



PNNL- 20486

Prepared for the U.S. Department of Energy  
under Contract DE-AC05-76RL01830

# **Report for Batch Leach Analyses on Sediments at 100-HR-3 Operable Unit, Boreholes C7620, C7621, C7622, C7623, C7626, C7627, C7628, C7629, C7630, and C7866.**

Michael Lindberg

June 2011



**Pacific Northwest**  
NATIONAL LABORATORY

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**Report for Batch Leach Analyses on  
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Unit, Boreholes C7620, C7621,  
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M Lindberg

June 2011

Prepared for the U.S. Department of Energy  
under Contract DE-AC05-76RL01830

Pacific Northwest National Laboratory  
Richland, Washington 99352

06/16/11 10:33

To: Anna Radloff

From: Michael J. Lindberg

A handwritten signature in black ink, appearing to read 'MJL', with a stylized flourish at the end.

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

Subject: Analytical Data Report for Sediment Samples Collected From 100-HR-3 Operable Unit, Sample Delivery Group ESL090020, SAF Number F10-214

This letter contains the following information for sample delivery group ESL090020

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

## **Introduction**

Between November 4, 2010 and April 25, 2011 sediment samples were received from 100-HR-3 Operable Unit for geochemical studies.

## **Analytical Results/Methodology**

The analyses for this project were performed at the 331 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:

### Preparation Blank (PB):

No Discrepancies Noted

### Duplicate (DUP):

Duplicate RPD for Uranium 238 (38.9%) was above the acceptance limit (35) in 1E05003-DUP1 for ICPMS-Tc\_U-WE. The sample result is less than 10 times the detection limits. Duplicate recoveries are not applicable to this analyte.

### Laboratory Control Samples (LCS):

No Discrepancies Noted

### Post Spike (PS):

No Discrepancies Noted

### Matrix Spike (MS):

Matrix Spike Recovery for Chromium, Hexavalent (48.8%) was outside acceptance limits (75-125) in 1E23001-MS1 for Hexavalent Chromium/Soil. Potential Matrix interference. Sample results associated with this batch are below the EQL. There should be no impact to the data as reported.

### 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

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## SAMPLES INCLUDED IN THIS REPORT

### 100-HR-3 Remedial Optimization Wells

HEIS No.	Laboratory ID	Matrix	Date Collected	Date Received
B28JK2	1011025-01	SOIL	11/3/10 10:20	11/4/10 14:30
B27C24	1011025-02	SOIL	11/9/10 09:25	11/11/10 13:30
B28KF6	1011025-03	SOIL	11/5/10 14:54	11/11/10 13:30
B28KW9	1011025-04	SOIL	11/12/10 12:15	11/16/10 08:40
B28N30	1011025-05	SOIL	11/11/10 11:30	11/16/10 08:40
B273M1	1011025-07	SOIL	11/19/10 10:15	12/2/10 09:05
B27C13	1011025-08	SOIL	12/1/10 11:03	12/2/10 09:05
B29M71	1011025-09	SOIL	12/1/10 11:03	12/2/10 09:05
B28YW2	1011025-10	SOIL	12/3/10 08:35	12/6/10 13:20
B28CP2	1011025-11	SOIL	1/14/11 08:50	1/19/11 13:40
B29C20	1011025-13	SOIL	1/22/11 08:18	1/24/11 13:30
B29P71	1011025-17	SOIL	1/25/11 09:35	1/26/11 13:15
B29HN7	1011025-21	SOIL	2/16/11 14:35	2/17/11 13:30
B2B4H0	1011025-29	SOIL	3/16/11 13:05	3/21/11 13:30
B2C647	1011025-33	SOIL	4/14/11 14:40	4/25/11 13:00

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

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Metals 1:1 DI Water Extract by ICPMS

Metals Acid Extract by ICPMS

Hexavalent Chromium by Colorimetric Determination

Metals 1:1 Water Extract by ICPOES

Metals Acid Extract by ICPOES

Moisture Content

Tc\_U Acid Extract by ICPMS

Tc\_U 1:1 DI Water Extract by ICPMS



## Wet Chemistry

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

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
1011025-01	B28JK2	3.13E1	N/A	5/02/11	1D29007
1011025-02	B27C24	3.04E1	N/A	5/02/11	1D29007
1011025-03	B28KF6	2.66E1	N/A	5/02/11	1D29007
1011025-04	B28KW9	2.22E1	N/A	5/02/11	1D29007
1011025-05	B28N30	3.42E1	N/A	5/02/11	1D29007
1011025-07	B273M1	1.32E1	N/A	5/02/11	1D29007
1011025-08	B27C13	1.67E1	N/A	5/02/11	1D29007
1011025-09	B29M71	1.88E1	N/A	5/02/11	1D29007
1011025-10	B28YW2	2.82E1	N/A	5/02/11	1D29007
1011025-11	B28CP2	1.20E1	N/A	5/02/11	1D29007
1011025-13	B29C20	2.39E1	N/A	5/02/11	1D29007
1011025-17	B29P71	2.18E1	N/A	5/02/11	1D29007
1011025-21	B29HN7	1.72E1	N/A	5/02/11	1D29007
1011025-29	B2B4H0	1.51E1	N/A	5/02/11	1D29007
1011025-33	B2C647	2.10E1	N/A	5/02/11	1D29007

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

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
1011025-01	B28JK2	<6.62E-1	6.62E-1	5/20/11	1E23001
1011025-02	B27C24	<6.52E-1	6.52E-1	5/20/11	1E23001
1011025-03	B28KF6	<6.33E-1	6.33E-1	5/20/11	1E23001
1011025-04	B28KW9	<6.10E-1	6.10E-1	5/20/11	1E23001
1011025-05	B28N30	<6.72E-1	6.72E-1	5/20/11	1E23001
1011025-07	B273M1	<5.71E-1	5.71E-1	5/20/11	1E23001
1011025-08	B27C13	<5.85E-1	5.85E-1	5/20/11	1E23001
1011025-09	B29M71	<5.94E-1	5.94E-1	5/20/11	1E23001
1011025-10	B28YW2	<6.37E-1	6.37E-1	5/20/11	1E23001
1011025-11	B28CP2	<5.59E-1	5.59E-1	5/20/11	1E23001
1011025-13	B29C20	<6.19E-1	6.19E-1	5/20/11	1E23001
1011025-17	B29P71	<6.09E-1	6.09E-1	5/20/11	1E23001
1011025-21	B29HN7	<5.87E-1	5.87E-1	5/20/11	1E23001
1011025-29	B2B4H0	<5.75E-1	5.75E-1	5/20/11	1E23001
1011025-33	B2C647	<6.05E-1	6.05E-1	5/20/11	1E23001

**Hexavalent Chromium/1:1 Water Extract****Chromium, Hexavalent (ug/g dry) by Colorimetric Determination**

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
1011025-01	B28JK2	<3.43E-2	3.43E-2	5/05/11	1E05001
1011025-02	B27C24	<3.48E-2	3.48E-2	5/05/11	1E05001
1011025-03	B28KF6	<3.67E-2	3.67E-2	5/05/11	1E05001
1011025-04	B28KW9	<3.89E-2	3.89E-2	5/05/11	1E05001
1011025-05	B28N30	<3.29E-2	3.29E-2	5/05/11	1E05001
1011025-07	B273M1	<4.44E-2	4.44E-2	5/05/11	1E05001
1011025-08	B27C13	<6.26E-2	6.26E-2	5/05/11	1E05001
1011025-09	B29M71	<4.05E-2	4.05E-2	5/05/11	1E05001
1011025-10	B28YW2	<3.58E-2	3.58E-2	5/05/11	1E05001
1011025-11	B28CP2	<4.40E-2	4.40E-2	5/05/11	1E05001
1011025-13	B29C20	<3.79E-2	3.79E-2	5/05/11	1E05001
1011025-17	B29P71	4.62E-2	3.91E-2	5/05/11	1E05001
1011025-21	B29HN7	<4.14E-2	4.14E-2	5/05/11	1E05001
1011025-29	B2B4H0	<4.23E-2	4.23E-2	5/05/11	1E05001
1011025-33	B2C647	<4.42E-2	4.42E-2	5/05/11	1E05001

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B28JK2</b>	<b>Lab ID: 1011025-01</b>					
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B27C24</b>	<b>Lab ID: 1011025-02</b>					
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B28KF6</b>	<b>Lab ID: 1011025-03</b>					
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B28KW9</b>	<b>Lab ID: 1011025-04</b>					
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B28N30</b>	<b>Lab ID: 1011025-05</b>					
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B273M1</b>	<b>Lab ID: 1011025-07</b>					
7440-39-3	Barium	<1.26E-1	ug/g dry	1.26E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B27C13</b>	<b>Lab ID: 1011025-08</b>					
7440-39-3	Barium	<1.76E-1	ug/g dry	1.76E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B29M71</b>	<b>Lab ID: 1011025-09</b>					
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B28YW2</b>	<b>Lab ID: 1011025-10</b>					
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B28CP2</b>	<b>Lab ID: 1011025-11</b>					
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B29C20</b>	<b>Lab ID: 1011025-13</b>					
7440-39-3	Barium	<1.23E-1	ug/g dry	1.23E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B29P71</b>	<b>Lab ID: 1011025-17</b>					
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B29HN7</b>	<b>Lab ID: 1011025-21</b>					
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B2B4H0</b>	<b>Lab ID: 1011025-29</b>					
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B2C647</b>	<b>Lab ID: 1011025-33</b>					
7440-39-3	Barium	<1.36E-1	ug/g dry	1.36E-1	5/09/11	1E09001	PNNL-AGG-ICP-AES

### Radionuclides by ICP-MS/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B28JK2</b>	<b>Lab ID: 1011025-01</b>					
U-238	Uranium 238	5.64E-1	ug/g dry	4.59E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B27C24</b>	<b>Lab ID: 1011025-02</b>					
U-238	Uranium 238	3.16E-1	ug/g dry	4.58E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28KF6</b>	<b>Lab ID: 1011025-03</b>					
U-238	Uranium 238	4.30E-1	ug/g dry	4.45E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28KW9</b>	<b>Lab ID: 1011025-04</b>					
U-238	Uranium 238	7.17E-1	ug/g dry	4.27E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28N30</b>	<b>Lab ID: 1011025-05</b>					
U-238	Uranium 238	1.00E0	ug/g dry	4.68E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B273M1</b>	<b>Lab ID: 1011025-07</b>					
U-238	Uranium 238	1.84E-1	ug/g dry	3.96E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B27C13</b>	<b>Lab ID: 1011025-08</b>					
U-238	Uranium 238	1.61E0	ug/g dry	4.03E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29M71</b>	<b>Lab ID: 1011025-09</b>					
U-238	Uranium 238	7.89E-1	ug/g dry	4.13E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28YW2</b>	<b>Lab ID: 1011025-10</b>					
U-238	Uranium 238	8.41E-1	ug/g dry	4.52E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28CP2</b>	<b>Lab ID: 1011025-11</b>					
U-238	Uranium 238	1.75E-1	ug/g dry	3.93E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29C20</b>	<b>Lab ID: 1011025-13</b>					
U-238	Uranium 238	2.03E-1	ug/g dry	4.33E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29P71</b>	<b>Lab ID: 1011025-17</b>					
U-238	Uranium 238	7.03E-1	ug/g dry	4.28E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29HN7</b>	<b>Lab ID: 1011025-21</b>					
U-238	Uranium 238	3.85E-1	ug/g dry	4.05E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B2B4H0</b>	<b>Lab ID: 1011025-29</b>					
U-238	Uranium 238	2.17E-1	ug/g dry	4.04E-2	5/05/11	1E05004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B2C647</b>	<b>Lab ID: 1011025-33</b>					
U-238	Uranium 238	4.37E-1	ug/g dry	4.20E-2	5/05/11	1E05004	PNNL-AGG-415

## Radionuclides by ICP-MS/1:1 Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B28JK2</b>	<b>Lab ID: 1011025-01</b>					
U-238	Uranium 238	1.68E-3	ug/g dry	7.98E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B27C24</b>	<b>Lab ID: 1011025-02</b>					
U-238	Uranium 238	4.30E-4	ug/g dry	8.00E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28KF6</b>	<b>Lab ID: 1011025-03</b>					
U-238	Uranium 238	1.81E-3	ug/g dry	7.99E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28KW9</b>	<b>Lab ID: 1011025-04</b>					
U-238	Uranium 238	9.00E-5	ug/g dry	8.00E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28N30</b>	<b>Lab ID: 1011025-05</b>					
U-238	Uranium 238	<7.99E-5	ug/g dry	7.99E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B273M1</b>	<b>Lab ID: 1011025-07</b>					
U-238	Uranium 238	3.30E-4	ug/g dry	8.16E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B27C13</b>	<b>Lab ID: 1011025-08</b>					
U-238	Uranium 238	4.92E-3	ug/g dry	1.14E-4	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29M71</b>	<b>Lab ID: 1011025-09</b>					
U-238	Uranium 238	3.28E-3	ug/g dry	7.99E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28YW2</b>	<b>Lab ID: 1011025-10</b>					
U-238	Uranium 238	<7.99E-5	ug/g dry	7.99E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28CP2</b>	<b>Lab ID: 1011025-11</b>					
U-238	Uranium 238	2.31E-4	ug/g dry	8.00E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29C20</b>	<b>Lab ID: 1011025-13</b>					
U-238	Uranium 238	4.02E-4	ug/g dry	7.98E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29P71</b>	<b>Lab ID: 1011025-17</b>					
U-238	Uranium 238	1.26E-3	ug/g dry	8.00E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29HN7</b>	<b>Lab ID: 1011025-21</b>					
U-238	Uranium 238	1.59E-3	ug/g dry	8.00E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B2B4H0</b>	<b>Lab ID: 1011025-29</b>					
U-238	Uranium 238	2.71E-4	ug/g dry	7.98E-5	5/06/11	1E05003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B2C647</b>	<b>Lab ID: 1011025-33</b>					
U-238	Uranium 238	1.03E-3	ug/g dry	8.76E-5	5/06/11	1E05003	PNNL-AGG-415

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B28JK2</b>	<b>Lab ID: 1011025-01</b>					
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	<2.83E-3	ug/g dry	2.83E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.90E-3	ug/g dry	7.90E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.12E-3	ug/g dry	3.12E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.72E-4	ug/g dry	5.72E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B27C24</b>	<b>Lab ID: 1011025-02</b>					
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	8.12E-3	ug/g dry	2.83E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.91E-3	ug/g dry	7.91E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28KF6</b>	<b>Lab ID: 1011025-03</b>					
14092-98-9	Chromium	1.25E-2	ug/g dry	3.44E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	5.87E-3	ug/g dry	2.83E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.91E-3	ug/g dry	7.91E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28KW9</b>	<b>Lab ID: 1011025-04</b>					
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	<2.84E-3	ug/g dry	2.84E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.92E-3	ug/g dry	7.92E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28N30</b>	<b>Lab ID: 1011025-05</b>					
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	5.98E-3	ug/g dry	2.83E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.91E-3	ug/g dry	7.91E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B273M1</b>	<b>Lab ID: 1011025-07</b>					
14092-98-9	Chromium	<3.50E-3	ug/g dry	3.50E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	<2.88E-3	ug/g dry	2.88E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<8.05E-3	ug/g dry	8.05E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.18E-3	ug/g dry	3.18E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.83E-4	ug/g dry	5.83E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.18E-3	ug/g dry	1.18E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B27C13</b>	<b>Lab ID: 1011025-08</b>					
14092-98-9	Chromium	<4.89E-3	ug/g dry	4.89E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	7.65E-3	ug/g dry	4.03E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<1.12E-2	ug/g dry	1.12E-2	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<4.44E-3	ug/g dry	4.44E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<8.13E-4	ug/g dry	8.13E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.65E-3	ug/g dry	1.65E-3	5/31/11	1E06003	PNNL-AGG-415

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B29M71</b>	<b>Lab ID: 1011025-09</b>					
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	6.69E-3	ug/g dry	2.83E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.91E-3	ug/g dry	7.91E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.12E-3	ug/g dry	3.12E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28YW2</b>	<b>Lab ID: 1011025-10</b>					
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	1.18E-2	ug/g dry	2.83E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.91E-3	ug/g dry	7.91E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28CP2</b>	<b>Lab ID: 1011025-11</b>					
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	<2.84E-3	ug/g dry	2.84E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.92E-3	ug/g dry	7.92E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29C20</b>	<b>Lab ID: 1011025-13</b>					
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	<2.83E-3	ug/g dry	2.83E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.90E-3	ug/g dry	7.90E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.12E-3	ug/g dry	3.12E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.72E-4	ug/g dry	5.72E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29P71</b>	<b>Lab ID: 1011025-17</b>					
14092-98-9	Chromium	3.73E-2	ug/g dry	3.45E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	8.84E-3	ug/g dry	2.84E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.92E-3	ug/g dry	7.92E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29HN7</b>	<b>Lab ID: 1011025-21</b>					
14092-98-9	Chromium	5.44E-3	ug/g dry	3.44E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	<2.83E-3	ug/g dry	2.83E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.91E-3	ug/g dry	7.91E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415
<b>HEIS No.</b>	<b>B2B4H0</b>	<b>Lab ID: 1011025-29</b>					
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	<2.83E-3	ug/g dry	2.83E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<7.90E-3	ug/g dry	7.90E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.12E-3	ug/g dry	3.12E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<5.72E-4	ug/g dry	5.72E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06003	PNNL-AGG-415



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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B2C647</b>	<b>Lab ID: 1011025-33</b>					
14092-98-9	Chromium	<3.77E-3	ug/g dry	3.77E-3	5/31/11	1E06003	PNNL-AGG-415
7440-38-2	Arsenic	5.75E-3	ug/g dry	3.11E-3	6/13/11	1E06003	PNNL-AGG-415
14687-58-2	Selenium	<8.67E-3	ug/g dry	8.67E-3	5/31/11	1E06003	PNNL-AGG-415
14378-37-1	Silver	<3.42E-3	ug/g dry	3.42E-3	5/31/11	1E06003	PNNL-AGG-415
14336-64-2	Cadmium	<6.27E-4	ug/g dry	6.27E-4	5/31/11	1E06003	PNNL-AGG-415
13966-28-4	Lead	<1.27E-3	ug/g dry	1.27E-3	5/31/11	1E06003	PNNL-AGG-415

## RCRA Metals By PNNL-AGG-415/Special Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B28JK2</b>	<b>Lab ID: 1011025-01</b>					
7440-39-3	Barium	8.65E1	ug/g dry	1.89E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B27C24</b>	<b>Lab ID: 1011025-02</b>					
7440-39-3	Barium	5.00E1	ug/g dry	1.88E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B28KF6</b>	<b>Lab ID: 1011025-03</b>					
7440-39-3	Barium	5.20E1	ug/g dry	1.83E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B28KW9</b>	<b>Lab ID: 1011025-04</b>					
7440-39-3	Barium	4.95E1	ug/g dry	1.76E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B28N30</b>	<b>Lab ID: 1011025-05</b>					
7440-39-3	Barium	5.79E1	ug/g dry	1.93E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B273M1</b>	<b>Lab ID: 1011025-07</b>					
7440-39-3	Barium	7.12E1	ug/g dry	1.63E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B27C13</b>	<b>Lab ID: 1011025-08</b>					
7440-39-3	Barium	1.12E2	ug/g dry	1.66E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B29M71</b>	<b>Lab ID: 1011025-09</b>					
7440-39-3	Barium	9.13E1	ug/g dry	1.70E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B28YW2</b>	<b>Lab ID: 1011025-10</b>					
7440-39-3	Barium	8.13E1	ug/g dry	1.86E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B28CP2</b>	<b>Lab ID: 1011025-11</b>					
7440-39-3	Barium	4.50E1	ug/g dry	1.62E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B29C20</b>	<b>Lab ID: 1011025-13</b>					
7440-39-3	Barium	2.82E1	ug/g dry	1.78E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B29P71</b>	<b>Lab ID: 1011025-17</b>					
7440-39-3	Barium	7.01E1	ug/g dry	1.76E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B29HN7</b>	<b>Lab ID: 1011025-21</b>					
7440-39-3	Barium	1.17E2	ug/g dry	1.66E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B2B4H0</b>	<b>Lab ID: 1011025-29</b>					
7440-39-3	Barium	3.27E1	ug/g dry	1.66E0	5/09/11	1E09002	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B2C647</b>	<b>Lab ID: 1011025-33</b>					
7440-39-3	Barium	6.39E1	ug/g dry	1.73E0	5/09/11	1E09002	PNNL-AGG-ICP-AES

## RCRA Metals By PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B28JK2</b>	<b>Lab ID: 1011025-01</b>					
14092-98-9	Chromium	1.64E1	ug/g dry	6.48E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	1.68E0	ug/g dry	3.76E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<7.27E-1	ug/g dry	7.27E-1	6/14/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.18E-3	ug/g dry	1.18E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<3.10E-3	ug/g dry	3.10E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	4.19E0	ug/g dry	1.77E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B27C24</b>	<b>Lab ID: 1011025-02</b>					
14092-98-9	Chromium	1.17E1	ug/g dry	6.46E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	1.50E0	ug/g dry	3.75E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<7.25E-1	ug/g dry	7.25E-1	6/14/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.17E-3	ug/g dry	1.17E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<3.09E-3	ug/g dry	3.09E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	4.23E0	ug/g dry	1.76E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28KF6</b>	<b>Lab ID: 1011025-03</b>					
14092-98-9	Chromium	1.17E1	ug/g dry	6.28E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	1.14E0	ug/g dry	3.64E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<7.05E-1	ug/g dry	7.05E-1	6/14/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.14E-3	ug/g dry	1.14E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<3.01E-3	ug/g dry	3.01E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	3.74E0	ug/g dry	1.71E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28KW9</b>	<b>Lab ID: 1011025-04</b>					
14092-98-9	Chromium	1.18E1	ug/g dry	6.02E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	1.06E0	ug/g dry	3.50E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<6.76E-1	ug/g dry	6.76E-1	6/14/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.09E-3	ug/g dry	1.09E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<2.89E-3	ug/g dry	2.89E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	4.22E0	ug/g dry	1.64E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28N30</b>	<b>Lab ID: 1011025-05</b>					
14092-98-9	Chromium	2.10E1	ug/g dry	6.60E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	5.78E-1	ug/g dry	3.83E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<7.41E-1	ug/g dry	7.41E-1	6/14/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.20E-3	ug/g dry	1.20E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<3.16E-3	ug/g dry	3.16E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	5.60E0	ug/g dry	1.80E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B273M1</b>	<b>Lab ID: 1011025-07</b>					
14092-98-9	Chromium	5.44E0	ug/g dry	5.59E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	5.34E-1	ug/g dry	3.25E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<6.27E-1	ug/g dry	6.27E-1	6/14/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.02E-3	ug/g dry	1.02E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<2.68E-3	ug/g dry	2.68E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	1.33E0	ug/g dry	1.52E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B27C13</b>	<b>Lab ID: 1011025-08</b>					
14092-98-9	Chromium	1.35E1	ug/g dry	5.69E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	1.49E1	ug/g dry	3.30E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<6.38E-1	ug/g dry	6.38E-1	6/14/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.03E-3	ug/g dry	1.03E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<2.73E-3	ug/g dry	2.73E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	4.40E0	ug/g dry	1.55E-1	5/31/11	1E06004	PNNL-AGG-415

## RCRA Metals By PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B29M71</b>	<b>Lab ID: 1011025-09</b>					
14092-98-9	Chromium	8.77E0	ug/g dry	5.82E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	3.51E0	ug/g dry	3.38E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<4.90E-1	ug/g dry	4.90E-1	5/31/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.06E-3	ug/g dry	1.06E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<2.79E-3	ug/g dry	2.79E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	2.32E0	ug/g dry	1.59E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28YW2</b>	<b>Lab ID: 1011025-10</b>					
14092-98-9	Chromium	1.01E1	ug/g dry	6.37E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	1.13E0	ug/g dry	3.70E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<5.36E-1	ug/g dry	5.36E-1	5/31/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.16E-3	ug/g dry	1.16E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<3.05E-3	ug/g dry	3.05E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	5.36E0	ug/g dry	1.74E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B28CP2</b>	<b>Lab ID: 1011025-11</b>					
14092-98-9	Chromium	2.10E1	ug/g dry	5.55E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	8.18E-1	ug/g dry	3.22E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<4.67E-1	ug/g dry	4.67E-1	5/31/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.01E-3	ug/g dry	1.01E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<2.66E-3	ug/g dry	2.66E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	1.42E0	ug/g dry	1.51E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29C20</b>	<b>Lab ID: 1011025-13</b>					
14092-98-9	Chromium	5.57E0	ug/g dry	6.11E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	9.68E-1	ug/g dry	3.55E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<5.14E-1	ug/g dry	5.14E-1	5/31/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.11E-3	ug/g dry	1.11E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<2.93E-3	ug/g dry	2.93E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	1.38E0	ug/g dry	1.67E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29P71</b>	<b>Lab ID: 1011025-17</b>					
14092-98-9	Chromium	1.74E1	ug/g dry	6.04E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	1.07E0	ug/g dry	3.51E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<5.09E-1	ug/g dry	5.09E-1	5/31/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.10E-3	ug/g dry	1.10E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<2.90E-3	ug/g dry	2.90E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	4.77E0	ug/g dry	1.65E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B29HN7</b>	<b>Lab ID: 1011025-21</b>					
14092-98-9	Chromium	8.20E0	ug/g dry	5.71E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	7.11E-1	ug/g dry	3.31E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<4.80E-1	ug/g dry	4.80E-1	5/31/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.04E-3	ug/g dry	1.04E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<2.74E-3	ug/g dry	2.74E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	1.99E0	ug/g dry	1.56E-1	5/31/11	1E06004	PNNL-AGG-415
<b>HEIS No.</b>	<b>B2B4H0</b>	<b>Lab ID: 1011025-29</b>					
14092-98-9	Chromium	5.75E0	ug/g dry	5.70E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	8.45E-1	ug/g dry	3.31E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<4.80E-1	ug/g dry	4.80E-1	5/31/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.04E-3	ug/g dry	1.04E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<2.73E-3	ug/g dry	2.73E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	1.36E0	ug/g dry	1.55E-1	5/31/11	1E06004	PNNL-AGG-415

### RCRA Metals By PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B2C647</b>	<b>Lab ID:</b>		<b>1011025-33</b>			
14092-98-9	Chromium	1.15E1	ug/g dry	5.93E-1	5/31/11	1E06004	PNNL-AGG-415
7440-38-2	Arsenic	8.73E-1	ug/g dry	3.44E-1	6/15/11	1E06004	PNNL-AGG-415
14687-58-2	Selenium	<4.99E-1	ug/g dry	4.99E-1	5/31/11	1E06004	PNNL-AGG-415
14378-37-1	Silver	<1.08E-3	ug/g dry	1.08E-3	5/31/11	1E06004	PNNL-AGG-415
14336-64-2	Cadmium	<2.84E-3	ug/g dry	2.84E-3	5/31/11	1E06004	PNNL-AGG-415
13966-28-4	Lead	2.87E0	ug/g dry	1.62E-1	5/31/11	1E06004	PNNL-AGG-415

## Equilibrium Kd 1:1 Calculations

**1011025-01 B28JK2**

Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.334714

**1011025-02 B27C24**

Analyte	Kd (L/g)
Arsenic	0.183729
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.733884

**1011025-03 B28KF6**

Analyte	Kd (L/g)
Arsenic	0.193208
Barium	ND
Cadmium	ND
Chromium	0.935
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.236569

**1011025-04 B28KW9**

Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	7.965667

**1011025-05 B28N30**

Analyte	Kd (L/g)
Arsenic	0.095656
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	ND

**1011025-07 B273M1**

Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.556576

**1011025-08 B27C13**

Analyte	Kd (L/g)
Arsenic	1.946712
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.326236

**1011025-09 B29M71**

Analyte	Kd (L/g)
Arsenic	0.523664
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.239549

**1011025-10 B28YW2**

Analyte	Kd (L/g)
Arsenic	0.094763
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	ND

**1011025-11 B28CP2**

Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.756576

**1011025-13 B29C20**

Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.503975

**1011025-17 B29P71**

Analyte	Kd (L/g)
Arsenic	0.120041
Barium	ND
Cadmium	ND
Chromium	0.465488
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.556937

**1011025-21 B29HN7**

Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium	1.506353
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.241138

**1011025-29 B2B4H0**

Analyte	Kd (L/g)
Arsenic	ND
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.799738

**1011025-33 B2C647**

Analyte	Kd (L/g)
Arsenic	0.150826
Barium	ND
Cadmium	ND
Chromium	ND
Chromium, Hexavalent	ND
Lead	ND
Selenium	ND
Silver	ND
Uranium 238	0.423272

# Hexavalent Chromium/Soil - Quality Control

## Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch 1E23001 - Hexavalent Chromium Digest

#### Blank (1E23001-BLK1)

Prepared & Analyzed: 05/20/11

Chromium, Hexavalent <5.00E-2 5.00E-2 ug/g wet

#### LCS (1E23001-BS1)

Prepared & Analyzed: 05/20/11

Chromium, Hexavalent 4.10E-1 5.00E-2 ug/g wet 5.01E-1 81.9 80-120

#### Duplicate (1E23001-DUP1)

Source: 1011025-04

Prepared & Analyzed: 05/20/11

Chromium, Hexavalent <6.09E-1 6.09E-1 ug/g dry ND 20

#### Matrix Spike (1E23001-MS1)

Source: 1011025-04

Prepared & Analyzed: 05/20/11

Chromium, Hexavalent 2.44E-1 6.14E-1 ug/g dry 5.00E-1 3.00E-3 48.2 75-125

## Hexavalent Chromium/1:1 Water Extract - Quality Control

### Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1E05001 - 1:1 Water Extract (Cr6)</b>									
<b>Blank (1E05001-BLK1)</b>				Prepared & Analyzed: 05/05/11					
Chromium, Hexavalent	<5.00E-2	5.00E-2	ug/g wet						
<b>LCS (1E05001-BS1)</b>				Prepared & Analyzed: 05/05/11					
Chromium, Hexavalent	5.05E-1	5.00E-2	ug/g wet	5.01E-1	101	70-130			
<b>Duplicate (1E05001-DUP1)</b>				<b>Source: 1011025-04</b>		Prepared & Analyzed: 05/05/11			
Chromium, Hexavalent	<3.89E-2	3.89E-2	ug/g dry		ND			20	
<b>Post Spike (1E05001-PS1)</b>				<b>Source: 1011025-04</b>		Prepared & Analyzed: 05/05/11			
Chromium, Hexavalent	5.25E-1	N/A	ug/mL	5.00E-1	2.00E-2	101	75-125		



**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 Limits	RPD	RPD Limit	Notes
<b>Batch 1E09001 - 1:1 Water Extract (ICP/ICPMS)</b>									
<b>Blank (1E09001-BLK1)</b>				Prepared: 05/04/11		Analyzed: 05/09/11			
Barium	<1.24E-1	1.24E-1	ug/g wet						
<b>LCS (1E09001-BS1)</b>				Prepared: 05/04/11		Analyzed: 05/09/11			
Barium	4.94E0	1.24E-1	ug/g wet	4.99E0		98.9	80-120		
<b>Duplicate (1E09001-DUP1)</b>				<b>Source: 1011025-04</b>		Prepared: 05/04/11		Analyzed: 05/09/11	
Barium	<1.24E-1	1.24E-1	ug/g dry		ND			35	
<b>Post Spike (1E09001-PS1)</b>				<b>Source: 1011025-04</b>		Prepared & Analyzed: 05/09/11			
Barium	2.51E2	N/A	ug/L	2.50E2	3.20E0	99.1	75-125		

# Radionuclides by ICP-MS/Acid Extract - Quality Control

## Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1E05004 - ASTM D 5198 (ICP/ICPMS)</b>										
<b>Blank (1E05004-BLK1)</b>				Prepared & Analyzed: 05/05/11						
Uranium 238	<1.00E-2	1.00E-2	ug/g wet							
<b>Duplicate (1E05004-DUP1)</b>				<b>Source: 1011025-04</b>		Prepared & Analyzed: 05/05/11				
Uranium 238	6.99E-1	4.24E-2	ug/g dry		7.17E-1			2.45	35	
<b>Post Spike (1E05004-PS1)</b>				<b>Source: 1011025-33</b>		Prepared & Analyzed: 05/05/11				
Uranium 238	1.98E0	N/A	ug/L	1.00E0	1.04E0	93.8	75-125			

# Radionuclides by ICP-MS/1:1 Water Extract - Quality Control

## Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1E05003 - 1:1 Water Extract (ICP/ICPMS)</b>									
<b>Blank (1E05003-BLK1)</b>					Prepared: 05/05/11	Analyzed: 05/06/11			
Uranium 238	<8.00E-5	8.00E-5	ug/g wet						
<b>Duplicate (1E05003-DUP1)</b>					Prepared: 05/05/11	Analyzed: 05/06/11			
Uranium 238	1.33E-4	8.00E-5	ug/g dry		9.00E-5		38.9	35	
<b>Post Spike (1E05003-PS1)</b>					Prepared: 05/05/11	Analyzed: 05/06/11			
Uranium 238	1.21E0	N/A	ug/L	1.00E0	1.89E-1	102	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
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**Batch 1E06003 - 1:1 Water Extract (ICP/ICPMS)**

**Blank (1E06003-BLK1)**

Prepared: 05/06/11 Analyzed: 05/31/11

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 (1E06003-BS1)**

Prepared: 05/06/11 Analyzed: 05/31/11

Chromium	4.97E0	3.44E-1	ug/g wet	4.99E0	99.6	80-120
Arsenic	4.79E0	2.84E-1	"	4.99E0	95.9	80-120
Selenium	4.98E0	7.92E-1	"	4.99E0	99.7	80-120
Silver	4.66E0	3.13E-1	"	4.99E0	93.3	80-120
Cadmium	4.63E0	5.73E-2	"	4.99E0	92.7	80-120
Lead	4.71E0	1.16E-1	"	4.99E0	94.3	80-120

**Duplicate (1E06003-DUP1)**

Source: 1011025-04

Prepared: 05/06/11 Analyzed: 05/31/11

Chromium	<3.44E-3	3.44E-3	ug/g dry	ND	35
Arsenic	<2.83E-3	2.83E-3	"	ND	35
Selenium	<7.91E-3	7.91E-3	"	ND	35
Silver	<3.13E-3	3.13E-3	"	ND	35
Cadmium	<5.73E-4	5.73E-4	"	ND	35
Lead	<1.16E-3	1.16E-3	"	ND	35

**Post Spike (1E06003-PS1)**

Source: 1011025-33

Prepared: 05/06/11 Analyzed: 05/31/11

Chromium	5.14E0	N/A	ug/L	5.00E0	1.40E-1	99.9	75-125
Arsenic	6.36E0	N/A	"	5.00E0	1.05E0	106	75-125
Selenium	5.30E0	N/A	"	5.00E0	2.82E-1	100	75-125
Silver	4.77E0	N/A	"	5.00E0	1.18E-3	95.4	75-125
Cadmium	5.11E0	N/A	"	5.00E0	1.18E-2	102	75-125
Lead	5.01E0	N/A	"	5.00E0	1.62E-2	99.8	75-125

# RCRA Metals By PNNL-AGG-415/Special Extract - Quality Control

## Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1E09002 - ASTM D 5198 (ICP/ICPMS)</b>									
<b>Blank (1E09002-BLK1)</b>					Prepared: 05/04/11	Analyzed: 05/09/11			
Barium	<4.12E-1	4.12E-1	ug/g wet						
<b>LCS (1E09002-BS1)</b>					Prepared: 05/04/11	Analyzed: 05/09/11			
Barium	5.68E0	4.12E-2	ug/g wet	5.80E0		97.8	80-120		
<b>Duplicate (1E09002-DUP1)</b>					Source: 1011025-04	Prepared: 05/04/11	Analyzed: 05/09/11		
Barium	4.73E1	1.75E0	ug/g dry		4.95E1		4.53	35	
<b>Post Spike (1E09002-PS1)</b>					Source: 1011025-04	Prepared & Analyzed: 05/09/11			
Barium	4.88E2	N/A	ug/L	2.50E2	2.32E2	103	75-125		

**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
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**Batch 1E06004 - ASTM D 5198 (ICP/ICPMS)**

**Blank (1E06004-BLK1)**

Prepared: 05/06/11 Analyzed: 05/31/11

Chromium	<1.41E-1	1.41E-1	ug/g wet
Arsenic	<8.20E-2	8.20E-2	"
Selenium	<1.19E-1	1.19E-1	"
Silver	<3.85E-3	3.85E-3	"
Cadmium	<1.02E-2	1.02E-2	"
Lead	<3.85E-2	3.85E-2	"

**LCS (1E06004-BS1)**

Prepared: 05/06/11 Analyzed: 05/31/11

Chromium	6.04E0	9.42E-1	ug/g wet	5.80E0	104	80-120
Arsenic	5.60E0	4.10E-1	"	5.80E0	96.4	80-120
Selenium	5.43E0	7.93E-1	"	5.80E0	93.5	80-120
Silver	5.66E0	2.56E-2	"	5.80E0	97.5	80-120
Cadmium	5.72E0	6.77E-2	"	5.80E0	98.6	80-120
Lead	5.81E0	2.57E-1	"	5.80E0	100	80-120

**Duplicate (1E06004-DUP1)**

Source: 1011025-04

Prepared: 05/06/11 Analyzed: 05/31/11

Chromium	1.13E1	5.98E-1	ug/g dry	1.18E1	4.60	35
Arsenic	9.82E-1	3.47E-1	"	1.06E0	8.02	35
Selenium	<6.71E-1	6.71E-1	"	ND		35
Silver	6.13E-2	1.63E-2	"	ND		35
Cadmium	6.10E-2	4.30E-2	"	ND		35
Lead	3.93E0	1.63E-1	"	4.22E0	7.05	35

**Post Spike (1E06004-PS1)**

Source: 1011025-33

Prepared: 05/06/11 Analyzed: 05/31/11

Chromium	4.15E1	N/A	ug/L	5.00E0	3.65E1	101	75-125
Arsenic	6.88E0	N/A	"	5.00E0	2.08E0	96.0	75-125
Selenium	5.44E0	N/A	"	5.00E0	7.72E-2	107	75-125
Silver	4.66E0	N/A	"	5.00E0	1.18E-3	93.1	75-125
Cadmium	4.98E0	N/A	"	5.00E0	1.18E-2	99.4	75-125
Lead	1.36E1	N/A	"	5.00E0	9.13E0	89.4	75-125

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-214-016	PAGE 1 OF 1
COLLECTOR <i>Garcia, Chamberlain</i>		COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR DYEKMAN, DL	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7620 (199-D3-5); I-020		PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO.		FIELD LOGBOOK NO. HNF-N-4918 Pg 147	ACTUAL SAMPLE DEPTH 103.0 - 105.1 ft	COA 300110ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Environmental Sciences Laboratory		OFFSITE PROPERTY NO. SEE PTR		BILL OF LADING/AIR BILL NO. SEE PTR		
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)	PRESERVATION None				
		HOLDING TIME 6 Months				
		TYPE OF CONTAINER G/P				
		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			
B273M1	SOIL	11-19-10	1015	✓		

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>J. Garcia</i>	DATE/TIME <i>11/19/10</i>	RECEIVED BY/STORED IN SSU-R1	DATE/TIME NOV 19 2010 1215	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. <input type="checkbox"/> The CACN for all analytical work at WSCF laboratory is 401642ES20.  BRM # 13564  [Stamp] ORIGINAL	
RELINQUISHED BY/REMOVED FROM SSU-R1	DATE/TIME DEC 02 2010 0730	RECEIVED BY/STORED IN M. A. White	DATE/TIME DEC 02 2010 0730		
RELINQUISHED BY/REMOVED FROM <i>M. A. White</i>	DATE/TIME DEC 02 2010 1400	RECEIVED BY/STORED IN <i>Igor Kutyshkin</i>	DATE/TIME DEC 02 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		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		

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

SDG # ESL090020

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-019	PAGE 1 OF 1
COLLECTOR <i>ROMO, KAYER, ZUKER</i>	COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR DYEKMAN, DL	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7621 (199-D5-133); I-022	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-585-12 P936	ACTUAL SAMPLE DEPTH 102.5 - 105.0 FT	COA 300110ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A	BILL OF LADING/AIR BILL NO. N/A			

<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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)	<b>PRESERVATION</b>		None
		<b>HOLDING TIME</b>		6 Months
		<b>TYPE OF CONTAINER</b>		G/P
		<b>NO. OF CONTAINER(S)</b>		1
		<b>VOLUME</b>		1000mL
<b>SPECIAL HANDLING AND/OR STORAGE</b>		<b>SAMPLE ANALYSIS</b>		KD - Batch (No CAS);
<b>SAMPLE NO.</b>	<b>MATRIX*</b>	<b>SAMPLE DATE</b>	<b>SAMPLE TIME</b>	
B27C13	SOIL	12-1-10	1103	/

<b>CHAIN OF POSSESSION</b>		<b>SIGN/ PRINT NAMES</b>		<b>SPECIAL INSTRUCTIONS</b> ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. BRM # 13564
RELINQUISHED BY/REMOVED FROM <i>Ed Kayer</i>	DATE/TIME 12-1-10 1205	RECEIVED BY/STORED IN SSU-R1	DATE/TIME 12-1-10 1205	
RELINQUISHED BY/REMOVED FROM SSU-R1	DATE/TIME DEC 02 2010 0730	RECEIVED BY/STORED IN M. A. White	DATE/TIME DEC 02 2010 0730	
RELINQUISHED BY/REMOVED FROM M. A. White	DATE/TIME DEC 02 2010 9105	RECEIVED BY/STORED IN Igor Kutyakov	DATE/TIME DEC 02 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	


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



<b>CH2M Hill Plateau Remediation Company</b>		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>		<b>F10-214-100</b>	<b>PAGE 1 OF 1</b>
<b>COLLECTOR</b> ROMO, KAYER, ZUNKER	<b>COMPANY CONTACT</b> RADLOFF, AW	<b>TELEPHONE NO.</b> 376-4554	<b>PROJECT COORDINATOR</b> RADLOFF, AW	<b>PRICE CODE</b> 8N	<b>DATA TURNAROUND</b> 45 Days / 45 Days
<b>SAMPLING LOCATION</b> C7621 (199-D5-133); I-022 DUP	<b>PROJECT DESIGNATION</b> 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		<b>SAF NO.</b> F10-214	<b>AIR QUALITY</b> <input type="checkbox"/>	
<b>ICE CHEST NO.</b>	<b>FIELD LOGBOOK NO.</b> HNF-N-585-12 P336	<b>ACTUAL SAMPLE DEPTH</b> 102.5 - 105.0 FT	<b>COA</b> 300110ES10	<b>METHOD OF SHIPMENT</b> GOVERNMENT VEHICLE	
<b>SHIPPED TO</b> Environmental Sciences Laboratory		<b>OFFSITE PROPERTY NO.</b> N/A		<b>BILL OF LADING/AIR BILL NO.</b> N/A	

<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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)	<b>PRESERVATION</b>	None
		<b>HOLDING TIME</b>	6 Months
		<b>TYPE OF CONTAINER</b>	G/P
		<b>NO. OF CONTAINER(S)</b>	1
		<b>VOLUME</b>	1000mL
<b>SPECIAL HANDLING AND/OR STORAGE</b>		<b>SAMPLE ANALYSIS</b>	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B29M71	SOIL	12-1-10	1103	/


<b>CHAIN OF POSSESSION</b>		<b>SIGN/ PRINT NAMES</b>		<b>SPECIAL INSTRUCTIONS</b> ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.  BR M # 13564   ORIGINAL
RELINQUISHED BY/REMOVED FROM Ed Kauer 12-1-10	DATE/TIME 1205	RECEIVED BY/STORED IN SSU-R1 12-1-10	DATE/TIME 1205	
RELINQUISHED BY/REMOVED FROM SSU-R1 12-2-10	DATE/TIME 0730	RECEIVED BY/STORED IN M. W. K. M. 12-2-10	DATE/TIME 0730	
RELINQUISHED BY/REMOVED FROM M. W. K. M. 12-2-10	DATE/TIME 9:05	RECEIVED BY/STORED IN Igor Kudryakov / L. K. 12-2-10	DATE/TIME 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	

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

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-021	PAGE 1 OF 1
COLLECTOR <i>Nakker</i>	COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR RADLOFF, AW	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7629 (199-D6-3); Bottom unconfined aquifer; I-018	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO. <i>N/A</i>	FIELD LOGBOOK NO. <i>HNF-11-585120924</i>	ACTUAL SAMPLE DEPTH <i>58.8'</i>	COA 300110ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A	BILL OF LADING/AIR BILL NO. N/A			

<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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	G/P
		NO. OF CONTAINER(S)	1
		SPECIAL HANDLING AND/OR STORAGE	VOLUME
		SAMPLE ANALYSIS	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B27C24	SOIL	<i>11/9/10</i>	<i>0925</i>

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>D. Smith</i>	DATE/TIME <i>11/9/10-1130</i>	RECEIVED BY/STORED IN <i>NO 413 SSUR</i>	DATE/TIME <i>11/9/10-1130</i>	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.  <i>BRM # 13564</i>  	
RELINQUISHED BY/REMOVED FROM <i>SSU-R1</i>	DATE/TIME <i>NOV 11 2010 0700</i>	RECEIVED BY/STORED IN <i>DW Brotherton</i>	DATE/TIME <i>NOV 11 2010 0700</i>		
RELINQUISHED BY/REMOVED FROM <i>cm Dwyer cm Cagle</i>	DATE/TIME <i>NOV 11 2010 1330</i>	RECEIVED BY/STORED IN <i>D. Smith</i>	DATE/TIME <i>NOV 11 2010 1330</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		

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

SDG # - ESL 090020

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-032	PAGE 1 OF 1
COLLECTOR <i>Romo, Kauer, Billingsley</i>		COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR DYEKMAN, DL	PRICE CODE 8N DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7626 (199-D6-3); I-018		PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>
ICE CHEST NO.		FIELD LOGBOOK NO. HNF-N- 576-3 <i>P9124</i>	ACTUAL SAMPLE DEPTH <i>54.9 - 56.9 FT</i>	COA 300110ES10	METHOD OF SHIPMENT FEDERAL EXPRESS
SHIPPED TO Environmental Sciences Laboratory		OFFSITE PROPERTY NO. SEE PTR		BILL OF LADING/AIR BILL NO. SEE PTR	

<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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)	<b>PRESERVATION</b>	None
		<b>HOLDING TIME</b>	6 Months
		<b>TYPE OF CONTAINER</b>	<i>SPLIT SPOON LINE 2</i>
		<b>NO. OF CONTAINER(S)</b>	1
	<b>VOLUME</b>	1000mL	
<b>SPECIAL HANDLING AND/OR STORAGE</b>		<b>SAMPLE ANALYSIS</b>	KD - Batch (No CAS);

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B28JK2	SOIL	<i>11-3/10</i>	<i>1020</i>	<i>/</i>


CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>Rob Romo, Robert Romo</i>	DATE/TIME <i>11-3-10 1330</i>	RECEIVED BY/STORED IN <b>SSU-R2</b>	DATE/TIME <i>NOV 03 2010 1330</i>	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. <input type="checkbox"/> The CACN for all analytical work at WSCF laboratory is 401642ES20. <i>BRM #13564</i>	
RELINQUISHED BY/REMOVED FROM <b>SSU-R2</b>	DATE/TIME <i>NOV 04 2010 1030</i>	RECEIVED BY/STORED IN <i>Mahita Mahita</i>	DATE/TIME <i>NOV 04 2010 1030</i>		
RELINQUISHED BY/REMOVED FROM <i>Mahita Mahita</i>	DATE/TIME <i>NOV 04 2010 14:30</i>	RECEIVED BY/STORED IN <i>Ben Williams Ben Williams</i>	DATE/TIME <i>NOV 04 2010 14:30</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		

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

*5DB6# ESL090020*

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-036	PAGE 1 OF 1
COLLECTOR <i>Garcia, Aguilar, Ramirez</i>	COMPANY CONTACT RADLOFF, A	TELEPHONE NO. 376-4554	PROJECT COORDINATOR RADLOFF, AW	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7628 (199-D6-3); I-018	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO. <i>N/A</i>	FIELD LOGBOOK NO. <i>HNF-N-585-12 P<sub>3</sub> 22</i>	ACTUAL SAMPLE DEPTH <i>to 11/5/10 580-60.5-630'</i>	COA 300110ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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	G/P	
		NO. OF CONTAINER(S)	1	
		VOLUME	1000mL	
	SPECIAL HANDLING AND/OR STORAGE <i>RADSCREEN TIE TO: MUM 9/24/10</i>	SAMPLE ANALYSIS	KD - Batch (No CAS);	
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B28KF6	SOIL	11/5/10	1454	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>J. Garcia</i>	DATE/TIME <i>11/5/10/1600</i>	RECEIVED BY/STORED IN <i>MO-413 SSU-R1</i>	DATE/TIME <i>11/5/10/1600</i>	** The laboratory is to achieve a detection limit of 10 pCi/g for Tritium. <input type="checkbox"/> ** The laboratory is to achieve a detection limit of 0.25 pCi/g for Technetium. <input type="checkbox"/>  <i>BRM# 13564</i>  	
RELINQUISHED BY/REMOVED FROM <b>SSU-R1</b>	DATE/TIME <i>NOV 11 2010 0710</i>	RECEIVED BY/STORED IN <i>om Aguilar cm Gbl</i>	DATE/TIME <i>NOV 11 2010 0710</i>		
RELINQUISHED BY/REMOVED FROM <i>om Aguilar cm Gbl</i>	DATE/TIME <i>NOV 11 2010 1330</i>	RECEIVED BY/STORED IN <i>DSmith</i>	DATE/TIME <i>NOV 11 2010 1330</i>		
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		

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

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-038	PAGE 1 OF 1
COLLECTOR GARCIA, YOUNG	COMPANY CONTACT RADLOFF, AW	TELEPHONE NO. 376-4554	PROJECT COORDINATOR RADLOFF, AW	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7630 (199-H1-7); I-016	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO. N/A	FIELD LOGBOOK NO. HNF-N-5763 pg 127	ACTUAL SAMPLE DEPTH 32.0-34.5 ft	COA 300110ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A	BILL OF LADING/AIR BILL NO. N/A			

<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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	G/P	
		NO. OF CONTAINER(S)	1	
		VOLUME	1000mL	
<b>SPECIAL HANDLING AND/OR STORAGE</b>		SAMPLE ANALYSIS	KD - Batch (No CAS);	
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B28KW9	SOIL	11/12/10	1215	-

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. <input type="checkbox"/> The CACN for all analytical work at WSCF laboratory is 401642ES20.  BRM # 13564  THX100	
J. Garcia	11/12/10 1330	SSU-R4	11/12/10 1330		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-R4	11-16-10 0700	cm Aquiler emlg	11-16-10 0700		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
cm Aquiler emlg	11-16-10 8:40	Igor Kudryakov	11-16-10 8:40		
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		

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

SDG # ESL090020

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-049	PAGE 1 OF 1
COLLECTOR <i>MORLEY</i>	COMPANY CONTACT RADLOFF, AW	TELEPHONE NO. 376-4554	PROJECT COORDINATOR RADLOFF, AW	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7627 (199-H3-7); I-017	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO. <i>N/A</i>	FIELD LOGBOOK NO. <i>INF-4-585 12 (P927)</i>	ACTUAL SAMPLE DEPTH <i>53.6 1</i>	COA 300110ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A	BILL OF LADING/AIR BILL NO. N/A			


<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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	G/P	
		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	
B28N30	SOIL	<i>11/11/10</i>	<i>1130</i>	<i>✓</i>

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>S. Morley</i>	DATE/TIME <i>11/11/10 1418</i>	RECEIVED BY/STORED IN <i>Mo 413 33024</i>	DATE/TIME <i>11/11/10 1418</i>	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.	
RELINQUISHED BY/REMOVED FROM <i>SSU-R4</i>	DATE/TIME <i>11-16-10 0700</i>	RECEIVED BY/STORED IN <i>cm Aguilar cm Cgl</i>	DATE/TIME <i>11-16-10 0700</i>	BRM # 13564	
RELINQUISHED BY/REMOVED FROM <i>cm Aguilar cm Cgl</i>	DATE/TIME <i>11-16-10 8:40</i>	RECEIVED BY/STORED IN <i>Igor Kufnyakov</i>	DATE/TIME <i>11-16-10 8:40</i>		
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		

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

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-056	PAGE 1 OF 1
COLLECTOR <b>GARCIA, ANDERSON</b>	COMPANY CONTACT RADLOFF, AW	TELEPHONE NO. 376-4554	PROJECT COORDINATOR RADLOFF, AW	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7623 (199-D6-3); I-021	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO. <b>N/A</b>	FIELD LOGBOOK NO. <b>HNF-N-441-8 1152</b>	ACTUAL SAMPLE DEPTH <b>106 104</b>	COA 300110ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A	<b>DA 12.3.10</b>	BILL OF LADING/AIR BILL NO. N/A		

<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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	G/P	
		NO. OF CONTAINER(S)	1	
		VOLUME	1000mL	
<b>SPECIAL HANDLING AND/OR STORAGE</b>		<b>SAMPLE ANALYSIS</b> KD - Batch (No CAS);		
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B28YW2	SOIL	12.3.10	0835	—

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.  <b>BRM#13564</b>  	
<b>DAVE ANDERSON</b>	12.3.10/1115	<b>SSU-R1</b>	DEC 03 2010 1115		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<b>SSU-R1</b>	DEC 06 2010 1200	<b>M.A. White</b>	DEC 06 2010 1200		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<b>M.A. White</b>	DEC 06 2010 13:20	<b>Igor Kutny</b>	DEC 06 2010 13:20		
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		

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

SDG # ESL090020

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-029	PAGE 1 OF 1
COLLECTOR <i>Romo, Kauer, Billingsley</i>	COMPANY CONTACT ANNA RADLOFF	TELEPHONE NO. 376-4554	PROJECT COORDINATOR RADLOFF, AW	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C7622 (199-D5-133); I-027	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO. <i>N/A</i>	FIELD LOGBOOK NO. <i>HNF-N 585-12 Pgs 1</i>	ACTUAL SAMPLE DEPTH <i>103.2 - 105.0</i>	COA 300110ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE <b>ORIGINAL</b>	
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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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	G/P
		NO. OF CONTAINER(S)	1
		VOLUME	<i>500</i> 1000mL
<b>SPECIAL HANDLING AND/OR STORAGE</b> <del>RADSCREEN TIE TO B28CP2</del> <i>KS 1/14/11</i>		<b>SAMPLE ANALYSIS</b> KD - Batch (No CAS); <i>KS 1/19/11</i>	


SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B28CP2	SOIL	1-14-11	0850	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>Rob Romo, Roberto Romo</i>	DATE/TIME 1-14-11 1300	RECEIVED BY/STORED IN <i>MO-413 SSU-R1</i>	DATE/TIME 1-14-11 1300	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. <input type="checkbox"/> The CACN for all analytical work at WSCF laboratory is 401642ES20.  <i>BRM # 13564</i>	
RELINQUISHED BY/REMOVED FROM <i>SSU-R1</i>	DATE/TIME JAN 19 2011 0940	RECEIVED BY/STORED IN <i>JR. Aguilar</i>	DATE/TIME JAN 19 2011 0940		
RELINQUISHED BY/REMOVED FROM <i>JR. Aguilar</i>	DATE/TIME JAN 19 2011 0940	RECEIVED BY/STORED IN <i>Beall Williams Reuther</i>	DATE/TIME 1/19/11 1340		
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		

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



CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F10-214-059	PAGE 1 OF 1
COLLECTOR <i>Chastan, Lancia</i>		COMPANY CONTACT RADLOFF, AW	TELEPHONE NO. 376-4554	PROJECT COORDINATOR RADLOFF, AW	PRICE CODE 8N	Data Turnaround 30 Days/30 Days
SAMPLING LOCATION C7639 (199-H3-9); I-017		PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO. <i>N/A</i>		FIELD LOGBOOK NO. <i>PS</i> <i>HNF-N-491-14 PL9</i>	ACTUAL SAMPLE DEPTH <i>46.0-48.5 FT</i>		COA 300110ES10	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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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	G/P			
		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			
B29C20	SOIL	1/22/11	0818	-		

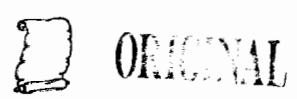
CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>E. Chastan</i>	DATE/TIME <i>1/22/11 1315</i>	RECEIVED BY/STORED IN <i>SSU R1</i>	DATE/TIME <i>1/22/11 1315</i>	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. <input type="checkbox"/> The CACN for all analytical work at WSCF laboratory is 401642ES20.  <i>BRM# 13564</i>  	
RELINQUISHED BY/REMOVED FROM <i>SSU-R1</i>	DATE/TIME <i>JAN 24 2011 1100</i>	RECEIVED BY/STORED IN <i>T.A. Wallace</i>	DATE/TIME <i>JAN 24 2011 1100</i>		
RELINQUISHED BY/REMOVED FROM <i>T.A. Wallace</i>	DATE/TIME <i>JAN 24 2011 13:30</i>	RECEIVED BY/STORED IN <i>CHRPC</i>	DATE/TIME <i>JAN 24 2011 13:30</i>		
RELINQUISHED BY/REMOVED FROM <i>CHRPC</i>	DATE/TIME	RECEIVED BY/STORED IN <i>Igor Kutnyakov</i>	DATE/TIME <i>JAN 24 2011</i>		
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		

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

*SDG# ESL090020*

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-115	PAGE 1 OF 1
COLLECTOR <i>Billingsley, Garcia, Christian</i>		COMPANY CONTACT RADLOFF, AW	TELEPHONE NO. 376-4554	PROJECT COORDINATOR RADLOFF, AW	PRICE CODE 8N DATA TURNAROUND
SAMPLING LOCATION C7624 (199-D5-134); I-024		PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/> PRICE CODE 7 H DATA TURANAROUND 30 DAYS/30 DAYS
ICE CHEST NO. <i>N/A</i>		FIELD LOGBOOK NO. <i>HNF-N-491-13 P613</i>	ACTUAL SAMPLE DEPTH <i>107.3'-109.8'</i>	COA 300110ES10	METHOD OF SHIPMENT, GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory		OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A	


<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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)	<b>PRESERVATION</b>	None	
		<b>HOLDING TIME</b>	6 Months	
		<b>TYPE OF CONTAINER</b>	G/P	
		<b>NO. OF CONTAINER(S)</b>	1	
		<b>VOLUME</b>	1000mL	
<b>SPECIAL HANDLING AND/OR STORAGE</b>		<b>SAMPLE ANALYSIS</b>	KD - Batch (No CAS);	
<b>SAMPLE NO.</b>	<b>MATRIX*</b>	<b>SAMPLE DATE</b>	<b>SAMPLE TIME</b>	
B29P71	SOIL	1-25-11	0935	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	<b>** The 100 Area S&amp;GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. <input type="checkbox"/> ** The CACN for all analytical work at WSCF laboratory is 401642ES20.</b>  BRM # 13564  	
<i>J. Billingsley</i>	1-25-11 1355	<i>MD-413 SSU-R1</i>	1-25-11 1355		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<i>MD 413 SSU-R1</i>	1/26/11 0800	<i>Thomas Wallace Turner</i>	1/26/11 0800		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<i>Thomas Wallace Turner</i>	1/26/11 13:15	<i>Igor Kutnyakov</i>	1/26/11 1315		
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		

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

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-089	PAGE 1 OF 1
COLLECTOR <i>Morley / Anderson</i>	COMPANY CONTACT RADLOFF, AW	TELEPHONE NO. 376-4554	PROJECT COORDINATOR RADLOFF, AW	PRICE CODE 8N	DATA Data Turnaround 30 Days/30 Days
SAMPLING LOCATION C7631 (199-H2-1); I-014	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO. <i>N/A</i>	FIELD LOGBOOK NO. <i>4NF-41, 491-14 (Pg 13)</i>	ACTUAL SAMPLE DEPTH <i>38.1</i>	COA 300110ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A	BILL OF LADING/AIR BILL NO. N/A			

<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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	G/P	
		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	
B29HN7	SOIL	<i>2/16/11</i>	<i>1435</i>	<i>\</i>


CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>Simon J. Miller</i>	DATE/TIME <i>2/16/11 1325</i>	RECEIVED BY/STORED IN <i>MD 413 SUE 1</i>	DATE/TIME <i>2/16/11 1525</i>	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. <input type="checkbox"/>  <i>B R M # 13564</i>  	
RELINQUISHED BY/REMOVED FROM <i>SSU-R1</i>	DATE/TIME <i>2-17-11 0700</i>	RECEIVED BY/STORED IN <i>cm Aguilar cm Cogh</i>	DATE/TIME <i>2-17-11 0700</i>		
RELINQUISHED BY/REMOVED FROM <i>cm Aguilar cm Cogh</i>	DATE/TIME <i>2-17-11 1330</i>	RECEIVED BY/STORED IN <i>J. K. J. J. J.</i>	DATE/TIME <i>2/17/11 1330</i>		
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		

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

*SDG # ESL 090020*

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-143	PAGE 1 OF 1
COLLECTOR <b>BAILEY</b>	COMPANY CONTACT RADLOFF, AW	TELEPHONE NO. 376-4554	PROJECT COORDINATOR RADLOFF, AW	PRICE CODE 8N	Data Turnaround 30 Days/30 Days
SAMPLING LOCATION C7640 (199-H3-10); I-015	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO. <b>N/A</b>	FIELD LOGBOOK NO. <b>HNF-N-491-14/21</b>	ACTUAL SAMPLE DEPTH <b>53.1'-55.4'</b>	COA 300110ES10	METHOD OF SHIPMENT FEDERAL EXPRESS	
SHIPPED TO Environmental Sciences Laboratory		OFFSITE PROPERTY NO. SEE PTR	BILL OF LADING/AIR BILL NO. SEE PTR		

<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> 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	G/P	
		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	
B2B4H0	SOIL	3-16-11	1305	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <b>JB Bailey</b>	DATE/TIME <b>3-16-11/1500</b>	RECEIVED BY/STORED IN <b>MOY 13 SSU R1</b>	DATE/TIME <b>3-16-11/1500</b>	<b>** The 100 Area S&amp;GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.</b>  <b>BRM # 13569</b>  	
RELINQUISHED BY/REMOVED FROM <b>SSU R1</b>	DATE/TIME <b>MAR 21 2011 0814</b>	RECEIVED BY/STORED IN <b>JR Aguilar</b>	DATE/TIME <b>MAR 21 2011 0814</b>		
RELINQUISHED BY/REMOVED FROM <b>JR Aguilar</b>	DATE/TIME <b>MAR 21 2011 1330</b>	RECEIVED BY/STORED IN <b>JR Aguilar</b>	DATE/TIME <b>MAR 21 2011 1330</b>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
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RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		

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

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F10-214-158	PAGE 1 OF 1
COLLECTOR <i>Kaucer, Romo, Kaucer</i>	COMPANY CONTACT RADLOFF, AW	TELEPHONE NO. 376-4554	PROJECT COORDINATOR RADLOFF, AW	PRICE CODE	PRICE CODE 5C DATA TURNAROUND 15 Days/15 Days
SAMPLING LOCATION C8375 (199-D5-143); I-034	PROJECT DESIGNATION 100 Area Remedial Investigation/Feasibility Analysis - 100-HR-3 - Sediment		SAF NO. F10-214	AIR QUALITY	
ICE CHEST NO.	FIELD LOGBOOK NO. HNF-N-491-13	ACTUAL SAMPLE DEPTH Pg 28 105.2 - 107.7 FT	COA 300110ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO <i>N/A</i> 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)	PRESERVATION	None	
		HOLDING TIME	6 Months	
		TYPE OF CONTAINER	G/P	
		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	
B2C647	SOIL	4-14-11	1440	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.  BRM # 13564	
<i>Rob Romo, Robert Romo</i>	<i>4-14-11 1530</i>	<i>MO-413 554 R1</i>	<i>4-14-11 1530</i>		
<i>MO-413 554-R1</i>	<i>4-25-11 1220</i>	<i>MAZDIK, Mazdi</i>	<i>4-25-11 1220</i>		
<i>MAZDIK, Mazdi</i>	<i>4-25-11 13:00</i>	<i>for Kutyng-ka</i>	<i>4-25-11 13:00</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		

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