0097831

SDM Disclaimer

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

ESL090006

RECEIVED
JUL 26 2011
EDMC

2010

ESL090006 RECEIVED SEPTEMBER 29, 2010

U.S. DEPARTMENT OF ENERGY

PNNL- 19806

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

Physical Property Analysis and Report for Sediments at 100-BC-5 Operable Unit, Boreholes C7505, C7506, C7507, and C7665

Michael Lindberg

September 2010

Pacific Northwest
NATIONAL LABORATORY

ESL090006

09/24/10 16:54

To: Dale Dyekman

From: Michael J. Lindberg

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

Subject: Physical Property Analysis and Report for Sediments at 100-BC-5 Operable Unit, Boreholes C7505, C7506, C7507, and C7665, Sample Delivery Group ESL 090006, SAF Number F09-066

This letter contains the following information for sample delivery group ESL 090006

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

Introduction

Between October 14, 2009 and February 22, 2010 sediment samples were received from 100-BC Decision Unit for geochemical studies.

Analytical Results/Methodology

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

Quality Control

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

Definitions

Dup	Duplicate
RPD	Relative Percent Difference
NR	No Recovery (percent recovery less than zero)
ND	Non-Detectable
%REC	Percent Recovery
NDET	Not Determined due to insufficient sample

Sample Receipt

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

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

Holding Times

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

Analytical Results

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

Case Narrative Report

Hold Time:

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

Preparation Blank (PB):

QC Sample 0H17002-BLK1 failed criteria for Mercury 202 in ICPMS-RCRA-WE.
MDL = 0.000181 ug/g
MRL = 0.000181 ug/g
Result = 0.000462 ug/g
Criterion = 1 x MRL

The analyte was detected at a value less than the contract required detection limit (RDL), but greater than or equal to the MDL.

Duplicate (DUP):

No discrepancies noted.

Laboratory Control Samples (LCS):

No discrepancies noted.

Post Spike (PS):

No discrepancies noted.

Matrix Spike (MS):

Matrix Spike Recovery for Chromium, Hexavalent (ND) was outside acceptance limits (75-125) in 0H19003-MS1 for Hexavalent Chromium/Soil
Potential Matrix interference. Sample results associated with this batche are below the EQL. There should be no impact to the data as reported.

Matrix Spike Recovery for Chromium, Hexavalent (68.8%) was outside acceptance limits (75-125) in 0I07009-MS1 for Hexavalent Chromium/Soil
Potential Matrix interference. Sample results associated with this batche are below the EQL. There should be no impact to the data as reported.

Other Criteria:

Core liners were not received for samples B22941, B22942, B22914, B22M13, B22995, B22997, B22FF5, B23KT7, B23KT8, B234R6, B234R7, B22FF3, B22FR6, and B22FR7. Therefore Saturated Hydraulic Conductivities, Bulk Density and Porosity could not be performed on these samples.

Saturated Hydraulic Conductivity could not be determined for sample B22FT7 due to void spaces along the container walls.

The value of ND for Kd determination indicated non-detectable analytes in either the water extract, acid extract or both.

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

Michael Lindberg

DISCLAIMER

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.

ESL090006

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

Metals 1:1 DI Water Extract by ICPMS

Metals Acid Extract by ICPMS

Bulk Density of soil samples

Hexavalent Chromium by Colorimetric Determination

Metals 1:1 Water Extract by ICPOES

Metals Acid Extract by ICPOES

Moisture Content

Particle Size Distribution

Porosity of soil samples

Saturated Hydraulic Conductivity

Stronium 90 Acid Extract by LSC

Strontium 90 Water Extract by LSC

SAMPLES ANALYZED IN THIS REPORT

HEIS No.	Laboratory ID	Matrix	Date Collected	Date Received
B22612	0910004-02	SOIL	10/9/09 10:10	10/14/09 09:30
B22613	0910004-03	SOIL	10/9/09 11:30	10/14/09 09:30
B22614	0910004-04	SOIL	10/9/09 13:25	10/14/09 09:30
B22615	0910004-05	SOIL	10/12/09 08:40	10/14/09 09:30
B22617	0910004-06	SOIL	10/12/09 12:50	10/14/09 09:30
B22911	0910004-07	SOIL	10/13/09 08:40	10/14/09 09:30
B22912	0910004-08	SOIL	10/13/09 11:25	10/14/09 09:30
B22941	0910004-10	SOIL	10/12/09 10:20	10/14/09 09:30
B22942	0910004-11	SOIL	10/12/09 13:50	10/14/09 09:30
B22914	0910004-12	SOIL	10/14/09 09:50	10/20/09 13:30
B22915	0910004-13	SOIL	10/14/09 11:35	10/20/09 13:30
B22M13	0910004-15	SOIL	10/15/09 14:00	10/20/09 13:30
B22M14	0910004-16	SOIL	10/19/09 15:20	10/20/09 13:30
B22995	0910004-17	SOIL	10/21/09 09:15	10/26/09 13:45
B22997	0910004-19	SOIL	10/20/09 13:00	10/26/09 13:45
B22916	0910004-20	SOIL	11/19/09 12:15	11/23/09 11:40
B22917	0910004-21	SOIL	11/19/09 13:10	11/23/09 11:40
B22619	0910004-22	SOIL	12/7/09 11:40	12/8/09 11:15
B22692	0910004-23	SOIL	11/19/09 13:10	12/8/09 11:15
B22FF5	0910004-24	SOIL	12/30/09 08:25	1/5/10 11:50
B23KT7	0910004-26	SOIL	1/4/10 13:20	1/5/10 11:50
B23KT8	0910004-27	SOIL	10/5/09 09:30	1/11/10 11:40
B234R6	0910004-28	SOIL	1/6/10 08:03	1/11/10 11:40
B234R7	0910004-29	SOIL	1/7/10 11:20	1/11/10 11:40
B22FD8	0910004-30	SOIL	12/28/09 12:40	12/30/09 11:30
B22FD9	0910004-31	SOIL	12/28/09 14:20	12/30/09 11:30
B22FF0	0910004-32	SOIL	12/29/09 08:08	12/30/09 11:30
B22FF2	0910004-34	SOIL	12/29/09 10:08	12/30/09 11:30
B22FF3	0910004-35	SOIL	12/29/09 11:26	12/30/09 11:30
B22FR6	0910004-36	SOIL	1/20/10 09:40	1/21/10 09:50
B22FR7	0910004-37	SOIL	1/20/10 09:40	1/21/10 09:50
B22FR8	0910004-38	SOIL	1/20/10 11:10	1/21/10 09:50
B22FR9	0910004-39	SOIL	1/20/10 13:30	1/21/10 09:50
B22FT0	0910004-40	SOIL	1/20/10 14:25	1/21/10 09:50
B22FT1	0910004-41	SOIL	1/21/10 09:30	1/26/10 11:15
B22FT2	0910004-42	SOIL	1/21/10 11:14	1/26/10 11:15
B22FF7	0910004-43	SOIL	1/29/10 11:25	2/1/10 12:00
B22FF8	0910004-44	SOIL	1/29/10 12:25	2/1/10 12:00
B22FT6	0910004-45	SOIL	2/16/10 09:10	2/22/10 13:00
B22FT7	0910004-47	SOIL	2/16/10 10:40	2/22/10 13:00

Wet Chemistry

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

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0910004-02	B22612	4.01E0	N/A	8/02/10	0G24001
0910004-03	B22613	6.13E0	N/A	8/02/10	0G24001
0910004-04	B22614	5.10E0	N/A	8/02/10	0G24001
0910004-05	B22615	5.81E0	N/A	8/02/10	0G24001
0910004-06	B22617	8.56E0	N/A	8/02/10	0G24001
0910004-07	B22911	2.58E0	N/A	8/02/10	0G24001
0910004-08	B22912	1.38E0	N/A	8/02/10	0G24001
0910004-10	B22941	4.63E0	N/A	8/02/10	0G24001
0910004-11	B22942	9.55E0	N/A	8/02/10	0G24001
0910004-12	B22914	2.93E0	N/A	8/02/10	0G24001
0910004-13	B22915	5.91E0	N/A	8/02/10	0G24001
0910004-15	B22M13	1.14E1	N/A	8/02/10	0G24001
0910004-16	B22M14	1.04E1	N/A	8/02/10	0G24001
0910004-17	B22995	2.14E1	N/A	8/02/10	0G24001
0910004-20	B22916	1.75E1	N/A	8/02/10	0G24001
0910004-21	B22917	1.94E1	N/A	8/02/10	0G24001
0910004-22	B22619	2.02E1	N/A	8/02/10	0G24001
0910004-23	B22692	1.94E1	N/A	8/02/10	0G24001
0910004-24	B22FF5	1.20E1	N/A	8/02/10	0G24001
0910004-26	B23KT7	1.01E1	N/A	8/02/10	0G24001
0910004-27	B23KT8	1.37E1	N/A	8/02/10	0G24001
0910004-28	B234R6	9.47E0	N/A	8/02/10	0G24001
0910004-29	B234R7	1.43E1	N/A	8/02/10	0G24001
0910004-30	B22FD8	4.39E0	N/A	8/02/10	0G24001
0910004-31	B22FD9	3.44E0	N/A	8/02/10	0G24001
0910004-32	B22FF0	5.93E0	N/A	8/02/10	0G24001
0910004-34	B22FF2	6.76E0	N/A	8/02/10	0G24001
0910004-35	B22FF3	1.47E1	N/A	8/02/10	0G24001
0910004-36	B22FR6	1.89E1	N/A	8/02/10	0G24001
0910004-37	B22FR7	3.17E0	N/A	8/02/10	0G24001
0910004-38	B22FR8	1.83E0	N/A	8/02/10	0G24001
0910004-39	B22FR9	1.46E0	N/A	8/02/10	0G24001
0910004-40	B22FT0	2.46E0	N/A	8/02/10	0G24001
0910004-41	B22FT1	9.11E0	N/A	8/02/10	0G24001
0910004-42	B22FT2	1.81E1	N/A	8/02/10	0G24001
0910004-43	B22FF7	2.53E1	N/A	8/02/10	0G24001
0910004-44	B22FF8	2.58E1	N/A	8/02/10	0G24001
0910004-45	B22FT6	2.24E1	N/A	8/02/10	0G24001
0910004-47	B22FT7	2.36E1	N/A	8/02/10	0G24001

Hexavalent Chromium/Soil

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

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0910004-02	B22612	<5.26E-1	5.26E-1	8/17/10	0H19003
0910004-03	B22613	<5.71E-1	5.71E-1	8/17/10	0H19003
0910004-05	B22615	<5.14E-1	5.14E-1	8/17/10	0H19003
0910004-06	B22617	<5.44E-1	5.44E-1	8/17/10	0H19003
0910004-07	B22911	<4.75E-1	4.75E-1	8/17/10	0H19003
0910004-08	B22912	<4.76E-1	4.76E-1	8/17/10	0H19003
0910004-10	B22941	<4.88E-1	4.88E-1	8/17/10	0H19003
0910004-11	B22942	<5.13E-1	5.13E-1	8/17/10	0H19003
0910004-12	B22914	<5.64E-1	5.64E-1	8/17/10	0H19003
0910004-13	B22915	<4.57E-1	4.57E-1	8/17/10	0H19003
0910004-15	B22M13	<5.35E-1	5.35E-1	8/17/10	0H19003
0910004-16	B22M14	<5.10E-1	5.10E-1	8/17/10	0H19003
0910004-20	B22916	<5.59E-1	5.59E-1	8/17/10	0H19003
0910004-21	B22917	<5.74E-1	5.74E-1	8/17/10	0H19003
0910004-22	B22619	<5.53E-1	5.53E-1	8/17/10	0H19003
0910004-23	B22692	<6.03E-1	6.03E-1	8/17/10	0H19003
0910004-24	B22FF5	<5.63E-1	5.63E-1	8/17/10	0H19003
0910004-30	B22FD8	<4.70E-1	4.70E-1	8/17/10	0H19003
0910004-31	B22FD9	<5.32E-1	5.32E-1	8/17/10	0H19003
0910004-32	B22FF0	<5.37E-1	5.37E-1	8/17/10	0H19003
0910004-34	B22FF2	<4.53E-1	4.53E-1	8/17/10	0I07009
0910004-35	B22FF3	<5.41E-1	5.41E-1	8/17/10	0I07009
0910004-36	B22FR6	<5.41E-1	5.41E-1	8/17/10	0I07009
0910004-37	B22FR7	<5.33E-1	5.33E-1	8/17/10	0I07009
0910004-38	B22FR8	<5.09E-1	5.09E-1	8/17/10	0I07009
0910004-39	B22FR9	<4.61E-1	4.61E-1	8/17/10	0I07009
0910004-40	B22FT0	<5.02E-1	5.02E-1	8/17/10	0I07009
0910004-41	B22FT1	<4.70E-1	4.70E-1	8/17/10	0I07009
0910004-42	B22FT2	<5.56E-1	5.56E-1	8/17/10	0I07009
0910004-43	B22FF7	<6.00E-1	6.00E-1	8/17/10	0I07009
0910004-44	B22FF8	<6.30E-1	6.30E-1	8/17/10	0I07009
0910004-45	B22FT6	<5.97E-1	5.97E-1	8/17/10	0I07009
0910004-47	B22FT7	<6.14E-1	6.14E-1	8/17/10	0I07009

ESL090006

Hexavalent Chromium/Water Extract

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

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0910004-02	B22612	<4.82E-2	4.82E-2	8/03/10	0H05001
0910004-03	B22613	<4.62E-2	4.62E-2	8/03/10	0H05001
0910004-05	B22615	<4.79E-2	4.79E-2	8/03/10	0H05001
0910004-06	B22617	<4.57E-2	4.57E-2	8/03/10	0H05001
0910004-07	B22911	<4.96E-2	4.96E-2	8/03/10	0H05001
0910004-08	B22912	<3.78E-2	3.78E-2	8/03/10	0H05001
0910004-10	B22941	<5.07E-2	5.07E-2	8/03/10	0H05001
0910004-11	B22942	<4.51E-2	4.51E-2	8/03/10	0H05001
0910004-12	B22914	<4.85E-2	4.85E-2	8/03/10	0H05001
0910004-13	B22915	<4.70E-2	4.70E-2	8/03/10	0H05001
0910004-15	B22M13	<4.56E-2	4.56E-2	8/03/10	0H05001
0910004-16	B22M14	<4.58E-2	4.58E-2	8/03/10	0H05001
0910004-20	B22916	<4.30E-2	4.30E-2	8/03/10	0H05001
0910004-21	B22917	<3.97E-2	3.97E-2	8/03/10	0H05001
0910004-22	B22619	<3.98E-2	3.98E-2	8/03/10	0H05001
0910004-23	B22692	<4.01E-2	4.01E-2	8/03/10	0H05001
0910004-24	B22FF5	<4.42E-2	4.42E-2	8/03/10	0H05001
0910004-30	B22FD8	<4.83E-2	4.83E-2	8/03/10	0H05001
0910004-31	B22FD9	<4.83E-2	4.83E-2	8/03/10	0H05001
0910004-32	B22FF0	<4.68E-2	4.68E-2	8/04/10	0H05008
0910004-34	B22FF2	<4.64E-2	4.64E-2	8/03/10	0H05001
0910004-35	B22FF3	<4.28E-2	4.28E-2	8/03/10	0H05001
0910004-36	B22FR6	<4.03E-2	4.03E-2	8/04/10	0H05008
0910004-37	B22FR7	<4.91E-2	4.91E-2	8/04/10	0H05008
0910004-38	B22FR8	<4.92E-2	4.92E-2	8/04/10	0H05008
0910004-39	B22FR9	<4.95E-2	4.95E-2	8/04/10	0H05008
0910004-40	B22FT0	<4.89E-2	4.89E-2	8/04/10	0H05008
0910004-41	B22FT1	<4.56E-2	4.56E-2	8/04/10	0H05008
0910004-42	B22FT2	<4.10E-2	4.10E-2	8/04/10	0H05008
0910004-43	B22FF7	<3.76E-2	3.76E-2	8/04/10	0H05008
0910004-44	B22FF8	<3.75E-2	3.75E-2	8/04/10	0H05008
0910004-45	B22FT6	<3.95E-2	3.95E-2	8/04/10	0H05008
0910004-47	B22FT7	<3.80E-2	3.80E-2	8/04/10	0H05008

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22612**		**Lab ID:**	**0910004-02**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22613**		**Lab ID:**	**0910004-03**			
7440-39-3	Barium	<1.22E-1	ug/g dry	1.22E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22615**		**Lab ID:**	**0910004-05**			
7440-39-3	Barium	<1.26E-1	ug/g dry	1.26E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22617**		**Lab ID:**	**0910004-06**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22911**		**Lab ID:**	**0910004-07**			
7440-39-3	Barium	<1.26E-1	ug/g dry	1.26E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22912**		**Lab ID:**	**0910004-08**			
7440-39-3	Barium	<9.53E-2	ug/g dry	9.53E-2	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22941**		**Lab ID:**	**0910004-10**			
7440-39-3	Barium	<1.31E-1	ug/g dry	1.31E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22942**		**Lab ID:**	**0910004-11**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22914**		**Lab ID:**	**0910004-12**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22915**		**Lab ID:**	**0910004-13**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22M13**		**Lab ID:**	**0910004-15**			
7440-39-3	Barium	<1.27E-1	ug/g dry	1.27E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22M14**		**Lab ID:**	**0910004-16**			
7440-39-3	Barium	<1.26E-1	ug/g dry	1.26E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22916**		**Lab ID:**	**0910004-20**			
7440-39-3	Barium	<1.28E-1	ug/g dry	1.28E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22917**		**Lab ID:**	**0910004-21**			
7440-39-3	Barium	<1.22E-1	ug/g dry	1.22E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22619**		**Lab ID:**	**0910004-22**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22692**		**Lab ID:**	**0910004-23**			
7440-39-3	Barium	<1.23E-1	ug/g dry	1.23E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22FF5**		**Lab ID:**	**0910004-24**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22FD8**		**Lab ID:**	**0910004-30**			
7440-39-3	Barium	<1.25E-1	ug/g dry	1.25E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22FD9**		**Lab ID:**	**0910004-31**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22FF0**		**Lab ID:**	**0910004-32**			
7440-39-3	Barium	<1.23E-1	ug/g dry	1.23E-1	8/18/10	0H18001	PNNL-AGG-ICP-AES
HEIS No.	**B22FF2**		**Lab ID:**	**0910004-34**			
7440-39-3	Barium	<1.23E-1	ug/g dry	1.23E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES
HEIS No.	**B22FF3**		**Lab ID:**	**0910004-35**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES
HEIS No.	**B22FR6**		**Lab ID:**	**0910004-36**			
7440-39-3	Barium	<1.23E-1	ug/g dry	1.23E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES

ESL090006

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FR7**		**Lab ID:**	**0910004-37**			
7440-39-3	Barium	<1.25E-1	ug/g dry	1.25E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES
HEIS No.	**B22FR8**		**Lab ID:**	**0910004-38**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES
HEIS No.	**B22FR9**		**Lab ID:**	**0910004-39**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES
HEIS No.	**B22FT0**		**Lab ID:**	**0910004-40**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES
HEIS No.	**B22FT1**		**Lab ID:**	**0910004-41**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES
HEIS No.	**B22FT2**		**Lab ID:**	**0910004-42**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES
HEIS No.	**B22FF7**		**Lab ID:**	**0910004-43**			
7440-39-3	Barium	<1.24E-1	ug/g dry	1.24E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES
HEIS No.	**B22FF8**		**Lab ID:**	**0910004-44**			
7440-39-3	Barium	<1.25E-1	ug/g dry	1.25E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES
HEIS No.	**B22FT6**		**Lab ID:**	**0910004-45**			
7440-39-3	Barium	<1.25E-1	ug/g dry	1.25E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES
HEIS No.	**B22FT7**		**Lab ID:**	**0910004-47**			
7440-39-3	Barium	<1.23E-1	ug/g dry	1.23E-1	8/18/10	0H18002	PNNL-AGG-ICP-AES

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22612**		**Lab ID:**	**0910004-02**			
7440-39-3	Barium	5.68E1	ug/g dry	1.45E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22613**		**Lab ID:**	**0910004-03**			
7440-39-3	Barium	8.29E1	ug/g dry	1.37E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22615**		**Lab ID:**	**0910004-05**			
7440-39-3	Barium	8.10E1	ug/g dry	1.44E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22617**		**Lab ID:**	**0910004-06**			
7440-39-3	Barium	4.87E1	ug/g dry	1.49E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22911**		**Lab ID:**	**0910004-07**			
7440-39-3	Barium	5.04E1	ug/g dry	1.39E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22912**		**Lab ID:**	**0910004-08**			
7440-39-3	Barium	3.75E1	ug/g dry	1.40E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22941**		**Lab ID:**	**0910004-10**			
7440-39-3	Barium	8.15E1	ug/g dry	1.45E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22942**		**Lab ID:**	**0910004-11**			
7440-39-3	Barium	4.03E1	ug/g dry	1.51E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22914**		**Lab ID:**	**0910004-12**			
7440-39-3	Barium	6.92E1	ug/g dry	1.52E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22915**		**Lab ID:**	**0910004-13**			
7440-39-3	Barium	7.48E1	ug/g dry	1.46E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22M13**		**Lab ID:**	**0910004-15**			
7440-39-3	Barium	5.16E1	ug/g dry	1.55E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22M14**		**Lab ID:**	**0910004-16**			
7440-39-3	Barium	3.54E1	ug/g dry	1.54E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22916**		**Lab ID:**	**0910004-20**			
7440-39-3	Barium	3.33E1	ug/g dry	1.61E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22917**		**Lab ID:**	**0910004-21**			
7440-39-3	Barium	4.31E1	ug/g dry	1.67E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22619**		**Lab ID:**	**0910004-22**			
7440-39-3	Barium	4.63E1	ug/g dry	1.67E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22692**		**Lab ID:**	**0910004-23**			
7440-39-3	Barium	5.05E1	ug/g dry	1.64E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22FF5**		**Lab ID:**	**0910004-24**			
7440-39-3	Barium	3.72E1	ug/g dry	1.52E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22FD8**		**Lab ID:**	**0910004-30**			
7440-39-3	Barium	4.66E1	ug/g dry	1.44E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22FD9**		**Lab ID:**	**0910004-31**			
7440-39-3	Barium	6.12E1	ug/g dry	1.37E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22FF0**		**Lab ID:**	**0910004-32**			
7440-39-3	Barium	4.47E1	ug/g dry	1.46E0	8/24/10	0H23001	PNNL-AGG-ICP-AES
HEIS No.	**B22FF2**		**Lab ID:**	**0910004-34**			
7440-39-3	Barium	4.82E1	ug/g dry	1.46E0	8/24/10	0H23002	PNNL-AGG-ICP-AES
HEIS No.	**B22FF3**		**Lab ID:**	**0910004-35**			
7440-39-3	Barium	3.59E1	ug/g dry	1.60E0	8/24/10	0H23002	PNNL-AGG-ICP-AES
HEIS No.	**B22FR6**		**Lab ID:**	**0910004-36**			
7440-39-3	Barium	3.92E1	ug/g dry	1.65E0	8/24/10	0H23002	PNNL-AGG-ICP-AES

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

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FR7**		**Lab ID:**	**0910004-37**			
7440-39-3	Barium	6.94E1	ug/g dry	1.44E0	8/24/10	0H23002	PNNL-AGG-ICP-AES
HEIS No.	**B22FR8**		**Lab ID:**	**0910004-38**			
7440-39-3	Barium	3.79E1	ug/g dry	1.42E0	8/24/10	0H23002	PNNL-AGG-ICP-AES
HEIS No.	**B22FR9**		**Lab ID:**	**0910004-39**			
7440-39-3	Barium	3.46E1	ug/g dry	1.41E0	8/24/10	0H23002	PNNL-AGG-ICP-AES
HEIS No.	**B22FT0**		**Lab ID:**	**0910004-40**			
7440-39-3	Barium	3.51E1	ug/g dry	1.42E0	8/24/10	0H23002	PNNL-AGG-ICP-AES
HEIS No.	**B22FT1**		**Lab ID:**	**0910004-41**			
7440-39-3	Barium	3.16E1	ug/g dry	1.53E0	8/24/10	0H23002	PNNL-AGG-ICP-AES
HEIS No.	**B22FT2**		**Lab ID:**	**0910004-42**			
7440-39-3	Barium	5.91E1	ug/g dry	1.65E0	8/24/10	0H23002	PNNL-AGG-ICP-AES
HEIS No.	**B22FF7**		**Lab ID:**	**0910004-43**			
7440-39-3	Barium	5.42E1	ug/g dry	1.75E0	8/24/10	0H23002	PNNL-AGG-ICP-AES
HEIS No.	**B22FF8**		**Lab ID:**	**0910004-44**			
7440-39-3	Barium	3.39E1	ug/g dry	1.78E0	8/24/10	0H23002	PNNL-AGG-ICP-AES
HEIS No.	**B22FT6**		**Lab ID:**	**0910004-45**			
7440-39-3	Barium	3.51E1	ug/g dry	1.89E0	8/24/10	0H23002	PNNL-AGG-ICP-AES
HEIS No.	**B22FT7**		**Lab ID:**	**0910004-47**			
7440-39-3	Barium	2.53E1	ug/g dry	1.73E0	8/24/10	0H23002	PNNL-AGG-ICP-AES

ESL090006

RCRA Metals by PNNL-AGG-415/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22612**		**Lab ID:**	**0910004-02**			
14092-98-9	Chromium	<3.46E-3	ug/g dry	3.46E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.85E-3	ug/g dry	2.85E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.95E-3	ug/g dry	7.95E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.14E-3	ug/g dry	3.14E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.75E-4	ug/g dry	5.75E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.17E-3	ug/g dry	1.17E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.82E-4	ug/g dry	1.82E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22613**		**Lab ID:**	**0910004-03**			
14092-98-9	Chromium	<3.39E-3	ug/g dry	3.39E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.80E-3	ug/g dry	2.80E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.80E-3	ug/g dry	7.80E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.08E-3	ug/g dry	3.08E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	1.02E-3	ug/g dry	5.65E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.15E-3	ug/g dry	1.15E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.78E-4	ug/g dry	1.78E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22615**		**Lab ID:**	**0910004-05**			
14092-98-9	Chromium	<3.50E-3	ug/g dry	3.50E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.88E-3	ug/g dry	2.88E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<8.04E-3	ug/g dry	8.04E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.18E-3	ug/g dry	3.18E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.82E-4	ug/g dry	5.82E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.18E-3	ug/g dry	1.18E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.84E-4	ug/g dry	1.84E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22617**		**Lab ID:**	**0910004-06**			
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.84E-3	ug/g dry	2.84E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.92E-3	ug/g dry	7.92E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.81E-4	ug/g dry	1.81E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22911**		**Lab ID:**	**0910004-07**			
14092-98-9	Chromium	<3.50E-3	ug/g dry	3.50E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.88E-3	ug/g dry	2.88E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<8.05E-3	ug/g dry	8.05E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.18E-3	ug/g dry	3.18E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.83E-4	ug/g dry	5.83E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.18E-3	ug/g dry	1.18E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.84E-4	ug/g dry	1.84E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22912**		**Lab ID:**	**0910004-08**			
14092-98-9	Chromium	<2.65E-3	ug/g dry	2.65E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	2.39E-3	ug/g dry	2.18E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<6.09E-3	ug/g dry	6.09E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<2.41E-3	ug/g dry	2.41E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<4.41E-4	ug/g dry	4.41E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<8.94E-4	ug/g dry	8.94E-4	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.39E-4	ug/g dry	1.39E-4	8/18/10	0H17001	PNNL-AGG-415

ESL090006

RCRA Metals by PNNL-AGG-415/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22941**	**Lab ID:**		**0910004-10**			
14092-98-9	Chromium	<3.65E-3	ug/g dry	3.65E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<3.01E-3	ug/g dry	3.01E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<8.39E-3	ug/g dry	8.39E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.32E-3	ug/g dry	3.32E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<6.07E-4	ug/g dry	6.07E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.23E-3	ug/g dry	1.23E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.92E-4	ug/g dry	1.92E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22942**	**Lab ID:**		**0910004-11**			
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.83E-3	ug/g dry	2.83E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.90E-3	ug/g dry	7.90E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.12E-3	ug/g dry	3.12E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.72E-4	ug/g dry	5.72E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.81E-4	ug/g dry	1.81E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22914**	**Lab ID:**		**0910004-12**			
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.84E-3	ug/g dry	2.84E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.91E-3	ug/g dry	7.91E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	1.01E-2	ug/g dry	1.16E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	2.03E-4	ug/g dry	1.81E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22915**	**Lab ID:**		**0910004-13**			
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	4.39E-3	ug/g dry	2.83E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.91E-3	ug/g dry	7.91E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.12E-3	ug/g dry	3.12E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.72E-4	ug/g dry	5.72E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	9.84E-3	ug/g dry	1.16E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.81E-4	ug/g dry	1.81E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22M13**	**Lab ID:**		**0910004-15**			
14092-98-9	Chromium	<3.53E-3	ug/g dry	3.53E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.91E-3	ug/g dry	2.91E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<8.11E-3	ug/g dry	8.11E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.21E-3	ug/g dry	3.21E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.87E-4	ug/g dry	5.87E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.19E-3	ug/g dry	1.19E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.86E-4	ug/g dry	1.86E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22M14**	**Lab ID:**		**0910004-16**			
14092-98-9	Chromium	<3.51E-3	ug/g dry	3.51E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.89E-3	ug/g dry	2.89E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<8.07E-3	ug/g dry	8.07E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.19E-3	ug/g dry	3.19E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.84E-4	ug/g dry	5.84E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	3.92E-3	ug/g dry	1.18E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.85E-4	ug/g dry	1.85E-4	8/18/10	0H17001	PNNL-AGG-415

RCRA Metals by PNNL-AGG-415/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22916**	**Lab ID:**		**0910004-20**			
14092-98-9	Chromium	<3.57E-3	ug/g dry	3.57E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	3.53E-3	ug/g dry	2.94E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<8.20E-3	ug/g dry	8.20E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.24E-3	ug/g dry	3.24E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.94E-4	ug/g dry	5.94E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.20E-3	ug/g dry	1.20E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.88E-4	ug/g dry	1.88E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22917**	**Lab ID:**		**0910004-21**			
14092-98-9	Chromium	<3.40E-3	ug/g dry	3.40E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	3.88E-3	ug/g dry	2.80E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.82E-3	ug/g dry	7.82E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.09E-3	ug/g dry	3.09E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.66E-4	ug/g dry	5.66E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.15E-3	ug/g dry	1.15E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.79E-4	ug/g dry	1.79E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22619**	**Lab ID:**		**0910004-22**			
14092-98-9	Chromium	<3.44E-3	ug/g dry	3.44E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.83E-3	ug/g dry	2.83E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.90E-3	ug/g dry	7.90E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.12E-3	ug/g dry	3.12E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.72E-4	ug/g dry	5.72E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.81E-4	ug/g dry	1.81E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22692**	**Lab ID:**		**0910004-23**			
14092-98-9	Chromium	<3.43E-3	ug/g dry	3.43E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.83E-3	ug/g dry	2.83E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.89E-3	ug/g dry	7.89E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.12E-3	ug/g dry	3.12E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.71E-4	ug/g dry	5.71E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.80E-4	ug/g dry	1.80E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22FF5**	**Lab ID:**		**0910004-24**			
14092-98-9	Chromium	<3.46E-3	ug/g dry	3.46E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.85E-3	ug/g dry	2.85E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.95E-3	ug/g dry	7.95E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.14E-3	ug/g dry	3.14E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.75E-4	ug/g dry	5.75E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.17E-3	ug/g dry	1.17E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.82E-4	ug/g dry	1.82E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22FD8**	**Lab ID:**		**0910004-30**			
14092-98-9	Chromium	<3.48E-3	ug/g dry	3.48E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.86E-3	ug/g dry	2.86E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.99E-3	ug/g dry	7.99E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.16E-3	ug/g dry	3.16E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.79E-4	ug/g dry	5.79E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.17E-3	ug/g dry	1.17E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.83E-4	ug/g dry	1.83E-4	8/18/10	0H17001	PNNL-AGG-415

ESL090006

RCRA Metals by PNNL-AGG-415/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FD9**	**Lab ID:**		**0910004-31**			
14092-98-9	Chromium	<3.45E-3	ug/g dry	3.45E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<2.84E-3	ug/g dry	2.84E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<7.92E-3	ug/g dry	7.92E-3	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<5.73E-4	ug/g dry	5.73E-4	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<1.81E-4	ug/g dry	1.81E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22FF0**	**Lab ID:**		**0910004-32**			
14092-98-9	Chromium	<3.43E-3	ug/g dry	3.43E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	<2.82E-3	ug/g dry	2.82E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<7.88E-3	ug/g dry	7.88E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.11E-3	ug/g dry	3.11E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.70E-4	ug/g dry	5.70E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.80E-4	ug/g dry	1.80E-4	8/18/10	0H17002	PNNL-AGG-415
HEIS No.	**B22FF2**	**Lab ID:**		**0910004-34**			
14092-98-9	Chromium	<6.86E-3	ug/g dry	6.86E-3	8/18/10	0H17001	PNNL-AGG-415
7440-38-2	Arsenic	<5.65E-3	ug/g dry	5.65E-3	8/18/10	0H17001	PNNL-AGG-415
14687-58-2	Selenium	<1.58E-2	ug/g dry	1.58E-2	8/18/10	0H17001	PNNL-AGG-415
14378-37-1	Silver	<6.23E-3	ug/g dry	6.23E-3	8/18/10	0H17001	PNNL-AGG-415
14336-64-2	Cadmium	<1.14E-3	ug/g dry	1.14E-3	8/18/10	0H17001	PNNL-AGG-415
13966-28-4	Lead	<2.31E-3	ug/g dry	2.31E-3	8/18/10	0H17001	PNNL-AGG-415
14191-86-7	Mercury	<3.60E-4	ug/g dry	3.60E-4	8/18/10	0H17001	PNNL-AGG-415
HEIS No.	**B22FF3**	**Lab ID:**		**0910004-35**			
14092-98-9	Chromium	<3.45E-3	ug/g dry	3.45E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	<2.84E-3	ug/g dry	2.84E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<7.93E-3	ug/g dry	7.93E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.74E-4	ug/g dry	5.74E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.81E-4	ug/g dry	1.81E-4	8/18/10	0H17002	PNNL-AGG-415
HEIS No.	**B22FR6**	**Lab ID:**		**0910004-36**			
14092-98-9	Chromium	<3.43E-3	ug/g dry	3.43E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	<2.82E-3	ug/g dry	2.82E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<7.88E-3	ug/g dry	7.88E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.11E-3	ug/g dry	3.11E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.70E-4	ug/g dry	5.70E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.80E-4	ug/g dry	1.80E-4	8/18/10	0H17002	PNNL-AGG-415
HEIS No.	**B22FR7**	**Lab ID:**		**0910004-37**			
14092-98-9	Chromium	<3.49E-3	ug/g dry	3.49E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	<2.87E-3	ug/g dry	2.87E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<8.02E-3	ug/g dry	8.02E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.17E-3	ug/g dry	3.17E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.81E-4	ug/g dry	5.81E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	<1.18E-3	ug/g dry	1.18E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.83E-4	ug/g dry	1.83E-4	8/18/10	0H17002	PNNL-AGG-415

RCRA Metals by PNNL-AGG-415/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FR8**	**Lab ID:**		**0910004-38**			
14092-98-9	Chromium	<3.45E-3	ug/g dry	3.45E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	3.68E-3	ug/g dry	2.84E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<7.93E-3	ug/g dry	7.93E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.74E-4	ug/g dry	5.74E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.81E-4	ug/g dry	1.81E-4	8/18/10	0H17002	PNNL-AGG-415
HEIS No.	**B22FR9**	**Lab ID:**		**0910004-39**			
14092-98-9	Chromium	<3.46E-3	ug/g dry	3.46E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	3.98E-3	ug/g dry	2.85E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<7.95E-3	ug/g dry	7.95E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.14E-3	ug/g dry	3.14E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.75E-4	ug/g dry	5.75E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	2.66E-3	ug/g dry	1.17E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.82E-4	ug/g dry	1.82E-4	8/18/10	0H17002	PNNL-AGG-415
HEIS No.	**B22FT0**	**Lab ID:**		**0910004-40**			
14092-98-9	Chromium	<3.46E-3	ug/g dry	3.46E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	3.14E-3	ug/g dry	2.85E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<7.94E-3	ug/g dry	7.94E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.14E-3	ug/g dry	3.14E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.75E-4	ug/g dry	5.75E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	<1.17E-3	ug/g dry	1.17E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.82E-4	ug/g dry	1.82E-4	8/18/10	0H17002	PNNL-AGG-415
HEIS No.	**B22FT1**	**Lab ID:**		**0910004-41**			
14092-98-9	Chromium	<3.45E-3	ug/g dry	3.45E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	<2.84E-3	ug/g dry	2.84E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<7.94E-3	ug/g dry	7.94E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.14E-3	ug/g dry	3.14E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.75E-4	ug/g dry	5.75E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	<1.17E-3	ug/g dry	1.17E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.82E-4	ug/g dry	1.82E-4	8/18/10	0H17002	PNNL-AGG-415
HEIS No.	**B22FT2**	**Lab ID:**		**0910004-42**			
14092-98-9	Chromium	<3.45E-3	ug/g dry	3.45E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	<2.84E-3	ug/g dry	2.84E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<7.93E-3	ug/g dry	7.93E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.13E-3	ug/g dry	3.13E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.74E-4	ug/g dry	5.74E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.81E-4	ug/g dry	1.81E-4	8/18/10	0H17002	PNNL-AGG-415
HEIS No.	**B22FF7**	**Lab ID:**		**0910004-43**			
14092-98-9	Chromium	<3.46E-3	ug/g dry	3.46E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	4.01E-3	ug/g dry	2.85E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<7.95E-3	ug/g dry	7.95E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.14E-3	ug/g dry	3.14E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.76E-4	ug/g dry	5.76E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	<1.17E-3	ug/g dry	1.17E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.82E-4	ug/g dry	1.82E-4	8/18/10	0H17002	PNNL-AGG-415

RCRA Metals by PNNL-AGG-415/Water Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FF8**		**Lab ID:**	**0910004-44**			
14092-98-9	Chromium	<3.47E-3	ug/g dry	3.47E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	5.17E-3	ug/g dry	2.86E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<7.98E-3	ug/g dry	7.98E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.15E-3	ug/g dry	3.15E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.78E-4	ug/g dry	5.78E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	1.10E-2	ug/g dry	1.17E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.82E-4	ug/g dry	1.82E-4	8/18/10	0H17002	PNNL-AGG-415
HEIS No.	**B22FT6**		**Lab ID:**	**0910004-45**			
14092-98-9	Chromium	<3.49E-3	ug/g dry	3.49E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	4.91E-3	ug/g dry	2.87E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<8.03E-3	ug/g dry	8.03E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.17E-3	ug/g dry	3.17E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	9.03E-4	ug/g dry	5.81E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	<1.18E-3	ug/g dry	1.18E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.83E-4	ug/g dry	1.83E-4	8/18/10	0H17002	PNNL-AGG-415
HEIS No.	**B22FT7**		**Lab ID:**	**0910004-47**			
14092-98-9	Chromium	<3.43E-3	ug/g dry	3.43E-3	8/18/10	0H17002	PNNL-AGG-415
7440-38-2	Arsenic	6.13E-3	ug/g dry	2.82E-3	8/18/10	0H17002	PNNL-AGG-415
14687-58-2	Selenium	<7.88E-3	ug/g dry	7.88E-3	8/18/10	0H17002	PNNL-AGG-415
14378-37-1	Silver	<3.11E-3	ug/g dry	3.11E-3	8/18/10	0H17002	PNNL-AGG-415
14336-64-2	Cadmium	<5.70E-4	ug/g dry	5.70E-4	8/18/10	0H17002	PNNL-AGG-415
13966-28-4	Lead	<1.16E-3	ug/g dry	1.16E-3	8/18/10	0H17002	PNNL-AGG-415
14191-86-7	Mercury	<1.80E-4	ug/g dry	1.80E-4	8/18/10	0H17002	PNNL-AGG-415

ESL090006

RCRA Metals by PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22612**		**Lab ID:**	**0910004-02**			
14092-98-9	Chromium	7.31E0	ug/g dry	6.63E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	6.51E-1	ug/g dry	2.89E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.58E-1	ug/g dry	5.58E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	7.97E-2	ug/g dry	1.81E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<4.77E-2	ug/g dry	4.77E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	1.71E0	ug/g dry	1.81E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.27E-2	ug/g dry	1.27E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22613**		**Lab ID:**	**0910004-03**			
14092-98-9	Chromium	8.66E0	ug/g dry	6.25E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	5.75E-1	ug/g dry	2.72E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.26E-1	ug/g dry	5.26E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	3.32E-2	ug/g dry	1.70E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	4.69E-2	ug/g dry	4.50E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	1.80E0	ug/g dry	1.70E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.20E-2	ug/g dry	1.20E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22615**		**Lab ID:**	**0910004-05**			
14092-98-9	Chromium	7.62E0	ug/g dry	6.56E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	4.79E-1	ug/g dry	2.86E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.52E-1	ug/g dry	5.52E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	1.51E-1	ug/g dry	1.79E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	6.80E-2	ug/g dry	4.72E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	2.02E0	ug/g dry	1.79E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.26E-2	ug/g dry	1.26E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22617**		**Lab ID:**	**0910004-06**			
14092-98-9	Chromium	8.02E0	ug/g dry	6.82E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	4.35E-1	ug/g dry	2.97E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.74E-1	ug/g dry	5.74E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	2.70E-2	ug/g dry	1.86E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<4.91E-2	ug/g dry	4.91E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	1.83E0	ug/g dry	1.86E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.31E-2	ug/g dry	1.31E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22911**		**Lab ID:**	**0910004-07**			
14092-98-9	Chromium	8.25E0	ug/g dry	6.36E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	6.40E-1	ug/g dry	2.77E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.36E-1	ug/g dry	5.36E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	5.27E-2	ug/g dry	1.73E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<4.58E-2	ug/g dry	4.58E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	2.23E0	ug/g dry	1.73E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.22E-2	ug/g dry	1.22E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22912**		**Lab ID:**	**0910004-08**			
14092-98-9	Chromium	9.07E0	ug/g dry	6.38E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	1.25E0	ug/g dry	2.78E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.37E-1	ug/g dry	5.37E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	3.34E-2	ug/g dry	1.74E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<4.59E-2	ug/g dry	4.59E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	2.95E0	ug/g dry	1.74E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.23E-2	ug/g dry	1.23E-2	8/19/10	0H18007	PNNL-AGG-415

RCRA Metals by PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22941**		**Lab ID:**	**0910004-10**			
14092-98-9	Chromium	9.01E0	ug/g dry	6.62E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	6.43E-1	ug/g dry	2.88E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.57E-1	ug/g dry	5.57E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	2.19E-2	ug/g dry	1.80E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<4.76E-2	ug/g dry	4.76E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	2.11E0	ug/g dry	1.80E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.27E-2	ug/g dry	1.27E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22942**		**Lab ID:**	**0910004-11**			
14092-98-9	Chromium	6.16E0	ug/g dry	6.91E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	4.12E-1	ug/g dry	3.01E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.81E-1	ug/g dry	5.81E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	3.13E-2	ug/g dry	1.88E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<4.97E-2	ug/g dry	4.97E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	1.79E0	ug/g dry	1.88E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.33E-2	ug/g dry	1.33E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22914**		**Lab ID:**	**0910004-12**			
14092-98-9	Chromium	6.59E0	ug/g dry	6.97E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	6.32E-1	ug/g dry	3.03E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.87E-1	ug/g dry	5.87E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	5.08E-2	ug/g dry	1.90E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	6.87E-2	ug/g dry	5.01E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	1.14E2	ug/g dry	1.90E1	8/20/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.34E-2	ug/g dry	1.34E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22915**		**Lab ID:**	**0910004-13**			
14092-98-9	Chromium	7.30E0	ug/g dry	6.69E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	5.87E-1	ug/g dry	2.91E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.63E-1	ug/g dry	5.63E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	5.44E-2	ug/g dry	1.82E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	6.64E-2	ug/g dry	4.81E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	6.24E1	ug/g dry	1.82E1	8/20/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.29E-2	ug/g dry	1.29E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22M13**		**Lab ID:**	**0910004-15**			
14092-98-9	Chromium	5.62E0	ug/g dry	7.09E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	3.92E-1	ug/g dry	3.09E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.97E-1	ug/g dry	5.97E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	3.58E-2	ug/g dry	1.93E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<5.10E-2	ug/g dry	5.10E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	7.14E0	ug/g dry	1.93E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.36E-2	ug/g dry	1.36E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22M14**		**Lab ID:**	**0910004-16**			
14092-98-9	Chromium	5.88E0	ug/g dry	7.02E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	4.35E-1	ug/g dry	3.06E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.91E-1	ug/g dry	5.91E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	2.80E-2	ug/g dry	1.91E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<5.05E-2	ug/g dry	5.05E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	1.25E2	ug/g dry	1.91E1	8/20/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.35E-2	ug/g dry	1.35E-2	8/19/10	0H18007	PNNL-AGG-415

ESL090006

RCRA Metals by PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22916**		**Lab ID:**	**0910004-20**			
14092-98-9	Chromium	6.89E0	ug/g dry	7.38E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	9.97E-1	ug/g dry	3.21E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<6.21E-1	ug/g dry	6.21E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	3.24E-2	ug/g dry	2.01E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<5.30E-2	ug/g dry	5.30E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	2.14E0	ug/g dry	2.01E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.42E-2	ug/g dry	1.42E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22917**		**Lab ID:**	**0910004-21**			
14092-98-9	Chromium	1.04E1	ug/g dry	7.63E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	1.91E0	ug/g dry	3.32E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<6.42E-1	ug/g dry	6.42E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	3.59E-2	ug/g dry	2.08E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<5.48E-2	ug/g dry	5.48E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	3.08E0	ug/g dry	2.08E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.47E-2	ug/g dry	1.47E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22619**		**Lab ID:**	**0910004-22**			
14092-98-9	Chromium	7.79E0	ug/g dry	7.64E-1	8/19/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	5.80E-1	ug/g dry	3.33E-1	8/19/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<6.43E-1	ug/g dry	6.43E-1	8/19/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	3.99E-2	ug/g dry	2.08E-2	8/19/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<5.50E-2	ug/g dry	5.50E-2	8/19/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	2.55E0	ug/g dry	2.08E-1	8/19/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.47E-2	ug/g dry	1.47E-2	8/19/10	0H18007	PNNL-AGG-415
HEIS No.	**B22692**		**Lab ID:**	**0910004-23**			
14092-98-9	Chromium	7.76E0	ug/g dry	7.48E-1	8/20/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	7.90E-1	ug/g dry	3.26E-1	8/20/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<6.30E-1	ug/g dry	6.30E-1	8/20/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	4.96E-2	ug/g dry	2.04E-2	8/20/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	6.32E-2	ug/g dry	5.38E-2	8/20/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	2.74E0	ug/g dry	2.04E-1	8/20/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.44E-2	ug/g dry	1.44E-2	8/20/10	0H18007	PNNL-AGG-415
HEIS No.	**B22FF5**		**Lab ID:**	**0910004-24**			
14092-98-9	Chromium	5.35E0	ug/g dry	6.96E-1	8/20/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	3.38E-1	ug/g dry	3.03E-1	8/20/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.86E-1	ug/g dry	5.86E-1	8/20/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	2.85E-2	ug/g dry	1.90E-2	8/20/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<5.01E-2	ug/g dry	5.01E-2	8/20/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	1.36E0	ug/g dry	1.90E-1	8/20/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.34E-2	ug/g dry	1.34E-2	8/20/10	0H18007	PNNL-AGG-415
HEIS No.	**B22FD8**		**Lab ID:**	**0910004-30**			
14092-98-9	Chromium	4.01E0	ug/g dry	6.58E-1	8/20/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	4.12E-1	ug/g dry	2.87E-1	8/20/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.54E-1	ug/g dry	5.54E-1	8/20/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	3.82E-2	ug/g dry	1.79E-2	8/20/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<4.73E-2	ug/g dry	4.73E-2	8/20/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	1.53E0	ug/g dry	1.79E-1	8/20/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.27E-2	ug/g dry	1.27E-2	8/20/10	0H18007	PNNL-AGG-415

RCRA Metals by PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FD9**		**Lab ID:**	**0910004-31**			
14092-98-9	Chromium	4.53E0	ug/g dry	6.28E-1	8/20/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	3.86E-1	ug/g dry	2.73E-1	8/20/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.28E-1	ug/g dry	5.28E-1	8/20/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	<1.71E-2	ug/g dry	1.71E-2	8/20/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	<4.51E-2	ug/g dry	4.51E-2	8/20/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	1.33E0	ug/g dry	1.71E-1	8/20/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.21E-2	ug/g dry	1.21E-2	8/20/10	0H18007	PNNL-AGG-415
HEIS No.	**B22FF0**		**Lab ID:**	**0910004-32**			
14092-98-9	Chromium	2.99E0	ug/g dry	6.66E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	<2.90E-1	ug/g dry	2.90E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<5.61E-1	ug/g dry	5.61E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	7.97E-2	ug/g dry	1.81E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	<4.79E-2	ug/g dry	4.79E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	1.22E0	ug/g dry	1.82E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.28E-2	ug/g dry	1.28E-2	8/20/10	0H18008	PNNL-AGG-415
HEIS No.	**B22FF2**		**Lab ID:**	**0910004-34**			
14092-98-9	Chromium	5.42E0	ug/g dry	6.69E-1	8/20/10	0H18007	PNNL-AGG-415
7440-38-2	Arsenic	3.94E-1	ug/g dry	2.91E-1	8/20/10	0H18007	PNNL-AGG-415
14687-58-2	Selenium	<5.63E-1	ug/g dry	5.63E-1	8/20/10	0H18007	PNNL-AGG-415
14378-37-1	Silver	8.60E-2	ug/g dry	1.82E-2	8/20/10	0H18007	PNNL-AGG-415
14336-64-2	Cadmium	5.36E-2	ug/g dry	4.81E-2	8/20/10	0H18007	PNNL-AGG-415
13966-28-4	Lead	1.50E0	ug/g dry	1.82E-1	8/20/10	0H18007	PNNL-AGG-415
14191-86-7	Mercury	<1.28E-2	ug/g dry	1.28E-2	8/20/10	0H18007	PNNL-AGG-415
HEIS No.	**B22FF3**		**Lab ID:**	**0910004-35**			
14092-98-9	Chromium	4.11E0	ug/g dry	7.32E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	<3.18E-1	ug/g dry	3.18E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<6.16E-1	ug/g dry	6.16E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	4.83E-2	ug/g dry	1.99E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	<5.26E-2	ug/g dry	5.26E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	1.03E0	ug/g dry	1.99E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.41E-2	ug/g dry	1.41E-2	8/20/10	0H18008	PNNL-AGG-415
HEIS No.	**B22FR6**		**Lab ID:**	**0910004-36**			
14092-98-9	Chromium	3.69E0	ug/g dry	7.54E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	<3.28E-1	ug/g dry	3.28E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<6.35E-1	ug/g dry	6.35E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	3.83E-2	ug/g dry	2.05E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	<5.42E-2	ug/g dry	5.42E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	1.59E0	ug/g dry	2.06E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.45E-2	ug/g dry	1.45E-2	8/20/10	0H18008	PNNL-AGG-415
HEIS No.	**B22FR7**		**Lab ID:**	**0910004-37**			
14092-98-9	Chromium	7.47E0	ug/g dry	6.56E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	5.57E-1	ug/g dry	2.86E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<5.52E-1	ug/g dry	5.52E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	5.41E-2	ug/g dry	1.79E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	<4.72E-2	ug/g dry	4.72E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	5.29E0	ug/g dry	1.79E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.26E-2	ug/g dry	1.26E-2	8/20/10	0H18008	PNNL-AGG-415

RCRA Metals by PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FR8**		**Lab ID:**	**0910004-38**			
14092-98-9	Chromium	7.64E0	ug/g dry	6.50E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	5.50E-1	ug/g dry	2.83E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<5.47E-1	ug/g dry	5.47E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	3.12E-2	ug/g dry	1.77E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	<4.67E-2	ug/g dry	4.67E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	2.27E0	ug/g dry	1.77E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.25E-2	ug/g dry	1.25E-2	8/20/10	0H18008	PNNL-AGG-415
HEIS No.	**B22FR9**		**Lab ID:**	**0910004-39**			
14092-98-9	Chromium	7.57E0	ug/g dry	6.46E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	5.36E-1	ug/g dry	2.81E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<5.44E-1	ug/g dry	5.44E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	2.28E-2	ug/g dry	1.76E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	<4.64E-2	ug/g dry	4.64E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	2.73E1	ug/g dry	1.76E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.24E-2	ug/g dry	1.24E-2	8/20/10	0H18008	PNNL-AGG-415
HEIS No.	**B22FT0**		**Lab ID:**	**0910004-40**			
14092-98-9	Chromium	7.93E0	ug/g dry	6.47E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	5.95E-1	ug/g dry	2.82E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<5.45E-1	ug/g dry	5.45E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	2.24E-2	ug/g dry	1.76E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	<4.65E-2	ug/g dry	4.65E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	2.35E0	ug/g dry	1.76E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.24E-2	ug/g dry	1.24E-2	8/20/10	0H18008	PNNL-AGG-415
HEIS No.	**B22FT1**		**Lab ID:**	**0910004-41**			
14092-98-9	Chromium	6.51E0	ug/g dry	6.98E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	4.85E-1	ug/g dry	3.04E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<5.87E-1	ug/g dry	5.87E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	1.92E-2	ug/g dry	1.90E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	<5.02E-2	ug/g dry	5.02E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	1.42E0	ug/g dry	1.90E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.34E-2	ug/g dry	1.34E-2	8/20/10	0H18008	PNNL-AGG-415
HEIS No.	**B22FT2**		**Lab ID:**	**0910004-42**			
14092-98-9	Chromium	7.08E0	ug/g dry	7.54E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	5.06E-1	ug/g dry	3.28E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<6.34E-1	ug/g dry	6.34E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	3.15E-2	ug/g dry	2.05E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	<5.42E-2	ug/g dry	5.42E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	3.70E0	ug/g dry	2.05E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.45E-2	ug/g dry	1.45E-2	8/20/10	0H18008	PNNL-AGG-415
HEIS No.	**B22FF7**		**Lab ID:**	**0910004-43**			
14092-98-9	Chromium	8.62E0	ug/g dry	8.01E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	3.17E0	ug/g dry	3.49E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<6.74E-1	ug/g dry	6.74E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	<2.18E-2	ug/g dry	2.18E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	5.89E-2	ug/g dry	5.76E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	6.36E0	ug/g dry	2.18E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.54E-2	ug/g dry	1.54E-2	8/20/10	0H18008	PNNL-AGG-415

RCRA Metals by PNNL-AGG-415/Acid Extract

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FF8**	**Lab ID:**		**0910004-44**			
14092-98-9	Chromium	1.05E1	ug/g dry	8.15E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	2.57E0	ug/g dry	3.55E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<6.86E-1	ug/g dry	6.86E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	<2.22E-2	ug/g dry	2.22E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	6.16E-2	ug/g dry	5.86E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	4.84E0	ug/g dry	2.22E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	1.67E-2	ug/g dry	1.57E-2	8/20/10	0H18008	PNNL-AGG-415
HEIS No.	**B22FT6**	**Lab ID:**		**0910004-45**			
14092-98-9	Chromium	9.26E0	ug/g dry	8.62E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	2.09E0	ug/g dry	3.75E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<7.25E-1	ug/g dry	7.25E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	4.17E-2	ug/g dry	2.35E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	<6.20E-2	ug/g dry	6.20E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	4.72E0	ug/g dry	2.35E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.66E-2	ug/g dry	1.66E-2	8/20/10	0H18008	PNNL-AGG-415
HEIS No.	**B22FT7**	**Lab ID:**		**0910004-47**			
14092-98-9	Chromium	7.27E0	ug/g dry	7.91E-1	8/20/10	0H18008	PNNL-AGG-415
7440-38-2	Arsenic	2.07E0	ug/g dry	3.44E-1	8/20/10	0H18008	PNNL-AGG-415
14687-58-2	Selenium	<6.66E-1	ug/g dry	6.66E-1	8/20/10	0H18008	PNNL-AGG-415
14378-37-1	Silver	2.90E-2	ug/g dry	2.15E-2	8/20/10	0H18008	PNNL-AGG-415
14336-64-2	Cadmium	<5.69E-2	ug/g dry	5.69E-2	8/20/10	0H18008	PNNL-AGG-415
13966-28-4	Lead	3.55E0	ug/g dry	2.16E-1	8/20/10	0H18008	PNNL-AGG-415
14191-86-7	Mercury	<1.52E-2	ug/g dry	1.52E-2	8/20/10	0H18008	PNNL-AGG-415

Strontium 90/Acid Extract

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

Lab ID	HEIS No.	Results	MDA	UNC	Analyzed	Batch
0910004-02	B22612	<9.68E-1	9.68E-1		9/03/10	0H10018
0910004-03	B22613	<8.95E-1	8.95E-1		9/03/10	0H10018
0910004-05	B22615	<9.42E-1	9.42E-1		9/03/10	0H10018
0910004-06	B22617	<9.54E-1	9.54E-1		9/03/10	0H10018
0910004-07	B22911	<9.42E-1	9.42E-1		9/03/10	0H10018
0910004-08	B22912	<9.56E-1	9.56E-1		9/03/10	0H10018
0910004-10	B22941	<9.61E-1	9.61E-1		9/03/10	0H10018
0910004-11	B22942	<9.57E-1	9.57E-1		9/03/10	0H10018
0910004-12	B22914	<1.03E0	1.03E0		9/03/10	0H10018
0910004-13	B22915	<9.60E-1	9.60E-1		9/03/10	0H10018
0910004-15	B22M13	<9.67E-1	9.67E-1		9/03/10	0H10018
0910004-16	B22M14	<9.66E-1	9.66E-1		9/03/10	0H10018
0910004-20	B22916	<9.53E-1	9.53E-1		9/03/10	0H10018
0910004-21	B22917	<9.70E-1	9.70E-1		9/03/10	0H10018
0910004-22	B22619	<9.66E-1	9.66E-1		9/03/10	0H10018
0910004-23	B22692	<9.51E-1	9.51E-1		9/03/10	0H10018
0910004-24	B22FF5	<9.44E-1	9.44E-1		9/03/10	0H10018
0910004-30	B22FD8	<9.57E-1	9.57E-1		9/03/10	0H10018
0910004-31	B22FD9	<9.21E-1	9.21E-1		9/03/10	0H10018
0910004-32	B22FF0	<9.55E-1	9.55E-1		9/03/10	0H13015
0910004-34	B22FF2	<9.51E-1	9.51E-1		9/03/10	0H10018
0910004-35	B22FF3	<9.68E-1	9.68E-1		9/03/10	0H13015
0910004-36	B22FR6	<9.63E-1	9.63E-1		9/03/10	0H13015
0910004-37	B22FR7	<9.65E-1	9.65E-1		9/03/10	0H13015
0910004-38	B22FR8	<9.69E-1	9.69E-1		9/03/10	0H13015
0910004-39	B22FR9	<9.66E-1	9.66E-1		9/03/10	0H13015
0910004-40	B22FT0	<9.59E-1	9.59E-1		9/03/10	0H13015
0910004-41	B22FT1	<9.71E-1	9.71E-1		9/03/10	0H13015
0910004-42	B22FT2	<9.69E-1	9.69E-1		9/03/10	0H13015
0910004-43	B22FF7	<9.71E-1	9.71E-1		9/03/10	0H13015
0910004-44	B22FF8	<9.84E-1	9.84E-1		9/03/10	0H13015
0910004-45	B22FT6	<1.07E0	1.07E0		9/03/10	0H13015
0910004-47	B22FT7	<9.72E-1	9.72E-1		9/03/10	0H13015

Strontium 90

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

Lab ID	HEIS No.	Results	MDA	UNC	Analyzed	Batch
0910004-02	B22612	<9.65E-1	9.65E-1		9/02/10	0H10011
0910004-03	B22613	<9.25E-1	9.25E-1		9/02/10	0H10011
0910004-05	B22615	<9.58E-1	9.58E-1		9/02/10	0H10011
0910004-06	B22617	<9.15E-1	9.15E-1		9/02/10	0H10011
0910004-07	B22911	<9.92E-1	9.92E-1		9/02/10	0H10011
0910004-08	B22912	<7.56E-1	7.56E-1		9/02/10	0H10011
0910004-10	B22941	<1.01E0	1.01E0		9/02/10	0H10011
0910004-11	B22942	<9.03E-1	9.03E-1		9/02/10	0H10011
0910004-12	B22914	<9.71E-1	9.71E-1		9/02/10	0H10011
0910004-13	B22915	<9.41E-1	9.41E-1		9/02/10	0H10011
0910004-15	B22M13	<9.12E-1	9.12E-1		9/02/10	0H10011
0910004-16	B22M14	<9.17E-1	9.17E-1		9/02/10	0H10011
0910004-20	B22916	<8.62E-1	8.62E-1		9/02/10	0H10011
0910004-21	B22917	<7.94E-1	7.94E-1		9/02/10	0H10011
0910004-22	B22619	<7.97E-1	7.97E-1		9/02/10	0H10011
0910004-23	B22692	<8.04E-1	8.04E-1		9/02/10	0H10011
0910004-24	B22FF5	<8.84E-1	8.84E-1		9/02/10	0H10011
0910004-30	B22FD8	<9.67E-1	9.67E-1		9/02/10	0H10011
0910004-31	B22FD9	<9.67E-1	9.67E-1		9/02/10	0H10011
0910004-32	B22FF0	<9.36E-1	9.36E-1		9/02/10	0H18005
0910004-34	B22FF2	<9.29E-1	9.29E-1		9/02/10	0H10011
0910004-35	B22FF3	<8.56E-1	8.56E-1		9/02/10	0H10011
0910004-36	B22FR6	<8.08E-1	8.08E-1		9/02/10	0H18005
0910004-37	B22FR7	<9.83E-1	9.83E-1		9/02/10	0H18005
0910004-38	B22FR8	<9.84E-1	9.84E-1		9/02/10	0H18005
0910004-39	B22FR9	<9.90E-1	9.90E-1		9/02/10	0H18005
0910004-40	B22FT0	<9.79E-1	9.79E-1		9/02/10	0H18005
0910004-41	B22FT1	<9.13E-1	9.13E-1		9/02/10	0H18005
0910004-42	B22FT2	<8.21E-1	8.21E-1		9/02/10	0H18005
0910004-43	B22FF7	<7.52E-1	7.52E-1		9/02/10	0H18005
0910004-44	B22FF8	<7.50E-1	7.50E-1		9/02/10	0H18005
0910004-45	B22FT6	<7.90E-1	7.90E-1		9/02/10	0H18005
0910004-47	B22FT7	<7.60E-1	7.60E-1		9/02/10	0H18005

Equilibrium Kd Calculations

0910004-02	B22612
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-03	B22613
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	4.45E-02
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-05	B22615
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-06	B22617
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-07	B22911
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-08	B22912
Analyte	Kd (L/g)
Arsenic 75	4.02E-01
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-10	B22941
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-11	B22942
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-12	B22914
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	1.13E+01
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-13	B22915
Analyte	Kd (L/g)
Arsenic 75	1.33E-01
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	6.33E+00
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-15	B22M13
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-16	B22M14
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	3.25E+01
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

Equilibrium Kd Calculations

0910004-20	B22916
Analyte	Kd (L/g)
Arsenic 75	2.92E-01
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-21	B22917
Analyte	Kd (L/g)
Arsenic 75	4.85E-01
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-22	B22619
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-23	B22692
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-24	B22FF5
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-30	B22FD8
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-31	B22FD9
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-32	B22FF0
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-34	B22FF2
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-35	B22FF3
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-36	B22FR6
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-37	B22FR7
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

Equilibrium Kd Calculations

0910004-38	B22FR8
Analyte	Kd (L/g)
Arsenic 75	1.49E-01
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-39	B22FR9
Analyte	Kd (L/g)
Arsenic 75	1.34E-01
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	1.03E+01
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-40	B22FT0
Analyte	Kd (L/g)
Arsenic 75	1.89E-01
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-41	B22FT1
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-42	B22FT2
Analyte	Kd (L/g)
Arsenic 75	ND
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-43	B22FF7
Analyte	Kd (L/g)
Arsenic 75	7.93E-01
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-44	B22FF8
Analyte	Kd (L/g)
Arsenic 75	5.00E-01
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	4.42E-01
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-45	B22FT6
Analyte	Kd (L/g)
Arsenic 75	4.31E-01
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

0910004-47	B22FT7
Analyte	Kd (L/g)
Arsenic 75	3.35E-01
Barium	ND
Cadmium 111	ND
Chromium 52	ND
Chromium, Hexavalent	ND
Lead 208	ND
Mercury 202	ND
Selenium 82	ND
Silver 107	ND
Strontium-90	ND

Physical Characteristics

Porosity (% by Volume) by Calculation

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0910004-02	B22612	2.63E1	N/A	9/22/10	0I22003
0910004-03	B22613	4.44E1	N/A	9/22/10	0I22003
0910004-04	B22614	3.18E1	N/A	9/22/10	0I22003
0910004-05	B22615	3.28E1	N/A	9/22/10	0I22003
0910004-06	B22617	3.30E1	N/A	9/22/10	0I22003
0910004-07	B22911	2.42E1	N/A	9/22/10	0I22003
0910004-08	B22912	2.19E1	N/A	9/22/10	0I22003
0910004-10	B22941	NDET	N/A	9/22/10	0I22003
0910004-11	B22942	NDET	N/A	9/22/10	0I22003
0910004-12	B22914	NDET	N/A	9/22/10	0I22003
0910004-13	B22915	3.17E1	N/A	9/22/10	0I22003
0910004-15	B22M13	NDET	N/A	9/22/10	0I22003
0910004-16	B22M14	2.52E1	N/A	9/22/10	0I22003
0910004-17	B22995	NDET	N/A	9/22/10	0I22003
0910004-19	B22997	NDET	N/A	9/22/10	0I22003
0910004-20	B22916	3.93E1	N/A	9/22/10	0I22003
0910004-21	B22917	3.69E1	N/A	9/22/10	0I22003
0910004-22	B22619	3.43E1	N/A	9/22/10	0I22003
0910004-23	B22692	3.57E1	N/A	9/22/10	0I22003
0910004-24	B22FF5	NDET	N/A	9/22/10	0I22003
0910004-26	B23KT7	NDET	N/A	9/22/10	0I22003
0910004-27	B23KT8	NDET	N/A	9/22/10	0I22003
0910004-28	B234R6	NDET	N/A	9/22/10	0I22003
0910004-29	B234R7	NDET	N/A	9/22/10	0I22003
0910004-30	B22FD8	8.40E0	N/A	9/22/10	0I22003
0910004-31	B22FD9	1.98E1	N/A	9/22/10	0I22003
0910004-32	B22FF0	2.99E1	N/A	9/22/10	0I22003
0910004-34	B22FF2	3.14E1	N/A	9/22/10	0I22003
0910004-35	B22FF3	NDET	N/A	9/22/10	0I22003
0910004-36	B22FR6	NDET	N/A	9/22/10	0I22003
0910004-37	B22FR7	NDET	N/A	9/22/10	0I22003
0910004-38	B22FR8	2.48E1	N/A	9/22/10	0I22003
0910004-39	B22FR9	2.23E1	N/A	9/22/10	0I22003
0910004-40	B22FT0	3.06E1	N/A	9/22/10	0I22003
0910004-41	B22FT1	2.70E1	N/A	9/22/10	0I22003
0910004-42	B22FT2	4.89E1	N/A	9/22/10	0I22003
0910004-43	B22FF7	4.35E1	N/A	9/22/10	0I22003
0910004-44	B22FF8	4.83E1	N/A	9/22/10	0I22003
0910004-45	B22FT6	4.38E1	N/A	9/22/10	0I22003
0910004-47	B22FT7	45.3E1	N/A	9/22/10	0I22003

Saturated Hydraulic Conductivity

Hydraulic Conductivity (cm/hr) by ASTM D5084

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0910004-02	B22612	1.24E-1	N/A	8/23/10	0I22002
0910004-03	B22613	2.74E1	N/A	8/24/10	0I22002
0910004-04	B22614	1.00E-1	N/A	8/20/10	0I22002
0910004-05	B22615	6.37E-1	N/A	8/18/10	0I22002
0910004-06	B22617	8.12E-3	N/A	8/27/10	0I22002
0910004-07	B22911	1.46E-2	N/A	8/23/10	0I22002
0910004-08	B22912	2.08E-2	N/A	8/25/10	0I22002
0910004-10	B22941	NDET	N/A	9/22/10	0I22002
0910004-11	B22942	NDET	N/A	9/22/10	0I22002
0910004-12	B22914	NDET	N/A	9/22/10	0I22002
0910004-13	B22915	1.69E0	N/A	8/24/10	0I22002
0910004-15	B22M13	NDET	N/A	9/22/10	0I22002
0910004-16	B22M14	1.32E0	N/A	9/07/10	0I22002
0910004-17	B22995	NDET	N/A	9/22/10	0I22002
0910004-19	B22997	NDET	N/A	9/22/10	0I22002
0910004-20	B22916	1.90E-3	N/A	9/02/10	0I22002
0910004-21	B22917	1.59E-2	N/A	9/08/10	0I22002
0910004-22	B22619	1.83E-2	N/A	9/08/10	0I22002
0910004-23	B22692	1.65E0	N/A	9/08/10	0I22002
0910004-24	B22FF5	NDET	N/A	9/22/10	0I22002
0910004-26	B23KT7	NDET	N/A	9/22/10	0I22002
0910004-27	B23KT8	NDET	N/A	9/22/10	0I22002
0910004-28	B234R6	NDET	N/A	9/22/10	0I22002
0910004-29	B234R7	NDET	N/A	9/22/10	0I22002
0910004-30	B22FD8	2.79E0	N/A	9/10/10	0I22002
0910004-31	B22FD9	2.89E0	N/A	9/10/10	0I22002
0910004-32	B22FF0	1.78E1	N/A	9/13/10	0I22002
0910004-34	B22FF2	2.78E0	N/A	9/14/10	0I22002
0910004-35	B22FF3	NDET	N/A	9/22/10	0I22002
0910004-37	B22FR7	NDET	N/A	9/22/10	0I22002
0910004-38	B22FR8	4.79E-1	N/A	9/15/10	0I22002
0910004-39	B22FR9	6.12E-2	N/A	9/13/10	0I22002
0910004-40	B22FT0	4.16E-1	N/A	9/14/10	0I22002
0910004-41	B22FT1	2.02E-2	N/A	9/15/10	0I22002
0910004-42	B22FT2	1.09E1	N/A	9/16/10	0I22002
0910004-43	B22FF7	2.38E-3	N/A	9/17/10	0I22002
0910004-44	B22FF8	4.16E-3	N/A	9/20/10	0I22002
0910004-45	B22FT6	4.11E-2	N/A	9/20/10	0I22002
0910004-47	B22FT7	NDET	N/A	9/22/10	0I22002

Particle Size Distribution (Dry Sieve)

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22612**		**Lab ID:**	**0910004-02**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.92E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.45E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.13E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.08E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	8.61E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	8.34E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	7.67E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	7.07E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.26E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22613**		**Lab ID:**	**0910004-03**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	3.33E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.54E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.22E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.37E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.32E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	9.81E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	9.39E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	7.14E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	6.76E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	9.11E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22614**		**Lab ID:**	**0910004-04**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.13E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.38E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.41E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.44E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	1.18E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.08E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	8.24E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	6.86E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	8.70E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22615**		**Lab ID:**	**0910004-05**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	9.17E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.85E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.22E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.35E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.25E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	9.71E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	7.37E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63

Particle Size Distribution (Dry Sieve)

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22615**		**Lab ID:**	**0910004-05**			
N/A	Particle Size 125 uM	6.29E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	5.13E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	5.67E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22617**		**Lab ID:**	**0910004-06**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	1.08E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	8.75E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.08E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.24E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.12E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	9.63E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	9.79E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.18E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	7.58E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	7.28E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22911**		**Lab ID:**	**0910004-07**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	7.80E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	5.40E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	8.41E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.06E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	1.54E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.73E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.29E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	8.93E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.31E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22912**		**Lab ID:**	**0910004-08**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	4.87E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.12E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.02E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	9.05E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	8.95E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.65E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.58E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	1.27E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.07E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22941**		**Lab ID:**	**0910004-10**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	4.74E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.49E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.01E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63

Particle Size Distribution (Dry Sieve)

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22941**		**Lab ID:**	**0910004-10**			
N/A	Particle Size 2000 uM	9.34E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	9.33E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	9.68E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	9.64E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.06E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	8.66E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.30E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22942**		**Lab ID:**	**0910004-11**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	1.14E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	2.06E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.89E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.24E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	7.30E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	5.55E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	7.52E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	6.19E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	4.49E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	5.66E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22914**		**Lab ID:**	**0910004-12**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	2.40E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.53E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	6.14E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	7.47E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	8.67E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	9.22E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.25E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.24E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	9.04E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.68E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22915**		**Lab ID:**	**0910004-13**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	3.92E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	7.33E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	8.18E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	9.31E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	1.24E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.98E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.48E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	1.12E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.31E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22M13**		**Lab ID:**	**0910004-15**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63

Particle Size Distribution (Dry Sieve)

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22M13**	**Lab ID:**	**0910004-15**				
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	5.16E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.55E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.24E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.12E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	9.05E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	1.57E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.15E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	8.49E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	5.08E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	5.93E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22M14**	**Lab ID:**	**0910004-16**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	2.19E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	2.38E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	4.60E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	7.74E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.10E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	1.42E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	2.22E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	2.40E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	7.78E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	3.97E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22995**	**Lab ID:**	**0910004-17**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	3.86E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	5.73E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.33E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	9.50E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	4.82E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	3.05E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	7.85E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.70E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22997**	**Lab ID:**	**0910004-19**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	2.66E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	7.76E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.83E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	9.15E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	4.47E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	2.94E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63

Particle Size Distribution (Dry Sieve)

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22997**		**Lab ID:**	**0910004-19**			
N/A	Particle Size 63 uM	1.04E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	3.51E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22916**		**Lab ID:**	**0910004-20**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.46E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.19E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.93E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	5.85E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	2.44E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	2.74E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	2.97E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	8.12E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22917**		**Lab ID:**	**0910004-21**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	4.66E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	7.57E-2	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	3.78E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	1.39E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.67E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	2.55E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	3.47E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.66E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22619**		**Lab ID:**	**0910004-22**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	9.64E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	2.80E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	2.68E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	2.75E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	3.91E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	3.82E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	2.78E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	1.18E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	9.10E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22692**		**Lab ID:**	**0910004-23**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	2.27E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	2.17E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	8.89E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63

Particle Size Distribution (Dry Sieve)

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22692**	**Lab ID:**	**0910004-23**				
N/A	Particle Size 1000 uM	1.39E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	2.42E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	3.04E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	3.07E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	1.82E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.36E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FF5**	**Lab ID:**	**0910004-24**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	1.31E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.58E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.74E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.55E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.13E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	8.01E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	6.49E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	4.91E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	3.56E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	3.96E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B23KT7**	**Lab ID:**	**0910004-26**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	1.48E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	2.85E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.84E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.45E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	9.41E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	5.22E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	3.77E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	2.11E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	1.41E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.81E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B23KT8**	**Lab ID:**	**0910004-27**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	6.67E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.58E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.14E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.66E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.76E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	1.73E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	8.39E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	2.88E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	1.50E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.86E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B234R6**	**Lab ID:**	**0910004-28**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63

Particle Size Distribution (Dry Sieve)

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B234R6**	**Lab ID:**	**0910004-28**				
N/A	Particle Size 16000 uM	2.33E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.63E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.69E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.13E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	8.71E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	7.94E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.39E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.15E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	4.99E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	6.15E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B234R7**	**Lab ID:**	**0910004-29**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	2.53E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	7.75E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	6.21E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	5.13E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	4.81E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	4.83E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	2.98E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	2.45E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	9.77E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	4.67E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FD8**	**Lab ID:**	**0910004-30**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	1.07E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	2.80E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.81E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.02E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	7.62E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	6.54E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	4.98E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	4.14E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	4.13E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	5.51E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FD9**	**Lab ID:**	**0910004-31**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	6.53E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.40E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.55E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.35E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.09E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	9.93E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	7.28E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	6.33E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	6.39E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63

Particle Size Distribution (Dry Sieve)

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FD9**		**Lab ID:**	**0910004-31**			
N/A	Particle Size Pan	9.70E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FF0**		**Lab ID:**	**0910004-32**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.67E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	2.14E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.37E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.47E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	9.89E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	7.29E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	5.49E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	5.47E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	5.39E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FF2**		**Lab ID:**	**0910004-34**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	2.03E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	3.44E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.25E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	7.38E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	6.12E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	5.93E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	4.21E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	2.95E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	2.57E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	3.67E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FF3**		**Lab ID:**	**0910004-35**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	2.91E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	2.44E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.36E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	9.59E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	6.75E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	4.67E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	4.22E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	2.99E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	2.18E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	2.54E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FR6**		**Lab ID:**	**0910004-36**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	2.47E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	2.89E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.82E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.50E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	1.17E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63

Particle Size Distribution (Dry Sieve)

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FR6**	**Lab ID:**	**0910004-36**				
N/A	Particle Size 500 uM	8.04E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	5.61E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	3.77E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	2.75E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	3.65E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FR7**	**Lab ID:**	**0910004-37**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	7.16E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	2.42E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.82E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	1.16E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	7.40E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	5.94E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	6.93E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	5.42E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	4.99E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	8.09E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FR8**	**Lab ID:**	**0910004-38**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	5.29E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.59E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	9.29E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	7.75E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	6.57E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	5.74E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	9.34E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.60E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	1.05E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.37E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FR9**	**Lab ID:**	**0910004-39**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	2.37E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	6.60E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	6.80E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	8.81E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	8.22E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	7.84E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	2.18E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.38E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	1.09E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.29E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FT0**	**Lab ID:**	**0910004-40**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	2.12E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63

Particle Size Distribution (Dry Sieve)

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FT0**	**Lab ID:**	**0910004-40**				
N/A	Particle Size 8000 uM	1.63E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	9.84E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	9.19E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	7.53E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	6.62E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.25E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.33E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	8.89E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	1.37E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FT1**	**Lab ID:**	**0910004-41**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	6.83E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.82E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.12E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	7.61E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	5.57E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	5.08E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.94E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.21E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	6.35E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	7.71E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FT2**	**Lab ID:**	**0910004-42**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	1.08E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	1.71E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.15E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	9.08E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	6.99E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	6.99E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.39E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.08E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	5.80E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	7.02E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FF7**	**Lab ID:**	**0910004-43**				
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	4.72E-2	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	3.15E-2	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	1.31E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	7.39E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	3.19E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	2.30E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	4.41E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63

Particle Size Distribution (Dry Sieve)

CAS #	Analyte	Results	Units	EQL	Analyzed	Batch	Method
HEIS No.	**B22FF8**		**Lab ID:**	**0910004-44**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	2.75E-2	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	1.21E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	1.66E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	2.88E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	2.38E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	4.55E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FT6**		**Lab ID:**	**0910004-45**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	3.38E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	1.34E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	9.70E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	5.36E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	3.23E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	5.19E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.80E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	1.92E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	5.57E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
HEIS No.	**B22FT7**		**Lab ID:**	**0910004-47**			
N/A	Particle Size 63000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 31500 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 16000 uM	0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 8000 uM	3.60E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 4000 uM	2.32E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 2000 uM	2.56E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 1000 uM	9.18E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 500 uM	3.91E-1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 250 uM	2.46E0	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 125 uM	1.93E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size 63 uM	3.49E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63
N/A	Particle Size Pan	3.68E1	% by Weight	N/A	9/23/10	0G28001	ASTM D422-63

PARTICLE SIZE DISTRIBUTION (HYDROMETER)

0910004-02 (B22612)

Particle Size (uM)	% Finer Than
88.8	19.9
62.6	19.4
35.7	17.7
18.8	11.6
10.5	7.74
7.35	6.08
5.98	5.53
5.14	4.70
1.46	2.21

0910004-04 (B22614)

Particle Size (uM)	% Finer Than
91.0	23.6
63.6	21.5
35.9	17.8
19.1	13.3
10.8	9.97
7.54	8.16
6.12	7.25
5.25	6.04
1.49	3.63

0910004-06 (B22617)

Particle Size (uM)	% Finer Than
81.6	13.6
57.1	12.2
32.4	9.65
17.5	7.66
9.95	5.67
6.97	4.54
5.67	3.97
4.90	3.69
1.40	2.55

0910004-08 (B22912)

Particle Size (uM)	% Finer Than
87.9	29.3
62.9	26.8
35.5	22.4
19.0	17.6
10.7	12.5
7.46	10.6
6.03	8.80
5.20	8.06
1.47	4.40

0910004-03 (B22613)

Particle Size (uM)	% Finer Than
90.7	20.8
63.0	17.7
35.7	14.7
19.0	10.7
10.8	8.25
7.55	6.42
6.13	5.50
5.28	4.89
1.50	3.06

0910004-05 (B22615)

Particle Size (uM)	% Finer Than
91.2	17.5
64.0	16.6
36.2	13.7
19.5	11.6
10.9	8.28
7.62	6.62
6.18	5.92
5.32	5.21
1.51	3.31

0910004-07 (B22911)

Particle Size (uM)	% Finer Than
94.2	27.9
66.0	26.0
37.1	20.6
19.9	16.3
11.3	12.4
7.89	10.5
6.38	8.92
5.52	8.53
1.56	4.65

0910004-10 (B22941)

Particle Size (uM)	% Finer Than
89.5	27.2
62.1	23.9
35.0	19.6
18.7	15.6
10.4	10.4
7.26	7.95
5.89	7.03
5.07	6.12
1.44	3.67

0910004-11 (B22942)

Particle Size (uM)	% Finer Than
88.3	8.70
61.5	7.31
34.8	5.57
18.7	4.18
10.7	2.96
7.48	2.44
6.08	2.09
5.27	2.09
1.51	1.39

0910004-13 (B22915)

Particle Size (uM)	% Finer Than
95.1	34.8
66.2	31.4
37.4	26.3
19.9	20.9
11.3	16.3
7.85	13.5
6.37	12.4
5.49	11.6
1.54	6.19

0910004-16 (B22M14)

Particle Size (uM)	% Finer Than
82.2	7.32
57.5	5.29
32.9	3.66
17.9	2.85
10.3	2.44
7.30	2.44
5.95	2.03
5.14	1.63
1.48	1.63

0910004-19 (B22997)

Particle Size (uM)	% Finer Than
82.6	9.19
57.5	5.81
32.9	3.87
17.9	2.90
10.4	2.90
7.33	2.90
5.95	1.94
5.16	1.94
1.49	1.94

0910004-12 (B22914)

Particle Size (uM)	% Finer Than
94.1	29.8
65.5	26.8
37.0	22.4
19.7	17.1
11.1	13.4
7.75	11.1
6.28	10.0
5.42	9.38
1.52	5.36

0910004-15 (B22M13)

Particle Size (uM)	% Finer Than
88.2	15.8
61.7	14.2
34.9	11.3
18.7	8.31
10.6	6.43
7.45	5.36
6.06	4.82
5.22	4.29
1.49	2.95

0910004-17 (B22995)

Particle Size (uM)	% Finer Than
190	3.89
133	2.43
75.9	1.46
41.6	1.46
23.9	0.97
16.8	0.49
13.8	0.97
11.9	0.49
3.47	1.46

0910004-20 (B22916)

Particle Size (uM)	% Finer Than
88.8	23.8
60.8	16.2
34.5	12.4
18.7	9.51
10.7	7.60
7.56	7.60
6.16	7.13
5.32	6.65
1.52	4.75

PARTICLE SIZE DISTRIBUTION (HYDROMETER)

0910004-21 (B22917)

Particle Size (uM)	% Finer Than
97.8	16.4
66.5	12.4
36.4	7.48
19.6	5.74
11.2	4.87
7.84	4.18
6.37	3.83
5.49	3.48
1.57	2.61

0910004-23 (B22692)

Particle Size (uM)	% Finer Than
93.2	32.0
64.6	26.8
36.1	18.8
19.3	13.2
11.1	11.8
7.74	9.40
6.31	8.93
5.45	8.46
1.56	6.11

0910004-26 (B23KT7)

Particle Size (uM)	% Finer Than
84.5	4.00
59.5	3.77
33.9	2.97
18.3	2.28
10.4	1.60
7.38	1.60
6.00	1.37
5.18	1.26
1.48	0.80

0910004-28 (B234R6)

Particle Size (uM)	% Finer Than
87.1	14.5
60.7	12.7
34.4	10.1
18.5	7.50
10.5	6.21
7.39	5.17
6.01	4.66
5.18	4.14
1.48	2.85

0910004-22 (B22619)

Particle Size (uM)	% Finer Than
89.4	19.0
62.4	15.7
35.3	11.1
19.0	7.87
10.9	6.48
7.68	5.56
6.24	4.63
5.42	5.10
1.56	4.17

0910004-24 (B22FF5)

Particle Size (uM)	% Finer Than
84.7	8.33
59.2	7.22
33.5	5.55
18.1	4.07
10.3	2.96
7.25	2.59
5.89	2.22
5.10	2.22
1.46	1.30

0910004-27 (B23KT8)

Particle Size (uM)	% Finer Than
81.3	5.29
57.1	4.57
32.8	3.85
17.9	3.37
10.3	2.88
7.25	2.64
5.90	2.40
5.10	2.16
1.46	1.44

0910004-29 (B234R7)

Particle Size (uM)	% Finer Than
84.3	7.63
58.8	5.34
33.6	3.43
18.3	2.67
10.5	2.29
7.46	2.29
6.09	2.29
5.26	1.91
1.52	1.53

0910004-30 (B22FD8)

Particle Size (uM)	% Finer Than
87.6	8.83
61.3	7.87
34.6	6.10
18.5	4.17
10.5	3.21
7.39	2.57
6.01	2.25
5.18	1.93
1.48	1.44

0910004-32 (B22FF0)

Particle Size (uM)	% Finer Than
79.7	13.2
56.0	11.6
32.0	8.97
17.4	7.39
9.98	5.80
7.01	4.22
5.71	3.69
4.93	3.17
1.42	3.17

0910004-35 (B22FF3)

Particle Size (uM)	% Finer Than
85.2	5.07
59.7	4.51
33.8	3.49
18.1	2.37
10.4	1.80
7.30	1.58
5.94	1.46
5.14	1.35
1.47	1.01

0910004-37 (B22FR7)

Particle Size (uM)	% Finer Than
90.4	13.1
63.0	11.5
35.7	9.66
19.1	7.57
10.8	5.68
7.56	4.54
6.15	4.17
5.30	3.79
1.50	2.27

0910004-31 (B22FD9)

Particle Size (uM)	% Finer Than
87.9	14.9
61.4	13.4
34.7	10.7
18.6	7.80
10.5	5.85
7.38	4.63
6.00	4.15
5.17	3.66
1.47	2.19

0910004-34 (B22FF2)

Particle Size (uM)	% Finer Than
89.6	8.85
62.7	8.11
35.4	6.64
18.9	4.92
10.7	3.69
7.49	3.20
6.07	2.83
5.23	2.46
1.48	1.48

0910004-36 (B22FR6)

Particle Size (uM)	% Finer Than
85.7	7.76
60.0	6.92
34.0	5.40
18.4	4.22
10.5	3.21
7.35	2.70
5.97	2.36
5.17	2.36
1.47	1.35

0910004-38 (B22FR8)

Particle Size (uM)	% Finer Than
93.0	20.6
64.8	18.3
36.5	14.4
19.6	11.2
11.1	8.84
7.78	7.36
6.31	6.48
5.44	5.89
1.54	3.24

PARTICLE SIZE DISTRIBUTION (HYDROMETER)

0910004-39 (B22FR9)

Particle Size (uM)	% Finer Than
94.6	31.6
65.7	27.6
37.0	22.5
19.7	17.5
11.1	13.1
7.77	10.9
6.30	9.82
5.42	8.73
1.53	4.73

0910004-41 (B22FT1)

Particle Size (uM)	% Finer Than
88.3	11.8
61.7	10.2
35.1	8.04
18.9	5.9
10.8	4.83
7.56	3.49
6.16	3.22
5.32	2.95
1.53	2.14

0910004-43 (B22FF7)

Particle Size (uM)	% Finer Than
97.1	100
68.3	97.1
38.9	87.1
20.9	75.9
11.7	59.2
8.16	49.1
6.61	44.7
5.69	41.3
1.59	22.3

0910004-45 (B22FT6)

Particle Size (uM)	% Finer Than
98.6	88.7
69.2	84.5
39.3	76.0
20.9	60.8
11.7	47.3
8.13	39.7
6.58	35.5
5.65	32.1
1.58	20.3

0910004-40 (B22FT0)

Particle Size (uM)	% Finer Than
90.9	19.2
63.5	17.1
35.7	13.2
19.2	10.2
10.9	7.48
7.61	5.99
6.18	5.39
5.33	4.79
1.52	2.99

0910004-42 (B22FT2)

Particle Size (uM)	% Finer Than
89.2	16.8
62.0	14.3
35.0	11.3
18.7	8.14
10.6	5.92
7.43	5.18
6.04	4.68
5.20	3.95
1.48	2.47

0910004-44 (B22FF8)

Particle Size (uM)	% Finer Than
96.8	96.5
68.2	94.0
39.0	87.8
21.0	75.2
11.8	60.2
8.25	50.2
6.68	45.1
5.75	41.4
1.61	23.8

0910004-47 (B22FT7)

Particle Size (uM)	% Finer Than
96.3	72.2
66.9	63.7
37.5	49.3
20.1	39.1
11.4	32.3
8.00	28.9
6.50	27.2
5.62	26.3
1.59	18.7

Bulk Density

Bulk Density (g/cc) by ASTM D2937

Lab ID	HEIS No.	Results	EQL	Analyzed	Batch
0910004-02	B22612	2.25E0	N/A	9/22/10	0I22004
0910004-03	B22613	1.88E0	N/A	9/22/10	0I22004
0910004-04	B22614	2.30E0	N/A	9/22/10	0I22004
0910004-05	B22615	2.44E0	N/A	9/22/10	0I22004
0910004-06	B22617	2.68E0	N/A	9/22/10	0I22004
0910004-07	B22911	2.23E0	N/A	9/22/10	0I22004
0910004-08	B22912	2.30E0	N/A	9/22/10	0I22004
0910004-10	B22941	NDET	N/A	9/22/10	0I22004
0910004-11	B22942	NDET	N/A	9/22/10	0I22004
0910004-12	B22914	NDET	N/A	9/22/10	0I22004
0910004-13	B22915	2.03E0	N/A	9/22/10	0I22004
0910004-15	B22M13	NDET	N/A	9/22/10	0I22004
0910004-16	B22M14	2.43E0	N/A	9/22/10	0I22004
0910004-17	B22995	NDET	N/A	9/22/10	0I22004
0910004-19	B22997	NDET	N/A	9/22/10	0I22004
0910004-20	B22916	2.18E0	N/A	9/22/10	0I22004
0910004-21	B22917	2.04E0	N/A	9/22/10	0I22004
0910004-22	B22619	2.08E0	N/A	9/22/10	0I22004
0910004-23	B22692	2.05E0	N/A	9/22/10	0I22004
0910004-24	B22FF5	NDET	N/A	9/22/10	0I22004
0910004-26	B23KT7	NDET	N/A	9/22/10	0I22004
0910004-27	B23KT8	NDET	N/A	9/22/10	0I22004
0910004-28	B234R6	NDET	N/A	9/22/10	0I22004
0910004-29	B234R7	NDET	N/A	9/22/10	0I22004
0910004-30	B22FD8	2.08E0	N/A	9/22/10	0I22004
0910004-31	B22FD9	2.41E0	N/A	9/22/10	0I22004
0910004-32	B22FF0	2.13E0	N/A	9/22/10	0I22004
0910004-34	B22FF2	2.14E0	N/A	9/22/10	0I22004
0910004-35	B22FF3	NDET	N/A	9/22/10	0I22004
0910004-36	B22FR6	NDET	N/A	9/22/10	0I22004
0910004-37	B22FR7	NDET	N/A	9/22/10	0I22004
0910004-38	B22FR8	1.31E0	N/A	9/22/10	0I22004
0910004-39	B22FR9	2.26E0	N/A	9/22/10	0I22004
0910004-40	B22FT0	2.12E0	N/A	9/22/10	0I22004
0910004-41	B22FT1	2.51E0	N/A	9/22/10	0I22004
0910004-42	B22FT2	2.50E0	N/A	9/22/10	0I22004
0910004-43	B22FF7	2.08E0	N/A	9/22/10	0I22004
0910004-44	B22FF8	2.12E0	N/A	9/22/10	0I22004
0910004-45	B22FT6	2.06E0	N/A	9/22/10	0I22004
0910004-47	B22FT7	2.10E0	N/A	9/22/10	0I22004

ESL090006

Hexavalent Chromium/Soil - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0H19003 - Hexavalent Chromium Digest										
Blank (0H19003-BLK1)				Prepared: 08/11/10		Analyzed: 08/17/10				
Chromium, Hexavalent	<2.50E0	2.50E0	ug/g wet							
LCS (0H19003-BS1)				Prepared: 08/11/10		Analyzed: 08/17/10				
Chromium, Hexavalent	2.52E1	2.50E0	ug/g wet	2.50E1		101	70-130			
Duplicate (0H19003-DUP1)		Source: 0910004-02		Prepared: 08/11/10		Analyzed: 08/17/10				
Chromium, Hexavalent	<4.84E-1	4.84E-1	ug/g dry		ND				20	
Matrix Spike (0H19003-MS1)		Source: 0910004-05		Prepared: 08/11/10		Analyzed: 08/17/10				
Chromium, Hexavalent	8.00E-3	4.84E-1	ug/g dry	5.00E-1	1.90E-2	NR	75-125			
Batch 0I07009 - Hexavalent Chromium Digest										
Blank (0I07009-BLK1)				Prepared & Analyzed: 08/17/10						
Chromium, Hexavalent	<5.00E-2	5.00E-2	ug/g wet							
LCS (0I07009-BS1)				Prepared & Analyzed: 08/17/10						
Chromium, Hexavalent	2.26E1	2.50E0	ug/g wet	2.50E1		90.4	70-130			
Duplicate (0I07009-DUP1)		Source: 0910004-40		Prepared & Analyzed: 08/17/10						
Chromium, Hexavalent	<5.12E-1	5.12E-1	ug/g dry		ND				20	
Matrix Spike (0I07009-MS1)		Source: 0910004-41		Prepared & Analyzed: 08/17/10						
Chromium, Hexavalent	3.44E-1	5.24E-1	ug/g dry	5.00E-1	1.00E-3	68.6	75-125			

ESL090006

Hexavalent Chromium/Water Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0H05001 - 1:1 Water Extract (Cr6)										
Blank (0H05001-BLK1)				Prepared & Analyzed: 08/03/10						
Chromium, Hexavalent	<5.00E-2	5.00E-2	ug/g wet							
LCS (0H05001-BS1)				Prepared: 08/03/10		Analyzed: 09/03/10				
Chromium, Hexavalent	2.05E-1	N/A	ug/mL	2.00E-1		102	70-130			
Duplicate (0H05001-DUP1)		Source: 0910004-16		Prepared & Analyzed: 08/03/10						
Chromium, Hexavalent	<4.48E-2	4.48E-2	ug/g dry		ND				20	
Duplicate (0H05001-DUP2)		Source: 0910004-34		Prepared & Analyzed: 08/03/10						
Chromium, Hexavalent	<4.64E-2	4.64E-2	ug/g dry		ND				20	
Post Spike (0H05001-PS1)		Source: 0910004-35		Prepared: 08/03/10		Analyzed: 09/09/10				
Chromium, Hexavalent	9.51E-1	N/A	ug/mL	1.00E0	ND	95.4	75-125			
Batch 0H05008 - 1:1 Water Extract (Cr6)										
Blank (0H05008-BLK1)				Prepared & Analyzed: 08/04/10						
Chromium, Hexavalent	<5.00E-2	5.00E-2	ug/g wet							
LCS (0H05008-BS1)				Prepared & Analyzed: 08/04/10						
Chromium, Hexavalent	2.00E-1	5.00E-2	ug/g wet	2.00E-1		100	70-130			
Duplicate (0H05008-DUP1)		Source: 0910004-44		Prepared & Analyzed: 08/04/10						
Chromium, Hexavalent	<3.73E-2	3.73E-2	ug/g dry		ND				20	
Post Spike (0H05008-PS1)		Source: 0910004-36		Prepared: 08/04/10		Analyzed: 09/09/10				
Chromium, Hexavalent	9.71E-1	N/A	ug/mL	1.00E0	1.00E-3	97	75-125			

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

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0H18001 - 1:1 Water Extract (ICP/ICPMS)										
Blank (0H18001-BLK1)				Prepared: 07/26/10		Analyzed: 08/18/10				
Barium	<1.24E-1	1.24E-1	ug/g wet							
LCS (0H18001-BS1)				Prepared: 07/26/10		Analyzed: 08/18/10				
Barium	4.75E0	1.24E-1	ug/g wet	5.00E0		95.0	80-120			
Duplicate (0H18001-DUP1)		Source: 0910004-16		Prepared: 07/26/10		Analyzed: 08/18/10				
Barium	<1.24E-1	1.24E-1	ug/g dry		ND				35	
Post Spike (0H18001-PS1)		Source: 0910004-16		Prepared & Analyzed: 08/18/10						
Barium	2.53E2	N/A	ug/L	2.50E2	5.23E0	99.1	75-125			
Batch 0H18002 - 1:1 Water Extract (ICP/ICPMS)										
Blank (0H18002-BLK1)				Prepared: 07/27/10		Analyzed: 08/18/10				
Barium	<1.24E-1	1.24E-1	ug/g wet							
LCS (0H18002-BS1)				Prepared: 07/27/10		Analyzed: 08/18/10				
Barium	4.68E0	1.24E-1	ug/g wet	5.00E0		93.7	80-120			
Duplicate (0H18002-DUP1)		Source: 0910004-34		Prepared: 07/26/10		Analyzed: 08/18/10				
Barium	<1.23E-1	1.23E-1	ug/g dry		ND				35	
Duplicate (0H18002-DUP2)		Source: 0910004-44		Prepared: 07/27/10		Analyzed: 08/18/10				
Barium	<1.24E-1	1.24E-1	ug/g dry		ND				35	
Post Spike (0H18002-PS1)		Source: 0910004-44		Prepared & Analyzed: 08/18/10						
Barium	2.59E2	N/A	ug/L	2.50E2	3.98E0	102	75-125			

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

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0H23001 - ASTM D 5198 (ICP/ICPMS)										
Blank (0H23001-BLK1)				Prepared: 07/29/10		Analyzed: 08/24/10				
Barium	<4.12E-1	4.12E-1	ug/g wet							
LCS (0H23001-BS1)				Prepared: 07/29/10		Analyzed: 08/24/10				
Barium	6.12E0	4.12E-2	ug/g wet	6.21E0		98.7	80-120			
Duplicate (0H23001-DUP1)		Source: 0910004-16		Prepared: 07/29/10		Analyzed: 08/24/10				
Barium	3.24E1	1.54E0	ug/g dry		3.54E1			8.77	35	
Post Spike (0H23001-PS1)		Source: 0910004-16		Prepared: 08/23/10		Analyzed: 08/24/10				
Barium	4.46E2	N/A	ug/L	2.50E2	1.90E2	103	75-125			
Batch 0H23002 - ASTM D 5198 (ICP/ICPMS)										
Blank (0H23002-BLK1)				Prepared: 08/06/10		Analyzed: 08/24/10				
Barium	<4.12E-1	4.12E-1	ug/g wet							
LCS (0H23002-BS1)				Prepared: 08/06/10		Analyzed: 08/24/10				
Barium	5.66E0	4.12E-2	ug/g wet	5.99E0		94.5	80-120			
Duplicate (0H23002-DUP1)		Source: 0910004-44		Prepared: 08/06/10		Analyzed: 08/24/10				
Barium	3.89E1	1.76E0	ug/g dry		3.39E1			13.8	35	
Post Spike (0H23002-PS1)		Source: 0910004-44		Prepared: 08/23/10		Analyzed: 08/24/10				
Barium	4.09E2	N/A	ug/L	2.50E2	1.57E2	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
Batch 0H17001 - 1:1 Water Extract (ICP/ICPMS)										
Blank (0H17001-BLK1)				Prepared & Analyzed: 08/18/10						
Chromium	<3.44E-3	3.44E-3	ug/g wet							
Arsenic	<2.84E-3	2.84E-3	"							
Selenium	<7.92E-3	7.92E-3	"							
Silver	<3.13E-3	3.13E-3	"							
Cadmium	<5.73E-4	5.73E-4	"							
Lead	<1.16E-3	1.16E-3	"							
Mercury	<1.81E-4	1.81E-4	"							
LCS (0H17001-BS1)				Prepared & Analyzed: 08/18/10						
Chromium	4.87E0	3.44E-1	ug/g wet	5.00E0		97.3	80-120			
Arsenic	4.64E0	2.84E-1	"	5.00E0		92.8	80-120			
Selenium	4.64E0	7.92E-1	"	5.00E0		92.9	80-120			
Silver	4.90E0	3.13E-1	"	5.00E0		98.0	80-120			
Cadmium	5.00E0	5.73E-2	"	5.00E0		100	80-120			
Lead	4.90E0	1.16E-1	"	5.00E0		98.1	80-120			
Duplicate (0H17001-DUP1)		**Source: 0910004-16**		Prepared & Analyzed: 08/18/10						
Chromium	<3.45E-3	3.45E-3	ug/g dry		ND				35	
Arsenic	<2.84E-3	2.84E-3	"		ND				35	
Selenium	<7.92E-3	7.92E-3	"		ND				35	
Silver	<3.13E-3	3.13E-3	"		ND				35	
Cadmium	<5.73E-4	5.73E-4	"		ND				35	
Lead	4.05E-3	1.16E-3	"		3.92E-3			3.24	35	
Mercury	<1.81E-4	1.81E-4	"		ND				35	
Duplicate (0H17001-DUP2)		**Source: 0910004-34**		Prepared & Analyzed: 08/18/10						
Chromium	<6.85E-3	6.85E-3	ug/g dry		ND				35	
Arsenic	<5.64E-3	5.64E-3	"		ND				35	
Selenium	<1.58E-2	1.58E-2	"		ND				35	
Silver	<6.22E-3	6.22E-3	"		ND				35	
Cadmium	<1.14E-3	1.14E-3	"		ND				35	
Lead	<2.31E-3	2.31E-3	"		ND				35	
Mercury	<3.60E-4	3.60E-4	"		ND				35	

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

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0H17001 - 1:1 Water Extract (ICP/ICPMS)										
Post Spike (0H17001-PS1)		**Source: 0910004-16**		Prepared & Analyzed: 08/18/10						
Chromium	4.70E0	N/A	ug/L	5.00E0	3.68E-2	93.3	75-125			
Arsenic	4.84E0	N/A	"	5.00E0	2.64E-1	91.5	75-125			
Selenium	4.84E0	N/A	"	5.00E0	1.45E-2	96.5	75-125			
Silver	4.91E0	N/A	"	5.00E0	1.67E-3	98.1	75-125			
Cadmium	5.14E0	N/A	"	5.00E0	9.57E-3	103	75-125			
Lead	5.69E0	N/A	"	5.00E0	7.69E-1	98.4	75-125			
Mercury	4.24E0	N/A	"	5.00E0	8.15E-3	84.6	75-125			
Post Spike (0H17001-PS2)		**Source: 0910004-34**		Prepared & Analyzed: 08/18/10						
Chromium	4.70E0	N/A	ug/L	5.00E0	ND	94.1	75-125			
Arsenic	4.62E0	N/A	"	5.00E0	8.96E-2	90.7	75-125			
Selenium	4.71E0	N/A	"	5.00E0	3.46E-2	93.5	75-125			
Silver	4.86E0	N/A	"	5.00E0	ND	97.2	75-125			
Cadmium	5.07E0	N/A	"	5.00E0	5.59E-3	101	75-125			
Lead	4.98E0	N/A	"	5.00E0	5.30E-2	98.5	75-125			
Mercury	4.29E0	N/A	"	5.00E0	2.85E-3	85.8	75-125			
Batch 0H17002 - 1:1 Water Extract (ICP/ICPMS)										
Blank (0H17002-BLK1)				Prepared & Analyzed: 08/18/10						
Chromium	<3.44E-3	3.44E-3	ug/g wet							
Arsenic	<2.84E-3	2.84E-3	"							
Selenium	<7.92E-3	7.92E-3	"							
Silver	<3.13E-3	3.13E-3	"							
Cadmium	<5.73E-4	5.73E-4	"							
Lead	<1.16E-3	1.16E-3	"							
Mercury	4.62E-4	1.81E-4	"							B

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

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0H17002 - 1:1 Water Extract (ICP/ICPMS)										
LCS (0H17002-BS1)				Prepared & Analyzed: 08/18/10						
Chromium	4.75E0	3.44E-1	ug/g wet	5.00E0		95.2	80-120			
Arsenic	4.61E0	2.84E-1	"	5.00E0		92.3	80-120			
Selenium	4.70E0	7.92E-1	"	5.00E0		94.2	80-120			
Silver	5.06E0	3.13E-1	"	5.00E0		101	80-120			
Cadmium	5.12E0	5.73E-2	"	5.00E0		102	80-120			
Lead	4.96E0	1.16E-1	"	5.00E0		99.4	80-120			
Duplicate (0H17002-DUP1)		Source: 0910004-44		Prepared & Analyzed: 08/18/10						
Chromium	<3.46E-3	3.46E-3	ug/g dry		ND				35	
Arsenic	5.36E-3	2.85E-3	"		5.17E-3			3.71	35	
Selenium	<7.95E-3	7.95E-3	"		ND				35	
Silver	<3.14E-3	3.14E-3	"		ND				35	
Cadmium	<5.75E-4	5.75E-4	"		ND				35	
Lead	<1.17E-3	1.17E-3	"		1.10E-2				35	
Mercury	<1.82E-4	1.82E-4	"		ND				35	
Post Spike (0H17002-PS1)		Source: 0910004-44		Prepared & Analyzed: 08/18/10						
Chromium	4.76E0	1.38E-2	ug/g dry	5.00E0	4.98E-3	95.2	75-125			
Arsenic	5.60E0	1.14E-2	"	5.00E0	1.03E0	91.4	75-125			
Selenium	4.86E0	3.17E-2	"	5.00E0	2.07E-2	96.7	75-125			
Silver	4.67E0	1.25E-2	"	5.00E0	2.09E-3	93.4	75-125			
Cadmium	4.96E0	2.30E-3	"	5.00E0	1.42E-3	99.1	75-125			
Lead	7.17E0	4.66E-3	"	5.00E0	2.19E0	99.6	75-125			
Mercury	4.46E0	7.25E-4	"	5.00E0	1.51E-2	89	75-125			

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

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0H18007 - ASTM D 5198 (ICP/ICPMS)										
Blank (0H18007-BLK1)				Prepared: 08/18/10		Analyzed: 08/19/10				
Chromium	<1.47E-1	1.47E-1	ug/g wet							
Arsenic	<6.39E-2	6.39E-2	"							
Selenium	<1.24E-1	1.24E-1	"							
Silver	<4.00E-3	4.00E-3	"							
Cadmium	<1.06E-2	1.06E-2	"							
Lead	<4.00E-2	4.00E-2	"							
Mercury	<2.82E-3	2.82E-3	"							
LCS (0H18007-BS1)				Prepared: 08/18/10		Analyzed: 08/19/10				
Chromium	5.61E0	7.20E-1	ug/g wet	4.74E0		118	80-120			
Arsenic	5.68E0	3.13E-1	"	4.74E0		120	80-120			
Selenium	5.59E0	6.06E-1	"	4.74E0		118	80-120			
Silver	5.13E0	1.96E-2	"	4.74E0		108	80-120			
Cadmium	5.68E0	5.17E-2	"	4.74E0		120	80-120			
Lead	5.57E0	1.96E-1	"	4.74E0		118	80-120			
Duplicate (0H18007-DUP1)		**Source: 0910004-16**		Prepared: 08/18/10		Analyzed: 08/19/10				
Chromium	5.84E0	7.03E-1	ug/g dry		5.88E0			0.774	35	
Arsenic	4.69E-1	3.06E-1	"		4.35E-1			7.49	35	
Selenium	<5.91E-1	5.91E-1	"		ND				35	
Silver	2.64E-2	1.91E-2	"		2.80E-2			6.08	35	
Cadmium	<5.05E-2	5.05E-2	"		ND				35	
Lead	1.40E2	1.91E1	"		1.25E2			11.7	35	
Mercury	<1.35E-2	1.35E-2	"		ND				35	
Post Spike (0H18007-PS1)		**Source: 0910004-16**		Prepared: 08/18/10		Analyzed: 08/19/10				
Chromium	2.04E1	N/A	ug/L	5.00E0	1.58E1	92.2	75-125			
Arsenic	5.89E0	N/A	"	5.00E0	1.17E0	94.6	75-125			
Selenium	4.69E0	N/A	"	5.00E0	2.45E-2	93.3	75-125			
Silver	4.32E0	N/A	"	5.00E0	7.53E-2	84.9	75-125			
Cadmium	4.95E0	N/A	"	5.00E0	9.94E-2	97	75-125			
Lead	8.15E0	N/A	"	5.00E-2	3.35E0	98.8	75-125			
Mercury	4.11E0	N/A	"	5.00E0	5.59E-3	82	75-125			

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

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0H18008 - ASTM D 5198 (ICP/ICPMS)										
Blank (0H18008-BLK1)				Prepared: 08/18/10		Analyzed: 08/20/10				
Chromium	<1.88E-1	1.88E-1	ug/g wet							
Arsenic	<8.20E-2	8.20E-2	"							
Selenium	<1.59E-1	1.59E-1	"							
Silver	<5.13E-3	5.13E-3	"							
Cadmium	<1.35E-2	1.35E-2	"							
Lead	<5.13E-2	5.13E-2	"							
Mercury	<3.62E-3	3.62E-3	"							
LCS (0H18008-BS1)				Prepared: 08/18/10		Analyzed: 08/20/10				
Chromium	6.05E0	9.42E-1	ug/g wet	5.99E0		101	80-120			
Arsenic	6.28E0	4.10E-1	"	5.99E0		105	80-120			
Selenium	5.95E0	7.93E-1	"	5.99E0		99.3	80-120			
Silver	5.66E0	2.56E-2	"	5.99E0		94.5	80-120			
Cadmium	6.15E0	6.77E-2	"	5.99E0		103	80-120			
Lead	6.16E0	2.57E-1	"	5.99E0		103	80-120			
Duplicate (0H18008-DUP1)		**Source: 0910004-44**		Prepared: 08/18/10		Analyzed: 08/20/10				
Chromium	1.47E1	8.03E-1	ug/g dry		1.05E1			34.1	35	
Arsenic	3.45E0	3.50E-1	"		2.57E0			29.1	35	
Selenium	<6.76E-1	6.76E-1	"		ND				35	
Silver	2.21E-2	2.19E-2	"		ND				35	
Cadmium	6.96E-2	5.78E-2	"		6.16E-2			12.2	35	
Lead	5.00E0	2.19E-1	"		4.84E0			3.19	35	
Mercury	<1.54E-2	1.54E-2	"		1.67E-2				35	
Post Spike (0H18008-PS1)		**Source: 0910004-44**		Prepared: 08/18/10		Analyzed: 08/20/10				
Chromium	2.91E1	N/A	ug/L	5.00E0	2.42E1	99.5	75-125			
Arsenic	1.10E1	N/A	"	5.00E0	5.95E0	102	75-125			
Selenium	4.97E0	N/A	"	5.00E0	2.30E-1	94.7	75-125			
Silver	4.37E0	N/A	"	5.00E0	4.51E-2	86.4	75-125			
Cadmium	5.07E0	N/A	"	5.00E0	1.42E-1	98.5	75-125			
Lead	1.49E1	N/A	"	5.00E0	1.12E1	73.8	75-125			
Mercury	3.73E0	N/A	"	5.00E0	3.86E-2	73.8	75-125			

Strontium 90/Acid Extract - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0H10018 - ASTM D 5198 (RadChem)										
Blank (0H10018-BLK1)				Prepared: 08/10/10		Analyzed: 09/03/10				
Strontium-90	<2.86E-1	2.86E-1	pCi/g wet							
LCS (0H10018-BS1)				Prepared: 08/10/10		Analyzed: 09/03/10				
Strontium-90	9.49E1	2.86E-1	pCi/g wet	9.71E1		97.7	80-120			
Duplicate (0H10018-DUP1)		Source: 0910004-16		Prepared: 08/10/10		Analyzed: 09/03/10				
Strontium-90	<9.67E-1	9.67E-1	pCi/g dry		ND				35	
Matrix Spike (0H10018-MS1)		Source: 0910004-16		Prepared: 08/10/10		Analyzed: 09/03/10				
Strontium-90	9.74E1	N/A	pCi/mL	1.02E2	ND	99.2	75-125			
Batch 0H13015 - ASTM D 5198 (RadChem)										
Blank (0H13015-BLK1)				Prepared: 08/13/10		Analyzed: 09/03/10				
Strontium-90	<2.86E-1	2.86E-1	pCi/g wet							
LCS (0H13015-BS1)				Prepared: 08/13/10		Analyzed: 09/03/10				
Strontium-90	9.49E1	2.86E-1	pCi/g wet	9.71E1		97.7	80-120			
Duplicate (0H13015-DUP1)		Source: 0910004-44		Prepared: 08/13/10		Analyzed: 09/03/10				
Strontium-90	<9.69E-1	9.69E-1	pCi/g dry		ND				35	
Matrix Spike (0H13015-MS1)		Source: 0910004-44		Prepared: 08/13/10		Analyzed: 09/03/10				
Strontium-90	9.63E1	N/A	pCi/mL	1.02E2	ND	98.1	75-125			

Strontium 90 - Quality Control
Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0H10011 - 1:1 Water Extract (RadChem)										
Blank (0H10011-BLK1)				Prepared: 08/10/10		Analyzed: 09/02/10				
Strontium-90	<1.00E0	1.00E0	pCi/g wet							
LCS (0H10011-BS1)				Prepared: 08/10/10		Analyzed: 09/02/10				
Strontium-90	9.38E1	1.00E0	pCi/g wet	9.71E1		96.5	80-120			
LCS (0H10011-BS2)				Prepared: 08/10/10		Analyzed: 09/02/10				
Strontium-90	9.74E1	1.00E0	pCi/g wet	9.71E1		100	80-120			
Duplicate (0H10011-DUP1)		Source: 0910004-16		Prepared: 08/10/10		Analyzed: 09/02/10				
Strontium-90	<8.98E-1	8.98E-1	pCi/g dry		ND				35	
Duplicate (0H10011-DUP2)		Source: 0910004-34		Prepared: 08/10/10		Analyzed: 09/02/10				
Strontium-90	<9.28E-1	9.28E-1	pCi/g dry		ND				35	
Matrix Spike (0H10011-MS1)		Source: 0910004-16		Prepared: 08/10/10		Analyzed: 09/02/10				
Strontium-90	9.94E1	N/A	pCi/mL	1.02E2	ND	101	75-125			
Matrix Spike (0H10011-MS2)		Source: 0910004-34		Prepared: 08/10/10		Analyzed: 09/02/10				
Strontium-90	1.00E2	N/A	pCi/mL	1.02E2	ND	102	75-125			
Batch 0H18005 - 1:1 Water Extract (RadChem)										
Blank (0H18005-BLK1)				Prepared: 08/18/10		Analyzed: 09/03/10				
Strontium-90	<1.00E0	1.00E0	pCi/g wet							
LCS (0H18005-BS1)				Prepared: 08/18/10		Analyzed: 09/03/10				
Strontium-90	9.95E1	1.00E0	pCi/g wet	9.71E1		102	80-120			

ESL090006

Strontium 90 - Quality Control

Environmental Science Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0H18005 - 1:1 Water Extract (RadChem)										
Duplicate (0H18005-DUP1)		**Source: 0910004-44**		Prepared: 08/18/10		Analyzed: 09/03/10				
Strontium-90	<7.46E-1	7.46E-1	pCi/g dry		ND				35	
Matrix Spike (0H18005-MS1)		**Source: 0910004-44**		Prepared: 08/18/10		Analyzed: 09/03/10				
Strontium-90	2.06E2	N/A	pCi/mL	2.05E2	ND	103	75-125			

Strontium 90 - Quality Control		
Batch 0H10018 and 0H13015- ASTM D 5198 (RadChem)		
Sample ID	HEIS ID	Tracer Recovery
0910004-02	B22612	94.8%
0910004-03	B22613	94.7%
0910004-05	B22615	92.8%
0910004-06	B22617	94.2%
0910004-07	B22911	96.7%
0910004-08	B22912	96.4%
0910004-10	B22941	93.5%
0910004-11	B22942	93.6%
0910004-12	B22914	96.1%
0910004-13	B22915	96.3%
0910004-15	B22M13	94.7%
0910004-16	B22M14	95.9%
0910004-20	B22916	96.4%
0910004-21	B22917	95.7%
0910004-22	B22619	97.5%
0910004-23	B22692	96.4%
0910004-24	B22FF5	94.6%
0910004-30	B22FD8	94.1%
0910004-31	B22FD9	95.8%
0910004-32	B22FF0	96.4%
0910004-34	B22FF2	95.0%
0910004-35	B22FF3	92.2%
0910004-36	B22FR6	93.9%
0910004-37	B22FR7	94.0%
0910004-38	B22FR8	94.6%
0910004-39	B22FR9	94.6%
0910004-40	B22FT0	95.2%
0910004-41	B22FT1	96.1%
0910004-42	B22FT2	91.4%
0910004-43	B22FF7	99.0%
0910004-44	B22FF8	94.8%
0910004-45	B22FT6	93.1%
0910004-47	B22FT7	96.0%

Strontium 90 - Quality Control		
Batch 0H10011 and 0H18005 - 1:1 Water Extract (RadChem)		
Sample ID	HEIS ID	Tracer Recovery
0910004-02	B22612	90.5%
0910004-03	B22613	91.7%
0910004-05	B22615	91.4%
0910004-06	B22617	93.4%
0910004-07	B22911	91.5%
0910004-08	B22912	91.2%
0910004-10	B22941	92.6%
0910004-11	B22942	92.1%
0910004-12	B22914	91.1%
0910004-13	B22915	91.8%
0910004-15	B22M13	93.2%
0910004-16	B22M14	91.6%
0910004-20	B22916	90.9%
0910004-21	B22917	91.8%
0910004-22	B22619	93.9%
0910004-23	B22692	90.7%
0910004-24	B22FF5	92.4%
0910004-30	B22FD8	91.9%
0910004-31	B22FD9	90.8%
0910004-32	B22FF0	91.5%
0910004-34	B22FF2	91.9%
0910004-35	B22FF3	90.4%
0910004-36	B22FR6	92.5%
0910004-37	B22FR7	92.6%
0910004-38	B22FR8	92.1%
0910004-39	B22FR9	91.7%
0910004-40	B22FT0	91.9%
0910004-41	B22FT1	93.7%
0910004-42	B22FT2	92.4%
0910004-43	B22FF7	90.6%
0910004-44	B22FF8	91.5%
0910004-45	B22FT6	91.9%
0910004-47	B22FT7	93.5%

CH2MHILL Laboratory Operation Company ESL090006	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-019	PAGE 1 OF 1
COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7505; I-001	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.: GWS-021	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 30.2-32.7	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION			None	None	None							
TYPE OF CONTAINER			G/P	Moisture Resistant Cont	Split Spoon Liner							
NO. OF CONTAINER(S)			1	1	1							
VOLUME			1000g	~~1000g~~ 1000 ml	1000mL							
SAMPLE ANALYSIS			SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)							
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B22611	SOIL	10-8-09	1455	✓	✓	✓						

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: CFulton/	DATE/TIME: 10-8-09 1530	RECEIVED BY/STORED IN: MO413 SSU-R2	DATE/TIME: 10-9-09 1530
RELINQUISHED BY/REMOVED FROM: MO-413-R2	DATE/TIME: OCT 1 2009 09:30	RECEIVED BY/STORED IN: DW Brotherton	DATE/TIME: OCT 1 4 2009 09:30
RELINQUISHED BY/REMOVED FROM: DW Brotherton	DATE/TIME: OCT 1 2 2009	RECEIVED BY/STORED IN: C Town	DATE/TIME: OCT 1 4 2009 1:30
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

☐

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

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

See ESL090006 WCC110004

A-6003-618(01/06)

ESL090006

CH2MHILL Hanford Group, Inc. | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F09-066-020 | PAGE 1 OF 1

COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: C7505; I-002	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	
ICE CHEST NO.: GWS-021	FIELD LOGBOOK NO.: HNF-N-503-9	ACTUAL SAMPLE DEPTH: ~~32~~ 35.1-37.6'	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	~~1000~~ 1800 mL	~~1000~~ 200 JCF	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22612	SOIL	10-9-09	1010	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
C Fulton	10-9-09 1530	MO413 SSU-N	10-9-09 1530
~~DW Brotherton~~ MO413 SSU-N	OCT 14 2009 09:30	DW Brotherton	OCT 14 2009 09:30
DW Brotherton	OCT 14 2009 9:30	C Tom	OCT 14 2009 9:30

SPECIAL INSTRUCTIONS

☐

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

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company ESL090006	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F09-066-021	PAGE 1 OF 1
COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N
SAMPLING LOCATION: C7505; I-003	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY: ☐
ICE CHEST NO.: GWS - 021	FIELD LOGBOOK NO.: HNF-N-5079	ACTUAL SAMPLE DEPTH: 39.7-42.2	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A	

DATA TURNAROUND: 45 Days / 45 Days

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g	1000g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

NA

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22613	SOIL	10-9-09	1130	✓		✓

NA

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Fulton	10-9-09 1530	MO 413 SSU-RA	10-9-09 1530
MO-413-R2	OCT 2009	DW Brotherton	OCT 14 2009
DW Brotherton	OCT 14 2009	C. Louin	OCT 14 2009

SPECIAL INSTRUCTIONS

☐ ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

CH2MHill Plateau Remediation Company		F09-066-021
COLLECTOR:	BOTTLE:	Moisture Resistant Cont 1000g
SAMP NUM: B2261[illegible]	PRES:	None
DATE SAMPLED: / /	TIME:	
PLACE SAMPLED: C7505; I-003		
ANALYSIS: SEE ITEM (2) IN SPECIAL INSTRUCTIONS		

JA 10-09

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

A-6003-618(01/06)

CH2M HILL Plateau Remediation Company ESL090006	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-022	PAGE 1 OF 1
COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7505; I-004	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.: GWS - 021.	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 412-437	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	~~1000~~ 1000 mL	~~1000 mL~~ 2005	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22614	SOIL	10-9-09	1325	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Fulton / Chitum	10-9-09 1530	MO 413 SSU-R2	10-9-09 1530
MO-413-R2	OCT 14 2009	DW Brotherton	OCT 14 2009 0930
DW Brotherton	OCT 14 2009 0930	Chitum	OCT 14 2009 0930

SPECIAL INSTRUCTIONS

☐ ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company ESL090006	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-023	PAGE 1 OF 1
COLLECTOR: Fu Hon	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7505; I-005	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.: GWS-021	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 44.5-47.0	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	~~1000~~ 1000mL	~~1000~~ 1000	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22615	SOIL	10-12-09	0840	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Fu Hon	10-12-09 1530	MO413 SSU-RR	10-12-09 1530
MO-413-R2	OCT 14 2009	DW Brotherton	OCT 14 2009 0930
DW Brotherton	OCT 14 2009 0930	Q. Tokui	OCT 14 2009

SPECIAL INSTRUCTIONS

☐ ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Platteville Remediation Company ESL090006	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-025	PAGE 1 OF 1
COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7505; I-007	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.: GWS-021	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 49.2-51.7	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	~~1000g~~ JJ 1000mL	~~1000g~~ JJ 200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22617	SOIL	10-12-09	1250	✓	✓	✓

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM: C Fulton	DATE/TIME: 10-12-09 1530	RECEIVED BY/STORED IN: MO 413 SSU-R2	DATE/TIME: 10-12-09 1530
RELINQUISHED BY/REMOVED FROM: MO-413-R2	DATE/TIME: OCT 1 2009	RECEIVED BY/STORED IN: DW Brotherton	DATE/TIME: OCT 1 2009
RELINQUISHED BY/REMOVED FROM: DW Brotherton	DATE/TIME: OCT 1 2009	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

SPECIAL INSTRUCTIONS

☐

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

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2M HILL Plateau Remediation Company

ESL090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-060

PAGE 1 OF 1

COLLECTOR: BAILEY / WEBB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days		
SAMPLING LOCATION: C7506; I-001	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
AIR QUALITY: ☐			
ICE CHEST NO.: GWS-021	FIELD LOGBOOK NO.: HNF.N-507.9	ACTUAL SAMPLE DEPTH: 36.6'	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000mL 10-13-09	40009 250g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22911	SOIL	10/13/09	0840	✓	✓	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: J. BAILEY / WEBB	10/13/09 1600	RECEIVED BY/STORED IN: MO413 SSV R2	10/13/09 1600
RELINQUISHED BY/REMOVED FROM: MO-413-R2	OCT 14 2009	RECEIVED BY/STORED IN: DW Brotherton	OCT 14 2009
RELINQUISHED BY/REMOVED FROM: DW Brotherton	OCT 14 2009	RECEIVED BY/STORED IN: C. Ian	OCT 14 2009 9:20
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	

SPECIAL INSTRUCTIONS

☐

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

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2M HILL Hanford Group, Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-061	PAGE 1 OF 1
ESL090006					
COLLECTOR: BAILEY/WEBB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7506; I-002	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY: ☐	45 Days / 45 Days
ICE CHEST NO.: GWS-021	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 61.8'	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g	~~1000g~~ 800 g JWB 10/14/09	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22912	SOIL	10/13/09	1125	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
JT Bailey / WEBB	10/13/09 1600	MO413 SJU R2	10/13/09 1600
MO-413-R2	OCT 14 2009	DW Brotherton	OCT 14 2009
DW Brotherton	OCT 14 2009 9:30	C. Joni	OCT 14 2009 9:30

SPECIAL INSTRUCTIONS

☐

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

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHILL Plateau Remediation Company ESL090006	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-062	PAGE 1 OF 1
COLLECTOR: BAILEY	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: SN	DATA TURNAROUND: 45 Days / 45 Days
SAMPLING LOCATION: C7506; I-003	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY: ☐	
ICE CHEST NO.: GWS-021	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 66.4'	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g	1000g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22913	SOIL	10-13-09	1515	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
JF Bailey	10/13/09 1600	MO413 SSUR2	10/13/09 1600
MO-413-R2	OCT 2009	DW Brothers	OCT 14 2009
DW Brothers	OCT 14 2009	Cohn	OCT 14 2009

SPECIAL INSTRUCTIONS

☐ ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHILL Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-080	PAGE 1 OF 1
COLLECTOR ESL090006 Fulton	COMPANY CONTACT DYEKMAN, DL	TELEPHONE NO. 373-2530	PROJECT COORDINATOR DYEKMAN, DL	PRICE CODE 8N	DATA TURNAROUND
SAMPLING LOCATION C7505; I-006	PROJECT DESIGNATION 100-BC Decision Unit-Soil		SAF NO. F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO. GWS-021	FIELD LOGBOOK NO. HNF-N-507-9	ACTUAL SAMPLE DEPTH 47.1-50.1	COA 300080E510	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Environmental Sciences Laboratory	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1000g	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22941	SOIL	10-12-09	1020	✓	✓

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
C Fulton	10-12-09 1530	MO 413 SSU-R2	10-12-09 1530
MO-413-R2	OCT 2009	DW Brotherton	OCT 2009
DW Brotherton	OCT 2009 1400	C Fulton	OCT 14 2009

SPECIAL INSTRUCTIONS

☐
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Hanford Group, Inc. Company ESL090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-081

COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days		
SAMPLING LOCATION: C7505; I-008	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	AIR QUALITY: ☐
ICE CHEST NO.: GWS-021	FIELD LOGBOOK NO.: HNF-N-503-9	ACTUAL SAMPLE DEPTH: 52.6-55.1	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A	

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	~~1000g~~ 1000 mL	~~1000g~~ 500g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22942	SOIL	10-12-09	1350	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
C Fulton	10-12-09 1350	MO413 SSU-RA	10-12-09 1530
MO-413-R2	OCT 14 2009	DW Brotherton	OCT 14 2009
DW Brotherton	OCT 14 2009	C. Tomi	OCT 14 2009

SPECIAL INSTRUCTIONS

☐

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

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

ESL090006

CH2M HILL Hanford Group, Inc. Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-063	PAGE 1 OF 1
COLLECTOR: BAILEY / WEBB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7506; 1-004	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY: ☐	45 Days / 45 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 69.8'	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000mL	~~1000g~~ 250g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22914	SOIL	10-14-09	0950	✓		

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J.E. BAILEY/JE Bailey	10-14-09 1400	W0417 SW R2	10-14-09 1400
SSW R2	10-20-09 1200	D. Parch	10-20-09 1200
D. Parch	10-20-09 1330	C. Fox	10/20/09 1332

SPECIAL INSTRUCTIONS

☐ ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

ESL 090006 SAF F09-066

A-6003-618(01/06)

CH2M HILL Plateau Remediation Company ESL090000

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-064 | PAGE 1 OF 1

COLLECTOR: BAILEY/WEBB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days		
SAMPLING LOCATION: C7506; I-005	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	AIR QUALITY: ☐
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 71.5'	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A	

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000mL	~~1000g~~ 250g JKB 10-14-09	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22915	SOIL	10-14-09	1135	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
JKBailey/JKBailey	10/14/09 1400	M0413 SU R2	10/14/09 1400
SU R2	10-20-09 2000	D. Parker	10-20-09 2000
D. Parker	10-20-09 1330	C. Tan	10/20/09 1330

SPECIAL INSTRUCTIONS

☐ ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/05)

CH2MHILL Hanford Group, Inc. Company ESL090000	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-026	PAGE 1 OF 1
COLLECTOR: F J Hon	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days
SAMPLING LOCATION: C7505; I-010	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY: ☐	
ICE CHEST NO.:	FIELD LOGBOOK NO.: HNF-N-585-13	ACTUAL SAMPLE DEPTH: 66.6 - 69.1	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE:

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	~~1000g~~ 1000mL	~~1000g~~ 200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22618	SOIL	10-15-09	1502	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
CFJHon / [signature]	10-15-09 1600	M0413 SSL-R2	10-15-09 1600
SSL R2	10-20-09 1200	D Parsons / [signature]	10-20-09 1200
D Parsons / [signature]	10-20-09 1330	C Toni / [signature]	10/20/09 1330

SPECIAL INSTRUCTIONS

☐ ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2M HILL Hanford Group, Inc. Company ESL090000

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-165 | PAGE 1 OF 1

COLLECTOR: Norlen White	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7506; I-028	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.:	FIELD LOGBOOK NO.: HNF-N-507 9	ACTUAL SAMPLE DEPTH: 77.9	COA: 300080ES10
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8N | AIR QUALITY: ☐ | DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	Split Spoon Liner	Moisture Resistant Cont	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	~~1000g~~ KS 10/15/09	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS Not enough returns	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B22M13	SOIL	10/15/9	~~10/15/9~~ 1440

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Morgan	10/15/9 1545	N0413 SSU-R2	10/15/9 1545
SSU R2	10-20-09	D. Parsons	10-20-09 1200
D. Parsons	10-20-09 1330	C. Jones	10/20/09 1330

SPECIAL INSTRUCTIONS

☐ ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

Not enough sample volume to cap liner KS 10/15/09

☐ ORIGINAL

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

A-6003-618(01/06)

CH2MHILL Hanford Group, Inc. Company

ESL090606

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-168

COLLECTOR: PAILLY/WEBB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7506; I-029	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-585-13	ACTUAL SAMPLE DEPTH: 87.9	COA: 300080ES10
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8N

AIR QUALITY: ☐

DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	Split Spoon Liner	Moisture Resistant Cont	G/P
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22M14	SOIL	10-19-09	1520	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
JP Pailly/WEBB	10-19-09 1606	MCL/13 SSU R2	10-19-09 1600
SSU R2	10-20-09 1200	D. Parch	10-20-09 1200
D. Parch	10-20-09 1300	C. Tapia	10/20/09 1300

SPECIAL INSTRUCTIONS

☐

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

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2M HILL Hanford Group, Inc. Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-082	PAGE 1 OF 1
COLLECTOR: BAILEY / WEBB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7506; ~~1006~~ I-009 KS 10/15/09	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.: GWS-106	FIELD LOGBOOK NO.: ANF-N-585-73	ACTUAL SAMPLE DEPTH: 97	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	
NO. OF CONTAINER(S)	1	1	
VOLUME	1000g mL	~~1000g~~ 250g Dry Weight	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B22995	SOIL	10-21-09	0915	✓	✓								

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J K BAILEY / WEBB	10-21-09 1600	IN0413 SSU R2	10-21-09 1600
SSU R2	10-20-09 1000	D. Parchen	10-20-09
D. Parchen	10-20-09 1345	C. Tom	10/20/09 1345

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(03/06)

For [illegible] for F09-066

CH2MHILL Plateau Remediation Company ESL090006	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-083	PAGE 1 OF 1
COLLECTOR: Bailey / WERB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7506; ~~1-087~~ I-010 KS 10/15/09	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.: C2WS-106	FIELD LOGBOOK NO.: HNF-N-585-B	ACTUAL SAMPLE DEPTH: 102.2'	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE: -

PRESERVATION	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1000g ~~mL~~	~~1000g~~ 250 JKB 10-15-09
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22996	SOIL	10-22-09	0901	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
JK Bailey / JK Bailey	10-22-09 1600	MO413 SSU R2	10-22-09 1600
MO 413 SSU R2	10-20-09 1000	D. Parker	10-20-09 1000
D. Parker	10-20-09 1345	C Jovin	10/26/09 1345

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHILL Hanford Group, Inc. ESL090000

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-084 | PAGE 1 OF 1

COLLECTOR: BAILEY/WEBB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7506; I-008	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.: CWS-106	FIELD LOGBOOK NO.: HNF-N585-13	ACTUAL SAMPLE DEPTH: 90'	COA: 300080ES10
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8N | DATA TURNAROUND: 45 Days / 45 Days | AIR QUALITY: ☐ | METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1000 mL	1000 mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22997	SOIL	10-20-09	1300	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Bailey / J Webb	10-20-09 1600	M0413 SSU R2	10-20-09 1600
SSU R2	10-26-09 1000	D. Pacheco	10-26-09 1000
D. Pacheco	10-26-09 1345	C. Farris	10/26/09 1345

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHILL Hanford Group, Inc. Company ESL090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-06S

COLLECTOR: Denny Webb	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: C7506; I-026	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	
ICE CHEST NO.: GWS - 115	FIELD LOGBOOK NO.: HNF-N-585-13	ACTUAL SAMPLE DEPTH: 179.4	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A	

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

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

SPECIAL HANDLING AND/OR STORAGE:

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g ✓	~~1000g~~ 1000mL ✓	1000mL ✓
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (no CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22916	SOIL	11-19-09	1215	X	X	X

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DW Webb / [illegible]	11-19-09 / 1430	MO #13 SSU-R2	11-19-09 / 1430
SSU-R2	NOV 23 2009 01:30	DW Brotherton	NOV 23 2009 01:30
DW Brotherton	NOV 23 2009 11:40	[illegible]	NOV 23 2009 11:40

SPECIAL INSTRUCTIONS

☐

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

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

ESL

SDG #090006

A-6003-618(01/06)

CH2MHILL Hanford Group, Inc. Company

E9L090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-066

PAGE 1 OF 1

COLLECTOR: WEBB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7506; I-027	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.: 6WS - 115	FIELD LOGBOOK NO.: HNF N-585-13	ACTUAL SAMPLE DEPTH: 183.3	COA: 300080ES10
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8N

AIR QUALITY: ☐

DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g	~~1000g~~ 200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22917	SOIL	11-19-09	1310	X	X	X

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DWWebb/DWHull	11-19-09/1430	MO 413 SSU-R2	11-19-09/1430
SSU-R2	NOV 23 2009 0830	DW Brotherton	NOV 23 2009 0830
DW Brotherton 11:40	NOV 23 2009	4R Intermodal 11:40	NOV 23 2009

SPECIAL INSTRUCTIONS

☐

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

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-61B(01/06)

CH2M HILL Plateau Remediation Company ESL090006	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-027	PAGE 1 OF 1
COLLECTOR: BAILEY	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7505; I-030	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.: GWS-154	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 205'	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	~~1000g~~ 1000mL KS 12/7/09	~~1000g~~ 200g KS 12/7/09	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22619	SOIL	12-7-09	1140	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
BAILEY	12-7-09 1600	MO413 SU R2	12-7-09 1600
MO-413-R2	DEC 08 2009 0915	DE Parchen CHPRC	DEC 08 2009 0915
DE Parchen CHPRC	DEC 08 2009	J. Kudryavtsev	DEC 08 2009
	11:15		11:15
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

☐

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

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

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

SDG# ESL090006

A-6003-618(01/06)

CH2MHILL Hanford Group, Inc. Company ESL090000

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-028 | PAGE 1 OF 1

COLLECTOR: Bailey	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days		
SAMPLING LOCATION: C7505; I-032	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	AIR QUALITY ☐
ICE CHEST NO.: GWS-154	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 212.3'-214.8	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A	

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000mL	1000g 2oz	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22692	SOIL	12-7-09	1315	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J Bailey	12-7-09 1600	MO413 SUR2	12-7-09 1600
MO-413-R2	DEC 08 2009 0815	DE Parchen CHPRC	DEC 08 2009 0815
DE Parchen CHPRC	DEC 08 2009	I. Kudryatov	DEC 08 2009
	11:15		11:15

SPECIAL INSTRUCTIONS

☐

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

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

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

A-6003-618(01/06)

ESL090006

CH2MHILL Laboratory Operation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-120	PAGE 1 OF 1
COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7507; I-008	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY: ☐	45 Days / 45 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-595-13	ACTUAL SAMPLE DEPTH: 82.0-84.5	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1000g/mL	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22FF5	SOIL	12-30-09	0825	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
C Fulton / C Fulton	12-30-09 1500	MO 413 SSU R2	12-30-09 1500
MO-413-R2	JAN 05 2010 0945	J. Garcia CHPRC	JAN 05 2010 0945
J. Garcia CHPRC	JAN 05 2010 1150	Ben Williams / Ben Williams	JAN 05 2010 1150

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.☐☐** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

WO 091004

SOG# ESL090006

CH2MHILL Hanford Group, Inc. Company ESL090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-121

COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days		
SAMPLING LOCATION: C7507; I-010	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
AIR QUALITY: ☐			
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-595-13	ACTUAL SAMPLE DEPTH: 87.5-90'	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1000g	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22FF6	SOIL	12-30-09	1325	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Fulton / Fulton	12-30-09 1500	MO 413 JSU-R2	12-30-09 1500
MO-413-R2	JAN 05 2010	J. Garcia CHPRC	JAN 05 2010
J. Garcia CHPRC	11:50 JAN 05 2010	Ben Williams	11:50 JAN 05 2010

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.☐☐** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Plateau Remediation Company ESL090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-175

COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7507; I-010a	PROJECT DESIGNATION: 100-BC Dedsion Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.	FIELD LOGBOOK NO.: HNF-N-5079	ACTUAL SAMPLE DEPTH: 92.9-95.4'	COA: 300080ES10
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8N

AIR QUALITY: ☐

DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None
TYPE OF CONTAINER	~~Split Spoon Liner~~ G/P GAF 1/4/10	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1000g	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B23KT7	SOIL	1-4-10	1320	✓	✓

☒ ORIGINAL

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
CFulton	1-4-10 - 1530	MO 413 SSU-R2	1-4-10 1530
MO-413-R2	JAN 05 2010 9:45	J. Garcia CHPRC	JAN 05 2010 9:45
J. Garcia CHPRC	JAN 05 2010 11:50	Ben Williams	JAN 05 2010 11:50

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401640ES20.

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

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

A-6003-618(01/06)

CH2MHill Hanford Remediation Company ESL090006	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-176	PAGE 1 OF 1
COLLECTOR: Bailey	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7507; I-010b	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.: GWS-16	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 97.5'-100.0'	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None
TYPE OF CONTAINER	~~Glass Sphere Liner~~ G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1000g	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAF 1/4/10

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B23KT8	SOIL	1/5/10	0930	✓	✓

ORIGINAL

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: JEBailey	RECEIVED BY/STORED IN: Moyer SUR2	1/5/10 1600
RELINQUISHED BY/REMOVED FROM: SSU-R2	RECEIVED BY/STORED IN: CHPRC	JAN 11 2010 0900
RELINQUISHED BY/REMOVED FROM: R.C. Romo CHPRC	RECEIVED BY/STORED IN: Igor Kustyuk	JAN 11 2010 11:40
RELINQUISHED BY/REMOVED FROM:	RECEIVED BY/STORED IN:	
RELINQUISHED BY/REMOVED FROM:	RECEIVED BY/STORED IN:	
RELINQUISHED BY/REMOVED FROM:	RECEIVED BY/STORED IN:	
RELINQUISHED BY/REMOVED FROM:	RECEIVED BY/STORED IN:	

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401640ES20.
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

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

SDG# ESL 090006

A-6003-618(01/06)

WO 0910004 SDG# ESL 090006 Last Sample 0910004-48

CH2MHill Hanford Group, Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-177	PAGE 1 OF 1
COLLECTOR: Bailey	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7507; I-010c	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.: GWS-16	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 101.9'-104.4'	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE:

PRESERVATION	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1000g	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B234R6	SOIL	1-6-10	0803	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
JK Bailey	1/6/10 1600	MOV 13 SSU R2	1/6/10 1600
SSU-R2	JAN 11 2010 0900	R.C. Rohro CHPRC	JAN 11 2010 0900
R.C. Rohro CHPRC	JAN 11 2010	I. Kudryatov	JAN 11 2010
	11:40		11:40
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

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

A-6003-618(01/06)

CH2MHill Hanford Group, Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-178	PAGE 1 OF 1
COLLECTOR: NEBB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7507; I-010d	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY: ☐	45 Days / 45 Days
ICE CHEST NO.: RR 1-11-10 / A GWS-16	FIELD LOGBOOK NO.: HNF-N-507-9 pg. 35	ACTUAL SAMPLE DEPTH: 107.8	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE:

PRESERVATION	None	None	
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	
NO. OF CONTAINER(S)	1	1	
VOLUME	1000 mL	200g	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B234R7	SOIL	1-7-10	1120	X	X						

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Dr Wall / Dr Wall	1-7-10 / 1600	HCAB SSU-R2	1-7-10 / 1600
SSU-R2	JAN 1 1 2010 0900	R.G. Romo CHPRC Romo	JAN 1 1 2010 0900
R.G. Romo CHPRC Romo	JAN 1 1 2010	T. Rudnyakov	JAN 1 1 2010
	11:40	T. Rudnyakov	11:40

SPECIAL INSTRUCTIONS

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

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

A-6003-618(01/06)

CH2M HILL Hanford Group, Inc. Company ESL090000

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-113

PAGE 1 OF 1 - 42

COLLECTOR: Sutton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: C7507; I-001	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	
ICE CHEST NO.: GWS-094	FIELD LOGBOOK NO.: ANF-N-595-13	ACTUAL SAMPLE DEPTH: 60.4-62.7	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A	

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FD8	SOIL	12-28-09	1746	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
C Sutton / [signature]	12-28-09 1600	MO413 SSURR	12-28-09 1600
MO-413-R2	DEC 30 2009 0840	A.D. Turner	DEC 30 2009 0840
A.D. Turner	DEC 30 2009 11:30	CHPRC	DEC 30 2009 11:30
CHPRC			

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.☐☐** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

K/S# 0910004 SDG ESL 090000

CH2MHILL Hanford Group, Inc. ESL090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-114

COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: C7507; I-002	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	
ICE CHEST NO.: GWS-094	FIELD LOGBOOK NO.: HNF-N-595-B	ACTUAL SAMPLE DEPTH: 64.6-67.1	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A	

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FD9	SOIL	12-28-09	1420	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
CFulton	12-28-09 1600	MO 413 SSUR2	12-28-09 1600
MO-413-R2	DEC 30 2009 0820	A.D. Turner	DEC 30 2009 0820
A.D. Turner	DEC 30 2009 11:30	C. Tran	DEC 30 2009 11:30

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.☐☐** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-619(01/06)

CH2M HILL Hanford Group, Inc. Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-115 | PAGE 1 OF 1

COLLECTOR: Webb	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7507; I-003	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.: GWS 041	FIELD LOGBOOK NO.: HNF-N-585-13 pg. 31	ACTUAL SAMPLE DEPTH: 70'-72.5'	COA: 300080ES10
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8N | AIR QUALITY: ☐ | DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000mL	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FF0	SOIL	12-29-09	0808	(3)	X	X

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
D.W. Webb/D.W. Webb	12-29-09 / 1600	MO413 SSU-R2	12-29-09 / 1600
MO-413-R2	DEC 30 2009 0820	A.D. Turner	DEC 30 2009 0820
A.D. Turner	DEC 30 2009 11:30	CHPRC	DEC 30 2009 11:30

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.☐☐** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

(3) NOT ENOUGH YIELD TO COLLECT THIS SAMPLE PER PRIORITY REQUEST.

ORIGINAL

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

A-6003-618(01/06)

CH2M HILL Hanford Group, Inc. Company ESL090000

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-116 | PAGE 1 OF 1

COLLECTOR: WETB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7507; I-004	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.: GWS-094	FIELD LOGBOOK NO.: HNF-N-585-13 pg.31	ACTUAL SAMPLE DEPTH: 73.3' - 75.8'	COA: 300080ES10
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8N | AIR QUALITY: ☐ | DATA TURNAROUND: 45 Days / 45 Days | METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000 mL (Jan 12-31-09)	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FF1	SOIL	12-29-09	0930	X	X	X

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Jon WEBB / Jon Webb	12-29-09 / 1600	MO 413 SSU-R2	12-29-09 / 1600
MO-413-R2	DEC 30 2009 0820	A.D. Turner CHPRC	DEC 30 2009 0820
A.D. Turner CHPRC	DEC 30 2009 11:30	C. Tom	DEC 30 2009 11:30

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.☐☐** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHILL Hanford Group, Inc. Company

ESL090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-117

COLLECTOR: WEB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: C7507; 1-005	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	
ICE CHEST NO.: GWS-094	FIELD LOGBOOK NO.: HNF-N-585-13 p.31	ACTUAL SAMPLE DEPTH: 74.9'-77.4'	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FF2	SOIL	12-29-09	1008	X	X	X

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DW Webb / DW Webb	12-29-09 / 1600	MO 413 SSU-R2	12-29-09 / 1600
MO-413-R2	DEC 30 2009 0829	A.D. Turner	DEC 30 2009 0829
A.D. Turner	DEC 30 2009 1:20	CRTPRC	DEC 30 2009
CRTPRC			

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.☐☐** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

EOL000006

CH2MHill Hanford Group, Inc. Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-118

COLLECTOR: WEBB	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7507; I-006	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.: GWS-094	FIELD LOGBOOK NO.: HNF-N-585-13 pg 31	ACTUAL SAMPLE DEPTH: 77.3'-79.8	COA: 300080ES10
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8N

AIR QUALITY: ☐

DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont
NO. OF CONTAINER(S)	1	1
VOLUME	1000g	200g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B22FF3	SOIL	12-29-09	1126	X	X

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DW Webb/DW Webb	12-29-09/1600	MO 413 SSU-R2	12-29-09/1600
MO-413-R2	DEC 30 2009 0620	A.D. Turner CHPRC	DEC 30 2009 0620
A.D. Turner CHPRC	DEC 30 2009 11:30	C. Fin	DEC 30 2009 11:30

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.☐☐** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2M Hill Hanford Group, Inc. Company ESL090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-139 | PAGE 1 OF 1

COLLECTOR: A. Emerson	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7665; I-001	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.: GWS-094	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 31.0	COA: 300080ES10
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8N | AIR QUALITY: ☐ | DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000~~g~~mL CB 1/4/10	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FR6	SOIL	1/20/10	0940	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Adam Emerson	1/20/10 1548	M0413 SSU-R2	1/20/10 1548
SSU-R2	JAN 21 2010	DW Brotherton	JAN 21 2010
DW Brotherton	JAN 21 2010	Ben Williams	9:50 JAN 21 2010
9150	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

~~** The CACN for all analytical work at WSCF laboratory is 401010ES20.~~ MJ 12/21/09

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

SDG# F S1.090006 WO# 0910004

A-6003-618(01/06)

ESL090006

CH2MHILL Hanford Group, Inc. Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-140

COLLECTOR: A Emerson	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7665; I-001DUP	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.: GWS-094	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 31.0	COA: 300080ES10
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: BN

AIR QUALITY: ☐

DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Spill Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000~~gm~~ mL KS 1/4/10	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FR7	SOIL	1/20/10	0940	✓	✓	

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
A Emerson	1/20/10 1548	M04/3 SSU-R2	1/20/10 1548
SSU-R2	JAN 2 1 2010	DW Brotherton	JAN 2 1 2010
DW Brotherton	JAN 2 1 2010	Ben Williams	9:50 JAN 2 1 2010
9:50			

SPECIAL INSTRUCTIONS

TMT 12/21/09

~~** The CACN for all analytical work at WSCF laboratory is 401640E920.~~

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2M HILL Hanford Group, Inc. Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-141	PAGE 1 OF 1
COLLECTOR: A Emerson	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7665; I-002	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.: GWS-094	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 35.3 ft	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000mL KS 1/4/10	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FR8	SOIL	1/20/10	1110	✓	✓	✓

CHAIN OF POSSESSION	DATE/TIME	SIGN/ PRINT NAMES	DATE/TIME
RELINQUISHED BY/REMOVED FROM: Adam Emerson	1/20/10 1540	RECEIVED BY/STORED IN: M0413 SSU-R2	1/20/10 1548
RELINQUISHED BY/REMOVED FROM: SSU-R2	JAN 2 1 2010 6:50	RECEIVED BY/STORED IN: DW Brothe	JAN 2 1 2010 6:50
RELINQUISHED BY/REMOVED FROM: DW Brotherton	JAN 2 1 2010	RECEIVED BY/STORED IN: Ben Williams	JAN 2 1 2010 9:50
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN	

SPECIAL INSTRUCTIONS

~~** The CACN for all analytical work at WSCP laboratory is 401640ES20.~~ MD 12/21/09

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHill Hanford Group, Inc. Company EOL090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-142 | PAGE 1 OF 1

COLLECTOR: A Emerson	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: C7665; I-003	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	
ICE CHEST NO.: GWS-094	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 40.8 ft	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g mL KS 1/4/10	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FR9	SOIL	1/20/10	1330	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Adam Emerson	1/20/10 1548	M0413 SSU-R2	1/20/10 1548
SSU-R2	JAN 2 1 2010	DW Brotherton	JAN 2 1 2010
DW Brotherton	JAN 2 1 2010	Bea Williams	JAN 2 1 2010
9:50		9:50	

SPECIAL INSTRUCTIONS

~~** The CACN for all analytical work at WSCF laboratory is 401640ES20.~~ MM 12/21/09

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2M HILL Hanford Group, Inc. Company — ESL000006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-143 — PAGE 1 OF 1

COLLECTOR: A Emerson	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: C7665; I-004	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	
ICE CHEST NO.: GWS-094	FIELD LOGBOOK NO.: HNF-N-507-9	ACTUAL SAMPLE DEPTH: 43.3 ft	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000~~gm~~ mL KS 1/4/10	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FT0	SOIL	1/20/10	1425	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Adam Emerson	1/20/10 1548	M0413 SSU-R2	1/20/10 1548
SSU-R2	JAN 21 2010	DW Brotherton	JAN 21 2010
DW Brotherton	JAN 21 2010 9:50	Bea Williams	JAN 21 2010 9:50

SPECIAL INSTRUCTIONS

** The CACN for all analytical work at WSCF laboratory is 401640ES20.

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2M HILL Hanford Group, Inc. Company

ESL090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-144 | PAGE 1 OF 1

COLLECTOR: A Emerson	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7665; I-005	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.: GWS-169	FIELD LOGBOOK NO.: HNF-N-585-13	ACTUAL SAMPLE DEPTH: 45.8 ft	COA: 300080ES10
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A

PRICE CODE: 8N | AIR QUALITY: ☐ | DATA TURNAROUND: 45 Days / 45 Days | METHOD OF SHIPMENT: GOVERNMENT VEHICLE

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

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

SPECIAL HANDLING AND/OR STORAGE:

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000~~g~~ mL KS 1/4/10	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FT1	SOIL	1/21/10	0930	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Adam Emerson	1/21/10 1545	M0413 SSU-R2	1/21/10 1545
SSU-R2	JAN 26 2010 0750	DW Brotherton	JAN 26 2010 0750
DW Brotherton	JAN 26 2010	J. Kudryakov 11:15	JAN 26 2010
11:15			

SPECIAL INSTRUCTIONS

~~** The CACN for all analytical work at WSCE laboratory is 401640E520.~~ DMS 12/21/09

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent Moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

ESL090006

CH2MHILL Hanford Group, Inc. Bechtel Hanford, Inc. Bechtel Corporation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-145

COLLECTOR: A. Emerson	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days		
SAMPLING LOCATION: C7665; I-006	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	AIR QUALITY: [ ]
ICE CHEST NO.: GWS-169	FIELD LOGBOOK NO.: HNF-N-585-13	ACTUAL SAMPLE DEPTH: 51.3 ft	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE			
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A	

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	~~Tube~~ 1/21/10 Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000mL KS 1/4/10	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FT2	SOIL	1/21/10	1114	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Adam Emerson	1/21/10 1545	M0413 SSU-R2	1/21/10 1545
SSU-R2	JAN 26 2010	DW Brotherton	JAN 26 2010
DW Brotherton	JAN 26 2010 11:15	I Kufnyakov	JAN 26 2010
11:15		Lyn Kufnyakov	

SPECIAL INSTRUCTIONS

~~** The CACN for all analytical work at WSCF laboratory is 4016405520.~~ MMT 12/21/09

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content / D2216 {Percent Moisture (wet sample)}

ORIGINAL

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

SDG# ESL090006 WO# 0910004

A-6003-618(01/06)

ESL 090006

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-122

COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: C7507; I-031	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	
ICE CHEST NO.: SML-429-A	FIELD LOGBOOK NO.: HNF-N-585-13	ACTUAL SAMPLE DEPTH: 190.5-193'	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A

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

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

SPECIAL HANDLING AND/OR STORAGE:

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FF7	SOIL	1-29-10	1125	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
C. Fulton	1-29-10 1430	MO 413 SSU-R2	1-29-10 1430
J.H. Kim CHPRC	FEB 01 2010	R. Williams	FEB 01 2010 12:00

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.☐☐** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

SDG-H ESL 090006 Lect.: 0910014-L4

CH2M HILL Hanford Group, Inc. Company ESL090000	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-123	PAGE 1 OF 1
COLLECTOR: Fulton	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7507; I-033	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.	FIELD LOGBOOK NO.: HWF- N-585-13	ACTUAL SAMPLE DEPTH: 195- 197.6	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None	
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner	
NO. OF CONTAINER(S)	1	1	1	
VOLUME	1000g	200g	1000mL	
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FF8	SOIL	1-29-10	1225	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
C Fulton	1-29-10 1430	NG 413 SSV RZ	1-29-10 1430
J.R. Aguilar CHPRC	FEB 0 1 2010 0900	Ben Williams FEB 0 1 2010	12:00
	2/1/10		

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.☐☐** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.☐☐** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

4

CH2M HILL Hanford Group, Inc. Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F09-066-149	PAGE 1 OF 1

COLLECTOR: D Webb, A Emerson	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
PRICE CODE: 8N	DATA TURNAROUND: 45 Days / 45 Days	AIR QUALITY: ☐	
SAMPLING LOCATION: C7665; I-027	PROJECT DESIGNATION: 100-BC Decision Unit-Soil	SAF NO.: F09-066	
ICE CHEST NO.: GWS-169	FIELD LOGBOOK NO.: HNF-N-585-13	ACTUAL SAMPLE DEPTH: 144.1-146.6 ft.	COA: 300080ES10
METHOD OF SHIPMENT: GOVERNMENT VEHICLE	SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A	BILL OF LADING/AIR BILL NO.: N/A

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000mL XS 1/4/10	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FT6	SOIL	2/16/10	0910	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Adam Emerson	2/16/10 1330	M0413 JSU-RA	2-16-10 1330
SSU-R2	FEB 22 2010 1000	JR Aguilar CHPRC	FEB 22 2010 1000
JR Aguilar CHPRC	FEB 22 2010 1:00	Ben Williams	FEB 22 2010 1:00

SPECIAL INSTRUCTIONS JMT 12/21/09

** ~~The CACN for all analytical work at WSCF laboratory is 401640ES20.~~

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.

(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}

(2)Moisture Content - 82216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

SDG# ESL090006 Lot: 091004-68

CH2M HILL Hanford Group, Inc. Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-161

COLLECTOR: D Webb / A Emerson	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7665; I-027	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.: GWS-169	FIELD LOGBOOK NO.: HNF-N-585-13	ACTUAL SAMPLE DEPTH: 144.1-146.6 ft	COA: 300080ES10
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: SEE PTR		BILL OF LADING/AIR BILL NO.: SEE PTR

PRICE CODE: 8N

AIR QUALITY: ☐

DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: FEDERAL EXPRESS

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 may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE:

PRESERVATION	None
TYPE OF CONTAINER	G
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	TRITIUM - MIDLEVEL (Tritium)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B22FT6	SOIL	2/16/10	0910	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Adam Emerson	2/16/10 1330	SSU R2 M0413	2/16/10 1330
SSU-R2	FEB 22 2010 1000	J.R. Aguilar CHPRC	FEB 22 2010 1000
J.R. Aguilar CHPRC	FEB 22 2010 100	[illegible]	FEB 22 2010 1:00

SPECIAL INSTRUCTIONS

JMT 2/21/09

~~** The CACN for all analytical work at WSCF laboratory is 4016405520.~~

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.

ORIGINAL

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

A-6003-618(01/06)

CH2M HILL Hanford Group, Inc. Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F09-066-150	PAGE 1 OF 1
COLLECTOR: A Emerson, D Webb	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL	PRICE CODE: 8N	DATA TURNAROUND
SAMPLING LOCATION: C7665; I-029	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.: GWS-169	FIELD LOGBOOK NO.: HNF-N-585-13	ACTUAL SAMPLE DEPTH: MAB-152.3 ft.	COA: 300080ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	
SHIPPED TO: Environmental Sciences Laboratory	OFFSITE PROPERTY NO.: N/A		BILL OF LADING/AIR BILL NO.: N/A		

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None	None	None
TYPE OF CONTAINER	G/P	Moisture Resistant Cont	Split Spoon Liner
NO. OF CONTAINER(S)	1	1	1
VOLUME	1000g ~~mL~~ KS 1/4/10	200g	1000mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	Generic Testing (No CAS)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B22FT7	SOIL	2/16/10	1040	✓	✓	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Adam Emerson	2/16/10 1330	MO 413 SSU-R2	2-16-10 1330
SSU-R2 FEB 22 2010	1000	J.R. Aguilar CHPRC FEB 22 2010	1800
J.R. Aguilar FEB 22 2010	1100	[illegible] FEB 22 2010	1100

SPECIAL INSTRUCTIONS

~~** The CACN for all analytical work at WSCF laboratory is 401640ES20.~~ TMH 12/24/09

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.
(1)Density {Bulk density - wet} Saturated Hydraulic Conductivity {Hydraulic Conductivity}
(2)Moisture Content - D2216 {Percent moisture (wet sample)}

ORIGINAL

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

A-6003-618(01/06)

CH2MHILL Hanford Solutions Company — FSL090006

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F09-066-162

COLLECTOR: A Emerson, D Webb	COMPANY CONTACT: DYEKMAN, DL	TELEPHONE NO.: 373-2530	PROJECT COORDINATOR: DYEKMAN, DL
SAMPLING LOCATION: C7665; I-029	PROJECT DESIGNATION: 100-BC Decision Unit-Soil		SAF NO.: F09-066
ICE CHEST NO.: GWS - 169	FIELD LOGBOOK NO.: HNF-N-585-13	ACTUAL SAMPLE DEPTH: 149.8-152.3 ft.	COA: 300080ES10
SHIPPED TO: Eberline Services	OFFSITE PROPERTY NO.: SEE PTR		BILL OF LADING/AIR BILL NO.: SEE PTR

PRICE CODE: 8N

AIR QUALITY: ☐

DATA TURNAROUND: 45 Days / 45 Days

METHOD OF SHIPMENT: FEDERAL EXPRESS

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

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

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
TYPE OF CONTAINER	G
NO. OF CONTAINER(S)	1
VOLUME	60mL
SAMPLE ANALYSIS	TRITIUM - MIDLEVEL (Tritium)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B22FT7	SOIL	2/16/10	1040	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Adam Emerson	2/16/10 1330	SSU-R2 M0413	2/16/10 1330
SSU-R2	FEB 22 2010 0930	CHPRC	FEB 22 2010 1000
J.R. Aguilar CHPRC	FEB 22 2010 1:00		FEB 22 2010 1:00

SPECIAL INSTRUCTIONS

~~** The CACN for all analytical work at WSCF laboratory is 401640ES20.~~ TMS 12/2/09

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

** The laboratories must meet prior requested and confirmed turnaround times and RDLs. The laboratories must notify the SM Project Coordinator in writing within 24 hrs of sample receipt if/when this requirement can not be met.

** Sample Management will provide copies of data to both the Task Manager, the Requester, and Mary Hartman. In addition please send copies of data to Tessa Buswell, per Greg Kaszas request.

ORIGINAL

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

A-6003-618(01/06)