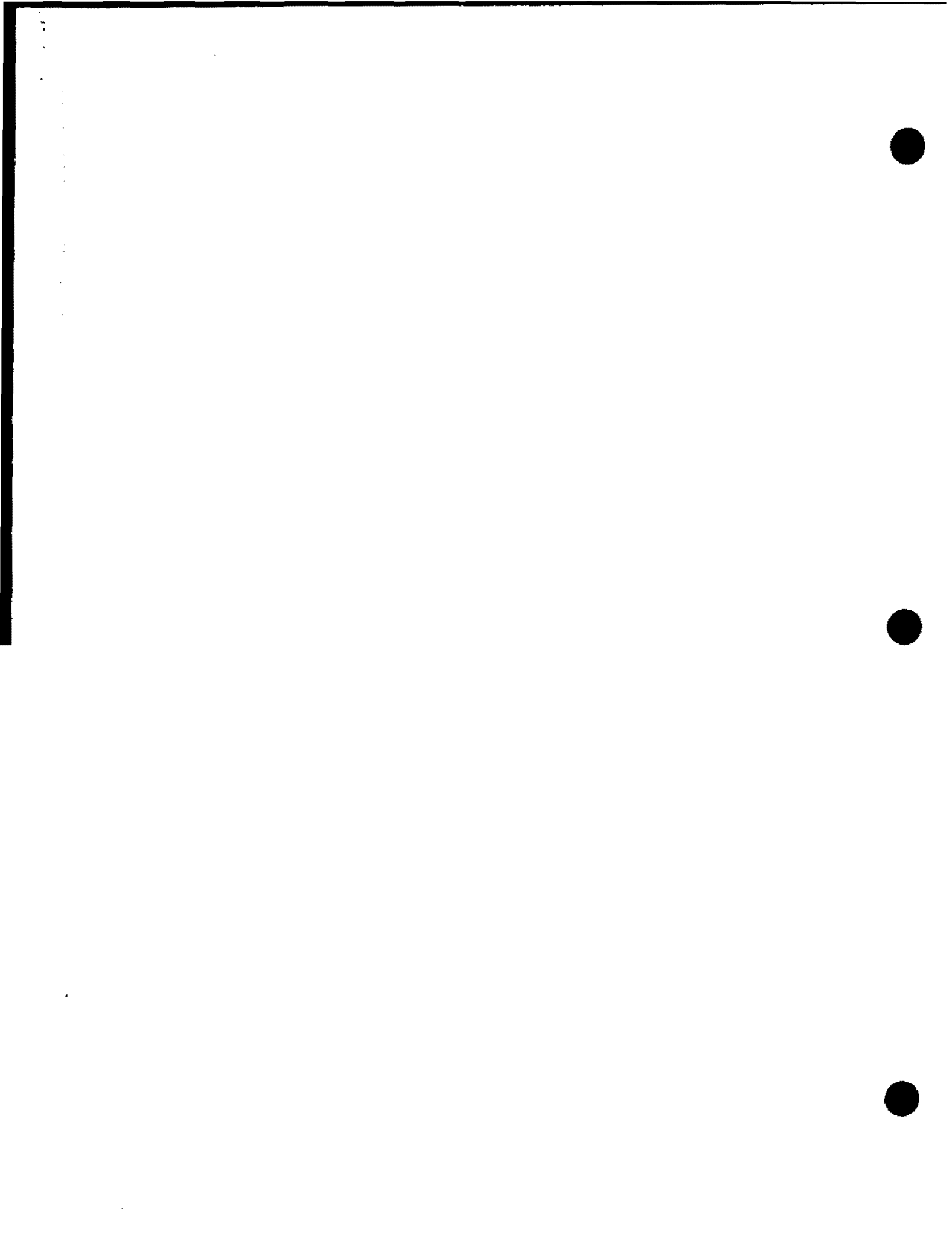
SAMPLING DATA FOR PRS 15-008(1)

Analyte	Loc ID	Sample ID	Mat	Value	SAL Value	Units	EPA QUAL	Prep Batch	State
Protactinium-231	15-2345	0215-95-0154	W	-352		PCL	U	71044	RAD
Protactinium-234	15-2345	LB	W	-10.1		PCL	U	71044	RAD
Protactinium-234	15-2345	0215-95-0154	W	16.6		PCL	U	71044	RAD
Protactinium-234M	15-2345	LB	W	1150		PCL	U	71044	RAD
Protactinium-234M	15-2345	0215-95-0154	W	2960		PCL	U	71044	RAD
Thorium-230	15-2345	LB	W	20.2		PCL	U	71044	RAD
Thorium-230	15-2345	0215-95-0154	W	21.5		PCL	U	71044	RAD
Thorium-231	15-2345	LB	W	0		PCL	U	71044	RAD
Thorium-231	15-2345	0215-95-0154	W	47.2		PCL	U	71044	RAD
Thorium-234	15-2345	LB	W	350		PCL	U	71044	RAD
Thorium-234	15-2345	0215-95-0154	W	0		PCL	U	71044	RAD
Total Uranium	15-2345	LB	W	0		UQL	U	70520	RAD
Total Uranium	15-2345	LB	W	10		UQL		70520	RAD
Total Uranium	15-2345	0215-95-0154	W	2.62		ug/l		70520	RAD
Uranium-234	15-2345	LB	W	0		PCL	U	71044	RAD
Uranium-234	15-2345	0215-95-0154	W	32.3		PCL	U	71044	RAD
Uranium-235	15-2345	LB	W	51.4		PCL	U	71044	RAD
Uranium-235	15-2345	0215-95-0154	W	96.3		PCL	U	71044	RAD
Uranium-238	15-2345	LB	W	350		PCL	U	71044	RAD
Uranium-238	15-2345	0215-95-0154	W	406		PCL	U	71044	RAD

10/30/93 10:00 AM

Appendix B

Geophysical Investigation at MDA-Z



3714 • 441005 • 0.11

Field Summary Report

**Geophysical Investigation at FU-2, TA-15,
SWMU 15-007(b), MDA-Z**

Submitted to:

University of California
Los Alamos National Laboratory
Los Alamos, NM 87545

Submitted by:

Geophex, Ltd.
901 18th Street - Suite 30100
Los Alamos, NM 87544

Geophex Job Number 568
October 1995



 **Geophex, Ltd.**
601 15th Street, Suite 30100
Los Alamos, New Mexico 87544
(505) 661-5140

October 12, 1995

University of California
Los Alamos National Laboratory
Attn: Mr. Doug Pippin
Ref.: 2776M0004-8N
P. O. Box 1665, MS G787
Los Alamos, NM 87545

Dear Doug:

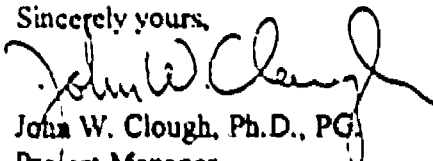
Enclosed are three copies of our field summary report, "Geophysical Investigations at FU-2, TA-15, SWMU 15-007(h), MDA-Z". This report summarizes the geophysical surveys conducted by Geophex during October 3-5, 1995.

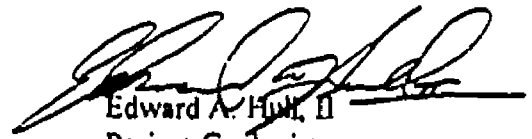
The field work went smoothly. We appreciate the congenial support of the ICF Kaiser staff involved.

The GPR method provided the best detail of the landfill boundary. The EM method did not produce a landfill boundary response as sharp as might be produced for a pit or trench but the anomaly pattern does support the GPR interpretation.

We have enjoyed meeting you and thank you for the opportunity of working with Field Unit 2 on this project. We look forward to providing you with assistance in the future.

Sincerely yours,

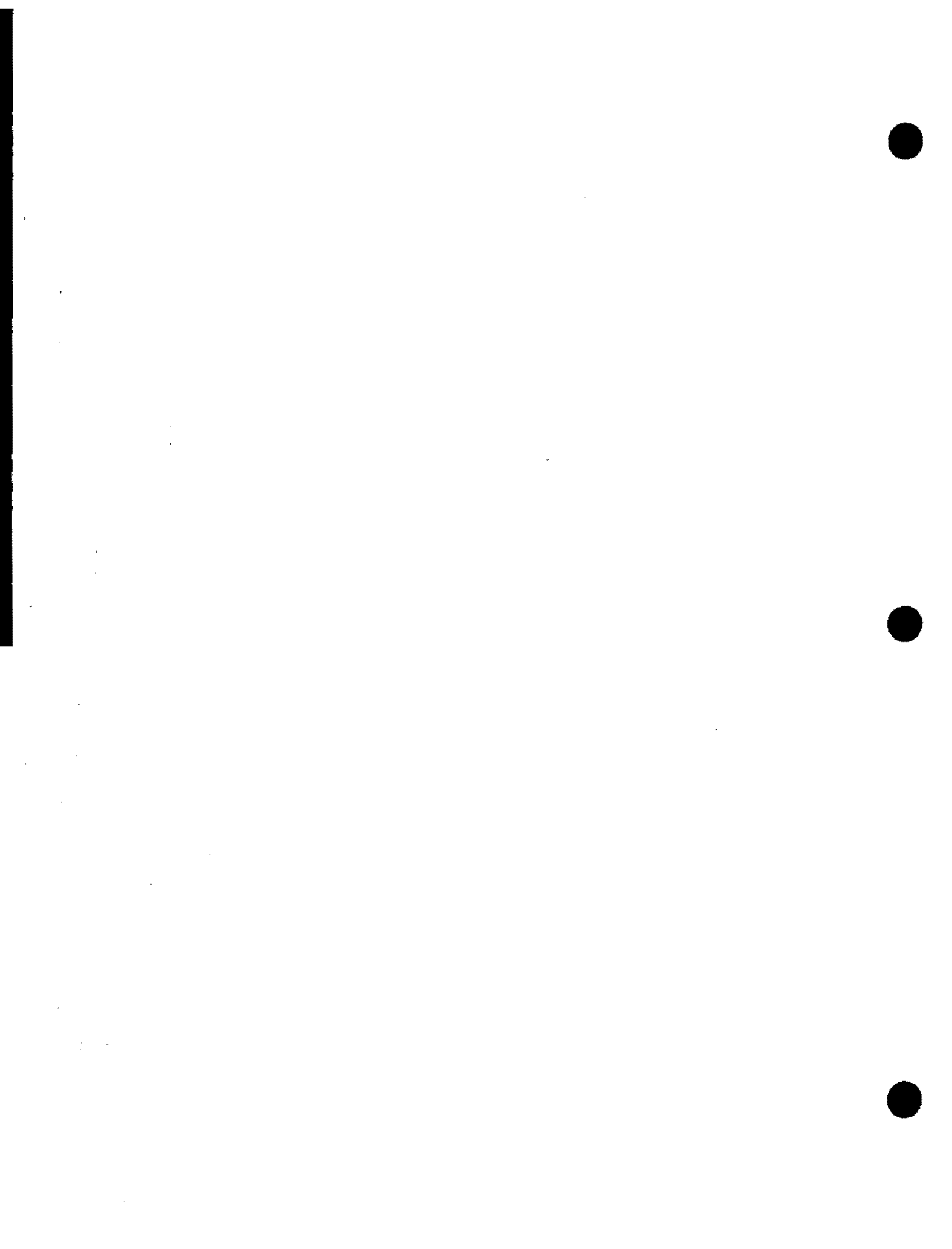

John W. Clough, Ph.D., PG
Project Manager


Edward A. Hull, II
Project Geologist

Encl: as stated

cc: Tom Fogg, ICF-Kaiser with enclosure
Larry Brown, LANL MS P274 with enclosure (3 copies)
Ken Howard, Geophex Ltd., Raleigh, NC

15-007(h) MDA-Z



51741 • 5-21-95 • G.R.H.

Field Summary Report
Geophysical Investigation at FU-2, TA-15,
SWMU 15-007(b), MDA-Z

Submitted to:

University of California
Los Alamos National Laboratory
Los Alamos, NM 87545

Submitted by:

Geophex, Ltd.
901 18th Street - Suite 30100
Los Alamos, NM 87544

Geophex Job Number 508
October 1995



Geophysical Survey

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15-007(b)-TA-15-FU-2

1.0 Project Introduction

1.1 Project Description

Geophex, Ltd. conducted geophysical investigations at MDA-Z, SWMU 15-007(b), Technical Area (TA)-15, Field Unit (FU)-2. The primary purpose of the investigations is to delineate the northern boundary of a small landfill (Figure 1).

MDA-Z is a small (approximately one-half acre) inactive disposal area used between 1965 and 1981 for construction debris, concrete sandbags, steel blast matting and other debris. The outer boundary and the two short sides of this landfill are open to view. Apparently debris was disposed of by dumping off the side of a small cliff. The height of the open face of the debris pile is approximately ten feet. The edge closest to the native soil is obscured by soil, grass, trees, and road gravel. Large blasting mats, constructed of one inch wire rope, and five foot square sections of one inch thick steel plate are visible on the surface. Some of these materials appear to be placed on native soil outside the boundaries of the landfill.

1.2 Scope of Work

In order to obtain volume estimates of this disposal area, the obscured boundary was determined. We conducted electromagnetic (EM) and ground-penetrating-radar (GPR) surveys to define the up-dip edge of the disposal area. We conducted these surveys during October 3-5, 1995.

As a requirement for these surveys we established a 100 x 300 foot orthogonal grid over the up-dip portion of the landfill and produced a detailed site map of our survey area (Figure 2). The 100 x 300 foot survey grid is staked and clearly marked. Referencing our grid to a geographic coordinate system is not within our scope of work; however we used previously surveyed stakes, marking soil sample locations within the area, to position our grid onto existing maps (Figure 1). Geophysical survey instruments and procedures are discussed in Appendix A.

2.0 Geophysical Survey Results

2.1 EM Survey

We conducted the EM survey using the Geophex GEM-2 system operating at frequencies of 1,350 and 7,200 Hz. We acquired data, perpendicular to the edge of the landfill, using a five foot line spacing. Data was obtained at one-half second intervals along the lines, resulting in a 2.5 x 5 foot grid of data. The survey extends from 5E to 240 E. We did not collect data from 240E to 300E due to the obstruction of heavy brush and trees. Most of the area beyond 240E is outside the landfill which extends to 260E at the cliff edge.

Figures 3-6 show the results of the EM survey. Generally, the lower frequency response (1,350 Hz) will image deeper targets and the high frequency response (7,290 Hz) shallower targets. The in-phase component responds to good conductors (metal) whereas the quadrature component responds to variations in conductivity of poor conductors (variations in soil type and moisture content).

Each of the plots show extremely large anomalies associated with the massive metal objects observed on the surface. The EM plots can be compared with the site map (Figure 2) to identify the source of most major anomalies.

A large unidentified anomaly is observed at 150E-90S on the 1,350 Hz in-phase response (Figure 3). A few other isolated anomalies are evident on this map but, a sharp, clearly defined, boundary between native soil and fill is not observed. There is an increase in anomaly amplitudes south of a line from 120E, 50S and 200E, 100S. We interpret these anomalies to be the thicker portion of the landfill. Thin fill probably extends north of this line. Toward the western end of the survey area, subtle anomalies are obscured by the very large anomalies produced by the blast mats and steel plates.

2.2 GPR Survey

GPR profiles were collected along eleven line locations (Figure 2). A north-south profile along line 150E shows a distinctive change in the reflection pattern beginning at 60S and continuing to the end of the line (Figure 7). This change is marked by increased energy return at later travel times. The energy returns extend to increasingly greater travel times towards the thick edge of the fill. This pattern is repeatable and observed on all of the GPR profiles.

An east-west profile along line 80S shows a similar pattern of energy return extending from 50E, with energy at increasing travel times to 100E, and then gradually decreasing to 210E (Figure 8). Nine additional profiles are included in Appendix B.

We interpret the changes in return energy to result from the landfill. We interpret the pattern to represent a response to inhomogeneities and reflectors within the fill material. We do not see continuous reflections from the base of the landfill and we do not interpret the base of the energy return pattern to directly represent the depth to the base of the fill.

An increase in energy at later travel times may be due to reflections from objects at increasing depth, however other factors produce similar changes in the GPR response. Changes may be due to scattering of energy from inhomogeneities near the antenna. Changes in coupling between the antenna and the ground will significantly alter the length of the wave pattern. For these reasons, a change in the appearance of GPR records can often be attributed to changes in surface or near-surface conditions. Changes in surface roughness, moisture content, or surface material can produce results that have been misinterpreted as reflections from deeper objects.

We carefully observed surface conditions during the survey in order to avoid misinterpretation of the changing signal pattern. The changes we observe on the GPR records do not correlate with

any noticeable changes in surface condition. In particular the pattern does not correlate with the change from topsoil to crushed gravel which is present along the north side of the site

Our interpretation of the landfill boundaries is marked on each of the eleven GPR profiles. The locations of these landfill edges are used to produce a map of the landfill boundary (Figure 9).

3.0 Conclusions

In spite of the occurrence of large metal objects scattered on the surface and in the face of the debris pile, there appears to be relatively few buried metal objects within the area of our survey. The EM survey indicates a few metal objects that help to define the landfill area but no sharp boundary is observed. The EM anomaly at 205E, 65S is produced by a metal plate that is lying on native soil material and not within the landfill. Metal object on the surface west of 50E also appear to be on undisturbed soil.

The GPR method was successful in imaging changes in ground conditions which we interpret as the edge of the fill. The GPR did not image the base of the fill and does not directly provide thickness data for obtaining volume estimates

As the fill thins towards the north the edge may become irregular and intermittent. Toward the southeast end of the survey, the landfill edge as defined by GPR is located at approximately 220E whereas sandbags are clearly visible at 250E. The fill between 220E and 250E may be thin, intermittent or non-existent. Errors in defining the lateral position of the landfill boundary may as great as 10-20 feet; however for a thin wedge of material this error will have little effect on volume estimates

The EM data support the GPR interpretation. Where there are differences in interpretation between the two geophysical methods, we have based our final interpretation on the GPR data. In the middle portion of the survey area the increase in EM anomaly amplitudes correlates closely with the GPR response. On the eastern side of the survey the GPR response indicates an landfill area somewhat larger than indicated by EM. We interpret this zone to contain thin fill which produces a GPR response but no EM response.

We are confident that no significant volume of fill exists outside the boundary determined by this survey.



Figures



OCTOBER 1995

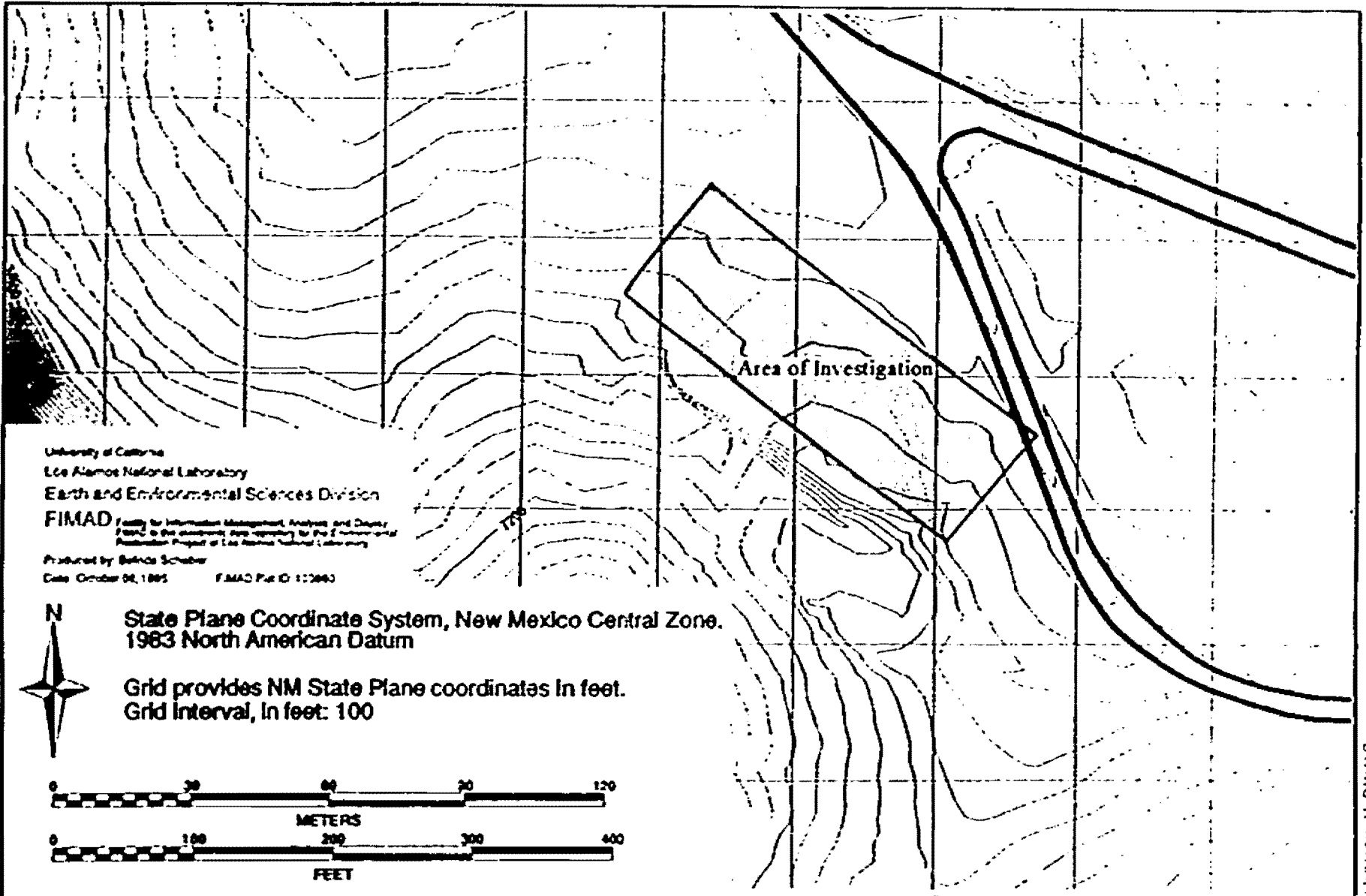
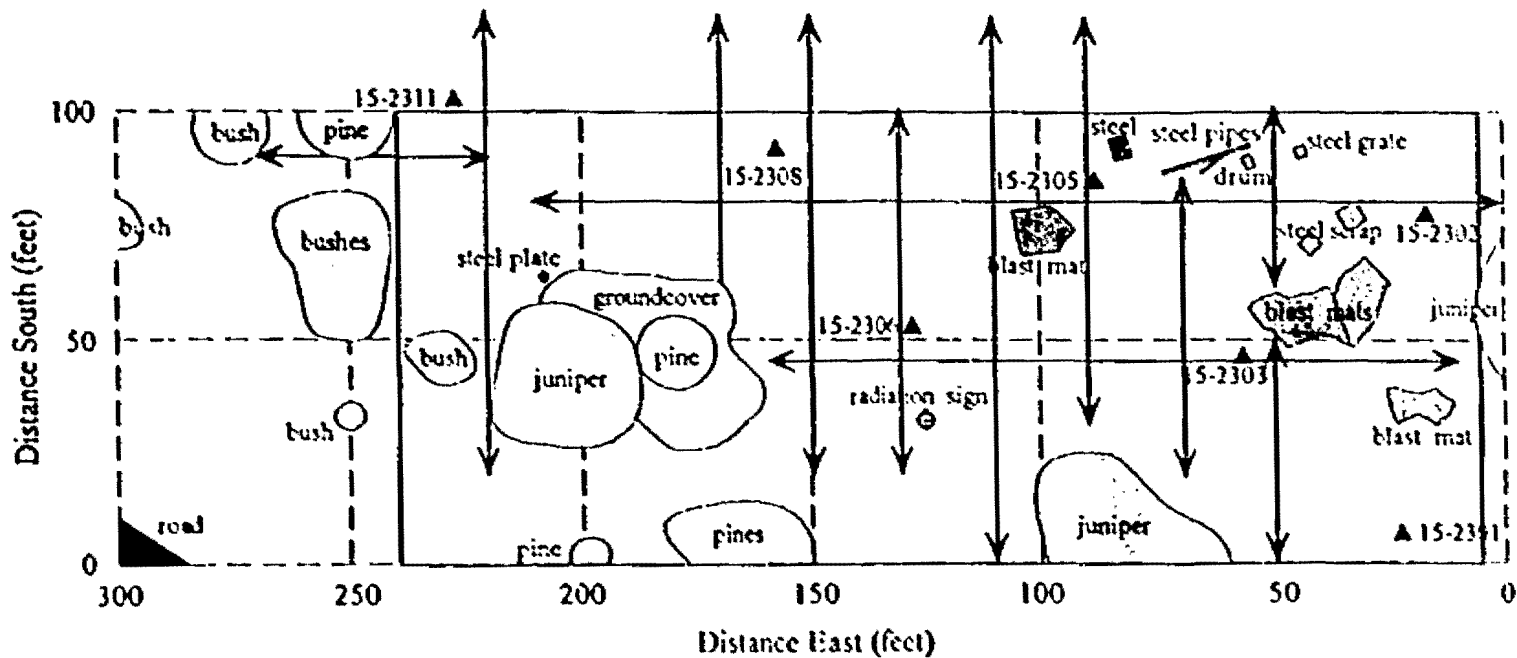


Figure 1. Area of investigation at FU-2, TA-15, SWMU 15-007(b), MDA-Z.

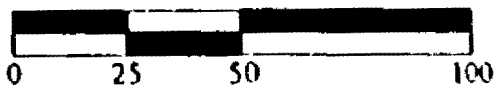


Field Summary Report for FU-2, TA-15
 SWMU 15-007(b), MDA-Z

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Scale 1" = 40'



- ▲ 15-2337 Soil Sample Location
- ↔ GPR Profile Line
- ▭ EM Survey Area



Figure 2. Area of Investigation detail map showing geophysical survey locations, survey grid, surface debris, soil sample locations and vegetation.

EM Survey - 1350 Hz in-phase response

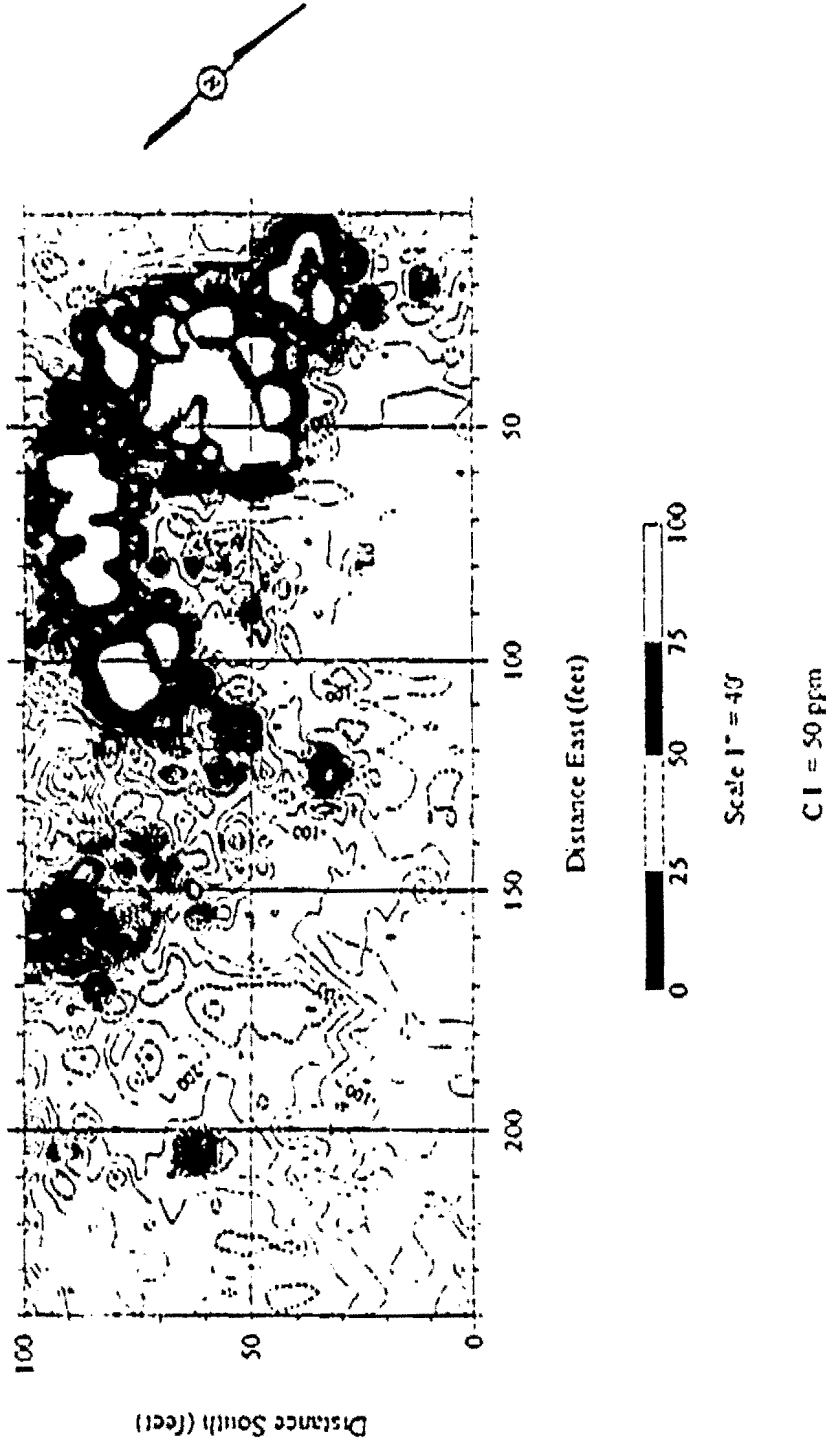
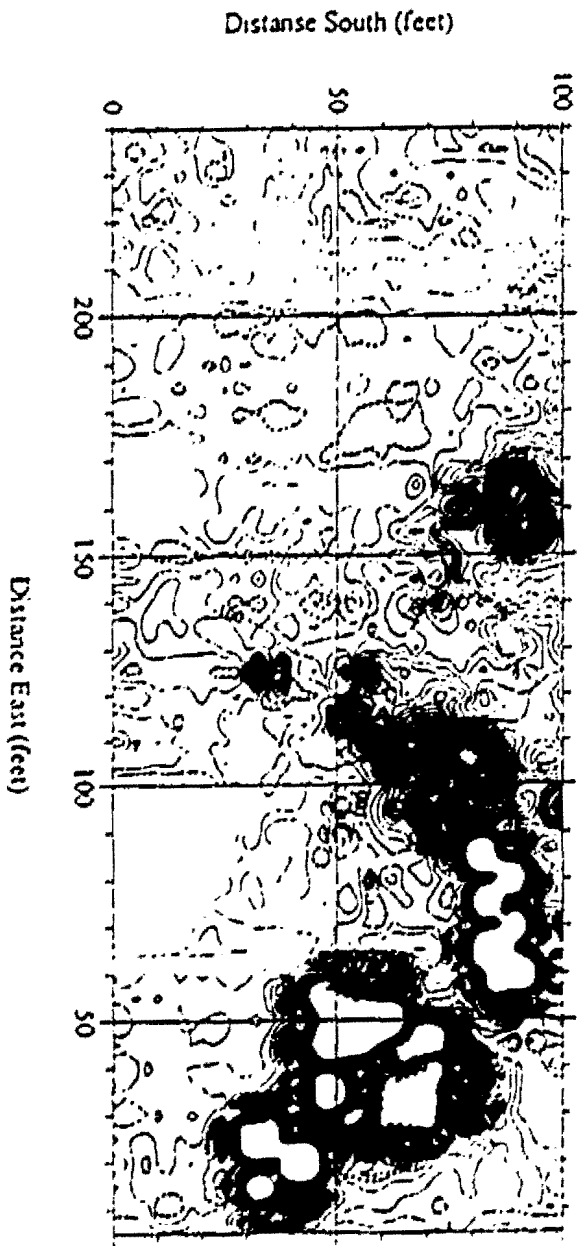


Figure 3. GEM-2 survey - 1350 Hz in-phase response.



EM Survey - 1350 Hz quadrature response



0 25 50 75 100

Scale 1" = 40'

C1 = 50 ppm



Geophex

Figure 4. GENI-2 survey - 1350 Hz quadrature response.

EM Survey - 7290 Hz in-phase response

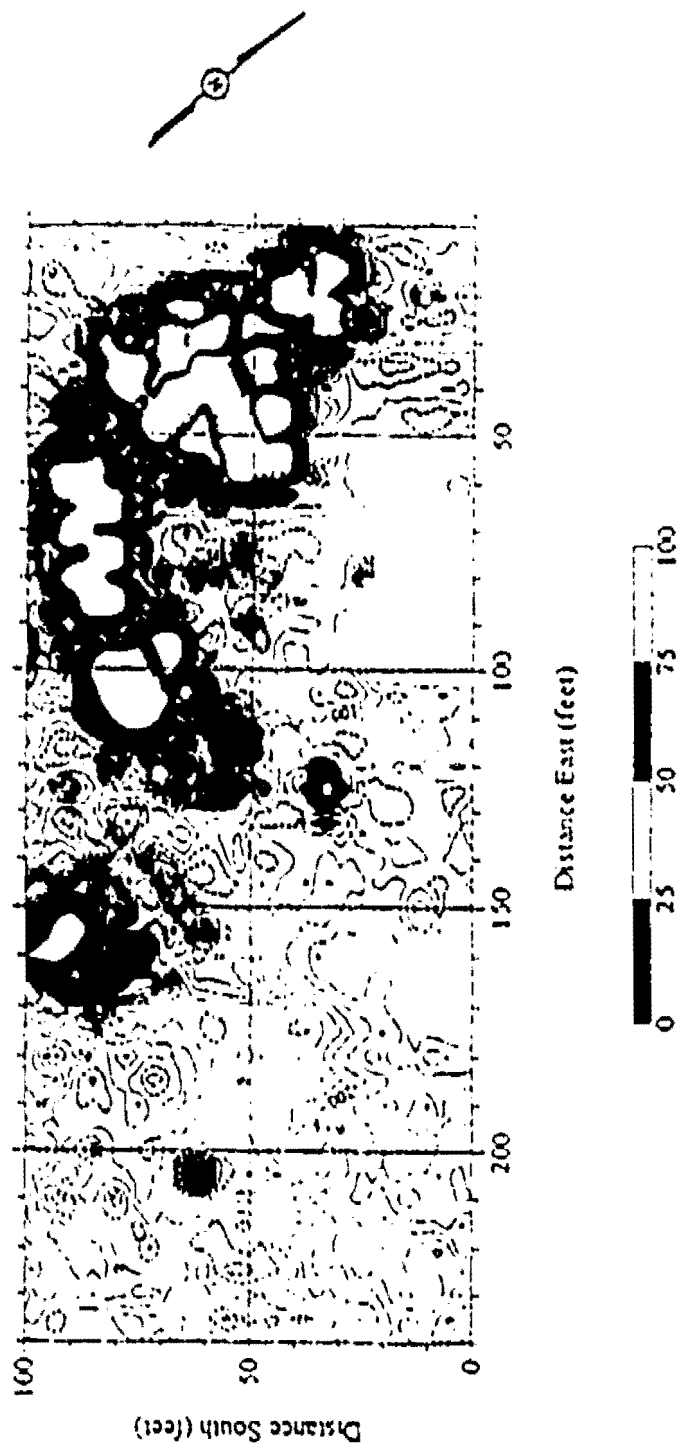


Figure 5. GEM-2 survey - 7290 Hz in-phase response.



EM Survey - 7290 Hz quadrature response

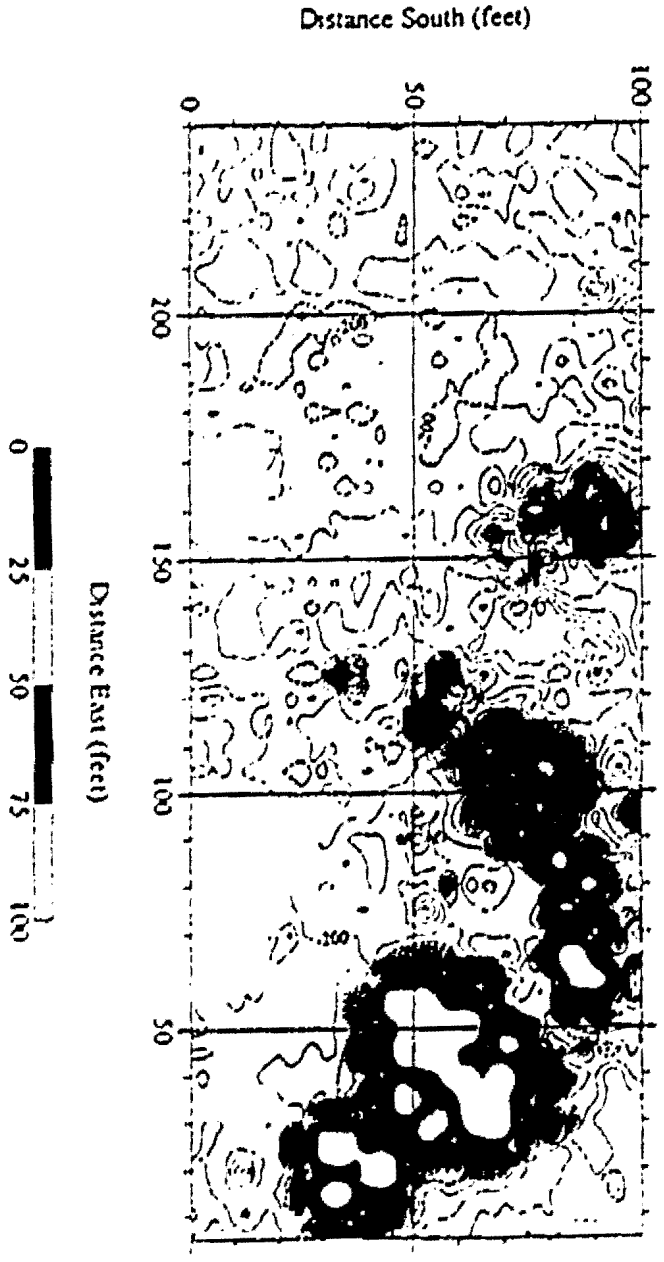


Figure 6. GEM-2 survey - 7290 Hz quadrature response.



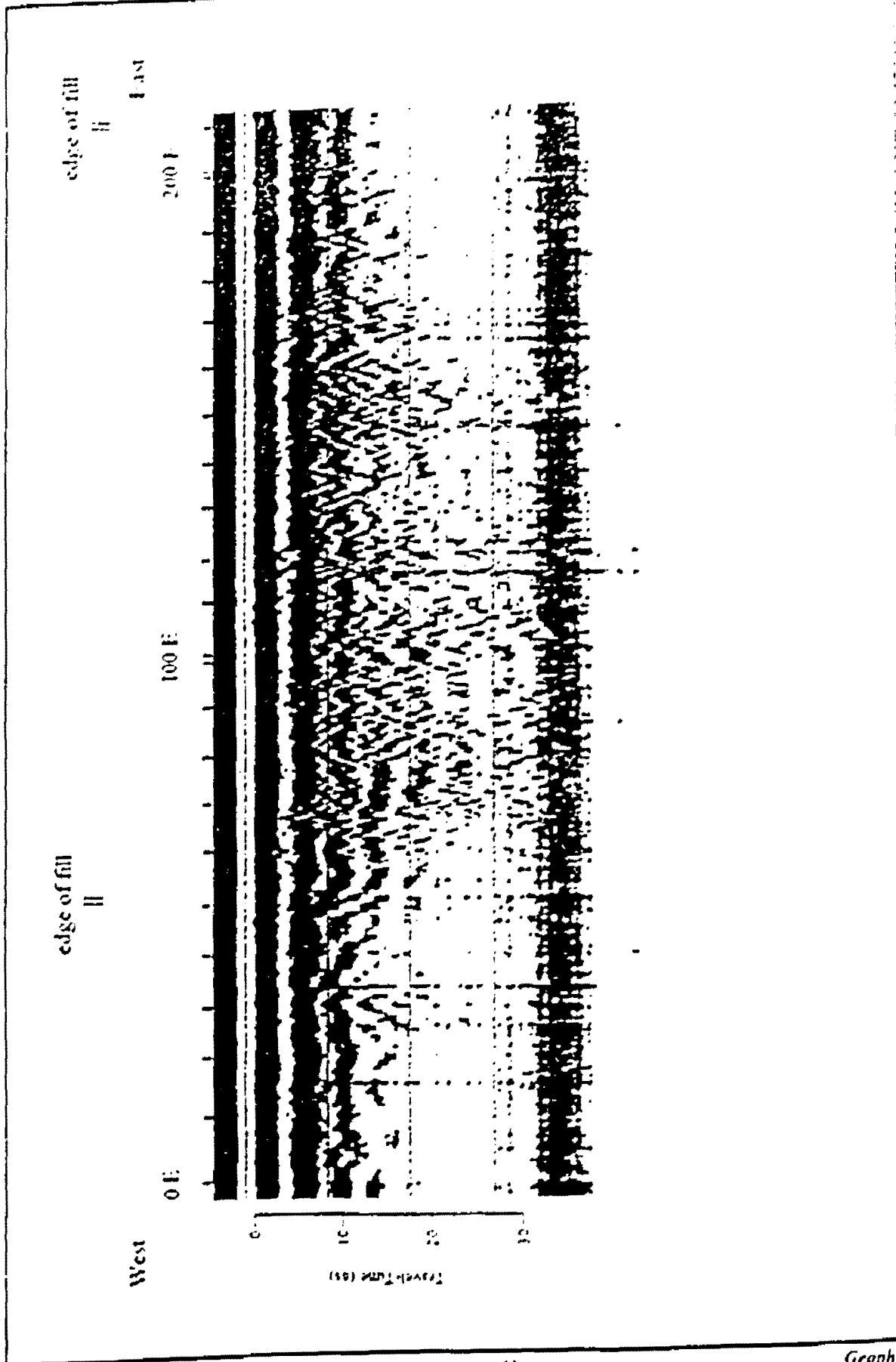
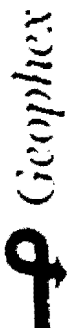


Figure 8 East-west GPR profile along S05





Appendix A

Geophysical Survey Instruments and Procedures

Electromagnetic (EM) Survey A-1
Ground-penetrating Radar (GPR)..... A-1

List of Tables

Table 1. Dielectric constants of some typical materials..... A-2



Geophysical Survey Instruments and Procedures

We conducted electromagnetic (EM) and ground-penetrating radar (GPR) surveys at this site. In this appendix, we briefly describe the methodology of the techniques used. Interpretation of an area usually requires the integration of data from more than one geophysical method, combined with available engineering and geological data.

Electromagnetic Survey

The EM survey method is based on measuring the response of an electromagnetic field induced into the earth. Low frequency signals, one to ten kilohertz, are transmitted by a small coil. The low frequency, very long wavelength electromagnetic fields produced by the transmitter, induce current flow in electrically conductive media in the earth. This induced current flow produces secondary electromagnetic fields which will radiate back to the surface. A receiving coil detects the secondary field and measures its strength and phase, relative to the transmitted signal. The data is presented as the relative amplitude of the secondary signal, in parts per million (ppm). The system records the signals that are both in-phase and 90 degrees out of phase (quadrature) with the transmitted signal.

The depth of penetration of the transmitted field is a function of the frequency of operation. Lower frequencies penetrate deeper, while higher frequencies are attenuated more rapidly. This frequency dependent penetration depth provides the opportunity to interpret multifrequency EM data to evaluate the depth, and size, of targets.

The instrument used for this survey is the GEM-2 developed by Geophex, Ltd. The instrument acquires both in-phase and quadrature data at two frequencies simultaneously. Frequencies may be selected in the range from 300 to 20,000 Hz. The instrument has a self-contained digital data recording system. The system typically records data at one-half second intervals. At this sampling rate data is collected at two to three foot intervals while the operator moves continuously at a brisk walk. Results from many environmental sites have established that the multifrequency GEM-2 is superior to conventional single-frequency units or magnetics alone in ability to characterize metallic and non-metallic targets.

Ground-penetrating Radar

This method employs an extremely short electromagnetic pulse that penetrates into the earth. A small portion of the pulse energy is reflected to the surface. The return signal is continuously recorded on a strip-chart or, in some cases, into a digital recording device. Amplitude of the reflected pulse depends primarily on the medium's dielectric constant. GPR anomalies result when there is a contrast in bulk dielectric property between materials. Dielectric constants of some typical materials are listed in Table 1.

Table 1. Dielectric constants of some typical materials

Material	Dielectric Constant
Air	1
Ice	3 - 4
Dry Sand	3 - 5
Granite	4 - 6
Limestone	4 - 8
Dry Salt	5 - 6
Shale	5 - 15
Silts	5 - 30
Clays	5 - 40
Saturated Sand	20 - 30
Water	80

For instance, there is a significant contrast in the dielectric property between clay and sandstone (or sand). Owing to this contrast, GPR can usually detect a shallow clay horizon below a sand formation. GPR anomalies arising from man-made structures exhibit the form of artificial geometric shapes created by buried targets. These targets may include both metallic and non-metallic objects such as tanks, drums, pipes, concrete blocks, bulk chemicals, animal bones, etc. Under favorable geologic conditions, the method can also detect the disturbed soil of backfilled pits and trenches.

The GPR employed for this survey is the SIR System-7 manufactured by GSSI, Inc. The system includes a Model SR-8000H Profiling Recorder; Model 3102 transducer with a center frequency of 500 MHz and a 2 ns pulse width, CC-30/11 Control Cable with a 50 m length; and a Model 10 Remote Marker. This radar unit is powered by a 12 volt automobile battery.



October 1995

B-1

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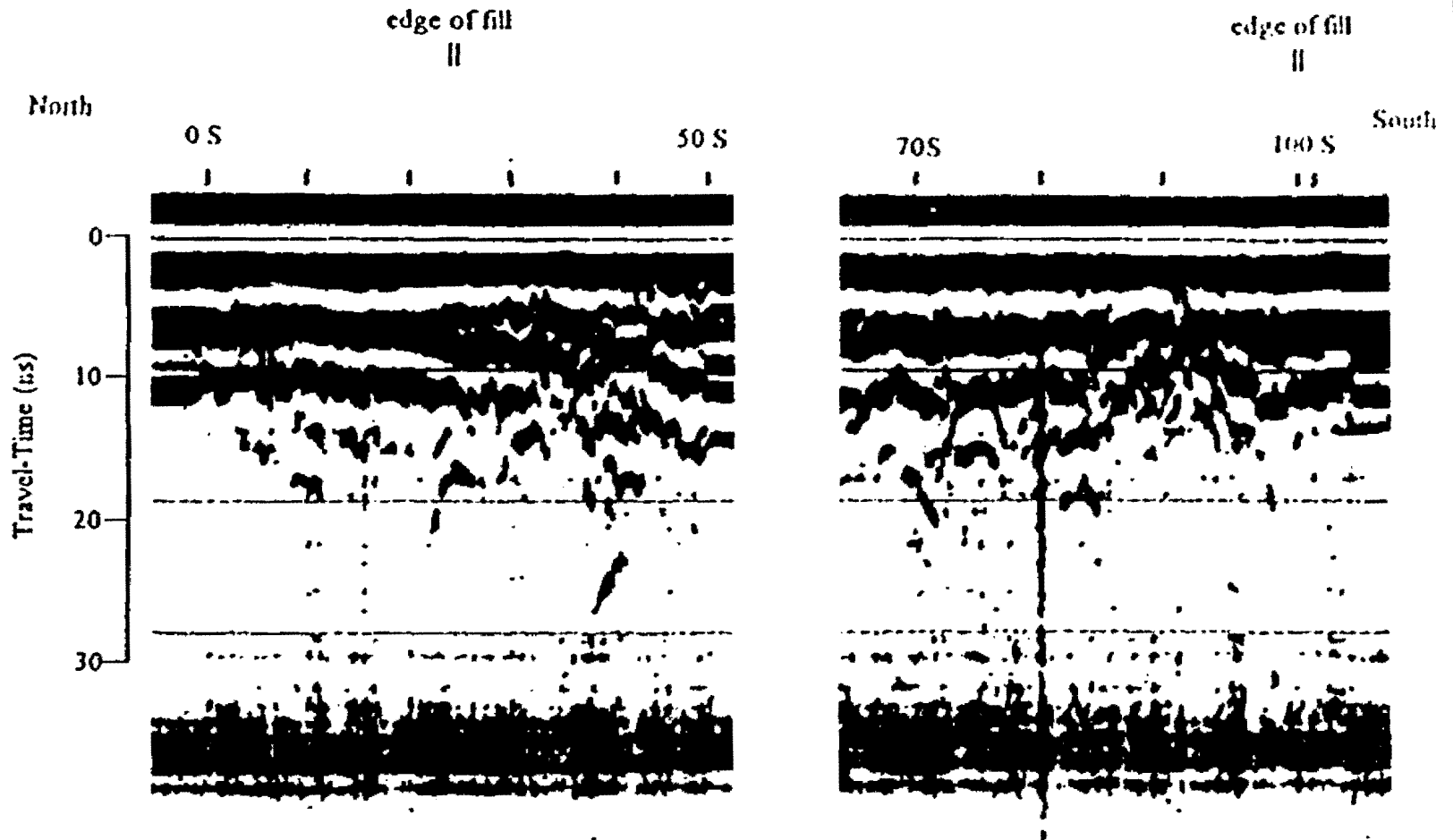


Figure B1. GPR profile along 50E. The edge of fill is interpreted at 20S and 100S. No profile was obtained across the blast mat from 50-60S.

Field Summary Report for P.L. 2 T.A. 15
 SWNIC 15-007101, NIDA.2

October 1995

B-2

Geophex Ltd

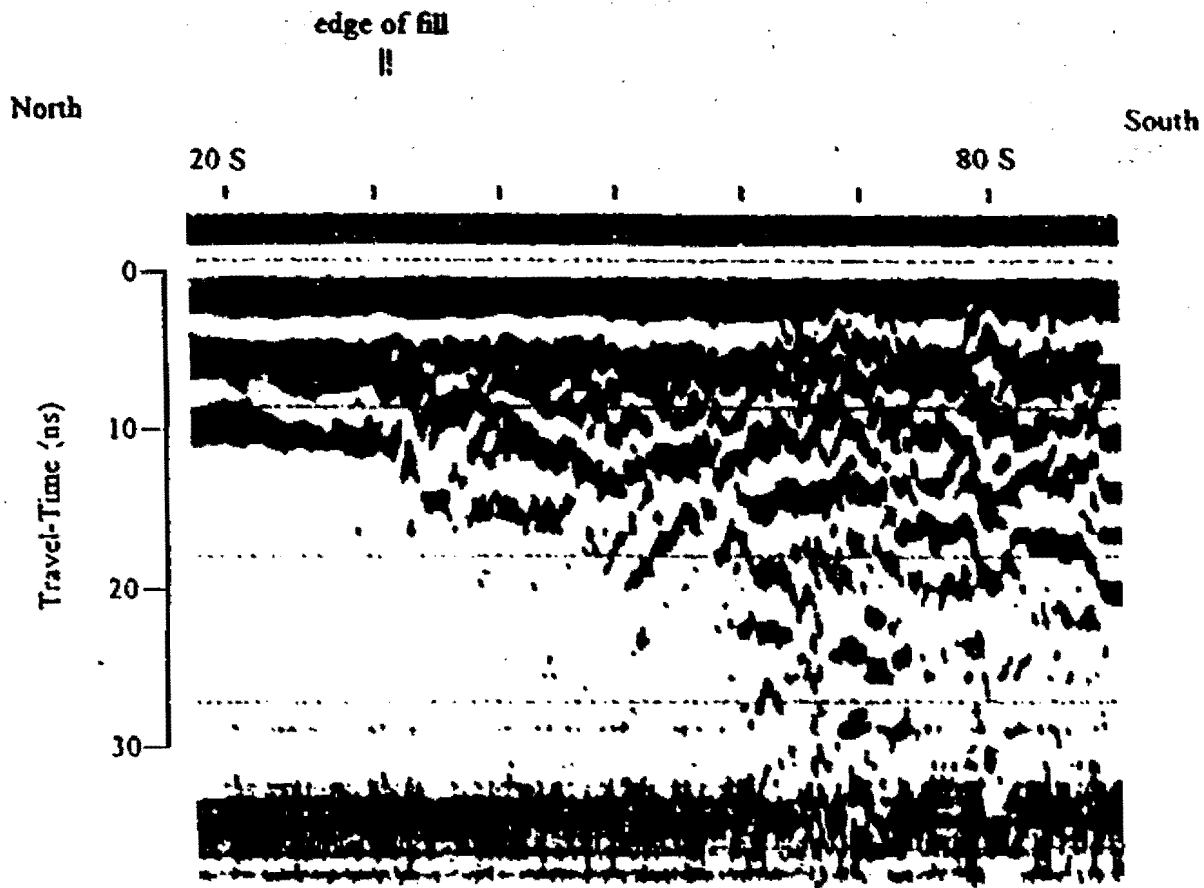


Figure B2. GPR profile along 70E. Energy returns are recorded at steadily increasing travel times from 30S to the end of the profile.

October 1995

B-3

Geophex Ltd

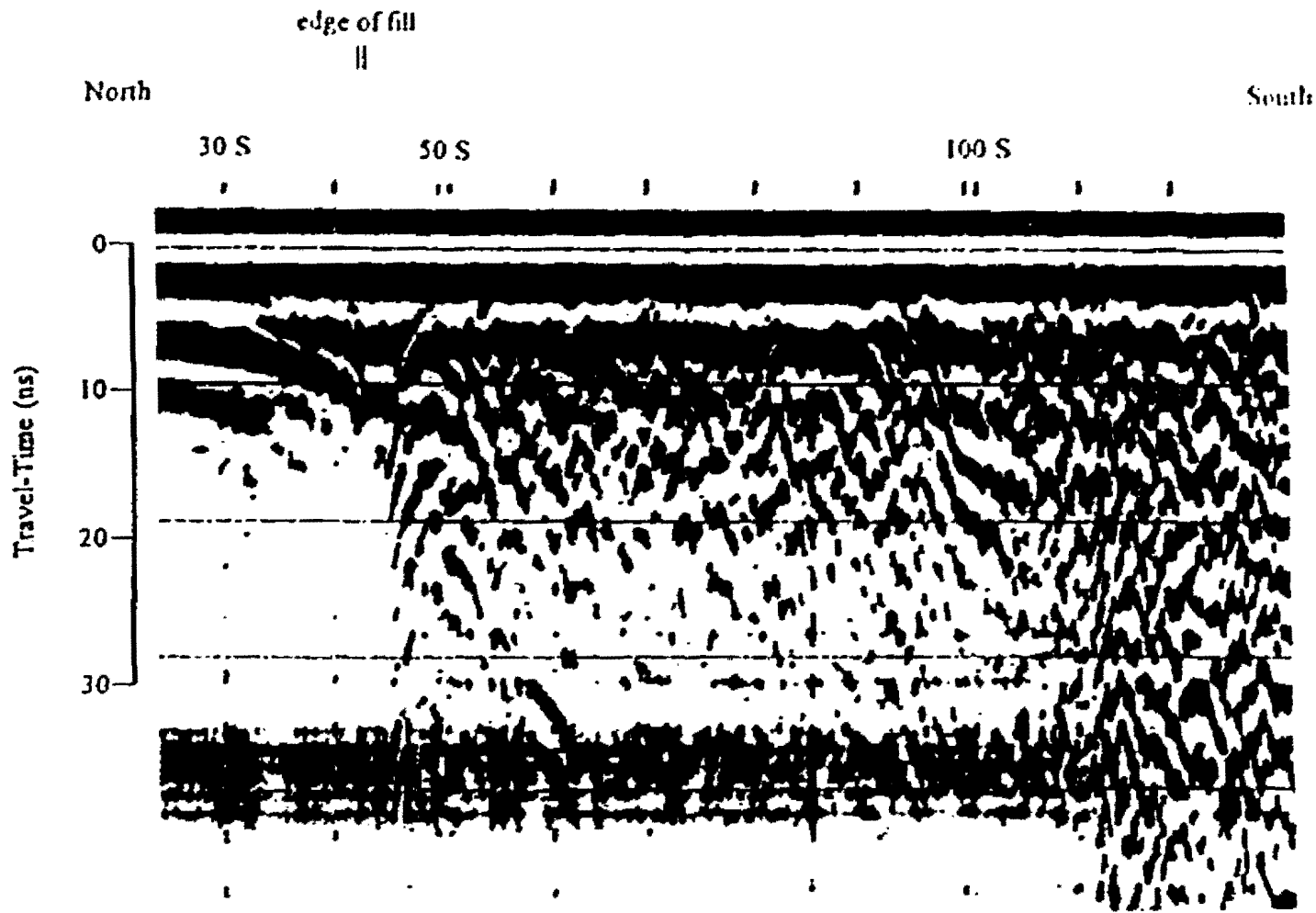


Figure B3. GPR profile along 90E. Compared with Figure B1 near the edge of the fill, this profile indicates greater inhomogeneity in the central portion of the fill

Field Summary Report for P.C. 27-11
SWNE 15-07-10, NDAZ

2007-10-27 10:51 AM

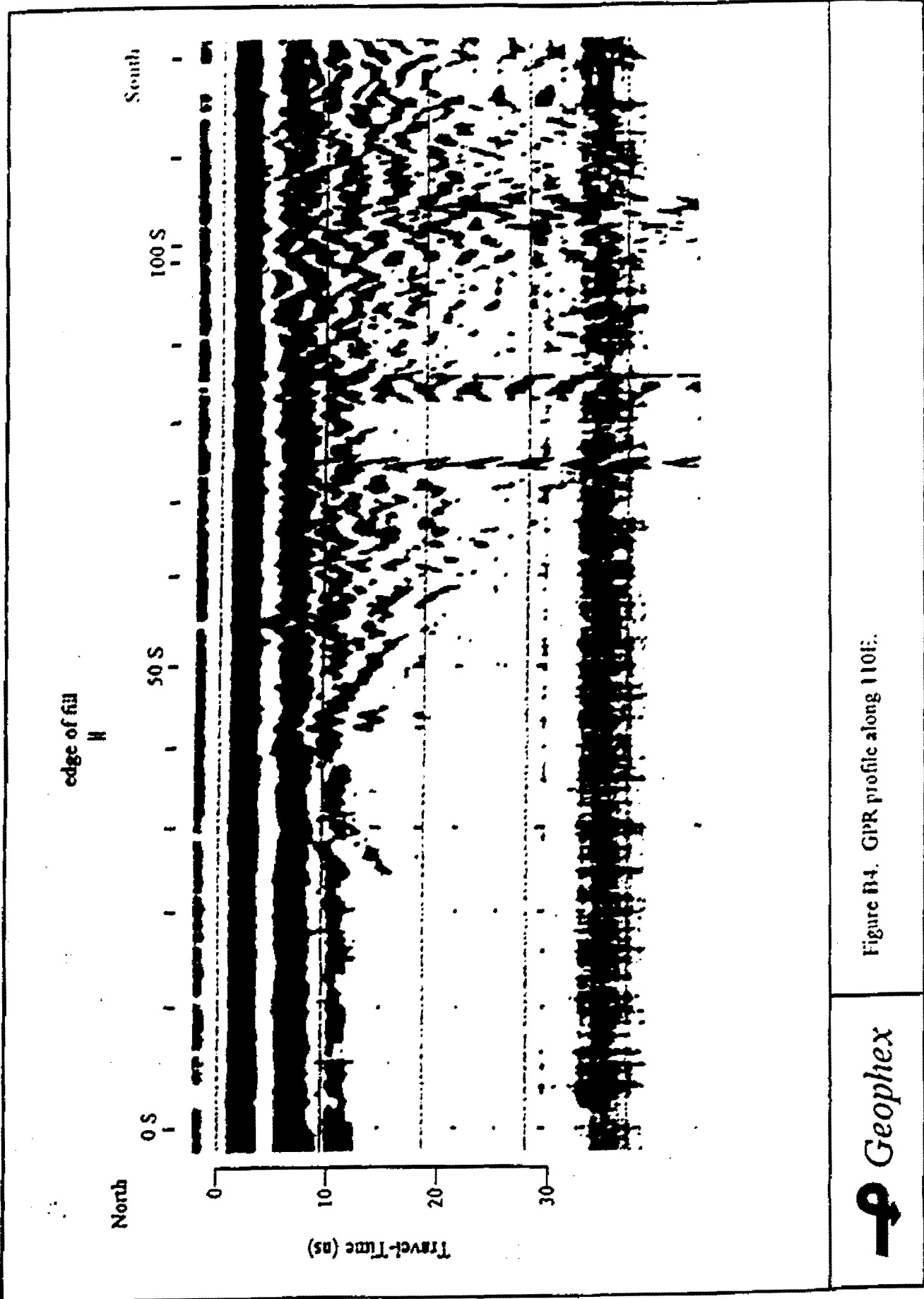


Figure B4. GPR profile along 110E.



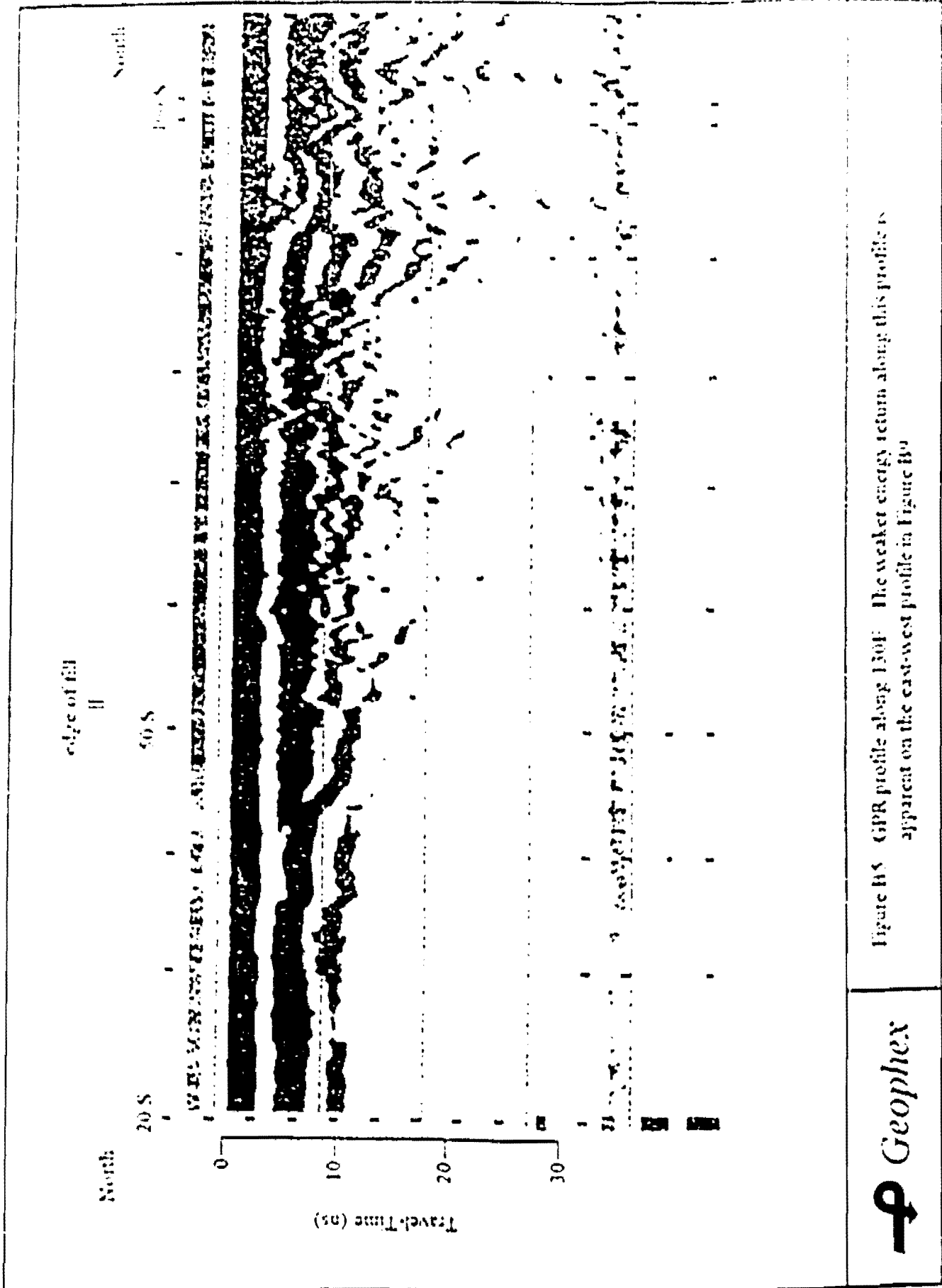


Figure B5 - GPR profile along 130F - The weaker energy return along this profile is apparent on the east-west profile in Figure B4



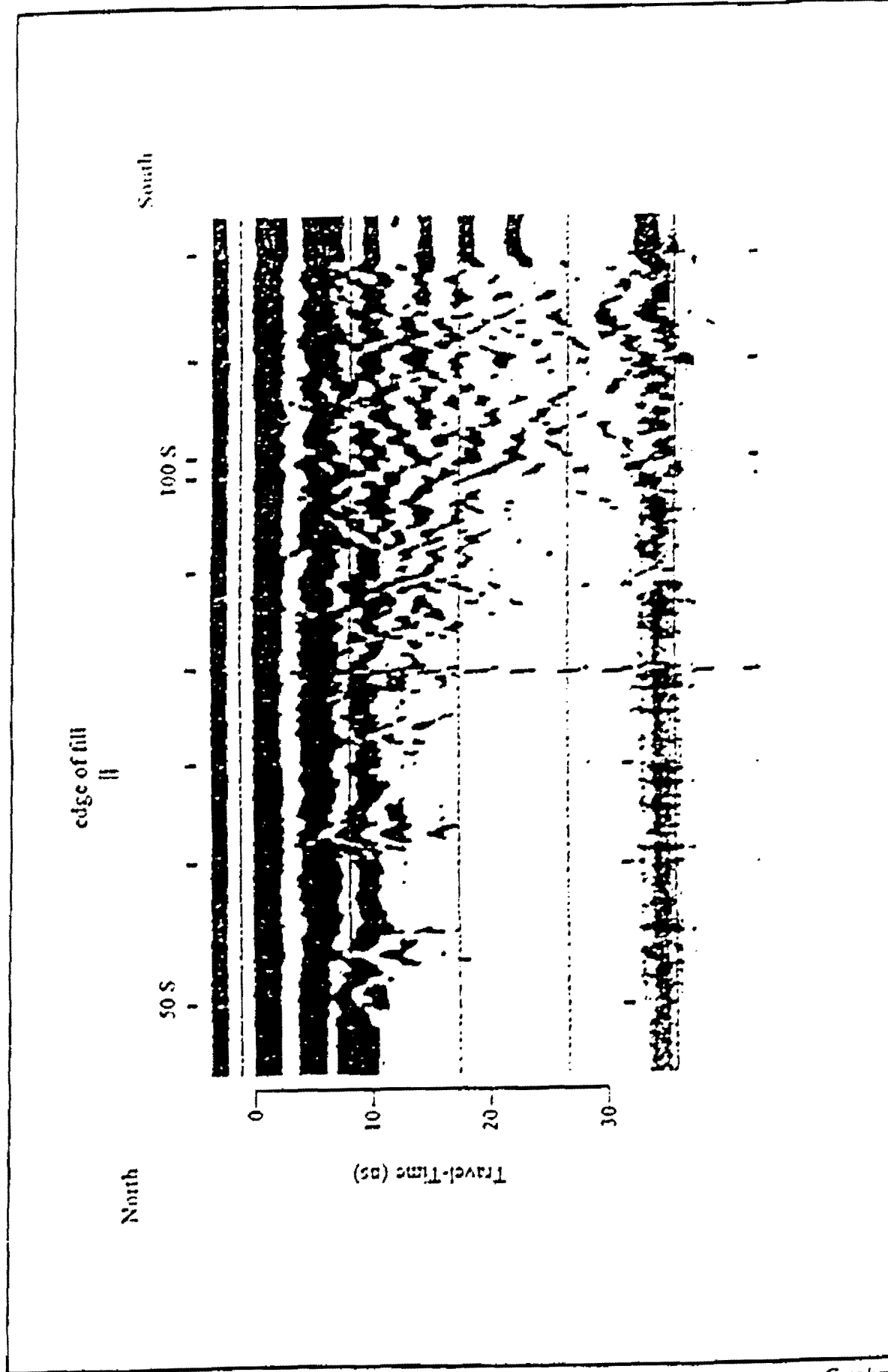


Figure B6 - GPR profile along 170F

October 1995

B-7

Geophex Ltd

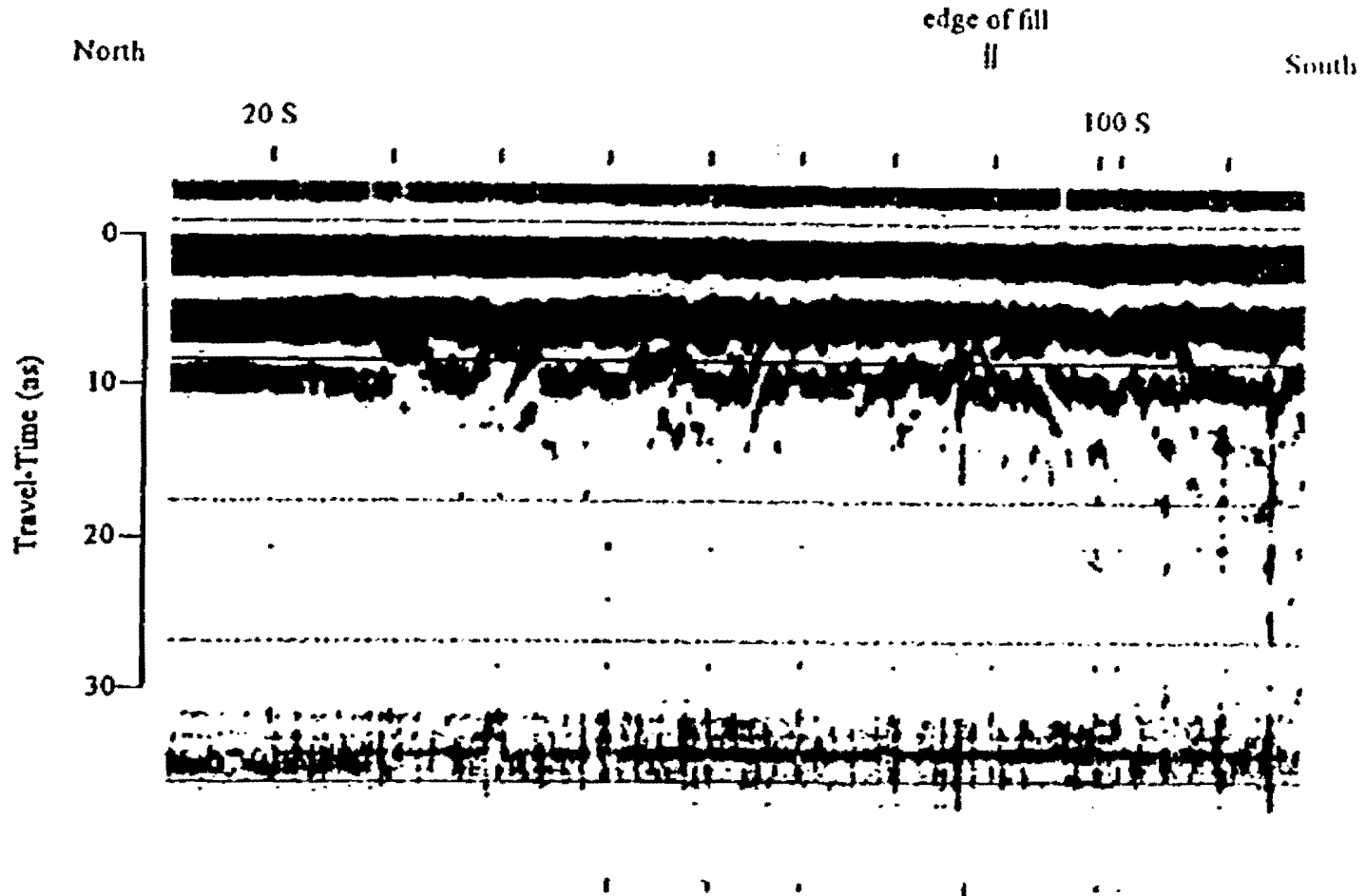


Figure B7. GPR profile along 220E. The weaker energy returns indicate very few inhomogeneities. Edge of fill at 90S correlates with Figure B10.

Field Summary Report for FL-2 T-A-1
 SWANU 15/007(b), MDA-2

FALFA - FALFOUR - 0174

October 1995

B-8

Geophex Ltd

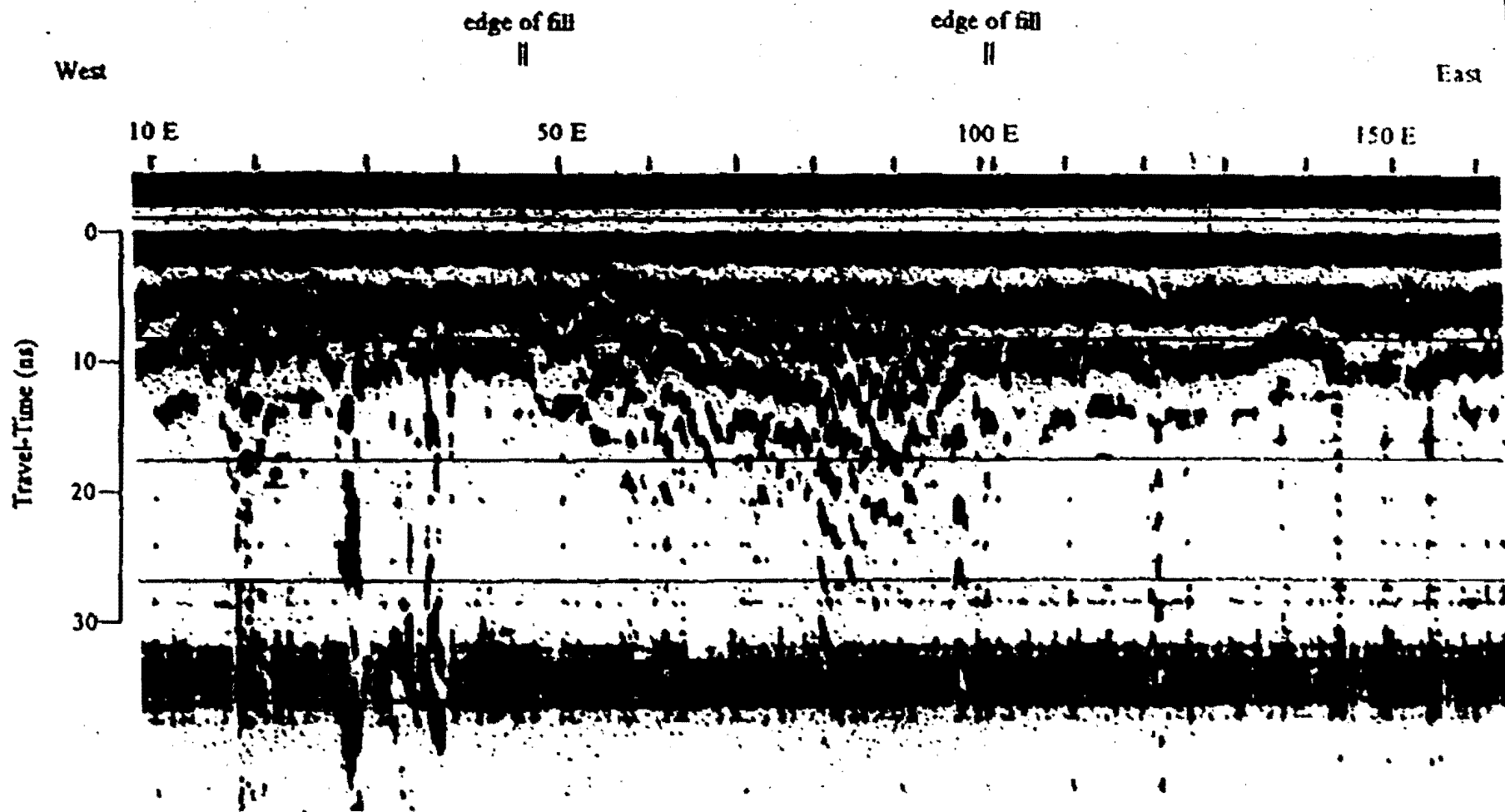


Figure B8. GPR profile along 45S. This profile, near the northern extent of the landfill, shows inhomogeneities between 50E and 100E.

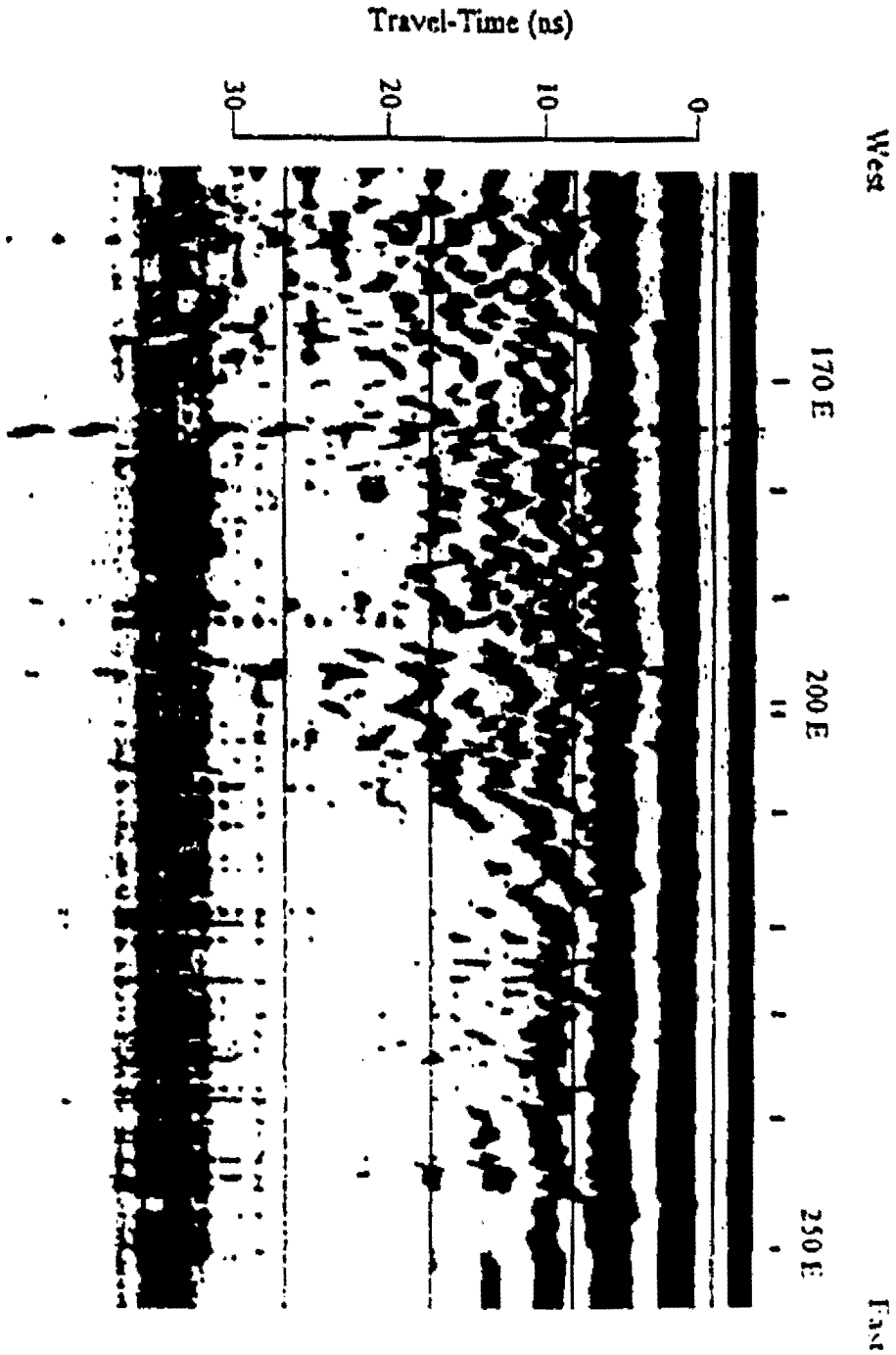


Figure B9. GPR profile along the eastern portion of 90S.



Appendix C

Correlations Between Mobile and Fixed Analytical Laboratories



APPENDIX C. CORRELATION BETWEEN FIELD AND LABORATORY METHODS FOR Hg, U, Pb and Be

Field screening methods were used during the sampling process to help determine which samples would be sent to the laboratory for analyses, also referred to as biased sampling. Samples from the field were processed in the mobile chemistry van using X-ray Fluorescence (XRF) techniques for mercury, lead and uranium, and Laser-Induced Breakdown Spectroscopy (LIBS) techniques for beryllium. As described in the work plan, the intent was to bias the fixed lab analyses toward high concentrations. Samples with high field screening values were sent for fixed lab analyses.

The screening analysis performed by LIBS and XRF are surface techniques, which measure the elements of interest in only the outermost few mm of the soil grains. The fixed laboratory analysis methods, by contrast, utilize a strong acid leaching procedure followed by either atomic absorption/emission or inductively coupled plasma emission. The fixed laboratory analysis measures more of a "total" concentration of an analyte than by the screening methods. Thus, while the two analytical techniques are not identical, they are similar enough to be used in conjunction. The performance of field instruments is of interest because they are less costly and yield real-time results. In addition, when the field screening measurements correlate well with the fixed lab analyses, the field information from samples not submitted to the lab can be used in a qualitative manner to characterize the extent of contamination over the sites.

The attached scatter plots of the field screening measurements relative to the analytical lab results show the correlations between the two measurement methods. Included on the plots are the statistical correlation of the data and the equation of the lines representing the least squares fit. Separate plots are shown for each PRS and for the combined results from all the PRSs. In some instances, an extremely large value (possibly representing an outlier) was encountered. In those cases, the outlier is plotted with the data and the correlation calculated both with and without that sample point.

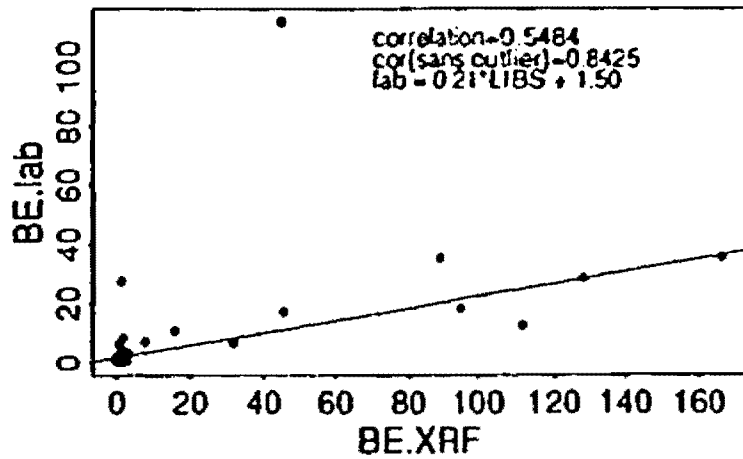
The results show:

- No plots were made for mercury because the majority of the measurements, both XRF and lab results, were non-detects.
- All of the plots show a positive correlation between the measurements. There are varying amounts of scatter about the lines, due to the differences in the nature of the analytical techniques, matrix effects, inhomogeneities in the samples, etc. In all but three cases, however, the correlations are statistically significantly different from zero. These results give confidence that the higher concentrations of metals in samples picked for fixed lab analysis were confirmed. This result, in turn, lends credence to the use of field screening for biasing the samples sent for fixed lab analysis.
- The correlations and related least squares fit (linear regression line) of fixed lab values to uranium XRF values at E-F Aggregate were used to estimate lab values at those points on the site where no lab analyses were done. These were primarily in the southeast corner of E-F Aggregate and were sampling locations that produced small XRF values. The least square equation that was used to estimate lab values from XRF values is printed on the scatter plot of the uranium data at EF Aggregate. The estimated values were used along with the fixed lab values to produce a contour map to describe the extent of uranium contamination in surface soils at E-F Aggregate. A similar approach was used to produce the contour map of lead at A-B site with the 1994 data. The 1995 lead XRF results were adjusted upwards using a constant factor of 100 ppm because repeated analyses of a PE sample showed that the XRF was biased low. The contour maps were produced by Kriging using linear interpolation and smoothing. The commercial software package Surfer was used.

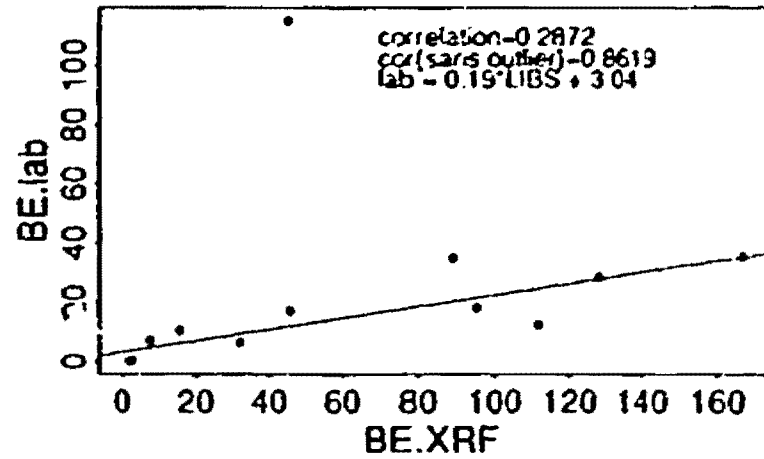


Beryllium: LIBS data vs LAB data

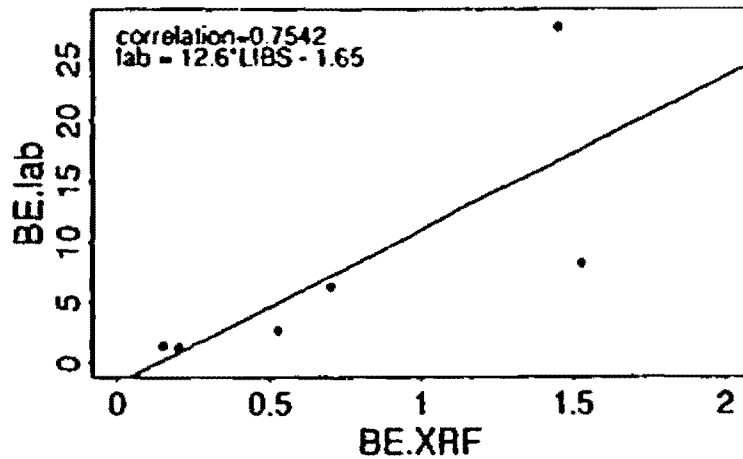
OU1086: all samples



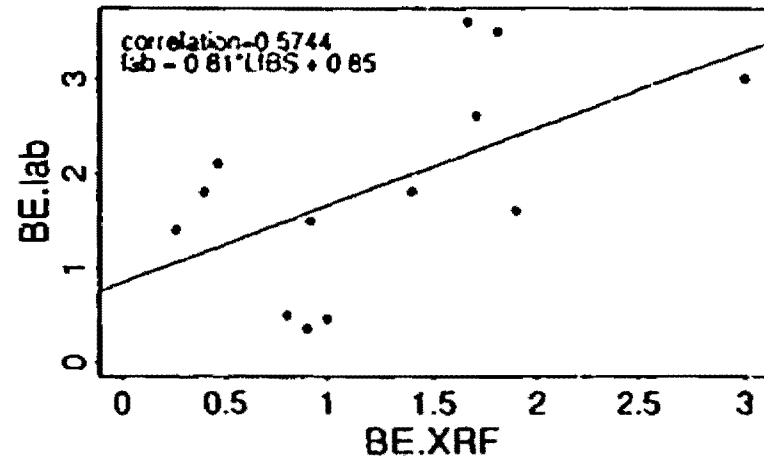
R-44 Surface Disposal



R-183 Wash Area

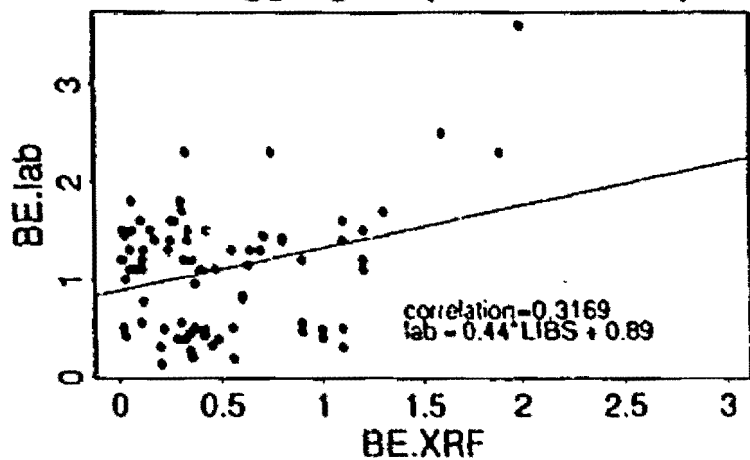


MDA-Z

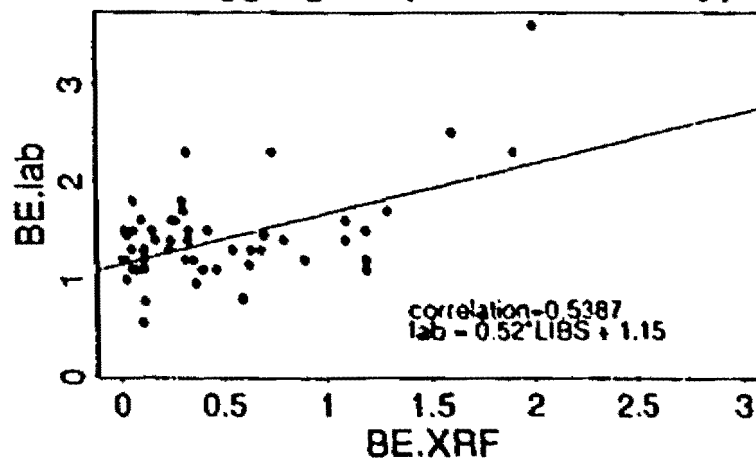


Beryllium: LIBS data vs LAB data

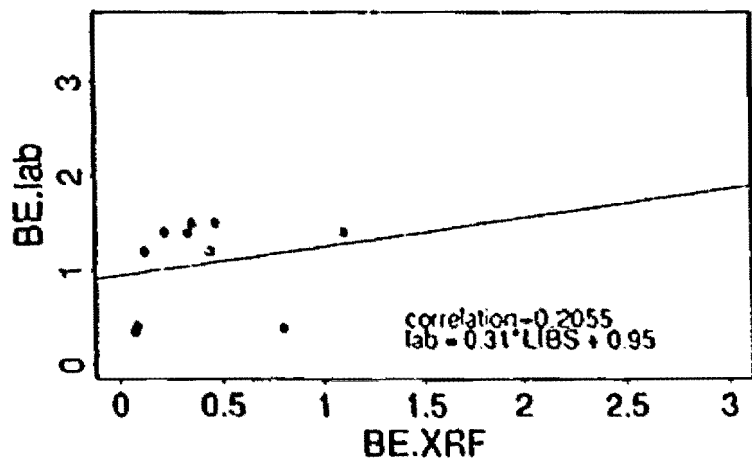
EF Aggregate (EF & C Sites)



EF Aggregate (lab detects only)

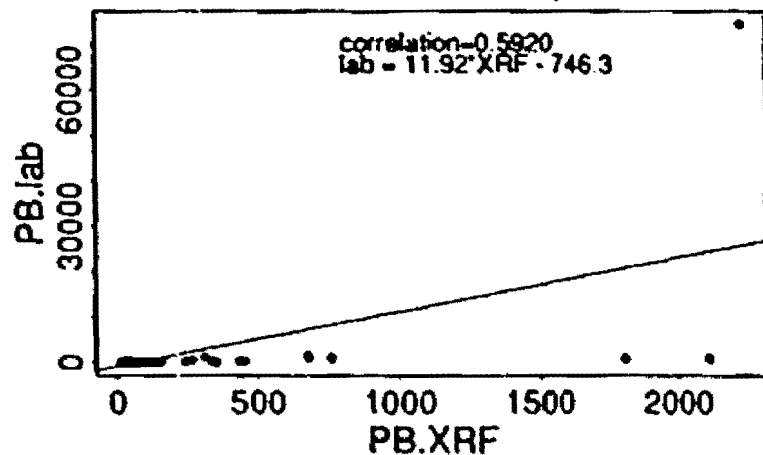


AB Site

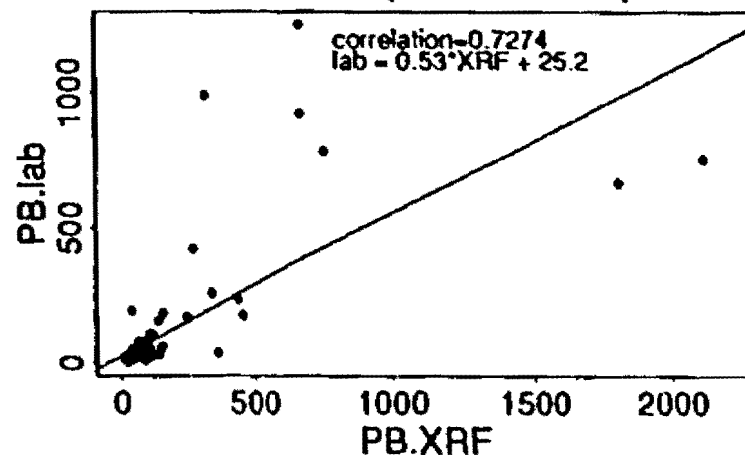


Lead: XRF data vs LAB data

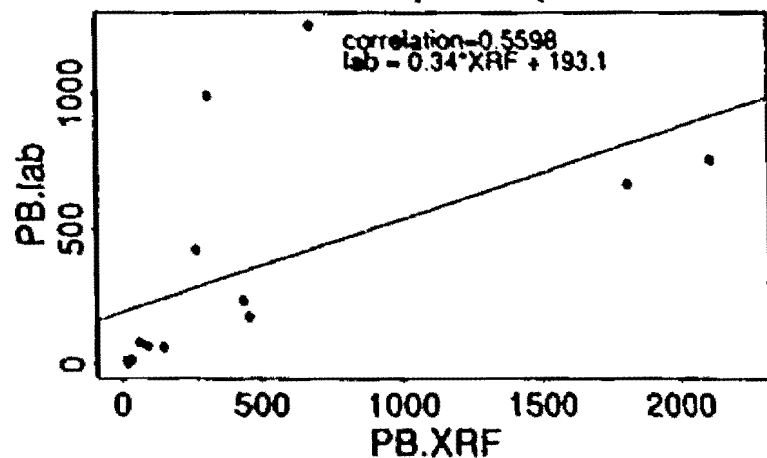
OU1086: all samples



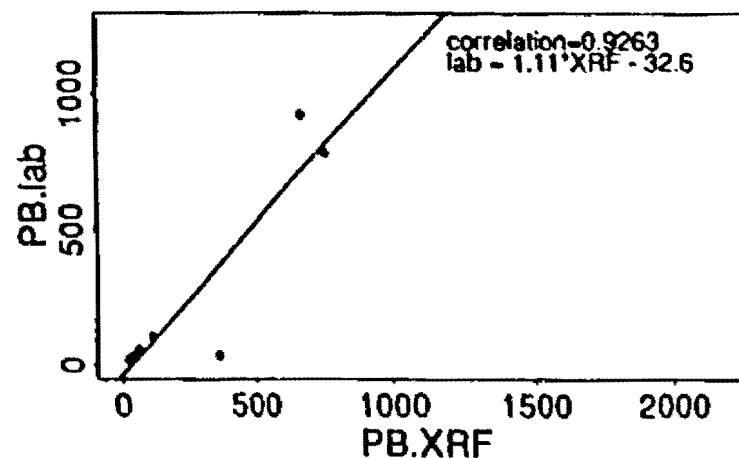
OU1086 (sans outlier)



R-44 Surface Disposal (sans outlier)

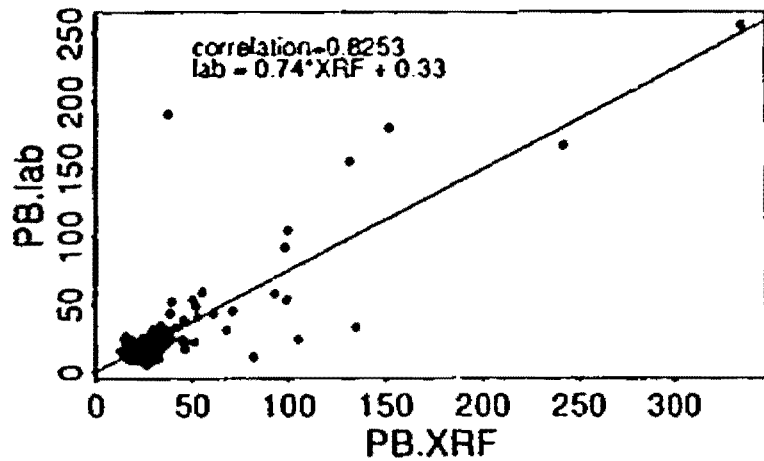


AB Site

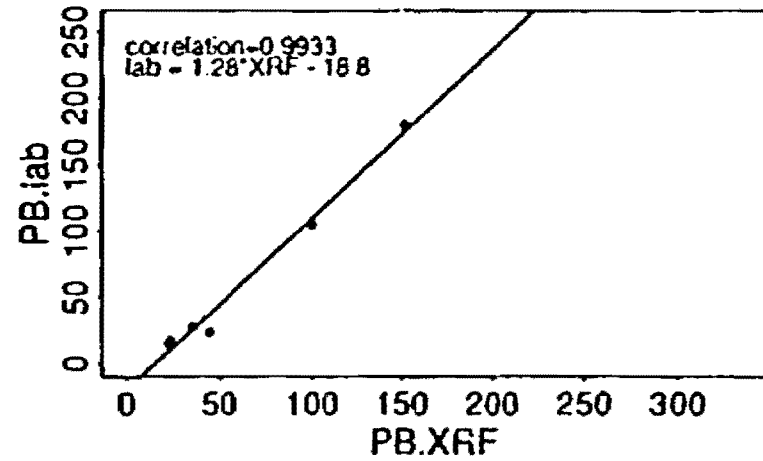


Lead: XRF data vs LAB data

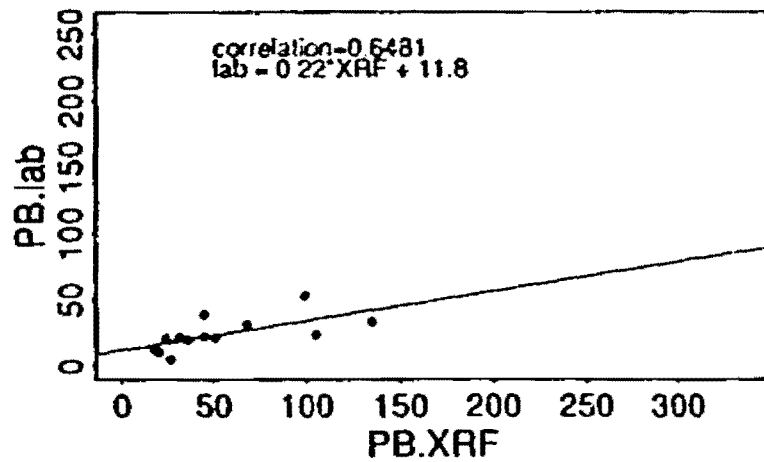
OU1086 sans R-44 & AB Site



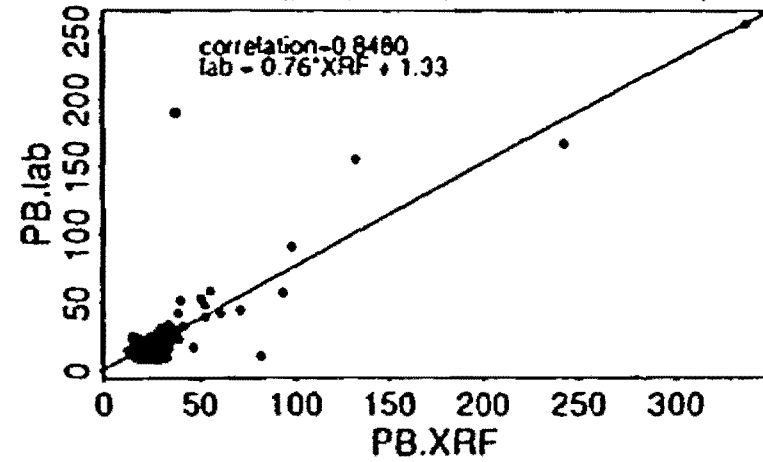
R-183 Wash Area



MDAZ

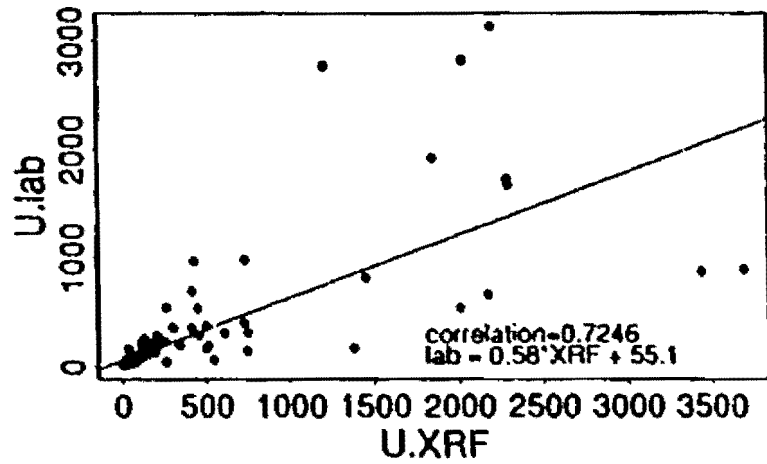


EF Aggregate (EF & C Sites)

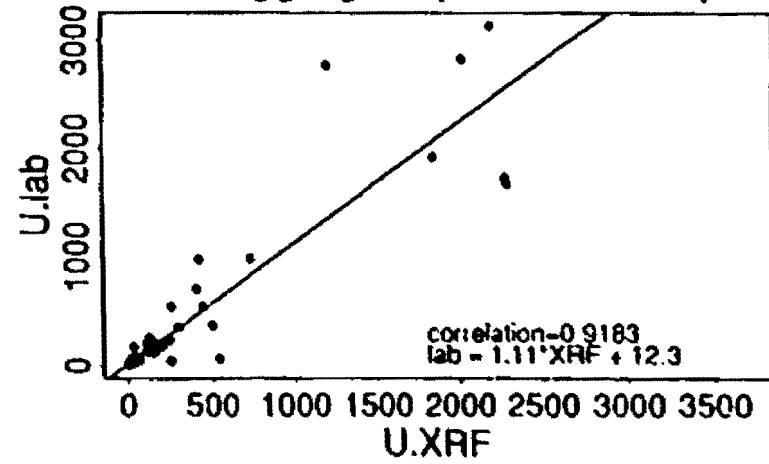


Uranium: XRF data vs LAB data

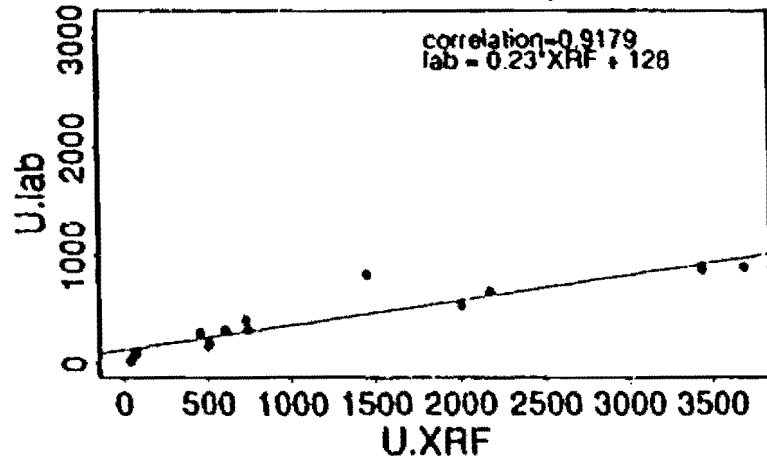
OU1086: all data



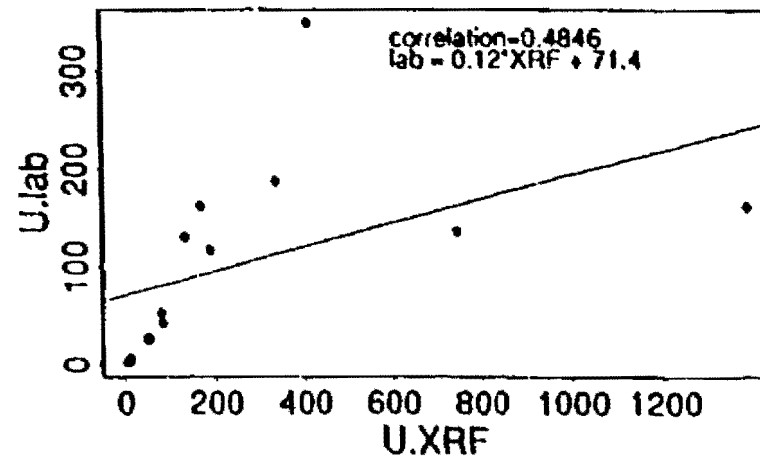
EF Aggregate (EF & C Sites)



R-44 Surface Disposal

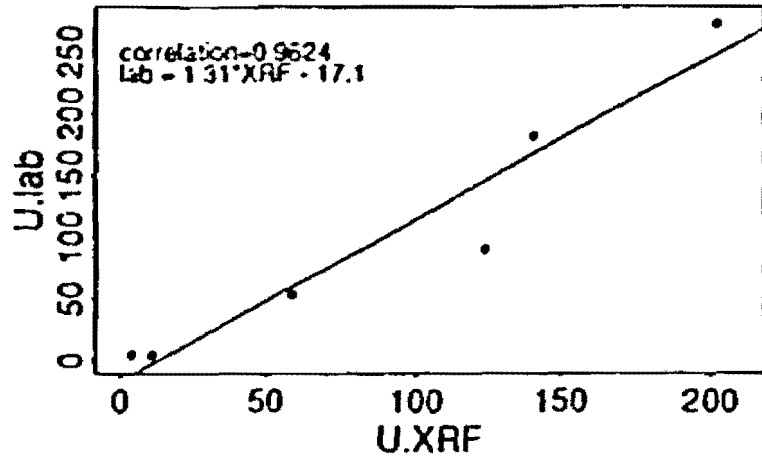


MDA-Z

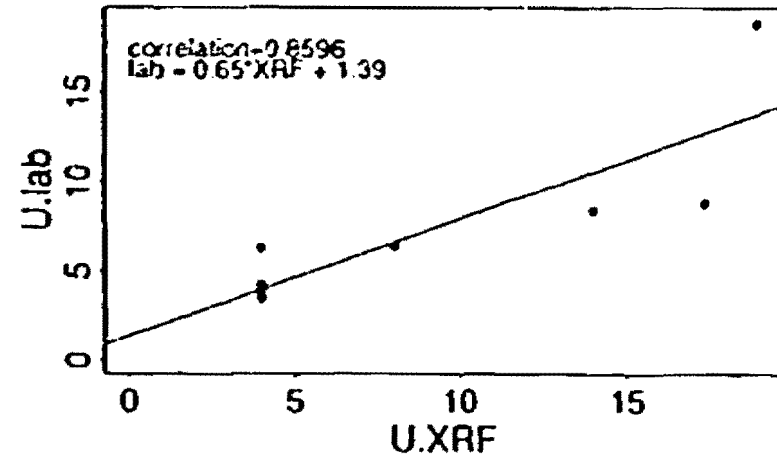


Uranium: XRF data vs LAB data

R-183 Wash Area



AB Site





Appendix D

Field Screening Results and Samples Sent for Fixed Lab Analysis



PRS 15-004 (a,d), Firing Site A-B

Submitted to Lab	AAB# or AAC#	Grid Point # (15)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results @			Chem Van			LIBS
				Beta/ Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta/ Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Miniram (mg/m3)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	U (ppm)	Be (ppm)
	3369	2422	18.24				252	nda	.	0.18	3.69	-53.38	-2.31	<5	25	8	0.227
	0914	2423	0.6	252	.	.	230	.	.	.	11.07	-11.74	0.47	<5	14.3	<8	1
	0923	2423	0.6	(rep of 2423)													
	0918	2424	0.6	280	.	.	235	.	.	.	3.69	11.74	2.69	<5	20.3	<8	1
	3347	2495	0.5	(rep of 2401)							-20.66	-40.8	-2.71	<5	736	<8	0.228
	3350	2495	18.24	(rep of 2401)							6.82	-38.76	-2.03	<5	38	<8	0.318

@ Rad van results have significant error

**XRF SAMPLES COLLECTED AT FIRING SITE A-B,
PRS 15-004 (b,c)**

SAMPLE LOCATION	Pb (in ppm)	SAMPLE LOCATION	Pb (in ppm)
15-2400	35	15-2460	164
15-2401	301	15-2461	236
15-2402	111	15-2462	180
15-2406	306	15-2463	356
15-2421	5	15-2464	785
15-2425	57	15-2465	457
15-2426	112	15-2466	523
15-2427	485	15-2467	480
15-2428	1493	15-2468	396
15-2429	146	15-2469	416
15-2430	283	15-2470	286
15-2431	366	15-2471	122
15-2432	67	15-2472	220
15-2433	142	15-2473	259
15-2434	938	15-2474	397
15-2435	264	15-2475	263
15-2436	84	15-2476	291
15-2437	153	15-2477	364
15-2438	235	15-2478	106
15-2439	320	15-2479	148
15-2440	338	15-2480	413
15-2441	238	15-2481	99
15-2442	346	15-2482	551
15-2443	342	15-2484	27
15-2444	726	15-2485	-25
15-2445	556	15-2486	5.8
15-2446	321	15-2487	-0.9
15-2447	406	15-2488	16
15-2448	254	15-2489	-21
15-2449	227	15-2490	-41
15-2450	527	15-2491	-51
15-2451	221	15-2492	85
15-2452	198	15-2493	261
15-2453	503		
15-2454	180		
15-2455	101		
15-2456	46		
15-2457	225		
15-2458	297		
15-2459	215		

NO. 15-004 (b,c)

PRS 15-004 (a,d), Firing Site C

Submitted to Lab	AABe or AACs	Grid Point # (15-)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results **			Chem Van			LIBS
				Beta/Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta/Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Miniram (mg/m ³)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	U (ppm)	
	3301	2250	0-6	200	nda	-	230	nda	-	0.00	-3.7	10.68	3.49	<5	23	9	0.328
	3389	2250	18-24				260	nda	-	0.00	11.1	-10.68	-1.61	<5	20	9	0.462
	0002	2251	0-6	320	-	-	165	-	-	-	3.69	6.41	-2.03	<5	16.9	21	1.2
	0009	2252	0-6	214	-	-	190	-	-	-	18.45	17.08	-1.89	<5	17.6	<8	1
*	3388	2253	0-6	350	nda	0.19	350	nda	-	0.00	-11.1	14.96	1.65	<5	32	29	0.023
*	3394	2253	18-24				160	nda	-	0.00	3.7	40.27	-0.14	<5	22	<8	0.031
	0028	2254	0-6	2500	-	-	249	-	-	-	-3.69	27.76	1.45	<5	18.9	27.8	0.7
*	0003	2255	0-6	204	-	-	277	-	-	-	-7.38	26.69	0.02	<5	29.5	<8	0.9
	3361	2256	0-6	155	nda	0.9	204	-	-	0.00	-3.7	12.81	0.88	<5	26	18	0.010
	3357	2256	18-24				209	-	-	0.00	-11.1	-29.89	1.72	<5	21	9	0.120
*	3358	2257	0-6	261	nda	0.17	168	nda	-	0.00	-3.7	-21.35	2.92	<5	28	30	0.307
*	3362	2257	18-24				169	nda	-	0.00	-11.1	-29.89	0.24	<5	18	12	0.254
		2258															
	0081	2259	0-6	180	-	-	182	-	-	-	-3.69	-19.22	-0.48	<5	18.2	<8	0.6
	3364	2260	0-6	183	nda	0.04	217	-	-	0.00	-11.1	8.54	0.57	<5	21	13	0.321
	3363	2260	18-24				183	-	-	0.00	11.1	-53.38	0.27	<5	20	<8	0.022
	0025	2261	0-6	210	-	-	210	-	-	-	0	1.07	-3.97	<5	17.5	<8	0.7
	3356	2262	0-6	224	nda	0.64	208	nda	-	0.00	-11.1	-6.41	0.46	<5	28	20	0.486
	3300	2262	18-24				156	nda	-	0.00	-3.7	-23.49	0.71	<5	21	<8	0.315
*	0026	2263	0-6	271	-	-	250	-	-	-	3.69	28.83	-2.37	<5	52.5	22.4	1.1
*	3386	2264	0-6	250	nda	0	200	nda	-	0.00	-11.1	-44.84	1.42	<5	26	26	0.056
*	3396	2264	18-24				180	nda	-	0.00	3.7	-44.84	-0.32	<5	25	<8	0.019
	0024	2265	0-6	223	-	-	170	-	-	-	-14.76	5.34	-2.13	<5	17.8	<8	0.6
	3392	2266	0-6	250	nda	0.17	180	nda	-	0.00	3.7	42.7	0.1	<5	9	14	0.292
	3393	2266	18-24				230	nda	-	0.00	-11.1	32.03	0.36	<5	21	<8	0.078
	0008	2267	0-6	240	-	-	220	-	-	-	-14.76	-18.15	-3.53	<5	27.8	20	0.8
*	3387	2268	0-6	400	nda	-	440	nda	-	0.00	-3.7	32.03	-1.2	<5	61	43	0.090
*	3395	2268	18-24				200	nda	-	0.00	3.7	-61.92	0.41	<5	15	<8	0.175
	0027	2269	0-6	275	-	-	260	-	-	-	11.07	26.69	-0.04	<5	18.9	19.1	1
	0085	2270	0-6	218	-	-	180	-	-	-	-7.38	24.55	-1.36	<5	19.4	14.7	0.8

PRS 15-004 (a,d), Firing Site C

Submitted to lab	AAEs or AACs	Grid Point # (15-)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results **			Chem Van			LBS
				Beta Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Moisture (mg/m ³)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	U (ppm)	Be (ppm)
	0991	2271	0.6	240	-	-	189	-	-	-	-14.76	-19.15	-2.1	<5	22.8	22.8	0.8
	0990	2272	0.6	354	-	-	250	-	-	-	11.07	37.37	0.66	<5	16.9	8.52	1.4
	0994	2273	0.6	292	-	-	251	-	-	-	-3.69	13.88	-1.38	<5	15.6	<8	1.1
	0987	2274	0.6	311	-	-	262	-	-	-	-3.69	43.77	0.66	<5	21.7	<8	1.4
	0984	2281	0.6"	156	-	-	166	-	-	-	-11.07	17.08	-2.6	<5	40.9	<8	1
	0983	2281	6-12"	-	-	-	162	-	-	-	-3.69	-14.95	0.07	<5	22.9	13.2	0.7
	0986	2282	0.6"	229	-	-	193	-	-	-	3.69	0	-1.15	<5	22.2	9.77	0.9
	0982	2282	18-24"	-	-	-	160	-	-	-	11.07	-4.27	-0.93	<5	27.5	<8	1
	3360	2296	0.6	(top of 2260)							-11.1	38.43	1.61	<5	26	14	0.256
	3359	2296	18-24	(top of 2260)							-11.1	-27.76	0.44	<5	21	<8	0.079

** Rad van results have significant errors

⊗ C 15-2256 = EF 15-2100

⊗ C 15-2266 = EF 15-2111

⊗ C 15-2268 = EF 15-2112

PRS 15-004(f), E-F Site and PRS 15-008(a)

Submitted to lab	AAB# or AAC#	Grid Point # (15-)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results @			Chem Van			LIBS
				Beta' Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta' Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Miniram (mg/m3)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	U (ppm)	
*	3333	2100	0.6	155	nda	0.9	204	-	-	0.00	3.7	-19.22	1.02	<5	23	16	0.026
*	3451	2100	18.24	-	-	-	209	-	-	0.00	3.7	-4.27	-0.84	<5	22	<8	0.121
*	3317	2101	0.6	250	nda	0.1	260	nda	0.1	0.00	25.83	64.06	1.43	<5	31	27	0.013
		2102															
		2103															
	3311	2104	0.6	240	nda	0.12	295	nda	-	0.00	0	-4.27	0.62	<5	19	16	0.449
		2105															
		2106															
		2107															
		2108															
		2109															
		2110															
	3489	2111	0.6	250	nda	0.17	180	nda	-	0.00	-3.7	-4.27	-0.83	<5	17	12	0.190
*	3461	2112	0.6	400	nda	0.42	440	nda	-	0.00	11.1	68.33	0.67	<5	52	47	0.066
	3296	2113	0.6	220	nda	0.21	280	nda	-	0.00	11.07	12.81	0.16	<5	20	14	0.165
*	3476	2114	0.6	240	nda	0.04	300	nda	-	0.00	3.69	68.33	1.06	<5	14	26	0.555
*	3487	2114	18.24		nda		240	nda	-	0.00	11.07	130.25	1.52	<5	22	<8	0.065
*	3306	2115	0.6	290	nda	0.04	320	nda	-	0.16	0	-14.95	4.38	<5	26	43	0.318
		2116															
		2117															
		2118															
*	3484	2119	0.3	206	nda	-	375	nda	0.06	0.78	22.14	55.52	0.36	<5	29	32	0.368
	3471	2119	18.24				222	nda	-	0.19	14.76	-8.54	-0.43	<5	19	<8	0.205
		2120															
	3314	2121	0.6	311	nda	0.14	211	0.50	-	0.96	0	-8.54	0.59	<5	17	18	0.565
	3299	2121	18.24				310	nda	-	0.08	0	-4.27	3	<5	12	<8	0.203
	3335	2122	0.6	170	nda	0.13	200	nda	-	0.08	11.07	17.08	2.19	<5	18	<8	0.248
	3315	2122	18.24				210	nda	-	0.15	3.69	0	0.92	<5	19	<8	0.235
*	3521	2123	0.6	300	nda	0.51	220	nda	-	0.00	11.07	153.74	1.73	<5	20	10	0.117
	3301	2124	0.6	240	nda	-	270	nda	-	0.00	18.45	34.16	-0.16	<5	23	39	0.324
	3319	2124	18.24				260	nda	-	0.00	-3.69	-40.57	0.53	<5	23	<8	0.231

PRS 15-004(f), E-F Site and PRS 15-008(a)

Submitted to Lab	AAE# or AAC#	Grid Point # (15)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results @			Chem Van			UBS
				Beta/Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta/Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Uranium (mg/m3)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	U (ppm)	
*	3339	2125	0.6	220	nda	-	210	nda	-	0.00	3.69	74.73	2.32	<5	22	65	0.655
	3325	2126	0.6	200	nda	0.51	220	nda	-	-	-3.69	29.89	1.11	<5	21	21	0.254
*	3349	2127	18.24	319	nda	0.29	230	nda	-	0.00	11.07	70.46	1.21	<5	28	11	0.079
		2128															
		2129															
		2130															
*	3334	2131	0.6	265	nda	0.09	278	nda	-	1.96	0	12.81	0.9	<5	28	9	0.415
	3468	2132	0.6	311	nda	0.12	327	nda	-	0.46	7.38	36.3	-0.52	<5	24	20	0.816
	3313	2133	0.6	200	nda	0.31	200	nda	-	-	3.69	6.41	2.04	<5	24	18	0.370
*	3450	2134	0.6	200	nda	0.35	220	nda	-	-	3.69	91.81	5.36	<5	23	11	0.405
	3309	2134	18.24				200	nda	-	0.00	18.45	-93.55	1.32	<5	26	<8	0.890
	3316	2135	0.6	210	nda	0.32	260	nda	-	1.59	-3.69	12.81	1.13	<5	21	<8	0.163
	3337	2136	18.24	268	nda	0.09	290	nda	-	0.08	7.38	-4.27	-1.92	<5	16	<8	0.159
*	3332	2137	18.24	418	nda	0.07	218	nda	-	0.36	-7.38	-119.57	-2.17	<5	28	14	0.272
		2138															
*	3312	2139	17.23	347	0.50	0.19	190	nda	-	0.21	14.76	2.14	0.82	<5	28	31	0.548
	3479	2140	0.4	296	0.50	0.07	192	nda	-	0.19	7.38	34.16	0.44	<5	26	28	0.327
*	3515	2141	0.4	1060	nda	0.11	555	nda	-	1.52	0	-44.84	3.99	<5	38	198	0.106
	3308	2142	0.45	508	nda	0.01	284	nda	-	0.16	-7.38	-25.62	1.39	<5	16	8	0.645
	3524	2143	0.4	496	nda	0.13	312	nda	-	0.11	0	-4.27	-0.67	<5	30	20	0.259
*	3341	2144	0.6	400	nda	-	170	nda	-	-	3.69	55.52	3.34	<5	28	29	0.116
*	3452	2145	0.6	250	nda	-	450	nda	-	0.15	3.69	151.6	2.11	<5	29	135	0.320
	3310	2146	0.6	210	nda	-	250	nda	-	0.09	-3.69	-21.35	1.81	<5	25	20	0.437
		3310	0.6											<5	22	18	
*	3343	2147	18.24	250	nda	0.14	200	nda	-	0.06	3.69	108.9	0.78	<5	17	13	0.123
		2148															
*	3327	2149	3.9	323	nda	0.03	352	nda	-	0.93	0	-32.03	0.15	<5	39	120	0.424
		2150															
*	3466	2151	18.24	221	nda	0.13	195	nda	-	1.07	0	-61.14	-1.98	<5	25	10	0.356
*	3458	2152	0.45	1010	nda	0.52	487	nda	-	0.06	-7.38	70.46	5.09	<5	34	160	0.706
	3467	2152	18.24				328	nda	-	0.37	-7.38	-59.79	-1.35	<5	20	<8	0.419

PRS 15-004(f), E-F Site and PRS 15-008(a)

Submitted to lab	AAB# or AAC#	Grid Point # (15-)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results @			Chem Van			LiBS
				Beta' Gamma (cpm)	Alpha (cpm)	Direct Reading g (mR/hr)	Beta' Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Miram (mg/m3)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	U (ppm)	Be (ppm)
*	3344	2153	0-5	1710	nda	0.08	834	nda	-	1.04	22.14	194.3	6.61	<5	16	260	0.480
*	3304	2153	9-15				465	nda	-	0.89	-7.38	-38.43	2.16	<5	29	8	0.371
*	3528	2154	0-2.5	253	nda	0.08	345	nda	-	0.76	-7.38	21.35	1.31	<5	24	49	0.031
*	3475	2155	0-6	350	nda	-	4500	nda	-	0.10	188.19	1368.67	66.95				
	3303	2156	0-6	260	nda	-	300	nda	-	1.62	-3.69	-12.81	1.54	<5	22	8	
	3303	2156	0-6											<5	26	21	
	3338	2156	18-24				230	nda	-	1.08	3.69	29.89	0.76	<5	22	<8	0.362
	3338	2156	18-24											<5	21	<8	
*	3307	2157	18-24	4000-1000	nda	-	220	nda	-	0.06	11.07	-2.14	1.41	<5	13	<8	0.398
	3307	2157	18-24											<5	17	<8	
		2158															
		2159															
		2160															
		2161															
		2162															
		2163															
	3465	2164	0-5	281	nda	0.07	225	nda	-	0.06	0	17.08	-0.81	<5	20	9	0.366
	3511	2165	0-6	295	nda	0.06	254	nda	-	0.00	7.38	32.03	0.22	<5	19	9	0.424
	3514	2165	6-12				245	nda	-	0.11	0	8.54	-0.81	<5	17	12	0.347
*	3342	2166	0-4	260	nda	-	310	nda	-	0.18	11.07	87.54	-0.8	<5	33	52	0.451
	3342	2166	0-4											<5	28	59	
*	3300	2167	0-6	230	nda	-	210	nda	-	0.66	18.45	36.3	1.28	<5	22	16	0.598
	3300	2167	0-6											<5	25	27	
	3297	2167	12-18				260	nda	-	-	-3.69	32.03	-2.23	<5	20	<8	0.230
	3297	2167	12-18											<5	18	18	
		2168															
		2169															
*	3323	2170	18-24	558	nda	0.08	258	nda	-	0.88	0	-6.41	-1.59	<5	22	10	0.308
		2171															
*	3477	2172	18-24	446	nda	0.07	248	nda	-	0.00	-14.76	72.6	2.58	<5	20	<8	0.063
*	3324	2173	18-24	339	nda	0.2	206	nda	-	0.07	0	-29.89	-2.11	<5	26	16	0.286

PRS 15-004(I), E-F Site and PRS 15-008(a)

Submitted to Lab	AAE# or AAC#	Grid Point # (15-)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results @			Chem Van			UGS
				Beta/Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta/Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Miniram (mg/m ³)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	U (ppm)	
		2174															
	3453	2175	0.6	333	nda	0.22	311	nda	-	0.20	0	4.27	1	<5	15	16	0.221
	3512	2175	16-22				250	nda	-	0.00	0	0	-1.65	<5	20	11	0.348
	3510	2176	0.6	441	nda	0.13	274	nda	-	0.35	0	19.22	3.12	<5	20	32	0.272
*	3318	2177	0.6	486	nda	0.26	540	nda	-	0.93	25.83	179.36	3.32	<5	33	154	0.347
*	3336	2178	0.6	300	nda	-	200	nda	-	0.68	-3.69	70.46	1.93	<5	32	48	0.358
*	3472	2179	0.4	393	nda	0.15	340	nda	-	0.00	11.07	-27.76	-1.44	<5	34	38	0.324
*	3520	2180	6-12	480	nda	0.22	454	nda	-	0.29	11.07	12.81	-6.15	<5	17	14	0.468
		2181															
*	3470	2182	18-24	322	nda	0.16	210	nda	-	0.00	-7.38	-23.42	2.01	<5	24	15	0.335
		2183															
		2184															
	3482	2185	0.6	392	nda	0.07	295	nda	-	0.65	6.62	-38.76	-2.76	<5	16	12	0.058
	3454	2186	0.6	329	nda	0.24	297	nda	-	0.12	0	-32.03	1.02	<5	15	8	0.222
	3457	2187	0.6	230	0.50	0.01	226	nda	-	0.00	0	-27.76	0.26	<5	16	17	0.062
		2188															
	3322	2189	0.6	289	nda	0.02	319	nda	-	0.04	-3.62	85.41	-3.14	<5	26	37	0.500
		2190															
*	3527	2191	0.6	1800	nda	0.32	1420	nda	0.24	-	11.07	102.42	-1.91	<5	32	448	0.033
		2192															
	3464	2194	0.6	419	nda	0.22	285	nda	-	0.45	-6.62	-34.68	-1.42	<5	23	16	0.047
	3293	2196	0.6	(rep of 2134)							18.45	0	0.52	<5	21	8	0.097
	3481	2196	18-24	(rep of 2134)							11.07	93.95	-0.1	<5	23	8	0.184
*	3485	2198	0.6	(rep of 2131)							7.58	-2.14	1.58	<5	38	26	0.344
	3509	2199	0.6	(rep of 2175)							-7.38	-6.41	-1.65	<5	16	35	0.227
	3455	2199	16-22	(rep of 2175)							0	-8.54	-1.12	<5	20	8	0.388
	3460	2200	0.6	714	nda	0.09	363	nda	-	0.66	-34.44	-28.56	-1.53	<5	21	13	0.205
	3462	2200	15-21				362	nda	-	0.31	-34.44	-14.25	-1.26	<5	19	8	0.313
		2201															
	3517	2202	0.6	370	nda	0.16	321	nda	-	0.43	0	-2.14	0.17	<5	20	8	0.037
	3463	2202	11-15				326	nda	-	-	-7.38	-36.3	0.69	<5	18	8	0.333

PRS 15-004(f), E-F Site and PRS 15-008(a)

Submitted to lab	AAB# or AAC#	Grid Point # (15-)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results @			Chem Van			LBS
				Beta' Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta' Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Miniram (mg/m3)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	1 (ppm)	Es (ppm)
		2203															
*	3295	2206	0-4	386	nda	0.04	312	nda	-	0.04	-3.69	104.63	-0.27	<5	24	25	0.556
	3486	2210	0-6	500	nda	0.57	381	nda	-	1.02	-20.66	-42.84	-0.57	<5	23	35	0.291
		2211															
	3469	2212	0-6	320	nda	0.09	230	nda	-	1.82	-34.44	4.08	-0.97	<5	16	16	0.102
	3468	2213	0-6	252	nda	0.06	252	nda	-	0.10	7.38	-14.95	0.9	<5	25	<8	0.394
	3513	2214	0-6	350	nda	0.03	324	nda	-	0.10	-7.38	-36.3	1.27	<5	23	15	0.114
*	3478	2226	0-6	812	0.50	0.03	365	nda	-	0.50	0	-104.63	0.82	<5	33	186	0.302
*	3518	2227	0-6	482	nda	0.11	516	nda	-	-	-7.38	2.14	1.29	<5	32	197	0.639
*	3320	2228	0-6	3840	nda	0.18	2620	nda	0.22	-	14.76	597.86	32.1	<5	132	2283	
*	3326	2229	0-4	725	nda	0.02	573	nda	-	0.00	-11.07	14.95	1.59	<5	24	113	0.332
*	3302	2230	0-3	649	nda	0.04	642	nda	-	0.00	-11.07	25.62	2.72	<5	15	138	0.156
*	3328	2231	0-5	4820	nda	0.26	1520	nda	0.34	0.00	25.83	721.7	15.64	<5	29	409	0.743
*	3491	2232	0-4	260	-	0.09	258	-	-	-	-	-	-	-	-	-	
*	3490	2233	0-4	354	-	0.08	281	-	-	-	-	-	-	-	-	-	
*	3474	2234	0-10	4080	nda	0.01	2850	nda	0.02	0.00	73.8	1469.02	38.45	Too hot for XRF			
*	3329	2235	0-8	2620	nda	0.61	2670	nda	0.2	1.09	0	651.24	26.32	<5	335	2291	0.628
*	3483	2236	0-12	1030	nda	0.2	489	nda	0.2	0.00	14.76	143.06	0.68	<5	29	31	0.417
		2237															
		2238															
*	3516	2239	0-12	1260	nda	0.13	2120	nda	0.18	-	-7.38	540.21	25.76	<5	93	1846	0.326
*	3213	2240	0-6	1230	nda	0.06	337	nda	-	0.00	-11.07	-53.38	-1.04	<5	82	542	0.112
*	3331	2241	0-6	241	nda	0.06	224	0.50	-	0.00	-11.07	-64.06	-2.92	<5	24	67	0.206
*	3473	2242	0-12	904	nda	0.06	3270	nda	0.27	0.00	-14.76	143.06	28.82	<5	55	2027	0.076
*	3331	2243	0-12	658	nda	0.36	401	nda	0.14	0.00	-14.76	-53.38	3.56	<5	32	128	0.242
*	3523	2244	0-6	800	nda	0.28	550	nda	0.2	0.00	3.69	65.12	0.76	<5	25	19	1.1
	0325	2244	96-102	-	-	-	131	nda	-	-	14.76	27.76	-4.31	<5	24.30	24.5	1.4
	0335	2244	96-102	-	-	-	131	nda	-	-	0	-10.68	-0.67	<5	14.90	25.6	1
	0334	2244	162-168	-	-	-	148	nda	-	-	25.83	17.08	0.91				1.1
*	3526	2245	0-6	500	nda	0.09	772	nda	0.16	0.00	3.69	-24.55	-1.01	<5	22	128	0.9
	0344	2245	108-114	-	-	-	115	nda	-	-	-7.38	-12.81	-3.68	<5	22.30	<8	1.3

PRS 15-004(f), E-F Site and PRS 15-008(a)

Submitted to IAD	AARS or AACR	Grid Point # (15)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results @			Chem Van			LIBS
				Beta Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Microm (mg/m ³)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	U (ppm)	Be (ppm)
*	0342	2245	108-174	-	-	-	434	nda	-	-	51.66	286.12	-0.71	<5	20.30	499	1
*	3445	2246	0.6	2050	nda	0.06	2350	-	0.24	0.00	18.45	784.69	50.83	<5	30	1206	1.6
*	0339	2246	22-28	-	-	-	224	nda	-	-	-14.76	13.88	0.82	<5	45.90	257	0.8
*	0740	2246	44-50	-	-	-	241	nda	-	-	-7.38	50.18	0.92	<5	16.70	30.7	1.1
*	3420	2247	0.6	4010	-	0.06	4420	nda	0.1	0.00	-3.69	103.56	1.17	<5	71	2199	1.9
*	0346	2247	21-27	-	-	-	246	nda	-	-	-7.38	55.58	0.35	<5	26.50	126	1.1
*	0345	2247	57-63	-	-	-	325	nda	-	-	-7.38	77.94	4.79	<5	20.40	49.2	1.1
*	3447	2248	0.6	1940	nda	0.5	1500	nda	0.06	0.00	-3.69	41.64	19.98	<5	50	735	1.2
*	0343	2248	12-18	-	-	-	142	nda	-	-	-14.76	11.74	1.69	<5	17.00	12	1
*	3449	2249	0.6	824	nda	0.05	968	nda	0.2	0.00	-3.69	229.54	10.39	<5	37	423	2.0
*	0341	2249	35-41	-	-	-	416	nda	-	-	0	79	0.53	<5	28.10	298	1.2
*	3321	2277	0.5	511	nda	0.3	303	nda	-	0.00	0	-29.80	-0.85	<5	58	40	0.224
*	3254	2278	0.6	213	nda	0.04	281	nda	-	0.00	-7.38	-25.62	21.41	<5	242	13	0.204
*	3525	2279	0.6	436	nda	0.03	343	nda	-	0.00	7.38	-17.08	-2.92	<5	37	40	0.368
*	3537	2283	0.4	-	-	-	2700	-	0.35	0.00	3.69	671.52	46.21	<5	61	2977	11.7
*	0328	2290	0.6	-	-	-	308	nda	-	-	-7.38	46.97	11.87	<5	21.40	243	1.3
*	0327	2290	108-114	-	-	-	168	nda	-	-	3.69	8.54	-5.01	<5	20.50	56.5	1.2
*	0326	2290	192-198	-	-	-	150	nda	-	-	-3.69	83.27	-0.12				1.2
*	0336	2291	0.6	165	-	-	127	nda	-	-	-7.38	38.43	-2.49	<5	12.00	28.4	0.9
*	0337	2291	68-54	-	-	-	119	nda	-	-	-7.38	-10.68	-0.33	<5	19.40	8.53	1.3
*	0338	2291	116-124	-	-	-	148	nda	-	-	0	-8.54	-3.19	<5	17.40	8.33	1
*	3325	2295	(rep of 2227)								7.38	-32.03	2.23	<5	23	164	0.691
*	3460	2299	(rep of 2182)								-14.76	32.03	3.25	<5	27	19	0.250

@ Rad van results have significant errors

PRS 15-007(b), MDA Z

Submitted to Lab	AAB#	Grid Point # (15)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results @			Chem Van			LIRS
				Beta Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Miniram (mg/m3)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	U (ppm)	Be (ppm)
	3427	2300	0-6	300	nda	0.12	192	nda	-	0.00	3.69	4.27	-2.85	<5	20	<8	0.007
	3438	2301	0-5	714	nda	0.26	388	nda	-	-	7.38	-143.06	0.07	<5	31	131	0.262
	3534	2301	0-5	SVOC analysis only													
	3422	2301	18-24				227	nda	-	0.00	7.38	-46.97	-2.12	<5	20	11	1.0
	3539	2301	18-24	SVOC and VOC analyses only													
	3437	2302	0-6	216	nda	0.06	220	nda	-	0.33	-3.69	-36.30	1.04	<5	23	12	0.579
	3443	2302	18-24				269	nda	-	0.00	-7.38	-64.06	0.44	<5	26	<8	0.9
	3540	2302	18-24	SVOC and VOC analyses only													
	3432	2303	0-6	179	nda	0.04	180	nda	-	0.00	3.69	2.14	-4.00	<5	35	19	0.041
	3432	2303	0-6											<5	31	11	
	3424	2303	10-24				160	nda	-	0.00	-7.38	40.57	2.00	<5	24	187	3.0
	3541	2303	18-24	SVOC and VOC analyses only													
	3436	2304	0-6	250	nda	0.14	186	nda	-	0.00	-7.38	-29.89	0.55	<5	25	16	0.161
	3421	2304	10-15				225	nda	-	0.00	-7.38	-38.43	-0.62	<5	18	10	0.8
	3542	2304	10-15	SVOC and VOC analyses only													
	3428	2305	0-6	406	nda	0.02	223	nda	-	0.00	25.83	55.52	1.97	<5	45	167	1.705
	6080	2305	0-6	VOC analysis only													
	3431	2306	0-6	257	nda	0.27	194	nda	-	-	7.38	-125.98	-2.14	<5	45	80	0.396
	3538	2306	0-6	VOC analysis only													
	3433	2307	0-6	369	nda	0.02	363	nda	-	0.00	11.07	123.64	0.66	<5	105	744	0.914
	3537	2307	0-6	VOC analysis only													
	3442	2307	12-18				680	nda	-	0.00	-3.69	-22.42	1.67	8	135	1378	1.9
	3543	2307	18-30	SVOC and VOC analyses only													
	3430	2308	0-6	812	nda	0.08	416	nda	-	0.00	11.07	117.44	2.77	<5	68	337	1.664
	3533	2308	0-6	SVOC analysis only													
	3426	2309	0-3	226	nda	0.22	186	nda	-	0.00	-14.76	-14.95	-1.19	<5	23	11	0.145
	3429	2310	0-6	395	nda	0.05	603	nda	-	0.00	3.69	74.73	2.60	<5	93	409	1.808
	3535	2310	0-6	SVOC analysis only													
	3435	2311	0-6	218	nda	0.19	250	nda	-	-	-7.38	-183.63	-2.23	<5	51	83	0.462
	3536	2311	0-6	SVOC analysis only													
	3444	2311	18-24				200	nda	-	0.00	11.07	43.77	-2.18	<5	36	51	1.4

PRS 15-007(b), MDA Z

Submitted to Lab	AAB#	Grid Point # (15)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results ⊕			Chem Van			LIBS
				Beta/Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta/Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Miniram (mg/m3)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	U (ppm)	Be (ppm)
*	3544	2311	18-24	SVOC and VOC analyses only													
	3430	2312	0-5	226	nda	0.11	187	nda	-	0.00	-7.38	-46.97	1.85	<5	32	19	0.106
	3440	2313	0-4	219	nda	-	226	nda	-	-	7.38	-145.19	-3.51	<5	27	<8	0.256

⊕ Rad van results have significant error

PRS 15-008(b), R-44 Disposal Site

Submitted to lab	AAB# or AAC#	Grid Point # (15-)	Depth (inches)	Surface Measurements			Sample Measurements				Rad Van Results @			Chem Van			LIBS
				Beta/Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta/Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Miniram (mg/m3)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	Hg (ppm)	Pb (ppm)	U (ppm)	
*	3503	2500	0-6	1220	nda	0.16	700	nda	0.39	0	0	38.43	7.94	<5	314	744	7.7
*	3504	2500	18-24				344	nda	0.02	0	0	-2.14	1.49	<5	17	38	2.4
*	3398	2501	0-6	2400	0-50	0.05	682	nda	-	0	7.38	125.98	1.89	<5	62	450	15.7
*	3530	2501	18-24				353	nda	0.09	0	14.76	-100.35	0.57	<5	20	77	1.9
*	3355	2502	0-6	1610	0-50	0.11	1030	nda	0.22	0	0	439.85	7.23	<5	455	2173	166.4
*	3401	2502	18-24				817	nda	-	0	0	8.54	5.81	<5	91	606	
*	3353	2503	0-6	761	0-50	0.05	834	nda	-	0	-7.38	85.41	9.85	<5	676	728	45.6
*	3352	2503	18-24				400	nda	-	0	-7.38	-51.25	3.2	<5	33	56	2.8
*	3400	2504	0-6	1320	nda	0.07	1880	0-50	0.55	0	14.76	196.44	16.66	<5	2114	3693	89.0
*	3528	2505	0-6	729	nda	0.11	2500	nda	0.04	0	14.76	367.26	210.54	<5	852	1664	88.6
*	3531	2506	0-6	726	nda	0.12	873	0-50	-	0	-7.38	-6.41	4.38	<5	267	1451	128.0
*	3399	2507	0-6	1370	nda	0.12	1160	nda	0.07	0	-7.38	44.84	30.39	<5	436	2006	111.8
*	3402	2508	0-6	867	nda	0.04	506	nda	-	0	0	21.35	3.97	<5	147	510	31.7
*	3397	2508	0-6	888	nda	0.12	534	nda	-	0	0	194.3	5.44	<5	160	687	14.8
*	0095	2510	18-24	300	-	-	522	-	-	-	-3.69	72.6	-1.88	-	-	-	45
*	3354	2506	0-6	(rep of 2504)							0	104.63	14.74	<5	1811	3441	95.1

@ Rad van results have significant error

PRS 15-012(b), R-183 Operational Release

Date	Time	Grid Footc (15')	Depth (feet)	Surface Measurements			Sample Measurements				Rad Van Results @				Chem Van			LIBS
				Beta Gamma (cpm)	Alpha (cpm)	Direct Reading (mR/hr)	Beta Gamma (cpm)	Alpha (cpm)	Event Reading (mR/hr)	Moisture (mg/m ³)	Alpha (pCi/g)	Beta (pCi/g)	Gamma (pCi/g)	19 (ppm)	Pb (ppm)	U (ppm)	Be (ppm)	
3424	2525	06	18 24	301	nda	016	211	nda	.	.	.	-7.38	-71.53	0.75	.5	34	27	0.200
3425	2525	06	18 24		nda		245	nda	.	.	.	0	-172.24	-1.23	.5	20	8	0.209
3426	2526	06	18 24	484	nda	017	408	nda	.	.	.	-14.76	-1.07	2.19	.5	35	141	1.530
3415	2525	06	18 24		nda		249	nda	.	.	.	0	-105.48	-0.99	.5	22	11	0.201
3417	2527	06	18 24	345	nda	012	450	nda	.	.	.	-14.76	-217.29	3.76	.5	152	232	1.449
3407	2527	06	18 24	347	nda	007	323	nda	.	.	.	7.38	80.07	-0.92	.5	44	59	0.526
3412	2528	06	18 24		nda		340	nda	.	.	.	0	-109.96	-0.15	.5	36	54	0.468
3410	2528	06	18 24		nda		228	nda	.	.	.	0	-97.15	-1.05	.5	23	.8	0.282
3416	2529	06	18 24	221	0.50	012	419	nda	.	.	.	-14.76	-193.24	-1.09	.5	100	124	0.702
3428	2529	06	18 24		nda		274	nda	.	.	.	-7.38	-39.5	-0.37	.5	23	.8	0.152
3414	2530	06	18 24	250	nda	011	269	nda	.	.	.	-7.38	-86.48	-1.15	.5	34	63	0.256
3429	2530	06	18 24		nda		200	nda	.	.	.	-7.38	-161.21	-0.66	.5	19	.8	0.237
3403	2535	06	18 24		nda							-14.76	-114.23	1.32	.5	95	124	0.684
3411	2535	06	18 24		nda							22.14	-118.5	-0.44	.5	21	11	0.237

@ Rad Van results have significant error

15-012(b), R-183



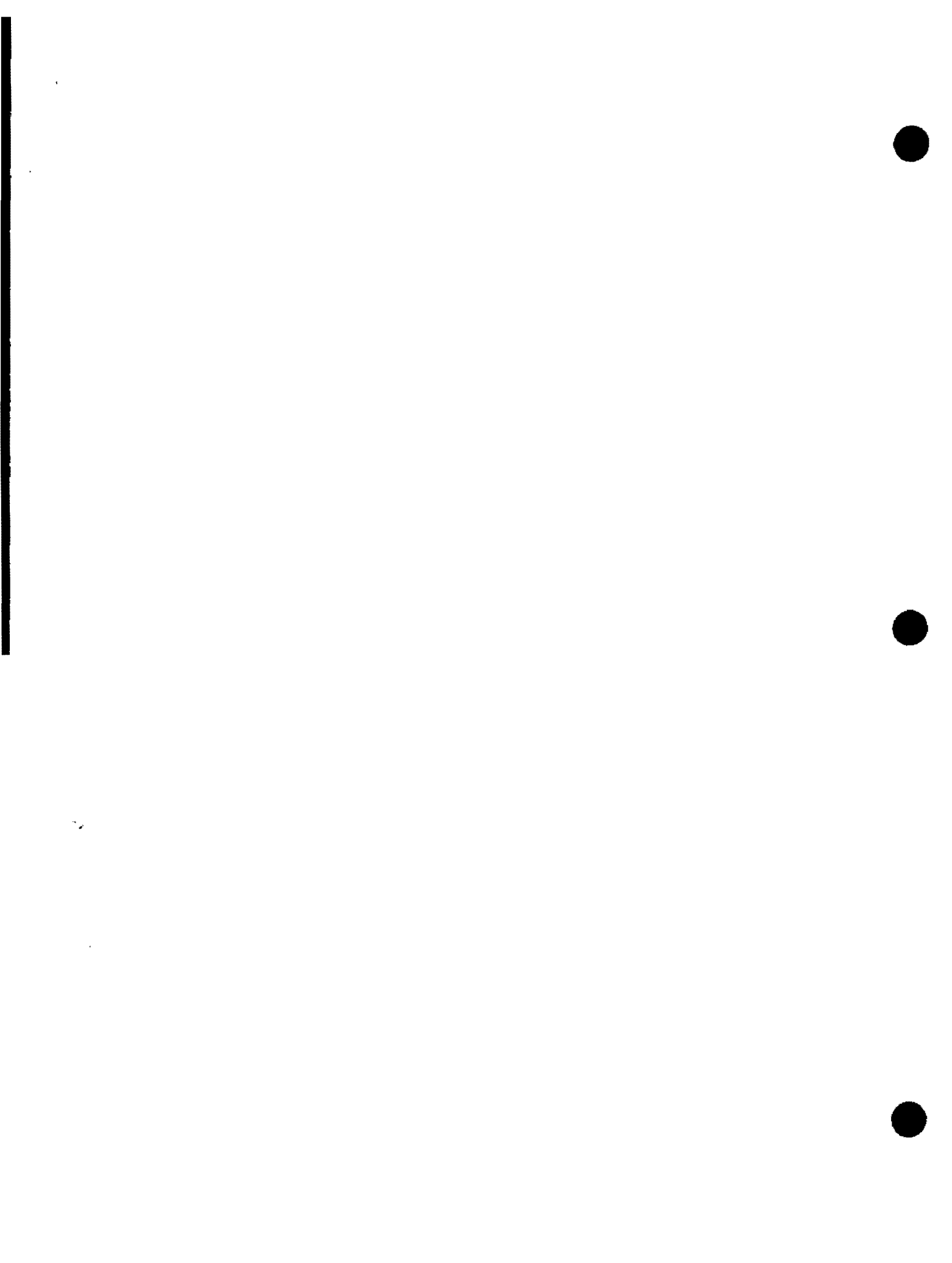


Appendix E Radiological Screening Data

A Ludlum 2221 with a Ludlum 4410 2x2 sodium iodide probe was calibrated for natural uranium. Readings were collected at the grid points of each PRS at a height of three feet and at the soil surface. Each reading was integrated for 60 seconds, and recorded in the field notebook.

The following tables show the data from each PRS.

4
12
6
15
0
3
4
14
7
12
0
4



PRS 15-004 (b,c) Firing Site A-B			
Grid point	AAB or AAC #	Ludlum 2221 with Ludlum 4410 2x2 NaI Probe	
		3' reading (cpm)	Surface reading (cpm)
15-2400		4612	4499
15-2401	3367, 3365	4474	4592
15-2402		5086	5035
15-2403	3346, 3368	4994	5141
15-2404		4826	4982
15-2405	3351, 3349	5197	5169
15-2406	0997	4798	4771
15-2407	3371, 3372	4660	4766
15-2408		4962	5151
15-2409		5232	5290
15-2410	0906	5321	5503
15-2411	0919	4986	5038
15-2412	0913	5342	5305
15-2413	0921	5575	5264
15-2414	3366, 3375	5332	5381
15-2415	0920	5251	5143
15-2416	3497, 3376	5180	5379
15-2417	0916	5162	5424
15-2418	3374, 3348	5162	5257
15-2419	0922	5357	5437
15-2420	3370, 3345	5205	5319
15-2421		5246	5356
15-2422	3373, 3369	5273	5259
15-2423	0914, 0923	5359	5383
15-2424	0918	5530	5514

Background reading 6426 cpm
Probe calibrated for Natural Uranium

PRS 15-004 (a,d) Firing Site C			
Grid point	AAB or AAC #	Ludlum 2221 with Ludlum 4410 2X2 Nai Probe	
		3' reading (cpm)	Surface reading (cpm)
15-2250	3391, 3389	12129	12715
15-2251	0992	12428	13110
15-2252	0989	12267	12150
15-2253	3388, 3394	13935	26518
15-2254	0928	13262	13167
15-2255	0993	10667	11197
15-2256	3361, 3357	11799	11923
15-2257	3358, 3362	12364	12761
15-2258		12344	12308
15-2259	0981	12564	12921
15-2260	3364, 3363	11494	11557
15-2261	0925	10889	10742
15-2262	3356, 3390	10235	10558
15-2263	0926	11189	11168
15-2264	3386, 3396	12213	12347
15-2265	0924	11818	11931
15-2266	3392, 3393	11372	11915
15-2267	0988	11531	11403
15-2268	3387, 3395	12394	21074
15-2269	0927	11064	11242
15-2270	0985	11306	11762
15-2271	0991	11921	12436
15-2272	0990	11555	11555
15-2273	0994	11467	11431
15-2274	0987	11925	11170

Background reading 10391 cpm
Probe calibrated for Natural Uranium

**PRS 15-004(l) and PRS 15-008(a)
Firing Site E-F Aggregate**

Grid point	AAB or AAC	Ludlum 2221 with Ludlum 4410 2x2 NaI Probe	
		3' reading (cpm)	Surface reading (cpm)
15-2100	3333, 3451	11799	11923
15-2101	3317	12344	12308
15-2102		12236	12675
15-2103		13413	13269
15-2104	3311	12879	12918
15-2105		13778	14513
15-2106		11443	11283
15-2107		11686	11836
15-2108		10632	11040
15-2109		11806	12012
15-2110		12082	12602
15-2111	3489	11372	11915
15-2112	3461	12394	21074
15-2113	3296	11418	11482
15-2114	3476, 3487	12927	13039
15-2115	3306	14547	15220
15-2116		13649	13638
15-2119	3484, 3471	12980	12989
15-2120		13240	13415
15-2121	3314, 3299	12727	12325
15-2122	3335, 3315	11582	11366
15-2123	3521	11863	11848
15-2124	3301, 3319	12465	12734
15-2125	3339	13620	14140
15-2126	3305	12469	12295
15-2127	3340	14424	16755
15-2130		14054	13539
15-2131	3334	13164	13678
15-2132	3488	12792	13217
15-2133	3313	12133	12147
15-2134	3450, 3309	12217	12040
15-2135	3316	12133	11425
15-2136	3337	13450	12849
15-2137	3332	16070	32584
15-2138		14107	14597
15-2139	3312	17252	18313
15-2140	3479	12360	12647
15-2141	3515	15349	20562
15-2142	3308	14385	14111

**PRS 15-004(f) and PRS 15-008(a)
Firing Site E-F Aggregate**

Grid point	AAB or AAC #	Ludlum 2221 with Ludlum 441C 2x2 NaI Probe	
		3' reading (cpm)	Surface reading (cpm)
15-2143	3524	13540	13523
15-2144	3341	12639	13686
15-2145	3452	14935	15350
15-2146	3310	13460	13078
15-2147	3343	14776	14097
15-2148		17452	16326
15-2149	3327	20567	19756
15-2150		21867	21937
15-2151	3466	19226	17774
15-2152	3458, 3467	15888	19262
15-2153	3344, 3304	17210	24072
15-2154	3528	12928	13210
15-2155	3475	12976	13407
15-2156	3303, 3338	13520	13459
15-2157	3307	13208	13941
15-2158		14969	20612
15-2159		15761	14833
15-2160		108959	188454
15-2161		92271	139199
15-2162		18814	17012
15-2163		15076	15060
15-2164	3465	12562	12651
15-2165	3511, 3514	11872	11574
15-2166	3342	12961	14160
15-2167	3300, 3297	13315	13596
15-2168		12923	13553
15-2169		14558	14850
15-2170	3323	18734	19756
15-2171		23935	21053
15-2172	3477	17114	16048
15-2173	3324	15556	15895
15-2174		14017	14894
15-2175	3453, 3512	12521	12694
15-2176	3510	10729	11476
15-2177	3318	13582	16348
15-2178	3336	15072	15778
15-2179	3472	12815	14761
15-2180	3520	13718	15127
15-2182	3470	16477	17539

**PRS 15-004(f) and PRS 15-008(a)
Firing Site E-F Aggregate**

Grid point	AAB or AAC #	Ludlum 2221 with Ludlum 4410 2x2 NaI Probe	
		3' reading (cpm)	Surface reading (cpm)
15-2183		14440	14818
15-2184		14382	13899
15-2185	3482	12884	13208
15-2186	3454	11381	11279
15-2187	3457	10572	10829
15-2189	3322	13417	14141
15-2190		13160	14248
15-2191	3527	16153	18259
15-2194	3464	14336	14117
15-2200	3460, 3462	12986	13138
15-2201		12159	12677
15-2202	3517, 3463	10842	11125
15-2203		10773	18272
15-2206	3295	13387	13383
15-2210	3486	12877	15489
15-2211		12690	13317
15-2212	3469	12032	12014
15-2213	3468	11012	11304
15-2214	3513	10731	10761
15-2222		11911	11560
15-2224		11267	11397
15-2225		11298	11229
15-2226	3478	14832	16805
15-2227	3518	22844	23362
15-2228	3320	41481	57499
15-2229	3326	16969	17040
15-2230	3302	19708	17562
15-2231	3328	44478	62949
15-2234	3474	30545	41814
15-2235	3329	31629	53419
15-2236	3483	16740	17200
15-2239	3516	16081	14687
15-2240	3298	13777	12769
15-2241	3330	14104	13078
15-2242	3473	24904	39707
15-2243	3331	19680	21388
15-2244	3523, 0325, 0335, 0334	30642	24894

**PRS 15-004(f) and PRS 15-008(a)
Firing Site E-F Aggregate**

Grid point	AAB or AAC #	Ludlum 2221 with Ludlum 4410 2x2 NaI Probe	
		3' reading (cpm)	Surface reading (cpm)
15-2245	3526, 0344, 0342	28556	22160
15-2246	3445, 0339, 0340	60788	66261
15-2247	3420, 0346, 0345	90529	117203
15-2248	3447, 0343	42989	48155
15-2249	3449, 0341	38609	39694
15-2277	3321	12373	12933
15-2278	3294	11445	10703
15-2279	3525	14297	14421
15-2280	3507	98586	102716

Background reading 10532 cpm
Probe calibrated to Natural Uranium

PRS 15-008(b)
Disposal Area at R-44

Grid point	AAB #	Ludium 2221 with Ludium 4410 2x2 NaI Probe	
		3' reading (cpm)	Surface reading (cpm)
15-2500	3503, 3504	21458	24143
15-2501	3398, 3530	20795	26483
15-2502	3355, 3401	26948	32254
15-2503	3353, 3352	20133	22622
15-2504	3400	22478	27869
15-2505	3529	22620	28962
15-2506	3531	22682	31177
15-2507	3399	24128	31818
15-2508	3402	18795	19432
15-2509	3397	18470	22320

Background reading 19815 cpm
Probe calibrated for Natural Uranium

PRS 15-007 (b)			
MDA Z			
Grid point	AAB #	Ludlum 2221 with Ludlum 4410 2x2 NaI Probe	
		3' reading (cpm)	Surface reading (cpm)
15-2300	3427	12333	11769
15-2301	3438, 3422	12201	15718
15-2302	3437, 3443	11824	11772
15-2303	3432, 3424	10279	10287
15-2304	3436, 3421	11630	11931
15-2305	3428	14821	13407
15-2306	3431	10815	12161
15-2307	3433, 3442	17710	23685
15-2308	3430	18036	25111
15-2309	3426	11495	11727
15-2310	3429	16004	17489
15-2311	3435, 3444	11113	12167
15-2312	3439	11769	12231
15-2313	3440	10853	11110

Background reading 9818 cpm
 Probe calibrated for Natural Uranium

PRS 15-012(b)
Operational Release at R-183

Grid point	AAS #	Ludium 2021 with Ludium 4410 2x2 Nat Probe	
		3' reading (cpm)	Surface reading (cpm)
15-2525	3404 3405	12152	12223
15-2526	3406 3415	13273	15002
15-2527	3417 3407	18523	18965
15-2528	3412 3413	14190	14883
15-2529	3416 3423	12323	11595
15-2530	3414 3420	12452	11924

Background reading 7957 cpm
 Error calculated for Natural Uranium

