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ESL090018 KB 4-27-11

Report for Batch Leach Analyses on Sediments at 100-FR-3 Operable Unit, Boreholes C7790, C7791, and C7792

Michael Lindberg

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SDM Disclaimer

The data herein cannot be reconciled by Sample Data Management (SDM) against the analytical requests on the submitted Chains of Custody, due to the nature of Environmental Sciences Laboratory (ESL) special studies. ESL scientists choose and analyze samples at their own discretion which may or may not reflect the planned analysis generated by SDM.

03/28/11 14:53

To: Anna Radloff

From: Michael J. Lindberg

Environmental Sciences Laboratory
Energy and Environment Directorate, Pacific Northwest National Laboratory

Subject: Analytical Data Report for Sediment Samples Collected From 100-FR-3 Operable Unit, Sample Delivery Group ESL090018, SAF Number F10-234

This letter contains the following information for sample delivery group ESL090018

- Cover Sheet
- Narrative
- Analytical Results
- Quality Control
- Chain of Custodies

Introduction

Between August 15, 2010 and December 2, 2010 sediment samples were received from the 100-FR-3 Operable Unit for geochemical studies.

Analytical Results/Methodology

The analyses for this project were performed at the 325 building located in the 300 Area of the Hanford Site. The analyses were performed according to Pacific Northwest National Laboratory (PNNL) approved procedures and/or nationally recognized test procedures. The data sets include the sample identification numbers, analytical results, estimated quantification limits (EQL), and quality control data.

Quality Control

The preparatory and analytical quality control requirements, calibration requirements, acceptance criteria, and failure actions are defined in the on-line QA plan "Conducting Analytical Work in Support of Regulatory Programs" (CAW). This QA plan implements the Hanford Analytical Services Quality Assurance Requirements Documents (HASQARD) for PNNL.

Definitions

Dup	Duplicate
RPD	Relative Percent Difference
NR	No Recovery (percent recovery less than zero)
ND	Non-Detectable
%REC	Percent Recovery

Sample Receipt

Samples were received with a chain of custody (COC) and were analyzed according to the sample identification numbers supplied by the client. All Samples were refrigerated upon receipt until prepared for analysis.

All samples were received with custody seals intact unless noted in the Case Narrative.

Holding Times

Holding time is defined as the time from sample preparation to the time of analyses. The prescribed holding times were met for all analytes unless noted in the Case Narrative.

Analytical Results

All reported analytical results meet the requirements of the CAW or client specified SOW unless noted in the case narrative.

Case Narrative Report

Hold Time:

Due to the requirements of the statement of work and sampling events in the field, the 28 day and the 48 hr requirements could not be met. All applicable hold times were started from the time of preparation and not the time of sampling.

Preparation Blank (PB):

No discrepancies noted.

Duplicate (DUP):

Duplicate RPD for Arsenic (55.5%) was above the acceptance limit (35) in 0J11001-DUP1 for ICPMS-RCRA-AE
Duplicate failure may be due to sample heterogeneity. All other duplicates and QC associated with the batch were in limits. There should be no impact to sample data as reported.

Duplicate RPD for Chromium (63.6%) was above the acceptance limit (35) in 0J11001-DUP1 for ICPMS-RCRA-AE
Duplicate failure may be due to sample heterogeneity. All other duplicates and QC associated with the batch were in limits. There should be no impact to sample data as reported.

Duplicate RPD for Lead (50.3%) was above the acceptance limit (35) in 0J11001-DUP2 for ICPMS-RCRA-AE
Duplicate failure may be due to sample heterogeneity. All other duplicates and QC associated with the batch were in limits. There should be no impact to sample data as reported.

Duplicate RPD for Barium (50.1%) was above the acceptance limit (35) in 0J14004-DUP1 for ICP-OES Vadose-AE
Duplicate failure may be due to sample heterogeneity. All other duplicates and QC associated with the batch were in limits. There should be no impact to sample data as reported.

Laboratory Control Samples (LCS):

No discrepancies noted.

Post Spike (PS):

Post-Spike Recovery for Chromium, Hexavalent (153%) was outside acceptance limits (75-125) in 0J15001-PS1 for Hexavalent Chromium/WE 1:5
The high recovery for the post spike is due to a preparation error. Sample results associated with this batch are below the EQL and all other batch QC was in limits. There should be no impact to the data as reported.

Matrix Spike (MS):

No discrepancies noted.

Other QC Criteria:

No discrepancies noted.

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager as verified by this signature.

Michael Lindberg

DISCLAIMER

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The following analyses were performed on the following samples included in this report:

Metals 1:1 DI Water Extract by ICPMS
Metals 1:2.5 DI Water Extract by ICPMS
Metals 1:5 DI Water Extract by ICPMS
Metals Acid Extract by ICPMS
Hexavalent Chromium by Colorimetric Determination
Metals 1:1 Water Extract by ICPOES
Metals 1:2.5 Water Extract by ICPOES
Metals 1:5 Water Extract by ICPOES
Metals Acid Extract by ICPOES
Moisture Content
Stronium 90 Acid Extract by LSC
Strontium 90 1:2.5 DI Water Extract by LSC
Strontium 90 1:5 DI Water Extract by LSC
Strontium 90 Water Extract by LSC

SAMPLES ANALYZED IN THIS REPORT

HEIS No.	Laboratory ID	Matrix	Date Collected	Date Received
B274K7	1009008-01	SOIL	9/1/10 10:26	9/1/10 15:00
B273B8	1009008-02	SOIL	8/30/10 12:16	9/1/10 15:00
B27PY0	1009008-03	SOIL	8/31/10 08:57	9/1/10 15:00
B274K6	1009008-04	SOIL	8/26/10 14:00	8/30/10 14:00
B26TC1	1009008-05	SOIL	8/13/10 12:25	8/15/10 14:45
B26TC2	1009008-06	SOIL	8/16/10 10:00	8/15/10 14:45
B273B2	1009008-07	SOIL	11/11/10 08:50	11/16/10 08:40
B273B3	1009008-08	SOIL	11/15/10 08:30	11/16/10 08:40
B273B4	1009008-09	SOIL	11/15/10 08:30	11/16/10 08:40
B273B6	1009008-10	SOIL	11/29/10 09:50	12/2/10 09:05
B273B5	1009008-11	SOIL	11/22/10 11:10	12/2/10 09:05

Wet Chemistry

Moisture Content (% by Weight) by AGG-WC-001

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
1009008-01	B274K7	3.51E1	N/A	10/05/10	0I29004
1009008-02	B273B8	2.19E1	N/A	10/05/10	0I29004
1009008-03	B27PY0	1.39E1	N/A	10/05/10	0I29004
1009008-04	B274K6	2.36E1	N/A	10/05/10	0I29004
1009008-05	B26TC1	1.12E1	N/A	10/05/10	0I29004
1009008-06	B26TC2	2.49E1	N/A	10/05/10	0I29004
1009008-07	B273B2	4.73E0	N/A	12/30/10	0L27001
1009008-08	B273B3	1.97E1	N/A	12/30/10	0L27001
1009008-09	B273B4	1.15E1	N/A	12/30/10	0L27001
1009008-10	B273B6	3.81E1	N/A	12/30/10	0L27001
1009008-11	B273B5	3.08E1	N/A	12/30/10	0L27001

Hexavalent Chromium/Soil

Chromium, Hexavalent (ug/g dry) by Colorimetric Determination

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
1009008-01	B274K7	<6.72E-1	6.72E-1	10/14/10	0J14008
1009008-02	B273B8	<5.92E-1	5.92E-1	10/14/10	0J14008
1009008-03	B27PY0	<5.27E-1	5.27E-1	10/14/10	0J14008
1009008-04	B274K6	<6.11E-1	6.11E-1	10/14/10	0J14008
1009008-05	B26TC1	<5.25E-1	5.25E-1	10/14/10	0J14008
1009008-06	B26TC2	<5.76E-1	5.76E-1	10/14/10	0J14008
1009008-07	B273B2	<5.22E-1	5.22E-1	1/13/11	1A14001
1009008-08	B273B3	<5.98E-1	5.98E-1	1/13/11	1A14001
1009008-09	B273B4	<5.55E-1	5.55E-1	1/13/11	1A14001
1009008-10	B273B6	<6.93E-1	6.93E-1	1/13/11	1A14001
1009008-11	B273B5	<6.54E-1	6.54E-1	1/13/11	1A14001

Hexavalent Chromium/1:1 Water Extract

Chromium, Hexavalent (ug/g dry) by Colorimetric Determination

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
1009008-01	B274K7	<2.94E-2	2.94E-2	10/11/10	0J11006
1009008-02	B273B8	<3.90E-2	3.90E-2	10/11/10	0J11006
1009008-03	B27PY0	<4.37E-2	4.37E-2	10/11/10	0J11006
1009008-04	B274K6	<3.83E-2	3.83E-2	10/11/10	0J11006
1009008-05	B26TC1	<4.45E-2	4.45E-2	10/11/10	0J11006
1009008-06	B26TC2	<3.97E-2	3.97E-2	10/11/10	0J11006
1009008-07	B273B2	<4.76E-2	4.76E-2	1/07/11	1A06002
1009008-08	B273B3	<4.02E-2	4.02E-2	1/07/11	1A06002
1009008-09	B273B4	<4.43E-2	4.43E-2	1/07/11	1A06002
1009008-10	B273B6	<3.06E-2	3.06E-2	1/07/11	1A06002
1009008-11	B273B5	<3.62E-2	3.62E-2	1/07/11	1A06002

Hexavalent Chromium/1:2.5 Water Extract

Chromium, Hexavalent (ug/g dry) by Colorimetric Determination

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
1009008-01	B274K7	<1.02E-1	1.02E-1	12/02/10	0J12002
1009008-02	B273B8	<1.14E-1	1.14E-1	12/02/10	0J12002
1009008-03	B27PY0	<1.18E-1	1.18E-1	12/02/10	0J12002
1009008-04	B274K6	<1.22E-1	1.22E-1	12/02/10	0J12002
1009008-05	B26TC1	<1.19E-1	1.19E-1	12/02/10	0J12002
1009008-06	B26TC2	<1.12E-1	1.12E-1	12/02/10	0J12002
1009008-07	B273B2	<1.21E-1	1.21E-1	1/07/11	1A07001
1009008-08	B273B3	<1.14E-1	1.14E-1	1/07/11	1A07001
1009008-09	B273B4	<1.19E-1	1.19E-1	1/07/11	1A07001
1009008-10	B273B6	<1.06E-1	1.06E-1	1/07/11	1A07001
1009008-11	B273B5	<1.10E-1	1.10E-1	1/07/11	1A07001

Hexavalent Chromium/1:5 Water Extract

Chromium, Hexavalent (ug/g dry) by Colorimetric Determination

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
1009008-01	B274K7	<2.22E-1	2.22E-1	12/02/10	0J15001
1009008-02	B273B8	<2.36E-1	2.36E-1	12/02/10	0J15001
1009008-03	B27PY0	<2.23E-1	2.23E-1	12/02/10	0J15001
1009008-04	B274K6	<2.38E-1	2.38E-1	12/02/10	0J15001
1009008-05	B26TC1	<2.40E-1	2.40E-1	12/02/10	0J15001
1009008-06	B26TC2	<2.37E-1	2.37E-1	12/02/10	0J15001
1009008-07	B273B2	<2.48E-1	2.48E-1	1/07/11	1A07002
1009008-08	B273B3	<2.37E-1	2.37E-1	1/07/11	1A07002
1009008-09	B273B4	<2.45E-1	2.45E-1	1/07/11	1A07002
1009008-10	B273B6	<2.30E-1	2.30E-1	1/07/11	1A07002
1009008-11	B273B5	<2.29E-1	2.29E-1	1/07/11	1A07002

Total Metals by PNNL-AGG-ICP-AES/1:1 Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B274K7**		**Lab ID:**	**1009008-01**			
7440-39-3	Barium	<1.16E-1	ug/g dry	1.16E-1	10/14/10	0J14005	PNNL-AGG-ICP-AES
HEIS No.	**B273B8**		**Lab ID:**	**1009008-02**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	10/14/10	0J14005	PNNL-AGG-ICP-AES
HEIS No.	**B27PY0**		**Lab ID:**	**1009008-03**			
7440-39-3	Barium	<1.25E-1	ug/g dry	1.25E-1	10/14/10	0J14005	PNNL-AGG-ICP-AES
HEIS No.	**B274K6**		**Lab ID:**	**1009008-04**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	10/14/10	0J14005	PNNL-AGG-ICP-AES
HEIS No.	**B26TC1**		**Lab ID:**	**1009008-05**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	10/14/10	0J14005	PNNL-AGG-ICP-AES
HEIS No.	**B26TC2**		**Lab ID:**	**1009008-06**			
7440-39-3	Barium	<1.29E-1	ug/g dry	1.29E-1	10/14/10	0J14005	PNNL-AGG-ICP-AES
HEIS No.	**B273B2**		**Lab ID:**	**1009008-07**			
7440-39-3	Barium	<8.25E-2	ug/g dry	8.25E-2	2/01/11	1A31003	PNNL-AGG-ICP-AES
HEIS No.	**B273B3**		**Lab ID:**	**1009008-08**			
7440-39-3	Barium	<8.26E-2	ug/g dry	8.26E-2	2/01/11	1A31003	PNNL-AGG-ICP-AES
HEIS No.	**B273B4**		**Lab ID:**	**1009008-09**			
7440-39-3	Barium	<8.26E-2	ug/g dry	8.26E-2	2/01/11	1A31003	PNNL-AGG-ICP-AES
HEIS No.	**B273B6**		**Lab ID:**	**1009008-10**			
7440-39-3	Barium	<8.20E-2	ug/g dry	8.20E-2	2/01/11	1A31003	PNNL-AGG-ICP-AES
HEIS No.	**B273B5**		**Lab ID:**	**1009008-11**			
7440-39-3	Barium	<8.52E-2	ug/g dry	8.52E-2	2/01/11	1A31003	PNNL-AGG-ICP-AES

Total Metals by PNNL-AGG-ICP-AES/1:2.5 Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B274K7**		**Lab ID:**	**1009008-01**			
7440-39-3	Barium	<2.95E-1	ug/g dry	2.95E-1	12/02/10	0J14006	PNNL-AGG-ICP-AES
HEIS No.	**B273B8**		**Lab ID:**	**1009008-02**			
7440-39-3	Barium	<3.08E-1	ug/g dry	3.08E-1	12/02/10	0J14006	PNNL-AGG-ICP-AES
HEIS No.	**B27PY0**		**Lab ID:**	**1009008-03**			
7440-39-3	Barium	<3.10E-1	ug/g dry	3.10E-1	12/02/10	0J14006	PNNL-AGG-ICP-AES
HEIS No.	**B274K6**		**Lab ID:**	**1009008-04**			
7440-39-3	Barium	<3.30E-1	ug/g dry	3.30E-1	12/02/10	0J14006	PNNL-AGG-ICP-AES
HEIS No.	**B26TC1**		**Lab ID:**	**1009008-05**			
7440-39-3	Barium	<3.08E-1	ug/g dry	3.08E-1	12/02/10	0J14006	PNNL-AGG-ICP-AES
HEIS No.	**B26TC2**		**Lab ID:**	**1009008-06**			
7440-39-3	Barium	<3.07E-1	ug/g dry	3.07E-1	12/02/10	0J14006	PNNL-AGG-ICP-AES
HEIS No.	**B273B2**		**Lab ID:**	**1009008-07**			
7440-39-3	Barium	<2.04E-1	ug/g dry	2.04E-1	2/01/11	1A31004	PNNL-AGG-ICP-AES
HEIS No.	**B273B3**		**Lab ID:**	**1009008-08**			
7440-39-3	Barium	<2.05E-1	ug/g dry	2.05E-1	2/01/11	1A31004	PNNL-AGG-ICP-AES
HEIS No.	**B273B4**		**Lab ID:**	**1009008-09**			
7440-39-3	Barium	<2.05E-1	ug/g dry	2.05E-1	2/01/11	1A31004	PNNL-AGG-ICP-AES
HEIS No.	**B273B6**		**Lab ID:**	**1009008-10**			
7440-39-3	Barium	<2.06E-1	ug/g dry	2.06E-1	2/01/11	1A31004	PNNL-AGG-ICP-AES
HEIS No.	**B273B5**		**Lab ID:**	**1009008-11**			
7440-39-3	Barium	<2.06E-1	ug/g dry	2.06E-1	2/01/11	1A31004	PNNL-AGG-ICP-AES

Total Metals by PNNL-AGG-ICP-AES/1:5 Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B274K7**		**Lab ID:**	**1009008-01**			
7440-39-3	Barium	<5.94E-1	ug/g dry	5.94E-1	12/02/10	0J14007	PNNL-AGG-ICP-AES
HEIS No.	**B273B8**		**Lab ID:**	**1009008-02**			
7440-39-3	Barium	<6.13E-1	ug/g dry	6.13E-1	12/02/10	0J14007	PNNL-AGG-ICP-AES
HEIS No.	**B27PY0**		**Lab ID:**	**1009008-03**			
7440-39-3	Barium	<5.69E-1	ug/g dry	5.69E-1	12/02/10	0J14007	PNNL-AGG-ICP-AES
HEIS No.	**B274K6**		**Lab ID:**	**1009008-04**			
7440-39-3	Barium	<6.18E-1	ug/g dry	6.18E-1	12/02/10	0J14007	PNNL-AGG-ICP-AES
HEIS No.	**B26TC1**		**Lab ID:**	**1009008-05**			
7440-39-3	Barium	<6.09E-1	ug/g dry	6.09E-1	12/02/10	0J14007	PNNL-AGG-ICP-AES
HEIS No.	**B26TC2**		**Lab ID:**	**1009008-06**			
7440-39-3	Barium	<6.17E-1	ug/g dry	6.17E-1	12/02/10	0J14007	PNNL-AGG-ICP-AES
HEIS No.	**B273B2**		**Lab ID:**	**1009008-07**			
7440-39-3	Barium	<4.12E-1	ug/g dry	4.12E-1	2/01/11	1A31005	PNNL-AGG-ICP-AES
HEIS No.	**B273B3**		**Lab ID:**	**1009008-08**			
7440-39-3	Barium	<4.07E-1	ug/g dry	4.07E-1	2/01/11	1A31005	PNNL-AGG-ICP-AES
HEIS No.	**B273B4**		**Lab ID:**	**1009008-09**			
7440-39-3	Barium	<4.14E-1	ug/g dry	4.14E-1	2/01/11	1A31005	PNNL-AGG-ICP-AES
HEIS No.	**B273B6**		**Lab ID:**	**1009008-10**			
7440-39-3	Barium	<4.11E-1	ug/g dry	4.11E-1	2/01/11	1A31005	PNNL-AGG-ICP-AES
HEIS No.	**B273B5**		**Lab ID:**	**1009008-11**			
7440-39-3	Barium	<4.03E-1	ug/g dry	4.03E-1	2/01/11	1A31005	PNNL-AGG-ICP-AES

Total Metals by PNNL-AGG-ICP-AES/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B274K7**		**Lab ID:**	**1009008-01**			
7440-39-3	Barium	3.12E1	ug/g dry	1.91E0	10/15/10	0J14004	PNNL-AGG-ICP-AES
HEIS No.	**B273B8**		**Lab ID:**	**1009008-02**			
7440-39-3	Barium	2.54E1	ug/g dry	1.71E0	10/15/10	0J14004	PNNL-AGG-ICP-AES
HEIS No.	**B27PY0**		**Lab ID:**	**1009008-03**			
7440-39-3	Barium	3.33E1	ug/g dry	1.59E0	10/15/10	0J14004	PNNL-AGG-ICP-AES
HEIS No.	**B274K6**		**Lab ID:**	**1009008-04**			
7440-39-3	Barium	2.18E1	ug/g dry	1.72E0	10/15/10	0J14004	PNNL-AGG-ICP-AES
HEIS No.	**B26TC1**		**Lab ID:**	**1009008-05**			
7440-39-3	Barium	2.96E1	ug/g dry	1.55E0	10/15/10	0J14004	PNNL-AGG-ICP-AES
HEIS No.	**B26TC2**		**Lab ID:**	**1009008-06**			
7440-39-3	Barium	1.12E2	ug/g dry	1.72E0	10/15/10	0J14004	PNNL-AGG-ICP-AES
HEIS No.	**B273B2**		**Lab ID:**	**1009008-07**			
7440-39-3	Barium	6.53E1	ug/g dry	1.49E0	2/02/11	1B02001	PNNL-AGG-ICP-AES
HEIS No.	**B273B3**		**Lab ID:**	**1009008-08**			
7440-39-3	Barium	5.15E1	ug/g dry	1.70E0	2/02/11	1B02001	PNNL-AGG-ICP-AES
HEIS No.	**B273B4**		**Lab ID:**	**1009008-09**			
7440-39-3	Barium	6.17E1	ug/g dry	1.60E0	2/02/11	1B02001	PNNL-AGG-ICP-AES
HEIS No.	**B273B6**		**Lab ID:**	**1009008-10**			
7440-39-3	Barium	1.36E3	ug/g dry	1.96E0	2/02/11	1B02001	PNNL-AGG-ICP-AES
HEIS No.	**B273B5**		**Lab ID:**	**1009008-11**			
7440-39-3	Barium	1.03E2	ug/g dry	1.85E0	2/02/11	1B02001	PNNL-AGG-ICP-AES

RCRA Metals By PNNL-AGG-415/1:1 Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B274K7**		**Lab ID:**	**1009008-01**			
14092-98-9	Chromium	<3.23E-3	ug/g dry	3.23E-3	10/11/10	0J11002	PNNL-AGG-415
7440-38-2	Arsenic	9.25E-3	ug/g dry	2.66E-3	10/11/10	0J11002	PNNL-AGG-415
14687-58-2	Selenium	1.83E-2	ug/g dry	7.43E-3	10/11/10	0J11002	PNNL-AGG-415
14378-37-1	Silver	<2.94E-3	ug/g dry	2.94E-3	10/11/10	0J11002	PNNL-AGG-415
14336-64-2	Cadmium	<5.38E-4	ug/g dry	5.38E-4	10/11/10	0J11002	PNNL-AGG-415
13966-28-4	Lead	<1.09E-3	ug/g dry	1.09E-3	10/11/10	0J11002	PNNL-AGG-415
HEIS No.	**B273B8**		**Lab ID:**	**1009008-02**			
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	10/11/10	0J11002	PNNL-AGG-415
7440-38-2	Arsenic	<2.83E-3	ug/g dry	2.83E-3	10/11/10	0J11002	PNNL-AGG-415
14687-58-2	Selenium	<7.90E-3	ug/g dry	7.90E-3	10/11/10	0J11002	PNNL-AGG-415
14378-37-1	Silver	<3.12E-3	ug/g dry	3.12E-3	10/11/10	0J11002	PNNL-AGG-415
14336-64-2	Cadmium	<5.72E-4	ug/g dry	5.72E-4	10/11/10	0J11002	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	10/11/10	0J11002	PNNL-AGG-415
HEIS No.	**B27PY0**		**Lab ID:**	**1009008-03**			
14092-98-9	Chromium	<3.49E-3	ug/g dry	3.49E-3	10/11/10	0J11002	PNNL-AGG-415
7440-38-2	Arsenic	<2.87E-3	ug/g dry	2.87E-3	10/11/10	0J11002	PNNL-AGG-415
14687-58-2	Selenium	<8.02E-3	ug/g dry	8.02E-3	10/11/10	0J11002	PNNL-AGG-415
14378-37-1	Silver	<3.17E-3	ug/g dry	3.17E-3	10/11/10	0J11002	PNNL-AGG-415
14336-64-2	Cadmium	<5.81E-4	ug/g dry	5.81E-4	10/11/10	0J11002	PNNL-AGG-415
13966-28-4	Lead	<1.18E-3	ug/g dry	1.18E-3	10/11/10	0J11002	PNNL-AGG-415
HEIS No.	**B274K6**		**Lab ID:**	**1009008-04**			
14092-98-9	Chromium	<3.46E-3	ug/g dry	3.46E-3	10/11/10	0J11002	PNNL-AGG-415
7440-38-2	Arsenic	<2.84E-3	ug/g dry	2.84E-3	10/11/10	0J11002	PNNL-AGG-415
14687-58-2	Selenium	<7.94E-3	ug/g dry	7.94E-3	10/11/10	0J11002	PNNL-AGG-415
14378-37-1	Silver	<3.14E-3	ug/g dry	3.14E-3	10/11/10	0J11002	PNNL-AGG-415
14336-64-2	Cadmium	<5.75E-4	ug/g dry	5.75E-4	10/11/10	0J11002	PNNL-AGG-415
13966-28-4	Lead	<1.17E-3	ug/g dry	1.17E-3	10/11/10	0J11002	PNNL-AGG-415
HEIS No.	**B26TC1**		**Lab ID:**	**1009008-05**			
14092-98-9	Chromium	<3.45E-3	ug/g dry	3.45E-3	10/11/10	0J11002	PNNL-AGG-415
7440-38-2	Arsenic	<2.84E-3	ug/g dry	2.84E-3	10/11/10	0J11002	PNNL-AGG-415
14687-58-2	Selenium	<7.92E-3	ug/g dry	7.92E-3	10/11/10	0J11002	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	10/11/10	0J11002	PNNL-AGG-415
14336-64-2	Cadmium	<5.74E-4	ug/g dry	5.74E-4	10/11/10	0J11002	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	10/11/10	0J11002	PNNL-AGG-415
HEIS No.	**B26TC2**		**Lab ID:**	**1009008-06**			
14092-98-9	Chromium	<3.59E-3	ug/g dry	3.59E-3	10/11/10	0J11002	PNNL-AGG-415
7440-38-2	Arsenic	8.86E-3	ug/g dry	2.96E-3	10/11/10	0J11002	PNNL-AGG-415
14687-58-2	Selenium	<8.25E-3	ug/g dry	8.25E-3	10/11/10	0J11002	PNNL-AGG-415
14378-37-1	Silver	<3.26E-3	ug/g dry	3.26E-3	10/11/10	0J11002	PNNL-AGG-415
14336-64-2	Cadmium	<5.97E-4	ug/g dry	5.97E-4	10/11/10	0J11002	PNNL-AGG-415
13966-28-4	Lead	<1.21E-3	ug/g dry	1.21E-3	10/11/10	0J11002	PNNL-AGG-415
HEIS No.	**B273B2**		**Lab ID:**	**1009008-07**			
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	1/17/11	1A17001	PNNL-AGG-415
7440-38-2	Arsenic	2.15E-2	ug/g dry	1.42E-2	1/21/11	1A17001	PNNL-AGG-415
14687-58-2	Selenium	<7.91E-3	ug/g dry	7.91E-3	1/17/11	1A17001	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	1/17/11	1A17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	1/17/11	1A17001	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	1/17/11	1A17001	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/1:1 Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B273B3**	**Lab ID:**		**1009008-08**			
14092-98-9	Chromium	<3.45E-3	ug/g dry	3.45E-3	1/17/11	1A17001	PNNL-AGG-415
7440-38-2	Arsenic	<1.42E-2	ug/g dry	1.42E-2	1/21/11	1A17001	PNNL-AGG-415
14687-58-2	Selenium	<7.92E-3	ug/g dry	7.92E-3	1/17/11	1A17001	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	1/17/11	1A17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.74E-4	ug/g dry	5.74E-4	1/17/11	1A17001	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	1/17/11	1A17001	PNNL-AGG-415
HEIS No.	**B273B4**	**Lab ID:**		**1009008-09**			
14092-98-9	Chromium	<3.45E-3	ug/g dry	3.45E-3	1/17/11	1A17001	PNNL-AGG-415
7440-38-2	Arsenic	2.70E-2	ug/g dry	1.42E-2	1/21/11	1A17001	PNNL-AGG-415
14687-58-2	Selenium	<7.93E-3	ug/g dry	7.93E-3	1/17/11	1A17001	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	1/17/11	1A17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.74E-4	ug/g dry	5.74E-4	1/17/11	1A17001	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	1/17/11	1A17001	PNNL-AGG-415
HEIS No.	**B273B6**	**Lab ID:**		**1009008-10**			
14092-98-9	Chromium	2.15E-2	ug/g dry	3.42E-3	1/17/11	1A17001	PNNL-AGG-415
7440-38-2	Arsenic	3.97E-2	ug/g dry	1.41E-2	1/21/11	1A17001	PNNL-AGG-415
14687-58-2	Selenium	<7.86E-3	ug/g dry	7.86E-3	1/17/11	1A17001	PNNL-AGG-415
14378-37-1	Silver	<3.11E-3	ug/g dry	3.11E-3	1/17/11	1A17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.69E-4	ug/g dry	5.69E-4	1/17/11	1A17001	PNNL-AGG-415
13966-28-4	Lead	<1.15E-3	ug/g dry	1.15E-3	1/17/11	1A17001	PNNL-AGG-415
HEIS No.	**B273B5**	**Lab ID:**		**1009008-11**			
14092-98-9	Chromium	<3.55E-3	ug/g dry	3.55E-3	1/17/11	1A17001	PNNL-AGG-415
7440-38-2	Arsenic	1.89E-2	ug/g dry	1.46E-2	1/21/11	1A17001	PNNL-AGG-415
14687-58-2	Selenium	<8.17E-3	ug/g dry	8.17E-3	1/17/11	1A17001	PNNL-AGG-415
14378-37-1	Silver	<3.23E-3	ug/g dry	3.23E-3	1/17/11	1A17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.91E-4	ug/g dry	5.91E-4	1/17/11	1A17001	PNNL-AGG-415
13966-28-4	Lead	<1.20E-3	ug/g dry	1.20E-3	1/17/11	1A17001	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/1:2.5 Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B274K7**		**Lab ID:**	**1009008-01**			
14092-98-9	Chromium	<8.22E-3	ug/g dry	8.22E-3	12/06/10	0J11003	PNNL-AGG-415
7440-38-2	Arsenic	8.83E-3	ug/g dry	6.77E-3	12/06/10	0J11003	PNNL-AGG-415
14687-58-2	Selenium	<1.89E-2	ug/g dry	1.89E-2	12/06/10	0J11003	PNNL-AGG-415
14378-37-1	Silver	<7.47E-3	ug/g dry	7.47E-3	12/06/10	0J11003	PNNL-AGG-415
14336-64-2	Cadmium	<1.37E-3	ug/g dry	1.37E-3	12/06/10	0J11003	PNNL-AGG-415
13966-28-4	Lead	<2.77E-3	ug/g dry	2.77E-3	12/06/10	0J11003	PNNL-AGG-415
HEIS No.	**B273B8**		**Lab ID:**	**1009008-02**			
14092-98-9	Chromium	<8.58E-3	ug/g dry	8.58E-3	12/06/10	0J11003	PNNL-AGG-415
7440-38-2	Arsenic	<7.07E-3	ug/g dry	7.07E-3	12/06/10	0J11003	PNNL-AGG-415
14687-58-2	Selenium	<1.97E-2	ug/g dry	1.97E-2	12/06/10	0J11003	PNNL-AGG-415
14378-37-1	Silver	<7.79E-3	ug/g dry	7.79E-3	12/06/10	0J11003	PNNL-AGG-415
14336-64-2	Cadmium	<1.43E-3	ug/g dry	1.43E-3	12/06/10	0J11003	PNNL-AGG-415
13966-28-4	Lead	<2.90E-3	ug/g dry	2.90E-3	12/06/10	0J11003	PNNL-AGG-415
HEIS No.	**B27PY0**		**Lab ID:**	**1009008-03**			
14092-98-9	Chromium	<8.62E-3	ug/g dry	8.62E-3	12/06/10	0J11003	PNNL-AGG-415
7440-38-2	Arsenic	<7.09E-3	ug/g dry	7.09E-3	12/06/10	0J11003	PNNL-AGG-415
14687-58-2	Selenium	<1.98E-2	ug/g dry	1.98E-2	12/06/10	0J11003	PNNL-AGG-415
14378-37-1	Silver	<7.82E-3	ug/g dry	7.82E-3	12/06/10	0J11003	PNNL-AGG-415
14336-64-2	Cadmium	<1.43E-3	ug/g dry	1.43E-3	12/06/10	0J11003	PNNL-AGG-415
13966-28-4	Lead	<2.91E-3	ug/g dry	2.91E-3	12/06/10	0J11003	PNNL-AGG-415
HEIS No.	**B274K6**		**Lab ID:**	**1009008-04**			
14092-98-9	Chromium	<9.20E-3	ug/g dry	9.20E-3	12/06/10	0J11003	PNNL-AGG-415
7440-38-2	Arsenic	<7.57E-3	ug/g dry	7.57E-3	12/06/10	0J11003	PNNL-AGG-415
14687-58-2	Selenium	<2.11E-2	ug/g dry	2.11E-2	12/06/10	0J11003	PNNL-AGG-415
14378-37-1	Silver	<8.35E-3	ug/g dry	8.35E-3	12/06/10	0J11003	PNNL-AGG-415
14336-64-2	Cadmium	<1.53E-3	ug/g dry	1.53E-3	12/06/10	0J11003	PNNL-AGG-415
13966-28-4	Lead	<3.10E-3	ug/g dry	3.10E-3	12/06/10	0J11003	PNNL-AGG-415
HEIS No.	**B26TC1**		**Lab ID:**	**1009008-05**			
14092-98-9	Chromium	<8.57E-3	ug/g dry	8.57E-3	12/06/10	0J11003	PNNL-AGG-415
7440-38-2	Arsenic	<7.06E-3	ug/g dry	7.06E-3	12/06/10	0J11003	PNNL-AGG-415
14687-58-2	Selenium	<1.97E-2	ug/g dry	1.97E-2	12/06/10	0J11003	PNNL-AGG-415
14378-37-1	Silver	<7.78E-3	ug/g dry	7.78E-3	12/06/10	0J11003	PNNL-AGG-415
14336-64-2	Cadmium	<1.43E-3	ug/g dry	1.43E-3	12/06/10	0J11003	PNNL-AGG-415
13966-28-4	Lead	<2.89E-3	ug/g dry	2.89E-3	12/06/10	0J11003	PNNL-AGG-415
HEIS No.	**B26TC2**		**Lab ID:**	**1009008-06**			
14092-98-9	Chromium	<8.55E-3	ug/g dry	8.55E-3	12/06/10	0J11003	PNNL-AGG-415
7440-38-2	Arsenic	1.28E-2	ug/g dry	7.04E-3	12/06/10	0J11003	PNNL-AGG-415
14687-58-2	Selenium	<1.97E-2	ug/g dry	1.97E-2	12/06/10	0J11003	PNNL-AGG-415
14378-37-1	Silver	<7.77E-3	ug/g dry	7.77E-3	12/06/10	0J11003	PNNL-AGG-415
14336-64-2	Cadmium	<1.42E-3	ug/g dry	1.42E-3	12/06/10	0J11003	PNNL-AGG-415
13966-28-4	Lead	<2.89E-3	ug/g dry	2.89E-3	12/06/10	0J11003	PNNL-AGG-415
HEIS No.	**B273B2**		**Lab ID:**	**1009008-07**			
14092-98-9	Chromium	<8.53E-3	ug/g dry	8.53E-3	1/17/11	1A17002	PNNL-AGG-415
7440-38-2	Arsenic	4.34E-2	ug/g dry	3.51E-2	1/21/11	1A17002	PNNL-AGG-415
14687-58-2	Selenium	<1.96E-2	ug/g dry	1.96E-2	1/17/11	1A17002	PNNL-AGG-415
14378-37-1	Silver	<7.74E-3	ug/g dry	7.74E-3	1/17/11	1A17002	PNNL-AGG-415
14336-64-2	Cadmium	<1.42E-3	ug/g dry	1.42E-3	1/17/11	1A17002	PNNL-AGG-415
13966-28-4	Lead	<2.88E-3	ug/g dry	2.88E-3	1/17/11	1A17002	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/1:2.5 Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B273B3**		**Lab ID:**	**1009008-08**			
14092-98-9	Chromium	<8.54E-3	ug/g dry	8.54E-3	1/17/11	1A17002	PNNL-AGG-415
7440-38-2	Arsenic	3.65E-2	ug/g dry	3.52E-2	1/21/11	1A17002	PNNL-AGG-415
14687-58-2	Selenium	<1.96E-2	ug/g dry	1.96E-2	1/17/11	1A17002	PNNL-AGG-415
14378-37-1	Silver	<7.76E-3	ug/g dry	7.76E-3	1/17/11	1A17002	PNNL-AGG-415
14336-64-2	Cadmium	<1.42E-3	ug/g dry	1.42E-3	1/17/11	1A17002	PNNL-AGG-415
13966-28-4	Lead	<2.88E-3	ug/g dry	2.88E-3	1/17/11	1A17002	PNNL-AGG-415
HEIS No.	**B273B4**		**Lab ID:**	**1009008-09**			
14092-98-9	Chromium	<8.57E-3	ug/g dry	8.57E-3	1/17/11	1A17002	PNNL-AGG-415
7440-38-2	Arsenic	5.86E-2	ug/g dry	3.53E-2	1/21/11	1A17002	PNNL-AGG-415
14687-58-2	Selenium	<1.97E-2	ug/g dry	1.97E-2	1/17/11	1A17002	PNNL-AGG-415
14378-37-1	Silver	<7.78E-3	ug/g dry	7.78E-3	1/17/11	1A17002	PNNL-AGG-415
14336-64-2	Cadmium	<1.43E-3	ug/g dry	1.43E-3	1/17/11	1A17002	PNNL-AGG-415
13966-28-4	Lead	<2.89E-3	ug/g dry	2.89E-3	1/17/11	1A17002	PNNL-AGG-415
HEIS No.	**B273B6**		**Lab ID:**	**1009008-10**			
14092-98-9	Chromium	2.13E-2	ug/g dry	8.58E-3	1/17/11	1A17002	PNNL-AGG-415
7440-38-2	Arsenic	1.05E-1	ug/g dry	3.53E-2	1/21/11	1A17002	PNNL-AGG-415
14687-58-2	Selenium	<1.97E-2	ug/g dry	1.97E-2	1/17/11	1A17002	PNNL-AGG-415
14378-37-1	Silver	<7.79E-3	ug/g dry	7.79E-3	1/17/11	1A17002	PNNL-AGG-415
14336-64-2	Cadmium	<1.43E-3	ug/g dry	1.43E-3	1/17/11	1A17002	PNNL-AGG-415
13966-28-4	Lead	<2.90E-3	ug/g dry	2.90E-3	1/17/11	1A17002	PNNL-AGG-415
HEIS No.	**B273B5**		**Lab ID:**	**1009008-11**			
14092-98-9	Chromium	<8.61E-3	ug/g dry	8.61E-3	1/17/11	1A17002	PNNL-AGG-415
7440-38-2	Arsenic	<3.54E-2	ug/g dry	3.54E-2	1/21/11	1A17002	PNNL-AGG-415
14687-58-2	Selenium	<1.98E-2	ug/g dry	1.98E-2	1/17/11	1A17002	PNNL-AGG-415
14378-37-1	Silver	<7.81E-3	ug/g dry	7.81E-3	1/17/11	1A17002	PNNL-AGG-415
14336-64-2	Cadmium	<1.43E-3	ug/g dry	1.43E-3	1/17/11	1A17002	PNNL-AGG-415
13966-28-4	Lead	<2.90E-3	ug/g dry	2.90E-3	1/17/11	1A17002	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/1:5 Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B274K7**		**Lab ID:**	**1009008-01**			
14092-98-9	Chromium	<1.65E-2	ug/g dry	1.65E-2	12/06/10	0J11004	PNNL-AGG-415
7440-38-2	Arsenic	<1.36E-2	ug/g dry	1.36E-2	12/06/10	0J11004	PNNL-AGG-415
14687-58-2	Selenium	<3.80E-2	ug/g dry	3.80E-2	12/06/10	0J11004	PNNL-AGG-415
14378-37-1	Silver	<1.50E-2	ug/g dry	1.50E-2	12/06/10	0J11004	PNNL-AGG-415
14336-64-2	Cadmium	<2.75E-3	ug/g dry	2.75E-3	12/06/10	0J11004	PNNL-AGG-415
13966-28-4	Lead	<5.58E-3	ug/g dry	5.58E-3	12/06/10	0J11004	PNNL-AGG-415
HEIS No.	**B273B8**		**Lab ID:**	**1009008-02**			
14092-98-9	Chromium	<1.70E-2	ug/g dry	1.70E-2	12/06/10	0J11004	PNNL-AGG-415
7440-38-2	Arsenic	<1.40E-2	ug/g dry	1.40E-2	12/06/10	0J11004	PNNL-AGG-415
14687-58-2	Selenium	<3.92E-2	ug/g dry	3.92E-2	12/06/10	0J11004	PNNL-AGG-415
14378-37-1	Silver	<1.55E-2	ug/g dry	1.55E-2	12/06/10	0J11004	PNNL-AGG-415
14336-64-2	Cadmium	<2.84E-3	ug/g dry	2.84E-3	12/06/10	0J11004	PNNL-AGG-415
13966-28-4	Lead	<5.75E-3	ug/g dry	5.75E-3	12/06/10	0J11004	PNNL-AGG-415
HEIS No.	**B27PY0**		**Lab ID:**	**1009008-03**			
14092-98-9	Chromium	<1.58E-2	ug/g dry	1.58E-2	12/06/10	0J11004	PNNL-AGG-415
7440-38-2	Arsenic	<1.30E-2	ug/g dry	1.30E-2	12/06/10	0J11004	PNNL-AGG-415
14687-58-2	Selenium	<3.64E-2	ug/g dry	3.64E-2	12/06/10	0J11004	PNNL-AGG-415
14378-37-1	Silver	<1.44E-2	ug/g dry	1.44E-2	12/06/10	0J11004	PNNL-AGG-415
14336-64-2	Cadmium	<2.63E-3	ug/g dry	2.63E-3	12/06/10	0J11004	PNNL-AGG-415
13966-28-4	Lead	<5.34E-3	ug/g dry	5.34E-3	12/06/10	0J11004	PNNL-AGG-415
HEIS No.	**B274K6**		**Lab ID:**	**1009008-04**			
14092-98-9	Chromium	<1.72E-2	ug/g dry	1.72E-2	12/06/10	0J11004	PNNL-AGG-415
7440-38-2	Arsenic	<1.42E-2	ug/g dry	1.42E-2	12/06/10	0J11004	PNNL-AGG-415
14687-58-2	Selenium	<3.95E-2	ug/g dry	3.95E-2	12/06/10	0J11004	PNNL-AGG-415
14378-37-1	Silver	<1.56E-2	ug/g dry	1.56E-2	12/06/10	0J11004	PNNL-AGG-415
14336-64-2	Cadmium	<2.86E-3	ug/g dry	2.86E-3	12/06/10	0J11004	PNNL-AGG-415
13966-28-4	Lead	<5.80E-3	ug/g dry	5.80E-3	12/06/10	0J11004	PNNL-AGG-415
HEIS No.	**B26TC1**		**Lab ID:**	**1009008-05**			
14092-98-9	Chromium	<1.69E-2	ug/g dry	1.69E-2	12/06/10	0J11004	PNNL-AGG-415
7440-38-2	Arsenic	<1.39E-2	ug/g dry	1.39E-2	12/06/10	0J11004	PNNL-AGG-415
14687-58-2	Selenium	<3.89E-2	ug/g dry	3.89E-2	12/06/10	0J11004	PNNL-AGG-415
14378-37-1	Silver	<1.54E-2	ug/g dry	1.54E-2	12/06/10	0J11004	PNNL-AGG-415
14336-64-2	Cadmium	<2.82E-3	ug/g dry	2.82E-3	12/06/10	0J11004	PNNL-AGG-415
13966-28-4	Lead	<5.72E-3	ug/g dry	5.72E-3	12/06/10	0J11004	PNNL-AGG-415
HEIS No.	**B26TC2**		**Lab ID:**	**1009008-06**			
14092-98-9	Chromium	<1.72E-2	ug/g dry	1.72E-2	12/06/10	0J11004	PNNL-AGG-415
7440-38-2	Arsenic	2.00E-2	ug/g dry	1.41E-2	12/06/10	0J11004	PNNL-AGG-415
14687-58-2	Selenium	<3.95E-2	ug/g dry	3.95E-2	12/06/10	0J11004	PNNL-AGG-415
14378-37-1	Silver	<1.56E-2	ug/g dry	1.56E-2	12/06/10	0J11004	PNNL-AGG-415
14336-64-2	Cadmium	<2.86E-3	ug/g dry	2.86E-3	12/06/10	0J11004	PNNL-AGG-415
13966-28-4	Lead	<5.80E-3	ug/g dry	5.80E-3	12/06/10	0J11004	PNNL-AGG-415
HEIS No.	**B273B2**		**Lab ID:**	**1009008-07**			
14092-98-9	Chromium	<1.72E-2	ug/g dry	1.72E-2	1/17/11	1A17003	PNNL-AGG-415
7440-38-2	Arsenic	<7.09E-2	ug/g dry	7.09E-2	1/21/11	1A17003	PNNL-AGG-415
14687-58-2	Selenium	<3.96E-2	ug/g dry	3.96E-2	1/17/11	1A17003	PNNL-AGG-415
14378-37-1	Silver	<1.56E-2	ug/g dry	1.56E-2	1/17/11	1A17003	PNNL-AGG-415
14336-64-2	Cadmium	<2.86E-3	ug/g dry	2.86E-3	1/17/11	1A17003	PNNL-AGG-415
13966-28-4	Lead	<5.81E-3	ug/g dry	5.81E-3	1/17/11	1A17003	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/1:5 Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B273B3**	**Lab ID:**		**1009008-08**			
14092-98-9	Chromium	<1.70E-2	ug/g dry	1.70E-2	1/17/11	1A17003	PNNL-AGG-415
7440-38-2	Arsenic	<6.99E-2	ug/g dry	6.99E-2	1/21/11	1A17003	PNNL-AGG-415
14687-58-2	Selenium	<3.90E-2	ug/g dry	3.90E-2	1/17/11	1A17003	PNNL-AGG-415
14378-37-1	Silver	<1.54E-2	ug/g dry	1.54E-2	1/17/11	1A17003	PNNL-AGG-415
14336-64-2	Cadmium	<2.82E-3	ug/g dry	2.82E-3	1/17/11	1A17003	PNNL-AGG-415
13966-28-4	Lead	<5.73E-3	ug/g dry	5.73E-3	1/17/11	1A17003	PNNL-AGG-415
HEIS No.	**B273B4**	**Lab ID:**		**1009008-09**			
14092-98-9	Chromium	<1.73E-2	ug/g dry	1.73E-2	1/17/11	1A17003	PNNL-AGG-415
7440-38-2	Arsenic	<7.12E-2	ug/g dry	7.12E-2	1/21/11	1A17003	PNNL-AGG-415
14687-58-2	Selenium	<3.97E-2	ug/g dry	3.97E-2	1/17/11	1A17003	PNNL-AGG-415
14378-37-1	Silver	<1.57E-2	ug/g dry	1.57E-2	1/17/11	1A17003	PNNL-AGG-415
14336-64-2	Cadmium	<2.88E-3	ug/g dry	2.88E-3	1/17/11	1A17003	PNNL-AGG-415
13966-28-4	Lead	5.95E-2	ug/g dry	5.83E-3	1/17/11	1A17003	PNNL-AGG-415
HEIS No.	**B273B6**	**Lab ID:**		**1009008-10**			
14092-98-9	Chromium	2.20E-2	ug/g dry	1.71E-2	1/17/11	1A17003	PNNL-AGG-415
7440-38-2	Arsenic	1.65E-1	ug/g dry	7.06E-2	1/21/11	1A17003	PNNL-AGG-415
14687-58-2	Selenium	<3.94E-2	ug/g dry	3.94E-2	1/17/11	1A17003	PNNL-AGG-415
14378-37-1	Silver	<1.56E-2	ug/g dry	1.56E-2	1/17/11	1A17003	PNNL-AGG-415
14336-64-2	Cadmium	<2.85E-3	ug/g dry	2.85E-3	1/17/11	1A17003	PNNL-AGG-415
13966-28-4	Lead	<5.79E-3	ug/g dry	5.79E-3	1/17/11	1A17003	PNNL-AGG-415
HEIS No.	**B273B5**	**Lab ID:**		**1009008-11**			
14092-98-9	Chromium	<1.68E-2	ug/g dry	1.68E-2	1/17/11	1A17003	PNNL-AGG-415
7440-38-2	Arsenic	<6.93E-2	ug/g dry	6.93E-2	1/21/11	1A17003	PNNL-AGG-415
14687-58-2	Selenium	<3.87E-2	ug/g dry	3.87E-2	1/17/11	1A17003	PNNL-AGG-415
14378-37-1	Silver	<1.53E-2	ug/g dry	1.53E-2	1/17/11	1A17003	PNNL-AGG-415
14336-64-2	Cadmium	<2.80E-3	ug/g dry	2.80E-3	1/17/11	1A17003	PNNL-AGG-415
13966-28-4	Lead	<5.68E-3	ug/g dry	5.68E-3	1/17/11	1A17003	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B274K7**		**Lab ID:**	**1009008-01**			
14092-98-9	Chromium	4.52E0	ug/g dry	4.36E-1	10/11/10	0J11001	PNNL-AGG-415
7440-38-2	Arsenic	4.56E-1	ug/g dry	1.90E-1	10/11/10	0J11001	PNNL-AGG-415
14687-58-2	Selenium	<3.67E-1	ug/g dry	3.67E-1	10/11/10	0J11001	PNNL-AGG-415
14378-37-1	Silver	6.20E-2	ug/g dry	1.19E-2	12/02/10	0J11001	PNNL-AGG-415
14336-64-2	Cadmium	<3.13E-2	ug/g dry	3.13E-2	12/02/10	0J11001	PNNL-AGG-415
13966-28-4	Lead	2.83E0	ug/g dry	1.19E-1	12/02/10	0J11001	PNNL-AGG-415
HEIS No.	**B273B8**		**Lab ID:**	**1009008-02**			
14092-98-9	Chromium	2.70E0	ug/g dry	3.91E-1	10/11/10	0J11001	PNNL-AGG-415
7440-38-2	Arsenic	3.92E-1	ug/g dry	1.70E-1	10/11/10	0J11001	PNNL-AGG-415
14687-58-2	Selenium	<3.29E-1	ug/g dry	3.29E-1	10/11/10	0J11001	PNNL-AGG-415
14378-37-1	Silver	2.98E-2	ug/g dry	1.06E-2	12/02/10	0J11001	PNNL-AGG-415
14336-64-2	Cadmium	<2.81E-2	ug/g dry	2.81E-2	12/02/10	0J11001	PNNL-AGG-415
13966-28-4	Lead	1.36E0	ug/g dry	1.06E-1	12/02/10	0J11001	PNNL-AGG-415
HEIS No.	**B27PY0**		**Lab ID:**	**1009008-03**			
14092-98-9	Chromium	2.53E0	ug/g dry	3.64E-1	10/11/10	0J11001	PNNL-AGG-415
7440-38-2	Arsenic	3.08E-1	ug/g dry	1.58E-1	10/11/10	0J11001	PNNL-AGG-415
14687-58-2	Selenium	<3.06E-1	ug/g dry	3.06E-1	10/11/10	0J11001	PNNL-AGG-415
14378-37-1	Silver	2.65E-2	ug/g dry	9.92E-3	12/02/10	0J11001	PNNL-AGG-415
14336-64-2	Cadmium	3.08E-2	ug/g dry	2.62E-2	12/02/10	0J11001	PNNL-AGG-415
13966-28-4	Lead	1.13E0	ug/g dry	9.92E-2	12/02/10	0J11001	PNNL-AGG-415
HEIS No.	**B274K6**		**Lab ID:**	**1009008-04**			
14092-98-9	Chromium	2.71E0	ug/g dry	3.92E-1	10/11/10	0J11001	PNNL-AGG-415
7440-38-2	Arsenic	3.32E-1	ug/g dry	1.71E-1	10/11/10	0J11001	PNNL-AGG-415
14687-58-2	Selenium	<3.30E-1	ug/g dry	3.30E-1	10/11/10	0J11001	PNNL-AGG-415
14378-37-1	Silver	2.40E-2	ug/g dry	1.07E-2	12/02/10	0J11001	PNNL-AGG-415
14336-64-2	Cadmium	<2.82E-2	ug/g dry	2.82E-2	12/02/10	0J11001	PNNL-AGG-415
13966-28-4	Lead	1.24E0	ug/g dry	1.07E-1	12/02/10	0J11001	PNNL-AGG-415
HEIS No.	**B26TC1**		**Lab ID:**	**1009008-05**			
14092-98-9	Chromium	3.44E0	ug/g dry	3.54E-1	10/11/10	0J11001	PNNL-AGG-415
7440-38-2	Arsenic	2.69E-1	ug/g dry	1.54E-1	10/11/10	0J11001	PNNL-AGG-415
14687-58-2	Selenium	<2.98E-1	ug/g dry	2.98E-1	10/11/10	0J11001	PNNL-AGG-415
14378-37-1	Silver	3.46E-2	ug/g dry	9.64E-3	12/02/10	0J11001	PNNL-AGG-415
14336-64-2	Cadmium	3.43E-2	ug/g dry	2.54E-2	12/02/10	0J11001	PNNL-AGG-415
13966-28-4	Lead	1.13E0	ug/g dry	9.65E-2	12/02/10	0J11001	PNNL-AGG-415
HEIS No.	**B26TC2**		**Lab ID:**	**1009008-06**			
14092-98-9	Chromium	5.89E0	ug/g dry	3.93E-1	10/11/10	0J11001	PNNL-AGG-415
7440-38-2	Arsenic	8.05E-1	ug/g dry	1.71E-1	10/11/10	0J11001	PNNL-AGG-415
14687-58-2	Selenium	<3.31E-1	ug/g dry	3.31E-1	10/11/10	0J11001	PNNL-AGG-415
14378-37-1	Silver	1.04E-1	ug/g dry	1.07E-2	12/02/10	0J11001	PNNL-AGG-415
14336-64-2	Cadmium	2.53E-1	ug/g dry	2.83E-2	12/02/10	0J11001	PNNL-AGG-415
13966-28-4	Lead	3.67E0	ug/g dry	1.07E-1	12/02/10	0J11001	PNNL-AGG-415
HEIS No.	**B273B2**		**Lab ID:**	**1009008-07**			
14092-98-9	Chromium	1.06E1	ug/g dry	6.80E-1	1/20/11	1A20001	PNNL-AGG-415
7440-38-2	Arsenic	2.62E0	ug/g dry	2.96E-1	1/21/11	1A20001	PNNL-AGG-415
14687-58-2	Selenium	<5.72E-1	ug/g dry	5.72E-1	1/20/11	1A20001	PNNL-AGG-415
14378-37-1	Silver	7.18E-2	ug/g dry	1.85E-2	1/20/11	1A20001	PNNL-AGG-415
14336-64-2	Cadmium	3.04E-1	ug/g dry	4.89E-2	1/20/11	1A20001	PNNL-AGG-415
13966-28-4	Lead	3.95E0	ug/g dry	1.85E-1	1/20/11	1A20001	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B273B3**		**Lab ID:**	**1009008-08**			
14092-98-9	Chromium	1.07E1	ug/g dry	7.76E-1	1/20/11	1A20001	PNNL-AGG-415
7440-38-2	Arsenic	2.54E0	ug/g dry	3.38E-1	1/21/11	1A20001	PNNL-AGG-415
14687-58-2	Selenium	<6.53E-1	ug/g dry	6.53E-1	1/20/11	1A20001	PNNL-AGG-415
14378-37-1	Silver	5.49E-2	ug/g dry	2.11E-2	1/20/11	1A20001	PNNL-AGG-415
14336-64-2	Cadmium	1.34E-1	ug/g dry	5.58E-2	1/20/11	1A20001	PNNL-AGG-415
13966-28-4	Lead	2.59E0	ug/g dry	2.12E-1	1/20/11	1A20001	PNNL-AGG-415
HEIS No.	**B273B4**		**Lab ID:**	**1009008-09**			
14092-98-9	Chromium	1.49E1	ug/g dry	7.32E-1	1/20/11	1A20001	PNNL-AGG-415
7440-38-2	Arsenic	3.06E0	ug/g dry	3.19E-1	1/22/11	1A20001	PNNL-AGG-415
14687-58-2	Selenium	<6.16E-1	ug/g dry	6.16E-1	1/20/11	1A20001	PNNL-AGG-415
14378-37-1	Silver	7.76E-2	ug/g dry	1.99E-2	1/20/11	1A20001	PNNL-AGG-415
14336-64-2	Cadmium	1.92E-1	ug/g dry	5.26E-2	1/20/11	1A20001	PNNL-AGG-415
13966-28-4	Lead	4.27E0	ug/g dry	2.00E-1	1/20/11	1A20001	PNNL-AGG-415
HEIS No.	**B273B6**		**Lab ID:**	**1009008-10**			
14092-98-9	Chromium	1.10E1	ug/g dry	8.95E-1	1/20/11	1A20001	PNNL-AGG-415
7440-38-2	Arsenic	9.71E0	ug/g dry	3.90E-1	1/22/11	1A20001	PNNL-AGG-415
14687-58-2	Selenium	<7.53E-1	ug/g dry	7.53E-1	1/20/11	1A20001	PNNL-AGG-415
14378-37-1	Silver	<2.44E-2	ug/g dry	2.44E-2	1/20/11	1A20001	PNNL-AGG-415
14336-64-2	Cadmium	<6.43E-2	ug/g dry	6.43E-2	1/20/11	1A20001	PNNL-AGG-415
13966-28-4	Lead	5.10E0	ug/g dry	2.44E-1	1/20/11	1A20001	PNNL-AGG-415
HEIS No.	**B273B5**		**Lab ID:**	**1009008-11**			
14092-98-9	Chromium	9.88E0	ug/g dry	8.44E-1	1/20/11	1A20001	PNNL-AGG-415
7440-38-2	Arsenic	2.16E0	ug/g dry	3.67E-1	1/22/11	1A20001	PNNL-AGG-415
14687-58-2	Selenium	<7.10E-1	ug/g dry	7.10E-1	1/20/11	1A20001	PNNL-AGG-415
14378-37-1	Silver	5.08E-2	ug/g dry	2.30E-2	1/20/11	1A20001	PNNL-AGG-415
14336-64-2	Cadmium	6.22E-2	ug/g dry	6.07E-2	1/20/11	1A20001	PNNL-AGG-415
13966-28-4	Lead	4.03E0	ug/g dry	2.30E-1	1/20/11	1A20001	PNNL-AGG-415

Strontium 90/Acid Extract

Strontium-90 (pCi/g dry) by AGG-RRL-002

Lab ID	HEIS No.	Results	MDA	UNC	Analyzed	Batch
1009008-01	B274K7	<9.11E-1	9.11E-1		10/15/10	0J07001
1009008-02	B273B8	<9.04E-1	9.04E-1		10/15/10	0J07001
1009008-03	B27PY0	<9.02E-1	9.02E-1		10/15/10	0J07001
1009008-04	B274K6	<8.96E-1	8.96E-1		10/15/10	0J07001
1009008-05	B26TC1	<8.99E-1	8.99E-1		10/15/10	0J07001
1009008-06	B26TC2	<8.89E-1	8.89E-1		10/15/10	0J07001
1009008-07	B273B2	<1.11E0	1.11E0		1/12/11	1A05001
1009008-08	B273B3	<1.10E0	1.10E0		1/12/11	1A05001
1009008-09	B273B4	<1.12E0	1.12E0		1/12/11	1A05001
1009008-10	B273B6	<1.10E0	1.10E0		1/12/11	1A05001
1009008-11	B273B5	<1.10E0	1.10E0		1/12/11	1A05001

Strontium 90/1:1 Water Extract

Strontium-90 (pCi/g dry) by AGG-RRL-002

Lab ID	HEIS No.	Results	MDA	UNC	Analyzed	Batch
1009008-01	B274K7	<8.74E-1	8.74E-1		10/15/10	0J07010
1009008-02	B273B8	<9.29E-1	9.29E-1		10/15/10	0J07010
1009008-03	B27PY0	<9.43E-1	9.43E-1		10/15/10	0J07010
1009008-04	B274K6	<9.34E-1	9.34E-1		10/15/10	0J07010
1009008-05	B26TC1	<9.32E-1	9.32E-1		10/15/10	0J07010
1009008-06	B26TC2	<9.70E-1	9.70E-1		10/15/10	0J07010
1009008-07	B273B2	<1.12E0	1.12E0		1/12/11	1A06003
1009008-08	B273B3	<1.12E0	1.12E0		1/12/11	1A06003
1009008-09	B273B4	<1.12E0	1.12E0		1/12/11	1A06003
1009008-10	B273B6	<1.11E0	1.11E0		1/12/11	1A06003
1009008-11	B273B5	<1.16E0	1.16E0		1/12/11	1A06003

Strontium 90/1:2.5 Water Extract

Strontium-90 (pCi/g dry) by AGG-RRL-002

Lab ID	HEIS No.	Results	MDA	UNC	Analyzed	Batch
1009008-01	B274K7	<2.22E0	2.22E0		11/15/10	0J07011
1009008-02	B273B8	<2.32E0	2.32E0		11/15/10	0J07011
1009008-03	B27PY0	<2.33E0	2.33E0		11/15/10	0J07011
1009008-04	B274K6	<2.48E0	2.48E0		11/15/10	0J07011
1009008-05	B26TC1	<2.32E0	2.32E0		11/15/10	0J07011
1009008-06	B26TC2	<2.31E0	2.31E0		11/15/10	0J07011
1009008-07	B273B2	<2.75E0	2.75E0		1/17/11	1A07003
1009008-08	B273B3	<2.75E0	2.75E0		1/17/11	1A07003
1009008-09	B273B4	<2.76E0	2.76E0		1/17/11	1A07003
1009008-10	B273B6	<2.76E0	2.76E0		1/17/11	1A07003
1009008-11	B273B5	<2.77E0	2.77E0		1/17/11	1A07003

Strontium 90/1:5 Water Extract

Strontium-90 (pCi/g dry) by AGG-RRL-002

Lab ID	HEIS No.	Results	MDA	UNC	Analyzed	Batch
1009008-01	B274K7	<4.47E0	4.47E0		10/15/10	0J07012
1009008-02	B273B8	<4.61E0	4.61E0		10/15/10	0J07012
1009008-03	B27PY0	<4.28E0	4.28E0		10/15/10	0J07012
1009008-04	B274K6	<4.65E0	4.65E0		10/15/10	0J07012
1009008-05	B26TC1	<4.58E0	4.58E0		10/15/10	0J07012
1009008-06	B26TC2	<4.64E0	4.64E0		10/15/10	0J07012
1009008-07	B273B2	<5.54E0	5.54E0		1/17/11	1A10006
1009008-08	B273B3	<5.46E0	5.46E0		1/17/11	1A10006
1009008-09	B273B4	<5.57E0	5.57E0		1/17/11	1A10006
1009008-10	B273B6	<5.52E0	5.52E0		1/17/11	1A10006
1009008-11	B273B5	<5.42E0	5.42E0		1/17/11	1A10006

Equilibrium Kd 1:1 Calculations

1009008-01	B274K7
Analyte	Kd (L/g)
Arsenic	4.83E-02
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-02	B273B8
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-03	B27PY0
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-04	B274K6
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-05	B26TC1
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-06	B26TC2
Analyte	Kd (L/g)
Arsenic	8.99E-02
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-07	B273B2
Analyte	Kd (L/g)
Arsenic	1.21E-01
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-08	B273B3
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-09	B273B4
Analyte	Kd (L/g)
Arsenic	1.12E-01
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-10	B273B6
Analyte	Kd (L/g)
Arsenic	2.44E-01
Barium	ND
Cadmium	ND
Chromium (Total)	5.11E-01
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-11	B273B5
Analyte	Kd (L/g)
Arsenic	1.13E-01
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

Equilibrium Kd 1:2.5 Calculations

1009008-01	B274K7
Analyte	Kd (L/g)
Arsenic	5.06E-02
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-02	B273B8
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-03	B27PY0
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-04	B274K6
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-05	B26TC1
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-06	B26TC2
Analyte	Kd (L/g)
Arsenic	6.19E-02
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-07	B273B2
Analyte	Kd (L/g)
Arsenic	5.94E-02
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-08	B273B3
Analyte	Kd (L/g)
Arsenic	6.86E-02
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-09	B273B4
Analyte	Kd (L/g)
Arsenic	5.12E-02
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-10	B273B6
Analyte	Kd (L/g)
Arsenic	9.15E-02
Barium	ND
Cadmium	ND
Chromium (Total)	5.15E-01
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-11	B273B5
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

Equilibrium Kd 1:5 Calculations

1009008-01	B274K7
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-02	B273B8
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-03	B27PY0
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-04	B274K6
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-05	B26TC1
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-06	B26TC2
Analyte	Kd (L/g)
Arsenic	3.93E-02
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-07	B273B2
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-08	B273B3
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-09	B273B4
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	7.08E-02
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-10	B273B6
Analyte	Kd (L/g)
Arsenic	5.78E-02
Barium	ND
Cadmium	ND
Chromium (Total)	4.99E-01
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

1009008-11	B273B5
Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium (Total)	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Strontium-90	ND

Hexavalent Chromium/Soil - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J14008 - Hexavalent Chromium Digest										
Blank (0J14008-BLK1)				Prepared & Analyzed: 10/14/10						
Chromium, Hexavalent	<2.50E0	2.50E0	ug/g wet							
LCS (0J14008-BS1)				Prepared & Analyzed: 10/14/10						
Chromium, Hexavalent	2.54E1	2.50E0	ug/g wet	2.50E1		102	70-130			
Duplicate (0J14008-DUP1)		Source: 1009008-01		Prepared & Analyzed: 10/14/10						
Chromium, Hexavalent	<6.66E-1	6.66E-1	ug/g dry		ND				35	
Batch 1A14001 - Hexavalent Chromium Digest										
Blank (1A14001-BLK1)				Prepared & Analyzed: 01/13/11						
Chromium, Hexavalent	<5.00E-2	5.00E-2	ug/g wet							
LCS (1A14001-BS1)				Prepared & Analyzed: 01/13/11						
Chromium, Hexavalent	4.71E-1	5.00E-2	ug/g wet	5.00E-1		94.3	80-120			
Duplicate (1A14001-DUP1)		Source: 1009008-10		Prepared & Analyzed: 01/13/11						
Chromium, Hexavalent	<6.92E-1	6.92E-1	ug/g dry		ND				35	

Hexavalent Chromium/1:1 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J11006 - 1:1 Water Extract (Cr6)										
Blank (0J11006-BLK1)				Prepared: 10/08/10		Analyzed: 10/11/10				
Chromium, Hexavalent	<5.00E-2	5.00E-2	ug/g wet							
LCS (0J11006-BS1)				Prepared: 10/08/10		Analyzed: 10/11/10				
Chromium, Hexavalent	5.06E-1	5.00E-2	ug/g wet	5.00E-1		101	70-130			
Duplicate (0J11006-DUP1)		**Source: 1009008-01**		Prepared: 10/08/10		Analyzed: 10/11/10				
Chromium, Hexavalent	<2.92E-2	2.92E-2	ug/g dry		ND				35	
Batch 1A06002 - 1:1 Water Extract (Cr6)										
Blank (1A06002-BLK1)				Prepared & Analyzed: 01/07/11						
Chromium, Hexavalent	<5.00E-2	5.00E-2	ug/g wet							
LCS (1A06002-BS1)				Prepared & Analyzed: 01/07/11						
Chromium, Hexavalent	5.17E-1	N/A	ug/mL	5.00E-1		103	70-130			
Duplicate (1A06002-DUP1)		**Source: 1009008-10**		Prepared & Analyzed: 01/07/11						
Chromium, Hexavalent	<3.88E-2	3.88E-2	ug/g dry		ND				35	

Hexavalent Chromium/1:2.5 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J12002 - 1:2.5 Water Extract (Cr6)										
Blank (0J12002-BLK1)				Prepared: 11/28/10		Analyzed: 12/02/10				
Chromium, Hexavalent	<5.00E-2	5.00E-2	ug/g wet							
LCS (0J12002-BS1)				Prepared: 11/28/10		Analyzed: 12/02/10				
Chromium, Hexavalent	5.40E-1	5.00E-2	ug/g wet	5.00E-1		108	70-130			
Duplicate (0J12002-DUP1)		**Source: 1009008-01**		Prepared: 11/28/10		Analyzed: 12/02/10				
Chromium, Hexavalent	<1.02E-1	1.02E-1	ug/g dry		ND				35	
Post Spike (0J12002-PS1)		**Source: 1009008-04**		Prepared: 11/28/10		Analyzed: 12/02/10				
Chromium, Hexavalent	4.89E-1	N/A	ug/mL	5.00E-1	7.00E-3	96.4	75-125			
Batch 1A07001 - 1:2.5 Water Extract (Cr6)										
Blank (1A07001-BLK1)				Prepared & Analyzed: 01/07/11						
Chromium, Hexavalent	<5.00E-2	5.00E-2	ug/g wet							
LCS (1A07001-BS1)				Prepared & Analyzed: 01/07/11						
Chromium, Hexavalent	5.19E-1	5.00E-2	ug/g wet	5.00E-1		104	70-130			
Duplicate (1A07001-DUP1)		**Source: 1009008-10**		Prepared & Analyzed: 01/07/11						
Chromium, Hexavalent	<1.05E-1	1.05E-1	ug/g dry		ND				35	

Hexavalent Chromium/1:5 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J15001 - 1:5 Water Extract (Cr6)										
Blank (0J15001-BLK1)				Prepared: 11/28/10		Analyzed: 12/02/10				
Chromium, Hexavalent	<5.00E-2	5.00E-2	ug/g wet							
LCS (0J15001-BS1)				Prepared: 11/28/10		Analyzed: 12/02/10				
Chromium, Hexavalent	5.45E-1	5.00E-2	ug/g wet	5.00E-1		109	70-130			
Duplicate (0J15001-DUP1)		**Source: 1009008-01**		Prepared: 11/28/10		Analyzed: 12/02/10				
Chromium, Hexavalent	<2.21E-1	2.21E-1	ug/g dry		ND				35	
Post Spike (0J15001-PS1)		**Source: 1009008-01**		Prepared: 11/28/10		Analyzed: 12/02/10				
Chromium, Hexavalent	7.71E-1	N/A	ug/mL	5.00E-1	7.00E-3	153	75-125			
Batch 1A07002 - 1:5 Water Extract (Cr6)										
Blank (1A07002-BLK1)				Prepared & Analyzed: 01/07/11						
Chromium, Hexavalent	<5.00E-2	5.00E-2	ug/g wet							
LCS (1A07002-BS1)				Prepared & Analyzed: 01/07/11						
Chromium, Hexavalent	5.23E-1	N/A	ug/mL	5.00E-1		105	70-130			
Duplicate (1A07002-DUP1)		**Source: 1009008-10**		Prepared & Analyzed: 01/07/11						
Chromium, Hexavalent	<1.89E-1	1.89E-1	ug/g dry		ND				35	

Total Metals by PNNL-AGG-ICP-AES/1:1 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J14005 - 1:1 Water Extract (ICP/ICPMS)										
Blank (0J14005-BLK1)				Prepared: 10/06/10		Analyzed: 10/14/10				
Barium	<1.24E-1	1.24E-1	ug/g wet							
LCS (0J14005-BS1)				Prepared: 10/06/10		Analyzed: 10/14/10				
Barium	4.41E0	1.24E-1	ug/g wet	4.99E0		88.4	80-120			
Duplicate (0J14005-DUP1)		**Source: 1009008-01**		Prepared: 10/06/10		Analyzed: 10/14/10				
Barium	<1.16E-1	1.16E-1	ug/g dry		ND				35	
Post Spike (0J14005-PS1)		**Source: 1009008-01**		Prepared & Analyzed: 10/14/10						
Barium	2.72E2	N/A	ug/L	2.50E2	8.87E0	105	75-125			
Batch 1A31003 - 1:1 Water Extract (ICP/ICPMS)										
Blank (1A31003-BLK1)				Prepared: 01/05/11		Analyzed: 02/01/11				
Barium	<8.25E-2	8.25E-2	ug/g wet							
LCS (1A31003-BS1)				Prepared: 01/05/11		Analyzed: 02/01/11				
Barium	4.51E0	8.25E-2	ug/g wet	5.00E0		90.2	80-120			
Duplicate (1A31003-DUP1)		**Source: 1009008-10**		Prepared: 01/05/11		Analyzed: 02/01/11				
Barium	<9.55E-2	9.55E-2	ug/g dry		ND				35	
Post Spike (1A31003-PS1)		**Source: 1009008-10**		Prepared & Analyzed: 02/01/11						
Barium	2.76E2	N/A	ug/L	2.50E2	2.95E1	98.7	75-125			

Total Metals by PNNL-AGG-ICP-AES/1:2.5 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J14006 - 1:2.5 Water Extract (ICP/ICPMS)										
Blank (0J14006-BLK1)				Prepared: 10/06/10		Analyzed: 12/02/10				
Barium	<1.24E-1	1.24E-1	ug/g wet							
LCS (0J14006-BS1)				Prepared: 10/06/10		Analyzed: 12/02/10				
Barium	4.83E0	1.24E-1	ug/g wet	5.00E0		96.6	80-120			
Duplicate (0J14006-DUP1)		**Source: 1009008-01**		Prepared: 10/06/10		Analyzed: 12/02/10				
Barium	<2.96E-1	2.96E-1	ug/g dry		ND				35	
Post Spike (0J14006-PS1)		**Source: 1009008-01**		Prepared: 10/14/10		Analyzed: 12/02/10				
Barium	2.65E2	N/A	ug/L	2.50E2	5.30E0	104	75-125			
Batch 1A31004 - 1:2.5 Water Extract (ICP/ICPMS)										
Blank (1A31004-BLK1)				Prepared: 01/05/11		Analyzed: 02/01/11				
Barium	<8.25E-2	8.25E-2	ug/g wet							
LCS (1A31004-BS1)				Prepared: 01/05/11		Analyzed: 02/01/11				
Barium	4.47E0	8.25E-2	ug/g wet	4.99E0		89.7	80-120			
Duplicate (1A31004-DUP1)		**Source: 1009008-10**		Prepared: 01/05/11		Analyzed: 02/01/11				
Barium	<2.06E-1	2.06E-1	ug/g dry		ND				35	
Post Spike (1A31004-PS1)		**Source: 1009008-10**		Prepared & Analyzed: 02/01/11						
Barium	2.62E2	N/A	ug/L	2.50E2	1.65E1	98.3	75-125			

Total Metals by PNNL-AGG-ICP-AES/1:5 Water Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J14007 - 1:5 Water Extract (ICP/ICPMS)										
Blank (0J14007-BLK1)				Prepared: 10/06/10		Analyzed: 12/02/10				
Barium	<1.24E-1	1.24E-1	ug/g wet							
LCS (0J14007-BS1)				Prepared: 10/06/10		Analyzed: 12/02/10				
Barium	4.97E0	1.24E-1	ug/g wet	5.00E0		99.4	80-120			
Duplicate (0J14007-DUP1)		**Source: 1009008-01**		Prepared: 10/06/10		Analyzed: 12/02/10				
Barium	<5.90E-1	5.90E-1	ug/g dry		ND				35	
Post Spike (0J14007-PS1)		**Source: 1009008-01**		Prepared: 10/14/10		Analyzed: 12/02/10				
Barium	2.55E2	N/A	ug/L	2.50E2	3.89E0	100	75-125			
Batch 1A31005 - 1:5 Water Extract (ICP/ICPMS)										
Blank (1A31005-BLK1)				Prepared: 01/05/11		Analyzed: 02/01/11				
Barium	<8.25E-2	8.25E-2	ug/g wet							
LCS (1A31005-BS1)				Prepared: 01/05/11		Analyzed: 02/01/11				
Barium	4.57E0	8.25E-2	ug/g wet	5.00E0		91.4	80-120			
Duplicate (1A31005-DUP1)		**Source: 1009008-10**		Prepared: 01/05/11		Analyzed: 02/01/11				
Barium	<3.43E-1	3.43E-1	ug/g dry		ND				35	
Post Spike (1A31005-PS1)		**Source: 1009008-10**		Prepared & Analyzed: 02/01/11						
Barium	2.57E2	N/A	ug/L	2.50E2	1.11E1	98.4	75-125			

Total Metals by PNNL-AGG-ICP-AES/Acid Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J14004 - ASTM D 5198 (ICP/ICPMS)										
Blank (0J14004-BLK1)				Prepared: 10/04/10		Analyzed: 10/15/10				
Barium	<4.12E-1	4.12E-1	ug/g wet							
LCS (0J14004-BS1)				Prepared: 10/04/10		Analyzed: 10/15/10				
Barium	5.83E0	4.12E-2	ug/g wet	5.87E0		99.3	80-120			
Duplicate (0J14004-DUP1)		**Source: 1009008-01**		Prepared: 10/04/10		Analyzed: 10/15/10				
Barium	5.21E1	1.90E0	ug/g dry		3.12E1			50.1	35	
Duplicate (0J14004-DUP2)		**Source: 1009027-01**		Prepared: 10/04/10		Analyzed: 10/15/10				
Barium	7.69E1	1.77E0	ug/g dry		7.66E1			0.389	35	
Post Spike (0J14004-PS1)		**Source: 1009008-01**		Prepared: 10/14/10		Analyzed: 10/15/10				
Barium	3.99E2	N/A	ug/L	2.50E2	1.35E2	105	75-125			
Batch 1B02001 - ASTM D 5198 (ICP/ICPMS)										
Blank (1B02001-BLK1)				Prepared: 12/28/10		Analyzed: 02/02/11				
Barium	<4.12E-1	4.12E-1	ug/g wet							
LCS (1B02001-BS1)				Prepared: 12/28/10		Analyzed: 02/02/11				
Barium	5.88E0	4.12E-2	ug/g wet	5.80E0		101	80-120			
Duplicate (1B02001-DUP1)		**Source: 1009008-10**		Prepared: 12/28/10		Analyzed: 02/02/11				
Barium	1.20E3	1.96E0	ug/g dry		1.36E3			11.9	35	
Post Spike (1B02001-PS1)		**Source: 1009008-10**		Prepared & Analyzed: 02/02/11						
Barium	5.96E3	N/A	ug/L	2.50E2	5.71E3	98.7	75-125			

RCRA Metals By PNNL-AGG-415/1:1 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J11002 - 1:1 Water Extract (ICP/ICPMS)										
Blank (0J11002-BLK1)				Prepared: 10/06/10		Analyzed: 10/11/10				
Chromium	<3.44E-3	3.44E-3	ug/g wet							
Arsenic	<2.84E-3	2.84E-3	"							
Selenium	<7.92E-3	7.92E-3	"							
Silver	<3.13E-3	3.13E-3	"							
Cadmium	<5.73E-4	5.73E-4	"							
Lead	<1.16E-3	1.16E-3	"							
LCS (0J11002-BS1)				Prepared: 10/06/10		Analyzed: 10/11/10				
Chromium	4.07E0	3.44E-1	ug/g wet	4.99E0		81.5	80-120			
Arsenic	4.20E0	2.84E-1	"	4.99E0		84.1	80-120			
Selenium	4.21E0	7.92E-1	"	4.99E0		84.3	80-120			
Silver	4.10E0	3.13E-1	"	4.99E0		82.1	80-120			
Cadmium	4.17E0	5.73E-2	"	4.99E0		83.5	80-120			
Lead	4.04E0	1.16E-1	"	4.99E0		81.0	80-120			
Duplicate (0J11002-DUP1)		**Source: 1009008-01**		Prepared: 10/06/10		Analyzed: 10/11/10				
Chromium	<3.22E-3	3.22E-3	ug/g dry		ND				35	
Arsenic	9.45E-3	2.65E-3	"		9.25E-3			2.20	35	
Selenium	1.69E-2	7.40E-3	"		1.83E-2			7.89	35	
Silver	<2.93E-3	2.93E-3	"		ND				35	
Cadmium	<5.36E-4	5.36E-4	"		ND				35	
Lead	<1.09E-3	1.09E-3	"		ND				35	
Post Spike (0J11002-PS1)		**Source: 1009008-06**		Prepared & Analyzed: 10/11/10						
Chromium	4.94E0	N/A	ug/L	5.00E0	3.29E-2	98.2	75-125			
Arsenic	7.10E0	N/A	"	5.00E0	1.70E0	108	75-125			
Selenium	5.76E0	N/A	"	5.00E0	1.14E-1	113	75-125			
Silver	4.85E0	N/A	"	5.00E0	ND	97	75-125			
Cadmium	5.09E0	N/A	"	5.00E0	3.95E-3	102	75-125			
Lead	4.92E0	N/A	"	5.00E0	1.24E-2	98.1	75-125			

RCRA Metals By PNNL-AGG-415/1:1 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1A17001 - 1:1 Water Extract (ICP/ICPMS)										
Blank (1A17001-BLK1)				Prepared & Analyzed: 01/17/11						
Chromium	<3.44E-3	3.44E-3	ug/g wet							
Arsenic	<1.42E-2	1.42E-2	"							
Selenium	<7.92E-3	7.92E-3	"							
Silver	<3.13E-3	3.13E-3	"							
Cadmium	<5.73E-4	5.73E-4	"							
Lead	<1.16E-3	1.16E-3	"							
LCS (1A17001-BS1)				Prepared & Analyzed: 01/17/11						
Chromium	4.49E0	3.44E-1	ug/g wet	5.00E0		89.8	80-120			
Arsenic	4.61E0	2.84E-1	"	5.00E0		92.2	80-120			
Selenium	4.35E0	7.92E-1	"	5.00E0		87.1	80-120			
Silver	4.57E0	3.13E-1	"	5.00E0		91.4	80-120			
Cadmium	4.49E0	5.73E-2	"	5.00E0		89.9	80-120			
Lead	4.60E0	1.16E-1	"	5.00E0		92.1	80-120			
Duplicate (1A17001-DUP1)		Source: 1009008-10		Prepared & Analyzed: 01/17/11						
Chromium	2.14E-2	3.99E-3	ug/g dry		2.15E-2			0.429	35	
Arsenic	5.33E-2	1.64E-2	"		3.97E-2			29.3	35	
Selenium	<9.16E-3	9.16E-3	"		ND				35	
Silver	<3.62E-3	3.62E-3	"		ND				35	
Cadmium	<6.63E-4	6.63E-4	"		ND				35	
Lead	<1.34E-3	1.34E-3	"		ND				35	

RCRA Metals By PNNL-AGG-415/1:2.5 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J11003 - 1:2.5 Water Extract (ICP/ICPMS)										
Blank (0J11003-BLK1)				Prepared: 10/06/10		Analyzed: 12/06/10				
Chromium	<3.44E-3	3.44E-3	ug/g wet							
Arsenic	<2.84E-3	2.84E-3	"							
Selenium	<7.92E-3	7.92E-3	"							
Silver	<3.13E-3	3.13E-3	"							
Cadmium	<5.73E-4	5.73E-4	"							
Lead	<1.16E-3	1.16E-3	"							
LCS (0J11003-BS1)				Prepared: 10/06/10		Analyzed: 12/06/10				
Chromium	4.59E0	3.44E-1	ug/g wet	5.00E0		91.9	80-120			
Arsenic	4.64E0	2.84E-1	"	5.00E0		92.8	80-120			
Selenium	4.69E0	7.92E-1	"	5.00E0		93.9	80-120			
Silver	4.71E0	3.13E-1	"	5.00E0		94.2	80-120			
Cadmium	4.78E0	5.73E-2	"	5.00E0		95.7	80-120			
Lead	4.82E0	1.16E-1	"	5.00E0		96.4	80-120			
Duplicate (0J11003-DUP1)		**Source: 1009008-01**		Prepared: 10/06/10		Analyzed: 12/06/10				
Chromium	<8.25E-3	8.25E-3	ug/g dry		ND				35	
Arsenic	9.86E-3	6.79E-3	"		8.83E-3			11.0	35	
Selenium	<1.89E-2	1.89E-2	"		ND				35	
Silver	<7.49E-3	7.49E-3	"		ND				35	
Cadmium	<1.37E-3	1.37E-3	"		ND				35	
Lead	<2.78E-3	2.78E-3	"		ND				35	
Post Spike (0J11003-PS1)		**Source: 1009008-06**		Prepared: 10/11/10		Analyzed: 12/06/10				
Chromium	4.83E0	N/A	ug/L	5.00E0	ND	96.7	75-125			
Arsenic	5.94E0	N/A	"	5.00E0	1.03E0	98.2	75-125			
Selenium	5.48E0	N/A	"	5.00E0	2.20E-1	105	75-125			
Silver	4.66E0	N/A	"	5.00E0	1.57E-4	93.3	75-125			
Cadmium	4.90E0	N/A	"	5.00E0	ND	97.9	75-125			
Lead	5.11E0	N/A	"	5.00E0	6.33E-3	102	75-125			

RCRA Metals By PNNL-AGG-415/1:2.5 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1A17002 - 1:2.5 Water Extract (ICP/ICPMS)										
Blank (1A17002-BLK1)				Prepared & Analyzed: 01/17/11						
Chromium	<3.44E-3	3.44E-3	ug/g wet							
Arsenic	<1.42E-2	1.42E-2	"							
Selenium	<7.92E-3	7.92E-3	"							
Silver	<3.13E-3	3.13E-3	"							
Cadmium	<5.73E-4	5.73E-4	"							
Lead	<1.16E-3	1.16E-3	"							
LCS (1A17002-BS1)				Prepared & Analyzed: 01/17/11						
Chromium	4.53E0	3.44E-1	ug/g wet	4.99E0		90.7	80-120			
Arsenic	4.64E0	2.84E-1	"	4.99E0		93.0	80-120			
Selenium	4.60E0	7.92E-1	"	4.99E0		92.1	80-120			
Silver	4.52E0	3.13E-1	"	4.99E0		90.6	80-120			
Cadmium	4.46E0	5.73E-2	"	4.99E0		89.4	80-120			
Lead	4.53E0	1.16E-1	"	4.99E0		90.7	80-120			
Duplicate (1A17002-DUP1)		**Source: 1009008-10**		Prepared & Analyzed: 01/17/11						
Chromium	2.22E-2	8.58E-3	ug/g dry		2.13E-2			3.83	35	
Arsenic	9.64E-2	3.53E-2	"		1.05E-1			8.39	35	
Selenium	<1.97E-2	1.97E-2	"		ND				35	
Silver	<7.79E-3	7.79E-3	"		ND				35	
Cadmium	<1.43E-3	1.43E-3	"		ND				35	
Lead	<2.89E-3	2.89E-3	"		ND				35	

RCRA Metals By PNNL-AGG-415/1:5 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J11004 - 1:5 Water Extract (ICP/ICPMS)										
Blank (0J11004-BLK1)				Prepared: 10/06/10		Analyzed: 12/06/10				
Chromium	<3.44E-3	3.44E-3	ug/g wet							
Arsenic	<2.84E-3	2.84E-3	"							
Selenium	<7.92E-3	7.92E-3	"							
Silver	<3.13E-3	3.13E-3	"							
Cadmium	<5.73E-4	5.73E-4	"							
Lead	<1.16E-3	1.16E-3	"							
LCS (0J11004-BS1)				Prepared: 10/06/10		Analyzed: 12/06/10				
Chromium	4.58E0	3.44E-1	ug/g wet	5.00E0		91.6	80-120			
Arsenic	4.52E0	2.84E-1	"	5.00E0		90.4	80-120			
Selenium	4.67E0	7.92E-1	"	5.00E0		93.3	80-120			
Silver	4.60E0	3.13E-1	"	5.00E0		92.1	80-120			
Cadmium	4.70E0	5.73E-2	"	5.00E0		93.9	80-120			
Lead	4.75E0	1.16E-1	"	5.00E0		94.9	80-120			
Duplicate (0J11004-DUP1)		**Source: 1009008-01**		Prepared: 10/06/10		Analyzed: 12/06/10				
Chromium	<1.64E-2	1.64E-2	ug/g dry		ND				35	
Arsenic	<1.35E-2	1.35E-2	"		ND				35	
Selenium	<3.77E-2	3.77E-2	"		ND				35	
Silver	<1.49E-2	1.49E-2	"		ND				35	
Cadmium	<2.73E-3	2.73E-3	"		ND				35	
Lead	<5.54E-3	5.54E-3	"		ND				35	
Post Spike (0J11004-PS1)		**Source: 1009008-06**		Prepared: 10/11/10		Analyzed: 12/06/10				
Chromium	4.75E0	N/A	ug/L	5.00E0	ND	95.5	75-125			
Arsenic	5.43E0	N/A	"	5.00E0	8.01E-1	92.6	75-125			
Selenium	4.94E0	N/A	"	5.00E0	3.15E-2	98.1	75-125			
Silver	4.60E0	N/A	"	5.00E0	1.20E-2	91.8	75-125			
Cadmium	4.94E0	N/A	"	5.00E0	5.09E-4	98.7	75-125			
Lead	5.10E0	N/A	"	5.00E0	7.45E-3	102	75-125			

RCRA Metals By PNNL-AGG-415/1:5 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1A17003 - 1:5 Water Extract (ICP/ICPMS)										
Blank (1A17003-BLK1)				Prepared & Analyzed: 01/17/11						
Chromium	<3.44E-3	3.44E-3	ug/g wet							
Arsenic	<1.42E-2	1.42E-2	"							
Selenium	<7.92E-3	7.92E-3	"							
Silver	<3.13E-3	3.13E-3	"							
Cadmium	<5.73E-4	5.73E-4	"							
Lead	<1.16E-3	1.16E-3	"							
LCS (1A17003-BS1)				Prepared & Analyzed: 01/17/11						
Chromium	4.77E0	3.44E-1	ug/g wet	5.00E0		95.5	80-120			
Arsenic	4.56E0	2.84E-1	"	5.00E0		91.2	80-120			
Selenium	4.90E0	7.92E-1	"	5.00E0		98.1	80-120			
Silver	4.65E0	3.13E-1	"	5.00E0		93.1	80-120			
Cadmium	4.57E0	5.73E-2	"	5.00E0		91.5	80-120			
Lead	4.64E0	1.16E-1	"	5.00E0		92.9	80-120			
Duplicate (1A17003-DUP1)		**Source: 1009008-10**		Prepared & Analyzed: 01/17/11						
Chromium	2.19E-2	1.43E-2	ug/g dry		2.20E-2			0.548	35	
Arsenic	1.35E-1	5.90E-2	"		1.65E-1			20.3	35	
Selenium	<3.29E-2	3.29E-2	"		ND				35	
Silver	<1.30E-2	1.30E-2	"		ND				35	
Cadmium	<2.38E-3	2.38E-3	"		ND				35	
Lead	<4.83E-3	4.83E-3	"		ND				35	

RCRA Metals By PNNL-AGG-415/Acid Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J11001 - ASTM D 5198 (ICP/ICPMS)										
Blank (0J11001-BLK1)				Prepared: 10/04/10		Analyzed: 10/11/10				
Chromium	<9.42E-2	9.42E-2	ug/g wet							
Arsenic	<4.10E-2	4.10E-2	"							
Selenium	<7.93E-2	7.93E-2	"							
Silver	<2.56E-3	2.56E-3	"							
Cadmium	<6.77E-3	6.77E-3	"							
Lead	<2.57E-2	2.57E-2	"							
LCS (0J11001-BS1)				Prepared: 10/04/10		Analyzed: 10/11/10				
Chromium	5.56E0	9.42E-1	ug/g wet	5.87E0		94.7	80-120			
Arsenic	5.60E0	4.10E-1	"	5.87E0		95.4	80-120			
Selenium	5.68E0	7.93E-1	"	5.87E0		96.7	80-120			
Silver	5.46E0	2.56E-2	"	5.87E0		93.0	80-120			
Cadmium	5.64E0	6.77E-2	"	5.87E0		96.0	80-120			
Lead	5.68E0	2.57E-1	"	5.87E0		96.7	80-120			
Duplicate (0J11001-DUP1)		**Source: 1009008-01**		Prepared: 10/04/10		Analyzed: 10/11/10				
Chromium	8.74E0	4.35E-1	ug/g dry		4.52E0			63.6	35	
Arsenic	8.06E-1	1.89E-1	"		4.56E-1			55.5	35	
Selenium	<3.66E-1	3.66E-1	"		ND				35	
Silver	7.55E-2	1.18E-2	"		6.20E-2			19.6	35	
Cadmium	<3.13E-2	3.13E-2	"		ND				35	
Lead	3.62E0	1.19E-1	"		2.83E0			24.2	35	
Duplicate (0J11001-DUP2)		**Source: 1009027-01**		Prepared: 10/04/10		Analyzed: 10/11/10				
Chromium	8.89E0	4.05E-1	ug/g dry		8.84E0			0.542	35	
Arsenic	1.80E0	1.76E-1	"		2.42E0			29.3	35	
Selenium	<3.41E-1	3.41E-1	"		ND				35	
Silver	5.10E-2	1.10E-2	"		5.16E-2			1.18	35	
Cadmium	7.93E-2	2.91E-2	"		1.05E-1			28.1	35	
Lead	5.32E0	1.10E-1	"		8.89E0			50.3	35	

RCRA Metals By PNNL-AGG-415/Acid Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J11001 - ASTM D 5198 (ICP/ICPMS)										
Post Spike (0J11001-PS1)		**Source: 1009008-06**		Prepared & Analyzed: 10/11/10						
Chromium	3.28E1	N/A	ug/L	5.00E0	2.82E1	91.7	75-125			
Arsenic	8.74E0	N/A	"	5.00E0	3.86E0	97.6	75-125			
Selenium	4.89E0	N/A	"	5.00E0	7.07E-2	96.3	75-125			
Silver	4.75E0	N/A	"	5.00E0	4.98E-1	85	75-125			
Cadmium	5.78E0	N/A	"	5.00E0	1.21E0	91.4	75-125			
Lead	2.10E1	N/A	"	5.00E0	1.76E1	67.9	75-125			
Batch 1A20001 - ASTM D 5198 (ICP/ICPMS)										
Blank (1A20001-BLK1)				Prepared & Analyzed: 01/20/11						
Chromium	<1.88E-1	1.88E-1	ug/g wet							
Arsenic	<8.20E-2	8.20E-2	"							
Selenium	<1.59E-1	1.59E-1	"							
Silver	<5.13E-3	5.13E-3	"							
Cadmium	<1.35E-2	1.35E-2	"							
Lead	<5.13E-2	5.13E-2	"							
LCS (1A20001-BS1)				Prepared & Analyzed: 01/20/11						
Chromium	5.30E0	9.42E-1	ug/g wet	5.80E0		91.5	80-120			
Arsenic	5.84E0	4.10E-1	"	5.80E0		101	80-120			
Selenium	5.29E0	7.93E-1	"	5.80E0		91.3	80-120			
Silver	5.40E0	2.56E-2	"	5.80E0		93.3	80-120			
Cadmium	5.40E0	6.77E-2	"	5.80E0		93.3	80-120			
Lead	5.52E0	2.57E-1	"	5.80E0		95.3	80-120			
Duplicate (1A20001-DUP1)		**Source: 1009008-10**		Prepared & Analyzed: 01/20/11						
Chromium	8.41E0	8.96E-1	ug/g dry		1.10E1			27.0	35	
Arsenic	8.27E0	3.90E-1	"		9.71E0			15.9	35	
Selenium	<7.54E-1	7.54E-1	"		ND				35	
Silver	<2.44E-2	2.44E-2	"		ND				35	
Cadmium	<6.44E-2	6.44E-2	"		ND				35	
Lead	4.35E0	2.44E-1	"		5.10E0			15.8	35	

Strontium 90/Acid Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J07001 - ASTM D 5198 (RadChem)										
Blank (0J07001-BLK1)				Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	<2.66E-1	2.66E-1	pCi/g wet							
LCS (0J07001-BS1)				Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	9.45E1	2.66E-1	pCi/g wet	9.69E1		97.5	80-120			
Duplicate (0J07001-DUP1)		**Source: 1009008-01**		Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	<9.09E-1	9.09E-1	pCi/g dry		ND				35	
Duplicate (0J07001-DUP2)		**Source: 1009027-01**		Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	<9.04E-1	9.04E-1	pCi/g dry		ND				35	
Matrix Spike (0J07001-MS1)		**Source: 1009008-01**		Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	9.43E1	2.66E-1	pCi/g dry	1.02E2	ND	97.5	75-125			
Batch 1A05001 - ASTM D 5198 (RadChem)										
Blank (1A05001-BLK1)				Prepared: 01/05/11		Analyzed: 01/12/11				
Strontium-90	<3.21E-1	3.21E-1	pCi/g wet							
LCS (1A05001-BS1)				Prepared: 01/05/11		Analyzed: 01/12/11				
Strontium-90	8.97E1	3.21E-1	pCi/g wet	9.63E1		93.1	80-120			
Duplicate (1A05001-DUP1)		**Source: 1009008-10**		Prepared: 01/05/11		Analyzed: 01/12/11				
Strontium-90	<1.10E0	1.10E0	pCi/g dry		ND				35	
Matrix Spike (1A05001-MS1)		**Source: 1009008-10**		Prepared: 01/05/11		Analyzed: 01/12/11				
Strontium-90	1.91E2	3.21E-1	pCi/g dry	2.05E2	ND	93.6	75-125			

Strontium 90/1:1 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J07010 - 1:1 Water Extract (RadChem)										
Blank (0J07010-BLK1)				Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	<9.31E-1	9.31E-1	pCi/g wet							
LCS (0J07010-BS1)				Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	9.52E1	9.31E-1	pCi/g wet	9.69E1		98.3	80-120			
Duplicate (0J07010-DUP1)		**Source: 1009008-01**		Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	<8.70E-1	8.70E-1	pCi/g dry		ND				35	
Matrix Spike (0J07010-MS1)		**Source: 1009008-01**		Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	9.53E1	1.58E0	pCi/g dry	1.02E2	ND	98.7	75-125			
Batch 1A06003 - 1:1 Water Extract (RadChem)										
Blank (1A06003-BLK1)				Prepared: 01/06/11		Analyzed: 01/12/11				
Strontium-90	<1.12E0	1.12E0	pCi/g wet							
LCS (1A06003-BS1)				Prepared: 01/06/11		Analyzed: 01/12/11				
Strontium-90	9.41E1	1.12E0	pCi/g wet	9.63E1		97.7	80-120			
Duplicate (1A06003-DUP1)		**Source: 1009008-10**		Prepared: 01/06/11		Analyzed: 01/12/11				
Strontium-90	<1.30E0	1.30E0	pCi/g dry		ND				35	
Matrix Spike (1A06003-MS1)		**Source: 1009008-10**		Prepared: 01/06/11		Analyzed: 01/12/11				
Strontium-90	9.36E1	1.98E0	pCi/g dry	1.02E2	ND	92	75-125			

Strontium 90/1:2.5 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J07011 - 1:2.5 Water Extract (RadChem)										
Blank (0J07011-BLK1)				Prepared & Analyzed: 11/15/10						
Strontium-90	<9.31E-1	9.31E-1	pCi/g wet							
LCS (0J07011-BS1)				Prepared & Analyzed: 11/15/10						
Strontium-90	9.36E1	9.31E-1	pCi/g wet	9.67E1		96.9	80-120			
Duplicate (0J07011-DUP1)		**Source: 1009008-01**		Prepared & Analyzed: 11/15/10						
Strontium-90	<2.23E0	2.23E0	pCi/g dry		ND				35	
Matrix Spike (0J07011-MS1)		**Source: 1009008-01**		Prepared & Analyzed: 11/15/10						
Strontium-90	9.69E1	1.58E0	pCi/g dry	1.02E2	ND	99.2	75-125			
Batch 1A07003 - 1:2.5 Water Extract (RadChem)										
Blank (1A07003-BLK1)				Prepared: 01/07/11 Analyzed: 01/17/11						
Strontium-90	<1.11E0	1.11E0	pCi/g wet							
LCS (1A07003-BS1)				Prepared: 01/07/11 Analyzed: 01/17/11						
Strontium-90	9.40E1	1.11E0	pCi/g wet	9.63E1		97.6	80-120			
Duplicate (1A07003-DUP1)		**Source: 1009008-10**		Prepared: 01/07/11 Analyzed: 01/17/11						
Strontium-90	<2.76E0	2.76E0	pCi/g dry		ND				35	
Matrix Spike (1A07003-MS1)		**Source: 1009008-10**		Prepared: 01/07/11 Analyzed: 01/17/11						
Strontium-90	9.30E1	1.95E0	pCi/g dry	1.02E2	7.11E-1	90.2	75-125			

Strontium 90/1:5 Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0J07012 - 1:5 Water Extract (RadChem)										
Blank (0J07012-BLK1)				Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	<9.31E-1	9.31E-1	pCi/g wet							
LCS (0J07012-BS1)				Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	9.53E1	9.31E-1	pCi/g wet	9.69E1		98.4	80-120			
Duplicate (0J07012-DUP1)		**Source: 1009008-01**		Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	<4.43E0	4.43E0	pCi/g dry		ND				35	
Matrix Spike (0J07012-MS1)		**Source: 1009008-01**		Prepared: 10/07/10		Analyzed: 10/15/10				
Strontium-90	9.88E1	1.58E0	pCi/g dry	1.02E2	ND	101	75-125			
Batch 1A10006 - 1:5 Water Extract (RadChem)										
Blank (1A10006-BLK1)				Prepared: 01/10/11		Analyzed: 01/17/11				
Strontium-90	<1.11E0	1.11E0	pCi/g wet							
LCS (1A10006-BS1)				Prepared: 01/10/11		Analyzed: 01/17/11				
Strontium-90	9.40E1	1.11E0	pCi/g wet	9.63E1		97.6	80-120			
Duplicate (1A10006-DUP1)		**Source: 1009008-10**		Prepared: 01/10/11		Analyzed: 01/17/11				
Strontium-90	<4.61E0	4.61E0	pCi/g dry		ND				35	
Matrix Spike (1A10006-MS1)		**Source: 1009008-10**		Prepared: 01/10/11		Analyzed: 01/17/11				
Strontium-90	9.17E1	1.95E0	pCi/g dry	1.02E2	ND	91.1	75-125			

Strontium 90 - Quality Control		
Batch 0J07001- ASTM D 5198 (RadChem)		
Sample ID	HEIS ID	Tracer Recovery
1009008-01	B274K7	94.9%
1009008-02	B273B8	94.3%
1009008-03	B27PY0	94.2%
1009008-04	B274K6	92.7%
1009008-05	B26TC1	92.7%
1009008-06	B26TC2	95.5%
1009008-07	B273B2	95.2%
1009008-08	B273B3	93.8%
1009008-09	B273B4	93.6%
1009008-10	B273B6	94.6%
1009008-11	B273B5	93.4%

Strontium 90 - Quality Control		
Batch 0J07010 - 1:1 Water Extract (RadChem)		
Sample ID	HEIS ID	Tracer Recovery
1009008-01	B274K7	93.0%
1009008-02	B273B8	93.3%
1009008-03	B27PY0	91.7%
1009008-04	B274K6	91.6%
1009008-05	B26TC1	92.4%
1009008-06	B26TC2	92.8%
1009008-07	B273B2	90.7%
1009008-08	B273B3	91.5%
1009008-09	B273B4	91.0%
1009008-10	B273B6	92.0%
1009008-11	B273B5	91.0%

Strontium 90 - Quality Control		
Batch 0J07011 - 1:2.5 Water Extract (RadChem)		
Sample ID	HEIS ID	Tracer Recovery
1009008-01	B274K7	89.4%
1009008-02	B273B8	91.0%
1009008-03	B27PY0	90.6%
1009008-04	B274K6	92.3%
1009008-05	B26TC1	90.8%
1009008-06	B26TC2	90.6%
1009008-07	B273B2	91.1%
1009008-08	B273B3	90.9%
1009008-09	B273B4	92.4%
1009008-10	B273B6	90.0%
1009008-11	B273B5	90.5%

Strontium 90 - Quality Control		
Batch 0J07012 - 1:5 Water Extract (RadChem)		
Sample ID	HEIS ID	Tracer Recovery
1009008-01	B274K7	90.7%
1009008-02	B273B8	91.4%
1009008-03	B27PY0	91.3%
1009008-04	B274K6	91.2%
1009008-05	B26TC1	91.5%
1009008-06	B26TC2	91.9%
1009008-07	B273B2	89.6%
1009008-08	B273B3	91.6%
1009008-09	B273B4	90.4%
1009008-10	B273B6	92.5%
1009008-11	B273B5	90.2%

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-234-026	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8N	DATA TURNAROUND
Turner, Crow	DYEKMAN, DL	373-2530	DYEKMAN, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7791 (199-F5-53); Bottom non-water-bearing RUM	100 Area Remedial Investigation/Feasibility Analysis - 100- FR-3 Soils		F10-234		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-585-14 pg 27	102.5 - 105 ft	300118ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

MATRIX*
A=Air
DL=Drum-Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000mL
SAMPLE ANALYSIS	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B273B6	SOIL	11/29/10	0950	N

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
A. Turner 11-29-10	1055	MO-413 SSU-R1	11-29-10 1055
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-R1	DEC 0 2 2010 0730	M. A. White	DEC 0 2 2010 0730
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
M. A. White	DEC 0 2 2010 905	Igor Kutnyakov	DEC 0 2 2010 9 05
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

BRM# 13564

☐ ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

SDG# ESL090018

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-234-032	PAGE 1 OF 1
COLLECTOR Turner, Crow	COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR DYEKMAN, DL	PRICE CODE 8N AIR QUALITY ☐	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7791 (199-F5-53); Middle non-water-bearing RUM	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100- FR-3 Soils		SAF NO. F10-234		
ICE CHEST NO.	FIELD LOGBOOK NO. #NF-N-585-12 pg 53	ACTUAL SAMPLE DEPTH 81.8-84.3 ft	COA 300118ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	Split Spoon Liner
		NO. OF CONTAINER(S)	1
		VOLUME	1000mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B273B5	SOIL	11-22-10	1110	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM A. Turner	DATE/TIME 11-22-10 1215	RECEIVED BY/STORED IN MO-413 SSU-R1	DATE/TIME 11-22-10 1215
RELINQUISHED BY/REMOVED FROM SSU-R1	DATE/TIME DEC 0 2 2010 0730	RECEIVED BY/STORED IN M. A. White	DATE/TIME DEC 0 2 2010 0730
RELINQUISHED BY/REMOVED FROM M. A. White	DATE/TIME DEC 0 2 2010 9105	RECEIVED BY/STORED IN Igor Kutnyakov	DATE/TIME DEC 0 2 2010 9105
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

BRM # 13564

☐ ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-234-038	PAGE 1 OF 1
COLLECTOR Crow	COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR DYEKMAN, DL	PRICE CODE 8N AIR QUALITY ☐	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7791 (199-F5-53); Top non-water-bearing RUM DUP	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100- FR-3 Soils		SAF NO. F10-234		
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-585 14	ACTUAL SAMPLE DEPTH 55.1'- 57.6'	COA 300118ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	Split Spoon Liner ✓
		NO. OF CONTAINER(S)	1
		VOLUME	1000mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B273B4	SOIL	11-15-10	0830	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM RCrow/RCrow	DATE/TIME 11-15-10 1000	RECEIVED BY/STORED IN SSU-R4	DATE/TIME NOV 14 2010 1000
RELINQUISHED BY/REMOVED FROM SSU-R4	DATE/TIME 11-16-10 0700	RECEIVED BY/STORED IN cmAguilar cmAguilar	DATE/TIME 11-16-10 0700
RELINQUISHED BY/REMOVED FROM cmAguilar cmAguilar	DATE/TIME 11-16-10 8:40	RECEIVED BY/STORED IN Igor Kutnyakov	DATE/TIME 11-16-10 8:40
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN Igor Kutnyakov	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

BRM # 13564

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-234-035	PAGE 1 OF 1
COLLECTOR CROW	COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR DYEKMAN, DL	PRICE CODE 8N AIR QUALITY ☐	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7791 (199-F5-53); Top non-water-bearing RUM	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100- FR-3 Soils		SAF NO. F10-234		
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-585 14	ACTUAL SAMPLE DEPTH 55.1'-57.6'	COA 300118ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	Split Spoon Liner
		NO. OF CONTAINER(S)	1
		VOLUME	1000mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B273B3	SOIL	11-15-10	0830	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM R Crow/R Crow	DATE/TIME 11-15-10 1000	RECEIVED BY/STORED IN SSU-R4	DATE/TIME NOV 14 2010 1000	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. BRM # 13,564
RELINQUISHED BY/REMOVED FROM SSU-R4	DATE/TIME 11-16-10 0700	RECEIVED BY/STORED IN CM Aguilar CM Aguilar	DATE/TIME 11-16-10 0700	
RELINQUISHED BY/REMOVED FROM CM Aguilar CM Aguilar	DATE/TIME 11-16-10 8:40	RECEIVED BY/STORED IN Igor Kuznyakov	DATE/TIME 11-16-10 8:40	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN Igor Kuznyakov	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-234-029	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8N	DATA TURNAROUND
Turner, Ross	DYEKMAN, DL	373-2530	DYEKMAN, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7791 (199-F5-53); Bottom unconfined aquifer	100 Area Remedial Investigation/Feasibility Analysis - 100- FR-3 Soils		F10-234		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
N/A	HNF-N-585-14 pg 25	52.3'	300118ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000mL
SAMPLE ANALYSIS	KD - Batch (No CAS);

~~BRM#~~

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B273B2	SOIL	11-11-10	0850	

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
A. Turner 11-11-10	1445	SSU-R4 11-11-10	1445
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-R4 11-14-10	0700	CM Aguilar CM Aguilar 11-16-10	0700
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
CM Aguilar CM Aguilar 11-16-10	8140	Igor Kuthyakov 11-16-10	8140
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
		Igor Kuthyakov	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

BRM# 13564

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

SDG# ESL090018

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-234-042	PAGE 1 OF 1
COLLECTOR Turner, Southerland	COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR DYEKMAN, DL	PRICE CODE 8N AIR QUALITY ☐	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7792 (199-F5-54); 5 feet into RUM	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100- FR-3 Soils		SAF NO. F10-234		
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-585-14 PG#19	ACTUAL SAMPLE DEPTH 74.9- 77.4 Ft	COA 300118ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	Split Spoon Liner 2
		NO. OF CONTAINER(S)	1
		VOLUME	1000mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	[redacted]
B274K7	SOIL	9-1-10	1026	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM Southerland	DATE/TIME 9-1-10 1150	RECEIVED BY/STORED IN mo413 SSU R1	DATE/TIME 9-1-10 / 1150
RELINQUISHED BY/REMOVED FROM SSU-R1	DATE/TIME SEP 01 2010 1300	RECEIVED BY/STORED IN ma White	DATE/TIME SEP 01 2010 1300
RELINQUISHED BY/REMOVED FROM ma White	DATE/TIME SEP 01 2010 1500	RECEIVED BY/STORED IN Ben Williams	DATE/TIME SEP 01 2010 1500
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401922ES20.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

BRM # 13564

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

SDG # ESL090018

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-234-044	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8N	DATA TURNAROUND
Turner, Southerland	DYEKMAN, DL	373-2530	DYEKMAN, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7792 (199-F5-54); Add on 1	100 Area Remedial Investigation/Feasibility Analysis - 100- FR-3 Soils		F10-234		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-585-14 PG#17	63.9 - 66.4 Ft	300118ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per. DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	Split Spoon Liner 2
NO. OF CONTAINER(S)	1
VOLUME	1000mL
SAMPLE ANALYSIS	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B273B8	SOIL	8-30-10	1216	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Southerland/[signature]	8-30-10/1340	M0413 SSU R1	8-30-10/1340
SSU-R1	SEP 01 2010 1300	MA White/[signature]	SEP 01 2010 1300
MA White/[signature]	SEP 01 2010 1500	Ben Williams/[signature]	SEP 01 2010 1300
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
BRM #13564

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-234-047	PAGE 1 OF 1
COLLECTOR Turner, Southerland	COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR DYEKMAN, DL	PRICE CODE 8N	DATA TURNAROUND
SAMPLING LOCATION C7792 (199-F5-54); Add on 2	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100- FR-3 Soils		SAF NO. F10-234	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-585-14 PG# 18	ACTUAL SAMPLE DEPTH 67.0-69.5 Ft	COA 300118ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	Split Spoon Liner 2
		NO. OF CONTAINER(S)	1
		VOLUME	1000mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B27PY0	SOIL	8-31-10	0857	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM B Southerland / [signature]	DATE/TIME 8-31-10/1200	RECEIVED BY/STORED IN M0413 SSU R1	DATE/TIME 8-31-10/1200
RELINQUISHED BY/REMOVED FROM SSU-R1	DATE/TIME SEP 01 2010 8-31-10 1200	RECEIVED BY/STORED IN M A White / M A White	DATE/TIME SEP 01 2010 1300
RELINQUISHED BY/REMOVED FROM M A White / M A White	DATE/TIME SEP 01 2010 1500	RECEIVED BY/STORED IN Ben Williams / Ben Williams	DATE/TIME SEP 01 2010 1500
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

BRM # 13564

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-234-041	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8N	DATA TURNAROUND
Turner, Crow	DYEKMAN, DL	373-2530	DYEKMAN, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7792 (199-F5-54); Bottom unconfined aquifer	100 Area Remedial Investigation/Feasibility Analysis - 100- FR-3 Soils		F10-234		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-585-14 pg 15	57-59 ft	300118ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Environmental Sciences Laboratory	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	Split Spoon Liner 3
NO. OF CONTAINER(S)	1
VOLUME	1000mL
SAMPLE ANALYSIS	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B274K6	SOIL	8/26/10	1400	X

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
A. Turner	8-26-10 1525	MO-413 SSU-R1	8/26/10 1525
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-R1	AUG 30 2010 1230	M. A. White	AUG 30 2010 1230
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
M. A. White	AUG 30 2010 1400	FEDEX	8/30/10 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The CACN for all analytical work at WSCF laboratory is 401922ES20.☐** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
BRM #13564

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-234-009	PAGE 1 OF 1
COLLECTOR Holms, Bates, Ramirez	COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR DYEKMAN, DL	PRICE CODE 8N	DATA TURNAROUND
SAMPLING LOCATION C7790 (199-F5-52); Bottom of Unconfined Aquifer	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100- FR-3 Soils		SAF NO. F10-234	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-545-14 page 8	ACTUAL SAMPLE DEPTH 63.3' - 65.8'	COA 300118ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS		
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)	PRESERVATION	None
		HOLDING TIME	6 Months
		TYPE OF CONTAINER	Split Spoon Liner 2
		NO. OF CONTAINER(S)	1
		VOLUME	1000mL
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B26TC1	SOIL	8/13/10	1225	—

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible] 8/13/10	1530	MO-413-554-R2 8/13/10	8/13/10 1530
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSL 22	AUG 15 2010 1240	J.R. Aguilar	AUG 15 2010 1240
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J.R. Aguilar	AUG 15 2010 14:45	Ben Williams	AUG 15 2010 14:45
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

BRM#13564

Original and 8-16-10 per R. Ramirez

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

SDG# ESL090018

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F10-234-010	PAGE 1 OF 1

COLLECTOR Helms, Bates	COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR DYEKMAN, DL	PRICE CODE 8N / AIR QUALITY ☐ / DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7790 (199-F5-52); 5 feet into RUM	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100- FR-3 Soils		SAF NO. F10-234	
ICE CHEST NO. 18 ~~N/A~~	FIELD LOGBOOK NO. HNF-N-545-4 Page 7	ACTUAL SAMPLE DEPTH 71.3 - 73.8	COA 300118ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A	

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegetation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1 2
VOLUME	1000mL
SAMPLE ANALYSIS	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B26TC2	SOIL	8/16/10	1000	

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM Dale Bates 8/16/10	DATE/TIME 1130	RECEIVED BY/STORED IN MO-413-SSL-R1 8/16/10	DATE/TIME 1130
RELINQUISHED BY/REMOVED FROM MO 413 SSL-R1 8/18/10 1400	DATE/TIME	RECEIVED BY/STORED IN MA Whit 8-18-10	DATE/TIME 1400
RELINQUISHED BY/REMOVED FROM MA Whit 8-18-10	DATE/TIME 15:15	RECEIVED BY/STORED IN Ben Williams 8-18-10	DATE/TIME 15:15
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

BRM #13564

ORIGINAL

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

SDG # ESL090018