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Analytical Data Report for Grab Samples Collected From BP-5 Operable Unit N Well (C5861)

Michael Lindberg

September 2008



Pacific Northwest
NATIONAL LABORATORY

08/28/08 10:47

To: Dana Widrig

From: Michael J. Lindberg

A handwritten signature in black ink, appearing to read 'MJL', is centered below the 'From' field.

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

Subject: Analytical Data Report for Grab Samples Collected From BP-5 Operable Unit N Well (C5861), Sample Delivery Group ESL070010, SAF Number F07-79

This letter contains the following information for sample delivery group ESL070010

- Cover Sheet
- Narrative
- Analytical Results
- Quality Control
- Geologic Logs
- Geologic Photos
- Chain of Custodies

Introduction

Between December 10, 2007 and December 11, 2007 soil cores and grab samples were received from BP-5 Operable Unit N Well (C5861) 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

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:

No Discrepancies Noted.

Preparation Blank (PB):

No Discrepancies Noted.

Duplicate (DUP):

No Discrepancies Noted.

Laboratory control samples (LCS):

No Discrepancies Noted.

Post spike (PS) and post spike duplicate (PSD):

No Discrepancies Noted.

Other QC Criteria:

No Discrepancies Noted.

DISCLAIMER

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SAMPLES INCLUDED IN THIS REPORT

200 BP 5 OU, C5861 N-Well VZ

HEIS No.	Laboratory ID	Matrix	Date Collected	Date Received
B1PN56	0802011-01	SOIL	12/7/07 08:41	12/10/07 16:00
B1PN57	0802011-02	SOIL	12/7/07 09:30	12/10/07 16:00
B1PN58	0802011-03	SOIL	12/7/07 09:37	12/10/07 16:00
B1PN59	0802011-04	SOIL	12/7/07 10:33	12/10/07 16:00
B1PN60	0802011-05	SOIL	12/7/07 13:50	12/10/07 16:00
B1PN61	0802011-06	SOIL	12/7/07 14:00	12/10/07 16:00
B1PN62	0802011-07	SOIL	12/7/07 14:40	12/10/07 16:00
B1PN63	0802012-01	SOIL	12/10/07 09:00	12/11/07 13:30
B1PN64	0802012-02	SOIL	12/10/07 10:23	12/11/07 13:30
B1PN65	0802012-03	SOIL	12/10/07 11:20	12/11/07 13:30
B1RRJ6	0802012-04	SOIL	12/10/07 13:50	12/11/07 13:30
B1RRJ7	0802012-05	SOIL	12/10/07 14:25	12/11/07 13:30
B1RRJ8	0802012-06	SOIL	12/10/07 15:20	12/11/07 13:30

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

Metals 1:1 DI Water Extract by ICPMS

1:1 DI Water Extract

Alkalinity, Titrimetic (pH 4.5)

Anions By Ion Chromatography

Geological description

Metals 1:1 Water Extract by ICPOES

Moisture Content

pH of Waters By Electrode

Specific Conductance

Tc_U 1:1 DI Water Extract by ICPMS

SAMPLES ANALYZED IN THIS REPORT

HEIS No.	Laboratory ID	Matrix	Date Collected	Date Received
B1PN56	0802011-01	SOIL	12/7/07 08:41	12/10/07 16:00
B1PN57	0802011-02	SOIL	12/7/07 09:30	12/10/07 16:00
B1PN58	0802011-03	SOIL	12/7/07 09:37	12/10/07 16:00
B1PN59	0802011-04	SOIL	12/7/07 10:33	12/10/07 16:00
B1PN60	0802011-05	SOIL	12/7/07 13:50	12/10/07 16:00
B1PN61	0802011-06	SOIL	12/7/07 14:00	12/10/07 16:00
B1PN62	0802011-07	SOIL	12/7/07 14:40	12/10/07 16:00
B1PN63	0802012-01	SOIL	12/10/07 09:00	12/11/07 13:30
B1PN64	0802012-02	SOIL	12/10/07 10:23	12/11/07 13:30
B1PN65	0802012-03	SOIL	12/10/07 11:20	12/11/07 13:30
B1RRJ6	0802012-04	SOIL	12/10/07 13:50	12/11/07 13:30
B1RRJ7	0802012-05	SOIL	12/10/07 14:25	12/11/07 13:30
B1RRJ8	0802012-06	SOIL	12/10/07 15:20	12/11/07 13:30

Wet Chemistry**Alkalinity as CaCO3 (ug/g dry) by Standard Methods 2320B**

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0802011-01	B1PN56	5.55E1	2.35E1	2/18/08	8D23016
0802011-02	B1PN57	1.01E2	2.35E1	2/18/08	8D23016
0802011-03	B1PN58	9.05E1	2.35E1	2/18/08	8D23016
0802011-04	B1PN59	8.93E1	2.36E1	2/18/08	8D23016
0802011-05	B1PN60	8.43E1	2.35E1	2/18/08	8D23016
0802011-06	B1PN61	6.31E1	2.35E1	2/18/08	8D23016
0802011-07	B1PN62	6.54E1	2.35E1	2/18/08	8D23016
0802012-01	B1PN63	5.63E1	2.35E1	2/18/08	8D23016
0802012-02	B1PN64	6.38E1	2.35E1	2/18/08	8D23016
0802012-03	B1PN65	5.17E1	2.35E1	2/18/08	8D23016
0802012-04	B1RRJ6	5.47E1	2.35E1	2/18/08	8D23016
0802012-05	B1RRJ7	5.61E1	2.41E1	2/18/08	8D23016
0802012-06	B1RRJ8	6.39E1	2.35E1	2/18/08	8D23016

Wet Chemistry

Specific Conductance (EC) (mS/cm) by EPA 120.1

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0802011-01	B1PN56	1.24E-1	5.00E-3	2/07/08	8D23015
0802011-02	B1PN57	2.37E-1	5.00E-3	2/07/08	8D23015
0802011-03	B1PN58	2.11E-1	5.00E-3	2/07/08	8D23015
0802011-04	B1PN59	2.88E-1	5.00E-3	2/07/08	8D23015
0802011-05	B1PN60	3.37E-1	5.00E-3	2/07/08	8D23015
0802011-06	B1PN61	2.64E-1	5.00E-3	2/07/08	8D23015
0802011-07	B1PN62	1.45E-1	5.00E-3	2/07/08	8D23015
0802012-01	B1PN63	1.08E-1	5.00E-3	2/07/08	8D23015
0802012-02	B1PN64	1.42E-1	5.00E-3	2/07/08	8D23015
0802012-03	B1PN65	9.10E-2	5.00E-3	2/07/08	8D23015
0802012-04	B1RRJ6	9.90E-2	5.00E-3	2/07/08	8D23015
0802012-05	B1RRJ7	1.04E-1	5.00E-3	2/07/08	8D23015
0802012-06	B1RRJ8	1.23E-1	5.00E-3	2/07/08	8D23015

Wet Chemistry**Moisture Content (% by Weight) by AGG-WC-001**

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0802011-01	B1PN56	2.30E0	N/A	2/05/08	8D23014
0802011-02	B1PN57	3.53E0	N/A	2/05/08	8D23014
0802011-03	B1PN58	3.22E0	N/A	2/05/08	8D23014
0802011-04	B1PN59	1.29E1	N/A	2/05/08	8D23014
0802011-05	B1PN60	2.12E1	N/A	2/05/08	8D23014
0802011-06	B1PN61	1.68E1	N/A	2/05/08	8D23014
0802011-07	B1PN62	2.77E0	N/A	2/05/08	8D23014
0802012-01	B1PN63	2.59E0	N/A	2/05/08	8D23014
0802012-02	B1PN64	2.76E0	N/A	2/05/08	8D23014
0802012-03	B1PN65	2.58E0	N/A	2/05/08	8D23014
0802012-04	B1RRJ6	2.96E0	N/A	2/05/08	8D23014
0802012-05	B1RRJ7	2.89E0	N/A	2/05/08	8D23014
0802012-06	B1RRJ8	3.32E0	N/A	2/05/08	8D23014

Wet Chemistry					
pH (pH Units) by AGG-pH-001					
Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0802011-01	B1PN56	8.40E0	N/A	2/07/08	8D23015
0802011-02	B1PN57	8.40E0	N/A	2/07/08	8D23015
0802011-03	B1PN58	8.30E0	N/A	2/07/08	8D23015
0802011-04	B1PN59	8.27E0	N/A	2/07/08	8D23015
0802011-05	B1PN60	8.15E0	N/A	2/07/08	8D23015
0802011-06	B1PN61	8.06E0	N/A	2/07/08	8D23015
0802011-07	B1PN62	8.33E0	N/A	2/07/08	8D23015
0802012-01	B1PN63	8.02E0	N/A	2/07/08	8D23015
0802012-02	B1PN64	8.14E0	N/A	2/07/08	8D23015
0802012-03	B1PN65	8.20E0	N/A	2/07/08	8D23015
0802012-04	B1RRJ6	8.31E0	N/A	2/07/08	8D23015
0802012-05	B1RRJ7	8.28E0	N/A	2/07/08	8D23015
0802012-06	B1RRJ8	8.29E0	N/A	2/07/08	8D23015

Anions by Ion Chromatography

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	B1PN56	Lab ID: 0802011-01					
16984-48-8	Fluoride	5.72E-1	ug/g dry	2.00E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	2.49E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	7.27E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
HEIS No.	B1PN57	Lab ID: 0802011-02					
16984-48-8	Fluoride	9.19E-1	ug/g dry	2.00E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	1.27E1	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
HEIS No.	B1PN58	Lab ID: 0802011-03					
16984-48-8	Fluoride	9.15E-1	ug/g dry	2.00E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	1.33E1	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
HEIS No.	B1PN59	Lab ID: 0802011-04					
16984-48-8	Fluoride	6.11E-1	ug/g dry	2.01E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	9.94E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	4.02E1	ug/g dry	1.51E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.51E0	ug/g dry	1.51E0	2/07/08	8D25004	AGG-IC-001
HEIS No.	B1PN60	Lab ID: 0802011-05					
16984-48-8	Fluoride	6.84E-1	ug/g dry	2.00E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	2.76E1	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	5.68E1	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
HEIS No.	B1PN61	Lab ID: 0802011-06					
16984-48-8	Fluoride	5.07E-1	ug/g dry	2.00E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	2.37E1	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	3.80E1	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
HEIS No.	B1PN62	Lab ID: 0802011-07					
16984-48-8	Fluoride	5.80E-1	ug/g dry	2.00E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	2.64E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	1.00E1	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
HEIS No.	B1PN63	Lab ID: 0802012-01					
16984-48-8	Fluoride	3.39E-1	ug/g dry	2.00E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	1.96E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	7.07E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001

Anions by Ion Chromatography

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	B1PN64	Lab ID: 0802012-02					
16984-48-8	Fluoride	4.98E-1	ug/g dry	2.00E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	9.13E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
HEIS No.	B1PN65	Lab ID: 0802012-03					
16984-48-8	Fluoride	3.68E-1	ug/g dry	2.00E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	2.99E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
HEIS No.	B1RRJ6	Lab ID: 0802012-04					
16984-48-8	Fluoride	4.51E-1	ug/g dry	2.00E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	3.18E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
HEIS No.	B1RRJ7	Lab ID: 0802012-05					
16984-48-8	Fluoride	4.37E-1	ug/g dry	2.05E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.03E0	ug/g dry	1.03E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	<1.03E0	ug/g dry	1.03E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	3.48E0	ug/g dry	1.54E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.54E0	ug/g dry	1.54E0	2/07/08	8D25004	AGG-IC-001
HEIS No.	B1RRJ8	Lab ID: 0802012-06					
16984-48-8	Fluoride	5.62E-1	ug/g dry	2.00E-1	2/07/08	8D25004	AGG-IC-001
14797-65-0	Nitrite	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14797-55-8	Nitrate	<1.00E0	ug/g dry	1.00E0	2/07/08	8D25004	AGG-IC-001
14808-79-8	Sulfate	4.57E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001
14265-44-2	Phosphate	<1.50E0	ug/g dry	1.50E0	2/07/08	8D25004	AGG-IC-001

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	B1PN56	Lab ID: 0802011-01					
7429-90-5	Aluminum	4.60E-1	ug/g dry	8.58E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	6.13E0	ug/g dry	3.87E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.33E-2	ug/g dry	3.33E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	4.68E0	ug/g dry	2.33E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.75E0	ug/g dry	8.34E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.71E-2	ug/g dry	1.71E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.26E1	ug/g dry	6.69E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
HEIS No.	B1PN57	Lab ID: 0802011-02					
7429-90-5	Aluminum	2.42E-1	ug/g dry	8.58E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.54E1	ug/g dry	3.87E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.33E-2	ug/g dry	3.33E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	8.83E0	ug/g dry	2.33E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	4.96E0	ug/g dry	8.34E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	1.84E-2	ug/g dry	1.71E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.25E1	ug/g dry	6.69E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
HEIS No.	B1PN58	Lab ID: 0802011-03					
7429-90-5	Aluminum	2.03E-1	ug/g dry	8.59E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.06E1	ug/g dry	3.87E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.33E-2	ug/g dry	3.33E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	8.03E0	ug/g dry	2.33E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.41E0	ug/g dry	8.35E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.71E-2	ug/g dry	1.71E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.33E1	ug/g dry	6.69E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
HEIS No.	B1PN59	Lab ID: 0802011-04					
7429-90-5	Aluminum	<8.61E-2	ug/g dry	8.61E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	2.04E1	ug/g dry	3.89E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.34E-2	ug/g dry	3.34E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	8.47E0	ug/g dry	2.34E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	6.56E0	ug/g dry	8.37E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.72E-2	ug/g dry	1.72E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.29E1	ug/g dry	6.72E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
HEIS No.	B1PN60	Lab ID: 0802011-05					
7429-90-5	Aluminum	<1.43E-1	ug/g dry	1.43E-1	2/20/08	8E01007	PNNL-AGG-ICP-AES
7440-70-2	Calcium	2.63E1	ug/g dry	6.45E-1	2/20/08	8E01007	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<5.55E-2	ug/g dry	5.55E-2	2/20/08	8E01007	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.51E0	ug/g dry	3.88E0	2/20/08	8E01007	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	4.43E0	ug/g dry	1.39E-1	2/20/08	8E01007	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<2.85E-2	ug/g dry	2.85E-2	2/20/08	8E01007	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.73E1	ug/g dry	1.11E0	2/20/08	8E01007	PNNL-AGG-ICP-AES
HEIS No.	B1PN61	Lab ID: 0802011-06					
7429-90-5	Aluminum	<8.59E-2	ug/g dry	8.59E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.85E1	ug/g dry	3.87E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.33E-2	ug/g dry	3.33E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	4.58E0	ug/g dry	2.33E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	6.51E0	ug/g dry	8.35E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.71E-2	ug/g dry	1.71E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.88E1	ug/g dry	6.69E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
HEIS No.	B1PN62	Lab ID: 0802011-07					

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	B1PN62	Lab ID: 0802011-07					
7429-90-5	Aluminum	3.94E-1	ug/g dry	8.59E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.82E0	ug/g dry	3.87E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.33E-2	ug/g dry	3.33E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.92E0	ug/g dry	2.33E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.52E0	ug/g dry	8.35E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.71E-2	ug/g dry	1.71E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.52E1	ug/g dry	6.69E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
HEIS No.	B1PN63	Lab ID: 0802012-01					
7429-90-5	Aluminum	3.23E-1	ug/g dry	8.58E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.76E0	ug/g dry	3.87E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.33E-2	ug/g dry	3.33E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.93E0	ug/g dry	2.33E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.75E0	ug/g dry	8.34E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	1.80E-2	ug/g dry	1.71E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	9.72E0	ug/g dry	6.69E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
HEIS No.	B1PN64	Lab ID: 0802012-02					
7429-90-5	Aluminum	2.78E-1	ug/g dry	8.58E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	6.76E0	ug/g dry	3.87E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.33E-2	ug/g dry	3.33E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.67E0	ug/g dry	2.33E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.24E0	ug/g dry	8.34E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.71E-2	ug/g dry	1.71E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.44E1	ug/g dry	6.69E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
HEIS No.	B1PN65	Lab ID: 0802012-03					
7429-90-5	Aluminum	4.81E-1	ug/g dry	8.58E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	4.62E0	ug/g dry	3.87E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.33E-2	ug/g dry	3.33E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.40E0	ug/g dry	2.33E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.40E0	ug/g dry	8.34E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	2.51E-2	ug/g dry	1.71E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	9.23E0	ug/g dry	6.69E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
HEIS No.	B1RRJ6	Lab ID: 0802012-04					
7429-90-5	Aluminum	4.24E-1	ug/g dry	8.58E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	4.77E0	ug/g dry	3.87E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.33E-2	ug/g dry	3.33E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.62E0	ug/g dry	2.33E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.42E0	ug/g dry	8.34E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	1.93E-2	ug/g dry	1.71E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.06E1	ug/g dry	6.69E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
HEIS No.	B1RRJ7	Lab ID: 0802012-05					
7429-90-5	Aluminum	4.46E-1	ug/g dry	8.80E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.05E0	ug/g dry	3.97E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.42E-2	ug/g dry	3.42E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.92E0	ug/g dry	2.39E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.54E0	ug/g dry	8.56E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.76E-2	ug/g dry	1.76E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.13E1	ug/g dry	6.86E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
HEIS No.	B1RRJ8	Lab ID: 0802012-06					

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	B1RRJ8	Lab ID: 0802012-06					
7429-90-5	Aluminum	4.07E-1	ug/g dry	8.58E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-70-2	Calcium	5.03E0	ug/g dry	3.87E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.33E-2	ug/g dry	3.33E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-09-7	Potassium	4.61E0	ug/g dry	2.33E0	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.55E0	ug/g dry	8.34E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.71E-2	ug/g dry	1.71E-2	2/07/08	8E01006	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.40E1	ug/g dry	6.69E-1	2/07/08	8E01006	PNNL-AGG-ICP-AES

Radionuclides by ICP-MS/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	B1PN56	Lab ID: 0802011-01					
14133-76-7	Technetium-99	<2.30E-5	ug/g dry	2.30E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	<5.64E-4	ug/g dry	5.64E-4	2/11/08	8D24001	PNNL-AGG-415
HEIS No.	B1PN57	Lab ID: 0802011-02					
14133-76-7	Technetium-99	<2.30E-5	ug/g dry	2.30E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	6.23E-4	ug/g dry	5.64E-4	2/11/08	8D24001	PNNL-AGG-415
HEIS No.	B1PN58	Lab ID: 0802011-03					
14133-76-7	Technetium-99	<2.30E-5	ug/g dry	2.30E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	<5.64E-4	ug/g dry	5.64E-4	2/11/08	8D24001	PNNL-AGG-415
HEIS No.	B1PN59	Lab ID: 0802011-04					
14133-76-7	Technetium-99	<2.31E-5	ug/g dry	2.31E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	1.30E-3	ug/g dry	5.66E-4	2/11/08	8D24001	PNNL-AGG-415
HEIS No.	B1PN60	Lab ID: 0802011-05					
14133-76-7	Technetium-99	<2.30E-5	ug/g dry	2.30E-5	2/20/08	8D24001	PNNL-AGG-415
	Uranium 238	3.46E-3	ug/g dry	5.63E-4	2/20/08	8D24001	PNNL-AGG-415
HEIS No.	B1PN61	Lab ID: 0802011-06					
14133-76-7	Technetium-99	<2.30E-5	ug/g dry	2.30E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	1.54E-3	ug/g dry	5.64E-4	2/11/08	8D24001	PNNL-AGG-415
HEIS No.	B1PN62	Lab ID: 0802011-07					
14133-76-7	Technetium-99	<2.30E-5	ug/g dry	2.30E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	<5.64E-4	ug/g dry	5.64E-4	2/11/08	8D24001	PNNL-AGG-415
HEIS No.	B1PN63	Lab ID: 0802012-01					
14133-76-7	Technetium-99	<2.30E-5	ug/g dry	2.30E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	<5.64E-4	ug/g dry	5.64E-4	2/11/08	8D24001	PNNL-AGG-415
HEIS No.	B1PN64	Lab ID: 0802012-02					
14133-76-7	Technetium-99	<2.30E-5	ug/g dry	2.30E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	<5.64E-4	ug/g dry	5.64E-4	2/11/08	8D24001	PNNL-AGG-415
HEIS No.	B1PN65	Lab ID: 0802012-03					
14133-76-7	Technetium-99	<2.30E-5	ug/g dry	2.30E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	<5.64E-4	ug/g dry	5.64E-4	2/11/08	8D24001	PNNL-AGG-415
HEIS No.	B1RRJ6	Lab ID: 0802012-04					
14133-76-7	Technetium-99	<2.30E-5	ug/g dry	2.30E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	<5.63E-4	ug/g dry	5.63E-4	2/11/08	8D24001	PNNL-AGG-415
HEIS No.	B1RRJ7	Lab ID: 0802012-05					
14133-76-7	Technetium-99	<2.36E-5	ug/g dry	2.36E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	<5.78E-4	ug/g dry	5.78E-4	2/11/08	8D24001	PNNL-AGG-415
HEIS No.	B1RRJ8	Lab ID: 0802012-06					
14133-76-7	Technetium-99	<2.30E-5	ug/g dry	2.30E-5	2/11/08	8D24001	PNNL-AGG-415
	Uranium 238	<5.64E-4	ug/g dry	5.64E-4	2/11/08	8D24001	PNNL-AGG-415

RCRA Metals By PNNL-AGG-415/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	B1PN56	Lab ID: 0802011-01					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	2/07/08	8E01009	PNNL-AGG-415
HEIS No.	B1PN57	Lab ID: 0802011-02					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	2/07/08	8E01009	PNNL-AGG-415
HEIS No.	B1PN58	Lab ID: 0802011-03					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	2/07/08	8E01009	PNNL-AGG-415
HEIS No.	B1PN59	Lab ID: 0802011-04					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	2/07/08	8E01009	PNNL-AGG-415
HEIS No.	B1PN60	Lab ID: 0802011-05					
14687-58-2	Selenium	1.13E-2	ug/g dry	1.10E-2	2/19/08	8E01009	PNNL-AGG-415
HEIS No.	B1PN61	Lab ID: 0802011-06					
14687-58-2	Selenium	1.13E-2	ug/g dry	1.11E-2	2/07/08	8E01009	PNNL-AGG-415
HEIS No.	B1PN62	Lab ID: 0802011-07					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	2/07/08	8E01009	PNNL-AGG-415
HEIS No.	B1PN63	Lab ID: 0802012-01					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	2/07/08	8E01009	PNNL-AGG-415
HEIS No.	B1PN64	Lab ID: 0802012-02					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	2/07/08	8E01009	PNNL-AGG-415
HEIS No.	B1PN65	Lab ID: 0802012-03					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	2/07/08	8E01009	PNNL-AGG-415
HEIS No.	B1RRJ6	Lab ID: 0802012-04					
14687-58-2	Selenium	<1.10E-2	ug/g dry	1.10E-2	2/07/08	8E01009	PNNL-AGG-415
HEIS No.	B1RRJ7	Lab ID: 0802012-05					
14687-58-2	Selenium	<1.13E-2	ug/g dry	1.13E-2	2/07/08	8E01009	PNNL-AGG-415
HEIS No.	B1RRJ8	Lab ID: 0802012-06					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	2/07/08	8E01009	PNNL-AGG-415

Wet Chemistry - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 8D23015 - 1:1 Water Extract (pH_EC_Alk)

Blank (8D23015-BLK1)

Prepared & Analyzed: 02/07/08

Specific Conductance (EC) <5.00E-3 5.00E-3 mS/cm

Duplicate (8D23015-DUP1)

Source: 0802011-04

Prepared & Analyzed: 02/07/08

Specific Conductance (EC) 2.80E-1 5.00E-3 mS/cm 2.88E-1 2.82 35

pH 8.20E0 N/A pH Units 8.27E0 0.850 35

Duplicate (8D23015-DUP2)

Source: 0802011-06

Prepared & Analyzed: 02/07/08

Specific Conductance (EC) <5.00E-3 5.00E-3 mS/cm 2.64E-1 35

pH 8.02E0 N/A pH Units 8.06E0 0.498 35

Batch 8D23016 - 1:1 Water Extract (pH_EC_Alk)

Blank (8D23016-BLK1)

Prepared & Analyzed: 02/18/08

Alkalinity as CaCO3 <2.35E1 2.35E1 ug/g wet

Duplicate (8D23016-DUP1)

Source: 0802011-04

Prepared & Analyzed: 02/18/08

Alkalinity as CaCO3 8.29E1 2.35E1 ug/g dry 8.93E1 7.43 35

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 8D25004 - 1:1 Water Extract (IC)										
Blank (8D25004-BLK1)				Prepared & Analyzed: 02/07/08						
Fluoride	<2.00E-1	2.00E-1	ug/g wet							
Nitrite	<1.00E0	1.00E0	"							
Nitrate	<1.00E0	1.00E0	"							
Sulfate	<1.50E0	1.50E0	"							
Phosphate	<1.50E0	1.50E0	"							
LCS (8D25004-BS1)				Prepared & Analyzed: 02/07/08						
Fluoride	2.03E0	2.00E-1	ug/g wet	2.00E0		102	80-120			
Nitrite	1.18E1	1.00E0	"	1.00E1		118	80-120			
Nitrate	1.05E1	1.00E0	"	1.00E1		105	80-120			
Sulfate	1.53E1	1.50E0	"	1.51E1		101	80-120			
Phosphate	1.49E1	1.50E0	"	1.51E1		99.1	80-120			
Duplicate (8D25004-DUP1)				Source: 0802011-04		Prepared & Analyzed: 02/07/08				
Fluoride	6.61E-1	2.00E-1	ug/g dry		6.11E-1			7.84	35	
Nitrite	<1.00E0	1.00E0	"		ND				35	
Nitrate	1.08E1	1.00E0	"		9.94E0			8.45	35	
Sulfate	3.85E1	1.50E0	"		4.02E1			4.34	35	
Phosphate	<1.50E0	1.50E0	"		ND				35	
Post Spike (8D25004-PS1)				Source: 0802012-02		Prepared & Analyzed: 02/07/08				
Fluoride	4.47E0	N/A	ug/mL	4.00E0	4.98E-1	99.3	75-125			
Nitrite	2.09E1	N/A	"	2.00E1	ND	104	75-125			
Nitrate	2.04E1	N/A	"	2.00E0	ND	102	75-125			
Sulfate	4.15E1	N/A	"	3.00E1	9.13E0	108	75-125			
Phosphate	3.26E1	N/A	"	3.00E1	ND	109	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 8E01006 - 1:1 Water Extract (ICP/ICPMS)										
Blank (8E01006-BLK2)				Prepared: 02/06/08 Analyzed: 02/07/08						
Aluminum	<8.58E-2	8.58E-2	ug/g wet							
Calcium	<3.87E-1	3.87E-1	"							
Chromium	<3.33E-2	3.33E-2	"							
Potassium	<2.33E0	2.33E0	"							
Magnesium	<8.34E-2	8.34E-2	"							
Manganese	<1.71E-2	1.71E-2	"							
Sodium	<6.69E-1	6.69E-1	"							
LCS (8E01006-BS2)				Prepared: 02/06/08 Analyzed: 02/07/08						
Aluminum	4.64E0	8.58E-2	ug/g wet	5.00E0		93.0	80-120			
Calcium	4.93E0	3.87E-1	"	5.00E0		98.8	80-120			
Chromium	4.91E0	3.33E-2	"	5.00E0		98.3	80-120			
Potassium	4.85E1	2.33E0	"	5.00E1		97.2	80-120			
Magnesium	4.75E0	8.34E-2	"	5.00E0		95.1	80-120			
Manganese	4.92E0	1.71E-2	"	5.00E0		98.6	80-120			
Sodium	5.03E0	6.69E-1	"	5.00E0		101	80-120			
Duplicate (8E01006-DUP2)				Source: 0802011-04		Prepared: 02/06/08 Analyzed: 02/07/08				
Aluminum	<8.58E-2	8.58E-2	ug/g dry		ND				35	
Calcium	1.94E1	3.87E-1	"		2.04E1			4.78	35	
Chromium	<3.33E-2	3.33E-2	"		ND				35	
Potassium	8.01E0	2.33E0	"		8.47E0			5.68	35	
Magnesium	6.17E0	8.34E-2	"		6.56E0			6.17	35	
Manganese	<1.71E-2	1.71E-2	"		ND				35	
Sodium	2.25E1	6.69E-1	"		2.29E1			1.57	35	
Post Spike (8E01006-PS2)				Source: 0802011-07		Prepared: 02/06/08 Analyzed: 02/07/08				
Aluminum	8.87E2	N/A	ug/L	8.33E2	1.31E2	90.6	75-125			
Calcium	2.80E3	N/A	"	8.33E2	1.94E3	103	75-125			
Chromium	2.10E2	N/A	"	2.08E2	7.11E-2	101	75-125			
Potassium	4.07E3	N/A	"	2.08E3	1.97E3	101	75-125			
Magnesium	1.64E3	N/A	"	8.33E2	8.40E2	96.0	75-125			
Manganese	4.35E2	N/A	"	4.16E2	2.39E0	104	75-125			
Sodium	5.97E3	N/A	"	8.33E2	5.06E3	109	75-125			

Radionuclides by ICP-MS/Water Extract - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D24001 - 1:1 Water Extract (ICP/ICPMS)										
Blank (8D24001-BLK2)				Prepared & Analyzed: 02/11/08						
Technetium-99	<2.30E-5	2.30E-5	ug/g wet							
Uranium 238	<5.64E-4	5.64E-4	"							
Duplicate (8D24001-DUP2)				Source: 0802011-04		Prepared & Analyzed: 02/11/08				
Technetium-99	<2.30E-5	2.30E-5	ug/g dry		ND				35	
Uranium 238	1.18E-3	5.64E-4	"		1.30E-3			9.63	35	
Post Spike (8D24001-PS2)				Source: 0802011-04		Prepared & Analyzed: 02/11/08				
Technetium-99	4.64E-1	N/A	ug/L	5.00E-1	1.50E-3	92.5	75-125			
Uranium 238	7.55E-1	N/A	"	5.00E-1	2.59E-1	99.2	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 8E01009 - 1:1 Water Extract (ICP/ICPMS)										
Blank (8E01009-BLK2)				Prepared & Analyzed: 02/07/08						
Selenium	<1.10E-2	1.10E-2	ug/g wet							
LCS (8E01009-BS2)				Prepared & Analyzed: 02/07/08						
Selenium	4.23E0	1.10E0	ug/g wet	5.00E0		84.7	80-120			
Duplicate (8E01009-DUP2)				Source: 0802011-04		Prepared & Analyzed: 02/07/08				
Selenium	<1.11E-2	1.11E-2	ug/g dry		ND				35	