U.S. DEPARTMENT OF ENERGY

PNNL-19179

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

Analytical Data Report of Grab Samples Collected From 200-ZP-1 Remedial Action Wells

Michael Lindberg

February 2010

Pacific Northwest
NATIONAL LABORATORY

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor Battelle Memorial Institute, nor any of their employees, makes **any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights**. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or Battelle Memorial Institute. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

PACIFIC NORTHWEST NATIONAL LABORATORY
operated by
BATTELLE
for the
UNITED STATES DEPARTMENT OF ENERGY
under Contract DE-AC05-76RL01830

Printed in the United States of America

Available to DOE and DOE contractors from the
Office of Scientific and Technical Information,
P.O. Box 62, Oak Ridge, TN 37831-0062;
ph: (865) 576-8401
fax: (865) 576-5728
email: reports@adonis.osti.gov

Available to the public from the National Technical Information Service,
U.S. Department of Commerce, 5285 Port Royal Rd., Springfield, VA 22161
ph: (800) 553-6847
fax: (703) 605-6900
email: orders@ntis.fedworld.gov
online ordering: http://www.ntis.gov/ordering.htm

This document was printed on recycled paper.
(9/2003)

PNNL-19179

Analytical Data Report of Grab Samples Collected From 200-ZP-1 Remedial Action Wells

M Lindberg

February 2010

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

Pacific Northwest National Laboratory
Richland, Washington 99352

02/19/10 13:30

To: Dale Dyekman

From: Michael J. Lindberg

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

Subject: Analytical Data Report for Sediment Samples Collected From 200-ZP-1 Remedial Action Wells, Sample Delivery Group ESL090002, SAF Number F09-012

This letter contains the following information for sample delivery group ESL090002

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

Introduction

Between February 12, 2009 and August 3, 2009 sediment samples were received from 200-ZP-1 Remedial Action Wells 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:

Sample 0902002-01 failed hold criteria for Total Carbon-NP.
Sampled = 02/09/09 12:57
Prepared = 03/10/09 14:04
Analyzed = 03/10/09 15:40
Sampled->Analyzed > 28.00 days

Sample 0902002-01 failed hold criteria for Total Inorganic Carbon-NP.
Sampled = 02/09/09 12:57
Prepared = 03/11/09 08:19
Analyzed = 03/11/09 10:22
Sampled->Analyzed > 28.00 days

Sample 0902002-05 failed hold criteria for Total Carbon-NP.
Sampled = 03/03/09 13:07
Prepared = 04/15/09 09:55
Analyzed = 04/16/09 11:04
Sampled->Analyzed > 28.00 days

Sample 0902002-05 failed hold criteria for Total Inorganic Carbon-NP.
Sampled = 03/03/09 13:07
Prepared = 04/16/09 14:58
Analyzed = 04/21/09 14:43
Sampled->Analyzed > 28.00 days

Sample 0902002-26 failed hold criteria for Total Carbon-NP.
Sampled = 04/22/09 08:55
Prepared = 06/02/09 08:25
Analyzed = 06/02/09 10:37
Sampled->Analyzed > 28.00 days

Sample 0902002-26 failed hold criteria for Total Inorganic Carbon-NP.
Sampled = 04/22/09 08:55
Prepared = 06/02/09 08:49
Analyzed = 06/02/09 13:40
Sampled->Analyzed > 28.00 days

Sample 0902002-27 failed hold criteria for Total Carbon-NP.
Sampled = 04/27/09 10:46
Prepared = 06/02/09 08:25
Analyzed = 06/02/09 10:48
Sampled->Analyzed > 28.00 days

Sample 0902002-27 failed hold criteria for Total Inorganic Carbon-NP.
Sampled = 04/27/09 10:46
Prepared = 06/02/09 08:49
Analyzed = 06/02/09 13:50
Sampled->Analyzed > 28.00 days

Case Narrative Report

Hold Time:

Sample 0902002-28 failed hold criteria for Total Carbon-NP.
Sampled = 04/29/09 08:15
Prepared = 06/02/09 08:25
Analyzed = 06/02/09 10:58
Sampled->Analyzed > 28.00 days

Sample 0902002-28 failed hold criteria for Total Inorganic Carbon-NP.
Sampled = 04/29/09 08:15
Prepared = 06/02/09 08:49
Analyzed = 06/02/09 14:02
Sampled->Analyzed > 28.00 days

Sample 0902002-29 failed hold criteria for Total Carbon-NP.
Sampled = 05/01/09 11:40
Prepared = 06/02/09 08:25
Analyzed = 06/02/09 11:09
Sampled->Analyzed > 28.00 days

Sample 0902002-29 failed hold criteria for Total Inorganic Carbon-NP.
Sampled = 05/01/09 11:40
Prepared = 06/02/09 08:49
Analyzed = 06/02/09 14:12
Sampled->Analyzed > 28.00 days

Sample 0902002-31 failed hold criteria for Total Carbon-NP.
Sampled = 05/05/09 08:25
Prepared = 06/02/09 08:25
Analyzed = 06/02/09 11:33
Sampled->Analyzed > 28.00 days

Sample 0902002-31 failed hold criteria for Total Inorganic Carbon-NP.
Sampled = 05/05/09 08:25
Prepared = 06/02/09 08:49
Analyzed = 06/02/09 14:30
Sampled->Analyzed > 28.00 days

Sample 0902002-37 failed hold criteria for Total Carbon-NP.
Sampled = 06/26/09 08:45
Prepared = 10/05/09 10:19
Analyzed = 10/05/09 11:34
Sampled->Analyzed > 28.00 days

Sample 0902002-37 failed hold criteria for Total Inorganic Carbon-NP.
Sampled = 06/26/09 08:45
Prepared = 10/05/09 10:19
Analyzed = 10/05/09 14:03
Sampled->Analyzed > 28.00 days

Case Narrative Report

Preparation Blank (PB):

QC Sample 9E07004-BLK1 failed criteria for Antimony 121 in ICPMS-RCRA-WE.
MDL = 0.000658 ug/g
MRL = 0.000658 ug/g
Result = 0.0140 ug/g
Criterion = 1 x MRL
Sample results associated with this batch were less than the EQL. There should be no impact to the data as reported.

Duplicate (DUP):

Duplicate RPD for Chloride (47.7%) was above the acceptance limit (35) in 9C10004-DUP1 for Anions by IC-WE
All other duplicates and QC associated with the batch were in limits. Duplicate failure may be due to sample heterogeneity. There should be no impact to sample data as reported.

Duplicate RPD for Antimony 121 (44.5%) was above the acceptance limit (35) in 9E07002-DUP1 for ICPMS-RCRA-WE
The sample and duplicate values were less than 10 times the EQL. The 35% criterion does not apply.

Laboratory Control Samples (LCS):

Bismuth, Lithium, Phosphorus, Strontium, and Zirconium are not present in the LCS. All analytes present in the LCS were in limits. There should be no impact to data as reported.

Post Spike (PS):

Post-Spike Recovery for Lead 208 (65.4%) was outside acceptance limits (75-125) in 9E07006-PS1 for ICPMS-RCRA-AE
The native sample concentration was greater than 5 times the spike concentration. There should be not impact to data as reported.

Post-Spike Recovery for Aluminum (407%) was outside acceptance limits (75-125) in 9E12001-PS1 for ICP-OES Vadose-AE
The native sample concentration was greater than 5 times the spike concentration. There should be not impact to data as reported.

Post-Spike Recovery for Calcium (386%) was outside acceptance limits (75-125) in 9E12001-PS1 for ICP-OES Vadose-AE
The native sample concentration was greater than 5 times the spike concentration. There should be not impact to data as reported.

Post-Spike Recovery for Iron (538%) was outside acceptance limits (75-125) in 9E12001-PS1 for ICP-OES Vadose-AE
The native sample concentration was greater than 5 times the spike concentration. There should be not impact to data as reported.

Post-Spike Recovery for Manganese (126%) was outside acceptance limits (75-125) in 9E12001-PS1 for ICP-OES Vadose-AE
The native sample concentration was greater than 5 times the spike concentration. There should be not impact to data as reported.

Post-Spike Recovery for Sodium (127%) was outside acceptance limits (75-125) in 9E12002-PS1 for ICP-OES Vadose-WE
The native sample concentration was greater than 5 times the spike concentration. There should be not impact to data as reported.

Post-Spike Recovery for Sodium (136%) was outside acceptance limits (75-125) in 9E12003-PS1 for ICP-OES Vadose-WE
The native sample concentration was greater than 5 times the spike concentration. There should be not impact to data as reported.

Post-Spike Recovery for Sodium (132%) was outside acceptance limits (75-125) in 9E12005-PS1 for ICP-OES Vadose-WE
The native sample concentration was greater than 5 times the spike concentration. There should be not impact to data as reported.

Matrix Spike (MS):

No Discrepancies Noted.

Other QC Criteria:

No Discrepancies Noted.

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor Battelle Memorial Institute, nor any of their employees, makes **any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights**. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or Battelle Memorial Institute. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

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

Metals 1:1 DI Water Extract by ICPMS

Metals Acid Extract by ICPMS

1:1 DI Water Extract

AGG-TOC-001

Anions By Ion Chromatography

Carbon, Total, Combustion or Oxidation

GEA No Preparation

Inorganic Carbon, Total, Combustion or Oxidation

Metals 1:1 Water Extract by ICPOES

Metals Acid Extract by ICPOES

Moisture Content

Nitric Acid Digestion

Percent Solids

SAMPLES ANALYZED IN THIS REPORT

HEIS No.	Laboratory ID	Matrix	Date Collected	Date Received
B1YD07	0902002-01	SOIL	2/9/09 12:57	2/12/09 13:50
B1YD08	0902002-02	SOIL	3/2/09 10:00	3/12/09 10:30
B1YD09	0902002-03	SOIL	3/3/09 09:00	3/12/09 10:30
B1YD74	0902002-04	SOIL	3/4/09 15:08	3/12/09 10:30
B1YND4	0902002-05	SOIL	3/3/09 13:07	4/1/09 13:00
B1YND5	0902002-06	SOIL	4/1/09 09:05	4/1/09 13:00
B1YND7	0902002-07	SOIL	3/27/09 09:30	4/1/09 13:00
B1YM90	0902002-08	SOIL	3/26/09 12:56	4/1/09 13:00
B1YM91	0902002-09	SOIL	4/6/09 08:02	4/9/09 14:15
B1YND6	0902002-10	SOIL	4/3/09 12:00	4/9/09 14:15
B1YD75	0902002-11	SOIL	3/28/09 13:45	4/9/09 14:15
B1YM92	0902002-12	SOIL	4/10/09 12:10	4/16/09 12:00
B1YM93	0902002-13	SOIL	4/15/09 08:05	4/16/09 12:00
B1YNV5	0902002-14	SOIL	4/15/09 07:30	4/16/09 12:00
B1YD76	0902002-15	SOIL	4/20/09 08:48	4/27/09 13:10
B1YD88	0902002-16	SOIL	4/21/09 08:48	4/27/09 13:10
B1YD77	0902002-17	SOIL	4/22/09 07:06	4/27/09 13:10
B1YD78	0902002-18	SOIL	4/22/09 16:23	4/27/09 13:10
B1YD79	0902002-19	SOIL	4/24/09 07:50	4/27/09 13:10
B1YND9	0902002-20	SOIL	4/9/09 15:25	4/30/09 13:00
B1YNF0	0902002-21	SOIL	4/9/09 15:25	4/30/09 13:00
B1YNF1	0902002-22	SOIL	4/20/09 08:25	4/30/09 13:00
B1YD80	0902002-23	SOIL	4/24/09 08:30	4/30/09 13:00
B1YD81	0902002-24	SOIL	4/28/09 09:00	4/30/09 13:00
B1YD82	0902002-25	SOIL	4/29/09 08:54	4/30/09 13:00
B1YNF2	0902002-26	SOIL	4/22/09 08:55	5/13/09 13:00
B1YNF3	0902002-27	SOIL	4/27/09 10:46	5/13/09 13:00
B1YNF4	0902002-28	SOIL	4/29/09 08:15	5/13/09 13:00
B1YNF5	0902002-29	SOIL	5/1/09 11:40	5/13/09 13:00
B1YNF6	0902002-30	SOIL	5/6/09 15:22	5/13/09 13:00
B1YD83	0902002-31	SOIL	5/5/09 08:25	5/13/09 13:00
B1YM97	0902002-37	SOIL	6/26/09 08:45	8/3/09 13:00

Wet Chemistry

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

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0902002-01	B1YD07	3.94E0	N/A	3/16/09	9C09001
0902002-02	B1YD08	4.66E0	N/A	3/26/09	9C23002
0902002-03	B1YD09	5.30E0	N/A	3/26/09	9C23002
0902002-04	B1YD74	9.40E0	N/A	3/26/09	9C23002
0902002-05	B1YND4	6.57E-1	N/A	4/08/09	9D06001
0902002-06	B1YND5	6.23E0	N/A	4/08/09	9D06001
0902002-07	B1YND7	4.46E0	N/A	4/08/09	9D06001
0902002-08	B1YM90	1.65E1	N/A	4/08/09	9D06001
0902002-09	B1YM91	1.00E1	N/A	4/16/09	9D06001
0902002-10	B1YND6	1.44E1	N/A	4/22/09	9D06001
0902002-11	B1YD75	9.98E0	N/A	4/22/09	9D06001
0902002-12	B1YM92	6.59E0	N/A	4/22/09	9D06001
0902002-13	B1YM93	1.56E1	N/A	4/22/09	9D06001
0902002-14	B1YNV5	8.52E0	N/A	4/22/09	9D06001
0902002-15	B1YD76	1.25E1	N/A	6/22/09	9E29002
0902002-16	B1YD88	1.31E1	N/A	6/22/09	9E29002
0902002-17	B1YD77	1.77E1	N/A	6/22/09	9E29002
0902002-18	B1YD78	2.74E1	N/A	6/22/09	9E29002
0902002-19	B1YD79	2.99E1	N/A	6/22/09	9E29002
0902002-20	B1YND9	7.95E0	N/A	6/22/09	9E29002
0902002-21	B1YNF0	7.50E0	N/A	6/22/09	9E29002
0902002-22	B1YNF1	7.49E0	N/A	6/22/09	9E29002
0902002-23	B1YD80	3.83E1	N/A	6/22/09	9E29002
0902002-24	B1YD81	9.88E0	N/A	6/22/09	9E29002
0902002-25	B1YD82	8.03E1	N/A	6/22/09	9E29002
0902002-26	B1YNF2	1.92E1	N/A	6/22/09	9E29002
0902002-27	B1YNF3	1.01E1	N/A	6/22/09	9E29002
0902002-28	B1YNF4	1.87E1	N/A	6/22/09	9E29002
0902002-29	B1YNF5	2.60E1	N/A	6/22/09	9E29002
0902002-30	B1YNF6	9.16E0	N/A	6/22/09	9E29002
0902002-31	B1YD83	1.82E1	N/A	6/22/09	9E29002
0902002-37	B1YM97	1.25E1	N/A	2/10/10	0B08009

Anions by Ion Chromatography

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YD07**		**Lab ID:**	**0902002-01**			
16984-48-8	Fluoride	5.50E-1	ug/g dry	2.16E-1	3/10/09	9C10004	AGG-IC-001
16887-00-6	Chloride	3.83E0	ug/g dry	5.39E-1	3/10/09	9C10004	AGG-IC-001
14797-65-0	Nitrite	<1.08E0	ug/g dry	1.08E0	3/10/09	9C10004	AGG-IC-001
14797-55-8	Nitrate	2.92E0	ug/g dry	1.08E0	3/10/09	9C10004	AGG-IC-001
14808-79-8	Sulfate	1.51E1	ug/g dry	1.62E0	3/10/09	9C10004	AGG-IC-001
l4265-44-2	Phosphate	<1.62E0	ug/g dry	1.62E0	3/10/09	9C10004	AGG-IC-001
HEIS No.	**B1YD08**		**Lab ID:**	**0902002-02**			
16984-48-8	Fluoride	2.06E0	ug/g dry	2.20E-1	3/24/09	9C25004	AGG-IC-001
16887-00-6	Chloride	2.55E0	ug/g dry	5.51E-1	3/24/09	9C25004	AGG-IC-001
14797-65-0	Nitrite	<1.10E0	ug/g dry	1.10E0	3/24/09	9C25004	AGG-IC-001
14797-55-8	Nitrate	<1.10E0	ug/g dry	1.10E0	3/24/09	9C25004	AGG-IC-001
14808-79-8	Sulfate	7.97E0	ug/g dry	1.65E0	3/24/09	9C25004	AGG-IC-001
l4265-44-2	Phosphate	<1.65E0	ug/g dry	1.65E0	3/24/09	9C25004	AGG-IC-001
HEIS No.	**B1YD09**		**Lab ID:**	**0902002-03**			
16984-48-8	Fluoride	7.05E-1	ug/g dry	2.22E-1	3/24/09	9C25004	AGG-IC-001
16887-00-6	Chloride	2.65E0	ug/g dry	5.55E-1	3/24/09	9C25004	AGG-IC-001
14797-65-0	Nitrite	<1.11E0	ug/g dry	1.11E0	3/24/09	9C25004	AGG-IC-001
14797-55-8	Nitrate	8.70E0	ug/g dry	1.11E0	3/24/09	9C25004	AGG-IC-001
14808-79-8	Sulfate	4.96E0	ug/g dry	1.66E0	3/24/09	9C25004	AGG-IC-001
l4265-44-2	Phosphate	<1.66E0	ug/g dry	1.66E0	3/24/09	9C25004	AGG-IC-001
HEIS No.	**B1YND4**		**Lab ID:**	**0902002-05**			
16984-48-8	Fluoride	3.21E-1	ug/g dry	2.00E-1	4/14/09	9D14001	AGG-IC-001
16887-00-6	Chloride	8.96E-1	ug/g dry	5.01E-1	4/14/09	9D14001	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	4/14/09	9D14001	AGG-IC-001
14797-55-8	Nitrate	2.01E0	ug/g dry	1.00E0	4/14/09	9D14001	AGG-IC-001
14808-79-8	Sulfate	1.41E1	ug/g dry	1.50E0	4/14/09	9D14001	AGG-IC-001
l4265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	4/14/09	9D14001	AGG-IC-001
HEIS No.	**B1YND5**		**Lab ID:**	**0902002-06**			
16984-48-8	Fluoride	5.67E-1	ug/g dry	2.00E-1	4/14/09	9D14001	AGG-IC-001
16887-00-6	Chloride	4.10E0	ug/g dry	5.00E-1	4/14/09	9D14001	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	4/14/09	9D14001	AGG-IC-001
14797-55-8	Nitrate	<1.00E0	ug/g dry	1.00E0	4/14/09	9D14001	AGG-IC-001
14808-79-8	Sulfate	5.97E0	ug/g dry	1.50E0	4/14/09	9D14001	AGG-IC-001
l4265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	4/14/09	9D14001	AGG-IC-001
HEIS No.	**B1YND7**		**Lab ID:**	**0902002-07**			
16984-48-8	Fluoride	1.28E0	ug/g dry	1.99E-1	4/14/09	9D14001	AGG-IC-001
16887-00-6	Chloride	6.90E0	ug/g dry	4.98E-1	4/14/09	9D14001	AGG-IC-001
14797-65-0	Nitrite	<9.96E-1	ug/g dry	9.96E-1	4/14/09	9D14001	AGG-IC-001
14797-55-8	Nitrate	1.44E0	ug/g dry	9.96E-1	4/14/09	9D14001	AGG-IC-001
14808-79-8	Sulfate	1.66E1	ug/g dry	1.49E0	4/14/09	9D14001	AGG-IC-001
l4265-44-2	Phosphate	<1.49E0	ug/g dry	1.49E0	4/14/09	9D14001	AGG-IC-001
HEIS No.	**B1YM90**		**Lab ID:**	**0902002-08**			
16984-48-8	Fluoride	3.88E-1	ug/g dry	2.00E-1	4/14/09	9D14001	AGG-IC-001
16887-00-6	Chloride	2.72E1	ug/g dry	5.00E-1	4/14/09	9D14001	AGG-IC-001
14797-65-0	Nitrite	1.49E0	ug/g dry	1.00E0	4/14/09	9D14001	AGG-IC-001
14797-55-8	Nitrate	5.54E1	ug/g dry	1.00E0	4/14/09	9D14001	AGG-IC-001
14808-79-8	Sulfate	5.39E1	ug/g dry	1.50E0	4/14/09	9D14001	AGG-IC-001
l4265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	4/14/09	9D14001	AGG-IC-001

Anions by Ion Chromatography

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YM91**		**Lab ID:**	**0902002-09**			
16984-48-8	Fluoride	5.31E-1	ug/g dry	2.15E-1	4/14/09	9D14001	AGG-IC-001
16887-00-6	Chloride	1.74E0	ug/g dry	5.36E-1	4/14/09	9D14001	AGG-IC-001
14797-65-0	Nitrite	<1.07E0	ug/g dry	1.07E0	4/14/09	9D14001	AGG-IC-001
14797-55-8	Nitrate	2.51E0	ug/g dry	1.07E0	4/14/09	9D14001	AGG-IC-001
14808-79-8	Sulfate	6.17E0	ug/g dry	1.61E0	4/14/09	9D14001	AGG-IC-001
l4265-44-2	Phosphate	<1.61E0	ug/g dry	1.61E0	4/14/09	9D14001	AGG-IC-001
HEIS No.	**B1YM92**		**Lab ID:**	**0902002-12**			
16984-48-8	Fluoride	5.59E-1	ug/g dry	2.01E-1	4/21/09	9D21001	AGG-IC-001
16887-00-6	Chloride	1.36E1	ug/g dry	5.03E-1	4/21/09	9D21001	AGG-IC-001
14797-65-0	Nitrite	<1.01E0	ug/g dry	1.01E0	4/21/09	9D21001	AGG-IC-001
14797-55-8	Nitrate	3.91E1	ug/g dry	1.01E0	4/21/09	9D21001	AGG-IC-001
14808-79-8	Sulfate	2.23E1	ug/g dry	1.51E0	4/21/09	9D21001	AGG-IC-001
l4265-44-2	Phosphate	<1.51E0	ug/g dry	1.51E0	4/21/09	9D21001	AGG-IC-001

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YD07**		**Lab ID:**	**0902002-01**			
7429-90-5	Aluminum	1.10E-1	ug/g dry	1.01E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.48E0	ug/g dry	1.48E0	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-39-3	Barium	<1.34E-1	ug/g dry	1.34E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<1.42E-2	ug/g dry	1.42E-2	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<3.29E-1	ug/g dry	3.29E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.11E1	ug/g dry	4.89E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	<1.41E-1	ug/g dry	1.41E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-50-8	Copper	<9.49E-2	ug/g dry	9.49E-2	5/13/09	9E12002	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.13E-1	ug/g dry	1.13E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-09-7	Potassium	4.40E0	ug/g dry	1.39E0	5/13/09	9E12002	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<8.07E-1	ug/g dry	8.07E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.40E0	ug/g dry	5.28E-2	5/13/09	9E12002	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.75E-2	ug/g dry	6.75E-2	5/13/09	9E12002	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<1.52E-1	ug/g dry	1.52E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	<6.51E-1	ug/g dry	6.51E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-24-6	Strontium	<8.66E-2	ug/g dry	8.66E-2	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	<1.44E-1	ug/g dry	1.44E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-66-6	Zinc	<1.06E-1	ug/g dry	1.06E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.26E1	ug/g dry	8.61E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	<1.39E-1	ug/g dry	1.39E-1	5/13/09	9E12002	PNNL-AGG-ICP-AES
HEIS No.	**B1YD08**		**Lab ID:**	**0902002-02**			
7429-90-5	Aluminum	3.13E-1	ug/g dry	1.03E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.51E0	ug/g dry	1.51E0	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-39-3	Barium	<1.36E-1	ug/g dry	1.36E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<1.44E-2	ug/g dry	1.44E-2	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<3.35E-1	ug/g dry	3.35E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	4.66E0	ug/g dry	4.98E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	<1.44E-1	ug/g dry	1.44E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<9.67E-2	ug/g dry	9.67E-2	5/13/09	9E12003	PNNL-AGG-ICP-AES
7439-89-6	Iron	3.91E-1	ug/g dry	1.15E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.44E0	ug/g dry	1.42E0	5/13/09	9E12003	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<8.23E-1	ug/g dry	8.23E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.47E0	ug/g dry	5.38E-2	5/13/09	9E12003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.88E-2	ug/g dry	6.88E-2	5/13/09	9E12003	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<1.55E-1	ug/g dry	1.55E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	<6.64E-1	ug/g dry	6.64E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-24-6	Strontium	<8.83E-2	ug/g dry	8.83E-2	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	<1.47E-1	ug/g dry	1.47E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-66-6	Zinc	<1.08E-1	ug/g dry	1.08E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.19E1	ug/g dry	8.78E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	<1.42E-1	ug/g dry	1.42E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
HEIS No.	**B1YD09**		**Lab ID:**	**0902002-03**			
7429-90-5	Aluminum	5.90E-1	ug/g dry	1.04E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.52E0	ug/g dry	1.52E0	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-39-3	Barium	<1.37E-1	ug/g dry	1.37E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<1.45E-2	ug/g dry	1.45E-2	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<3.38E-1	ug/g dry	3.38E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-70-2	Calcium	2.39E0	ug/g dry	5.02E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YD09**		**Lab ID:**	**0902002-03**			
7440-48-4	Cobalt	<1.45E-1	ug/g dry	1.45E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-50-8	Copper	<9.74E-2	ug/g dry	9.74E-2	5/13/09	9E12003	PNNL-AGG-ICP-AES
7439-89-6	Iron	7.38E-1	ug/g dry	1.16E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-09-7	Potassium	2.18E0	ug/g dry	1.43E0	5/13/09	9E12003	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<8.28E-1	ug/g dry	8.28E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	8.08E-1	ug/g dry	5.42E-2	5/13/09	9E12003	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.93E-2	ug/g dry	6.93E-2	5/13/09	9E12003	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<1.56E-1	ug/g dry	1.56E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	<6.69E-1	ug/g dry	6.69E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-24-6	Strontium	<8.89E-2	ug/g dry	8.89E-2	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	<1.48E-1	ug/g dry	1.48E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-66-6	Zinc	<1.08E-1	ug/g dry	1.08E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.13E1	ug/g dry	8.84E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	<1.43E-1	ug/g dry	1.43E-1	5/13/09	9E12003	PNNL-AGG-ICP-AES
HEIS No.	**B1YND4**		**Lab ID:**	**0902002-05**			
7429-90-5	Aluminum	<9.38E-2	ug/g dry	9.38E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.37E0	ug/g dry	1.37E0	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<1.31E-2	ug/g dry	1.31E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<3.05E-1	ug/g dry	3.05E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	9.02E0	ug/g dry	4.53E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	<1.31E-1	ug/g dry	1.31E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.79E-2	ug/g dry	8.79E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	2.82E0	ug/g dry	1.29E0	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<7.48E-1	ug/g dry	7.48E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.48E0	ug/g dry	4.89E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.25E-2	ug/g dry	6.25E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<1.41E-1	ug/g dry	1.41E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	1.74E0	ug/g dry	6.04E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-24-6	Strontium	<8.03E-2	ug/g dry	8.03E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	<1.33E-1	ug/g dry	1.33E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-66-6	Zinc	<9.79E-2	ug/g dry	9.79E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	8.18E0	ug/g dry	7.98E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	<1.29E-1	ug/g dry	1.29E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
HEIS No.	**B1YND5**		**Lab ID:**	**0902002-06**			
7429-90-5	Aluminum	5.26E-1	ug/g dry	9.37E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.37E0	ug/g dry	1.37E0	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<1.31E-2	ug/g dry	1.31E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<3.04E-1	ug/g dry	3.04E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	8.14E0	ug/g dry	4.52E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	<1.31E-1	ug/g dry	1.31E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.79E-2	ug/g dry	8.79E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-89-6	Iron	4.80E-1	ug/g dry	1.05E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.51E0	ug/g dry	1.29E0	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<7.47E-1	ug/g dry	7.47E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.03E0	ug/g dry	4.89E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YND5**		**Lab ID:**	**0902002-06**			
7439-96-5	Manganese	<6.25E-2	ug/g dry	6.25E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<1.41E-1	ug/g dry	1.41E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	<6.03E-1	ug/g dry	6.03E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-24-6	Strontium	<8.02E-2	ug/g dry	8.02E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	<1.33E-1	ug/g dry	1.33E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-66-6	Zinc	<9.78E-2	ug/g dry	9.78E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.22E1	ug/g dry	7.97E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	<1.29E-1	ug/g dry	1.29E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
HEIS No.	**B1YND7**		**Lab ID:**	**0902002-07**			
7429-90-5	Aluminum	3.29E-1	ug/g dry	9.34E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.36E0	ug/g dry	1.36E0	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-39-3	Barium	<1.23E-1	ug/g dry	1.23E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<1.31E-2	ug/g dry	1.31E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<3.03E-1	ug/g dry	3.03E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	6.42E0	ug/g dry	4.51E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	<1.30E-1	ug/g dry	1.30E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.75E-2	ug/g dry	8.75E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-89-6	Iron	3.08E-1	ug/g dry	1.04E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	4.62E0	ug/g dry	1.29E0	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<7.44E-1	ug/g dry	7.44E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.19E0	ug/g dry	4.87E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.22E-2	ug/g dry	6.22E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<1.40E-1	ug/g dry	1.40E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	<6.01E-1	ug/g dry	6.01E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-24-6	Strontium	<7.99E-2	ug/g dry	7.99E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	<1.33E-1	ug/g dry	1.33E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-66-6	Zinc	<9.74E-2	ug/g dry	9.74E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.23E1	ug/g dry	7.94E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	<1.28E-1	ug/g dry	1.28E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
HEIS No.	**B1YM90**		**Lab ID:**	**0902002-08**			
7429-90-5	Aluminum	<9.38E-2	ug/g dry	9.38E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.37E0	ug/g dry	1.37E0	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<1.31E-2	ug/g dry	1.31E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<3.04E-1	ug/g dry	3.04E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.45E1	ug/g dry	4.52E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	<1.31E-1	ug/g dry	1.31E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.79E-2	ug/g dry	8.79E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.05E-1	ug/g dry	1.05E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	6.38E0	ug/g dry	1.29E0	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<7.47E-1	ug/g dry	7.47E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.17E1	ug/g dry	4.89E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.25E-2	ug/g dry	6.25E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<1.41E-1	ug/g dry	1.41E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	1.47E1	ug/g dry	6.03E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-24-6	Strontium	2.54E-1	ug/g dry	8.02E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	<1.33E-1	ug/g dry	1.33E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-66-6	Zinc	<9.78E-2	ug/g dry	9.78E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YM90**		**Lab ID:**	**0902002-08**			
7440-23-5	Sodium	2.84E1	ug/g dry	7.98E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	<1.29E-1	ug/g dry	1.29E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
HEIS No.	**B1YM91**		**Lab ID:**	**0902002-09**			
7429-90-5	Aluminum	3.83E-1	ug/g dry	1.01E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.47E0	ug/g dry	1.47E0	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-39-3	Barium	<1.33E-1	ug/g dry	1.33E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<1.41E-2	ug/g dry	1.41E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<3.26E-1	ug/g dry	3.26E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	8.33E0	ug/g dry	4.85E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	<1.40E-1	ug/g dry	1.40E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-50-8	Copper	<9.42E-2	ug/g dry	9.42E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-89-6	Iron	3.68E-1	ug/g dry	1.12E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.32E0	ug/g dry	1.39E0	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<8.01E-1	ug/g dry	8.01E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.73E0	ug/g dry	5.24E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.70E-2	ug/g dry	6.70E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<1.51E-1	ug/g dry	1.51E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	<6.47E-1	ug/g dry	6.47E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-24-6	Strontium	<8.60E-2	ug/g dry	8.60E-2	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	<1.43E-1	ug/g dry	1.43E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-66-6	Zinc	<1.05E-1	ug/g dry	1.05E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	9.43E0	ug/g dry	8.55E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	<1.38E-1	ug/g dry	1.38E-1	5/13/09	9E12004	PNNL-AGG-ICP-AES
HEIS No.	**B1YM92**		**Lab ID:**	**0902002-12**			
7429-90-5	Aluminum	3.10E-1	ug/g dry	9.43E-2	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.38E0	ug/g dry	1.38E0	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-39-3	Barium	<1.25E-1	ug/g dry	1.25E-1	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<1.32E-2	ug/g dry	1.32E-2	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<3.06E-1	ug/g dry	3.06E-1	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.98E1	ug/g dry	4.55E-1	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	<1.32E-1	ug/g dry	1.32E-1	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-50-8	Copper	<8.84E-2	ug/g dry	8.84E-2	5/13/09	9E12005	PNNL-AGG-ICP-AES
7439-89-6	Iron	<1.06E-1	ug/g dry	1.06E-1	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.99E0	ug/g dry	1.30E0	5/13/09	9E12005	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<7.52E-1	ug/g dry	7.52E-1	5/13/09	9E12005	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	5.99E0	ug/g dry	4.92E-2	5/13/09	9E12005	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<6.29E-2	ug/g dry	6.29E-2	5/13/09	9E12005	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<1.41E-1	ug/g dry	1.41E-1	5/13/09	9E12005	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	<6.07E-1	ug/g dry	6.07E-1	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-24-6	Strontium	9.00E-2	ug/g dry	8.07E-2	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	<1.34E-1	ug/g dry	1.34E-1	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-66-6	Zinc	<9.84E-2	ug/g dry	9.84E-2	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.67E1	ug/g dry	8.02E-1	5/13/09	9E12005	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	<1.29E-1	ug/g dry	1.29E-1	5/13/09	9E12005	PNNL-AGG-ICP-AES

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YD07**		**Lab ID:**	**0902002-01**			
7429-90-5	Aluminum	5.29E3	ug/g dry	2.32E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-42-8	Boron	<9.93E1	ug/g dry	9.93E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-39-3	Barium	5.29E1	ug/g dry	1.41E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<7.92E-1	ug/g dry	7.92E-1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<9.76E0	ug/g dry	9.76E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	2.72E3	ug/g dry	2.41E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	6.30E0	ug/g dry	4.95E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-50-8	Copper	7.91E0	ug/g dry	6.63E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.61E4	ug/g dry	6.23E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	6.36E2	ug/g dry	8.87E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<2.15E1	ug/g dry	2.15E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.03E3	ug/g dry	6.60E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.02E2	ug/g dry	2.07E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<7.87E0	ug/g dry	7.87E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	2.85E2	ug/g dry	3.06E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-24-6	Strontium	1.60E1	ug/g dry	1.51E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	2.18E1	ug/g dry	4.14E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-66-6	Zinc	2.86E1	ug/g dry	3.78E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.87E2	ug/g dry	6.53E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	6.02E0	ug/g dry	2.77E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
HEIS No.	**B1YD08**		**Lab ID:**	**0902002-02**			
7429-90-5	Aluminum	9.25E3	ug/g dry	2.40E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.03E2	ug/g dry	1.03E2	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-39-3	Barium	8.50E1	ug/g dry	1.46E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<8.21E-1	ug/g dry	8.21E-1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	1.78E1	ug/g dry	1.01E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.18E4	ug/g dry	2.49E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	9.08E0	ug/g dry	5.13E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-50-8	Copper	9.28E0	ug/g dry	6.87E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.98E4	ug/g dry	6.46E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	1.78E3	ug/g dry	9.19E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<2.23E1	ug/g dry	2.23E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	5.52E3	ug/g dry	6.84E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	3.48E2	ug/g dry	2.15E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<8.15E0	ug/g dry	8.15E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	6.05E2	ug/g dry	3.17E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-24-6	Strontium	4.26E1	ug/g dry	1.56E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	3.02E1	ug/g dry	4.30E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-66-6	Zinc	4.16E1	ug/g dry	3.92E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.29E2	ug/g dry	6.77E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	1.38E1	ug/g dry	2.88E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
HEIS No.	**B1YD09**		**Lab ID:**	**0902002-03**			
7429-90-5	Aluminum	7.12E3	ug/g dry	2.38E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.02E2	ug/g dry	1.02E2	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-39-3	Barium	7.89E1	ug/g dry	1.45E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<8.14E-1	ug/g dry	8.14E-1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<1.00E1	ug/g dry	1.00E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	3.08E3	ug/g dry	2.47E1	5/12/09	9E12001	PNNL-AGG-ICP-AES

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YD09**		**Lab ID:**	**0902002-03**			
7440-48-4	Cobalt	7.31E0	ug/g dry	5.09E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-50-8	Copper	<6.81E0	ug/g dry	6.81E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.85E4	ug/g dry	6.41E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	1.73E3	ug/g dry	9.12E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<2.21E1	ug/g dry	2.21E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.50E3	ug/g dry	6.78E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	6.80E2	ug/g dry	2.13E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<8.09E0	ug/g dry	8.09E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	3.42E2	ug/g dry	3.15E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-24-6	Strontium	1.91E1	ug/g dry	1.55E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	2.25E1	ug/g dry	4.26E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-66-6	Zinc	5.25E1	ug/g dry	3.88E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.37E2	ug/g dry	6.71E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	8.69E0	ug/g dry	2.85E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
HEIS No.	**B1YND4**		**Lab ID:**	**0902002-05**			
7429-90-5	Aluminum	7.57E3	ug/g dry	2.29E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-42-8	Boron	<9.84E1	ug/g dry	9.84E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-39-3	Barium	5.60E1	ug/g dry	1.40E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<7.84E-1	ug/g dry	7.84E-1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	1.74E1	ug/g dry	9.67E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	8.45E3	ug/g dry	2.38E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	6.92E0	ug/g dry	4.90E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-50-8	Copper	7.69E0	ug/g dry	6.56E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.75E4	ug/g dry	6.17E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	1.30E3	ug/g dry	8.78E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<2.13E1	ug/g dry	2.13E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	5.30E3	ug/g dry	6.53E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.81E2	ug/g dry	2.05E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<7.79E0	ug/g dry	7.79E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	4.52E2	ug/g dry	3.03E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-24-6	Strontium	3.40E1	ug/g dry	1.50E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	2.48E1	ug/g dry	4.10E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-66-6	Zinc	3.34E1	ug/g dry	3.74E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.74E2	ug/g dry	6.46E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	4.76E0	ug/g dry	2.75E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
HEIS No.	**B1YND5**		**Lab ID:**	**0902002-06**			
7429-90-5	Aluminum	6.40E3	ug/g dry	2.43E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.04E2	ug/g dry	1.04E2	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-39-3	Barium	5.91E1	ug/g dry	1.48E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<8.30E-1	ug/g dry	8.30E-1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	1.03E1	ug/g dry	1.02E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	3.89E3	ug/g dry	2.52E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	8.69E0	ug/g dry	5.19E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-50-8	Copper	9.19E0	ug/g dry	6.95E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.80E4	ug/g dry	6.53E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.87E2	ug/g dry	9.30E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<2.26E1	ug/g dry	2.26E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.86E3	ug/g dry	6.92E0	5/12/09	9E12001	PNNL-AGG-ICP-AES

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YND5**		**Lab ID:**	**0902002-06**			
7439-96-5	Manganese	2.29E2	ug/g dry	2.17E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<8.25E0	ug/g dry	8.25E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	3.88E2	ug/g dry	3.21E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-24-6	Strontium	1.94E1	ug/g dry	1.58E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	2.99E1	ug/g dry	4.35E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-66-6	Zinc	3.27E1	ug/g dry	3.96E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.85E2	ug/g dry	6.84E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	8.67E0	ug/g dry	2.91E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
HEIS No.	**B1YND7**		**Lab ID:**	**0902002-07**			
7429-90-5	Aluminum	8.72E3	ug/g dry	2.39E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.02E2	ug/g dry	1.02E2	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-39-3	Barium	1.23E2	ug/g dry	1.45E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<8.16E-1	ug/g dry	8.16E-1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<1.01E1	ug/g dry	1.01E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	4.62E3	ug/g dry	2.48E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	8.75E0	ug/g dry	5.10E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-50-8	Copper	2.30E1	ug/g dry	6.83E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-89-6	Iron	2.04E4	ug/g dry	6.42E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	1.09E3	ug/g dry	9.14E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<2.22E1	ug/g dry	2.22E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	4.48E3	ug/g dry	6.80E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	4.30E2	ug/g dry	2.13E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<8.10E0	ug/g dry	8.10E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	4.28E2	ug/g dry	3.15E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-24-6	Strontium	2.84E1	ug/g dry	1.56E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	3.41E1	ug/g dry	4.27E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-66-6	Zinc	4.28E1	ug/g dry	3.89E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	6.61E2	ug/g dry	6.72E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	9.92E0	ug/g dry	2.86E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
HEIS No.	**B1YM90**		**Lab ID:**	**0902002-08**			
7429-90-5	Aluminum	1.22E4	ug/g dry	2.65E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.14E2	ug/g dry	1.14E2	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-39-3	Barium	1.07E2	ug/g dry	1.61E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<9.05E-1	ug/g dry	9.05E-1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	1.14E1	ug/g dry	1.12E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.15E4	ug/g dry	2.75E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	9.12E0	ug/g dry	5.66E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-50-8	Copper	1.43E1	ug/g dry	7.57E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.94E4	ug/g dry	7.12E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	2.23E3	ug/g dry	1.01E2	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<2.46E1	ug/g dry	2.46E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	7.24E3	ug/g dry	7.54E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	3.98E2	ug/g dry	2.37E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<8.99E0	ug/g dry	8.99E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	6.44E2	ug/g dry	3.50E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-24-6	Strontium	3.62E1	ug/g dry	1.73E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	2.10E1	ug/g dry	4.74E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-66-6	Zinc	4.60E1	ug/g dry	4.32E0	5/12/09	9E12001	PNNL-AGG-ICP-AES

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YM90**		**Lab ID:**	**0902002-08**			
7440-23-5	Sodium	2.21E2	ug/g dry	7.46E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	8.13E0	ug/g dry	3.17E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
HEIS No.	**B1YM91**		**Lab ID:**	**0902002-09**			
7429-90-5	Aluminum	6.98E3	ug/g dry	2.47E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.06E2	ug/g dry	1.06E2	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-39-3	Barium	1.02E2	ug/g dry	1.51E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<8.45E-1	ug/g dry	8.45E-1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<1.04E1	ug/g dry	1.04E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	3.33E3	ug/g dry	2.57E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	9.73E0	ug/g dry	5.29E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-50-8	Copper	7.54E0	ug/g dry	7.07E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.98E4	ug/g dry	6.65E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	8.79E2	ug/g dry	9.46E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<2.30E1	ug/g dry	2.30E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	4.48E3	ug/g dry	7.04E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	5.00E2	ug/g dry	2.21E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<8.39E0	ug/g dry	8.39E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	4.34E2	ug/g dry	3.27E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-24-6	Strontium	1.91E1	ug/g dry	1.61E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	2.29E1	ug/g dry	4.42E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-66-6	Zinc	3.50E1	ug/g dry	4.03E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.99E2	ug/g dry	6.97E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	8.44E0	ug/g dry	2.96E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
HEIS No.	**B1YM92**		**Lab ID:**	**0902002-12**			
7429-90-5	Aluminum	6.73E3	ug/g dry	2.43E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-42-8	Boron	<1.04E2	ug/g dry	1.04E2	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-39-3	Barium	5.87E1	ug/g dry	1.48E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-41-7	Beryllium	<8.31E-1	ug/g dry	8.31E-1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-69-9	Bismuth	<1.03E1	ug/g dry	1.03E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.34E3	ug/g dry	2.53E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-48-4	Cobalt	8.31E0	ug/g dry	5.20E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-50-8	Copper	7.95E0	ug/g dry	6.96E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-89-6	Iron	1.81E4	ug/g dry	6.54E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-09-7	Potassium	6.28E2	ug/g dry	9.31E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-93-2	Lithium	<2.26E1	ug/g dry	2.26E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.93E3	ug/g dry	6.93E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-96-5	Manganese	4.57E2	ug/g dry	2.17E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7439-98-7	Molybdenum	<8.26E0	ug/g dry	8.26E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7723-14-0	Phosphorus	3.75E2	ug/g dry	3.21E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-24-6	Strontium	1.84E1	ug/g dry	1.59E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-62-2	Vanadium	2.67E1	ug/g dry	4.35E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-66-6	Zinc	3.17E1	ug/g dry	3.97E0	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.76E2	ug/g dry	6.85E1	5/12/09	9E12001	PNNL-AGG-ICP-AES
7440-67-7	Zirconium	7.61E0	ug/g dry	2.91E0	5/12/09	9E12001	PNNL-AGG-ICP-AES

RCRA Metals By PNNL-AGG-415/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YD07**		**Lab ID:**	**0902002-01**			
14092-98-9	Chromium	<3.72E-3	ug/g dry	3.72E-3	5/07/09	9E07001	PNNL-AGG-415
7440-38-2	Arsenic	1.32E-2	ug/g dry	3.06E-3	5/07/09	9E07001	PNNL-AGG-415
14687-58-2	Selenium	<8.55E-3	ug/g dry	8.55E-3	5/07/09	9E07001	PNNL-AGG-415
14378-37-1	Silver	<3.38E-3	ug/g dry	3.38E-3	5/07/09	9E07001	PNNL-AGG-415
14336-64-2	Cadmium	<6.19E-4	ug/g dry	6.19E-4	5/07/09	9E07001	PNNL-AGG-415
14265-72-6	Antimony	<7.11E-4	ug/g dry	7.11E-4	5/07/09	9E07001	PNNL-AGG-415
13966-28-4	Lead	<1.26E-3	ug/g dry	1.26E-3	5/07/09	9E07001	PNNL-AGG-415
HEIS No.	**B1YD08**		**Lab ID:**	**0902002-02**			
14092-98-9	Chromium	<3.79E-3	ug/g dry	3.79E-3	5/07/09	9E07002	PNNL-AGG-415
7440-38-2	Arsenic	<3.12E-3	ug/g dry	3.12E-3	5/07/09	9E07002	PNNL-AGG-415
14687-58-2	Selenium	<8.72E-3	ug/g dry	8.72E-3	5/07/09	9E07002	PNNL-AGG-415
14378-37-1	Silver	<3.44E-3	ug/g dry	3.44E-3	5/07/09	9E07002	PNNL-AGG-415
14336-64-2	Cadmium	<6.31E-4	ug/g dry	6.31E-4	5/07/09	9E07002	PNNL-AGG-415
14265-72-6	Antimony	1.84E-3	ug/g dry	7.25E-4	5/07/09	9E07002	PNNL-AGG-415
13966-28-4	Lead	<1.28E-3	ug/g dry	1.28E-3	5/07/09	9E07002	PNNL-AGG-415
HEIS No.	**B1YD09**		**Lab ID:**	**0902002-03**			
14092-98-9	Chromium	<3.82E-3	ug/g dry	3.82E-3	5/07/09	9E07002	PNNL-AGG-415
7440-38-2	Arsenic	<3.15E-3	ug/g dry	3.15E-3	5/07/09	9E07002	PNNL-AGG-415
14687-58-2	Selenium	<8.78E-3	ug/g dry	8.78E-3	5/07/09	9E07002	PNNL-AGG-415
14378-37-1	Silver	<3.47E-3	ug/g dry	3.47E-3	5/07/09	9E07002	PNNL-AGG-415
14336-64-2	Cadmium	<6.36E-4	ug/g dry	6.36E-4	5/07/09	9E07002	PNNL-AGG-415
14265-72-6	Antimony	1.47E-3	ug/g dry	7.30E-4	5/07/09	9E07002	PNNL-AGG-415
13966-28-4	Lead	<1.29E-3	ug/g dry	1.29E-3	5/07/09	9E07002	PNNL-AGG-415
HEIS No.	**B1YND4**		**Lab ID:**	**0902002-05**			
14092-98-9	Chromium	<3.45E-3	ug/g dry	3.45E-3	5/07/09	9E07003	PNNL-AGG-415
7440-38-2	Arsenic	1.34E-2	ug/g dry	2.84E-3	5/07/09	9E07003	PNNL-AGG-415
14687-58-2	Selenium	<7.93E-3	ug/g dry	7.93E-3	5/07/09	9E07003	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	5/07/09	9E07003	PNNL-AGG-415
14336-64-2	Cadmium	<5.74E-4	ug/g dry	5.74E-4	5/07/09	9E07003	PNNL-AGG-415
14265-72-6	Antimony	<6.59E-4	ug/g dry	6.59E-4	5/07/09	9E07003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/07/09	9E07003	PNNL-AGG-415
HEIS No.	**B1YND5**		**Lab ID:**	**0902002-06**			
14092-98-9	Chromium	<3.45E-3	ug/g dry	3.45E-3	5/07/09	9E07003	PNNL-AGG-415
7440-38-2	Arsenic	3.79E-3	ug/g dry	2.84E-3	5/07/09	9E07003	PNNL-AGG-415
14687-58-2	Selenium	<7.92E-3	ug/g dry	7.92E-3	5/07/09	9E07003	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	5/07/09	9E07003	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	5/07/09	9E07003	PNNL-AGG-415
14265-72-6	Antimony	7.66E-4	ug/g dry	6.59E-4	5/07/09	9E07003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/07/09	9E07003	PNNL-AGG-415
HEIS No.	**B1YND7**		**Lab ID:**	**0902002-07**			
14092-98-9	Chromium	<3.43E-3	ug/g dry	3.43E-3	5/07/09	9E07003	PNNL-AGG-415
7440-38-2	Arsenic	4.72E-3	ug/g dry	2.83E-3	5/07/09	9E07003	PNNL-AGG-415
14687-58-2	Selenium	<7.89E-3	ug/g dry	7.89E-3	5/07/09	9E07003	PNNL-AGG-415
14378-37-1	Silver	<3.12E-3	ug/g dry	3.12E-3	5/07/09	9E07003	PNNL-AGG-415
14336-64-2	Cadmium	<5.71E-4	ug/g dry	5.71E-4	5/07/09	9E07003	PNNL-AGG-415
14265-72-6	Antimony	5.52E-3	ug/g dry	6.56E-4	5/07/09	9E07003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/07/09	9E07003	PNNL-AGG-415
HEIS No.	**B1YM90**		**Lab ID:**	**0902002-08**			

RCRA Metals By PNNL-AGG-415/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YM90**		**Lab ID:**	**0902002-08**			
14092-98-9	Chromium	1.27E-1	ug/g dry	3.45E-3	5/07/09	9E07003	PNNL-AGG-415
7440-38-2	Arsenic	7.51E-3	ug/g dry	2.84E-3	5/07/09	9E07003	PNNL-AGG-415
14687-58-2	Selenium	<7.92E-3	ug/g dry	7.92E-3	5/07/09	9E07003	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	5/07/09	9E07003	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	5/07/09	9E07003	PNNL-AGG-415
14265-72-6	Antimony	<6.59E-4	ug/g dry	6.59E-4	5/07/09	9E07003	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	5/07/09	9E07003	PNNL-AGG-415
HEIS No.	**B1YM91**		**Lab ID:**	**0902002-09**			
14092-98-9	Chromium	<3.69E-3	ug/g dry	3.69E-3	5/07/09	9E07003	PNNL-AGG-415
7440-38-2	Arsenic	<3.04E-3	ug/g dry	3.04E-3	5/07/09	9E07003	PNNL-AGG-415
14687-58-2	Selenium	<8.49E-3	ug/g dry	8.49E-3	5/07/09	9E07003	PNNL-AGG-415
14378-37-1	Silver	<3.35E-3	ug/g dry	3.35E-3	5/07/09	9E07003	PNNL-AGG-415
14336-64-2	Cadmium	<6.15E-4	ug/g dry	6.15E-4	5/07/09	9E07003	PNNL-AGG-415
14265-72-6	Antimony	<7.06E-4	ug/g dry	7.06E-4	5/07/09	9E07003	PNNL-AGG-415
13966-28-4	Lead	<1.25E-3	ug/g dry	1.25E-3	5/07/09	9E07003	PNNL-AGG-415
HEIS No.	**B1YM92**		**Lab ID:**	**0902002-12**			
14092-98-9	Chromium	<3.47E-3	ug/g dry	3.47E-3	5/07/09	9E07004	PNNL-AGG-415
7440-38-2	Arsenic	<2.85E-3	ug/g dry	2.85E-3	5/07/09	9E07004	PNNL-AGG-415
14687-58-2	Selenium	<7.97E-3	ug/g dry	7.97E-3	5/07/09	9E07004	PNNL-AGG-415
14378-37-1	Silver	<3.15E-3	ug/g dry	3.15E-3	5/07/09	9E07004	PNNL-AGG-415
14336-64-2	Cadmium	<5.77E-4	ug/g dry	5.77E-4	5/07/09	9E07004	PNNL-AGG-415
14265-72-6	Antimony	<6.63E-4	ug/g dry	6.63E-4	5/07/09	9E07004	PNNL-AGG-415
13966-28-4	Lead	<1.17E-3	ug/g dry	1.17E-3	5/07/09	9E07004	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YD07**		**Lab ID:**	**0902002-01**			
14092-98-9	Chromium	1.43E1	ug/g dry	6.46E-1	5/08/09	9E07006	PNNL-AGG-415
7440-38-2	Arsenic	5.25E-1	ug/g dry	2.81E-1	5/08/09	9E07006	PNNL-AGG-415
14687-58-2	Selenium	<5.43E-1	ug/g dry	5.43E-1	5/08/09	9E07006	PNNL-AGG-415
14378-37-1	Silver	<1.76E-2	ug/g dry	1.76E-2	5/08/09	9E07006	PNNL-AGG-415
14336-64-2	Cadmium	<4.64E-2	ug/g dry	4.64E-2	5/08/09	9E07006	PNNL-AGG-415
14265-72-6	Antimony	<1.80E-1	ug/g dry	1.80E-1	5/08/09	9E07006	PNNL-AGG-415
13966-28-4	Lead	2.14E0	ug/g dry	1.76E-1	5/08/09	9E07006	PNNL-AGG-415
HEIS No.	**B1YD08**		**Lab ID:**	**0902002-02**			
14092-98-9	Chromium	1.36E1	ug/g dry	6.69E-1	5/08/09	9E07006	PNNL-AGG-415
7440-38-2	Arsenic	3.04E0	ug/g dry	2.91E-1	5/08/09	9E07006	PNNL-AGG-415
14687-58-2	Selenium	<5.63E-1	ug/g dry	5.63E-1	5/08/09	9E07006	PNNL-AGG-415
14378-37-1	Silver	4.29E-2	ug/g dry	1.82E-2	5/08/09	9E07006	PNNL-AGG-415
14336-64-2	Cadmium	6.28E-2	ug/g dry	4.81E-2	5/08/09	9E07006	PNNL-AGG-415
14265-72-6	Antimony	<1.87E-1	ug/g dry	1.87E-1	5/08/09	9E07006	PNNL-AGG-415
13966-28-4	Lead	3.75E0	ug/g dry	1.82E-1	5/08/09	9E07006	PNNL-AGG-415
HEIS No.	**B1YD09**		**Lab ID:**	**0902002-03**			
14092-98-9	Chromium	1.09E1	ug/g dry	6.64E-1	5/08/09	9E07006	PNNL-AGG-415
7440-38-2	Arsenic	2.94E-1	ug/g dry	2.89E-1	5/08/09	9E07006	PNNL-AGG-415
14687-58-2	Selenium	<5.59E-1	ug/g dry	5.59E-1	5/08/09	9E07006	PNNL-AGG-415
14378-37-1	Silver	<1.81E-2	ug/g dry	1.81E-2	5/08/09	9E07006	PNNL-AGG-415
14336-64-2	Cadmium	<4.77E-2	ug/g dry	4.77E-2	5/08/09	9E07006	PNNL-AGG-415
14265-72-6	Antimony	<1.85E-1	ug/g dry	1.85E-1	5/08/09	9E07006	PNNL-AGG-415
13966-28-4	Lead	1.08E0	ug/g dry	1.81E-1	5/08/09	9E07006	PNNL-AGG-415
HEIS No.	**B1YND4**		**Lab ID:**	**0902002-05**			
14092-98-9	Chromium	1.31E1	ug/g dry	6.39E-1	5/08/09	9E07006	PNNL-AGG-415
7440-38-2	Arsenic	3.43E0	ug/g dry	2.78E-1	5/08/09	9E07006	PNNL-AGG-415
14687-58-2	Selenium	<5.38E-1	ug/g dry	5.38E-1	5/08/09	9E07006	PNNL-AGG-415
14378-37-1	Silver	2.86E-2	ug/g dry	1.74E-2	5/08/09	9E07006	PNNL-AGG-415
14336-64-2	Cadmium	<4.60E-2	ug/g dry	4.60E-2	5/08/09	9E07006	PNNL-AGG-415
14265-72-6	Antimony	<1.79E-1	ug/g dry	1.79E-1	5/08/09	9E07006	PNNL-AGG-415
13966-28-4	Lead	3.06E0	ug/g dry	1.74E-1	5/08/09	9E07006	PNNL-AGG-415
HEIS No.	**B1YND5**		**Lab ID:**	**0902002-06**			
14092-98-9	Chromium	1.70E1	ug/g dry	6.77E-1	5/08/09	9E07006	PNNL-AGG-415
7440-38-2	Arsenic	1.47E0	ug/g dry	2.95E-1	5/08/09	9E07006	PNNL-AGG-415
14687-58-2	Selenium	<5.70E-1	ug/g dry	5.70E-1	5/08/09	9E07006	PNNL-AGG-415
14378-37-1	Silver	2.02E-2	ug/g dry	1.84E-2	5/08/09	9E07006	PNNL-AGG-415
14336-64-2	Cadmium	6.56E-2	ug/g dry	4.87E-2	5/08/09	9E07006	PNNL-AGG-415
14265-72-6	Antimony	<1.89E-1	ug/g dry	1.89E-1	5/08/09	9E07006	PNNL-AGG-415
13966-28-4	Lead	2.63E0	ug/g dry	1.85E-1	5/08/09	9E07006	PNNL-AGG-415
HEIS No.	**B1YND7**		**Lab ID:**	**0902002-07**			
14092-98-9	Chromium	2.91E1	ug/g dry	6.65E-1	5/08/09	9E07006	PNNL-AGG-415
7440-38-2	Arsenic	3.84E-1	ug/g dry	2.90E-1	5/08/09	9E07006	PNNL-AGG-415
14687-58-2	Selenium	<5.60E-1	ug/g dry	5.60E-1	5/08/09	9E07006	PNNL-AGG-415
14378-37-1	Silver	2.42E-2	ug/g dry	1.81E-2	5/08/09	9E07006	PNNL-AGG-415
14336-64-2	Cadmium	<4.78E-2	ug/g dry	4.78E-2	5/08/09	9E07006	PNNL-AGG-415
14265-72-6	Antimony	<1.86E-1	ug/g dry	1.86E-1	5/08/09	9E07006	PNNL-AGG-415
13966-28-4	Lead	2.67E0	ug/g dry	1.81E-1	5/08/09	9E07006	PNNL-AGG-415
HEIS No.	**B1YM90**		**Lab ID:**	**0902002-08**			

RCRA Metals By PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B1YM90**		**Lab ID:**	**0902002-08**			
14092-98-9	Chromium	1.78E1	ug/g dry	7.38E-1	5/11/09	9E07006	PNNL-AGG-415
7440-38-2	Arsenic	5.50E0	ug/g dry	3.21E-1	5/11/09	9E07006	PNNL-AGG-415
14687-58-2	Selenium	<6.21E-1	ug/g dry	6.21E-1	5/11/09	9E07006	PNNL-AGG-415
14378-37-1	Silver	6.32E-2	ug/g dry	2.01E-2	5/11/09	9E07006	PNNL-AGG-415
14336-64-2	Cadmium	6.69E-2	ug/g dry	5.30E-2	5/11/09	9E07006	PNNL-AGG-415
14265-72-6	Antimony	<2.06E-1	ug/g dry	2.06E-1	5/11/09	9E07006	PNNL-AGG-415
13966-28-4	Lead	6.02E0	ug/g dry	2.01E-1	5/11/09	9E07006	PNNL-AGG-415
HEIS No.	**B1YM91**		**Lab ID:**	**0902002-09**			
14092-98-9	Chromium	1.72E1	ug/g dry	6.89E-1	5/08/09	9E07006	PNNL-AGG-415
7440-38-2	Arsenic	4.16E-1	ug/g dry	3.00E-1	5/08/09	9E07006	PNNL-AGG-415
14687-58-2	Selenium	<5.80E-1	ug/g dry	5.80E-1	5/08/09	9E07006	PNNL-AGG-415
14378-37-1	Silver	<1.88E-2	ug/g dry	1.88E-2	5/08/09	9E07006	PNNL-AGG-415
14336-64-2	Cadmium	<4.95E-2	ug/g dry	4.95E-2	5/08/09	9E07006	PNNL-AGG-415
14265-72-6	Antimony	<1.92E-1	ug/g dry	1.92E-1	5/08/09	9E07006	PNNL-AGG-415
13966-28-4	Lead	2.56E0	ug/g dry	1.88E-1	5/08/09	9E07006	PNNL-AGG-415
HEIS No.	**B1YM92**		**Lab ID:**	**0902002-12**			
14092-98-9	Chromium	1.97E1	ug/g dry	6.78E-1	5/08/09	9E07006	PNNL-AGG-415
7440-38-2	Arsenic	3.92E-1	ug/g dry	2.95E-1	5/08/09	9E07006	PNNL-AGG-415
14687-58-2	Selenium	<5.71E-1	ug/g dry	5.71E-1	5/08/09	9E07006	PNNL-AGG-415
14378-37-1	Silver	<1.85E-2	ug/g dry	1.85E-2	5/08/09	9E07006	PNNL-AGG-415
14336-64-2	Cadmium	<4.87E-2	ug/g dry	4.87E-2	5/08/09	9E07006	PNNL-AGG-415
14265-72-6	Antimony	<1.89E-1	ug/g dry	1.89E-1	5/08/09	9E07006	PNNL-AGG-415
13966-28-4	Lead	2.50E0	ug/g dry	1.85E-1	5/08/09	9E07006	PNNL-AGG-415

Carbon Analysis/Soil

Total Organic Carbon (ug/g) by AGG-TOC-001

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0902002-01	B1YD07	<2.00E2	2.00E2	3/11/09	[CALC]
0902002-02	B1YD08	2.61E2	2.00E2	3/27/09	[CALC]
0902002-03	B1YD09	2.00E2	2.00E2	3/27/09	[CALC]
0902002-04	B1YD74	<2.00E2	2.00E2	3/27/09	[CALC]
0902002-05	B1YND4	5.03E2	2.00E2	4/21/09	[CALC]
0902002-06	B1YND5	2.68E2	2.00E2	4/21/09	[CALC]
0902002-07	B1YND7	3.59E2	2.00E2	4/21/09	[CALC]
0902002-08	B1YM90	3.16E3	2.00E2	4/21/09	[CALC]
0902002-09	B1YM91	3.92E2	2.00E2	4/22/09	[CALC]
0902002-10	B1YND6	<2.00E2	2.00E2	4/22/09	[CALC]
0902002-11	B1YD75	2.46E2	2.00E2	4/22/09	[CALC]
0902002-12	B1YM92	2.52E2	2.00E2	4/22/09	[CALC]
0902002-13	B1YM93	8.97E2	2.00E2	4/22/09	[CALC]
0902002-14	B1YNV5	<2.00E2	2.00E2	4/22/09	[CALC]
0902002-15	B1YD76	<2.00E2	2.00E2	5/06/09	[CALC]
0902002-16	B1YD88	2.85E2	2.00E2	5/06/09	[CALC]
0902002-17	B1YD77	3.47E2	2.00E2	5/06/09	[CALC]
0902002-18	B1YD78	2.05E2	2.00E2	5/06/09	[CALC]
0902002-19	B1YD79	5.93E2	2.00E2	5/06/09	[CALC]
0902002-20	B1YND9	4.81E2	2.00E2	5/07/09	[CALC]
0902002-21	B1YNF0	5.76E2	2.00E2	5/07/09	[CALC]
0902002-22	B1YNF1	1.53E3	2.00E2	5/07/09	[CALC]
0902002-23	B1YD80	5.21E2	2.00E2	5/07/09	[CALC]
0902002-24	B1YD81	2.22E2	2.00E2	5/07/09	[CALC]
0902002-25	B1YD82	1.99E3	2.00E2	5/07/09	[CALC]
0902002-26	B1YNF2	2.36E2	2.00E2	6/02/09	[CALC]
0902002-27	B1YNF3	3.75E2	2.00E2	6/02/09	[CALC]
0902002-28	B1YNF4	<2.00E2	2.00E2	6/02/09	[CALC]
0902002-29	B1YNF5	<2.00E2	2.00E2	6/02/09	[CALC]
0902002-30	B1YNF6	2.74E2	2.00E2	6/02/09	[CALC]
0902002-31	B1YD83	2.26E2	2.00E2	6/02/09	[CALC]
0902002-37	B1YM97	<2.00E2	2.00E2	10/05/09	[CALC]

Carbon Analysis/Soil

Total Carbon (ug/g) by AGG-TOC-001

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0902002-01	B1YD07	2.42E3	2.00E2	3/10/09	9C10005
0902002-02	B1YD08	2.61E2	2.00E2	3/26/09	9C25003
0902002-03	B1YD09	2.00E2	2.00E2	3/26/09	9C25003
0902002-04	B1YD74	<2.00E2	2.00E2	3/26/09	9C25003
0902002-05	B1YND4	2.54E3	2.00E2	4/16/09	9D15004
0902002-06	B1YND5	5.31E2	2.00E2	4/16/09	9D15004
0902002-07	B1YND7	3.59E2	2.00E2	4/16/09	9D15004
0902002-08	B1YM90	6.70E3	2.00E2	4/16/09	9D15004
0902002-09	B1YM91	3.92E2	2.00E2	4/16/09	9D15004
0902002-10	B1YND6	2.62E3	2.00E2	4/16/09	9D15004
0902002-11	B1YD75	1.08E3	2.00E2	4/16/09	9D15004
0902002-12	B1YM92	1.16E3	2.00E2	4/17/09	9D15004
0902002-13	B1YM93	8.97E2	2.00E2	4/17/09	9D15004
0902002-14	B1YNV5	<2.00E2	2.00E2	4/17/09	9D15004
0902002-15	B1YD76	2.17E3	2.00E2	5/05/09	9E05001
0902002-16	B1YD88	3.33E3	2.00E2	5/05/09	9E05001
0902002-17	B1YD77	5.95E2	2.00E2	5/06/09	9E05001
0902002-18	B1YD78	2.05E2	2.00E2	5/06/09	9E05001
0902002-19	B1YD79	5.93E2	2.00E2	5/06/09	9E05001
0902002-20	B1YND9	1.76E3	2.00E2	5/06/09	9E05001
0902002-21	B1YNF0	1.26E3	2.00E2	5/06/09	9E05001
0902002-22	B1YNF1	3.13E4	2.00E2	5/06/09	9E05001
0902002-23	B1YD80	5.21E2	2.00E2	5/06/09	9E05001
0902002-24	B1YD81	2.22E2	2.00E2	5/06/09	9E05001
0902002-25	B1YD82	1.99E3	2.00E2	5/06/09	9E05001
0902002-26	B1YNF2	8.39E2	2.00E2	6/02/09	9F02001
0902002-27	B1YNF3	3.75E2	2.00E2	6/02/09	9F02001
0902002-28	B1YNF4	<2.00E2	2.00E2	6/02/09	9F02001
0902002-29	B1YNF5	<2.00E2	2.00E2	6/02/09	9F02001
0902002-30	B1YNF6	7.26E2	2.00E2	6/02/09	9F02001
0902002-31	B1YD83	2.26E2	2.00E2	6/02/09	9F02001
0902002-37	B1YM97	7.03E2	2.00E2	10/05/09	9J05001

Carbon Analysis/Soil

Total Inorganic Carbon (ug/g) by AGG-TOC-001

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0902002-01	B1YD07	2.40E3	2.00E2	3/11/09	9C11001
0902002-02	B1YD08	<2.00E2	2.00E2	3/27/09	9C25005
0902002-03	B1YD09	<2.00E2	2.00E2	3/27/09	9C25005
0902002-04	B1YD74	<2.00E2	2.00E2	3/27/09	9C25005
0902002-05	B1YND4	2.04E3	2.00E2	4/21/09	9D16001
0902002-06	B1YND5	2.63E2	2.00E2	4/21/09	9D16001
0902002-07	B1YND7	<2.00E2	2.00E2	4/21/09	9D16001
0902002-08	B1YM90	3.53E3	2.00E2	4/21/09	9D16001
0902002-09	B1YM91	<2.00E2	2.00E2	4/22/09	9D16001
0902002-10	B1YND6	2.46E3	2.00E2	4/22/09	9D16001
0902002-11	B1YD75	8.30E2	2.00E2	4/22/09	9D16001
0902002-12	B1YM92	9.04E2	2.00E2	4/22/09	9D16001
0902002-13	B1YM93	<2.00E2	2.00E2	4/22/09	9D16001
0902002-14	B1YNV5	<2.00E2	2.00E2	4/22/09	9D16001
0902002-15	B1YD76	2.04E3	2.00E2	5/06/09	9E06001
0902002-16	B1YD88	3.04E3	2.00E2	5/06/09	9E06001
0902002-17	B1YD77	2.48E2	2.00E2	5/06/09	9E06001
0902002-18	B1YD78	<2.00E2	2.00E2	5/06/09	9E06001
0902002-19	B1YD79	<2.00E2	2.00E2	5/06/09	9E06001
0902002-20	B1YND9	1.28E3	2.00E2	5/07/09	9E06001
0902002-21	B1YNF0	6.82E2	2.00E2	5/07/09	9E06001
0902002-22	B1YNF1	2.98E4	2.00E2	5/07/09	9E06001
0902002-23	B1YD80	<2.00E2	2.00E2	5/07/09	9E06001
0902002-24	B1YD81	<2.00E2	2.00E2	5/07/09	9E06001
0902002-25	B1YD82	<2.00E2	2.00E2	5/07/09	9E06001
0902002-26	B1YNF2	6.02E2	2.00E2	6/02/09	9F02002
0902002-27	B1YNF3	<2.00E2	2.00E2	6/02/09	9F02002
0902002-28	B1YNF4	<2.00E2	2.00E2	6/02/09	9F02002
0902002-29	B1YNF5	<2.00E2	2.00E2	6/02/09	9F02002
0902002-30	B1YNF6	4.52E2	2.00E2	6/02/09	9F02002
0902002-31	B1YD83	<2.00E2	2.00E2	6/02/09	9F02002
0902002-37	B1YM97	5.39E2	2.00E2	10/05/09	9J05001

GEA/Soil

CAS #	Analyte	Results	Units	MDA	UNC	Analyzed	Batch	Method
HEIS No.	**B1YD07**		**Lab ID:**	**0902002-01**				
10198-40-0	Cobalt-60	<1.96E-1	pCi/g dry	1.96E-1		4/23/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<2.29E-1	pCi/g dry	2.29E-1		4/23/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<8.07E-1	pCi/g dry	8.07E-1		4/23/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<4.85E-1	pCi/g dry	4.85E-1		4/23/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<7.83E-1	pCi/g dry	7.83E-1		4/23/09	9D23001	AGG-RRL-001
HEIS No.	**B1YD08**		**Lab ID:**	**0902002-02**				
10198-40-0	Cobalt-60	<1.94E-1	pCi/g dry	1.94E-1		4/23/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<2.37E-1	pCi/g dry	2.37E-1		4/23/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<8.93E-1	pCi/g dry	8.93E-1		4/23/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<5.15E-1	pCi/g dry	5.15E-1		4/23/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<8.93E-1	pCi/g dry	8.93E-1		4/23/09	9D23001	AGG-RRL-001
HEIS No.	**B1YD09**		**Lab ID:**	**0902002-03**				
10198-40-0	Cobalt-60	<1.64E-1	pCi/g dry	1.64E-1		4/24/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<1.92E-1	pCi/g dry	1.92E-1		4/24/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<6.42E-1	pCi/g dry	6.42E-1		4/24/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<4.07E-1	pCi/g dry	4.07E-1		4/24/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<6.25E-1	pCi/g dry	6.25E-1		4/24/09	9D23001	AGG-RRL-001
HEIS No.	**B1YD74**		**Lab ID:**	**0902002-04**				
10198-40-0	Cobalt-60	<1.97E-1	pCi/g dry	1.97E-1		4/24/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<2.22E-1	pCi/g dry	2.22E-1		4/24/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<8.83E-1	pCi/g dry	8.83E-1		4/24/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<5.07E-1	pCi/g dry	5.07E-1		4/24/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<8.66E-1	pCi/g dry	8.66E-1		4/24/09	9D23001	AGG-RRL-001
HEIS No.	**B1YND4**		**Lab ID:**	**0902002-05**				
10198-40-0	Cobalt-60	<1.62E-1	pCi/g dry	1.62E-1		4/24/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<2.00E-1	pCi/g dry	2.00E-1		4/24/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<6.65E-1	pCi/g dry	6.65E-1		4/24/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<4.22E-1	pCi/g dry	4.22E-1		4/24/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<6.61E-1	pCi/g dry	6.61E-1		4/24/09	9D23001	AGG-RRL-001
HEIS No.	**B1YND5**		**Lab ID:**	**0902002-06**				
10198-40-0	Cobalt-60	<1.98E-1	pCi/g dry	1.98E-1		4/24/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<2.28E-1	pCi/g dry	2.28E-1		4/24/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<9.14E-1	pCi/g dry	9.14E-1		4/24/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<5.09E-1	pCi/g dry	5.09E-1		4/24/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<8.54E-1	pCi/g dry	8.54E-1		4/24/09	9D23001	AGG-RRL-001
HEIS No.	**B1YND7**		**Lab ID:**	**0902002-07**				
10198-40-0	Cobalt-60	<1.79E-1	pCi/g dry	1.79E-1		4/27/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<2.13E-1	pCi/g dry	2.13E-1		4/27/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<7.38E-1	pCi/g dry	7.38E-1		4/27/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<4.68E-1	pCi/g dry	4.68E-1		4/27/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<7.34E-1	pCi/g dry	7.34E-1		4/27/09	9D23001	AGG-RRL-001
HEIS No.	**B1YM90**		**Lab ID:**	**0902002-08**				
10198-40-0	Cobalt-60	<2.82E-1	pCi/g dry	2.82E-1		4/27/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<3.11E-1	pCi/g dry	3.11E-1		4/27/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<1.11E0	pCi/g dry	1.11E0		4/27/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<6.60E-1	pCi/g dry	6.60E-1		4/27/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<1.13E0	pCi/g dry	1.13E0		4/27/09	9D23001	AGG-RRL-001

GEA/Soil

CAS #	Analyte	Results	Units	MDA	UNC	Analyzed	Batch	Method
HEIS No.	**B1YM91**		**Lab ID:**	**0902002-09**				
10198-40-0	Cobalt-60	<1.55E-1	pCi/g dry	1.55E-1		4/27/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<2.06E-1	pCi/g dry	2.06E-1		4/27/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<6.74E-1	pCi/g dry	6.74E-1		4/27/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<4.27E-1	pCi/g dry	4.27E-1		4/27/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<6.61E-1	pCi/g dry	6.61E-1		4/27/09	9D23001	AGG-RRL-001
HEIS No.	**B1YND6**		**Lab ID:**	**0902002-10**				
10198-40-0	Cobalt-60	<2.09E-1	pCi/g dry	2.09E-1		4/27/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<2.38E-1	pCi/g dry	2.38E-1		4/27/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<9.14E-1	pCi/g dry	9.14E-1		4/27/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<5.41E-1	pCi/g dry	5.41E-1		4/27/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<8.97E-1	pCi/g dry	8.97E-1		4/27/09	9D23001	AGG-RRL-001
HEIS No.	**B1YD75**		**Lab ID:**	**0902002-11**				
10198-40-0	Cobalt-60	<1.36E-1	pCi/g dry	1.36E-1		4/29/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<1.72E-1	pCi/g dry	1.72E-1		4/29/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<5.71E-1	pCi/g dry	5.71E-1		4/29/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<3.54E-1	pCi/g dry	3.54E-1		4/29/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<5.53E-1	pCi/g dry	5.53E-1		4/29/09	9D23001	AGG-RRL-001
HEIS No.	**B1YM92**		**Lab ID:**	**0902002-12**				
10198-40-0	Cobalt-60	<1.84E-1	pCi/g dry	1.84E-1		4/29/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<2.17E-1	pCi/g dry	2.17E-1		4/29/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<8.09E-1	pCi/g dry	8.09E-1		4/29/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<4.80E-1	pCi/g dry	4.80E-1		4/29/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<8.09E-1	pCi/g dry	8.09E-1		4/29/09	9D23001	AGG-RRL-001
HEIS No.	**B1YM93**		**Lab ID:**	**0902002-13**				
10198-40-0	Cobalt-60	<1.33E-1	pCi/g dry	1.33E-1		4/29/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<1.58E-1	pCi/g dry	1.58E-1		4/29/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<5.62E-1	pCi/g dry	5.62E-1		4/29/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<3.43E-1	pCi/g dry	3.43E-1		4/29/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<5.47E-1	pCi/g dry	5.47E-1		4/29/09	9D23001	AGG-RRL-001
HEIS No.	**B1YNV5**		**Lab ID:**	**0902002-14**				
10198-40-0	Cobalt-60	<1.98E-1	pCi/g dry	1.98E-1		4/29/09	9D23001	AGG-RRL-001
10045-97-3	Cesium-137	<2.25E-1	pCi/g dry	2.25E-1		4/29/09	9D23001	AGG-RRL-001
14683-23-9	Europium-152	<8.38E-1	pCi/g dry	8.38E-1		4/29/09	9D23001	AGG-RRL-001
15585-10-1	Europium-154	<4.85E-1	pCi/g dry	4.85E-1		4/29/09	9D23001	AGG-RRL-001
14391-16-3	Europium-155	<8.06E-1	pCi/g dry	8.06E-1		4/29/09	9D23001	AGG-RRL-001
HEIS No.	**B1YD76**		**Lab ID:**	**0902002-15**				
10198-40-0	Cobalt-60	<1.58E-1	pCi/g dry	1.58E-1		6/03/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<1.90E-1	pCi/g dry	1.90E-1		6/03/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<6.58E-1	pCi/g dry	6.58E-1		6/03/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<4.10E-1	pCi/g dry	4.10E-1		6/03/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<6.48E-1	pCi/g dry	6.48E-1		6/03/09	9F03001	AGG-RRL-001
HEIS No.	**B1YD88**		**Lab ID:**	**0902002-16**				
10198-40-0	Cobalt-60	<1.70E-1	pCi/g dry	1.70E-1		6/03/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.25E-1	pCi/g dry	2.25E-1		6/03/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<8.59E-1	pCi/g dry	8.59E-1		6/03/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<4.90E-1	pCi/g dry	4.90E-1		6/03/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<8.04E-1	pCi/g dry	8.04E-1		6/03/09	9F03001	AGG-RRL-001

GEA/Soil

CAS #	Analyte	Results	Units	MDA	UNC	Analyzed	Batch	Method
HEIS No.	**B1YD77**		**Lab ID:**	**0902002-17**				
10198-40-0	Cobalt-60	<1.67E-1	pCi/g dry	1.67E-1		6/03/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.12E-1	pCi/g dry	2.12E-1		6/03/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<7.12E-1	pCi/g dry	7.12E-1		6/03/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<4.53E-1	pCi/g dry	4.53E-1		6/03/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<6.87E-1	pCi/g dry	6.87E-1		6/03/09	9F03001	AGG-RRL-001
HEIS No.	**B1YD78**		**Lab ID:**	**0902002-18**				
10198-40-0	Cobalt-60	<2.53E-1	pCi/g dry	2.53E-1		6/03/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.65E-1	pCi/g dry	2.65E-1		6/03/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<1.00E0	pCi/g dry	1.00E0		6/03/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<5.72E-1	pCi/g dry	5.72E-1		6/03/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<9.57E-1	pCi/g dry	9.57E-1		6/03/09	9F03001	AGG-RRL-001
HEIS No.	**B1YD79**		**Lab ID:**	**0902002-19**				
10198-40-0	Cobalt-60	<2.10E-1	pCi/g dry	2.10E-1		6/03/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.66E-1	pCi/g dry	2.66E-1		6/03/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<9.34E-1	pCi/g dry	9.34E-1		6/03/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<5.87E-1	pCi/g dry	5.87E-1		6/03/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<8.86E-1	pCi/g dry	8.86E-1		6/03/09	9F03001	AGG-RRL-001
HEIS No.	**B1YND9**		**Lab ID:**	**0902002-20**				
10198-40-0	Cobalt-60	<2.21E-1	pCi/g dry	2.21E-1		6/03/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.45E-1	pCi/g dry	2.45E-1		6/03/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<9.38E-1	pCi/g dry	9.38E-1		6/03/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<5.39E-1	pCi/g dry	5.39E-1		6/03/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<8.96E-1	pCi/g dry	8.96E-1		6/03/09	9F03001	AGG-RRL-001
HEIS No.	**B1YNF0**		**Lab ID:**	**0902002-21**				
10198-40-0	Cobalt-60	<2.02E-1	pCi/g dry	2.02E-1		6/04/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.46E-1	pCi/g dry	2.46E-1		6/04/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<8.70E-1	pCi/g dry	8.70E-1		6/04/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<5.30E-1	pCi/g dry	5.30E-1		6/04/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<8.17E-1	pCi/g dry	8.17E-1		6/04/09	9F03001	AGG-RRL-001
HEIS No.	**B1YNF1**		**Lab ID:**	**0902002-22**				
10198-40-0	Cobalt-60	<2.15E-1	pCi/g dry	2.15E-1		6/04/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.67E-1	pCi/g dry	2.67E-1		6/04/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<1.03E0	pCi/g dry	1.03E0		6/04/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<5.70E-1	pCi/g dry	5.70E-1		6/04/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<9.35E-1	pCi/g dry	9.35E-1		6/04/09	9F03001	AGG-RRL-001
HEIS No.	**B1YD80**		**Lab ID:**	**0902002-23**				
10198-40-0	Cobalt-60	<1.94E-1	pCi/g dry	1.94E-1		6/04/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.46E-1	pCi/g dry	2.46E-1		6/04/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<8.26E-1	pCi/g dry	8.26E-1		6/04/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<5.17E-1	pCi/g dry	5.17E-1		6/04/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<7.96E-1	pCi/g dry	7.96E-1		6/04/09	9F03001	AGG-RRL-001
HEIS No.	**B1YD81**		**Lab ID:**	**0902002-24**				
10198-40-0	Cobalt-60	<1.91E-1	pCi/g dry	1.91E-1		6/04/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.23E-1	pCi/g dry	2.23E-1		6/04/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<8.47E-1	pCi/g dry	8.47E-1		6/04/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<4.81E-1	pCi/g dry	4.81E-1		6/04/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<8.09E-1	pCi/g dry	8.09E-1		6/04/09	9F03001	AGG-RRL-001

GEA/Soil

CAS #	Analyte	Results	Units	MDA	UNC	Analyzed	Batch	Method
HEIS No.	**B1YD82**		**Lab ID:**	**0902002-25**				
10198-40-0	Cobalt-60	<3.64E-1	pCi/g dry	3.64E-1		6/05/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<4.43E-1	pCi/g dry	4.43E-1		6/05/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<1.54E0	pCi/g dry	1.54E0		6/05/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<9.84E-1	pCi/g dry	9.84E-1		6/05/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<1.63E0	pCi/g dry	1.63E0		6/05/09	9F03001	AGG-RRL-001
HEIS No.	**B1YNF2**		**Lab ID:**	**0902002-26**				
10198-40-0	Cobalt-60	<2.01E-1	pCi/g dry	2.01E-1		6/05/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.55E-1	pCi/g dry	2.55E-1		6/05/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<9.62E-1	pCi/g dry	9.62E-1		6/05/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<5.47E-1	pCi/g dry	5.47E-1		6/05/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<9.06E-1	pCi/g dry	9.06E-1		6/05/09	9F03001	AGG-RRL-001
HEIS No.	**B1YNF3**		**Lab ID:**	**0902002-27**				
10198-40-0	Cobalt-60	<2.12E-1	pCi/g dry	2.12E-1		6/08/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.62E-1	pCi/g dry	2.62E-1		6/08/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<8.75E-1	pCi/g dry	8.75E-1		6/08/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<5.46E-1	pCi/g dry	5.46E-1		6/08/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<8.23E-1	pCi/g dry	8.23E-1		6/08/09	9F03001	AGG-RRL-001
HEIS No.	**B1YNF4**		**Lab ID:**	**0902002-28**				
10198-40-0	Cobalt-60	<3.13E-1	pCi/g dry	3.13E-1		6/08/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<3.47E-1	pCi/g dry	3.47E-1		6/08/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<1.34E0	pCi/g dry	1.34E0		6/08/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<7.25E-1	pCi/g dry	7.25E-1		6/08/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<1.28E0	pCi/g dry	1.28E0		6/08/09	9F03001	AGG-RRL-001
HEIS No.	**B1YNF5**		**Lab ID:**	**0902002-29**				
10198-40-0	Cobalt-60	<3.19E-1	pCi/g dry	3.19E-1		6/08/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<3.68E-1	pCi/g dry	3.68E-1		6/08/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<1.30E0	pCi/g dry	1.30E0		6/08/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<7.96E-1	pCi/g dry	7.96E-1		6/08/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<1.24E0	pCi/g dry	1.24E0		6/08/09	9F03001	AGG-RRL-001
HEIS No.	**B1YNF6**		**Lab ID:**	**0902002-30**				
10198-40-0	Cobalt-60	<2.46E-1	pCi/g dry	2.46E-1		6/08/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<3.03E-1	pCi/g dry	3.03E-1		6/08/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<1.16E0	pCi/g dry	1.16E0		6/08/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<6.54E-1	pCi/g dry	6.54E-1		6/08/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<1.12E0	pCi/g dry	1.12E0		6/08/09	9F03001	AGG-RRL-001
HEIS No.	**B1YD83**		**Lab ID:**	**0902002-31**				
10198-40-0	Cobalt-60	<1.82E-1	pCi/g dry	1.82E-1		6/08/09	9F03001	AGG-RRL-001
10045-97-3	Cesium-137	<2.35E-1	pCi/g dry	2.35E-1		6/08/09	9F03001	AGG-RRL-001
14683-23-9	Europium-152	<8.04E-1	pCi/g dry	8.04E-1		6/08/09	9F03001	AGG-RRL-001
15585-10-1	Europium-154	<5.24E-1	pCi/g dry	5.24E-1		6/08/09	9F03001	AGG-RRL-001
14391-16-3	Europium-155	<8.10E-1	pCi/g dry	8.10E-1		6/08/09	9F03001	AGG-RRL-001
HEIS No.	**B1YM97**		**Lab ID:**	**0902002-37**				
10198-40-0	Cobalt-60	<2.05E-1	pCi/g dry	2.05E-1		2/09/10	0B12010	AGG-RRL-001
10045-97-3	Cesium-137	<2.51E-1	pCi/g dry	2.51E-1		2/09/10	0B12010	AGG-RRL-001
14683-23-9	Europium-152	<9.85E-1	pCi/g dry	9.85E-1		2/09/10	0B12010	AGG-RRL-001
15585-10-1	Europium-154	<5.76E-1	pCi/g dry	5.76E-1		2/09/10	0B12010	AGG-RRL-001
14391-16-3	Europium-155	<8.75E-1	pCi/g dry	8.75E-1		2/09/10	0B12010	AGG-RRL-001

Anions by Ion Chromatography - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9C10004 - 1:1 Water Extract (IC)										
Blank (9C10004-BLK1)				Prepared & Analyzed: 03/10/09						
Fluoride	<2.00E-1	2.00E-1	ug/g wet							
Chloride	<5.00E-1	5.00E-1	"							
Nitrite	<1.00E0	1.00E0	"							
Nitrate	<1.00E0	1.00E0	"							
Sulfate	<1.50E0	1.50E0	"							
Phosphate	<1.50E0	1.50E0	"							
LCS (9C10004-BS1)				Prepared & Analyzed: 03/10/09						
Fluoride	2.01E0	2.07E-1	ug/g wet	2.07E0		97.0	80-120			D
Chloride	5.18E0	5.17E-1	"	5.17E0		100	80-120			D
Nitrite	9.70E0	1.03E0	"	1.03E1		93.7	80-120			D
Nitrate	1.07E1	1.03E0	"	1.03E1		104	80-120			D
Sulfate	1.65E1	1.55E0	"	1.55E1		106	80-120			D
Phosphate	1.56E1	1.55E0	"	1.55E1		100	80-120			D
Duplicate (9C10004-DUP1)		**Source: 0902002-01**		Prepared & Analyzed: 03/10/09						
Fluoride	4.90E-1	2.16E-1	ug/g dry		5.50E-1			11.6	35	D
Chloride	2.35E0	5.40E-1	"		3.83E0			47.7	35	D
Nitrite	<1.08E0	1.08E0	"		ND				35	
Nitrate	2.39E0	1.08E0	"		2.92E0			19.8	35	D
Sulfate	1.19E1	1.62E0	"		1.51E1			23.8	35	D
Phosphate	<1.62E0	1.62E0	"		ND				35	
Post Spike (9C10004-PS1)		**Source: 0902002-01**		Prepared & Analyzed: 03/10/09						
Fluoride	1.39E0	N/A	ug/mL	7.69E-1	5.10E-1	115	75-125			D
Chloride	5.35E0	N/A	"	1.92E0	3.55E0	93.4	75-125			D
Nitrite	3.83E0	N/A	"	3.85E0	ND	99.7	75-125			D
Nitrate	6.60E0	N/A	"	3.85E0	2.71E0	101	75-125			D
Sulfate	1.89E1	N/A	"	5.77E0	1.40E1	84.4	75-125			D
Phosphate	5.61E0	N/A	"	5.77E0	ND	97.2	75-125			D

Anions by Ion Chromatography - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9C25004 - 1:1 Water Extract (IC)										
Blank (9C25004-BLK1)				Prepared & Analyzed: 03/24/09						
Fluoride	<2.00E-1	2.00E-1	ug/g wet							
Chloride	<5.00E-1	5.00E-1	"							
Nitrite	<1.00E0	1.00E0	"							
Nitrate	<1.00E0	1.00E0	"							
Sulfate	<1.50E0	1.50E0	"							
Phosphate	<1.50E0	1.50E0	"							
LCS (9C25004-BS1)				Prepared & Analyzed: 03/24/09						
Fluoride	2.01E0	2.00E-1	ug/g wet	2.00E0		101	80-120			
Chloride	4.98E0	5.00E-1	"	5.00E0		99.7	80-120			
Nitrite	1.07E1	1.00E0	"	9.99E0		107	80-120			
Nitrate	1.09E1	1.00E0	"	9.99E0		109	80-120			
Sulfate	1.50E1	1.50E0	"	1.50E1		100	80-120			
Phosphate	1.51E1	1.50E0	"	1.50E1		100	80-120			
Duplicate (9C25004-DUP1)	**Source: 0902002-03**			Prepared & Analyzed: 03/24/09						
Fluoride	6.99E-1	2.22E-1	ug/g dry		7.05E-1			0.898	35	D
Chloride	2.42E0	5.54E-1	"		2.65E0			8.94	35	D
Nitrite	<1.11E0	1.11E0	"		ND				35	
Nitrate	8.09E0	1.11E0	"		8.70E0			7.32	35	D
Sulfate	4.63E0	1.66E0	"		4.96E0			6.79	35	D
Phosphate	<1.66E0	1.66E0	"		ND				35	
Post Spike (9C25004-PS1)	**Source: 0902002-02**			Prepared & Analyzed: 03/24/09						
Fluoride	2.53E0	N/A	ug/mL	7.69E-1	1.87E0	85.5	75-125			D
Chloride	4.07E0	N/A	"	1.92E0	2.31E0	91.2	75-125			D
Nitrite	3.86E0	N/A	"	3.85E0	ND	100	75-125			D
Nitrate	4.31E0	N/A	"	3.85E0	4.78E-1	99.6	75-125			D
Sulfate	1.27E1	N/A	"	5.77E0	7.24E0	95.2	75-125			D
Phosphate	5.69E0	N/A	"	5.77E0	2.42E-1	94.5	75-125			D

Anions by Ion Chromatography - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9D14001 - 1:1 Water Extract (IC)										
Blank (9D14001-BLK1)				Prepared & Analyzed: 04/14/09						
Fluoride	<2.00E-1	2.00E-1	ug/g wet							
Chloride	<5.00E-1	5.00E-1	"							
Nitrite	<1.00E0	1.00E0	"							
Nitrate	<1.00E0	1.00E0	"							
Sulfate	<1.50E0	1.50E0	"							
Phosphate	<1.50E0	1.50E0	"							
LCS (9D14001-BS1)				Prepared & Analyzed: 04/14/09						
Fluoride	2.02E0	2.00E-1	ug/g wet	2.00E0		101	80-120			
Chloride	4.85E0	5.00E-1	"	5.00E0		97.0	80-120			
Nitrite	9.89E0	1.00E0	"	1.00E1		98.9	80-120			
Nitrate	1.02E1	1.00E0	"	1.00E1		102	80-120			
Sulfate	1.50E1	1.50E0	"	1.50E1		100	80-120			
Phosphate	1.50E1	1.50E0	"	1.50E1		99.8	80-120			
Duplicate (9D14001-DUP1)	**Source: 0902002-08**			Prepared & Analyzed: 04/14/09						
Fluoride	3.56E-1	2.03E-1	ug/g dry		3.88E-1			8.52	35	D
Chloride	2.74E1	5.08E-1	"		2.72E1			0.683	35	D
Nitrite	1.46E0	1.02E0	"		1.49E0			1.65	35	D
Nitrate	5.60E1	1.02E0	"		5.54E1			1.08	35	D
Sulfate	5.37E1	1.52E0	"		5.39E1			0.376	35	D
Phosphate	<1.52E0	1.52E0	"		ND				35	
Post Spike (9D14001-PS1)	**Source: 0902002-05**			Prepared & Analyzed: 04/14/09						
Fluoride	1.05E0	N/A	ug/mL	7.69E-1	3.21E-1	94.4	75-125			D
Chloride	2.72E0	N/A	"	1.92E0	8.95E-1	94.7	75-125			D
Nitrite	3.81E0	N/A	"	3.85E0	ND	98.9	75-125			D
Nitrate	5.66E0	N/A	"	3.85E0	2.01E0	94.8	75-125			D
Sulfate	1.93E1	N/A	"	5.77E0	1.41E1	90.2	75-125			D
Phosphate	5.75E0	N/A	"	5.77E0	ND	99.7	75-125			D

Anions by Ion Chromatography - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9D21001 - 1:1 Water Extract (IC)										
Blank (9D21001-BLK1)				Prepared & Analyzed: 04/21/09						
Fluoride	<2.00E-1	2.00E-1	ug/g wet							
Chloride	<5.00E-1	5.00E-1	"							
Nitrite	<1.00E0	1.00E0	"							
Nitrate	<1.00E0	1.00E0	"							
Sulfate	<1.50E0	1.50E0	"							
Phosphate	<1.50E0	1.50E0	"							
LCS (9D21001-BS1)				Prepared & Analyzed: 04/21/09						
Fluoride	1.98E0	2.00E-1	ug/g wet	2.00E0		99.1	80-120			
Chloride	5.01E0	5.00E-1	"	5.00E0		100	80-120			
Nitrite	1.01E1	1.00E0	"	1.00E1		101	80-120			
Nitrate	1.03E1	1.00E0	"	1.00E1		103	80-120			
Sulfate	1.52E1	1.50E0	"	1.50E1		101	80-120			
Phosphate	1.50E1	1.50E0	"	1.50E1		99.7	80-120			
Duplicate (9D21001-DUP1)	**Source: 0902002-12**			Prepared & Analyzed: 04/21/09						
Fluoride	5.71E-1	2.02E-1	ug/g dry		5.59E-1			2.15	35	D
Chloride	1.35E1	5.04E-1	"		1.36E1			0.783	35	D
Nitrite	<1.01E0	1.01E0	"		ND				35	
Nitrate	4.04E1	1.01E0	"		3.91E1			3.19	35	D
Sulfate	2.31E1	1.51E0	"		2.23E1			3.26	35	D
Phosphate	<1.51E0	1.51E0	"		ND				35	
Post Spike (9D21001-PS1)	**Source: 0902002-12**			Prepared & Analyzed: 04/21/09						
Fluoride	1.35E0	N/A	ug/mL	7.69E-1	5.55E-1	103	75-125			D
Chloride	1.53E1	N/A	"	1.92E0	1.35E1	95.1	75-125			D
Nitrite	3.88E0	N/A	"	3.85E0	ND	101	75-125			D
Nitrate	4.18E1	N/A	"	3.85E0	3.89E1	76.5	75-125			D
Sulfate	2.80E1	N/A	"	5.77E0	2.22E1	100	75-125			D
Phosphate	5.67E0	N/A	"	5.77E0	4.24E-1	90.9	75-125			D

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E12002 - 1:1 Water Extract (ICP/ICPMS)										
Blank (9E12002-BLK1)				Prepared: 03/09/09		Analyzed: 05/13/09				
Aluminum	<9.37E-2	9.37E-2	ug/g wet							
Boron	<1.37E0	1.37E0	"							
Barium	<1.24E-1	1.24E-1	"							
Beryllium	<1.31E-2	1.31E-2	"							
Bismuth	<3.04E-1	3.04E-1	"							
Calcium	<4.52E-1	4.52E-1	"							
Cobalt	<1.31E-1	1.31E-1	"							
Copper	<8.78E-2	8.78E-2	"							
Iron	<1.05E-1	1.05E-1	"							
Potassium	<1.29E0	1.29E0	"							
Lithium	<7.47E-1	7.47E-1	"							
Magnesium	<4.89E-2	4.89E-2	"							
Manganese	<6.25E-2	6.25E-2	"							
Molybdenum	<1.41E-1	1.41E-1	"							
Phosphorus	<6.03E-1	6.03E-1	"							
Strontium	<8.02E-2	8.02E-2	"							
Vanadium	<1.33E-1	1.33E-1	"							
Zinc	<9.77E-2	9.77E-2	"							
Sodium	<7.97E-1	7.97E-1	"							
Zirconium	<1.29E-1	1.29E-1	"							
LCS (9E12002-BS1)				Prepared: 03/09/09		Analyzed: 05/13/09				
Aluminum	4.80E0	9.37E-2	ug/g wet	5.00E0		96.1	80-120			
Boron	5.12E0	1.37E0	"	5.00E0		102	80-120			
Barium	5.13E0	1.24E-1	"	5.00E0		103	80-120			
Beryllium	5.14E0	1.31E-2	"	5.00E0		103	80-120			
Calcium	5.12E0	4.52E-1	"	5.00E0		102	80-120			
Cobalt	5.00E0	1.31E-1	"	5.00E0		100	80-120			
Copper	5.00E0	8.78E-2	"	5.00E0		99.9	80-120			
Iron	5.06E0	1.05E-1	"	5.00E0		101	80-120			
Potassium	5.05E1	1.29E0	"	5.00E1		101	80-120			
Magnesium	4.88E0	4.89E-2	"	5.00E0		97.5	80-120			
Manganese	5.10E0	6.25E-2	"	5.00E0		102	80-120			
Molybdenum	5.08E0	1.41E-1	"	5.00E0		102	80-120			
Vanadium	4.95E0	1.33E-1	"	5.00E0		99.0	80-120			
Zinc	4.95E0	9.77E-2	"	5.00E0		99.0	80-120			
Sodium	5.34E0	7.97E-1	"	5.00E0		107	80-120			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E12002 - 1:1 Water Extract (ICP/ICPMS)										
Duplicate (9E12002-DUP1)		**Source: 0902002-01**		Prepared: 03/09/09		Analyzed: 05/13/09				
Aluminum	<1.01E-1	1.01E-1	ug/g dry		1.10E-1				35	
Boron	<1.48E0	1.48E0	"		ND				35	
Barium	<1.34E-1	1.34E-1	"		ND				35	
Beryllium	<1.41E-2	1.41E-2	"		ND				35	
Bismuth	<3.28E-1	3.28E-1	"		ND				35	
Calcium	1.02E1	4.88E-1	"		1.11E1			8.04	35	
Cobalt	<1.41E-1	1.41E-1	"		ND				35	
Copper	<9.48E-2	9.48E-2	"		ND				35	
Iron	<1.13E-1	1.13E-1	"		ND				35	
Potassium	4.15E0	1.39E0	"		4.40E0			5.94	35	
Lithium	<8.06E-1	8.06E-1	"		ND				35	
Magnesium	2.19E0	5.27E-2	"		2.40E0			9.10	35	
Manganese	<6.74E-2	6.74E-2	"		ND				35	
Molybdenum	<1.52E-1	1.52E-1	"		ND				35	
Phosphorus	<6.51E-1	6.51E-1	"		ND				35	
Strontium	<8.65E-2	8.65E-2	"		ND				35	
Vanadium	<1.44E-1	1.44E-1	"		ND				35	
Zinc	<1.05E-1	1.05E-1	"		ND				35	
Sodium	1.20E1	8.60E-1	"		1.26E1			5.54	35	
Zirconium	<1.39E-1	1.39E-1	"		ND				35	
Post Spike (9E12002-PS1)		**Source: 0902002-01**		Prepared: 05/12/09		Analyzed: 05/13/09				
Aluminum	5.16E2	N/A	ug/L	5.00E2	3.41E1	96.4	75-125			
Boron	5.41E2	N/A	"	5.00E2	1.55E1	105	75-125			
Barium	2.67E2	N/A	"	2.50E2	7.00E0	104	75-125			
Beryllium	2.63E2	N/A	"	2.50E2	1.23E0	105	75-125			
Bismuth	4.66E2	N/A	"	5.00E2	ND	96.1	75-125			
Calcium	3.99E3	N/A	"	5.00E2	3.41E3	116	75-125			
Cobalt	2.52E2	N/A	"	2.50E2	3.57E-1	101	75-125			
Copper	5.19E2	N/A	"	5.00E2	4.83E0	103	75-125			
Iron	5.48E2	N/A	"	5.00E2	3.20E1	103	75-125			
Potassium	2.68E3	N/A	"	1.25E3	1.36E3	106	75-125			
Lithium	5.01E2	N/A	"	5.00E2	4.15E0	99.5	75-125			
Magnesium	1.25E3	N/A	"	5.00E2	7.39E2	103	75-125			
Manganese	2.58E2	N/A	"	2.50E2	ND	105	75-125			
Molybdenum	5.14E2	N/A	"	5.00E2	9.74E0	101	75-125			
Phosphorus	1.29E3	N/A	"	1.25E3	2.45E1	101	75-125			
Strontium	5.47E2	N/A	"	5.00E2	1.81E1	106	75-125			
Vanadium	2.53E2	N/A	"	2.50E2	7.18E0	98.1	75-125			
Zinc	2.72E2	N/A	"	2.50E2	1.64E1	102	75-125			
Sodium	4.53E3	N/A	"	5.00E2	3.90E3	127	75-125			
Zirconium	2.54E2	N/A	"	2.50E2	4.08E-1	101	75-125			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E12003 - 1:1 Water Extract (ICP/ICPMS)										
Blank (9E12003-BLK1)				Prepared: 03/23/09		Analyzed: 05/13/09				
Aluminum	<9.37E-2	9.37E-2	ug/g wet							
Boron	<1.37E0	1.37E0	"							
Barium	<1.24E-1	1.24E-1	"							
Beryllium	<1.31E-2	1.31E-2	"							
Bismuth	<3.04E-1	3.04E-1	"							
Calcium	<4.52E-1	4.52E-1	"							
Cobalt	<1.31E-1	1.31E-1	"							
Copper	<8.78E-2	8.78E-2	"							
Iron	<1.05E-1	1.05E-1	"							
Potassium	<1.29E0	1.29E0	"							
Lithium	<7.47E-1	7.47E-1	"							
Magnesium	<4.89E-2	4.89E-2	"							
Manganese	<6.25E-2	6.25E-2	"							
Molybdenum	<1.41E-1	1.41E-1	"							
Phosphorus	<6.03E-1	6.03E-1	"							
Strontium	<8.02E-2	8.02E-2	"							
Vanadium	<1.33E-1	1.33E-1	"							
Zinc	<9.77E-2	9.77E-2	"							
Sodium	<7.97E-1	7.97E-1	"							
Zirconium	<1.29E-1	1.29E-1	"							
LCS (9E12003-BS1)				Prepared: 03/23/09		Analyzed: 05/13/09				
Aluminum	4.80E0	9.37E-2	ug/g wet	4.99E0		96.2	80-120			
Boron	5.13E0	1.37E0	"	4.99E0		103	80-120			
Barium	5.02E0	1.24E-1	"	4.99E0		101	80-120			
Beryllium	5.09E0	1.31E-2	"	4.99E0		102	80-120			
Calcium	5.12E0	4.52E-1	"	4.99E0		103	80-120			
Cobalt	5.01E0	1.31E-1	"	4.99E0		100	80-120			
Copper	4.96E0	8.78E-2	"	4.99E0		99.5	80-120			
Iron	5.00E0	1.05E-1	"	4.99E0		100	80-120			
Potassium	5.01E1	1.29E0	"	4.99E1		100	80-120			
Magnesium	4.83E0	4.89E-2	"	4.99E0		97.0	80-120			
Manganese	5.05E0	6.25E-2	"	4.99E0		101	80-120			
Molybdenum	5.08E0	1.41E-1	"	4.99E0		102	80-120			
Vanadium	4.89E0	1.33E-1	"	4.99E0		98.1	80-120			
Zinc	4.94E0	9.77E-2	"	4.99E0		99.1	80-120			
Sodium	5.31E0	7.97E-1	"	4.99E0		107	80-120			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E12003 - 1:1 Water Extract (ICP/ICPMS)										
Duplicate (9E12003-DUP1)		**Source: 0902002-03**		Prepared: 03/23/09		Analyzed: 05/13/09				
Aluminum	4.65E-1	1.04E-1	ug/g dry		5.90E-1			23.8	35	
Boron	<1.52E0	1.52E0	"		ND				35	
Barium	<1.37E-1	1.37E-1	"		ND				35	
Beryllium	<1.45E-2	1.45E-2	"		ND				35	
Bismuth	<3.37E-1	3.37E-1	"		ND				35	
Calcium	2.33E0	5.01E-1	"		2.39E0			2.34	35	
Cobalt	<1.45E-1	1.45E-1	"		ND				35	
Copper	<9.73E-2	9.73E-2	"		ND				35	
Iron	6.39E-1	1.16E-1	"		7.38E-1			14.5	35	
Potassium	2.08E0	1.43E0	"		2.18E0			4.63	35	
Lithium	<8.28E-1	8.28E-1	"		ND				35	
Magnesium	7.56E-1	5.41E-2	"		8.08E-1			6.68	35	
Manganese	<6.92E-2	6.92E-2	"		ND				35	
Molybdenum	<1.56E-1	1.56E-1	"		ND				35	
Phosphorus	<6.68E-1	6.68E-1	"		ND				35	
Strontium	<8.88E-2	8.88E-2	"		ND				35	
Vanadium	<1.48E-1	1.48E-1	"		ND				35	
Zinc	<1.08E-1	1.08E-1	"		ND				35	
Sodium	1.15E1	8.83E-1	"		1.13E1			1.38	35	
Zirconium	<1.42E-1	1.42E-1	"		ND				35	
Post Spike (9E12003-PS1)		**Source: 0902002-03**		Prepared: 05/12/09		Analyzed: 05/13/09				
Aluminum	6.67E2	N/A	ug/L	5.00E2	1.77E2	97.9	75-125			
Boron	5.33E2	N/A	"	5.00E2	6.76E0	105	75-125			
Barium	2.68E2	N/A	"	2.50E2	5.73E0	105	75-125			
Beryllium	2.64E2	N/A	"	2.50E2	3.29E-2	105	75-125			
Bismuth	4.81E2	N/A	"	5.00E2	ND	97.9	75-125			
Calcium	1.27E3	N/A	"	5.00E2	7.18E2	110	75-125			
Cobalt	2.50E2	N/A	"	2.50E2	ND	101	75-125			
Copper	5.19E2	N/A	"	5.00E2	1.72E0	103	75-125			
Iron	7.45E2	N/A	"	5.00E2	2.22E2	105	75-125			
Potassium	1.98E3	N/A	"	1.25E3	6.56E2	106	75-125			
Lithium	5.04E2	N/A	"	5.00E2	4.70E0	99.8	75-125			
Magnesium	7.50E2	N/A	"	5.00E2	2.43E2	101	75-125			
Manganese	2.66E2	N/A	"	2.50E2	2.96E-1	106	75-125			
Molybdenum	5.08E2	N/A	"	5.00E2	ND	102	75-125			
Phosphorus	1.27E3	N/A	"	1.25E3	3.22E1	99.3	75-125			
Strontium	5.36E2	N/A	"	5.00E2	4.73E0	106	75-125			
Vanadium	2.60E2	N/A	"	2.50E2	1.41E1	98.2	75-125			
Zinc	2.76E2	N/A	"	2.50E2	1.90E1	103	75-125			
Sodium	4.09E3	N/A	"	5.00E2	3.41E3	136	75-125			
Zirconium	2.55E2	N/A	"	2.50E2	5.64E-1	102	75-125			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E12004 - 1:1 Water Extract (ICP/ICPMS)										
Blank (9E12004-BLK1)				Prepared: 04/03/09		Analyzed: 05/13/09				
Aluminum	<9.37E-2	9.37E-2	ug/g wet							
Boron	<1.37E0	1.37E0	"							
Barium	<1.24E-1	1.24E-1	"							
Beryllium	<1.31E-2	1.31E-2	"							
Bismuth	<3.04E-1	3.04E-1	"							
Calcium	<4.52E-1	4.52E-1	"							
Cobalt	<1.31E-1	1.31E-1	"							
Copper	<8.78E-2	8.78E-2	"							
Iron	<1.05E-1	1.05E-1	"							
Potassium	<1.29E0	1.29E0	"							
Lithium	<7.47E-1	7.47E-1	"							
Magnesium	<4.89E-2	4.89E-2	"							
Manganese	<6.25E-2	6.25E-2	"							
Molybdenum	<1.41E-1	1.41E-1	"							
Phosphorus	<6.03E-1	6.03E-1	"							
Strontium	<8.02E-2	8.02E-2	"							
Vanadium	<1.33E-1	1.33E-1	"							
Zinc	<9.77E-2	9.77E-2	"							
Sodium	<7.97E-1	7.97E-1	"							
Zirconium	<1.29E-1	1.29E-1	"							
LCS (9E12004-BS1)				Prepared: 04/03/09		Analyzed: 05/13/09				
Aluminum	4.70E0	9.37E-2	ug/g wet	4.99E0		94.2	80-120			
Boron	5.11E0	1.37E0	"	4.99E0		102	80-120			
Barium	5.12E0	1.24E-1	"	4.99E0		103	80-120			
Beryllium	5.02E0	1.31E-2	"	4.99E0		101	80-120			
Calcium	5.11E0	4.52E-1	"	4.99E0		102	80-120			
Cobalt	4.94E0	1.31E-1	"	4.99E0		99.0	80-120			
Copper	4.96E0	8.78E-2	"	4.99E0		99.3	80-120			
Iron	4.98E0	1.05E-1	"	4.99E0		99.9	80-120			
Potassium	5.05E1	1.29E0	"	4.99E1		101	80-120			
Magnesium	4.82E0	4.89E-2	"	4.99E0		96.7	80-120			
Manganese	5.03E0	6.25E-2	"	4.99E0		101	80-120			
Molybdenum	5.04E0	1.41E-1	"	4.99E0		101	80-120			
Vanadium	4.88E0	1.33E-1	"	4.99E0		97.9	80-120			
Zinc	4.87E0	9.77E-2	"	4.99E0		97.7	80-120			
Sodium	5.11E0	7.97E-1	"	4.99E0		102	80-120			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E12004 - 1:1 Water Extract (ICP/ICPMS)										
Duplicate (9E12004-DUP1)		**Source: 0902002-08**		Prepared: 04/03/09		Analyzed: 05/13/09				
Aluminum	<9.52E-2	9.52E-2	ug/g dry		ND				35	
Boron	<1.39E0	1.39E0	"		ND				35	
Barium	<1.26E-1	1.26E-1	"		ND				35	
Beryllium	<1.33E-2	1.33E-2	"		ND				35	
Bismuth	<3.09E-1	3.09E-1	"		ND				35	
Calcium	5.36E1	4.59E-1	"		5.45E1			1.75	35	
Cobalt	<1.33E-1	1.33E-1	"		ND				35	
Copper	<8.92E-2	8.92E-2	"		ND				35	
Iron	<1.07E-1	1.07E-1	"		ND				35	
Potassium	6.34E0	1.31E0	"		6.38E0			0.635	35	
Lithium	<7.59E-1	7.59E-1	"		ND				35	
Magnesium	1.16E1	4.96E-2	"		1.17E1			0.858	35	
Manganese	<6.34E-2	6.34E-2	"		ND				35	
Molybdenum	<1.43E-1	1.43E-1	"		ND				35	
Phosphorus	1.47E1	6.12E-1	"		1.47E1			0.264	35	
Strontium	2.49E-1	8.14E-2	"		2.54E-1			1.84	35	
Vanadium	<1.35E-1	1.35E-1	"		ND				35	
Zinc	<9.93E-2	9.93E-2	"		ND				35	
Sodium	2.81E1	8.10E-1	"		2.84E1			1.09	35	
Zirconium	<1.31E-1	1.31E-1	"		ND				35	
Post Spike (9E12004-PS1)		**Source: 0902002-08**		Prepared: 05/12/09		Analyzed: 05/13/09				
Aluminum	5.14E2	N/A	ug/L	5.00E2	1.92E1	99	75-125			
Boron	5.46E2	N/A	"	5.00E2	5.71E0	108	75-125			
Barium	2.97E2	N/A	"	2.50E2	2.84E1	107	75-125			
Beryllium	2.66E2	N/A	"	2.50E2	ND	106	75-125			
Bismuth	5.16E2	N/A	"	5.00E2	1.33E1	101	75-125			
Calcium	1.87E4	N/A	"	5.00E2	1.82E4	105	75-125			
Cobalt	2.51E2	N/A	"	2.50E2	ND	101	75-125			
Copper	5.30E2	N/A	"	5.00E2	1.61E0	106	75-125			
Iron	5.32E2	N/A	"	5.00E2	2.63E0	106	75-125			
Potassium	3.53E3	N/A	"	1.25E3	2.13E3	112	75-125			
Lithium	5.14E2	N/A	"	5.00E2	5.78E0	102	75-125			
Magnesium	4.51E3	N/A	"	5.00E2	3.90E3	123	75-125			
Manganese	2.59E2	N/A	"	2.50E2	ND	106	75-125			
Molybdenum	5.34E2	N/A	"	5.00E2	1.71E1	103	75-125			
Phosphorus	6.31E3	N/A	"	1.25E3	4.89E3	114	75-125			
Strontium	6.29E2	N/A	"	5.00E2	8.46E1	109	75-125			
Vanadium	2.50E2	N/A	"	2.50E2	ND	101	75-125			
Zinc	2.76E2	N/A	"	2.50E2	2.02E1	102	75-125			
Sodium	1.01E4	N/A	"	5.00E2	9.48E3	124	75-125			
Zirconium	2.70E2	N/A	"	2.50E2	2.07E0	107	75-125			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E12005 - 1:1 Water Extract (ICP/ICPMS)										
Blank (9E12005-BLK1)				Prepared: 04/20/09	Analyzed: 05/13/09					
Aluminum	<9.37E-2	9.37E-2	ug/g wet							
Boron	<1.37E0	1.37E0	"							
Barium	<1.24E-1	1.24E-1	"							
Beryllium	<1.31E-2	1.31E-2	"							
Bismuth	<3.04E-1	3.04E-1	"							
Calcium	<4.52E-1	4.52E-1	"							
Cobalt	<1.31E-1	1.31E-1	"							
Copper	<8.78E-2	8.78E-2	"							
Iron	<1.05E-1	1.05E-1	"							
Potassium	<1.29E0	1.29E0	"							
Lithium	<7.47E-1	7.47E-1	"							
Magnesium	<4.89E-2	4.89E-2	"							
Manganese	<6.25E-2	6.25E-2	"							
Molybdenum	<1.41E-1	1.41E-1	"							
Phosphorus	<6.03E-1	6.03E-1	"							
Strontium	<8.02E-2	8.02E-2	"							
Vanadium	<1.33E-1	1.33E-1	"							
Zinc	1.30E-1	9.77E-2	"							
Sodium	<7.97E-1	7.97E-1	"							
Zirconium	<1.29E-1	1.29E-1	"							
LCS (9E12005-BS1)				Prepared: 04/20/09	Analyzed: 05/13/09					
Aluminum	4.77E0	9.37E-2	ug/g wet	5.00E0		95.3	80-120			
Boron	5.16E0	1.37E0	"	5.00E0		103	80-120			
Barium	5.09E0	1.24E-1	"	5.00E0		102	80-120			
Beryllium	5.10E0	1.31E-2	"	5.00E0		102	80-120			
Calcium	5.04E0	4.52E-1	"	5.00E0		101	80-120			
Cobalt	5.01E0	1.31E-1	"	5.00E0		100	80-120			
Copper	4.98E0	8.78E-2	"	5.00E0		99.6	80-120			
Iron	5.00E0	1.05E-1	"	5.00E0		100	80-120			
Potassium	4.99E1	1.29E0	"	5.00E1		99.9	80-120			
Magnesium	4.83E0	4.89E-2	"	5.00E0		96.7	80-120			
Manganese	5.05E0	6.25E-2	"	5.00E0		101	80-120			
Molybdenum	5.10E0	1.41E-1	"	5.00E0		102	80-120			
Vanadium	4.91E0	1.33E-1	"	5.00E0		98.1	80-120			
Zinc	4.95E0	9.77E-2	"	5.00E0		98.9	80-120			
Sodium	5.00E0	7.97E-1	"	5.00E0		99.9	80-120			

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E12005 - 1:1 Water Extract (ICP/ICPMS)										
Duplicate (9E12005-DUP1)		**Source: 0902002-12**		Prepared: 04/20/09		Analyzed: 05/13/09				
Aluminum	3.39E-1	9.45E-2	ug/g dry		3.10E-1			9.17	35	
Boron	<1.38E0	1.38E0	"		ND				35	
Barium	<1.25E-1	1.25E-1	"		ND				35	
Beryllium	<1.32E-2	1.32E-2	"		ND				35	
Bismuth	<3.07E-1	3.07E-1	"		ND				35	
Calcium	2.01E1	4.56E-1	"		1.98E1			1.69	35	
Cobalt	<1.32E-1	1.32E-1	"		ND				35	
Copper	<8.86E-2	8.86E-2	"		ND				35	
Iron	1.26E-1	1.06E-1	"		ND				35	
Potassium	5.71E0	1.30E0	"		5.99E0			4.85	35	
Lithium	<7.53E-1	7.53E-1	"		ND				35	
Magnesium	6.22E0	4.93E-2	"		5.99E0			3.75	35	
Manganese	<6.30E-2	6.30E-2	"		ND				35	
Molybdenum	<1.42E-1	1.42E-1	"		ND				35	
Phosphorus	<6.08E-1	6.08E-1	"		ND				35	
Strontium	9.34E-2	8.08E-2	"		9.00E-2			3.67	35	
Vanadium	<1.34E-1	1.34E-1	"		ND				35	
Zinc	<9.86E-2	9.86E-2	"		ND				35	
Sodium	1.61E1	8.04E-1	"		1.67E1			3.56	35	
Zirconium	<1.30E-1	1.30E-1	"		ND				35	
Post Spike (9E12005-PS1)		**Source: 0902002-12**		Prepared: 05/12/09		Analyzed: 05/13/09				
Aluminum	5.97E2	N/A	ug/L	5.00E2	1.03E2	98.8	75-125			
Boron	5.70E2	N/A	"	5.00E2	6.70E0	113	75-125			
Barium	2.81E2	N/A	"	2.50E2	1.52E1	106	75-125			
Beryllium	2.70E2	N/A	"	2.50E2	ND	108	75-125			
Bismuth	5.14E2	N/A	"	5.00E2	ND	104	75-125			
Calcium	7.16E3	N/A	"	5.00E2	6.56E3	120	75-125			
Cobalt	2.56E2	N/A	"	2.50E2	ND	103	75-125			
Copper	5.35E2	N/A	"	5.00E2	4.93E0	106	75-125			
Iron	5.60E2	N/A	"	5.00E2	3.14E1	106	75-125			
Potassium	3.35E3	N/A	"	1.25E3	1.98E3	109	75-125			
Lithium	5.14E2	N/A	"	5.00E2	4.48E0	102	75-125			
Magnesium	2.56E3	N/A	"	5.00E2	1.98E3	116	75-125			
Manganese	2.62E2	N/A	"	2.50E2	ND	107	75-125			
Molybdenum	5.37E2	N/A	"	5.00E2	1.57E1	104	75-125			
Phosphorus	1.36E3	N/A	"	1.25E3	6.32E1	104	75-125			
Strontium	5.68E2	N/A	"	5.00E2	2.98E1	108	75-125			
Vanadium	2.59E2	N/A	"	2.50E2	6.68E0	101	75-125			
Zinc	2.86E2	N/A	"	2.50E2	1.83E1	107	75-125			
Sodium	6.19E3	N/A	"	5.00E2	5.53E3	132	75-125			
Zirconium	2.59E2	N/A	"	2.50E2	4.09E-1	103	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 9E12001 - ASTM D 5198 (ICP/ICPMS)										
Blank (9E12001-BLK1)				Prepared: 04/24/09		Analyzed: 05/12/09				
Aluminum	<6.76E0	6.76E0	ug/g wet							
Boron	<2.90E1	2.90E1	"							
Barium	<4.12E-1	4.12E-1	"							
Beryllium	<2.31E-1	2.31E-1	"							
Bismuth	<2.85E0	2.85E0	"							
Calcium	<7.02E0	7.02E0	"							
Cobalt	<1.44E0	1.44E0	"							
Copper	<1.93E0	1.93E0	"							
Iron	<1.82E0	1.82E0	"							
Potassium	<2.59E1	2.59E1	"							
Lithium	<6.28E0	6.28E0	"							
Magnesium	<1.92E0	1.92E0	"							
Manganese	<6.04E-1	6.04E-1	"							
Molybdenum	<2.29E0	2.29E0	"							
Phosphorus	<8.93E0	8.93E0	"							
Strontium	<4.40E-1	4.40E-1	"							
Vanadium	<1.21E0	1.21E0	"							
Zinc	<1.10E0	1.10E0	"							
Sodium	<1.90E1	1.90E1	"							
Zirconium	<8.10E-1	8.10E-1	"							
LCS (9E12001-BS1)				Prepared: 04/24/09		Analyzed: 05/12/09				
Aluminum	5.60E0	6.76E-1	ug/g wet	5.94E0		94.4	80-120			
Boron	5.72E0	2.90E0	"	5.94E0		96.4	80-120			
Barium	5.81E0	4.12E-2	"	5.94E0		97.8	80-120			
Beryllium	5.85E0	2.31E-2	"	5.94E0		98.5	80-120			
Calcium	6.04E0	7.02E-1	"	5.94E0		102	80-120			
Cobalt	5.99E0	1.44E-1	"	5.94E0		101	80-120			
Copper	5.96E0	1.93E-1	"	5.94E0		100	80-120			
Iron	6.11E0	1.82E-1	"	5.94E0		103	80-120			
Potassium	5.85E1	2.59E0	"	5.94E1		98.5	80-120			
Magnesium	5.50E0	1.92E-1	"	5.94E0		92.7	80-120			
Manganese	5.95E0	6.04E-2	"	5.94E0		100	80-120			
Molybdenum	6.03E0	2.29E-1	"	5.94E0		102	80-120			
Vanadium	5.86E0	1.21E-1	"	5.94E0		98.6	80-120			
Zinc	5.69E0	1.10E-1	"	5.94E0		95.9	80-120			
Sodium	6.59E0	1.90E0	"	5.94E0		111	80-120			

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 9E12001 - ASTM D 5198 (ICP/ICPMS)										
Duplicate (9E12001-DUP1)	**Source: 0902002-08**			Prepared: 04/24/09	Analyzed: 05/12/09					
Aluminum	1.24E4	2.62E1	ug/g dry		1.22E4			2.21	35	
Boron	<1.12E2	1.12E2	"		ND				35	
Barium	1.10E2	1.60E0	"		1.07E2			2.66	35	
Beryllium	<8.95E-1	8.95E-1	"		ND				35	
Bismuth	1.13E1	1.10E1	"		1.14E1			0.333	35	
Calcium	1.17E4	2.72E1	"		1.15E4			1.99	35	
Cobalt	9.13E0	5.60E0	"		9.12E0			0.0887	35	
Copper	1.43E1	7.49E0	"		1.43E1			0.0755	35	
Iron	1.96E4	7.04E0	"		1.94E4			0.723	35	
Potassium	2.24E3	1.00E2	"		2.23E3			0.286	35	
Lithium	<2.43E1	2.43E1	"		ND				35	
Magnesium	7.28E3	7.46E0	"		7.24E3			0.546	35	
Manganese	3.94E2	2.34E0	"		3.98E2			0.994	35	
Molybdenum	<8.89E0	8.89E0	"		ND				35	
Phosphorus	6.39E2	3.46E1	"		6.44E2			0.757	35	
Strontium	3.70E1	1.71E0	"		3.62E1			2.16	35	
Vanadium	2.06E1	4.69E0	"		2.10E1			1.69	35	
Zinc	4.66E1	4.27E0	"		4.60E1			1.22	35	
Sodium	2.26E2	7.38E1	"		2.21E2			1.92	35	
Zirconium	7.99E0	3.14E0	"		8.13E0			1.72	35	
Post Spike (9E12001-PS1)	**Source: 0902002-08**			Prepared & Analyzed: 05/12/09						
Aluminum	6.41E4	N/A	ug/L	5.00E2	6.21E4	407	75-125			
Boron	5.09E2	N/A	"	5.00E2	ND	104	75-125			
Barium	8.08E2	N/A	"	2.50E2	5.48E2	104	75-125			
Beryllium	2.58E2	N/A	"	2.50E2	1.82E0	102	75-125			
Bismuth	5.77E2	N/A	"	5.00E2	5.80E1	104	75-125			
Calcium	6.05E4	N/A	"	5.00E2	5.86E4	386	75-125			
Cobalt	2.92E2	N/A	"	2.50E2	4.66E1	98.1	75-125			
Copper	5.89E2	N/A	"	5.00E2	7.30E1	103	75-125			
Iron	1.02E5	N/A	"	5.00E2	9.92E4	538	75-125			
Potassium	1.30E4	N/A	"	1.25E3	1.14E4	125	75-125			
Lithium	5.78E2	N/A	"	5.00E2	8.02E1	99.5	75-125			
Magnesium	3.75E4	N/A	"	5.00E2	3.69E4	105	75-125			
Manganese	2.35E3	N/A	"	2.50E2	2.03E3	126	75-125			
Molybdenum	5.40E2	N/A	"	5.00E2	3.56E1	101	75-125			
Phosphorus	4.65E3	N/A	"	1.25E3	3.29E3	109	75-125			
Strontium	6.99E2	N/A	"	5.00E2	1.85E2	103	75-125			
Vanadium	3.59E2	N/A	"	2.50E2	1.07E2	101	75-125			
Zinc	4.81E2	N/A	"	2.50E2	2.35E2	98.3	75-125			
Sodium	1.68E3	N/A	"	5.00E2	1.13E3	111	75-125			
Zirconium	2.91E2	N/A	"	2.50E2	4.15E1	99.8	75-125			

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

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E07001 - 1:1 Water Extract (ICP/ICPMS)										
Blank (9E07001-BLK1)				Prepared & Analyzed: 05/07/09						
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	"							
Antimony	<6.58E-4	6.58E-4	"							
Lead	<1.16E-3	1.16E-3	"							
LCS (9E07001-BS1)				Prepared & Analyzed: 05/07/09						
Chromium	5.16E0	3.44E-1	ug/g wet	5.00E0		103	80-120			
Arsenic	5.42E0	2.84E-1	"	5.00E0		108	80-120			
Selenium	5.06E0	7.92E-1	"	5.00E0		101	80-120			
Silver	4.12E0	3.13E-1	"	5.00E0		82.4	80-120			
Cadmium	5.25E0	5.73E-2	"	5.00E0		105	80-120			
Lead	4.75E0	1.16E-1	"	5.00E0		95.0	80-120			
Duplicate (9E07001-DUP1)		**Source: 0902002-01**		Prepared & Analyzed: 05/07/09						
Chromium	<3.72E-3	3.72E-3	ug/g dry		ND				35	
Arsenic	1.41E-2	3.06E-3	"		1.32E-2			7.03	35	
Selenium	<8.54E-3	8.54E-3	"		ND				35	
Silver	<3.37E-3	3.37E-3	"		ND				35	
Cadmium	<6.18E-4	6.18E-4	"		ND				35	
Antimony	<7.11E-4	7.11E-4	"		ND				35	
Lead	<1.25E-3	1.25E-3	"		ND				35	
Post Spike (9E07001-PS1)		**Source: 0902002-01**		Prepared & Analyzed: 05/07/09						
Chromium	4.80E0	N/A	ug/L	5.00E0	1.49E-3	95.9	75-125			
Arsenic	7.73E0	N/A	"	5.00E0	2.44E0	106	75-125			
Selenium	5.35E0	N/A	"	5.00E0	1.76E-1	103	75-125			
Silver	5.02E0	N/A	"	5.00E0	ND	101	75-125			
Cadmium	5.22E0	N/A	"	5.00E0	ND	107	75-125			
Antimony	5.38E0	N/A	"	5.00E0	3.18E-2	107	75-125			
Lead	5.02E0	N/A	"	5.00E0	6.30E-2	99.1	75-125			

RCRA Metals By PNNL-AGG-415/Water Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E07002 - 1:1 Water Extract (ICP/ICPMS)										
Blank (9E07002-BLK1)				Prepared & Analyzed: 05/07/09						
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	"							
Antimony	<6.58E-4	6.58E-4	"							
Lead	<1.16E-3	1.16E-3	"							
LCS (9E07002-BS1)				Prepared & Analyzed: 05/07/09						
Chromium	5.13E0	3.44E-1	ug/g wet	4.99E0		103	80-120			
Arsenic	5.16E0	2.84E-1	"	4.99E0		104	80-120			
Selenium	5.00E0	7.92E-1	"	4.99E0		100	80-120			
Silver	4.94E0	3.13E-1	"	4.99E0		99.0	80-120			
Cadmium	5.29E0	5.73E-2	"	4.99E0		106	80-120			
Lead	4.72E0	1.16E-1	"	4.99E0		94.7	80-120			
Duplicate (9E07002-DUP1)		**Source: 0902002-03**		Prepared & Analyzed: 05/07/09						
Chromium	<3.82E-3	3.82E-3	ug/g dry		ND				35	
Arsenic	3.42E-3	3.14E-3	"		ND				35	
Selenium	<8.77E-3	8.77E-3	"		ND				35	
Silver	<3.46E-3	3.46E-3	"		ND				35	
Cadmium	<6.35E-4	6.35E-4	"		ND				35	
Antimony	2.32E-3	7.30E-4	"		1.47E-3			44.5	35	
Lead	<1.29E-3	1.29E-3	"		ND				35	
Post Spike (9E07002-PS1)		**Source: 0902002-03**		Prepared & Analyzed: 05/07/09						
Chromium	4.92E0	N/A	ug/L	5.00E0	1.21E-1	96.1	75-125			
Arsenic	5.89E0	N/A	"	5.00E0	5.61E-1	107	75-125			
Selenium	5.51E0	N/A	"	5.00E0	2.01E-1	106	75-125			
Silver	5.00E0	N/A	"	5.00E0	ND	100	75-125			
Cadmium	5.24E0	N/A	"	5.00E0	ND	107	75-125			
Antimony	5.61E0	N/A	"	5.00E0	2.66E-1	107	75-125			
Lead	5.04E0	N/A	"	5.00E0	6.95E-2	99.4	75-125			

RCRA Metals By PNNL-AGG-415/Water Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E07003 - 1:1 Water Extract (ICP/ICPMS)										
Blank (9E07003-BLK1)				Prepared & Analyzed: 05/07/09						
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	"							
Antimony	<6.58E-4	6.58E-4	"							
Lead	<1.16E-3	1.16E-3	"							
LCS (9E07003-BS1)				Prepared & Analyzed: 05/07/09						
Chromium	5.18E0	3.44E-1	ug/g wet	4.99E0		104	80-120			
Arsenic	5.28E0	2.84E-1	"	4.99E0		106	80-120			
Selenium	5.08E0	7.92E-1	"	4.99E0		102	80-120			
Silver	4.91E0	3.13E-1	"	4.99E0		98.5	80-120			
Cadmium	5.29E0	5.73E-2	"	4.99E0		106	80-120			
Lead	4.78E0	1.16E-1	"	4.99E0		95.8	80-120			
Duplicate (9E07003-DUP1)		**Source: 0902002-08**		Prepared & Analyzed: 05/07/09						
Chromium	1.28E-1	3.50E-3	ug/g dry		1.27E-1			0.758	35	
Arsenic	7.89E-3	2.88E-3	"		7.51E-3			4.91	35	
Selenium	<8.04E-3	8.04E-3	"		ND				35	
Silver	<3.18E-3	3.18E-3	"		ND				35	
Cadmium	<5.82E-4	5.82E-4	"		ND				35	
Antimony	<6.69E-4	6.69E-4	"		ND				35	
Lead	<1.18E-3	1.18E-3	"		ND				35	
Post Spike (9E07003-PS1)		**Source: 0902002-08**		Prepared & Analyzed: 05/07/09						
Chromium	2.91E1	N/A	ug/L	5.00E0	2.53E1	75.5	75-125			
Arsenic	7.01E0	N/A	"	5.00E0	1.50E0	110	75-125			
Selenium	5.75E0	N/A	"	5.00E0	2.14E-1	111	75-125			
Silver	4.95E0	N/A	"	5.00E0	ND	99.3	75-125			
Cadmium	5.17E0	N/A	"	5.00E0	ND	106	75-125			
Antimony	5.31E0	N/A	"	5.00E0	1.50E-2	106	75-125			
Lead	5.06E0	N/A	"	5.00E0	3.85E-2	100	75-125			

RCRA Metals By PNNL-AGG-415/Water Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9E07004 - 1:1 Water Extract (ICP/ICPMS)										
Blank (9E07004-BLK1)				Prepared & Analyzed: 05/07/09						
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	"							
Antimony	1.40E-2	6.58E-4	"							
Lead	<1.16E-3	1.16E-3	"							
LCS (9E07004-BS1)				Prepared & Analyzed: 05/07/09						
Chromium	5.08E0	3.44E-1	ug/g wet	5.00E0		102	80-120			
Arsenic	5.24E0	2.84E-1	"	5.00E0		105	80-120			
Selenium	5.05E0	7.92E-1	"	5.00E0		101	80-120			
Silver	4.97E0	3.13E-1	"	5.00E0		99.3	80-120			
Cadmium	5.34E0	5.73E-2	"	5.00E0		107	80-120			
Lead	4.82E0	1.16E-1	"	5.00E0		96.5	80-120			
Duplicate (9E07004-DUP1)		**Source: 0902002-12**		Prepared & Analyzed: 05/07/09						
Chromium	<3.47E-3	3.47E-3	ug/g dry		ND				35	
Arsenic	<2.86E-3	2.86E-3	"		ND				35	
Selenium	<7.98E-3	7.98E-3	"		ND				35	
Silver	<3.15E-3	3.15E-3	"		ND				35	
Cadmium	<5.78E-4	5.78E-4	"		ND				35	
Antimony	<6.64E-4	6.64E-4	"		ND				35	
Lead	<1.17E-3	1.17E-3	"		ND				35	
Post Spike (9E07004-PS1)		**Source: 0902002-12**		Prepared & Analyzed: 05/07/09						
Chromium	4.97E0	N/A	ug/L	5.00E0	2.66E-1	94	75-125			
Arsenic	6.05E0	N/A	"	5.00E0	3.42E-1	114	75-125			
Selenium	5.78E0	N/A	"	5.00E0	1.43E-1	113	75-125			
Silver	5.00E0	N/A	"	5.00E0	ND	100	75-125			
Cadmium	5.24E0	N/A	"	5.00E0	ND	107	75-125			
Antimony	5.34E0	N/A	"	5.00E0	1.88E-2	106	75-125			
Lead	5.11E0	N/A	"	5.00E0	5.74E-2	101	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
Batch 9E07006 - ASTM D 5198 (ICP/ICPMS)										
Blank (9E07006-BLK1)				Prepared: 05/07/09		Analyzed: 05/08/09				
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	"							
Antimony	<5.26E-2	5.26E-2	"							
Lead	<5.13E-2	5.13E-2	"							
LCS (9E07006-BS1)				Prepared: 05/07/09		Analyzed: 05/08/09				
Chromium	5.79E0	9.42E-1	ug/g wet	5.94E0		97.5	80-120			
Arsenic	5.74E0	4.10E-1	"	5.94E0		96.7	80-120			
Selenium	5.64E0	7.93E-1	"	5.94E0		95.1	80-120			
Silver	5.56E0	2.56E-2	"	5.94E0		93.7	80-120			
Cadmium	5.72E0	6.77E-2	"	5.94E0		96.4	80-120			
Antimony	6.81E0	2.63E-1	"	5.94E0		115	80-120			
Lead	5.48E0	2.57E-1	"	5.94E0		92.2	80-120			
Duplicate (9E07006-DUP1)		**Source: 0902002-08**		Prepared: 05/07/09		Analyzed: 05/11/09				
Chromium	1.77E1	7.30E-1	ug/g dry		1.78E1			0.369	35	
Arsenic	5.54E0	3.18E-1	"		5.50E0			0.647	35	
Selenium	<6.14E-1	6.14E-1	"		ND				35	
Silver	6.31E-2	1.99E-2	"		6.32E-2			0.166	35	
Cadmium	6.39E-2	5.25E-2	"		6.69E-2			4.58	35	
Antimony	<2.04E-1	2.04E-1	"		ND				35	
Lead	6.04E0	1.99E-1	"		6.02E0			0.330	35	
Post Spike (9E07006-PS1)		**Source: 0902002-08**		Prepared: 05/07/09		Analyzed: 05/11/09				
Chromium	4.94E1	N/A	ug/L	5.00E0	4.55E1	79.3	75-125			
Arsenic	1.86E1	N/A	"	5.00E0	1.40E1	90.8	75-125			
Selenium	3.50E0	N/A	"	5.00E0	ND	79.7	75-125			
Silver	4.98E0	N/A	"	5.00E0	1.61E-1	96.4	75-125			
Cadmium	4.92E0	N/A	"	5.00E0	1.71E-1	94.9	75-125			
Antimony	5.17E0	N/A	"	5.00E0	1.87E-1	99.6	75-125			
Lead	1.86E1	N/A	"	5.00E0	1.54E1	65.4	75-125			

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-012-001	PAGE 1 OF 2
COLLECTOR McEntyre / Crow / Rust	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7017; EW1-001	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO. CUB 2/13/09 SOFT-1 N/A	**FIELD LOGBOOK NO.** PG 2 HNF-N-585 - 9	**ACTUAL SAMPLE DEPTH** 95'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C	Cool~4C/Cool~4C	None
TYPE OF CONTAINER	G/P	aG	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1	1
VOLUME	500mL	250mL	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS 029038	SEE ITEM (2) IN SPECIAL INSTRUCTIONS 029336	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1YD07	SOIL	2-9-09	1257	✓	✓	✓
	Lot #			029038	029336	

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
McEntyre / Crow / Rust	2-9-09 1400	R.L. Steele	2-9-09 1400
R.L. Steele	2-9-09 1500	McEntyre / Crow / Rust	2-9-09 1500
McEntyre / Crow / Rust	2-9-09 1515	M0413 SSV#2	2-9-09 1515
M0-413 SSV-R2	2/12/09 13:00	Brotherton	2/12/09 13:00
Brotherton	2/12/09 13:50	Kevin Miller	2/12/09 13:50

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-012-001	PAGE 2 OF 2
COLLECTOR McIntyre, Cook, Rost	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7017; EW1-001	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	**45 Days / 45 Days**
ICE CHEST NO. DWB 2/12/09 ~~SOFT-L~~ N/A	**FIELD LOGBOOK NO.** Pg 2 HNF-N-585-9	**ACTUAL SAMPLE DEPTH** 95'	**COA** 300194ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)6010M_ICP_ASTM_AE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_ICP_ASTM_AE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6010M_METALS_ICP_WE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_METALS_ICP_WE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6020M_ICPMS_ASTM_AE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} 6020M_METALS_ICPMS_WE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}
(2)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}
(3)Moisture Content - D2216 {Percent moisture (wet sample)}

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-012-002	PAGE 1 OF 2
COLLECTOR Bates	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7017; EW1-010	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO. N/A	**FIELD LOGBOOK NO.** HNF-585-9	**ACTUAL SAMPLE DEPTH** 218' - 221'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C	Cool~4C/Cool~4C	None										
TYPE OF CONTAINER	G/P	aG	Moisture Resistant Cont										
NO. OF CONTAINER(S)	1	1	1										
VOLUME	500mL	250mL	200g										
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS 029038	SEE ITEM (2) IN SPECIAL INSTRUCTIONS 029136	SEE ITEM (3) IN SPECIAL INSTRUCTIONS										
SAMPLE NO.	**MATRIX***	**SAMPLE DATE**	**SAMPLE TIME**										
B1YD08	SOIL	3/9/09	10:00	✓	✓	✓							

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Barbara Bates	3/9/09 10:45	M0413 SSUR-2	3/9/09 10:45
M0413 SSUR-2	3-12-09 0927	Ed Kaur/Edward Glenn	3-12-09 0927
Ed Kaur/Edward Glenn	3-12-09 10:30	C Jovin	3/12/2009 1083

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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			F09-012-002	PAGE 2 OF 2
COLLECTOR	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7017; EW1-010	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA** 300194ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)6010M_ICP_ASTM_AE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_ICP_ASTM_AE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6010M_METALS_ICP_WE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_METALS_ICP_WE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6020M_ICPMS_ASTM_AE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} 6020M_METALS_ICPMS_WE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}
(2)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}
(3)Moisture Content - D2216 {Percent moisture (wet sample)}

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F09-012-003	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8N	DATA TURNAROUND
CHACON / Fulton	WIDRIG, DL	376-2858	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7017; EW1-011	200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		F09-012		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNFN 585-9 AB	228.7' - 231.2'	300194ES10	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=Vegitation
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

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	PRESERVATION	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS
				Cool~4C/Cool~4C	Cool~4C/Cool~4C	None		
				G/P	aG	Moisture Resistant Cont		
				1	1	1		
				500mL	250mL	200g		
				SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS		
B1YD09 +79	SOIL	3/3/09	0902	✓	✓	✓		
				027361				
				[illegible]	523082	N/A		

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
K. Patterson	3/3/09 1005	T A Frazier	3/3/09 1005
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Victor Isaacs	3/3/09 1040	K. Patterson	3/3/09 1040
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
K. Patterson	3/3/09 1055	MO413 SSUR2	3/3/09 1055
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MO413 SSUR2	3-12-09 0932	Ed Kaw	3-12-09 0932
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaw	3-12-09 10:30	C. Foum	3/12/09 10:30
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
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

ICED

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		F09-012-003	PAGE 2 OF 2
COLLECTOR	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N **AIR QUALITY** ☐ **DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7017; EW1-011	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA** 300194ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A	

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)6010M_ICP_ASTM_AE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_ICP_ASTM_AE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6010M_METALS_ICP_WE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_METALS_ICP_WE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6020M_ICPMS_ASTM_AE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} 6020M_METALS_ICPMS_WE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}
(2)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}
(3)Moisture Content - D2216 {Percent moisture (wet sample)}

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F09-012-004	PAGE 1 OF 1

COLLECTOR PATTERSON / CROW	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N; **DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7017; EW1-012	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-5 Pg 8	**ACTUAL SAMPLE DEPTH** 249'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C									
TYPE OF CONTAINER	aG									
NO. OF CONTAINER(S)	1									
VOLUME	250mL									
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS									

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1YD74	SOIL	3/4/09	1508	✓									
				029336									

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
K Patterson [signature]	3/4/09 1315	MO413 SSU-R2	3-4-09 1315
MO413 SSU-R2	3-12-09 0928	Ed Kane [signature]	3-12-09 0928
Ed Kane [signature]	3-12-09 1030	C. Tom [signature]	3/12/09 10:30

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-037	PAGE 1 OF 2
COLLECTOR Citrcen	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7021; EW3-001	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-D-585-9 pg 8	**ACTUAL SAMPLE DEPTH** 95'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C	Cool~4C/Cool~4C	None
TYPE OF CONTAINER	G/P	aG	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1	1
VOLUME	500mL	250mL	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1YND4	SOIL	3/3/09	1307	✓	✓	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
K PATTERSON	3/3/09 1530	MO-413 Ref #2	3-3-09 1530
Larry Rosane Tony Rosane	4-1-09 1300	Quentin Iovin	4/1/09 1300

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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			F09-012-037	PAGE 2 OF 2
COLLECTOR	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7021; EW3-001	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA** 300194ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)6010M_ICP_ASTM_AE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_ICP_ASTM_AE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6010M_METALS_ICP_WE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_METALS_ICP_WE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6020M_ICPMS_ASTM_AE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} 6020M_METALS_ICPMS_WE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}
(2)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}
(3)Moisture Content - D2216 {Percent moisture (wet sample)}

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F09-012-038	PAGE 1 OF 2

COLLECTOR Charon	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N **DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7021; EW3-012	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-SDS-9 819	**ACTUAL SAMPLE DEPTH** 270'	**COA** 300194ES10	**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=Vegitation
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
RADIOACTIVE TIE TO: B1YNJ0

PRESERVATION	Cool~4C/Cool~4C	Cool~4C/Cool~4C	None							
TYPE OF CONTAINER	G/P	aG	Moisture Resistant Cont							
NO. OF CONTAINER(S)	1	1	1							
VOLUME	500mL	250mL	200g							
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS							

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME											
B1YND5	SOIL	4-1-09	0945	✓	✓	✓								
Lot #				029035	029336	DT								

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Steve Rust	4-1-09 / 1030	MO-413 SSU-R1	4-1-09 / 1030
Larry Rosane, Larry Rosane	4-1-09 / 1300	Christian Lovin	4/1/09 1300

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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			F09-012-038	PAGE 2 OF 2
COLLECTOR	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7021; EW3-012	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA** 300194ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)6010M_ICP_ASTM_AE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_ICP_ASTM_AE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6010M_METALS_ICP_WE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_METALS_ICP_WE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6020M_ICPMS_ASTM_AE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} 6020M_METALS_ICPMS_WE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}
(2)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}
(3)Moisture Content - D2216 {Percent moisture (wet sample)}

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F09-012-052	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8N	DATA TURNAROUND
Patterson / Helms	WIDRIG, DL	376-2858	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7021; EW3-010-G.S	200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		F09-012		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-585-5	251'	300194ES10	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=Vegitation
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	Cool~4C/Cool~4C	Cool~4C/Cool~4C	None	
TYPE OF CONTAINER	G/P	aG	Moisture Resistant Cont	
NO. OF CONTAINER(S)	1	1	1	
VOLUME	500mL	250mL	200g	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	
LOT #	035499	360030	N/A	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1YND7	SOIL	3/27/09	0932	✓	✓	✓

CHAIN OF POSSESSION — SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
R Patterson / [signature]	3/27/09 1040	MO413 SSU-R2	3/27/09 1040
Larry Rosane / Larry Rosane	4-1-09 / 1300	Cristina [signature]	4/1/09 1300

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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			F09-012-052	PAGE 2 OF 2
COLLECTOR Patterson / Hedine	COMPANY CONTACT WIDRIG, DL	TELEPHONE NO. 376-2858	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8N	DATA TURNAROUND
SAMPLING LOCATION C7021; EW3-010-G.S	PROJECT DESIGNATION 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		SAF NO. F09-012	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA 300194ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)6010M_ICP_ASTM_AE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_ICP_ASTM_AE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6010M_METALS_ICP_WE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_METALS_ICP_WE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6020M_ICPMS_ASTM_AE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} 6020M_METALS_ICPMS_WE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}
(2)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}
(3)Moisture Content - D2216 {Percent moisture (wet sample)}

A-6003-618(01/06)

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F09-012-019	PAGE 1 OF 2

COLLECTOR Bates	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7018; EW2-001	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO. N/A	**FIELD LOGBOOK NO.** HNF-N-585-8	**ACTUAL SAMPLE DEPTH** 95'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C	Cool~4C/Cool~4C	None							
TYPE OF CONTAINER	G/P	aG	Moisture Resistant Cont							
NO. OF CONTAINER(S)	1	1	1							
VOLUME	500mL	250mL	200g							
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS							

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1YM90	SOIL	3-26-09	1256	✓	✓	✓							

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
ARMcIntyre - [signature]	3/26/09 1530	MO-413 - SSU-R2	3/26/09 1530
Larry Rosane - Larry Rosane	4-1-09/ 1300	Cristina Tovi [signature]	4/1/09 1300

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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

A-6003-618(01/06)

Washington River Protection Solutions	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-012-019	PAGE 2 OF 2
COLLECTOR BATES	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N **AIR QUALITY** ☐	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7018; EW2-001	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012		
ICE CHEST NO. N/A	**FIELD LOGBOOK NO.** HNF-N-585-8	**ACTUAL SAMPLE DEPTH** 95'	**COA** 300194ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)6010M_ICP_ASTM_AE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_ICP_ASTM_AE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6010M_METALS_ICP_WE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_METALS_ICP_WE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6020M_ICPMS_ASTM_AE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} 6020M_METALS_ICPMS_WE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}
(2)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}
(3)Moisture Content - D2216 {Percent moisture (wet sample)}

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F09-012-020	PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8N	DATA TURNAROUND
Kaufman, Holmes, Bates	WIDRIG, DL	376-2858	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C7018; EW2-010	200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		F09-012		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
N/A	HNF-N-585-3 pg 3	217'7" to 218'7"	300194ES10	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=Vegitation
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
RADIOACTIVE Tie to B1YD12

PRESERVATION	Cool~4C/Cool~4C	Cool~4C/Cool~4C	None
TYPE OF CONTAINER	G/P	aG	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1	1
VOLUME	500mL	250mL	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1YM91	SOIL	4-6-09	0802	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaufman, Edward Holmes	4-6-09 1005	MO 413 - SSV-R2	4-06-09 1005
MO 413 SSV R2	4/9/09 1245	Brotherton	4/9/09 1245
Brotherton	4/9/09 1495	C. Tovrn	4/9/09 1495

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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			F09-012-020	PAGE 2 OF 2
COLLECTOR Knowe, Helms, Bates	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N **AIR QUALITY** ☐	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7018; EW2-010	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012		
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-3 pg 33	**ACTUAL SAMPLE DEPTH** 217.7 to 218.7	**COA** 300194ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)6010M_ICP_ASTM_AE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_ICP_ASTM_AE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6010M_METALS_ICP_WE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_METALS_ICP_WE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6020M_ICPMS_ASTM_AE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} 6020M_METALS_ICPMS_WE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}
(2)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}
(3)Moisture Content - D2216 {Percent moisture (wet sample)}

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-012-039	PAGE 1 OF 1
COLLECTOR Bailey	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7021; EW3-014	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO. N/A	**FIELD LOGBOOK NO.** HNF-N-585-9 & 20	**ACTUAL SAMPLE DEPTH** 292.5 ft.	**COA** 300194ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A JRD 4-3-09		**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=Vegitation
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
RADIOACTIVE TIE TO: B1YNJ1

PRESERVATION	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YND6	SOIL	4-3-09	1200	✓
Lot #				029336

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
JR Bailey	4-3-09/1215	M0413 SSU-R1	4-3-09 1215
M0-413 SSU-R1	4/9/09 12:45	Beatheaton	4/9/09 12:45
Beatheaton	4/9/09 14:15	[illegible]	4/9/09 1415

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-005	PAGE 1 OF 1
COLLECTOR Chacon, Fulton	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7017; EW1-014	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO. —	**FIELD LOGBOOK NO.** HWF-N-585-9	**ACTUAL SAMPLE DEPTH** 272.5-273'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS 029356

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YD75	SOIL	3-26-09	1345	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
C. Fulton / Chacon	3-26-09 1430	MO 413 SSV-R2	3-26-09 1430
MO-413 SSV-R2	4/9/09 12:45	Brad Heaston	4/9/09 12:45
Brad Heaston	4/9/09 1415	C. Fulton	4/9/09 1415

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-021	PAGE 1 OF 2
COLLECTOR Bates, Smith, ROSANE	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7018; EW2-011-G.S ✓	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-8 pg 4	**ACTUAL SAMPLE DEPTH** 227.65'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C	Cool~4C/Cool~4C	None
TYPE OF CONTAINER	G/P	aG	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1	1
VOLUME	500mL	250mL	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1YM92	SOIL	4-10-9	1210	✓	✓	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane, Larry Rosane	4-10-09/1400	MO-413 Ref #2	4-10-09/1400
MO 413 Ref 2	4-16-09 1100	D. Pasch	4-16-09 1100
D. Pasch	4-16-09 1200	Keith Hyl	4-16-09 1200

SPECIAL INSTRUCTIONS
SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS

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			F09-012-021	PAGE 2 OF 2
COLLECTOR	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N **AIR QUALITY** ☐	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7018; EW2-011-G.S	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012		
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-8pg4	**ACTUAL SAMPLE DEPTH** 227.65	**COA** 300194ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A		

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)6010M_ICP_ASTM_AE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_ICP_ASTM_AE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6010M_METALS_ICP_WE (TAL) {Aluminum, Barium, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Potassium, Vanadium, Zinc} 6010M_METALS_ICP_WE (Add-On) {Beryllium, Bismuth, Boron, Lithium, Phosphorus, Strontium, Zirconium} 6020M_ICPMS_ASTM_AE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_ICPMS_ASTM_AE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} 6020M_METALS_ICPMS_WE (TAL) {Antimony, Cadmium, Chromium, Silver} 6020M_METALS_ICPMS_WE (Add-On) {Arsenic, Lead, Molybdenum, Selenium} IC Anions - 9056 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}
(2)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}
(3)Moisture Content - D2216 {Percent moisture (wet sample)}

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-012-022	PAGE 1 OF 1
COLLECTOR PATTERSON	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7018; EW2-012	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-10.	**ACTUAL SAMPLE DEPTH** 250.5'	**COA** 300194ES10	**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=Vegitation
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
RADIOACTIVE TIE TO: B1YD13

PRESERVATION	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YM93	SOIL	4/15/09	0805	✓
				323082

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[signature]	4/15/09	MO 413 554 R2	4/15/09
MO 413 554 R2	4-16-09 1100	D. Parker	4-16-09 1100
D. Parker	4-16-09 1200	[signature]	4-16-09 1200

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-053	PAGE 1 OF 1
COLLECTOR Kaver, Bates	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N **AIR QUALITY** ☐	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7021; EW3-019-G.S	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012		
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-9 Pg 25	**ACTUAL SAMPLE DEPTH** 330 to 332,5	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B1YNV5	SOIL	4-15-09	0730

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kaver, Ed Bates	4-15-09 0801	200413 SSU R-2	4-15-09 0801
200413 SSU R2	4-16-09 1100	D. Pasch	4-16-09 1100
D. Pasch	4-16-09 1200		4-16-09 1200

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-006	PAGE 1 OF 1
COLLECTOR KRAUSE, Helms	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7017; EW1-016	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO. GWSC-8	**FIELD LOGBOOK NO.** HNF-N-585-9	**ACTUAL SAMPLE DEPTH** 295'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B1YD76	SOIL	4-20-09	0848

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed KRAUSE, Ehelms	4-20-09 0918	MO-413 SSU-R2	4-20-09 0918
MO 413 SSU-R2	4-27-09 1230	D. Parcher	4-27-09 1230
D. Parcher	4-27-09 1310	C. Foum	4/27/09 1310

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-018	PAGE 1 OF 1
COLLECTOR Knoll / Helms	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7017; EW1-016-D	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO. GWSC-8	**FIELD LOGBOOK NO.** ERNFN-585-9	**ACTUAL SAMPLE DEPTH** 293'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B1YD88	SOIL	4-21-09	08:48

CHAIN OF POSSESSION

SIGN/ PRINT NAMES			
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
K Knoll / E Helms	4-20-09 0918	MO 413 SSU-R2	4-20-09 0918
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
413 SSU-R2	4-27-09 1230	D. Parker	4-27-09 1230
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
D. Parker	4-27-09 1310	C. Louvier	4/27/09 1310
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 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-007	PAGE 1 OF 1
COLLECTOR KAUER, Brotherton	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7017; EW1-018	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO. GSWC-8	**FIELD LOGBOOK NO.** PS 70 HNF-N-585-9	**ACTUAL SAMPLE DEPTH** 314.6	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YD77	SOIL	4-22-09	07:06	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed KAUER	4-22-09 0713	MO-413 SSU-R2	4/22/09 0713
MO 413 SSU-R2	4-27-09 1230	D. Parchen	4-27-09
D. Parchen	4-27-09 1310	C. IOVIN	4/27/09 1310

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-008	PAGE 1 OF 1
COLLECTOR K.J. Young	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N **AIR QUALITY** ☐	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7017; EW1-020	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012		
ICE CHEST NO. SMC-470	**FIELD LOGBOOK NO.** HNF-N-585-09 PG 30	**ACTUAL SAMPLE DEPTH** 334.5	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YD78	SOIL	4/22/09	1623	✓

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
K.J. Young K.J. Young 4/22/9	1651	SSU-R2 4/22/09	1651
MO 4.13 SSU-R2	4-27-09 1250	D. Parker	4-27-09 1250
D. Parker	4-27-09 1310	C. Jorm	4/27/09 1310

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-009	PAGE 1 OF 1
COLLECTOR Rosane, Bates	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7017; EW1-022	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO. GWSC-8	**FIELD LOGBOOK NO.** HNF-N-585-9 pg 32	**ACTUAL SAMPLE DEPTH** 355'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B1YD79	SOIL	4-24-09	0750

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	4-24-09 0811	Mo 413 Rm #2	4-24-09 0811
MO 413 SSW Rm 2	4-27-09 1230	D.E. Rasch	4-27-09 1220
D.E. Rasch	4-27-09 1310	C. Sloan	4/27/09 1310

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-041	PAGE 1 OF 1
COLLECTOR Bates	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND**
SAMPLING LOCATION C7021; EW3-018	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	45 Days / 45 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** p-23 HNF-N-585-9	**ACTUAL SAMPLE DEPTH** 311.5-313.5	**COA** 300194ES10	**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=Vegitation
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
RADIOACTIVE TIE TO: B1YNN3

PRESERVATION	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YND9	SOIL	4-9-09	1525	✓
Lot #				029336

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Steve Rust	4-9-09 1600	Pete Peters MO413	4-9-9/1600
MO 413 SSU R2	4-30-09 1100	D. Parker	4-30-09 1300
D. Parker	4-30-09 1300	I. Kutsugaku	4/30/09 13:00

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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	F09-012-042	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8N	DATA TURNAROUND
Bates	WIDRIG, DL	376-2858	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7021; EW3-018-D	200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode	F09-012

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-585-9 P.23	311.5-313.5	300194ES10	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=Vegitation
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
RADIOACTIVE TIE TO: B1YNN3

PRESERVATION	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YNF0	SOIL	4-9-09	1525	✓
Lot #				029336

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible]	4-9-09 1600	Dale Oates [illegible] MO493	4-9-9 1600
MO 4C3 3SSa R2	4-30-09 1100	D. Parish [illegible]	4-30-09
D. Parish [illegible]	4-30-09 1300	J. Kudnyakov [illegible]	4-30-09 13:00

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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	F09-012-043	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8N	DATA TURNAROUND
Kaven, Helms, Rust	WIDRIG, DL	376-2858	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.
C7021; EW3-020	200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode	F09-012

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-585-9 pg 24	351.1 to 353.3	300194ES10	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=Vegitation
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
RADIOACTIVE TIE TO: B1YNN3

PRESERVATION	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YNF1	SOIL	4-20-09	08:25	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
El Kaven [signature]	4-20-09 0854	MO-413 SSU-R2	4-20-09 0854
MO 413 SSU R2	4-30-09 1100	D. Parchen [signature]	4-30-09 1100
D. Parchen [signature]	4-30-09 1300	I Kutnyakov / [signature]	4-30-09 13:00

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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	F09-012-010	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8N	DATA TURNAROUND
Helm / White	WIDRIG, DL	376-2858	WIDRIG, DL		45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY** ☐	
C7017; EW1-024	200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		F09-012		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-585-9	375'	300194ES10	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=Vegitation
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	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YD80	SOIL	4/28/09	08:30	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Brotherton Brotherton	4/27/09 15:45	MO 413 R4U-SW	4/27/09 15:45
MO 413 SSU R2	4-30-09 1100	D. Parker D. Parker	4-30-09 1100
D. Parker D. Parker	4-30-09 1300	I. Kurtzyk / Ilyn Kurtzyk	4/30/09 13:00

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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	F09-012-011	PAGE 1 OF 1

COLLECTOR Kaiser, Crow, White	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N / **DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7017; EW1-026	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-9 PG 35	**ACTUAL SAMPLE DEPTH** 395'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YD81	SOIL	4-28-09	0900	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
E. Kaiser / [signature]	4-28-09 0926	MO-413-SSU-R2	4-28-09 0926
MO 413 SSU R2	4-30-09 1100	D. Parch [signature]	4-30-09 1100
D. Parch [signature]	4-30-09 1300	I. Kutnyakov / [signature]	4-30/09 13:00

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-012	PAGE 1 OF 1
COLLECTOR White	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7017; EW1-028	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-9 36	**ACTUAL SAMPLE DEPTH** 414'	**COA** 300194ES10	**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=Vegitation
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	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YD82	SOIL	4/25/09	0854	✓

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[signature]	4/29/09 0933	MO-413 SSU R2	4/29/09 0933
MO 413 SSU R2	4-30-09 1100	D. Roech [signature]	4-30-09 1100
D. Parcher [signature]	4-30-09 1300	I. Kutnyakov / [signature]	4-30-09 13:00

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-044	PAGE 1 OF 1
COLLECTOR KAUER, Brotherton	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N **AIR QUALITY** ☐	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7021; EW3-022	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012		
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-9 PG 70	**ACTUAL SAMPLE DEPTH** 370.8 to 372.8	**COA** 300194ES10	**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=Vegitation
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
RADIOACTIVE TIE TO: B1YNP0

PRESERVATION	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B1YNF2	SOIL	4-22-09	0855

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer/Edward Brotherton	4-22-09 1150	M0413 SSU-B2	4/22/09 1150
M0413 SSU B2	MAY 13 2009 1230	KC Patterson	MAY 13 2009 1230
KC Patterson	MAY 13 2009	Egor Kudryavtsev/Egor Kudryavtsev	12:30 5/13/09

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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		F09-012-045	PAGE 1 OF 1
COLLECTOR Helms / [illegible]	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N; **DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7021; EW3-024	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-9	**ACTUAL SAMPLE DEPTH** 392'- 394'	**COA** 300194ES10	**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=Vegitation
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
RADIOACTIVE TIE TO: B1YNP0

PRESERVATION	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B1YNF3	SOIL	4/27/09	10:46

CHAIN OF POSSESSION — **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Brotherton [signature]	4/27/09 15:45	MO-413 RRU-S2	4/27/09 15:45
MO-413 SSU-R2	MAY 13 2009 / 1220	KC Patterson [signature]	MAY 13 2009 / 1220
KC Patterson [signature]	MAY 13 2009	Igor Kutnyakov / [signature] 12:30	5/13/09

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-046	PAGE 1 OF 1
COLLECTOR: Lauer	COMPANY CONTACT: WIDRIG, DL	TELEPHONE NO.: 376-2858	PROJECT COORDINATOR: WIDRIG, DL	PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days
SAMPLING LOCATION: C7021; EW3-026	PROJECT DESIGNATION: 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		SAF NO.: F09-012	AIR QUALITY: ☐	
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N 585-9 pg 2	ACTUAL SAMPLE DEPTH: 407.2'	COA: 300194ES10	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=Vegitation, 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
RADIOACTIVE TIE TO: B1YNP5

PRESERVATION	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YNF4	SOIL	4/29/09	0815	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[signature]		MO 413 - 550-B2	4/29/09 0933
MO 413 550-B2	MAY 13 2009 1230	KC Patterson	MAY 13 2009 1230
KC Patterson	MAY 13 2009	Igor Kudryavtsev / Igor Kudryavtsev	12:30 5/13/09

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-047	PAGE 1 OF 1
COLLECTOR Rosane	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7021; EW3-028	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-9 pg 37	**ACTUAL SAMPLE DEPTH** 432 - 434'	**COA** 300194ES10	**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=Vegitation
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
RADIOACTIVE TIE TO: B1YNP5

PRESERVATION	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YNF5	SOIL	5-1-09	1140	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane, Tony Rosane	5-1-09 / 1220	MO-413 Ref# 2	5-1-09 / 1220
MO-413 Ref# 2	MAY 13 2009 / 1230	KC Patterson	MAY 13 2009 / 1230
KC Patterson	MAY 13 2009	Igor Kudryavtsev / Igor Kudryavtsev	5/13/09

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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			F09-012-048	PAGE 1 OF 1
COLLECTOR Kaufer / Brotherton	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7021; EW3-030	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-585-9	**ACTUAL SAMPLE DEPTH** 450½' - 452½'	**COA** 300194ES10	**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=Vegitation
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
RADIOACTIVE TIE TO: B1YNR0

PRESERVATION	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YNF6	SOIL	5/6/09	15:22	✓

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Brotherton Buck	5/6/09 15:45	M0413 - 55U-R2	5/6/09 15:45
M0413 55U-R2	MAY 13 2009 1230	KC Patterson	MAY 13 2009 1230
KC Patterson	MAY 13 2009	Igor Kutnyakov / Igor Kutnyakov	12 30 05/13/09

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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	F09-012-013	PAGE 1 OF 1

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 8N	DATA TURNAROUND
Kauer	WIDRIG, DL	376-2858	WIDRIG, DL		45 Days / 45 Days

SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.	AIR QUALITY
C7017; EW1-030	200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode	F09-012	☐

ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
	HNF-N-585-9 Pg 39	462'	300194ES10	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=Vegitation
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	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YD83	SOIL	5-5-09	0828	✓

CHAIN OF POSSESSION — SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
K Patterson [signature]	5/5/09 0845	MO113 SSU-R2	5/5/09 0845
MO113 SSU-R2	MAY 13 2009 1230	KC Patterson [signature]	MAY 13 2009 1230
KC Patterson [signature]	MAY 13 2009	Igor Kutnyakov / Igor Kutnyakov	5/13/09 12:30

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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

34

A-6003-618(01/06)

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-012-026	PAGE 1 OF 1
COLLECTOR Rosane	**COMPANY CONTACT** WIDRIG, DL	**TELEPHONE NO.** 376-2858	**PROJECT COORDINATOR** WIDRIG, DL	**PRICE CODE** 8N	**DATA TURNAROUND** 45 Days / 45 Days
SAMPLING LOCATION C7018; EW2-018	**PROJECT DESIGNATION** 200-ZP-1 Remedial Action Wells Sampling and Analysis - Geochemical Mode		**SAF NO.** F09-012	**AIR QUALITY** ☐	
ICE CHEST NO. GWS-063	**FIELD LOGBOOK NO.** HNF-W-585-8 pg 10	**ACTUAL SAMPLE DEPTH** 308-310'	**COA** 300194ES10	**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=Vegitation
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
RADIOACTIVE TIE TO: B1YH71

PRESERVATION	Cool~4C/Cool~4C
TYPE OF CONTAINER	aG
NO. OF CONTAINER(S)	1
VOLUME	250mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1YM97	SOIL	6-26-09	0845	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Larry Rosane Larry Rosane	6-26-09/ 1500	MO-413 SSU-R2	6-2609/ 1500
MO413 SSU R2	8-3-09 1100	DE Parchen CHPRC	8-3-09 1100
DE Parchen CHPRC	8-3-09 1300	C. Louw	8/3/09 1300

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)TOC - ASTME1915A {Total organic carbon} GAMMA_GS {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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

A-6003-618(01/06)