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U. S. Department of Energy
Los Alamos Area Office, MS A316
Environmental Restoration Program
Los Alamos, New Mexico 87544
505-667-7203/FAX 505-665-4504

Date: December 5, 1997
Refer to: EM/ER:97-513

Dr. Robert Dinwiddie
NMED-HRMB
P.O. Box 26110
Santa Fe, NM 87502

SUBJECT: RESPONSE TO REQUEST FOR SUPPLEMENTAL INFORMATION FOR VCA COMPLETION REPORT FOR PRS 12-001(a) IN TA-12 (FORMER OU 1085)

Dear Dr. Dinwiddie:

Enclosed is the Los Alamos National Laboratory's response to the New Mexico Environment Department Hazardous and Radioactive Materials Bureau's request for supplemental information for the Voluntary Corrective Action Completion Report for Potential Release Site 12-001(a) in Technical Area 12.

If you have any questions, please contact Gene Gould at (505) 667-0402 or Mike Gilgosch at (505) 667-5794.

Sincerely,

Julie A. Canepa, Program Manager
LANL/ER Project

Sincerely,

Theodore J. Taylor, Program Manager
DOE/LAAO

JC/TT/rfr

Enclosure (1) Response to Request for Supplemental Information for VCA Completion Report for PRS 12-001(a) in TA-12 (Former OU 1085)

Cy (w/enc.):
M. Gilgosch, LAAO, MS A316
G. Gould, EES-15, MS J495
D. Griswold, AL-ERD, MS A906
J. Harry, EES-5, MS M992
D. Neleigh, EPA, R.6, 6PD-N
C. Rodriguez, CIO/ER, MS M769
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J. White, ESH-19, MS K490
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S. Yanicak, NMED-AIP, MS J993
EM/ER File (CT# C373), MS M992
RPF, MS M707

Information Only (w/o enc.):
T. Baca, EM, MS J591
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J. Plum, LAAO, MS A316
S. Rae, ESH-18, MS K497
G. Rael, AL-ERD, MS A906
J. Vozella, LAAO, MS A316
EM/ER File, MS M992

Response to Request for Supplemental Information
Voluntary Corrective Action Completion Report
Potential Release Site 12-001(a)
September 1996

GENERAL COMMENTS

NMED Comment

LANL has failed to provide the sampling results/information necessary to determine that contaminant migration is negligible. Referencing another document for sampling results is unacceptable in corrective action Reports. All pertinent sampling results for each PRS must be included in each VCA/RFI Report.

LANL Response

The VCA Completion Report for PRS 12-001(a) was written and submitted according to LANL's Project Consistency Team (PCT) Policy Number 029, "Final Reports for Voluntary Corrective Actions and Expedited Cleanups," (EM/ER:95-PCT-029, Revision 1). This policy does not require each report to contain analytical data obtained for another report, e.g., an RFI report. LANL is currently negotiating with NMED regarding report contents. The PCT Policy will be revised upon agreement between LANL and NMED regarding requirements of report contents. The sample results for the RFI investigation at PRS 12-001(a) are provided in Attachment 1.

NMED Comment

1. *Page 1; Section 2.0:*
    a. *LANL must include all sampling data that has been performed at each PRS in future Reports. The Report must be a "stand alone" document.*

LANL Response

The analytical data collected at this PRS during the RFI investigation are provided in Attachment 1. The RFI sampling data includes samples from the bottom of the steel pit (0212-05-0001 and 0212-95-0002) and the surface soil from the surrounding area (0212-95-0003, 0212-95-0004, 0212-95-0007). A site map is provided in Attachment 2. These samples were analyzed for inorganics, uranium, and high explosives and by alpha spectroscopy. No confirmatory samples were collected at this PRS because all of the soil was removed from the interior of the steel pit as part of the VCA. The contents of future reports will be based on agreements made between LANL and NMED.

NMED Comment

b. *Also, LANL mentions that six surface samples were collected outside the steel-lined firing pit. However, only 3 samples were submitted for fixed laboratory analysis. Indicate what the other 3 samples were used for.*

LANL Response

Samples from five distinct locations and one duplicate (for a total of six) were collected and all were screened for HE, radioactivity, and metals (Pb and U) by XRF. As specified in the approved work plan, sample selection bias for subsequent fixed laboratory analysis would be based upon three criteria: positive HE spot test results, radioactivity greater than or equal to twice local background, metals readings above SALs. Because none of the six samples exhibited any of the selection criteria at the specified decision point, samples were chosen at random for fixed laboratory analysis. Thus, the three samples described in the comment that were not submitted for fixed laboratory analysis were used for screening purposes only.

NMED Comment

2. *Page 4; Section 3: LANL should not only present an evaluation of risk based on a most likely exposure scenario, but also on a residential exposure scenario.*

LANL Response

The chemicals of potential concern (COPCs) at this PRS, which were the basis for the remedial activities, had already been identified by the comparison of the Phase I data to their respective SALs [i.e., 1995 EPA Region 9 residential preliminary remediation goals (PRGs)]. Because the COPCs failed the risk-based screening assessment, i.e., exceeded SALs or were retained due to the multiple chemical evaluation (MCE), and the steel pit would not be applicable to a residential exposure scenario, the residential cleanup levels (EPA Region 9 residential PRGs) were not presented in the completion report.

In response to NMED's request for information, LANL has modified Section 3.1 as follows:

The industrial preliminary remediation goals (PRGs) presented in Table 3.1-1 were calculated for this site using the modified U.S. Environmental Protection Agency (EPA) equations and LANL site-specific input parameters, which were presented in the Voluntary Corrective Action Plan for PRS 12-001(a) (LANL 1996, 1339). The derivation of human health risk-based cleanup levels for PRS 12-001(a) is based on a nonintrusive industrial scenario using Laboratory-specific default parameters for a generic worker. These default parameters assume an exposure frequency of 250 days per year and a duration of 25 years. Exposure routes considered in the calculations of the PRGs include incidental ingestion and inhalation of contaminated soil.

Although a residential exposure scenario is unlikely considering the nature and location of the PRS, the residential PRGs are also included in Table 3.1-1. The residential PRGs presented were obtained from the 1995 EPA Region 9 PRG Tables (EPA 1995, 1307) and are equivalent to the SALs used in the screening assessment.

TABLE 3.1-1
PRGs FOR NONINTRUSIVE INDUSTRIAL AND RESIDENTIAL EXPOSURE SCENARIOS FOR PRS 12-001(a)

Chemical	Maximum Detected Concentration (mg/kg)	Noncarcinogenic PRG (mg/kg)		Carcinogenic PRG (mg/kg)		PRGs (mg/kg)	
		Industrial	Residential	Industrial	Residential	Industrial	Residential
Arsenic	11.3	613	22	2.15	0.38	2.15	0.38
Barium	872	7680	5300	NA	NA	7680	5300
Copper	991	81,400	2800	NA	NA	81,400	2800
Nickel	411	40,900	1500	NA	NA	40,900	1500
Thallium	4.6	184	5.4	NA	NA	184	5.4
Uranium	35.5	378*	230	NA	NA	378	230

NA = not applicable
*Calculated using RESRAD

The maximum detected concentration of each of the COPCs identified at this PRS, except for arsenic, were below the industrial and residential PRGs. Because the VCA conducted at this site involved the removal of all of the soil from the steel pit, the cleanup resulted in concentrations below the PRGs for both scenarios.

References:

EPA (U.S. Environmental Protection Agency) 1995. "Region IX Preliminary Remediation Goals (PRGs) Second Half 1995." San Francisco, California. (EPA 1995,1307)

Los Alamos National Laboratory, "Voluntary Corrective Action Plan for Potential Release Site 12-001(a) Inactive Firing site, Field Unit 2," Final Draft, Los Alamos National Laboratory Report LA-UR-96-1874, Los Alamos, New Mexico, April 1996 (LANL 1996, 1339)

NMED Comment

3. *Page 4; Section 3.3: LANL mentions that no confirmatory sampling was performed because all the waste was removed from the steel lined pit. The RFI Report fails to mention if the steel liner was inspected to ensure that it was not cracked or torn or if rinsate samples were obtained from the pit to ensure that the liner was properly decontaminated. Please clarify if these actions occurred.*

LANL Response

The steel liner bottom was visually inspected as part of the RFI work plan preparation process and found to have been welded onto the sides and intact. In fact, the initials of the welder are visible on one of the inside walls (Kinkead 1997, ER ID# XXXXX). No rinsate samples were proposed in the plan or collected from the bottom of the liner as part of the VCA, because all the removable soil particles were collected by hand sweeping the area. After remediation, cloth swipes were collected from the walls and floor and wall-mounted ladders inside the structure, and monitored for any detectable radiation using a Ludlum 2929 tray counter, and also a Ludlum 12 detector with GM pancake probe. No detectable activity was found above

background as a result of this survey. During the swipe sample collection, the floor and walls were found to still be intact (Owens 1997, ER ID# XXXXX).

References:

Kinkead, S., November 1997, "Visual Inspection of PRS 12-001(a)," Los Alamos National Laboratory Memorandum EES-15: ER-97-094, ER ID# XXXXX, Los Alamos, New Mexico. (Kinkead 1997, ER ID# XXXXX)

Owens, C.,November 1997, "Inspection of PRS 12-001(a)," Los Alamos National Laboratory Memorandum EES-15: ER-97-095, ER ID# XXXXX, Los Alamos, New Mexico. (Owens 1997, ER ID # XXXXX)

NMED Comment

4. *Page 7; Appendix A, 1st paragraph:*
    a. *LANL mentions that the sample data were compared to the QA/QC sample data using numerical acceptance criteria established by either the analytical laboratory or EPA. Please clarify the criteria you are using in determining the data usability. Indicate if this criteria was approved by the Administrative Authority and, if so, reference the approval.*

LANL Response

The statement referred to in the comment regarding the criteria used in the QA/QC comparisons is a generic statement based on historic validation procedures that used a combination of acceptance limits based on EPA contract laboratory program (CLP) national functional guidelines for data review (EPA 1994, 1205 and 1206), EPA SW-846 Methods (EPA 1986, 1222), and internal analytical data from the off-site laboratories. Currently, the acceptance limits used in the QA/QC analyses are based only on EPA guidelines, i.e., CLP National Functional Guidelines for Organic Data Review (EPA 1994, 1205), CLP National Functional Guidelines for Inorganic Data Review (EPA 1994, 1206), or SW-846 Methods (EPA 1986, 1222). As a result, the statement in question should be modified as follows:

"....The sample data were compared to the QA/QC sample data using numerical acceptance criteria presented in either EPA's contract laboratory program (CLP) national functional guidelines for data review (EPA 1994, 1205 and 1206) or EPA SW-846 Methods (EPA 1986, 1222)...."

LANL has not received any approval from the Administrative Authority regarding the acceptance criteria used in the data assessment. The baseline validation procedure is referenced in the ER Project Quality Assurance Project Plan Requirements for Sampling and Analysis (QAPP) (LANL 1996, 1292), which was provided to NMED in March 1996 for review and comment, and is based on the criteria mentioned above. The criteria were obtained from the EPA guidelines and methods documents mentioned above and are those typically used to determine data usability throughout the country under the contract laboratory program.

References:

EPA (US Environmental Protection Agency), November 1986. "Test Methods for Evaluating Solid Waste," Volumes 1A, 1B, 1C and II, SW-846, Third Edition, Revision 4, December 1996, Office of Solid Waste and Emergency Response, Washington, D.C. (EPA 1986, 1222)

EPA (US Environmental Protection Agency), February 1994. "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, EPA540/R-94/012, Washington, DC. (EPA 1994, 1205)

EPA (US Environmental Protection Agency), February 1994. "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, EPA540/R-94/013, Washington, DC. (EPA 1994, 1206)

LANL (Los Alamos National Laboratory), March 1996. "Quality Assurance Project Plan Requirements for Sampling and Analysis," Los Alamos National Laboratory Report LA-UR-96-441, ER ID No. 53450, Los Alamos, New Mexico. (LANL 1996, 1292)

NMED Comment

b. *Also, LANL mentions that some of their data is qualified. Indicate what the PM qualifier means.*

LANL Response

The baseline validation procedure is presented in the ER Project Quality Assurance Project Plan Requirements for Sampling and Analysis (QAPP) (LANL 1996, 1292) and the qualifiers presented and defined in the RFI Report Framework (ER Project 1996, 1421), which were provided to NMED in 1996 and 1997, respectively, for review and comment.

The PM qualifier indicates that professional judgement should be applied to using the data in decision-making and a manual review of the raw data is recommended to determine if QA/QC issues impacts data use for decision-making purposes.

References:

Environmental Restoration Project, August12, 1996. "RFI Report Framework," Revision 1, Los Alamos National Laboratory, Los Alamos, New Mexico. (ER Project 1996, 1421)

LANL (Los Alamos National Laboratory), March 1996. "Quality Assurance Project Plan Requirements for Sampling and Analysis," Los Alamos National Laboratory Report LA-UR-96-441, ER ID No. 53450, Los Alamos, New Mexico. (LANL 1996, 1292)

NMED Comment

5. *Page 7; Third Paragraph: LANL mentions that the sample values for certain analytes were less than ten times the blank value, indicating that the detection could be the result of blank contamination. Indicate the criterion in which LANL is basing this assumption.*

LANL Response

The evaluation of blank contamination is based on EPA's CLP National Functional Guidelines for Organic Data Review (EPA 1994, 1205). Under the section pertaining to the blanks for volatiles, the functional guidelines for organic analysis indicates that a positive sample result should be reported unless the concentration of the compound in the sample is less than or equal to 10X the amount in the blank for the common laboratory contaminants (methylene, chloride, acetone, and 2-butanone), or 5X the amount for other volatile target compounds. If these criteria are met for the appropriate compounds, the data should be qualified as undetected (U). The results must not be corrected by subtracting any blank values.

Reference:

EPA (US Environmental Protection Agency), February 1994. "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, EPA540/R-94/012, Washington, DC. (EPA 1994, 1205)

ATTACHMENT 1

RFI Data for PRS 12-001(a)

SAMPLE DATA FOR PRS 12-001(a)

PRS_ID	SAMPLE_ID	LOCATION ID	BEGIN DEPTH	END DEPTH	DEPTH	ANALYTE CODE DESCRIPTION	SAMPLE TYPE CODE	SAMPLE RESULTS	REPORTING UNIT	SAL MATRIX	LAB QUALIFIER	SAL LEVEL	SAL UNITS	UTL LEVEL	UTL UNITS	RFI_CLASS	UNCERTAINTY	COMMENTS
12-001(a)	0212-95-0001	12-1001	0	1	IN	Aluminum		8150	MG/KG	SOIL		77000	MG/KG	38700	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Amino-2,6-dinitrotoluene[4-]		0.188	MG/KG	SOIL	UJ					ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Amino-4,6-dinitrotoluene[2-]		0.188	MG/KG	SOIL	UJ					ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Antimony		0.782	MG/KG	SOIL	J	31	MG/KG	1	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Arsenic		5.66	MG/KG	SOIL	J			7.82	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Barium		618	MG/KG	SOIL		5300	MG/KG	315	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Beryllium		0.562	MG/KG	SOIL	J			1.95	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Cadmium		0.178	MG/KG	SOIL	J	38	MG/KG	2.6	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Calcium		1500	MG/KG	SOIL				6120	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Chromium, Total		34.2	MG/KG	SOIL	J	210	MG/KG	19.3	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Cobalt		7.56	MG/KG	SOIL	J	4600	MG/KG	19.2	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Copper		722	MG/KG	SOIL		2800	MG/KG	15.5	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Dinitrobenzene[1,2-]	Surrogate spike	0.241	MG/KG	SOIL						ORGANIC		Percent Recovery=64.4%
12-001(a)	0212-95-0001	12-1001	0	1	IN	Dinitrobenzene[1,3-]		0.188	MG/KG	SOIL	UJ	6.5	MG/KG			ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Dinitrotoluene[2,4-]		0.188	MG/KG	SOIL	UJ	130	MG/KG			ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Dinitrotoluene[2,6-]		0.188	MG/KG	SOIL	UJ	65	MG/KG			ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	HMX		0.75	MG/KG	SOIL	UJ	3300	MG/KG			ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Iron		42600	MG/KG	SOIL				21300	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Lead		22.1	MG/KG	SOIL	J	400	MG/KG	23.3	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Magnesium		1110	MG/KG	SOIL				4810	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Manganese		665	MG/KG	SOIL		3200	MG/KG	714	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Mercury		0.0301	MG/KG	SOIL				0.1	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Nickel		89.5	MG/KG	SOIL		1500	MG/KG	15.2	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Nitrobenzene		0.188	MG/KG	SOIL	UJ	18	MG/KG			ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Nitrotoluene[2-]		0.188	MG/KG	SOIL	UJ					ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Nitrotoluene[3-]		0.188	MG/KG	SOIL	UJ	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Nitrotoluene[4-]		0.188	MG/KG	SOIL	UJ	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Potassium		1100	MG/KG	SOIL				3410	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Protactinium-231		0	PCI/G	SOIL	U					RAD	0	
12-001(a)	0212-95-0001	12-1001	0	1	IN	Protactinium-234		0.198	PCI/G	SOIL	U					RAD	0.124	
12-001(a)	0212-95-0001	12-1001	0	1	IN	Protactinium-234M		0	PCI/G	SOIL	U					RAD	0	
12-001(a)	0212-95-0001	12-1001	0	1	IN	RDX		0.75	MG/KG	SOIL	UJ	4	MG/KG			ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Selenium		0.698	MG/KG	SOIL	J	380	MG/KG	1.7	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Silver		0.5	MG/KG	SOIL	UJ	380	MG/KG			INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Sodium		65.1	MG/KG	SOIL	J			915	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Tetryl		0.375	MG/KG	SOIL	UJ	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Thallium		1.95	MG/KG	SOIL	J	5.4	MG/KG	1	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Thorium-230		1.27	PCI/G	SOIL				2.29	PCI/G	RAD	0.0933	
12-001(a)	0212-95-0001	12-1001	0	1	IN	Thorium-231		0.901	PCI/G	SOIL						RAD	0.247	
12-001(a)	0212-95-0001	12-1001	0	1	IN	Thorium-234		6.02	PCI/G	SOIL						RAD	0.457	
12-001(a)	0212-95-0001	12-1001	0	1	IN	Trinitrobenzene[1,3,5-]		0.188	MG/KG	SOIL	UJ	3.3	MG/KG			ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Trinitrotoluene[2,4,6-]		0.188	MG/KG	SOIL	UJ	15	MG/KG			ORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Uranium		24.4	MG/KG	SOIL		29	MG/KG	1.87	MG/KG	INORGANIC	0.321	
12-001(a)	0212-95-0001	12-1001	0	1	IN	Uranium-234		1.15	PCI/G	SOIL				2.39	PCI/G	RAD	0.141	
12-001(a)	0212-95-0001	12-1001	0	1	IN	Uranium-235		0.714	PCI/G	SOIL				0.16	PCI/G	RAD	0.236	
12-001(a)	0212-95-0001	12-1001	0	1	IN	Uranium-238		7.66	PCI/G	SOIL				2.29	PCI/G	RAD	1.31	
12-001(a)	0212-95-0001	12-1001	0	1	IN	Vanadium		11.8	MG/KG	SOIL	J	540	MG/KG	41.9	MG/KG	INORGANIC		
12-001(a)	0212-95-0001	12-1001	0	1	IN	Zinc		69.3	MG/KG	SOIL		23000	MG/KG	50.8	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Aluminum		7780	MG/KG	SOIL		77000	MG/KG	38700	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Amino-2,6-dinitrotoluene[4-]		0.188	MG/KG	SOIL	UJ					ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Amino-4,6-dinitrotoluene[2-]		0.188	MG/KG	SOIL	UJ					ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Antimony		1.85	MG/KG	SOIL		31	MG/KG	1	MG/KG	INORGANIC		

SAMPLE DATA FOR PRS 12-001(a)

PRS_ID	SAMPLE_ID	LOCATION ID	BEGIN DEPTH	END DEPTH	DEPTH	ANALYTE CODE DESCRIPTION	SAMPLE TYPE CODE	SAMPLE RESULTS	REPORTING UNIT	SAL MATRIX	LAB QUALIFIER	SAL LEVEL	SAL UNITS	UTL LEVEL	UTL UNITS	RFI_CLASS	UNCERTAINTY	COMMENTS
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Arsenic		11.3	MG/KG	SOIL				7.82	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Barium		872	MG/KG	SOIL		5300	MG/KG	315	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Beryllium		0.472	MG/KG	SOIL				1.95	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Cadmium		0.0501	MG/KG	SOIL	J	38	MG/KG	2.6	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Calcium		1250	MG/KG	SOIL				6120	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Chromium, Total		165	MG/KG	SOIL		210	MG/KG	19.3	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Cobalt		10.4	MG/KG	SOIL		4600	MG/KG	19.2	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Copper		991	MG/KG	SOIL		2800	MG/KG	15.5	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Dinitrobenzene[1,2-]	Surrogate spike	0.295	MG/KG	SOIL						ORGANIC		Percent Recovery=78.7%
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Dinitrobenzene[1,3-]		0.188	MG/KG	SOIL	UJ	6.5	MG/KG			ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Dinitrotoluene[2,4-]		0.188	MG/KG	SOIL	UJ	130	MG/KG			ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Dinitrotoluene[2,6-]		0.188	MG/KG	SOIL	UJ	65	MG/KG			ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	HMX		1.59	MG/KG	SOIL	J	3300	MG/KG			ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Iron		98300	MG/KG	SOIL				21300	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Lead		23.3	MG/KG	SOIL		400	MG/KG	23.3	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Magnesium		1060	MG/KG	SOIL				4610	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Manganese		659	MG/KG	SOIL		3200	MG/KG	714	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Mercury		0.0268	MG/KG	SOIL	J			0.1	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Nickel		411	MG/KG	SOIL		1500	MG/KG	15.2	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Nitrobenzene		0.188	MG/KG	SOIL	UJ	18	MG/KG			ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Nitrotoluene[2-]		0.188	MG/KG	SOIL	UJ					ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Nitrotoluene[3-]		0.188	MG/KG	SOIL	UJ	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Nitrotoluene[4-]		0.188	MG/KG	SOIL	UJ	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Potassium		1000	MG/KG	SOIL				3410	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Protactinium-231		4.85	PCI/G	SOIL						RAD	0.248	
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Protactinium-234		0.166	PCI/G	SOIL	U					RAD	0.119	
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Protactinium-234M		0	PCI/G	SOIL	U					RAD	0	
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	RDX		0.75	MG/KG	SOIL	UJ	4	MG/KG			ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Selenium		1.81	MG/KG	SOIL		380	MG/KG	1.7	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Silver		0.5	MG/KG	SOIL	U	380	MG/KG			INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Sodium		83	MG/KG	SOIL				915	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Tetryl		0.375	MG/KG	SOIL	UJ	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Thallium		4.59	MG/KG	SOIL		5.4	MG/KG	1	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Thorium-230		0.917	PCI/G	SOIL				2.29	PCI/G	RAD	0.094	
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Thorium-231		0.0595	PCI/G	SOIL	U					RAD	0.103	
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Thorium-234		8.44	PCI/G	SOIL						RAD	0.48	
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Trinitrobenzene[1,3,5-]		0.188	MG/KG	SOIL	UJ	3.3	MG/KG			ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Trinitrotoluene[2,4,6-]		0.188	MG/KG	SOIL	UJ	15	MG/KG			ORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Uranium		35.5	MG/KG	SOIL		29	MG/KG	1.87	MG/KG	INORGANIC	0.591	
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Uranium-234		1.03	PCI/G	SOIL				2.39	PCI/G	RAD	0.147	
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Uranium-235		0.698	PCI/G	SOIL				0.16	PCI/G	RAD	0.194	
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Uranium-238		9.2	PCI/G	SOIL				2.29	PCI/G	RAD	1.26	
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Vanadium		11	MG/KG	SOIL		540	MG/KG	41.9	MG/KG	INORGANIC		
12-001(a)	0212-95-0002	12-1002	0	0.75	IN	Zinc		105	MG/KG	SOIL		23000	MG/KG	50.8	MG/KG	INORGANIC		
12-001(a)	0212-95-0002 (R)	12-1002	0	0.75	IN	Cesium-137	Laboratory replicate	2.18	PCI/G	SOIL						RAD	0.0744	
12-001(a)	0212-95-0002 (R)	12-1002	0	0.75	IN	Protactinium-231	Laboratory replicate	4.85	PCI/G	SOIL						RAD	0.229	
12-001(a)	0212-95-0002 (R)	12-1002	0	0.75	IN	Protactinium-234	Laboratory replicate	0.127	PCI/G	SOIL	U					RAD	0.115	
12-001(a)	0212-95-0002 (R)	12-1002	0	0.75	IN	Protactinium-234M	Laboratory replicate	13	PCI/G	SOIL						RAD	5.16	
12-001(a)	0212-95-0002 (R)	12-1002	0	0.75	IN	Thorium-230	Laboratory replicate	1.03	PCI/G	SOIL				2.29	PCI/G	RAD	0.0835	
12-001(a)	0212-95-0002 (R)	12-1002	0	0.75	IN	Thorium-231	Laboratory replicate	0.459	PCI/G	SOIL						RAD	0.194	
12-001(a)	0212-95-0002 (R)	12-1002	0	0.75	IN	Thorium-234	Laboratory replicate	8.58	PCI/G	SOIL						RAD	0.555	
12-001(a)	0212-95-0002 (R)	12-1002	0	0.75	IN	Uranium-234	Laboratory replicate	1.01	PCI/G	SOIL				2.39	PCI/G	RAD	0.145	

SAMPLE DATA FOR PRS 12-001(a)

PRS_ID	SAMPLE_ID	LOCATION ID	BEGIN DEPTH	END DEPTH	DEPTH	ANALYTE CODE DESCRIPTION	SAMPLE TYPE CODE	SAMPLE RESULTS	REPORTING UNIT	SAL MATRIX	LAB QUALIFIER	SAL LEVEL	SAL UNITS	UTL LEVEL	UTL UNITS	RFI_CLASS	UNCERTAINTY	COMMENTS
12-001(a)	0212-95-0002 (R)	12-1002	0	0.75	IN	Uranium-235	Laboratory replicate	0.424	PCI/G	SOIL				0.16	PCI/G	RAD	0.181	
12-001(a)	0212-95-0002 (R)	12-1002	0	0.75	IN	Uranium-238	Laboratory replicate	7.75	PCI/G	SOIL				2.29	PCI/G	RAD	1.26	
12-001(a)	0212-95-0003	12-1003	0	6	IN	Aluminum		13600	MG/KG	SOIL		77000	MG/KG	38700	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Amino-2,6-dinitrotoluene[4-]		0.188	MG/KG	SOIL	U					ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Amino-4,6-dinitrotoluene[2-]		0.188	MG/KG	SOIL	U					ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Antimony		0.971	MG/KG	SOIL	UJ	31	MG/KG	1	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Arsenic		2.28	MG/KG	SOIL	J			7.82	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Barium		233	MG/KG	SOIL		5300	MG/KG	315	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Beryllium		0.887	MG/KG	SOIL	J			1.95	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Cadmium		0.107	MG/KG	SOIL	J	38	MG/KG	2.6	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Calcium		4080	MG/KG	SOIL				6120	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Chromium, Total		8.15	MG/KG	SOIL	J	210	MG/KG	19.3	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Cobalt		5.33	MG/KG	SOIL		4600	MG/KG	19.2	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Copper		7.03	MG/KG	SOIL		2800	MG/KG	15.5	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Dinitrobenzene[1,2-]	Surrogate spike	0.265	MG/KG	SOIL						ORGANIC		Percent Recovery=70.6%
12-001(a)	0212-95-0003	12-1003	0	6	IN	Dinitrobenzene[1,3-]		0.188	MG/KG	SOIL	U	6.5	MG/KG			ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Dinitrotoluene[2,4-]		0.188	MG/KG	SOIL	U	130	MG/KG			ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Dinitrotoluene[2,6-]		0.188	MG/KG	SOIL	U	65	MG/KG			ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	HMX		0.75	MG/KG	SOIL	U	3300	MG/KG			ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Iron		11100	MG/KG	SOIL				21300	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Lead		14.8	MG/KG	SOIL		400	MG/KG	23.3	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Magnesium		2040	MG/KG	SOIL				4610	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Manganese		589	MG/KG	SOIL		3200	MG/KG	714	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Mercury		0.0138	MG/KG	SOIL	J			0.1	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Nickel		7.08	MG/KG	SOIL		1500	MG/KG	15.2	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Nitrobenzene		0.188	MG/KG	SOIL	U	18	MG/KG			ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Nitrotoluene[2-]		0.188	MG/KG	SOIL	U					ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Nitrotoluene[3-]		0.188	MG/KG	SOIL	U	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Nitrotoluene[4-]		0.188	MG/KG	SOIL	U	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Potassium		2120	MG/KG	SOIL				3410	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Protactinium-231		0	PCI/G	SOIL	U					RAD	0	
12-001(a)	0212-95-0003	12-1003	0	6	IN	Protactinium-234		-0.43	PCI/G	SOIL	U					RAD	0.152	
12-001(a)	0212-95-0003	12-1003	0	6	IN	Protactinium-234M		9.65	PCI/G	SOIL	U					RAD	4.25	
12-001(a)	0212-95-0003	12-1003	0	6	IN	RDX		0.75	MG/KG	SOIL	U	4	MG/KG			ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Selenium		0.767	MG/KG	SOIL		380	MG/KG	1.7	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Silver		0.971	MG/KG	SOIL	U	380	MG/KG			INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Sodium		75.2	MG/KG	SOIL				915	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Tetryl		0.375	MG/KG	SOIL	U	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Thallium		0.971	MG/KG	SOIL	UJ	5.4	MG/KG	1	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Thorium-230		1.62	PCI/G	SOIL				2.29	PCI/G	RAD	0.123	
12-001(a)	0212-95-0003	12-1003	0	6	IN	Thorium-231		0	PCI/G	SOIL	U					RAD	0	
12-001(a)	0212-95-0003	12-1003	0	6	IN	Thorium-234		4.17	PCI/G	SOIL	V					RAD	0.465	
12-001(a)	0212-95-0003	12-1003	0	6	IN	Trinitrobenzene[1,3,5-]		0.188	MG/KG	SOIL	U	3.3	MG/KG			ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Trinitrotoluene[2,4,6-]		0.188	MG/KG	SOIL	U	15	MG/KG			ORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Uranium		5.47	MG/KG	SOIL		29	MG/KG	1.87	MG/KG	INORGANIC	0.0622	
12-001(a)	0212-95-0003	12-1003	0	6	IN	Uranium-234		1.48	PCI/G	SOIL				2.39	PCI/G	RAD	0.133	
12-001(a)	0212-95-0003	12-1003	0	6	IN	Uranium-235		0.476	PCI/G	SOIL		10	PCI/G	0.16	PCI/G	RAD	0.162	
12-001(a)	0212-95-0003	12-1003	0	6	IN	Uranium-238		1.61	PCI/G	SOIL	U	67	PCI/G	2.29	PCI/G	RAD	1.26	
12-001(a)	0212-95-0003	12-1003	0	6	IN	Vanadium		17	MG/KG	SOIL	J	540	MG/KG	41.9	MG/KG	INORGANIC		
12-001(a)	0212-95-0003	12-1003	0	6	IN	Zinc		24.9	MG/KG	SOIL		23000	MG/KG	50.8	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Aluminum		11200	MG/KG	SOIL		77000	MG/KG	38700	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Amino-2,6-dinitrotoluene[4-]		0.188	MG/KG	SOIL	U					ORGANIC		

SAMPLE DATA FOR PRS 12-001(a)

PRS_ID	SAMPLE_ID	LOCATION ID	BEGIN DEPTH	END DEPTH	DEPTH	ANALYTE CODE DESCRIPTION	SAMPLE TYPE CODE	SAMPLE RESULTS	REPORTING UNIT	SAL MATRIX	LAB QUALIFIER	SAL LEVEL	SAL UNITS	UTL LEVEL	UTL UNITS	RFI_CLASS	UNCERTAINTY	COMMENTS
12-001(a)	0212-95-0004	12-1003	0	6	IN	Amino-4,6-dinitrotoluene[2-]		0.188	MG/KG	SOIL	U					ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Antimony		0.255	MG/KG	SOIL	J	31	MG/KG	1	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Arsenic		2.57	MG/KG	SOIL	J			7.82	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Barium		208	MG/KG	SOIL		5300	MG/KG	315	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Beryllium		0.812	MG/KG	SOIL	J			1.95	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Cadmium		0.0926	MG/KG	SOIL	J	38	MG/KG	2.6	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Calcium		3620	MG/KG	SOIL				6120	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Chromium, Total		7.56	MG/KG	SOIL	J	210	MG/KG	19.3	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Cobalt		6.45	MG/KG	SOIL		4600	MG/KG	19.2	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Copper		6.39	MG/KG	SOIL		2800	MG/KG	15.5	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Dinitrobenzene[1,2-]	Surrogate spike	0.267	MG/KG	SOIL						ORGANIC		Percent Recovery=71.2%
12-001(a)	0212-95-0004	12-1003	0	6	IN	Dinitrobenzene[1,3-]		0.188	MG/KG	SOIL	U	6.5	MG/KG			ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Dinitrotoluene[2,4-]		0.188	MG/KG	SOIL	U	130	MG/KG			ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Dinitrotoluene[2,6-]		0.188	MG/KG	SOIL	U	65	MG/KG			ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	HMX		0.75	MG/KG	SOIL	U	3300	MG/KG			ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Iron		10400	MG/KG	SOIL				21300	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Lead		14.6	MG/KG	SOIL		400	MG/KG	23.3	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Magnesium		1810	MG/KG	SOIL				4610	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Manganese		624	MG/KG	SOIL		3200	MG/KG	714	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Mercury		0.017	MG/KG	SOIL	J	23	MG/KG	0.1	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Nickel		6.53	MG/KG	SOIL		1500	MG/KG	15.2	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Nitrobenzene		0.188	MG/KG	SOIL	U	18	MG/KG			ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Nitrotoluene[2-]		0.188	MG/KG	SOIL	U					ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Nitrotoluene[3-]		0.188	MG/KG	SOIL	U	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Nitrotoluene[4-]		0.188	MG/KG	SOIL	U	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Potassium		1820	MG/KG	SOIL				3410	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Protactinium-231		0	PCI/G	SOIL	U					RAD	0	
12-001(a)	0212-95-0004	12-1003	0	6	IN	Protactinium-234		0.0936	PCI/G	SOIL	U					RAD	0.139	
12-001(a)	0212-95-0004	12-1003	0	6	IN	Protactinium-234M		7.5	PCI/G	SOIL	U					RAD	4.23	
12-001(a)	0212-95-0004	12-1003	0	6	IN	RDX		0.75	MG/KG	SOIL	U	4	MG/KG			ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Selenium		0.481	MG/KG	SOIL	U	380	MG/KG	1.7	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Silver		0.962	MG/KG	SOIL	U	380	MG/KG			INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Sodium		54.1	MG/KG	SOIL				915	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Tetryl		0.375	MG/KG	SOIL	U	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Thallium		0.203	MG/KG	SOIL	J	5.4	MG/KG	1	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Thorium-230		1.48	PCI/G	SOIL				2.29	PCI/G	RAD	0.102	
12-001(a)	0212-95-0004	12-1003	0	6	IN	Thorium-231		0	PCI/G	SOIL	UJ					RAD	0	
12-001(a)	0212-95-0004	12-1003	0	6	IN	Thorium-234		3.77	PCI/G	SOIL						RAD	0.424	
12-001(a)	0212-95-0004	12-1003	0	6	IN	Trinitrobenzene[1,3,5-]		0.188	MG/KG	SOIL	U	3.3	MG/KG			ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Trinitrotoluene[2,4,6-]		0.188	MG/KG	SOIL	U	15	MG/KG			ORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Uranium		4.51	MG/KG	SOIL		29	MG/KG	1.87	MG/KG	INORGANIC	0.0537	
12-001(a)	0212-95-0004	12-1003	0	6	IN	Uranium-234		1.76	PCI/G	SOIL				2.39	PCI/G	RAD	0.139	
12-001(a)	0212-95-0004	12-1003	0	6	IN	Uranium-235		0.187	PCI/G	SOIL	U	10	PCI/G	0.16	PCI/G	RAD	0.117	
12-001(a)	0212-95-0004	12-1003	0	6	IN	Uranium-238		2.92	PCI/G	SOIL		67	PCI/G	2.29	PCI/G	RAD	1.21	
12-001(a)	0212-95-0004	12-1003	0	6	IN	Vanadium		17	MG/KG	SOIL	J	540	MG/KG	41.9	MG/KG	INORGANIC		
12-001(a)	0212-95-0004	12-1003	0	6	IN	Zinc		22.9	MG/KG	SOIL		23000	MG/KG	50.8	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Aluminum		17100	MG/KG	SOIL		77000	MG/KG	38700	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Amino-2,6-dinitrotoluene[4-]		0.188	MG/KG	SOIL	U					ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Amino-4,6-dinitrotoluene[2-]		0.188	MG/KG	SOIL	U					ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Antimony		0.178	MG/KG	SOIL	J	31	MG/KG	1	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Arsenic		3.15	MG/KG	SOIL	J			7.82	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Barium		214	MG/KG	SOIL		5300	MG/KG	315	MG/KG	INORGANIC		

SAMPLE DATA FOR PRS 12-001(a)

PRS_ID	SAMPLE_ID	LOCATION ID	BEGIN DEPTH	END DEPTH	DEPTH	ANALYTE CODE DESCRIPTION	SAMPLE TYPE CODE	SAMPLE RESULTS	REPORTING UNIT	SAL MATRIX	LAB QUALIFIER	SAL LEVEL	SAL UNITS	UTL LEVEL	UTL UNITS	RFI_CLASS	UNCERTAINTY	COMMENTS
12-001(a)	0212-95-0007	12-1006	0	5	IN	Beryllium		1.15	MG/KG	SOIL	J			1.95	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Cadmium		0.127	MG/KG	SOIL	J	38	MG/KG	2.6	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Calcium		2320	MG/KG	SOIL				6120	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Chromium, Total		10.2	MG/KG	SOIL	J	210	MG/KG	19.3	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Cobalt		6.49	MG/KG	SOIL		4600	MG/KG	19.2	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Copper		9.56	MG/KG	SOIL		2800	MG/KG	15.5	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Dinitrobenzene[1,2-]	Surrogate spike	0.302	MG/KG	SOIL						ORGANIC		Perent Recovery=80.6%
12-001(a)	0212-95-0007	12-1006	0	5	IN	Dinitrobenzene[1,3-]		0.188	MG/KG	SOIL	U	6.5	MG/KG			ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Dinitrotoluene[2,4-]		0.188	MG/KG	SOIL	U	130	MG/KG			ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Dinitrotoluene[2,6-]		0.188	MG/KG	SOIL	U	65	MG/KG			ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	HMX		0.75	MG/KG	SOIL	U	3300	MG/KG			ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Iron		14000	MG/KG	SOIL				21300	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Lead		17.3	MG/KG	SOIL		400	MG/KG	23.3	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Magnesium		2510	MG/KG	SOIL				4610	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Manganese		455	MG/KG	SOIL		3200	MG/KG	714	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Mercury		0.0532	MG/KG	SOIL				0.1	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Nickel		8.59	MG/KG	SOIL		1500	MG/KG	15.2	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Nitrobenzene		0.188	MG/KG	SOIL	U	18	MG/KG			ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Nitrotoluene[2-]		0.188	MG/KG	SOIL	U					ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Nitrotoluene[3-]		0.188	MG/KG	SOIL	U	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Nitrotoluene[4-]		0.188	MG/KG	SOIL	U	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Potassium		2060	MG/KG	SOIL				3410	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Protactinium-231		0	PCI/G	SOIL	U					RAD	0	
12-001(a)	0212-95-0007	12-1006	0	5	IN	Protactinium-234		-0.00442	PCI/G	SOIL	U					RAD	0.168	
12-001(a)	0212-95-0007	12-1006	0	5	IN	Protactinium-234M		15.2	PCI/G	SOIL	U					RAD	3.41	
12-001(a)	0212-95-0007	12-1006	0	5	IN	RDX		0.75	MG/KG	SOIL	U	4	MG/KG			ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Selenium		0.476	MG/KG	SOIL	U	380	MG/KG	1.7	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Silver		0.952	MG/KG	SOIL	U	380	MG/KG			INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Sodium		82.8	MG/KG	SOIL				915	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Tetryl		0.375	MG/KG	SOIL	U	650	MG/KG			ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Thallium		0.952	MG/KG	SOIL	UJ	5.4	MG/KG	1	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Thorium-230		1.75	PCI/G	SOIL				2.29	PCI/G	RAD	0.122	
12-001(a)	0212-95-0007	12-1006	0	5	IN	Thorium-231		0	PCI/G	SOIL	U					RAD	0	
12-001(a)	0212-95-0007	12-1006	0	5	IN	Thorium-234		4.86	PCI/G	SOIL						RAD	0.481	
12-001(a)	0212-95-0007	12-1006	0	5	IN	Trinitrobenzene[1,3,5-]		0.188	MG/KG	SOIL	U	3.3	MG/KG			ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Trinitrotoluene[2,4,6-]		0.188	MG/KG	SOIL	U	15	MG/KG			ORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Uranium		12.3	MG/KG	SOIL		29	MG/KG	1.87	MG/KG	INORGANIC	0.137	
12-001(a)	0212-95-0007	12-1006	0	5	IN	Uranium-234		1.33	PCI/G	SOIL				2.39	PCI/G	RAD	0.159	
12-001(a)	0212-95-0007	12-1006	0	5	IN	Uranium-235		0.209	PCI/G	SOIL	U	10	PCI/G	0.16	PCI/G	RAD	0.141	
12-001(a)	0212-95-0007	12-1006	0	5	IN	Uranium-238		8.04	PCI/G	SOIL		67	PCI/G	2.29	PCI/G	RAD	1.66	
12-001(a)	0212-95-0007	12-1006	0	5	IN	Vanadium		23	MG/KG	SOIL	J	540	MG/KG	41.9	MG/KG	INORGANIC		
12-001(a)	0212-95-0007	12-1006	0	5	IN	Zinc		26.9	MG/KG	SOIL		23000	MG/KG	50.8	MG/KG	INORGANIC		
12-001(a)	LB					Aluminum	Blank spike duplicate	3350	MG/KG							INORGANIC		Percent Recovery=98.1%
12-001(a)	LB					Aluminum	Blank spike	3610	MG/KG							INORGANIC		Percent Recovery=105%
12-001(a)	LB					Aluminum	Laboratory blank	0.043	MG/KG		J					INORGANIC		
12-001(a)	LB					Antimony	Blank spike duplicate	92.7	MG/KG							INORGANIC		Percent Recovery=112%
12-001(a)	LB					Antimony	Blank spike	83.1	MG/KG							INORGANIC		Percent Recovery=125%
12-001(a)	LB					Antimony	Laboratory blank	0.01	MG/KG		U					INORGANIC		
12-001(a)	LB					Arsenic	Blank spike duplicate	78.9	MG/KG							INORGANIC		Percent Recovery=123%
12-001(a)	LB					Arsenic	Blank spike	66.7	MG/KG							INORGANIC		Percent Recovery=110%
12-001(a)	LB					Arsenic	Laboratory blank	0.01	MG/KG		U					INORGANIC		
12-001(a)	LB					Barium	Blank spike duplicate	210	MG/KG							INORGANIC		Percent Recovery=107%

SAMPLE DATA FOR PRS 12-001(a)

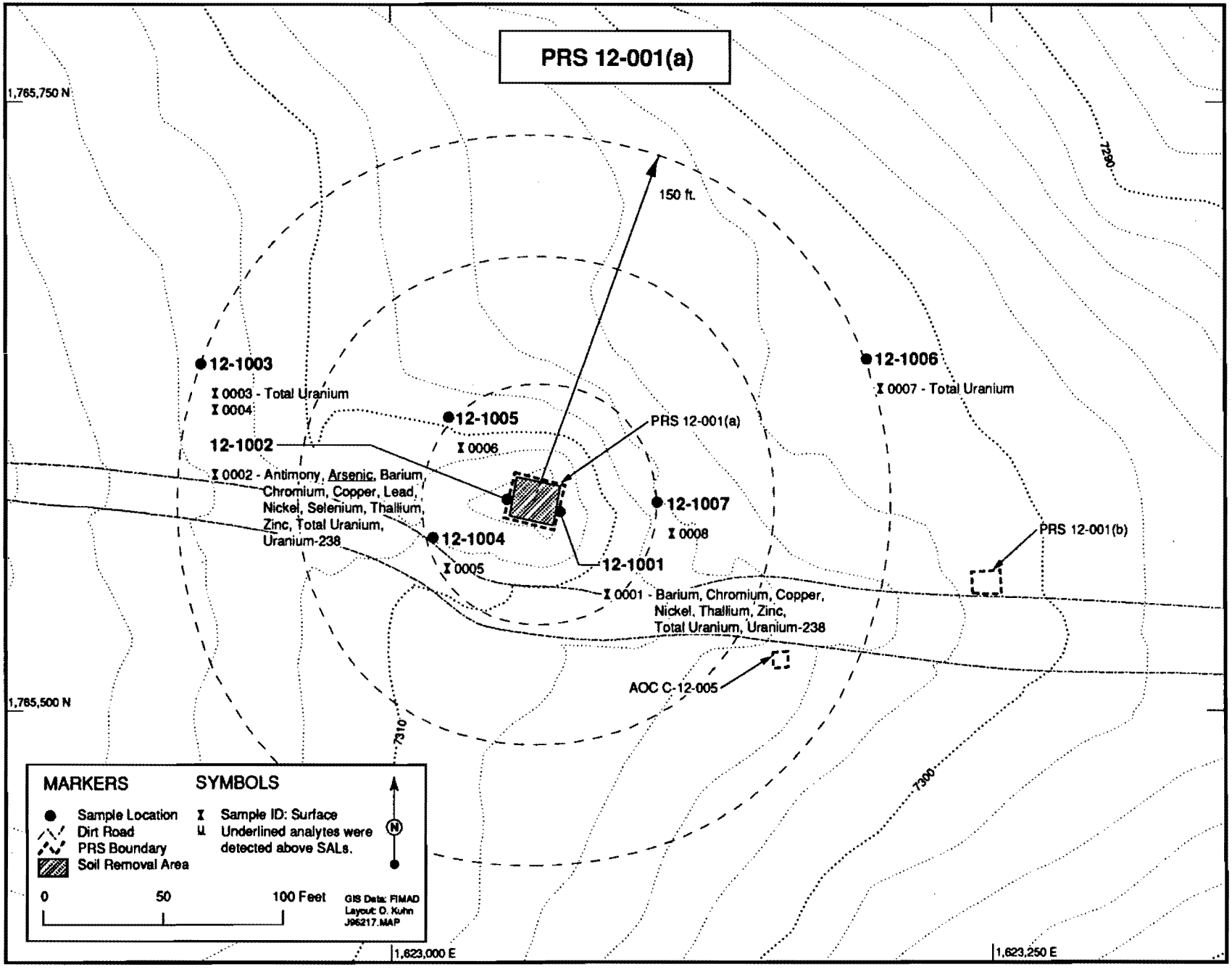
PRS_ID	SAMPLE_ID	LOCATION ID	BEGIN DEPTH	END DEPTH	DEPTH	ANALYTE CODE DESCRIPTION	SAMPLE TYPE CODE	SAMPLE RESULTS	REPORTING UNIT	SAL MATRIX	LAB QUALIFIER	SAL LEVEL	SAL UNITS	UTL LEVEL	UTL UNITS	RFI_CLASS	UNCERTAINTY	COMMENTS
12-001(a)	LB					Barium	Blank spike	183	MG/KG							INORGANIC		Percent Recovery=92.9%
12-001(a)	LB					Barium	Laboratory blank	0.000194	MG/KG		J					INORGANIC		
12-001(a)	LB					Beryllium	Blank spike duplicate	111	MG/KG							INORGANIC		Percent Recovery=122%
12-001(a)	LB					Beryllium	Blank spike	97.2	MG/KG							INORGANIC		Percent Recovery=107%
12-001(a)	LB					Beryllium	Laboratory blank	0.000123	MG/KG		J					INORGANIC		
12-001(a)	LB					Cadmium	Blank spike duplicate	150	MG/KG							INORGANIC		Percent Recovery=122%
12-001(a)	LB					Cadmium	Blank spike	132	MG/KG							INORGANIC		Percent Recovery=107%
12-001(a)	LB					Cadmium	Laboratory blank	0.000187	MG/KG		J					INORGANIC		
12-001(a)	LB					Calcium	Blank spike duplicate	2830	MG/KG							INORGANIC		Percent Recovery=119%
12-001(a)	LB					Calcium	Blank spike	2640	MG/KG							INORGANIC		Percent Recovery=111%
12-001(a)	LB					Calcium	Laboratory blank	0.122	MG/KG							INORGANIC		
12-001(a)	LB					Cesium-137	Blank spike	28.7	PCI/G							RAD	0.396	Percent Recovery=115%
12-001(a)	LB					Cesium-137	Laboratory blank	-0.0046	PCI/G		U					RAD	0.00939	
12-001(a)	LB					Chromium, Total	Blank spike duplicate	93.7	MG/KG							INORGANIC		Percent Recovery=121%
12-001(a)	LB					Chromium, Total	Blank spike	87.1	MG/KG							INORGANIC		Percent Recovery=112%
12-001(a)	LB					Chromium, Total	Laboratory blank	0.0117	MG/KG							INORGANIC		
12-001(a)	LB					Cobalt	Blank spike duplicate	164	MG/KG							INORGANIC		Percent Recovery=116%
12-001(a)	LB					Cobalt	Blank spike	149	MG/KG							INORGANIC		Percent Recovery=105%
12-001(a)	LB					Cobalt	Laboratory blank	0.000255	MG/KG		J					INORGANIC		
12-001(a)	LB					Copper	Blank spike duplicate	116	MG/KG							INORGANIC		Percent Recovery=110%
12-001(a)	LB					Copper	Blank spike	1005	MG/KG							INORGANIC		Percent Recovery=98.8%
12-001(a)	LB					Copper	Laboratory blank	0.01	MG/KG		U					INORGANIC		
12-001(a)	LB					Iron	Blank spike duplicate	6710	MG/KG							INORGANIC		Percent Recovery=89%
12-001(a)	LB					Iron	Blank spike	7460	MG/KG							INORGANIC		Percent Recovery=99%
12-001(a)	LB					Iron	Laboratory blank	0.0743	MG/KG							INORGANIC		
12-001(a)	LB					Lead	Blank spike	186	MG/KG							INORGANIC		Percent Recovery=98.9%
12-001(a)	LB					Lead	Laboratory blank	0.005	MG/KG		U					INORGANIC		
12-001(a)	LB					Lead	Blank spike duplicate	210	MG/KG							INORGANIC		Percent Recovery=112%
12-001(a)	LB					Magnesium	Blank spike duplicate	3690	MG/KG							INORGANIC		Percent Recovery=118%
12-001(a)	LB					Magnesium	Blank spike	3330	MG/KG							INORGANIC		Percent Recovery=106%
12-001(a)	LB					Magnesium	Laboratory blank	0.00423	MG/KG		J					INORGANIC		
12-001(a)	LB					Manganese	Blank spike	209	MG/KG							INORGANIC		Percent Recovery=97.2%
12-001(a)	LB					Manganese	Laboratory blank	0.000958	MG/KG		J					INORGANIC		
12-001(a)	LB					Manganese	Blank spike duplicate	227	MG/KG							INORGANIC		Percent Recovery=106%
12-001(a)	LB					Nickel	Blank spike duplicate	82.2	MG/KG							INORGANIC		Percent Recovery=117%
12-001(a)	LB					Nickel	Blank spike	76	MG/KG							INORGANIC		Percent Recovery=108%
12-001(a)	LB					Nickel	Laboratory blank	0.00694	MG/KG		J					INORGANIC		
12-001(a)	LB					Potassium	Blank spike duplicate	2010	MG/KG							INORGANIC		Percent Recovery=93.9%
12-001(a)	LB					Potassium	Blank spike	1930	MG/KG							INORGANIC		Percent Recovery=90.1%
12-001(a)	LB					Potassium	Laboratory blank	0.00946	MG/KG		J					INORGANIC		
12-001(a)	LB					Protactinium-231	Laboratory blank	0.145	PCI/G							RAD	0.0842	
12-001(a)	LB					Protactinium-234	Laboratory blank	-0.0503	PCI/G		U					RAD	0.0641	
12-001(a)	LB					Protactinium-234M	Laboratory blank	3.41	PCI/G		U					RAD	1.72	
12-001(a)	LB					Selenium	Blank spike duplicate	88.9	MG/KG							INORGANIC		Percent Recovery=103%
12-001(a)	LB					Selenium	Blank spike	80.2	MG/KG							INORGANIC		Percent Recovery=93.2%
12-001(a)	LB					Selenium	Laboratory blank	0.005	MG/KG		U					INORGANIC		
12-001(a)	LB					Silver	Laboratory blank	0.01	MG/KG		U					INORGANIC		
12-001(a)	LB					Silver	Blank spike	119	MG/KG							INORGANIC		Percent Recovery=102%
12-001(a)	LB					Silver	Blank spike duplicate	133	MG/KG							INORGANIC		Percent Recovery=113%
12-001(a)	LB					Sodium	Blank spike duplicate	312	MG/KG							INORGANIC		Percent Recovery=99.7%
12-001(a)	LB					Sodium	Blank spike	286	MG/KG							INORGANIC		Percent Recovery=91.5%
12-001(a)	LB					Sodium	Laboratory blank	0.0521	MG/KG		J					INORGANIC		

SAMPLE DATA FOR PRS 12-001(a)

PRS_ID	SAMPLE_ID	LOCATION ID	BEGIN DEPTH	END DEPTH	DEPTH	ANALYTE CODE DESCRIPTION	SAMPLE TYPE CODE	SAMPLE RESULTS	REPORTING UNIT	SAL MATRIX	LAB QUALIFIER	SAL LEVEL	SAL UNITS	UTL LEVEL	UTL UNITS	RFI_CLASS	UNCERTAINTY	COMMENTS
12-001(a)	LB					Thallium	Blank spike duplicate	105	MG/KG							INORGANIC		Percent Recovery=121%
12-001(a)	LB					Thallium	Blank spike	94.5	MG/KG							INORGANIC		Percent Recovery=108%
12-001(a)	LB					Thallium	Laboratory blank	0.01	MG/KG		U					INORGANIC		
12-001(a)	LB					Thorium-230	Laboratory blank	0.0369	PCI/G		U					RAD	0.0185	
12-001(a)	LB					Thorium-231	Laboratory blank	-0.0334	PCI/G		U					RAD	0.0451	
12-001(a)	LB					Thorium-234	Laboratory blank	0.157	PCI/G		U					RAD	0.166	
12-001(a)	LB					Uranium-234	Laboratory blank	0.00411	PCI/G		U					RAD	0.0339	
12-001(a)	LB					Uranium-235	Laboratory blank	0.104	PCI/G		U					RAD	0.0802	
12-001(a)	LB					Uranium-238	Laboratory blank	1.43	PCI/G							RAD	0.265	
12-001(a)	LB					Vanadium	Blank spike duplicate	225	MG/KG							INORGANIC		Percent Recovery=123%
12-001(a)	LB					Vanadium	Blank spike	196	MG/KG							INORGANIC		Percent Recovery=107%
12-001(a)	LB					Vanadium	Laboratory blank	0.01	MG/KG		U					INORGANIC		
12-001(a)	LB					Zinc	Blank spike duplicate	279	MG/KG							INORGANIC		Percent Recovery=105%
12-001(a)	LB					Zinc	Blank spike	253	MG/KG							INORGANIC		Percent Recovery=95.5%
12-001(a)	LB					Zinc	Laboratory blank	0.0175	MG/KG		J					INORGANIC		

ATTACHMENT 2

PRS 12-001(a) Site Map


PRS 12-001(a)
1,765,750 N
1,765,500 N
1,623,000 E
1,623,250 E
150 ft.
7290
7300
7310
12-1003
0003 - Total Uranium
0004
12-1002
0002 - Antimony, Arsenic, Barium, Chromium, Copper, Lead, Nickel, Selenium, Thallium, Zinc, Total Uranium, Uranium-238
12-1005
0006
12-1004
0005
12-1001
0001 - Barium, Chromium, Copper, Nickel, Thallium, Zinc, Total Uranium, Uranium-238
12-1007
0008
12-1006
0007 - Total Uranium
PRS 12-001(a)
PRS 12-001(b)
AOC C-12-005
MARKERS
Sample Location
Dirt Road
PRS Boundary
Soil Removal Area
SYMBOLS
Sample ID: Surface
Underlined analytes were detected above SALs.
N
0
50
100 Feet
GIS Data: FIMAD
Layout: D. Kuhn
J95217.MAP