



PNNL-SA-62141

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

# Analytical Data Report of Grab Samples Collected From BP-5 Operable Unit O Well (C5852)

Michael Lindberg

September 2008



08/28/08 15:40

To: Dana Widrig

From: Michael J. Lindberg

A handwritten signature in black ink, appearing to read 'MJL', is placed over a light gray rectangular background.

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

Subject: Analytical Data Report of Grab Samples Collected From BP-5 Operable Unit O Well (C5852), Sample Delivery Group ESL070005, SAF Number F07-069

This letter contains the following information for sample delivery group ESL070005

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

## **Introduction**

Between October 12, 2007 and October 28, 2007 soil cores and grab samples were received from BP-5 Operable Unit O Well (C5852) 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):**

Post-Spike Recovery for Sodium (126%) was outside acceptance limits (75-125) in 8E01004-PS1 for ICP-OES Vadose-WE  
The concentration of the analyte in the original sample is greater than 1000 ppm. Therefore, spikes are not required per HASQARD.

### **Matrix spike (MS) and matrix spike duplicate (MSD):**

Not Applicable

### **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.

## SAMPLES INCLUDED IN THIS REPORT

### 200 BP 5 OU, C5852 O-Well VZ

HEIS No.	Laboratory ID	Matrix	Date Collected	Date Received
B1PMY9	0802019-01	SOIL	10/11/07 13:50	10/12/07 09:00
B1PN01	0802019-03	SOIL	10/11/07 14:32	10/12/07 09:00
B1PN03	0802020-01	SOIL	10/12/07 07:48	10/17/07 08:55
B1PN05	0802020-03	SOIL	10/12/07 09:16	10/17/07 08:55
B1PN07	0802020-05	SOIL	10/12/07 10:33	10/17/07 08:55
B1PN09	0802020-09	SOIL	10/12/07 14:35	10/17/07 08:55
B1PN11	0802020-11	SOIL	10/15/07 08:10	10/17/07 08:55
B1R100	0802020-17	SOIL	10/16/07 09:42	10/17/07 08:55
B1PN17	0802023-09	SOIL	10/18/07 14:20	10/24/07 08:30
B1PN18	0802023-10	SOIL	10/19/07 14:00	10/24/07 08:30
B1PN25	0802023-19	SOIL	10/23/07 14:05	10/23/07 15:00
B1PN26	0802023-20	SOIL	10/24/07 12:50	10/25/07 12:50

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, Titrimetric (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

<b>HEIS No.</b>	<b>Laboratory ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Received</b>
B1PMY9	0802019-01	SOIL	10/11/07 13:50	10/12/07 09:00
B1PN01	0802019-03	SOIL	10/11/07 14:32	10/12/07 09:00
B1PN03	0802020-01	SOIL	10/12/07 07:48	10/17/07 08:55
B1PN05	0802020-03	SOIL	10/12/07 09:16	10/17/07 08:55
B1PN07	0802020-05	SOIL	10/12/07 10:33	10/17/07 08:55
B1PN09	0802020-09	SOIL	10/12/07 14:35	10/17/07 08:55
B1PN11	0802020-11	SOIL	10/15/07 08:10	10/17/07 08:55
B1R100	0802020-17	SOIL	10/16/07 09:42	10/17/07 08:55
B1PN17	0802023-09	SOIL	10/18/07 14:20	10/24/07 08:30
B1PN18	0802023-10	SOIL	10/19/07 14:00	10/24/07 08:30
B1PN25	0802023-19	SOIL	10/23/07 14:05	10/23/07 15:00
B1PN26	0802023-20	SOIL	10/24/07 12:50	10/25/07 12:50

Wet Chemistry					
Alkalinity as CaCO3 (ug/g dry) by Standard Methods 2320B					
Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0802019-01	B1PMY9	4.50E1	2.49E1	11/29/07	8D07003
0802019-03	B1PN01	4.18E1	2.35E1	4/29/08	8D07003
0802020-01	B1PN03	3.83E1	2.42E1	11/29/07	8D07003
0802020-03	B1PN05	5.03E1	2.55E1	11/29/07	8D07003
0802020-05	B1PN07	3.59E1	2.36E1	11/29/07	8D07003
0802020-09	B1PN09	5.13E1	2.37E1	11/29/07	8D07003
0802020-11	B1PN11	4.85E1	2.42E1	11/29/07	8D07003
0802020-17	B1R100	5.10E1	2.36E1	11/29/07	8D07003
0802023-09	B1PN17	4.34E1	2.35E1	11/29/07	8D07003
0802023-10	B1PN18	4.88E1	2.36E1	11/29/07	8D07003
0802023-19	B1PN25	4.42E1	2.40E1	11/29/07	8D07003
0802023-20	B1PN26	4.44E1	2.41E1	11/29/07	8D07003

## Wet Chemistry

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

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0802019-01	B1PMY9	2.71E-1	1.00E-2	11/28/07	8D07003
0802019-03	B1PN01	3.22E-1	1.00E-2	11/28/07	8D07003
0802020-01	B1PN03	2.41E-1	1.00E-2	11/28/07	8D07003
0802020-03	B1PN05	2.11E-1	1.00E-2	11/28/07	8D07003
0802020-05	B1PN07	2.21E-1	1.00E-2	11/28/07	8D07003
0802020-09	B1PN09	2.46E-1	1.00E-2	11/28/07	8D07003
0802020-11	B1PN11	2.87E-1	1.00E-2	11/28/07	8D07003
0802020-17	B1R100	1.37E-1	1.00E-2	11/28/07	8D07003
0802023-09	B1PN17	1.07E-1	1.00E-2	11/28/07	8D07003
0802023-10	B1PN18	1.06E-1	1.00E-2	11/28/07	8D07003
0802023-19	B1PN25	1.05E-1	1.00E-2	11/28/07	8D07003
0802023-20	B1PN26	1.02E-1	1.00E-2	11/28/07	8D07003



## Wet Chemistry

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

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0802019-01	B1PMY9	4.49E0	N/A	4/21/08	8D08004
0802019-03	B1PN01	4.33E0	N/A	4/21/08	8D08004
0802020-01	B1PN03	4.09E0	N/A	4/21/08	8D08004
0802020-03	B1PN05	2.74E0	N/A	4/21/08	8D08004
0802020-05	B1PN07	3.23E0	N/A	4/21/08	8D08004
0802020-09	B1PN09	2.42E0	N/A	4/21/08	8D08004
0802020-11	B1PN11	4.56E0	N/A	4/21/08	8D08004
0802020-17	B1R100	9.19E0	N/A	4/21/08	8D08004
0802023-09	B1PN17	7.43E0	N/A	4/21/08	8D08004
0802023-10	B1PN18	8.44E0	N/A	4/21/08	8D08004
0802023-19	B1PN25	6.59E0	N/A	4/21/08	8D08004
0802023-20	B1PN26	6.81E0	N/A	4/21/08	8D08004

Wet Chemistry					
pH (pH Units) by AGG-pH-001					
Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0802019-01	B1PMY9	7.16E0	N/A	11/28/07	8D30002
0802019-03	B1PN01	7.23E0	N/A	12/05/07	8D30002
0802020-01	B1PN03	7.45E0	N/A	12/05/07	8D30002
0802020-03	B1PN05	7.56E0	N/A	11/28/07	8D30002
0802020-05	B1PN07	7.09E0	N/A	11/28/07	8D30002
0802020-09	B1PN09	7.71E0	N/A	11/28/07	8D30002
0802020-11	B1PN11	7.47E0	N/A	11/28/07	8D30002
0802020-17	B1R100	7.60E0	N/A	11/28/07	8D30002
0802023-09	B1PN17	7.44E0	N/A	11/28/07	8D30002
0802023-10	B1PN18	7.28E0	N/A	11/28/07	8D30002
0802023-19	B1PN25	7.47E0	N/A	11/28/07	8D30002
0802023-20	B1PN26	7.39E0	N/A	11/28/07	8D30002

## Anions by Ion Chromatography

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B1PMY9</b>	<b>Lab ID: 0802019-01</b>					
16984-48-8	Fluoride	<2.12E0	ug/g dry	2.12E0	11/28/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.06E1	ug/g dry	1.06E1	11/28/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	8.05E0	ug/g dry	1.06E0	12/05/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	6.76E1	ug/g dry	1.59E1	11/28/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.59E1	ug/g dry	1.59E1	11/28/07	8D25002	AGG-IC-001
<b>HEIS No.</b>	<b>B1PN01</b>	<b>Lab ID: 0802019-03</b>					
16984-48-8	Fluoride	<2.00E0	ug/g dry	2.00E0	11/28/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.00E1	ug/g dry	1.00E1	11/28/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	9.45E0	ug/g dry	1.00E0	12/05/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	8.41E1	ug/g dry	1.50E1	11/28/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.50E1	ug/g dry	1.50E1	11/28/07	8D25002	AGG-IC-001
<b>HEIS No.</b>	<b>B1PN03</b>	<b>Lab ID: 0802020-01</b>					
16984-48-8	Fluoride	<2.06E0	ug/g dry	2.06E0	11/28/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.03E1	ug/g dry	1.03E1	11/28/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	7.50E0	ug/g dry	1.03E0	12/05/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	5.92E1	ug/g dry	1.54E1	11/28/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.54E1	ug/g dry	1.54E1	11/28/07	8D25002	AGG-IC-001
<b>HEIS No.</b>	<b>B1PN05</b>	<b>Lab ID: 0802020-03</b>					
16984-48-8	Fluoride	<2.17E0	ug/g dry	2.17E0	11/28/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.09E1	ug/g dry	1.09E1	11/28/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	5.58E0	ug/g dry	1.09E0	12/05/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	4.82E1	ug/g dry	1.63E1	11/28/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.63E1	ug/g dry	1.63E1	11/28/07	8D25002	AGG-IC-001
<b>HEIS No.</b>	<b>B1PN07</b>	<b>Lab ID: 0802020-05</b>					
16984-48-8	Fluoride	<2.01E0	ug/g dry	2.01E0	11/28/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.00E1	ug/g dry	1.00E1	11/28/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	5.72E0	ug/g dry	1.00E0	12/05/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	4.84E1	ug/g dry	1.51E1	11/28/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.51E1	ug/g dry	1.51E1	11/28/07	8D25002	AGG-IC-001
<b>HEIS No.</b>	<b>B1PN09</b>	<b>Lab ID: 0802020-09</b>					
16984-48-8	Fluoride	<2.02E0	ug/g dry	2.02E0	11/28/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.01E1	ug/g dry	1.01E1	11/28/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	4.94E0	ug/g dry	1.01E0	12/05/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	4.79E1	ug/g dry	1.51E1	11/28/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.51E1	ug/g dry	1.51E1	11/28/07	8D25002	AGG-IC-001
<b>HEIS No.</b>	<b>B1PN11</b>	<b>Lab ID: 0802020-11</b>					
16984-48-8	Fluoride	<2.06E0	ug/g dry	2.06E0	11/28/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.03E1	ug/g dry	1.03E1	11/28/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	8.91E0	ug/g dry	1.03E0	12/05/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	7.09E1	ug/g dry	1.54E1	11/28/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.54E1	ug/g dry	1.54E1	11/28/07	8D25002	AGG-IC-001
<b>HEIS No.</b>	<b>B1R100</b>	<b>Lab ID: 0802020-17</b>					
16984-48-8	Fluoride	<2.00E0	ug/g dry	2.00E0	11/28/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.00E1	ug/g dry	1.00E1	11/28/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	<1.00E1	ug/g dry	1.00E1	11/28/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	1.86E1	ug/g dry	1.50E1	11/28/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.50E1	ug/g dry	1.50E1	11/28/07	8D25002	AGG-IC-001

## Anions by Ion Chromatography

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B1PN17</b>	<b>Lab ID: 0802023-09</b>					
16984-48-8	Fluoride	<2.00E0	ug/g dry	2.00E0	11/28/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.00E1	ug/g dry	1.00E1	11/28/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	<1.00E0	ug/g dry	1.00E0	12/05/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	<1.50E1	ug/g dry	1.50E1	11/28/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.50E1	ug/g dry	1.50E1	11/28/07	8D25002	AGG-IC-001
<b>HEIS No.</b>	<b>B1PN18</b>	<b>Lab ID: 0802023-10</b>					
16984-48-8	Fluoride	<2.01E0	ug/g dry	2.01E0	11/28/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.00E1	ug/g dry	1.00E1	11/28/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	1.58E0	ug/g dry	1.00E0	12/05/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	1.52E1	ug/g dry	1.51E1	11/28/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.51E1	ug/g dry	1.51E1	11/28/07	8D25002	AGG-IC-001
<b>HEIS No.</b>	<b>B1PN25</b>	<b>Lab ID: 0802023-19</b>					
16984-48-8	Fluoride	<2.04E0	ug/g dry	2.04E0	11/28/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.02E1	ug/g dry	1.02E1	11/28/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	<1.02E0	ug/g dry	1.02E0	12/05/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	<1.53E1	ug/g dry	1.53E1	11/28/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.53E1	ug/g dry	1.53E1	11/28/07	8D25002	AGG-IC-001
<b>HEIS No.</b>	<b>B1PN26</b>	<b>Lab ID: 0802023-20</b>					
16984-48-8	Fluoride	<2.05E0	ug/g dry	2.05E0	11/29/07	8D25002	AGG-IC-001
14797-65-0	Nitrite	<1.02E1	ug/g dry	1.02E1	11/29/07	8D25002	AGG-IC-001
14797-55-8	Nitrate	1.29E0	ug/g dry	1.02E0	12/05/07	8D25002	AGG-IC-001
14808-79-8	Sulfate	<1.54E1	ug/g dry	1.54E1	11/29/07	8D25002	AGG-IC-001
14265-44-2	Phosphate	<1.54E1	ug/g dry	1.54E1	11/29/07	8D25002	AGG-IC-001

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B1PMY9</b>	<b>Lab ID: 0802019-01</b>					
7429-90-5	Aluminum	<9.08E-2	ug/g dry	9.08E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	2.02E1	ug/g dry	4.10E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.52E-2	ug/g dry	3.52E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.83E0	ug/g dry	2.46E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	4.90E0	ug/g dry	8.83E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.81E-2	ug/g dry	1.81E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.89E1	ug/g dry	7.08E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B1PN01</b>	<b>Lab ID: 0802019-03</b>					
7429-90-5	Aluminum	<8.58E-2	ug/g dry	8.58E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	2.12E1	ug/g dry	3.87E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-47-3	Chromium	<3.33E-2	ug/g dry	3.33E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	7.32E0	ug/g dry	2.33E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	5.11E0	ug/g dry	8.34E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.71E-2	ug/g dry	1.71E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.61E1	ug/g dry	6.69E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B1PN03</b>	<b>Lab ID: 0802020-01</b>					
7429-90-5	Aluminum	<8.82E-2	ug/g dry	8.82E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.78E1	ug/g dry	3.98E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.18E0	ug/g dry	2.39E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	4.27E0	ug/g dry	8.58E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.76E-2	ug/g dry	1.76E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.52E1	ug/g dry	6.88E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B1PN05</b>	<b>Lab ID: 0802020-03</b>					
7429-90-5	Aluminum	<9.31E-2	ug/g dry	9.31E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.44E1	ug/g dry	4.20E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.42E0	ug/g dry	2.53E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.54E0	ug/g dry	9.05E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.86E-2	ug/g dry	1.86E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.64E1	ug/g dry	7.26E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B1PN07</b>	<b>Lab ID: 0802020-05</b>					
7429-90-5	Aluminum	<8.61E-2	ug/g dry	8.61E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.49E1	ug/g dry	3.88E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	5.36E0	ug/g dry	2.34E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.67E0	ug/g dry	8.37E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.72E-2	ug/g dry	1.72E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.51E1	ug/g dry	6.71E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B1PN09</b>	<b>Lab ID: 0802020-09</b>					
7429-90-5	Aluminum	<8.65E-2	ug/g dry	8.65E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	1.44E1	ug/g dry	3.90E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	7.23E0	ug/g dry	2.35E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	3.81E0	ug/g dry	8.41E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.73E-2	ug/g dry	1.73E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	2.03E1	ug/g dry	6.74E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B1PN11</b>	<b>Lab ID: 0802020-11</b>					
7429-90-5	Aluminum	<8.83E-2	ug/g dry	8.83E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	2.44E1	ug/g dry	3.98E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	6.94E0	ug/g dry	2.39E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	6.47E0	ug/g dry	8.58E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B1PN11</b>	<b>Lab ID: 0802020-11</b>					
7439-96-5	Manganese	<1.76E-2	ug/g dry	1.76E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.28E1	ug/g dry	6.88E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B1R100</b>	<b>Lab ID: 0802020-17</b>					
7429-90-5	Aluminum	<8.60E-2	ug/g dry	8.60E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	7.90E0	ug/g dry	3.88E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	4.59E0	ug/g dry	2.33E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	2.10E0	ug/g dry	8.36E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.72E-2	ug/g dry	1.72E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	1.02E1	ug/g dry	6.71E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B1PN17</b>	<b>Lab ID: 0802023-09</b>					
7429-90-5	Aluminum	<8.59E-2	ug/g dry	8.59E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	6.65E0	ug/g dry	3.88E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.07E0	ug/g dry	2.33E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.77E0	ug/g dry	8.35E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.72E-2	ug/g dry	1.72E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	7.40E0	ug/g dry	6.70E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B1PN18</b>	<b>Lab ID: 0802023-10</b>					
7429-90-5	Aluminum	<8.61E-2	ug/g dry	8.61E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	6.47E0	ug/g dry	3.89E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.07E0	ug/g dry	2.34E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.70E0	ug/g dry	8.37E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.72E-2	ug/g dry	1.72E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	7.31E0	ug/g dry	6.72E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B1PN25</b>	<b>Lab ID: 0802023-19</b>					
7429-90-5	Aluminum	<8.76E-2	ug/g dry	8.76E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	7.47E0	ug/g dry	3.95E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.30E0	ug/g dry	2.38E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.95E0	ug/g dry	8.51E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.75E-2	ug/g dry	1.75E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	6.04E0	ug/g dry	6.83E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
<b>HEIS No.</b>	<b>B1PN26</b>	<b>Lab ID: 0802023-20</b>					
7429-90-5	Aluminum	<8.79E-2	ug/g dry	8.79E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-70-2	Calcium	6.92E0	ug/g dry	3.96E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-09-7	Potassium	3.27E0	ug/g dry	2.39E0	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-95-4	Magnesium	1.80E0	ug/g dry	8.54E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7439-96-5	Manganese	<1.75E-2	ug/g dry	1.75E-2	12/05/07	8E01004	PNNL-AGG-ICP-AES
7440-23-5	Sodium	6.40E0	ug/g dry	6.85E-1	12/05/07	8E01004	PNNL-AGG-ICP-AES

## Radionuclides by ICP-MS/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B1PMY9</b>	<b>Lab ID: 0802019-01</b>					
14133-76-7	Technetium-99	<9.74E-6	ug/g dry	9.74E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	3.71E-4	ug/g dry	2.39E-4	11/30/07	8D22006	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN01</b>	<b>Lab ID: 0802019-03</b>					
14133-76-7	Technetium-99	9.21E-6	ug/g dry	9.20E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	3.29E-4	ug/g dry	2.25E-4	11/30/07	8D22006	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN03</b>	<b>Lab ID: 0802020-01</b>					
14133-76-7	Technetium-99	<9.46E-6	ug/g dry	9.46E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	<2.32E-4	ug/g dry	2.32E-4	11/30/07	8D22006	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN05</b>	<b>Lab ID: 0802020-03</b>					
14133-76-7	Technetium-99	<9.98E-6	ug/g dry	9.98E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	<2.45E-4	ug/g dry	2.45E-4	11/30/07	8D22006	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN07</b>	<b>Lab ID: 0802020-05</b>					
14133-76-7	Technetium-99	<9.23E-6	ug/g dry	9.23E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	<2.26E-4	ug/g dry	2.26E-4	11/30/07	8D22006	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN09</b>	<b>Lab ID: 0802020-09</b>					
14133-76-7	Technetium-99	9.65E-6	ug/g dry	9.27E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	<2.27E-4	ug/g dry	2.27E-4	11/30/07	8D22006	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN11</b>	<b>Lab ID: 0802020-11</b>					
14133-76-7	Technetium-99	1.01E-5	ug/g dry	9.46E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	<2.32E-4	ug/g dry	2.32E-4	11/30/07	8D22006	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1R100</b>	<b>Lab ID: 0802020-17</b>					
14133-76-7	Technetium-99	<9.22E-6	ug/g dry	9.22E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	<2.26E-4	ug/g dry	2.26E-4	11/30/07	8D22006	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN17</b>	<b>Lab ID: 0802023-09</b>					
14133-76-7	Technetium-99	1.02E-5	ug/g dry	9.21E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	<2.26E-4	ug/g dry	2.26E-4	11/30/07	8D22006	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN18</b>	<b>Lab ID: 0802023-10</b>					
14133-76-7	Technetium-99	<9.24E-6	ug/g dry	9.24E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	<2.26E-4	ug/g dry	2.26E-4	11/30/07	8D22006	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN25</b>	<b>Lab ID: 0802023-19</b>					
14133-76-7	Technetium-99	<9.39E-6	ug/g dry	9.39E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	<2.30E-4	ug/g dry	2.30E-4	11/30/07	8D22006	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN26</b>	<b>Lab ID: 0802023-20</b>					
14133-76-7	Technetium-99	1.08E-5	ug/g dry	9.43E-6	11/30/07	8D22006	PNNL-AGG-415
	Uranium 238	<2.31E-4	ug/g dry	2.31E-4	11/30/07	8D22006	PNNL-AGG-415

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
<b>HEIS No.</b>	<b>B1PMY9</b>	<b>Lab ID: 0802019-01</b>					
14687-58-2	Selenium	<1.17E-2	ug/g dry	1.17E-2	12/03/07	8D22007	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN01</b>	<b>Lab ID: 0802019-03</b>					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	12/03/07	8D22007	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN03</b>	<b>Lab ID: 0802020-01</b>					
14687-58-2	Selenium	<1.14E-2	ug/g dry	1.14E-2	12/03/07	8D22007	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN05</b>	<b>Lab ID: 0802020-03</b>					
14687-58-2	Selenium	<1.20E-2	ug/g dry	1.20E-2	12/03/07	8D22007	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN07</b>	<b>Lab ID: 0802020-05</b>					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	12/03/07	8D22007	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN09</b>	<b>Lab ID: 0802020-09</b>					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	12/03/07	8D22007	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN11</b>	<b>Lab ID: 0802020-11</b>					
14687-58-2	Selenium	<1.14E-2	ug/g dry	1.14E-2	12/03/07	8D22007	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1R100</b>	<b>Lab ID: 0802020-17</b>					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	12/03/07	8D22007	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN17</b>	<b>Lab ID: 0802023-09</b>					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	12/03/07	8D22007	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN18</b>	<b>Lab ID: 0802023-10</b>					
14687-58-2	Selenium	<1.11E-2	ug/g dry	1.11E-2	12/03/07	8D22007	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN25</b>	<b>Lab ID: 0802023-19</b>					
14687-58-2	Selenium	<1.13E-2	ug/g dry	1.13E-2	12/03/07	8D22007	PNNL-AGG-415
<b>HEIS No.</b>	<b>B1PN26</b>	<b>Lab ID: 0802023-20</b>					
14687-58-2	Selenium	<1.13E-2	ug/g dry	1.13E-2	12/03/07	8D22007	PNNL-AGG-415



# Wet Chemistry - Quality Control

## Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 8D07003 - 1:1 Water Extract (pH_EC_Alk)</b>									
<b>Blank (8D07003-BLK1)</b>					Prepared: 11/27/07 Analyzed: 11/29/07				
Alkalinity as CaCO <sub>3</sub>	<2.35E1	2.35E1	ug/g wet						
Specific Conductance (EC)	<1.00E-2	1.00E-2	mS/cm						
<b>Duplicate (8D07003-DUP1)</b>					Source: 0802019-03 Prepared: 11/27/07 Analyzed: 11/28/07				
Specific Conductance (EC)	3.20E-1	1.00E-2	mS/cm		3.22E-1		0.623	35	
Alkalinity as CaCO <sub>3</sub>	3.55E1	2.39E1	ug/g dry		4.18E1		16.3	35	
<b>Batch 8D30002 - 1:1 Water Extract (pH_EC_Alk)</b>									
<b>Duplicate (8D30002-DUP1)</b>					Source: 0802019-03 Prepared & Analyzed: 11/28/07				
pH	7.56E0	N/A	pH Units		7.23E0		4.46	35	
<b>Duplicate (8D30002-DUP2)</b>					Source: 0802020-01 Prepared & Analyzed: 11/28/07				
pH	7.45E0	N/A	pH Units		7.45E0		0.00	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
<b>Batch 8D25002 - 1:1 Water Extract (IC)</b>										
<b>Blank (8D25002-BLK1)</b>				Prepared: 11/28/07 Analyzed: 11/29/07						
Fluoride	<2.00E0	2.00E0	ug/g wet							
Nitrite	<1.00E1	1.00E1	"							
Nitrate	<1.00E1	1.00E1	"							
Sulfate	<1.50E1	1.50E1	"							
Phosphate	<1.50E1	1.50E1	"							
<b>LCS (8D25002-BS1)</b>				Prepared: 11/28/07 Analyzed: 11/29/07						
Fluoride	1.98E0	2.00E-1	ug/g wet	2.00E0		99.2	80-120			
Nitrite	1.02E1	1.00E0	"	1.00E1		102	80-120			
Nitrate	9.75E0	1.00E0	"	1.00E1		97.2	80-120			
Sulfate	1.39E1	1.50E0	"	1.51E1		92.5	80-120			
Phosphate	1.41E1	1.50E0	"	1.51E1		93.5	80-120			
<b>Duplicate (8D25002-DUP1)</b>				<b>Source: 0802019-03</b>		Prepared: 11/28/07 Analyzed: 11/29/07				
Fluoride	<2.03E0	2.03E0	ug/g dry		ND					35
Nitrite	<1.02E1	1.02E1	"		ND					35
Nitrate	<1.02E1	1.02E1	"		9.45E0					35
Sulfate	9.03E1	1.52E1	"		8.41E1			7.11		35
Phosphate	<1.52E1	1.52E1	"		ND					35
<b>Post Spike (8D25002-PS1)</b>				<b>Source: 0802023-19</b>		Prepared & Analyzed: 11/28/07				
Fluoride	4.13E-1	N/A	ug/mL	4.00E-1	ND	105	75-125			
Nitrite	2.04E0	N/A	"	2.00E0	ND	102	75-125			
Nitrate	2.13E1	N/A	"	2.00E1	8.06E-1	102	75-125			
Sulfate	4.01E0	N/A	"	3.00E0	1.43E0	86.1	75-125			
Phosphate	3.04E0	N/A	"	3.00E0	3.79E-1	88.6	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
<b>Batch 8E01004 - 1:1 Water Extract (ICP/ICPMS)</b>										
<b>Blank (8E01004-BLK1)</b>				Prepared & Analyzed: 12/05/07						
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	"							
<b>LCS (8E01004-BS1)</b>				Prepared & Analyzed: 12/05/07						
Aluminum	4.41E0	8.58E-2	ug/g wet	5.00E0		88.1	80-120			
Calcium	4.68E0	3.87E-1	"	5.00E0		93.7	80-120			
Chromium	4.70E0	3.33E-2	"	5.00E0		94.1	80-120			
Potassium	4.60E1	2.33E0	"	5.00E1		91.9	80-120			
Magnesium	4.52E0	8.34E-2	"	5.00E0		90.3	80-120			
Manganese	4.76E0	1.71E-2	"	5.00E0		95.3	80-120			
Sodium	4.58E0	6.69E-1	"	5.00E0		91.6	80-120			
<b>Duplicate (8E01004-DUP1)</b>				<b>Source: 0802019-03</b>		Prepared & Analyzed: 12/05/07				
Aluminum	<8.72E-2	8.72E-2	ug/g dry		ND					35
Calcium	2.42E1	3.93E-1	"		2.12E1			13.0		35
Chromium	<3.38E-2	3.38E-2	"		ND					35
Potassium	6.39E0	2.37E0	"		7.32E0			13.5		35
Magnesium	5.40E0	8.47E-2	"		5.11E0			5.64		35
Manganese	<1.74E-2	1.74E-2	"		ND					35
Sodium	2.33E1	6.80E-1	"		2.61E1			11.3		35
<b>Post Spike (8E01004-PS1)</b>				<b>Source: 0802020-05</b>		Prepared & Analyzed: 12/05/07				
Aluminum	7.88E2	N/A	ug/L	8.33E2	1.46E1	92.8	75-125			
Calcium	5.77E3	N/A	"	8.33E2	4.95E3	98.4	75-125			
Potassium	3.92E3	N/A	"	2.08E3	1.78E3	102	75-125			
Magnesium	2.03E3	N/A	"	8.33E2	1.22E3	97.2	75-125			
Manganese	4.33E2	N/A	"	4.17E2	1.05E0	103	75-125			
Sodium	6.07E3	N/A	"	8.33E2	5.02E3	126	75-125			

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

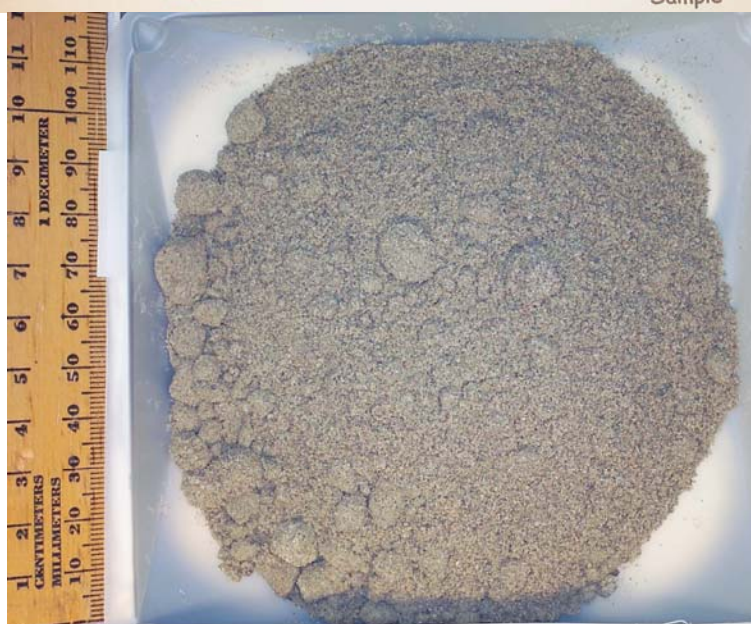
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 8D22006 - 1:1 Water Extract (ICP/ICPMS)</b>										
<b>Blank (8D22006-BLK1)</b>				Prepared & Analyzed: 11/30/07						
Technetium-99	<9.20E-6	9.20E-6	ug/g wet							
Uranium 238	<2.25E-4	2.25E-4	"							
<b>Duplicate (8D22006-DUP1)</b>				<b>Source: 0802019-03</b>		Prepared & Analyzed: 11/30/07				
Technetium-99	<9.35E-6	9.35E-6	ug/g dry		9.21E-6				35	
Uranium 238	3.46E-4	2.29E-4	"		3.29E-4			5.06	35	
<b>Post Spike (8D22006-PS1)</b>				<b>Source: 0802019-03</b>		Prepared & Analyzed: 11/30/07				
Technetium-99	5.05E-1	N/A	ug/L	5.00E-1	4.61E-3	100	75-125			
Uranium 238	6.70E-1	N/A	"	5.00E-1	1.64E-1	101	75-125			

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

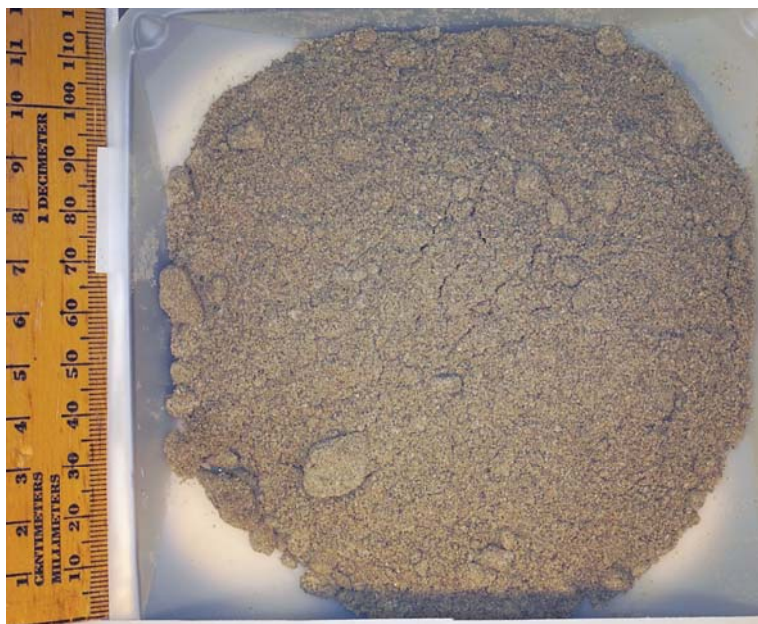
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 8D22007 - 1:1 Water Extract (ICP/ICPMS)</b>										
<b>Blank (8D22007-BLK1)</b>				Prepared & Analyzed: 12/03/07						
Selenium	<1.10E-2	1.10E-2	ug/g wet							
<b>LCS (8D22007-BS1)</b>				Prepared & Analyzed: 12/03/07						
Selenium	4.20E0	1.10E0	ug/g wet	5.00E0		84.0	80-120			
<b>Duplicate (8D22007-DUP1)</b>				<b>Source: 0802019-03</b>		Prepared & Analyzed: 12/03/07				
Selenium	<1.12E-2	1.12E-2	ug/g dry		ND				35	



C5852 B1PN29 335.5 ft Grab Sample



C5852 B1PMY9 250 ft Grab Sample



C5852 B1PN00 252.5 ft Grab Sample



C5852 B1PN01 255 ft Grab Sample





C5852 B1PN02 257.5 ft Grab Sample

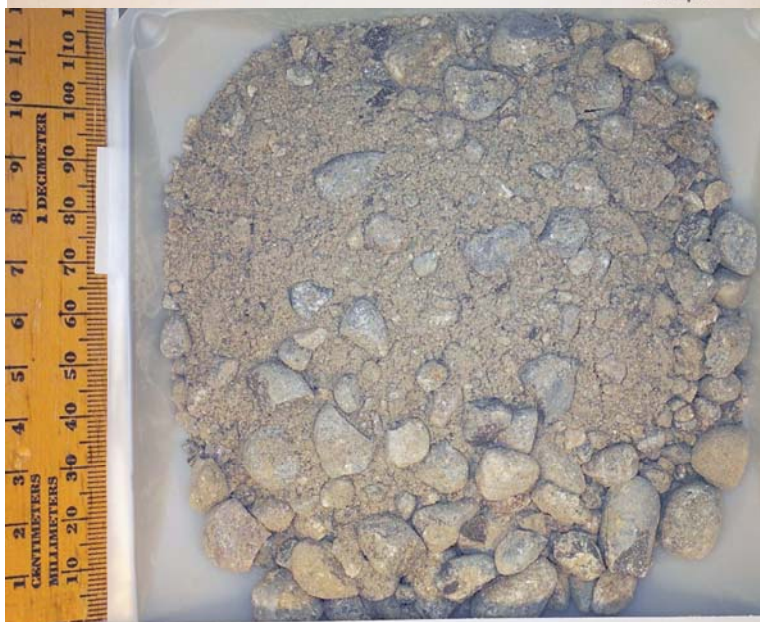


C5852 B1PN03 260 ft Grab Sample

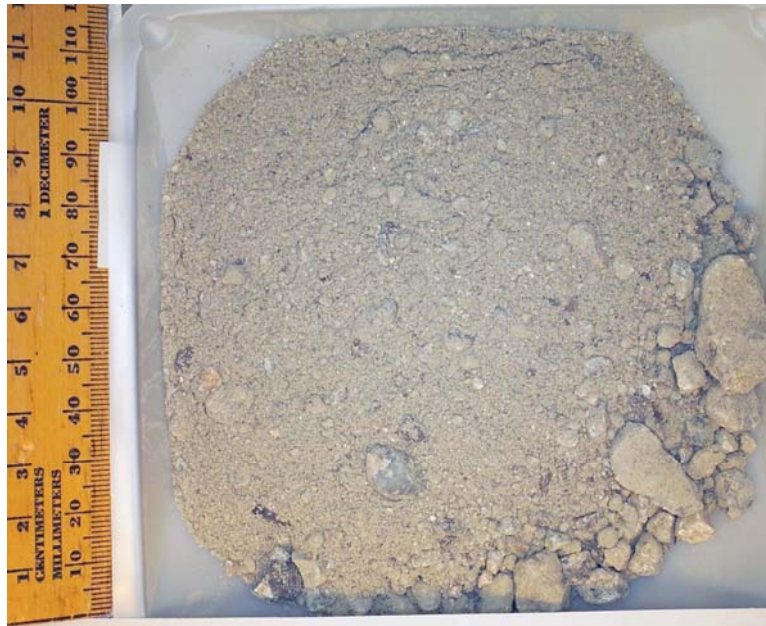




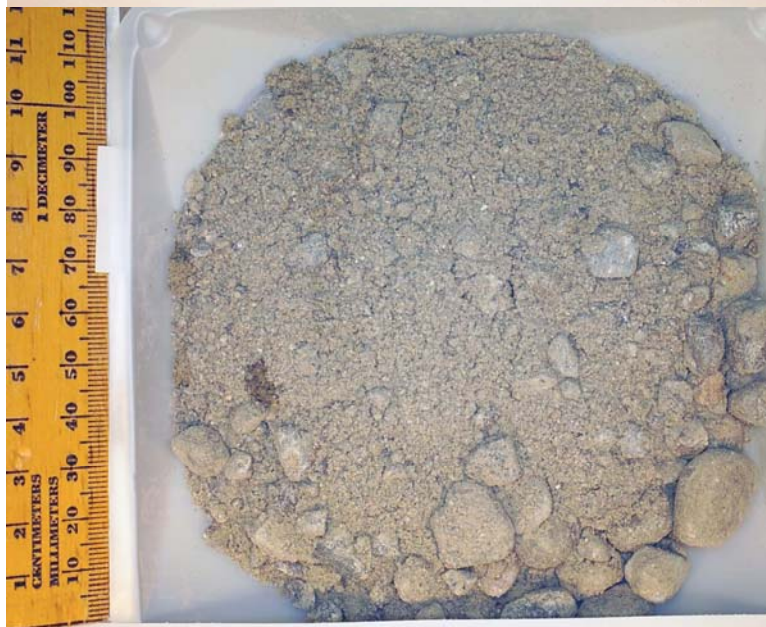
C5852 B1PN04 262.5 ft Grab Sample



C5852 B1PN05 265 ft Grab Sample



C5852 B1PN06 267.5 ft Grab Sample



C5852 B1PN07 270 ft Grab Sample





C5852 B1PN08 273.5 ft Grab Sample



C5852 B1PN09 275 ft Grab Sample



C5852 B1PN10 277.5 ft Grab Sample



C5852 B1PN11 279.5 ft Grab Sample





C5852 B1R0Y7 284.5 ft Grab Sample



C5852 B1R0Y8 286.5 ft Grab Sample



C5852 B1R0Y9 289.5 ft Grab Sample



C5852 B1R100 292 ft Grab Sample





C5852 B1PN12 295 ft Grab Sample



C5852 B1PN13 297 ft Grab Sample



C5852 B1PN14 300 ft Grab Sample



C5852 B1PN15 302 ft Grab Sample





C5852 B1PN16 305 ft Grab Sample



C5852 B1PN17 306.5 ft Grab Sample



C5852 B1PN18 310.5 ft Grab Sample



C5852 B1PN19 311.4 ft Grab Sample

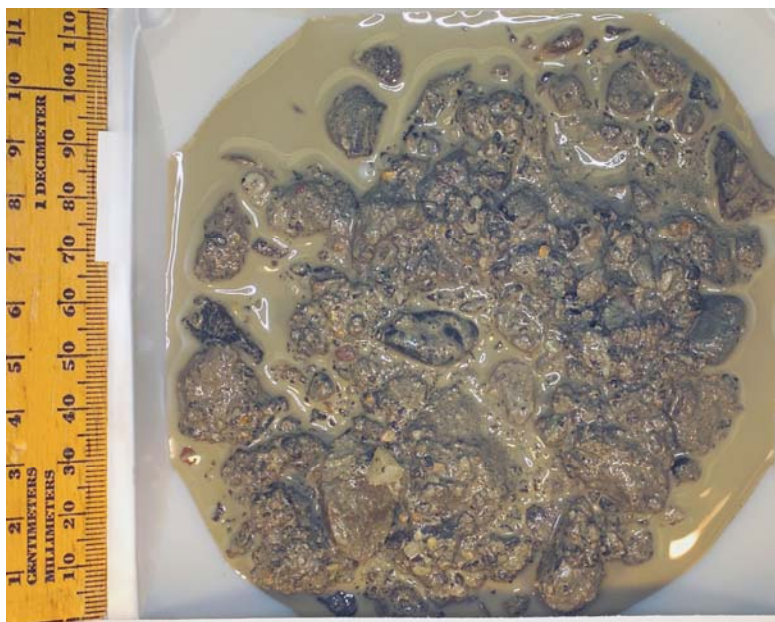




C5852 B1PN20 315 ft Grab Sample



C5852 B1PN21 317.5 ft Grab Sample



C5852 B1PN22 319.5 ft Grab Sample



C5852 B1PN23 322 ft Grab Sample





C5852 B1PN24 324.2 ft Grab Sample



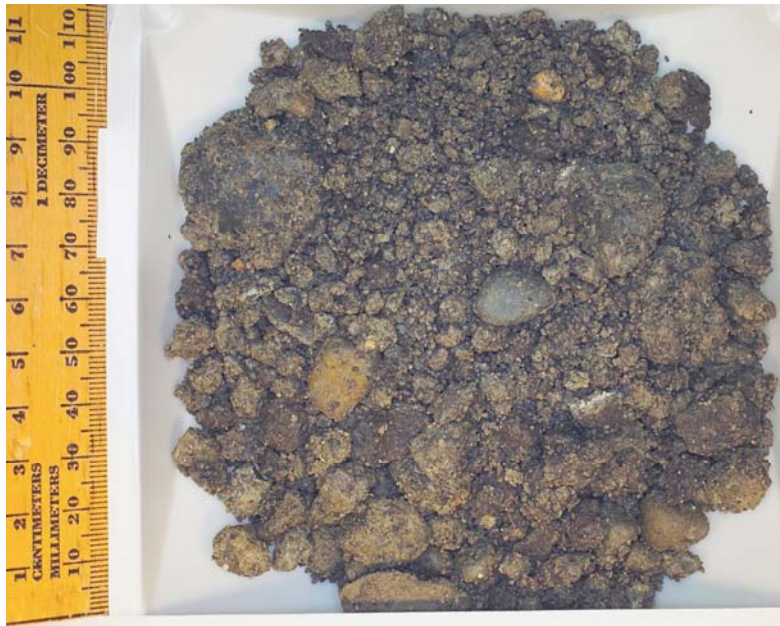
C5852 B1PN25 327 ft Grab Sample



C5852 B1PN26 330 ft Grab Sample



C5852 B1PN27 332 ft Grab Sample



C5852 B1PN28 334.5 ft Grab Sample



**COLLECTOR**  
NCO Sampler

**SAMPLING LOCATION**  
C5852, I-1  
ICE CHEST NO.

**Bob Julian**  
Fluor Hanford

**SHIPPED TO**

PNNL Building 325

**COMPANY CONTACT**  
Trent, SJ

**TELEPHONE NO.**  
373-5869

**PROJECT COORDINATOR**  
TRENT, SJ

**PRICE CODE**  
8N

**DATA TURNAROUND**  
45 Days / 45 Days

**PROJECT DESIGNATION**

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

**FIELD LOGBOOK NO.**

COA

17NF-W-575-2

123262E510

**METHOD OF SHIPMENT**

GOVERNMENT VEHICLE

**OFFSITE PROPERTY NO.**

N/A

**BILL OF LADING/AIR BILL NO.**

N/A

**MATRIX\***

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

**PRESERVATION**

None

None

**TYPE OF CONTAINER**

G/P

Moisture Resistant Cont

**NO. OF CONTAINER(S)**

1

1

**VOLUME**

1L

200g

**SAMPLE ANALYSIS**

SEE ITEM (1) IN SPECIAL INSTRUCTIONS  
Moisture Content - D2216.

**SAMPLE NO.**

**MATRIX\***

B1PMY9 SOIL

**SAMPLE DATE**

10/11/07

1350

**CHAIN OF POSSESSION**

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

**SPECIAL INSTRUCTIONS**

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

**LABORATORY SECTION**

RECEIVED BY

TITLE

DATE/TIME

**FINAL SAMPLE DISPOSITION**

DISPOSAL METHOD

DISPOSED BY

DATE/TIME



## COLLECTOR

NCO Sampler

Bob Julian

## SAMPLING LOCATION

Fluor Hanford

C5852, 1-2

252.5'

## ICE CHEST NO.

## SHIPPED TO

PNNL Building 325

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

PRICE CODE 8N

DATA  
TURNAROUND

## SAF NO.

F07-069

AIR QUALITY

45 Days /  
45 Days

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## FIELD LOGBOOK NO.

COA

123362ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\* POSSIBLE SAMPLE HAZARDS/ REMARKS

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

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL INSTRUCTIONS

Moisture  
Content - D2216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE SAMPLE TIME

B1PN00

SOIL

10/11/07 1412

✓

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

## RELINQUISHED BY/ REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

(1)Gross Alpha; Gross Beta; 1-129 by ICPMS {Iodine-129} Tc-99 by ICPMS

## RELINQUISHED BY/ REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

{Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP

## RELINQUISHED BY/ REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC -

## RELINQUISHED BY/ REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) -

## RELINQUISHED BY/ REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

TITLE

## RELINQUISHED BY/ REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

DATE/TIME

## RELINQUISHED BY/ REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

DATE/TIME

## RELINQUISHED BY/ REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

DATE/TIME

## LABORATORY SECTION

## RECEIVED BY

TITLE

DATE/TIME

## FINAL SAMPLE DISPOSITION

## DISPOSAL METHOD

## DISPOSED BY

DATE/TIME

**COLLECTOR** Bob Julian  
Fluor Hanford  
NCO Sampler

**COMPANY CONTACT**  
Trent, SJ

**TELEPHONE NO.**  
373-5869

**PROJECT COORDINATOR**  
TRENT, SJ

**PRICE CODE** 8N

**DATA**  
TURNAROUND

**SAMPLING LOCATION**

255

**PROJECT DESIGNATION**  
200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

**FIELD LOGBOOK NO.**  
17215-N-575-2

**SAF NO.**  
F07-069

**AIR QUALITY**

45 Days /  
45 Days

**ICE CHEST NO.**

**OFFSITE PROPERTY NO.**

**COA**  
123262E510

**METHOD OF SHIPMENT**  
GOVERNMENT VEHICLE

**SHIPPED TO**

PNNL Building 325

N/A

**BILL OF LADING/AIR BILL NO.**  
N/A

**MATRIX\*** **POSSIBLE SAMPLE HAZARDS/ REMARKS**

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

**PRESERVATION**

None

None

**TYPE OF CONTAINER**

G/P

Moisture  
Resistant Cont

**NO. OF CONTAINER(S)**

1

1

**VOLUME**

1L

200g

**SPECIAL HANDLING AND/OR STORAGE**

SEE ITEM (1) IN Moisture  
SPECIAL INSTRUCTIONS Content - D2216.

**SAMPLE NO.**

**MATRIX\***

**SAMPLE DATE** **SAMPLE TIME**

B1PN01

SOIL

10/11/07 1432

**CHAIN OF POSSESSION**

**SIGN/ PRINT NAMES**

**SPECIAL INSTRUCTIONS**

RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM

RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN

DATE/TIME  
DATE/TIME  
DATE/TIME  
DATE/TIME

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS  
{Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP  
Metals - 6020 (TAL); 310.1\_AKALINITY: Alkalinity (1); IC Anions - 300.0; TIC -  
415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) -  
9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

**LABORATORY**

**SECTION**

RECEIVED BY

TITLE

DATE/TIME

**FINAL SAMPLE** **DISPOSAL METHOD**  
**DISPOSITION**

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

73148

**COLLECTOR**  
NCO Sampler  
**Bob Julian**  
Fluor Hanford

**COMPANY CONTACT**  
Trent, SJ

**TELEPHONE NO.**  
373-5869

**PROJECT COORDINATOR**  
TRENT, SJ

**PRICE CODE**  
8N

**DATA TURNAROUND**  
45 Days /  
45 Days

**SAMPLING LOCATION**  
CS852, 1-4  
**ICE CHEST NO.**  
257.5'

**PROJECT DESIGNATION**  
200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

**FIELD LOGBOOK NO.**  
7405-N-5-75-2

**SAF NO.**  
F07-069

**AIR QUALITY**

**GOVERNMENT VEHICLE**

**SHIPPED TO**  
PNNL Building 325

**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  
SF=Sediment  
T=Tissue  
V=Vegetation  
W=Water  
WI=Wipe  
X=Other

**POSSIBLE SAMPLE HAZARDS/ REMARKS**  
Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

PRESERVATION	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1L	200g

SEE ITEM (1) IN SPECIAL INSTRUCTIONS

Moisture Content - 02216.

**SAMPLE NO.**  
B1PN02

**MATRIX\***  
SOIL

**SAMPLE DATE**  
10/11/07

**SAMPLE TIME**  
1517

**CHAIN OF POSSESSION**

**SIGN/ PRINT NAMES**

**SPECIAL INSTRUCTIONS**

RELINQUISHED BY/REMOVED FROM  
RECEIVED BY/STORED IN  
DATE/TIME  
10-11-07 1530

RECEIVED BY/STORED IN  
DATE/TIME  
10-11-07 1530

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

RELINQUISHED BY/REMOVED FROM

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

RECEIVED BY/STORED IN

DATE/TIME

**LABORATORY SECTION**  
RECEIVED BY  
DISPOSAL METHOD

**TITLE**  
DATE/TIME  
DISPOSED BY  
DATE/TIME

## DATA TURNAROUND

45 Days /  
45 Days

**BILL OF LADING/AIR BILL NO.**

N/A

### SPECIAL INSTRUCTIONS

Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

TITLE	DATE/TIME
DISPOSED BY	DATE/TIME

## COLLECTOR

NCO Sampler

D. PARCHEN

## COMPANY CONTACT

Trent, NJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, NJ

## PRICE CODE

8N

## DATA

TURNAROUND

## SAMPLING LOCATION

C852, I-6

262.5'

## SAF NO.

F07-069

## AIR QUALITY

45 Days /  
45 Days

## ICE CHEST NO.

## SHIPPED TO

PNNL Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

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

## POSSIBLE SAMPLE HAZARDS/REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont.

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS  
Moisture  
Content - D2216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE SAMPLE TIME

B1PN04

SOIL

10/2/02 0822

## CHAIN OF POSSESSION

## SIGN/PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM  
D. E. PARCHEN

DATE/TIME  
10-13-02RECEIVED BY/STORED IN  
NO 745DATE/TIME  
10-12-02

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN  
Kevin Patterson

DATE/TIME

RELINQUISHED BY/REMOVED FROM  
Kevin Patterson

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY SECTION

RECEIVED BY

## TITLE

DATE/TIME

## FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME



COLLECTOR  
Fluor Hanford  
NCO Sampler  
D. E. PARCHEN

## SAMPLING LOCATION

CS852, 1-8  
267.5

ICE CHEST NO.

## SHIPPED TO

PNL Building 325

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## FIELD LOGBOOK NO.

HNS-N-575-2

## OFFSITE PROPERTY NO.

N/A

## PROJECT COORDINATOR

Trent, SJ

## PRICE CODE

8N

DATA  
TURNAROUND45 Days /  
45 Days

## AIR QUALITY

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\* POSSIBLE SAMPLE HAZARDS/ REMARKS

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

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

## SAMPLE NO.

SOIL

## MATRIX\*

## SAMPLE DATE SAMPLE TIME

10/2/07 0953

✓

✓

## CHAIN OF POSSESSION

Fluor Hanford  
D. E. PARCHEN  
RELINQUISHED BY/REMOVED FROM

RELINQUISHED BY/REMOVED FROM

RELINQUISHED BY/REMOVED FROM  
Kevin Patterson  
RELINQUISHED BY/REMOVED FROM

RELINQUISHED BY/REMOVED FROM

RELINQUISHED BY/REMOVED FROM

RELINQUISHED BY/REMOVED FROM

LABORATORY RECEIVED BY

SECTION

FINAL SAMPLE  
DISPOSITION

## SIGN/ PRINT NAMES

## RECEIVED BY/STORED IN

NO 745 RELF

in Patterson

RECEIVED BY/STORED IN

RECEIVED BY/STORED IN

RECEIVED BY/STORED IN

RECEIVED BY/STORED IN

RECEIVED BY/STORED IN

RECEIVED BY/STORED IN

RECEIVED BY/STORED IN

RECEIVED BY/STORED IN

## SPECIAL INSTRUCTIONS

(1) Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS  
{Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP  
Metals - 6020 (TAL); 310.1 ALKALINITY; Alkalinity (1); IC Anions - 300.0; TIC -  
415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) -  
9045;

## TITLE

## DATE/TIME

## DISPOSED BY

## DATE/TIME

**COLLECTOR** Fluor Hanford  
NCO Sampler **J. E. PARCHEM**

**SAMPLING LOCATION**

270

CS852, 1-9  
ICE CHEST NO.

**SHIPPED TO**

PNL Building 325

**COMPANY CONTACT**

Trent, SJ

**TELEPHONE NO.**

373-5869

**PROJECT DESIGNATION**

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

**FIELD LOGBOOK NO.**

COA

HNF-N-575-2

123262ES10

**OFFSITE PROPERTY NO.**

N/A

**PROJECT COORDINATOR**

TRENT, SJ

**PRICE CODE**

8N

**AIR QUALITY**

**DATA**  
TURNAROUND  
45 Days /  
45 Days

**SAF NO.**

F07-069

**METHOD OF SHIPMENT**

GOVERNMENT VEHICLE

**BILL OF LADING/AIR BILL NO.**

N/A

**Possible Sample Hazards/ Remarks**

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

**PRESERVATION**

None

None

**TYPE OF CONTAINER**

G/P

Moisture  
Resistant Cont**NO. OF CONTAINER(S)**

1

1

**VOLUME**

1L

200g

**SPECIAL HANDLING AND/OR STORAGE****SAMPLE ANALYSIS**

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

**SAMPLE NO.****MATRIX\*****SAMPLE DATE****SAMPLE TIME**

B1PN07

SOIL

10/12/07 1033

✓

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

RELINQUISHED BY/REMOVED FROM

Fluor Hanford

Dmy

DATE/TIME

10-12-07

RECEIVED BY/STORED IN

M6745 RFP

DATE/TIME

10-12-07

RELINQUISHED BY/REMOVED FROM

Kevin Patterson

Dmy

DATE/TIME

10/12/07 0650

RECEIVED BY/STORED IN

Kevin Patterson

DATE/TIME

10/17/07 0650

RELINQUISHED BY/REMOVED FROM

Kevin Patterson

Dmy

DATE/TIME

OCT 17 2007 0855

RECEIVED BY/STORED IN

Kevin Patterson

DATE/TIME

OCT 17 2007 0855

RELINQUISHED BY/REMOVED FROM

Kevin Patterson

Dmy

DATE/TIME

OCT 17 2007 0855

RECEIVED BY/STORED IN

Kevin Patterson

DATE/TIME

OCT 17 2007 0855

RELINQUISHED BY/REMOVED FROM

Kevin Patterson

Dmy

DATE/TIME

OCT 17 2007 0855

RECEIVED BY/STORED IN

Kevin Patterson

DATE/TIME

OCT 17 2007 0855

**LABORATORY****SECTION**

RECEIVED BY

TITLE

DATE/TIME

**FINAL SAMPLE****DISPOSITION**

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

2872

A-6003-618(01/06)



## COLLECTOR

NCO Sampler

D. Parcken

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND

## SAMPLING LOCATION

C5852, 1-10

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## SAF NO.

F07-069

## AIR QUALITY

45 Days /  
45 Days

## ICE CHEST NO.

## FIELD LOGBOOK NO.

HN-10-575-2

## COA

123262E510

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNM Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

## TYPE OF CONTAINER

Split Spoon  
Liner

## NO. OF CONTAINER(S)

2

## VOLUME

1000g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1PMX8

SOIL

10-12-07 1130

X

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM  
D. ParckenDATE/TIME  
10-12-07 1600RECEIVED BY/STORED IN  
NO 745 R.F. 44DATE/TIME  
10-12-07 1600

(1) Density; Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil Cation Exchange Capacity - 9080; Generic Testing; SPECIAL STUDIES (No CAS) KD - Batch;

RELINQUISHED BY/REMOVED FROM  
Kevin PattersonDATE/TIME  
10-12-07 0650RECEIVED BY/STORED IN  
Kevin PattersonDATE/TIME  
10-12-07 0650RELINQUISHED BY/REMOVED FROM  
Kevin PattersonDATE/TIME  
OCT 17 2007 0855RECEIVED BY/STORED IN  
Kevin PattersonDATE/TIME  
OCT 17 2007 0855

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY  
SECTION

RECEIVED BY

## TITLE

DATE/TIME

FINAL SAMPLE  
DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

2323 2324

## COLLECTOR

NCO Sampler

Fluor Hanford

## SAMPLING LOCATION

J.E. PARCHEM

CSS52, I-11

273.5 - 276

## ICE CHEST NO.

## SHIPPED TO

PNNL Building 325

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

## DATA

TURNAROUND

## AIR QUALITY

45 Days /

45 Days

## SAF NO.

F07-069

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## BILL OF LADING/AIR BILL NO.

N/A

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## FIELD LOGBOOK NO.

HNF-00-575-2

## OFFSITE PROPERTY NO.

N/A

COAP 4-25-01

133862

## MATRIX\*

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

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

## TYPE OF CONTAINER

Split Spoon  
Liner

## NO. OF CONTAINER(S)

4

## VOLUME

1000g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1PMY2

SOIL

10/12/07 1415

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY

RECEIVED BY

## TITLE

## DATE/TIME

## SECTION

## FINAL SAMPLE

DISPOSAL METHOD

DISPOSED BY

## DATE/TIME

(1) Density: Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil Cation Exchange Capacity - 9080; Generic Testing; SPECIAL STUDIES (No CAS) KD - Batch;

**COLLECTOR**  
Fluor Hanford  
NCO Sampler  
**D. E. PARCHEN**

**COMPANY CONTACT**  
Trent, SI  
373-5869

**TELEPHONE NO.**

**PROJECT COORDINATOR**  
TRENT, SI

**PRICE CODE**  
8N

**DATA TURNAROUND**  
45 Days / 45 Days

**SAMPLING LOCATION**  
CS852, I-13  
**273.5**

**PROJECT DESIGNATION**  
200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet  
**FIELD LOGBOOK NO.**  
HNL-20.575-2  
COA  
123262ES10

**SAF NO.**  
F07-069  
**AIR QUALITY**

**METHOD OF SHIPMENT**  
GOVERNMENT VEHICLE  
**BILL OF LADING/AIR BILL NO.**  
N/A

**SHIPPED TO**

PNNL Building 325

N/A

N/A

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

**POSSIBLE SAMPLE HAZARDS/ REMARKS**  
Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

**PRESERVATION**  
None

**TYPE OF CONTAINER**  
G/P

**NO. OF CONTAINER(S)**  
1

**VOLUME**  
1L

**SAMPLE ANALYSIS**  
SEE ITEM (1) IN SPECIAL INSTRUCTIONS  
Moisture Content - D2216;

**SPECIAL INSTRUCTIONS**  
(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 60108 (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

**SAMPLE NO.**

B1PN08

SOIL

**MATRIX\***

**SAMPLE DATE**  
10/12/07 1345

**SAMPLE TIME**

**CHAIN OF POSSESSION**

**SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM  
Fluor Hanford  
**D. E. PARCHEN**  
RELINQUISHED BY/REMOVED FROM  
Fluor Hanford  
**Kevin Patterson**

DATE/TIME  
10-12-07  
DATE/TIME  
10/12/07 0650  
OCT 17 2007  
OCT 17 2007

RECEIVED BY/STORED IN  
MA 745 R.F. H  
RECEIVED BY/STORED IN  
Kevin Patterson  
RECEIVED BY/STORED IN  
Kevin Patterson

DATE/TIME  
10-12-07  
DATE/TIME  
10/14/07 0650  
OCT 17 2007  
OCT 17 2007

RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM

DATE/TIME  
DATE/TIME  
DATE/TIME

RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN

DATE/TIME  
DATE/TIME  
DATE/TIME

**LABORATORY SECTION**  
RECEIVED BY  
DISPOSAL METHOD

**TITLE**  
DISPOSED BY  
DATE/TIME

COLLECTOR Fluor Hanford  
NCO Sampler D. E. PARCHEN

COMPANY CONTACT  
Trent, SJ

TELEPHONE NO.  
373-5869

PROJECT COORDINATOR  
TRENT, SJ

PRICE CODE  
8N

DATA  
TURNAROUND  
45 Days /  
45 Days

## SAMPLING LOCATION

CS852, I-14

0751

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

SAF NO.  
F07-069

AIR QUALITY

## ICE CHEST NO.

FIELD LOGBOOK NO.

COA

METHOD OF SHIPMENT  
GOVERNMENT VEHICLE

## SHIPPED TO

PNL Building 325

OFFSITE PROPERTY NO.

N/A

BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

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

## PRESERVATION

None None

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## TYPE OF CONTAINER

G/P Moisture Resistant Cont

NO. OF CONTAINER(S)

1 1

VOLUME

1L 200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN SPECIAL INSTRUCTIONS  
Moisture Content - D2216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1PN09 SOIL

10/12/07 1435

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

D. PARCEN D. E. PARCHEN

10-12-07

MO 745 RECEIVED BY/STORED IN

10-12-07

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

(1) Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY; Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

## DATA

TURNAROUND

## SAMPLING LOCATION

C5852, I-15

## SAF NO.

F07-069

## AIR QUALITY

45 Days / 45 Days

## ICE CHEST NO.

277.5

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## COA

HN-20-575-2

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNL Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN SPECIAL INSTRUCTIONS  
Moisture Content - 02216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1PN10

SOIL

10/12/07 1500

✓

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME RECEIVED BY/STORED IN

DATE/TIME

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY; Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY SECTION

RECEIVED BY

## TITLE

## DATE/TIME

## FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

**COLLECTOR** Kevin Patterson  
NCO Sampler Fluor Hanford

**SAMPLING LOCATION** 279.5

C5852, 1-16

**ICE CHEST NO.**

**SHIPPED TO**  
PNNL Building 325

**MATRIX\*** POSSIBLE SAMPLE HAZARDS/ REMARKS  
A=Air Contains Radioactive Material at concentrations  
DL=Drum that are not regulated for transportation per 49  
Liquids CFR but are not releasable per DOE Order  
DS=Drum 5400.5 (1990/1993)  
Solids  
L=Liquid  
O=Oil  
S=Soil  
SE=Sediment  
T=Tissue  
V=Vegetation  
W=Water  
WI=Wipe  
X=Other

**COMPANY CONTACT**  
Trent, SJ  
373-5869

**PROJECT DESIGNATION**  
200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

**FIELD LOGBOOK NO.** 4708-205755-2

**OFFSITE PROPERTY NO.** N/A

**TELEPHONE NO.** 373-5869

**COA** 123262ES10

**PROJECT COORDINATOR**  
TRENT, SJ

**SAF NO.**  
F07-069

**METHOD OF SHIPMENT**  
GOVERNMENT VEHICLE

**BILL OF LADING/AIR BILL NO.** N/A

**PRICE CODE** 8N

**AIR QUALITY**

**DATA TURNAROUND**  
45 Days /  
45 Days

**PRESERVATION** None None

**TYPE OF CONTAINER** G/P Moisture  
Resistant Cont

**NO. OF CONTAINER(S)** 1 1

**VOLUME** 1L 200g

**SPECIAL HANDLING AND/OR STORAGE**

**SAMPLE ANALYSIS** SEE ITEM (1) IN Moisture  
SPECIAL Content - D2216;  
INSTRUCTIONS

**SAMPLE NO.**

**MATRIX\***

**SAMPLE DATE** 10/15/07

**SAMPLE TIME** 0810

B1PN11 SOIL

### CHAIN OF POSSESSION

### SIGN/ PRINT NAMES

### SPECIAL INSTRUCTIONS

**REMOVED FROM** Kevin Patterson  
Fluor Hanford

**REMOVED BY/REMOVED FROM** Kevin Patterson  
Fluor Hanford

**REMOVED BY/REMOVED FROM** Kevin Patterson  
Fluor Hanford

**REMOVED BY/REMOVED FROM** Kevin Patterson  
Fluor Hanford

**REMOVED BY/REMOVED FROM** Kevin Patterson  
Fluor Hanford

**REMOVED BY/REMOVED FROM** Kevin Patterson  
Fluor Hanford

**DATE/TIME** 10-15-07  
OCT 17 2007 0650  
OCT 17 2007 0835

**RECEIVED BY/STORED IN** MO 745 R.S. #1  
Kevin Patterson  
Fluor Hanford

**RECEIVED BY/STORED IN** Kevin Patterson  
Fluor Hanford

**RECEIVED BY/STORED IN** Kevin Patterson  
Fluor Hanford

**RECEIVED BY/STORED IN** Kevin Patterson  
Fluor Hanford

**RECEIVED BY/STORED IN** Kevin Patterson  
Fluor Hanford

**DATE/TIME** 10-15-07  
OCT 17 2007 0650  
OCT 17 2007 0835

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

**LABORATORY SECTION** RECEIVED BY

**FINAL SAMPLE DISPOSITION** DISPOSAL METHOD

**TITLE**

**DATE/TIME**

**DATE/TIME**

**DATE/TIME**

COLLECTOR  
NCO SamplerCOMPANY CONTACT  
Trent, SJTELEPHONE NO.  
373-5869PROJECT COORDINATOR  
TRENT, SJPRICE CODE  
8NDATA  
TURNAROUNDSAMPLING LOCATION  
C5852, I-17  
ICE CHEST NO.PROJECT DESIGNATION  
200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

FIELD LOGBOOK NO.

SAFE NO.  
F07-069

AIR QUALITY

45 Days /  
45 Days

SHIPPED TO

PNL Building 325

N/A

OFFSITE PROPERTY NO.

N/A

BILL OF LADING/AIR BILL NO.

N/A

MATRIX\*

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

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

PRESERVATION

None

TYPE OF CONTAINER

Split Spoon  
Liner

NO. OF CONTAINER(S)

4

VOLUME

1000g

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

SAMPLE NO.

MATRIX\*

SAMPLE DATE

SAMPLE TIME

B1PMY3

SOIL

10/15/07 0853

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

(1) Density, Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil Cation Exchange Capacity - 9080; Generic Testing; SPECIAL STUDIES (No CAS) KD - Batch;

REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RECEIVED BY

SECTION

RECEIVED BY

TITLE

FINAL SAMPLE  
DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

1-2383

1-2384

3-2385

4-2386

## COLLECTOR

NCO Sampler

## SAMPLING LOCATION

CS852, I-101

## ICE CHEST NO.

## SHIPPED TO

PNNL Building 325

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

## DATA TURNAROUND

45 Days / 45 Days

## SAF NO.

F07-069

## AIR QUALITY

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## FIELD LOGBOOK NO.

## COA

123262ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

## TYPE OF CONTAINER

Split Spoon Liner

## NO. OF CONTAINER(S)

2

## VOLUME

1000g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN SPECIAL INSTRUCTIONS

## SAMPLE NO.

B1R0Y5 SOIL

## MATRIX\*

## SAMPLE DATE SAMPLE TIME

10/15/07 1425

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

NCO Sampler

10-15-07 1600

10-15-07 1600

NCO 745 Ref 21

10-15-07 1600

(1) Density; Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil Cation Exchange Capacity - 9080; Generic Testing; SPECIAL STUDIES (No CAS) KD - Batch;

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

Kevin Patterson

10-15-07 1600

10-15-07 1600

Kevin Patterson

10-15-07 1600

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## LABORATORY SECTION

## RECEIVED BY

## TITLE

## DATE/TIME

## FINAL SAMPLE DISPOSITION

## DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME





## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND45 Days / 45  
Days

## SAMPLING LOCATION

C5852, I-105

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## SAF NO.

F07-069

## AIR QUALITY

8N

## ICE CHEST NO.

## FIELD LOGBOOK NO.

## ACTUAL SAMPLE DEPTH

## COA

12362ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNL Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

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

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

Moisture  
Content - D2216;

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1R0Y8

SOIL

10/15/07 1515

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

## RELINQUISHED BY/ REMOVED FROM

DATE/TIME

## RECEIVED BY/ STORED IN

DATE/TIME

Fluor Hanford

10-15-07

MO 745 R.A.F. #1

10-15-07

RELINQUISHED BY/ REMOVED FROM

DATE/TIME

RECEIVED BY/ STORED IN

DATE/TIME

Kevin Patterson

OCT 17 2007 0855

RECEIVED BY/ STORED IN

DATE/TIME

RELINQUISHED BY/ REMOVED FROM

DATE/TIME

RECEIVED BY/ STORED IN

DATE/TIME

RELINQUISHED BY/ REMOVED FROM

DATE/TIME

RECEIVED BY/ STORED IN

DATE/TIME

RELINQUISHED BY/ REMOVED FROM

DATE/TIME

RECEIVED BY/ STORED IN

DATE/TIME

LABORATORY  
SECTION

## RECEIVED BY

## TITLE

## DATE/TIME

FINAL SAMPLE  
DISPOSITION

## DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS  
{Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 60108 (TAL); ICP  
Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC -  
415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) -  
9045;

2295

COLLECTOR  
NCO SamplerCOMPANY CONTACT  
Trent, SJTELEPHONE NO.  
373-5869PROJECT COORDINATOR  
Trent, SJPRICE CODE  
8NDATA  
TURNAROUND  
45 Days / 45  
Days

## SAMPLING LOCATION

C5852, I-106

ICE CHEST NO.

289.5'

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

SAF NO.

F07-069

AIR QUALITY

## FIELD LOGBOOK NO.

## ACTUAL SAMPLE DEPTH

COA

123262ES10

METHOD OF SHIPMENT  
GOVERNMENT VEHICLE

## SHIPPED TO

PNNL Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

## POSSIBLE SAMPLE HAZARDS/ REMARKS

## PRESERVATION

None

None

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

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

L=Liquid

## NO. OF CONTAINER(S)

1

1

O=Oil

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS  
Moisture  
Content - D2216,

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1R0Y9

SOIL

10/16/07 0855

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY

## RECEIVED BY

## TITLE

## DATE/TIME

## SECTION

## FINAL SAMPLE

## DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME

## DISPOSITION

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND45 Days / 45  
Days

## SAMPLING LOCATION

C5832, 1-107

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## SAF NO.

F07-069

## AIR QUALITY

## ICE CHEST NO.

2921

## FIELD LOGBOOK NO.

## ACTUAL SAMPLE DEPTH

## COA

12362E510

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNNL Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS  
Moisture  
Content - D2216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1R100

SOIL

10/16/07 0942

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

623474

## SPECIAL INSTRUCTIONS

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

LABORATORY  
SECTION

## RECEIVED BY

## TITLE

## DATE/TIME

FINAL SAMPLE  
DISPOSITION

## DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME

2897

COLLECTOR  
NCO SamplerCOMPANY CONTACT  
Trent, SJTELEPHONE NO.  
373-5869PROJECT COORDINATOR  
TRENT, SJPRICE CODE  
8NDATA  
TURNAROUND

SAMPLING LOCATION

295

C5852, 1-18

PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

SAF NO.

F07-069

AIR QUALITY

45 Days /  
45 Days

ICE CHEST NO.

FIELD LOGBOOK NO.

COA

METHOD OF SHIPMENT

GOVERNMENT VEHICLE

SHIPPED TO

PNHL Building 325

OFFSITE PROPERTY NO.

N/A

BILL OF LADING/AIR BILL NO.

N/A

MATRIX\*

POSSIBLE SAMPLE HAZARDS/ REMARKS

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

PRESERVATION

None

None

TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

NO. OF CONTAINER(S)

1

1

VOLUME

1L

200g

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

SAMPLE NO.

MATRIX\*

SAMPLE DATE

SAMPLE TIME

B1PN12

SOIL

10/18/07 0800

✓

✓

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM  
10/18/07 1547  
RELINQUISHED BY/REMOVED FROM  
10/24/07 0700  
RELINQUISHED BY/REMOVED FROM  
10/24/07 0830  
RELINQUISHED BY/REMOVED FROMDATE/TIME  
DATE/TIME  
DATE/TIME  
DATE/TIMERECEIVED BY/STORED IN  
10/18/07 1547  
RECEIVED BY/STORED IN  
10/24/07 0700  
RECEIVED BY/STORED IN  
10/24/07 0830  
RECEIVED BY/STORED INDATE/TIME  
DATE/TIME  
DATE/TIME  
DATE/TIME(1) Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS  
{Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP  
Metals - 6020 (TAL); 310.1 ALKALINITY; Alkalinity (1); IC Anions - 300.0; TIC -  
415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) -  
9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY  
SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE  
DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME



## COLLECTOR

NCO Sampler

## SAMPLING LOCATION

C5852, 1-19

## ICE CHEST NO.

297

## SHIPPED TO

PNNL Building 325

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

## DATA TURNAROUND

45 Days / 45 Days

## SAF NO.

F07-069

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## BILL OF LADING/AIR BILL NO.

N/A

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## FIELD LOGBOOK NO.

HANFORD 575-2

## COA

123262ES10

## OFFSITE PROPERTY NO.

N/A

## MATRIX\* POSSIBLE SAMPLE HAZARDS/ REMARKS

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN SPECIAL INSTRUCTIONS Moisture Content - D2216;

## SAMPLE NO.

B1PN13

SOIL

## MATRIX\*

## SAMPLE DATE

10/18/07 0835

✓

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

K1. Fungus/air

10/18/07 15:41

RECEIVED BY/STORED IN

R Mo. 745 REF #1

DATE/TIME: 10/18/07 15:41

RELINQUISHED BY/REMOVED FROM

MO-745 / MO-745 N-24-47

DATE/TIME 0700

RECEIVED BY/STORED IN

J. B. B. / J. B. B. 10-24-47

DATE/TIME 0700

RELINQUISHED BY/REMOVED FROM

J. S. A. / J. S. A. 10-24-47

DATE/TIME 0830

RECEIVED BY/STORED IN

M. Volonty / M. Volonty 10/24/07 0830

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

## FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

(1) Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY; Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

## COLLECTOR

NCO Sampler

## SAMPLING LOCATION

C5852, I-20

## ICE CHEST NO.

300

## SHIPPED TO

PNNL Building 325

## MATRIX\*

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

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## SPECIAL HANDLING AND/OR STORAGE

SEE ITEM (1) IN SPECIAL INSTRUCTIONS

## SAMPLE ANALYSIS

Moisture Content - D2216;

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

## DATA TURNAROUND

45 Days / 45 Days

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Parameter

## FIELD LOGBOOK NO.

COA

HNF-N-575-2

123262E510

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## PRESERVATION

None

## TYPE OF CONTAINER

G/P

Moisture Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SAMPLE NO.

B1PN14

## MATRIX\*

SOIL

## SAMPLE DATE

10/18/07 0845

✓

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

## FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND45 Days /  
45 Days

## SAMPLING LOCATION

CS852, 1-21

362

## ICE CHEST NO.

## SHIPPED TO

PNNL Building 325

HNE-N-575-2  
OFFSITE PROPERTY NO.

## FIELD LOGBOOK NO.

123262ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

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

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL INSTRUCTIONS  
Moisture  
Content - D2216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

10/16/07

0930

## B1PN15

## SOIL

✓

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1\_AKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

LABORATORY  
SECTION

## RECEIVED BY

## TITLE

## DATE/TIME

FINAL SAMPLE  
DISPOSITION

## DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME

COLLECTOR  
NCO SamplerCOMPANY CONTACT  
Trent, SJTELEPHONE NO.  
373-5869PROJECT COORDINATOR  
TRENT, SJPRICE CODE  
8NDATA  
TURNAROUND

SAMPLING LOCATION

CS852, 1-22 362.2 - 364.7

ICE CHEST NO.

SAF NO.  
F07-069

AIR QUALITY

45 Days /  
45 Days

SHIPPED TO

PNNL Building 325

PROJECT DESIGNATION  
200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet  
FIELD LOGBOOK NO.  
14N/E-A-575-2COA  
123262ES10METHOD OF SHIPMENT  
GOVERNMENT VEHICLE

BILL OF LADING/AIR BILL NO.

N/A

N/A

MATRIX\*

POSSIBLE SAMPLE HAZARDS/ REMARKS

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

PRESERVATION

None

TYPE OF CONTAINER

Split Spoon  
Liner

NO. OF CONTAINER(S)

2

VOLUME

1000g

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

SAMPLE NO.

MATRIX\*

SAMPLE DATE

SAMPLE TIME

B1PMX9

SOIL

10/18/07 1100

✓

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

(1) Density; Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil  
Cation Exchange Capacity - 9080; Generic Testing; SPECIAL STUDIES (No CAS) KD -  
Batch;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY  
SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE  
DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND45 Days /  
45 Days

## SAMPLING LOCATION

301 304 7 305

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## SAF NO.

F07-069

## AIR QUALITY

## ICE CHEST NO.

## FIELD LOGBOOK NO.

COA

HNF-N-575-2

123262ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNML Building 325

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  
SF=Sediment  
T=Tissue  
V=Vegetation  
W=Water  
WI=Wipe  
X=Other

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

SEE ITEM (1) IN  
SPECIAL INSTRUCTIONS  
Moisture Content - 02216.

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

10/18/07

1335

✓

✓

B1PN16

SOIL

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY

## RECEIVED BY

## TITLE

## DATE/TIME

## SECTION

## FINAL SAMPLE

## DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME

0437



## COLLECTOR

NCO Sampler

## SAMPLING LOCATION

CS852, I-26 306.5

## ICE CHEST NO.

## SHIPPED TO

PNNL Building 325

## MATRIX\*

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

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

## POSSIBLE SAMPLE HAZARDS/ REMARKS

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

Moisture  
Content - D2216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1PN17

SOIL

10/18/07 1420

✓

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM  
10-Young/20-10-25  
RELINQUISHED BY/REMOVED FROM  
10-745/12EF #1 10-24-07 0800  
RELINQUISHED BY/REMOVED FROM  
J.S. Miller/20-10-24-07 0830  
RELINQUISHED BY/REMOVED FROM

DATE/TIME  
10/18/07 15:45  
DATE/TIME  
10/18/07 0800  
DATE/TIME  
10/24-07 0830  
DATE/TIME

RECEIVED BY/STORED IN  
R Mo-745  
RECEIVED BY/STORED IN  
J.S. Miller/20-10-24-07  
RECEIVED BY/STORED IN  
M. Valencia/10-24-07 0830  
RECEIVED BY/STORED IN

DATE/TIME  
10/18/07 15:45  
DATE/TIME  
10/24-07 0800  
DATE/TIME  
10/24-07 0830  
DATE/TIME

(1) Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS  
{Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP  
Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC -  
415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) -  
9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY  
SECTION

## RECEIVED BY

## TITLE

## DATE/TIME

FINAL SAMPLE  
DISPOSITION

## DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME

## COMPANY CONTACT

TELEPHONE NO.  
373-5869

## PROJECT COORDINATOR

PRICE CODE  
8N

DATA  
TURNAROUND  
45 Days /  
45 Days

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## SAF NO.

F07-069

## AIR QUALITY

## FIELD LOGBOOK NO.

COA

HANF-N-575-2

123262ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## OFFSITE PROPERTY NO.

## BILL OF LADING/AIR BILL NO.

N/A

N/A



## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND45 Days /  
45 Days

## SAMPLING LOCATION

CS852, 1-28

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## SAF NO.

F07-069

## ICE CHEST NO.

311,4

## FIELD LOGBOOK NO.

COA

## OFFSITE PROPERTY NO.

123262ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNNL Building 325

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL INSTRUCTIONS  
Moisture  
Content - D2216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1PN19

SOIL

10-14-07 1450

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROMDATE/TIME  
DATE/TIME  
DATE/TIME  
DATE/TIME  
DATE/TIMERECEIVED BY/STORED IN  
RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN  
RECEIVED BY/STORED INDATE/TIME  
DATE/TIME  
DATE/TIME  
DATE/TIME  
DATE/TIME

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

W. Valencia M. Valero 10/24/07 0830

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY  
SECTION

## RECEIVED BY

## TITLE

## DATE/TIME

FINAL SAMPLE  
DISPOSITION

## DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME

LOT #

023414

N/A

2/1/00

COLLECTOR  
NCO SamplerCOMPANY CONTACT  
Trent, SJTELEPHONE NO.  
373-5869PROJECT COORDINATOR  
TRENT, SJPRICE CODE  
8NDATA  
TURNAROUNDSAMPLING LOCATION  
CS852, 1-30PROJECT DESIGNATION  
200-BP-5 OU Characterization for O Well - Geochemical Modeling ParametSAFE NO.  
F07-069

AIR QUALITY

45 Days /  
45 Days

ICE CHEST NO.

FIELD LOGBOOK NO.

COA

METHOD OF SHIPMENT  
GOVERNMENT VEHICLESHIPPED TO  
PNNL Building 325

OFFSITE PROPERTY NO.

BILL OF LADING/AIR BILL NO.

N/A

N/A

MATRIX\*

POSSIBLE SAMPLE HAZARDS/ REMARKS

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

PRESERVATION

None

None

TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

NO. OF CONTAINER(S)

1

1

VOLUME

1L

200g

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL INSTRUCTIONSMoisture  
Content - 02216;

SAMPLE NO.

MATRIX\*

SAMPLE DATE

SAMPLE TIME

B1PN20

SOIL

10-22-07 0800

X

X

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM  
Dwight/Alvin  
RELINQUISHED BY/REMOVED FROM  
M. T. 10-24-07  
RELINQUISHED BY/REMOVED FROM  
J.S. 10-24-07  
RELINQUISHED BY/REMOVED FROM  
J.S. 10-24-07DATE/TIME  
10-22-07/1300  
DATE/TIME  
0700  
DATE/TIME  
0830  
DATE/TIMERECEIVED BY/STORED IN  
M. T. 10-22-07/1300  
RECEIVED BY/STORED IN  
J.S. 10-24-07  
RECEIVED BY/STORED IN  
M. 10-24-07DATE/TIME  
10-22-07/1300  
DATE/TIME  
0700  
DATE/TIME  
10/24/07 0830  
DATE/TIME

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY  
SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE  
DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

04445

## DATA TURNAROUND

45 Days /  
45 Days

5007

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

٢١

### SPECIAL INSTRUCTIONS

(1) Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS

{Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1.); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

DATE/TIME

DATE/TIME

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND

## SAMPLING LOCATION

CS852, I-32

319.5

## ICE CHEST NO.

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## FIELD LOGBOOK NO.

COA

123262ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNML Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL INSTRUCTIONS  
Moisture  
Content - D2216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

10/30/07

0850

B1PN22

SOIL

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

## RELINQUISHED BY/REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

## RELINQUISHED BY/REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

## RELINQUISHED BY/REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

## RELINQUISHED BY/REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

## RELINQUISHED BY/REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

## RELINQUISHED BY/REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

## RELINQUISHED BY/REMOVED FROM

DATE/TIME

## RECEIVED BY/STORED IN

DATE/TIME

LABORATORY  
SECTION

## RECEIVED BY

## TITLE

## DATE/TIME

FINAL SAMPLE  
DISPOSITION

## DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99}; Uranium by ICPMS {Uranium}; ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1\_AKALINITY; Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;



COLLECTOR  
NCO Sampler

COMPANY CONTACT  
Trent, SJ

TELEPHONE NO.  
373-5869

PROJECT COORDINATOR  
TRENT, SJ

PRICE CODE  
8N

DATA  
TURNAROUND  
45 Days / 45 Days

SAMPLING LOCATION

CS852, 1-102

287 - 289.5'

PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

SAF NO.  
F07-069

AIR QUALITY

ICE CHEST NO.

2

FIELD LOGBOOK NO.

ACTUAL SAMPLE DEPTH

COA  
123419ES10

METHOD OF SHIPMENT  
GOVERNMENT VEHICLE

SHIPPED TO

PNNL Building 325

OFFSITE PROPERTY NO.

N/A

BILL OF LADING/AIR BILL NO.

N/A

MATRIX\*

POSSIBLE SAMPLE HAZARDS/ REMARKS  
A=Air  
DL=Drum  
Liquids  
DS=Drum  
Solids  
5400.5 (1990/1993)  
Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order

PRESERVATION

None

TYPE OF CONTAINER

Split Spoon  
Liner

NO. OF CONTAINER(S)

13

VOLUME

1000g

S=Soil  
SE=Sediment  
T=Tissue  
V=Vegetation  
W=Water  
WI=Wipe  
X=Other

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

SAMPLE NO.

MATRIX\*

SAMPLE DATE SAMPLE TIME

B1R0Y6

SOIL

10/16/07 0845

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

(1) Density; Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil Cation Exchange Capacity - 9080; Generic Testing; SPECIAL STUDIES (No CAS) KD - Batch;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

Line 2 #4 empty

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

## DATA

TURNAROUND

## SAMPLING LOCATION

CS852, 1-108

## SAFE NO.

F07-069

## AIR QUALITY

45 Days / 45 Days

## ICE CHEST NO.

321-294.51

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## FIELD LOGBOOK NO.

## ACTUAL SAMPLE DEPTH

COA 123419ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNNL Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

## POSSIBLE SAMPLE HAZARDS/REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

## TYPE OF CONTAINER

Split Spoon Liner

## NO. OF CONTAINER(S)

4

## VOLUME

1000g

## SPECIAL HANDLING AND/OR STORAGE

SEE ITEM (1) IN SPECIAL INSTRUCTIONS

## SAMPLE ANALYSIS

## SAMPLE NO.

SOIL

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1R101

10/16/07 1000

## CHAIN OF POSSESSION

## SIGN/PRINT NAMES

## SPECIAL INSTRUCTIONS

(1) Density, Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil Cation Exchange Capacity - 9080; Generic Testing; SPECIAL STUDIES {No CAS} KD - Batch;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY SECTION

RECEIVED BY

## TITLE

DATE/TIME

## FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

COLLECTOR

NCO Sampler

SAMPLING LOCATION

CS852, 1-23

ICE CHEST NO.

SHIPPED TO

PNNL Building 325

COMPANY CONTACT

Trent, SJ

TELEPHONE NO.

373-5869

PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

FIELD LOGBOOK NO.

HNF-10-575-2

COB 9.35.07

12/3/07

PROJECT COORDINATOR

TRENT, SJ

PRICE CODE

8N

DATA TURNAROUND

45 Days / 45 Days

SAF NO.

F07-069

METHOD OF SHIPMENT

GOVERNMENT VEHICLE

BILL OF LADING/AIR BILL NO.

N/A

MATRIX\*

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

PRESERVATION

None

TYPE OF CONTAINER

Split Spoon Liner

NO. OF CONTAINER(S)

4

VOLUME

1000g

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.

MATRIX\*

SAMPLE DATE

SAMPLE TIME

B1PMY4

SOIL

10/18/07 1400

✓

CHAIN OF POSSESSION

SIGN / PRINT NAMES

SPECIAL INSTRUCTIONS

(1) Density, Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil  
cation Exchange Capacity - 9080; Generic Testing; SPECIAL STUDIES (No CAS) KD -  
Batch;

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

10/19/07 15:35

R Mo-745 RLF #1

10/19/07 15:35

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

10-24-07 0700

J. P. H. / J. A. / 10-24-07

0700

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

10-24-07 0830

W. Volante / M. Wilco

10/24/07 0830

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

12-3-07

Demo Moore / New Mo

12/03/07 12:57

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

12-3-07

Demo Moore / New Mo

12/03/07 12:57

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

COLLECTOR  
NCO Sampler

COMPANY CONTACT  
Trent, SJ

TELEPHONE NO.  
373-5869

PROJECT COORDINATOR  
TRENT, SJ

PRICE CODE  
8N

DATA  
TURNAROUND  
45 Days /  
45 Days

SAMPLING LOCATION

C5852, 1-29 311.4 -> 313.9

ICE CHEST NO.

PROJECT DESIGNATION  
200-BP-5 OU Characterization for O Well - Geochemical Modeling Parameter

FIELD LOGBOOK NO.  
COA 5852.250

SAF NO.  
F07-069

AIR QUALITY

METHOD OF SHIPMENT  
GOVERNMENT VEHICLE

SHIPPED TO

PNNL Building 325

N/A

BILL OF LADING/AIR BILL NO.  
N/A

MATRIX\* POSSIBLE SAMPLE HAZARDS/ REMARKS

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

PRESERVATION

None

TYPE OF CONTAINER

Split Spoon  
Liner

NO. OF CONTAINER(S)

4

VOLUME

1000g

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

SAMPLE NO.

MATRIX\*

B1PMY5 SOIL

SAMPLE DATE SAMPLE TIME

10/19/07 1520

✓

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

(1)Density, Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil  
Cation Exchange Capacity - 9080; Generic Testing; SPECIAL STUDIES (No CAS) KD -  
Batch;

DATE/TIME

10-14-07

DATE/TIME

10-19-07 1615

DATE/TIME

0700

DATE/TIME

0700

DATE/TIME

0830

DATE/TIME

12/09/07 12157

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE  
DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

DATE/TIME

 $N/A$ 

work

liner

4

1000

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

SAMPLE DATE      SAMPLE TIME

(1) Density, Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil Cation Exchange Capacity; 0080; Corrosive Testing; SPECIAL CTIMIDES (No CAS) ND

Batch; 2000, generic loading, or formaldehyde (no C10) no

DATE/TIME 2/03/07 12:57

RECEIVED BY/STORED IN  
Dean Moore/

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RECEIVED BY/STORED IN

**TITLE**

DATE/TIME

DISPOSED BY

DATE/TIME

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

## DATA

TURNAROUND

## SAMPLING LOCATION

C5852, 1-41

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## SAF NO.

F07-069

## AIR QUALITY

45 Days /  
45 Days

## ICE CHEST NO.

332-334.5

## FIELD LOGBOOK NO.

HMF-N-575-2

## COA

123456789010  
9-25-07

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNML Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

A=Air

DL=Drum

Liquids

OS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WT=Wipe

X=Other

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

## TYPE OF CONTAINER

Split Spoon  
Liner

## NO. OF CONTAINER(S)

4

## VOLUME

1000g

## SPECIAL HANDLING AND/OR STORAGE

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE SAMPLE TIME

B1PMY7

SOIL

10-24-07 1450

X

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

(1) Density, Particle Size (Hydrometer) - D422, Saturated Hydraulic Conductivity, Soil Cation Exchange Capacity - 9080, Generic Testing, SPECIAL STUDIES (No CAS) KD - Batch;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

R.D. Sullivan 10-24-07 1600

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

10-25-07 11200

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

10-25-07 1250

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY SECTION

## RECEIVED BY

## TITLE

## DATE/TIME

## FINAL SAMPLE DISPOSITION

## DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME

10/26/07 6:54 PM





COLLECTOR

NCO Sampler

COMPANY CONTACT

Trent, SJ

TELEPHONE NO.

373-5869

PROJECT COORDINATOR

TRENT, SJ

PRICE CODE

8N

DATA TURNAROUND

45 Days / 45 Days

SAMPLING LOCATION

330'

CS852, 1-39

ICE CHEST NO.

PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

FIELD LOGBOOK NO.

COA 123262ES10

METHOD OF SHIPMENT

GOVERNMENT VEHICLE

SHIPPED TO

PNNL Building 325

OFFSITE PROPERTY NO.

N/A

BILL OF LADING/AIR BILL NO.

N/A

MATRIX\*

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

PRESERVATION

None

None

TYPE OF CONTAINER

G/P

Moisture Resistant Cont

NO. OF CONTAINER(S)

1

1

VOLUME

1L

200g

A=Air  
DL=Drum  
L=Liquid  
O=Oil  
S=Soil  
SE=Sediment  
T=Tissue  
V=Vegetation  
W=Water  
WJ=Wipe  
X=Other

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

SEE ITEM (1) IN SPECIAL INSTRUCTIONS Moisture Content - D2216;

SAMPLE NO.

MATRIX\*

SAMPLE DATE

10/24/07

1750

B1PN26

SOIL

10/24/07 1750

✓

✓

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM  
KJ. Leung 10-24-07 1600  
RELINQUISHED BY/REMOVED FROM  
M. Rife 10-25-07 1700  
RELINQUISHED BY/REMOVED FROM  
D. Webb 10-25-07 1750  
RELINQUISHED BY/REMOVED FROM

RECEIVED BY/STORED IN  
M. Rife 10-24-07 1600  
RECEIVED BY/STORED IN  
D. Webb 10-25-07 1700  
RECEIVED BY/STORED IN  
M. Valencia 10-25-07 1750  
RECEIVED BY/STORED IN

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY; Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND

## SAMPLING LOCATION

CS852, 1-40

332

## SAF NO.

F07-069

## AIR QUALITY

45 Days /  
45 Days

## ICE CHEST NO.

332

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## FIELD LOGBOOK NO.

COA

144F-N-575-2

123262ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNNL Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL INSTRUCTIONS

Moisture  
Content - 02216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

10/24/07

1330

B1PN27

SOIL

10/24/07 1330

✓

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

K3. Youngman 10-24-07

1600

MO 745 Frige 2

10-24-07

1600

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

MO 745 Ref #1

10-25-07

11200

10-25-07

17000

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

Bovette/lin v. will

10-25-07

11250

M. Valentini

10/25/07/1250

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

## RECEIVED BY/STORED IN

## DATE/TIME

LABORATORY  
SECTION

## RECEIVED BY

## TITLE

## DATE/TIME

FINAL SAMPLE  
DISPOSITION

## DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99}; Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1\_AKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

24107

A-6007.61/0711/063

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND45 Days /  
45 Days

## SAMPLING LOCATION

CS852, 1-42

334.5

## ICE CHEST NO.

## SHIPPED TO

PNNL Building 325

## PROJECT DESIGNATION

N/A

## FIELD LOGBOOK NO.

14NFC-N-575-2

## COA

123262ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## BILL OF LADING/ AIR BILL NO.

N/A

## MATRIX\*

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

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

SEE ITEM (1) IN  
SPECIAL INSTRUCTIONS  
Moisture  
Content - 02216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

10/24/07

1520

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

LST 027210

## SPECIAL INSTRUCTIONS

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1\_AKALINITY; Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

KJ. Thompson

10-24-07 1600

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

10-24-07 1600

10-24-07 1600

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

10-25-07 11200

10-25-07 11200

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

10-25-07 1250

10-25-07 1250

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

10-25-07 1250

10-25-07 1250

## RELINQUISHED BY/REMOVED FROM

## DATE/TIME

10-25-07 1250

10-25-07 1250

## LABORATORY

RECEIVED BY

## TITLE

## DATE/TIME

## SECTION

## FINAL SAMPLE

DISPOSAL METHOD

## DISPOSED BY

## DATE/TIME

7417

A 6003-618(01/06)

COLLECTOR  
NCO Sampler  
SAMPLING LOCATION  
CS852, 1-45  
ICE CHEST NO.

Young, Julian  
335-336'

SHIPPED TO  
PNNL Building 325

COMPANY CONTACT  
Trent, SJ  
PROJECT DESIGNATION  
200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet  
FIELD LOGBOOK NO.  
OFFSITE PROPERTY NO.

TELEPHONE NO.  
373-5869  
TRENT, SJ  
SAFE NO.  
F07-069  
METHOD OF SHIPMENT  
GOVERNMENT VEHICLE  
BILL OF LADING/AIR BILL NO.

PRICE CODE  
8N  
AIR QUALITY  
45 Days /  
45 Days

## MATRIX\* POSSIBLE SAMPLE HAZARDS/ REMARKS

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

PRESERVATION  
None  
TYPE OF CONTAINER  
Split Spoon  
Liner  
NO. OF CONTAINER(S)  
1

VOLUME  
1000g

## SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS  
SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

SAMPLE NO.

MATRIX\*

SAMPLE DATE SAMPLE TIME

B1PMY1 SOIL

10-25-07 0955

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM

DATE/TIME  
DATE/TIME  
DATE/TIME

RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN

DATE/TIME  
DATE/TIME  
DATE/TIME

(1) Density; Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil  
Cation Exchange Capacity - 9080; Generic Testing; SPECIAL STUDIES (No CAS) KD -  
Batch;

only liner # 2 used

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY  
SECTION  
FINAL SAMPLE  
DISPOSITION

RECEIVED BY  
RECEIVED BY/STORED IN

TITLE  
DISPOSED BY

DATE/TIME  
DATE/TIME

2472

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND

## SAMPLING LOCATION

C5852, 1-43

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## SAF NO.

F07-069

## AIR QUALITY

45 Days /  
45 Days

## ICE CHEST NO.

## FIELD LOGBOOK NO.

## COA

123262ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNNL Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

S=Soil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

SEE ITEM (1) IN  
SPECIAL INSTRUCTIONS  
Moisture  
Content - 02216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1PN29

SOIL

10/25/07 0840

✓

✓

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

K. J. Jones

10-25-07 1450

N. Valente

10/26/07 1450

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY SECTION

RECEIVED BY

## TITLE

DATE/TIME

## FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME



## COLLECTOR

NCO Sampler

## SAMPLING LOCATION

CS852, I-34

## ICE CHEST NO.

## SHIPPED TO

PNML Building 325

## MATRIX\*

A=Air

DL=Drum

Liquids

DS=Drum

Solids

L=Liquid

O=Oil

SE=Sediment

T=Tissue

V=Vegetation

W=Water

WI=Wipe

X=Other

## POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

## DATA TURNAROUND

45 Days / 45 Days

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## SAF NO.

F07-069

## AIR QUALITY

## FIELD LOGBOOK NO.

COA

123262ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN SPECIAL INSTRUCTIONS

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1PMY0

SOIL

10-23-07

1125

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

(1) Density, Particle Size (Hydrometer) - D422; Saturated Hydraulic Conductivity; Soil Cation Exchange Capacity - 9080; Generic Testing; SPECIAL STUDIES (No CAS) KD - Batch;

COLLECTOR

NCO Sampler

COMPANY CONTACT

Trent, SJ

TELEPHONE NO.

373-5869

PROJECT COORDINATOR

TRENT, SJ

PRICE CODE

8N

DATA  
TURNAROUND

SAMPLING LOCATION

322'

CS852, 1-33

ICE CHEST NO.

SAF NO.

F07-069

AIR QUALITY

45 Days /  
45 Days

SHIPPED TO

PNNL Building 325

PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

COA

123262ES10

METHOD OF SHIPMENT

GOVERNMENT VEHICLE

BILL OF LADING/AIR BILL NO.

N/A

MATRIX\*

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

POSSIBLE SAMPLE HAZARDS/ REMARKS

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

PRESERVATION

None

TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

NO. OF CONTAINER(S)

1

1

VOLUME

1L

200g

SPECIAL HANDLING AND/OR STORAGE

SAMPLE ANALYSIS

SEE ITEM (1) IN SPECIAL INSTRUCTIONS  
Moisture Content - D2216;

SAMPLE NO.

B1PN23

MATRIX\*

SOIL

SAMPLE DATE

10/23/07 1103

SAMPLE TIME

✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

SIGN/ PRINT NAMES

Lot # 027210

SPECIAL INSTRUCTIONS

(1)Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND

## SAMPLING LOCATION

324, 2

CS852, 1-37

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## SAF NO.

F07-069

## AIR QUALITY

45 Days /  
45 Days

## ICE CHEST NO.

FIELD LOGBOOK NO.

COA

123262ES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## SHIPPED TO

PNNL Building 325

## OFFSITE PROPERTY NO.

N/A

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

## POSSIBLE SAMPLE HAZARDS/ REMARKS

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

Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

## SAMPLE ANALYSIS

SEE ITEM (1) IN  
SPECIAL INSTRUCTIONS

Moisture  
Content - 02216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1PN24

SOIL

10-23-07 1300

## CHAIN OF POSSESSION

## SIGN/ PRINT NAMES

LOT# 077210

## SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM

DATE/TIME  
DATE/TIME  
DATE/TIME

RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN

DATE/TIME  
DATE/TIME  
DATE/TIME

RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM  
RELINQUISHED BY/REMOVED FROM

DATE/TIME  
DATE/TIME  
DATE/TIME

RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN  
RECEIVED BY/STORED IN

DATE/TIME  
DATE/TIME  
DATE/TIME

(1)Gross Alpha; Gross Beta; 1-129 by ICPMS {Iodine-129} Tc-99 by ICPMS {Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY: Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

RELINQUISHED BY/REMOVED FROM

DATE/TIME

RECEIVED BY/STORED IN

DATE/TIME

## LABORATORY SECTION

RECEIVED BY

TITLE

DATE/TIME

## FINAL SAMPLE DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME

2419

## COLLECTOR

NCO Sampler

## COMPANY CONTACT

Trent, SJ

## TELEPHONE NO.

373-5869

## PROJECT COORDINATOR

TRENT, SJ

## PRICE CODE

8N

DATA  
TURNAROUND

## SAMPLING LOCATION

CS852, I-38

## AIR QUALITY

F07-069

45 Days /  
45 Days

## ICE CHEST NO.

3271

## SHIPPED TO

PNWL Building 325

## PROJECT DESIGNATION

200-BP-5 OU Characterization for O Well - Geochemical Modeling Paramet

## FIELD LOGBOOK NO.

HNE-N-575-2 12326ZES10

## METHOD OF SHIPMENT

GOVERNMENT VEHICLE

## BILL OF LADING/AIR BILL NO.

N/A

## MATRIX\*

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

## PRESERVATION

None

None

## TYPE OF CONTAINER

G/P

Moisture  
Resistant Cont

## NO. OF CONTAINER(S)

1

1

## VOLUME

1L

200g

## SPECIAL HANDLING AND/OR STORAGE

SEE ITEM (1) IN  
SPECIAL  
INSTRUCTIONS

Moisture  
Content - D2216;

## SAMPLE NO.

## MATRIX\*

## SAMPLE DATE

## SAMPLE TIME

B1PN25

SOIL

10/23/07 1405

## CHAIN OF POSSESSION

## SIGN / PRINT NAMES

## SPECIAL INSTRUCTIONS

RELINQUISHED BY / REMOVED FROM

DATE/TIME

RECEIVED BY / STORED IN

DATE/TIME

(1) Gross Alpha; Gross Beta; I-129 by ICPMS {Iodine-129} Tc-99 by ICPMS

RELINQUISHED BY / REMOVED FROM

DATE/TIME

RECEIVED BY / STORED IN

DATE/TIME

{Technetium-99} Uranium by ICPMS {Uranium} ICP Metals - 6010B (TAL); ICP Metals - 6020 (TAL); 310.1 ALKALINITY; Alkalinity (1); IC Anions - 300.0; TIC - 415.1M {Total Inorganic Carbon} TOC - 415.1 {Total organic carbon} pH (Soil) - 9045;

RELINQUISHED BY / REMOVED FROM

DATE/TIME

RECEIVED BY / STORED IN

DATE/TIME

RELINQUISHED BY / REMOVED FROM

DATE/TIME

RECEIVED BY / STORED IN

DATE/TIME

RELINQUISHED BY / REMOVED FROM

DATE/TIME

RECEIVED BY / STORED IN

DATE/TIME

RELINQUISHED BY / REMOVED FROM

DATE/TIME

RECEIVED BY / STORED IN

DATE/TIME

RELINQUISHED BY / REMOVED FROM

DATE/TIME

RECEIVED BY / STORED IN

DATE/TIME

## LABORATORY

## SECTION

RECEIVED BY

TITLE

DATE/TIME

FINAL SAMPLE  
DISPOSITION

DISPOSAL METHOD

DISPOSED BY

DATE/TIME