RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

February 27, 2015

February 26, 2015

CH2M HILL Plateau Remediation Company
2420 Stevens Center Place
P.O. Box 1600
Richland, WA 99352
Attn.: Tracey A. Burch

Subject: Geotechnical Laboratory Testing Services

Enclosed is the final report on geotechnical analyses performed by RJ Lee Group in conjunction with PBS Engineering and Environmental, Inc. (PBS).

General Set Comments
During the period of September 30, 2014, to January 20, 2015, RJ Lee Group received from CH2M-Hill Plateau Remediation Company (CHPRC) the first set of 28 samples to be tested for geotechnical analysis at the Columbia Basin Analytical Laboratories. On January 5, 2015 a discussions took place about issues related to inadequate sample volumes for the provided samples in relation to ASTM procedures requested by CHPRC. The customer directed Columbia Basin Analytical Laboratories to work with the CHPRC project coordinator on addressing these issues. The CHPRC project coordinator provided clarification on the requested ASTM procedures on February 12, 2015. The first set of 16 CHPRC samples, in sample delivery group (SDG) number WA011020140001, has been assigned a Columbia Basin Analytical Laboratories login order number per the below table.

CHPRC #	CBALab #	Geotechnical #
B2YF05	WA011020140001-003	H-0001
B2YF04	WA011020140001-001	H-0002
B2YF06	WA011020140001-002	H-0004
B2WB58	WA011020140001-004	H-0005
B2WB60	WA011020140001-006	H-0006
B2R2X0	WA011020140001-007	H-0007
B2T036	WA011020140001-008	H-0008
B2WB59	WA011020140001-005	H-0009
B2W317	WA011020140001-010	H-0010
B2W319	WA011020140001-011	H-0011
B2W321	WA011020140001-012	H-0012
B2W9Y4	WA011020140001-013	H-0013
B2XPH3	WA011020140001-014	H-0014
B2XPH6	WA011020140001-015	H-0015
B2XPH9	WA011020140001-016	H-0016
B2T1L2	WA011020140001-009	H-0017

This project deliverable contains the reports of the requested analytical results and copies of the associated chains of custody for the first set of 16 samples listed below.

The analytical results provided in this deliverable relate only to the items tested. Samples were received in acceptable condition unless otherwise noted in the attached report(s).

I certify that this analytical report is in compliance with the Hanford SOW, both technically and for completeness. Release of the data contained in this hard copy report has been authorized by the Laboratory Director or a designee as verified by the following signature.

February 26, 2015

Heinz Huber Date
Laboratory Manager, Columbia Basin Analytical Laboratories

If you have any questions, please feel free to contact us at 509-545-4989 or email at hhuber@rjleegroup.com.

February 27, 2015

PBS | Engineering + Environmental

February 24, 2015

RJ Lee Group, Inc.
Attn: Mr. Larry Lockrem
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, Washington 93301

Re: Geotechnical Laboratory Testing Results
Sample Delivery Group No. WA011020140001
PBS Project No. 63737.000

Dear Mr. Lockrem:

In accordance with your request, PBS Engineering and Environmental Inc. (PBS) is providing you with the results of our recent geotechnical laboratory testing. Our services were provided in accordance with the request provided with Sample Delivery Group (SDG) number WA011020140001.

We performed the following tests:

- Carbonate Content (ASTM D4373)
- Grain Size Analysis - Hydrometer (ASTM D422)
- Hydraulic Conductivity – Constant Head (ASTM D2434)

The tests were performed in general accordance with the above-mentioned ASTM Standards, except for the following cases:

- **Grain Size Analysis - Hydrometer (ASTM D422):** Samples B2T034, B2T036, B2WB58, B2WB60, B2R2X0, B2WB59, B2W317, B2W319, B2W321, B2XPH3, B2XPH6, B2XPH9 and B2T1L2 did not contain the designated approximate minimum mass of sample based on the nominal diameter of the largest soil particles. The tests were performed on the sample mass available, per the direction of RJ Lee and CHPRC.

- **Hydraulic Conductivity – Constant Head (ASTM D2434):** Samples B2T034, B2WB58, B2WB60, B2R2X0, B2WB59, B2W317, B2W319, B2W321 and B2T1L2 were not tested in a permeameter cylinder appropriately sized based on the maximum particle size of the soil due to the lack of adequate sample volumes provided. The tests were performed in the closest appropriately sized cylinder available for the volume of sample provided, per the direction of RJ Lee and CHPRC.

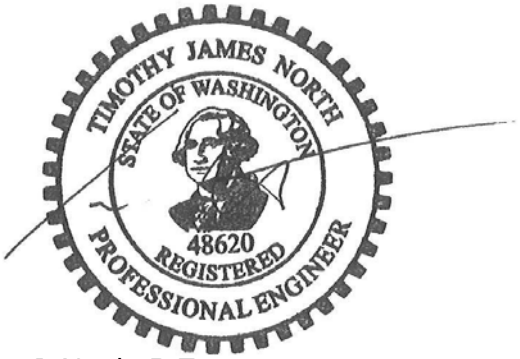
In some cases, the samples provided were inadequate in terms of sample size in general or consisted primarily of large particle sizes, both of which should be considered when interpreting the results of the testing. Those samples are: **B2T034, B2WB58, B2R2XO, B2W317, B2W319, B2W321, B2XPH6** and **B2T1L2.** Photographs of the samples in question are attached.

400 Bradley Boulevard, Suite 300, Richland, WA 99352
509.942.1600 Main
866.727.0140 Fax
www.pbsenv.com
Bend | Boise | Coos Bay | Eugene | Portland | Seattle | Tri-Cities | Vancouver

February 27, 2015

We trust this letter meets your current needs. If you have any questions, or wish to further discuss our observations, conclusions, and recommendations, please contact us at 509.942.1600.

Sincerely,
PBS Engineering and Environmental, Inc.



Timothy J. North, P.E.
Project Geotechnical Engineer

Nathan A. Bowles, P.E.
Senior Engineer/Operations Manager

TN/

Attachments: Sample Photographs
Report of Laboratory Testing – Carbonate Content
Report of Laboratory Testing – Grain-size Analysis - Hydrometer
Report of Laboratory Testing – Hydraulic Conductivity – Constant Head
Chains of Custody

February 27, 2015

Mr. Larry Lockrem
Re: Geotechnical Laboratory Testing Results – WA011020140001
February 24, 2015

Photo 1. Sample No. B2T034 (PBS Sample No. H-0002).

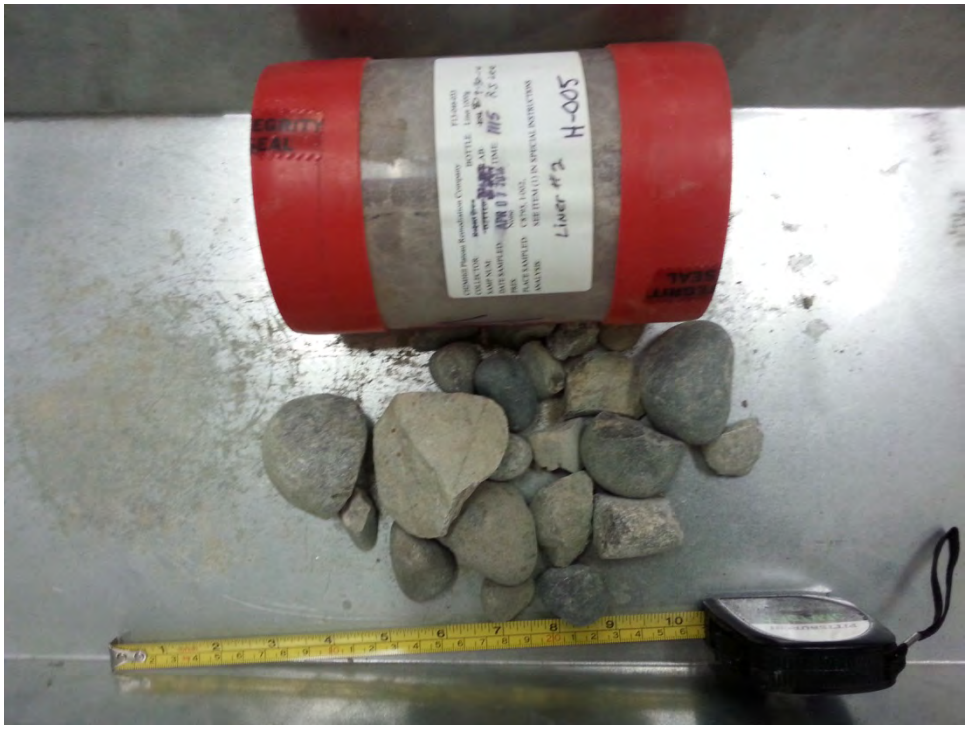


Photo 2. Sample No. B2WB58 (PBS Sample No. H-0005).

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Photo 3. Sample No. B2R2X0 (PBS Sample No. H-0007).

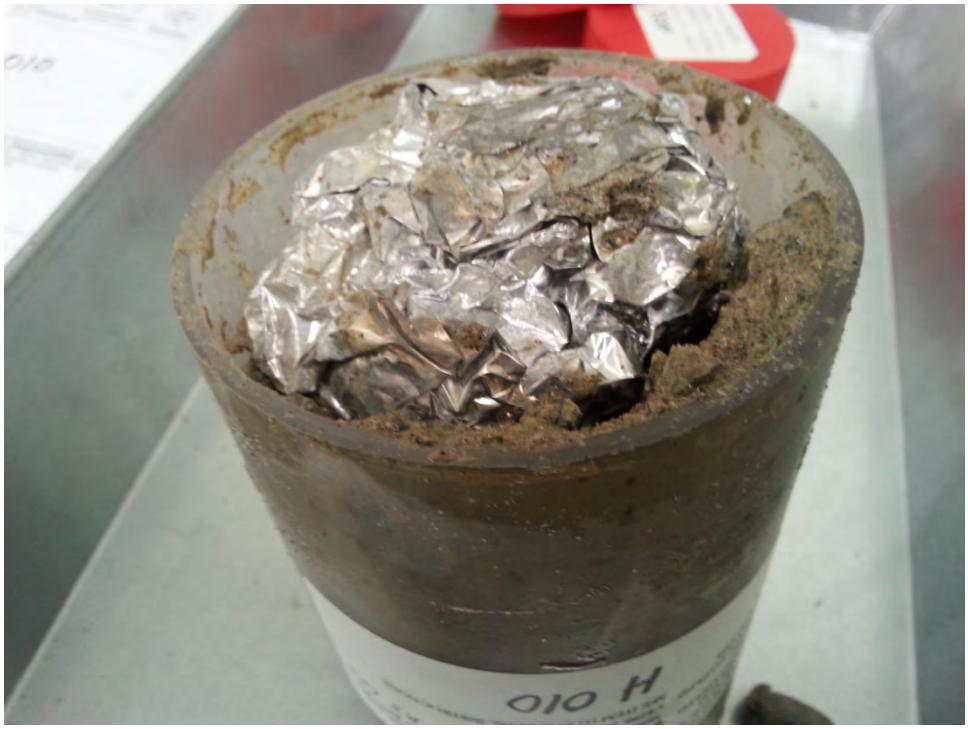

Photo 4. Sample No. B2W317 (PBS Sample No. H-0010).

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Photo 5. Sample No. B2W319 (PBS Sample No. H-0011).

Photo 6. Sample No. B2W321 (PBS Sample No. H-0012).

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Photo 7. Sample No. B2XPH6 (PBS Sample No. H-0015).

Photo 8. Sample No. B2T1L2 (PBS Sample No. H-0017).

February 27, 2015

REPORT OF LABORATORY TESTING

Report to:	CH2M-Hill - Plateau Remidation 2420 Stevens Center Place P.O. Box 1600 Richland, WA 99352	**Date:** **Sample Delivery Group No.:** **Sample Authorization No.:**	2/24/2015 WA011020140001 F13-046

Project:	CHPRC Laboratory	**Project No.:**	63797.000
Report of:	Carbonate Content (ASTM D4373)	**Lab Technician:**	B. Russell

Items Received:

16 samples were provided to us containing soil material obtained by you, the client.
We performed the following test:

Rapid Determination of Carbonate Content (ASTM D4373).

The test specimen was dried and pulverized to pass the No. 40 sieve. One gram of the pulverized sample was placed into the reactor along with the acid solution and gently mixed to initiate reaction. If there was no pressure response, but a minor reaction, the trial was repeated with larger sample sizes. After 10 minutes of reaction time, the pressure value was read and recorded. If, necessary, the pressure was read over longer periods of time in accordance with ASTM D4373.

LABORATORY TEST RESULTS

Rapid Determination of Carbonate Content

Customer Sample Number	Laboratory Sample Number	Date of Analysis	Quantity of sample used, (g)	CO_2 Pressure (kPa)	Calcite Equivalent (%$CaCO_2$)
B2T038	H-0001	12/30/2014	1.00	0.0	0.0
B2T034	H-0002	12/30/2014	1.00	0.0	0.0
B2T036	H-0004	1/8/2015	1.00	0.0	0.0
B2WB58	H-0005	1/8/2015	1.00	0.0	0.0
B2WB60	H-0006	1/9/2015	1.00	0.0	0.0
B2R2X0	H-0007	1/12/2015	1.00	0.0	0.0
B2T036	H-0008	1/12/2015	1.00	0.2	2.2
B2WB59	H-0009	1/12/2015	1.00	0.7	3.1
B2W317	H-0010	1/13/2015	1.00	0.0	0.0
B2W319	H-0011	1/13/2015	1.00	0.0	0.0
B2W321	H-0012	1/14/2015	5.00	0.0	0.0
B2W9Y4	H-0013	1/14/2015	1.00	0.0	0.0
B2XPH3	H-0014	1/15/2015	1.00	0.1	2.1
B2XPH6	H-0015	1/15/2015	1.00	0.0	0.0
B2XPH9	H-0016	1/19/2015	1.00	0.0	0.0
B2T1L2	H-0017	1/19/2015	1.00	0.0	0.0

SHEET 1 OF 1 REVIEWED BY: T. North, P.E.

February 27, 2015

REPORT OF LABORATORY TESTING

Report to:	CH2M-Hill - Plateau Remediation 2420 Stevens Center Place P.O. Box 1600 Richland, WA 99352	**Date:** **Sample Delivery Group No.:** **Sample Authorization No.:**	2/24/2015 WA011020140001 F13-046

Project:	CHPRC Laboratory	**Project No.:**	63797.000
Report of:	Grain Size Analysis - Hydrometer (ASTM D422)	**Lab Technician:**	B. Russell

Items Received:

16 samples were provided to us containing soil material obtained by you, the client.
We performed the following test:

Particle/Grain Size Analysis - Hydrometer (ASTM D422):

Mechanical Grain Size Analyses (wet sieve) were conducted on each of the soil samples to determine their grain size distribution. In addition, hydrometer tests were conducted on portions of the soil samples passing the No. 200 sieve. The results of the mechnical grain size analyses and hydrometer testing are plotted on the attached Figures (Particle Size Analysis Test Results - Hydrometer - Pages 1 through 4).

LABORATORY TEST RESULTS

Particle Grain Size Analysis - Hydrometer (ASTM D422) - Sieve Portion

Customer Sample Number	Laboratory Sample Number	Date of Analysis	Percent Passing by Sieve Size										
			3-in.	1½-in.	¾-in.	⅜-in.	No. 4	No. 10	No. 20	No. 40	No. 100	No. 140	No. 200
B2T038	H-0001	12/30/2014	100	100	100	100	100	100	99.8	99.1	57.9	21.4	9.2
B2T034	H-0002	12/30/2014	100	71.3	60.5	40.8	29.5	21.3	16.2	11.5	7.5	4.9	3.3
B2T036	H-0004	1/8/2015	100	90.5	89	87.3	86.7	86.4	86.3	82	64.2	27.8	6.6
B2WB58	H-0005	1/8/2015	100	85.7	66.3	51.2	42.5	35.8	31.4	27.5	16.1	11	7.2
B2WB60	H-0006	1/9/2015	100	93.5	84.3	73.3	65.3	58.8	53.7	49.3	27.9	12.8	6.8
B2R2X0	H-0007	1/12/2015	100	77.7	59.5	45.5	40.7	22.6	20.4	18.8	10.5	6.1	3.9
B2T036	H-0008	1/12/2015	100	100	100	100	100	100	99.7	94.1	24.2	5.7	3.3
B2WB59	H-0009	1/12/2015	100	91.7	73.1	57.7	51.4	45.9	41.8	33.8	21.3	16.4	11.5
B2W317	H-0010	1/13/2015	100	87.8	58.2	42.9	36.7	32.4	29.9	28.2	15.7	8.6	5.4
B2W319	H-0011	1/13/2015	100	95.4	70.1	48.6	36	27.1	23.1	20.2	12.4	8.8	4.9
B2W321	H-0012	1/14/2015	100	84.3	56.9	42.2	34.4	28.3	26.3	24.6	16.2	8.9	5.6
B2W9Y4	H-0013	1/14/2015	100	100	100	100	100	100	99.9	99.7	69.5	6.3	4.2
B2T1L2	H-0017	1/19/2015	100	79.3	63.8	52.5	44.9	38.7	35.4	28.7	20.4	6.8	3.4

REVIEWED BY: T. North, P.E.

February 27, 2015

REPORT OF LABORATORY TESTING

Report to:	CH2M-Hill - Plateau Remediation 2420 Stevens Center Place P.O. Box 1600 Richland, WA 99352	**Date:** **Sample Delivery Group No.:** **Sample Authorization No.:**	2/24/2015 WA011020140001 F13-046

Project:	CHPRC Laboratory	**Project No.:**	63797.000
Report of:	Grain Size Analysis - Hydrometer (ASTM D422)	**Lab Technician:**	B. Russell

Particle/Grain Size Analysis - Hydrometer (ASTM D422):

See sheet 1 of 6

LABORATORY TEST RESULTS

Particle Grain Size Analysis - Hydrometer (ASTM D422) - Hydrometer Portion

Customer Sample Number	Lab Sample Number	Hydrometer Readings													
		2 min		5min		15 min		30 min		60 min		250 min		1440 min	
		Dia. (mm)	Finer (%)	Dia. (mm)	Finer (%)	Dia. (mm)	Finer (%)	Dia. (mm)	Finer (%)	Dia. (mm)	Finer (%)	Dia. (mm)	Finer (%)	Dia. (mm)	Finer (%)
B2T038	H-0001	0.036	8.9	0.023	7.9	0.013	6.9	0.01	5.9	0.007	4.9	0.003	4.8	0.001	3.6
B2T034	H-0002	0.035	2.7	0.022	2.3	0.013	1.9	0.009	1.4	0.007	1.2	0.003	1.2	0.001	0.8
B2T036	H-0004	0.036	6	0.023	5.1	0.013	4.2	0.01	3.3	0.007	3.3	0.003	3.3	0.001	2.3
B2WB58	H-0005	0.034	5.7	0.022	4.2	0.013	3.5	0.009	2.8	0.007	2.4	0.003	2.1	0.001	1.7
B2WB60	H-0006	0.036	4.1	0.023	3.5	0.013	2.9	0.009	2.9	0.007	2.3	0.003	2.2	0.001	2.2
B2R2X0	H-0007	0.035	2.9	0.022	2.4	0.013	1.7	0.009	1.5	0.007	1.3	0.003	0.8	0.001	0.8
B2T036	H-0008	0.038	2.6	0.024	2.6	0.014	2.6	0.01	1.7	0.007	1.7	0.003	1.7	0.001	1.7
B2WB59	H-0009	0.035	5.4	0.023	3.5	0.013	2.2	0.009	2.2	0.007	1.7	0.003	0.8	0.001	0
B2W317	H-0010	0.036	2.9	0.023	2.2	0.013	1.6	0.009	1.5	0.007	0.9	0.003	0.5	0.001	0.2
B2W319	H-0011	0.036	2.7	0.023	1.8	0.013	1.3	0.01	1	0.007	0.7	0.003	0.4	0.001	0
B2W321	H-0012	0.036	3.1	0.023	2.2	0.013	1.6	0.01	1.4	0.007	1.1	0.003	0.5	0.001	0
B2W9Y4	H-0013	0.037	3.9	0.023	3.9	0.013	3.8	0.01	2.8	0.007	2.8	0.003	2.7	0.001	2.6
B2T1L2	H-0017	0.036	3.1	0.023	2.3	0.013	1.5	0.01	1.1	0.007	0.7	0.003	0.2	0.001	0

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DELIVERING SCIENTIFIC RESOLUTION

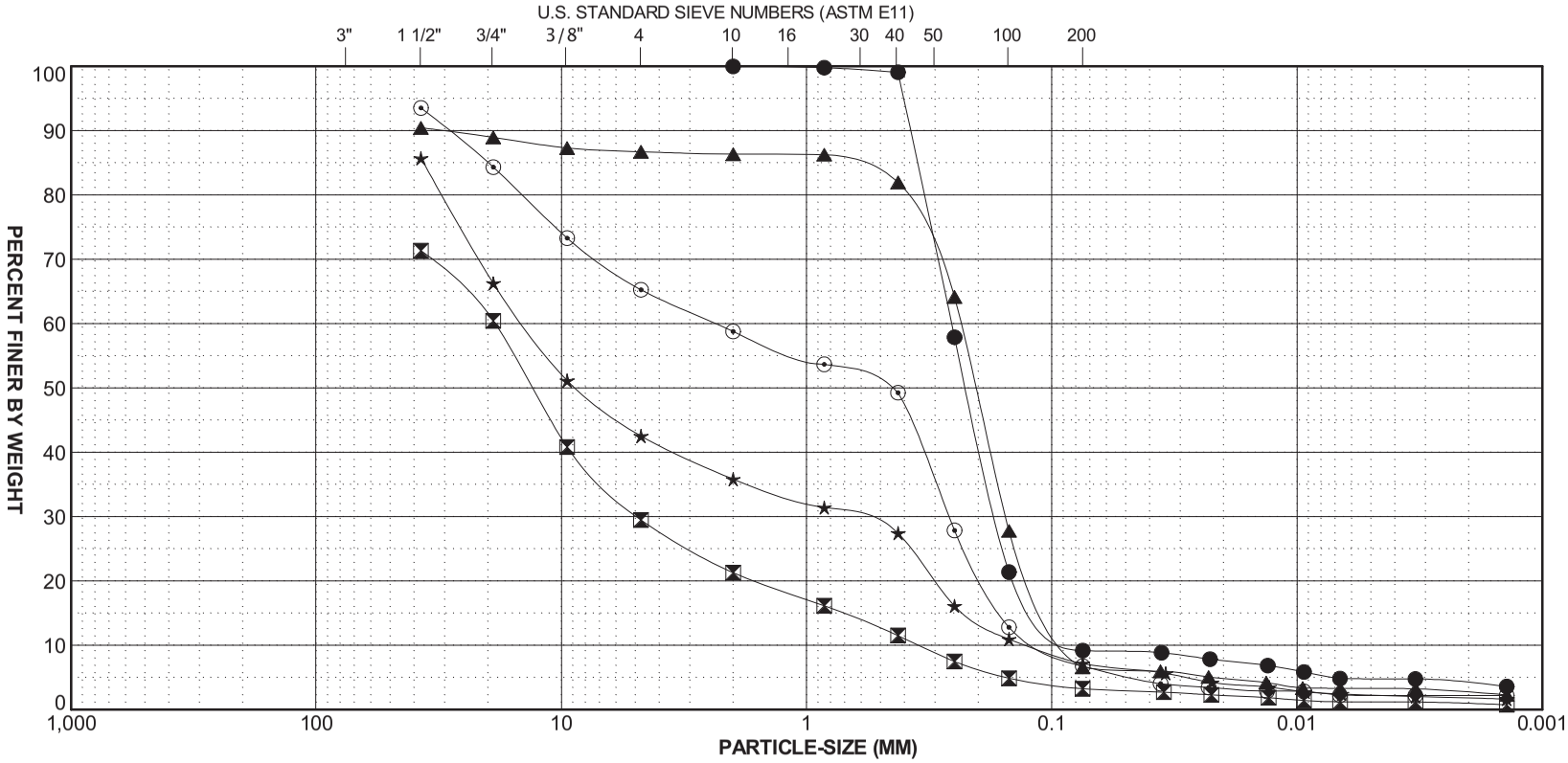
PARTICLE-SIZE ANALYSIS TEST RESULTS

CHPRC - GEOTECHNICAL LABORATORY

PBS PROJECT NUMBER: 63797

TEST METHOD: ASTM D422

BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY



KEY	LAB NUMBER	SAMPLE NUMBER	SAMPLE DEPTH (FEET)	MOISTURE CONTENT (PERCENT)	D60 (MM)	D50 (MM)	D30 (MM)	D10 (MM)	D5 (MM)	GRAVEL (PERCENT)	SAND (PERCENT)	FINES (PERCENT)
●	H-001	B2T038	182.9		0.3	0.2	0.2	0.08	0.01		91	9
⊠	H-002	B2T034	105.0		18.7	13.1	4.9	0.3	0.2	42	26	3
▲	H-004	B2T036	60.3		0.2	0.2	0.2	0.08	0.02	4	80	7
★	H-005	B2WB58	85.7		14.2	8.7	0.7	0.1	0.03	43	35	7
⊙	H-006	B2WB60	157.5		2.3	0.5	0.3	0.1	0.05	28	59	7

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

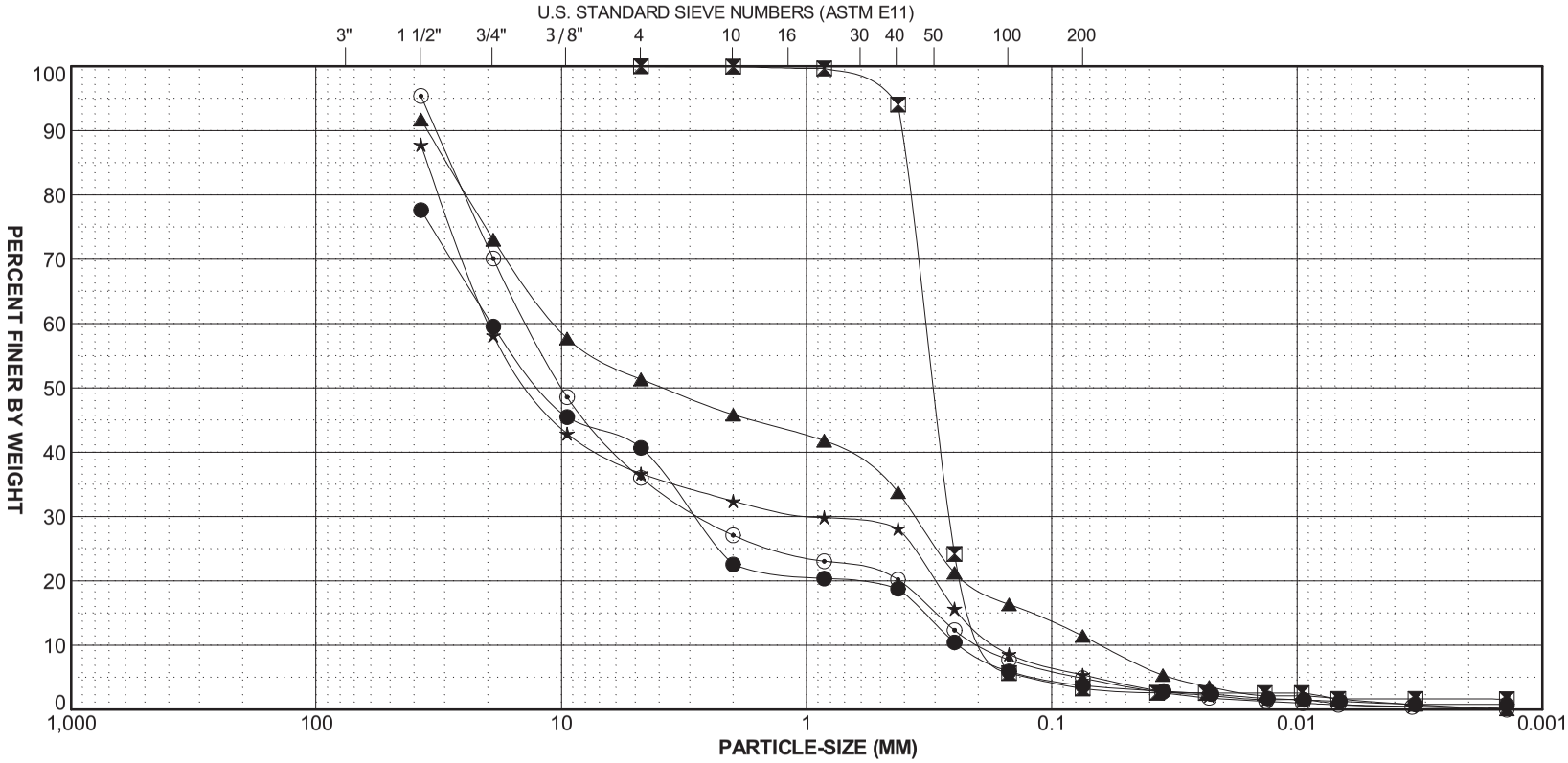
PARTICLE-SIZE ANALYSIS TEST RESULTS
(continued)

CHPRC - GEOTECHNICAL LABORATORY

PBS PROJECT NUMBER:
63797

TEST METHOD: ASTM C136

BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY



KEY	LAB NUMBER	SAMPLE NUMBER	SAMPLE DEPTH (FEET)	MOISTURE CONTENT (PERCENT)	D60 (MM)	D50 (MM)	D30 (MM)	D10 (MM)	D5 (MM)	GRAVEL (PERCENT)	SAND (PERCENT)	FINES (PERCENT)
●	H-007	B2R2X0	26.8		19.3	11.9	2.9	0.2	0.1	37	37	4
⊠	H-008	B2T036	140.6		0.3	0.3	0.3	0.2	0.1		97	3
▲	H-009	B2WB59	121.1		10.5	3.8	0.4	0.06	0.03	40	40	11
★	H-010	B2W317	39.5		19.8	13.1	0.9	0.2	0.07	51	31	5
⊙	H-011	B2W319	59.8		13.7	9.9	2.6	0.2	0.08	59	31	5

RJ LEE GROUP
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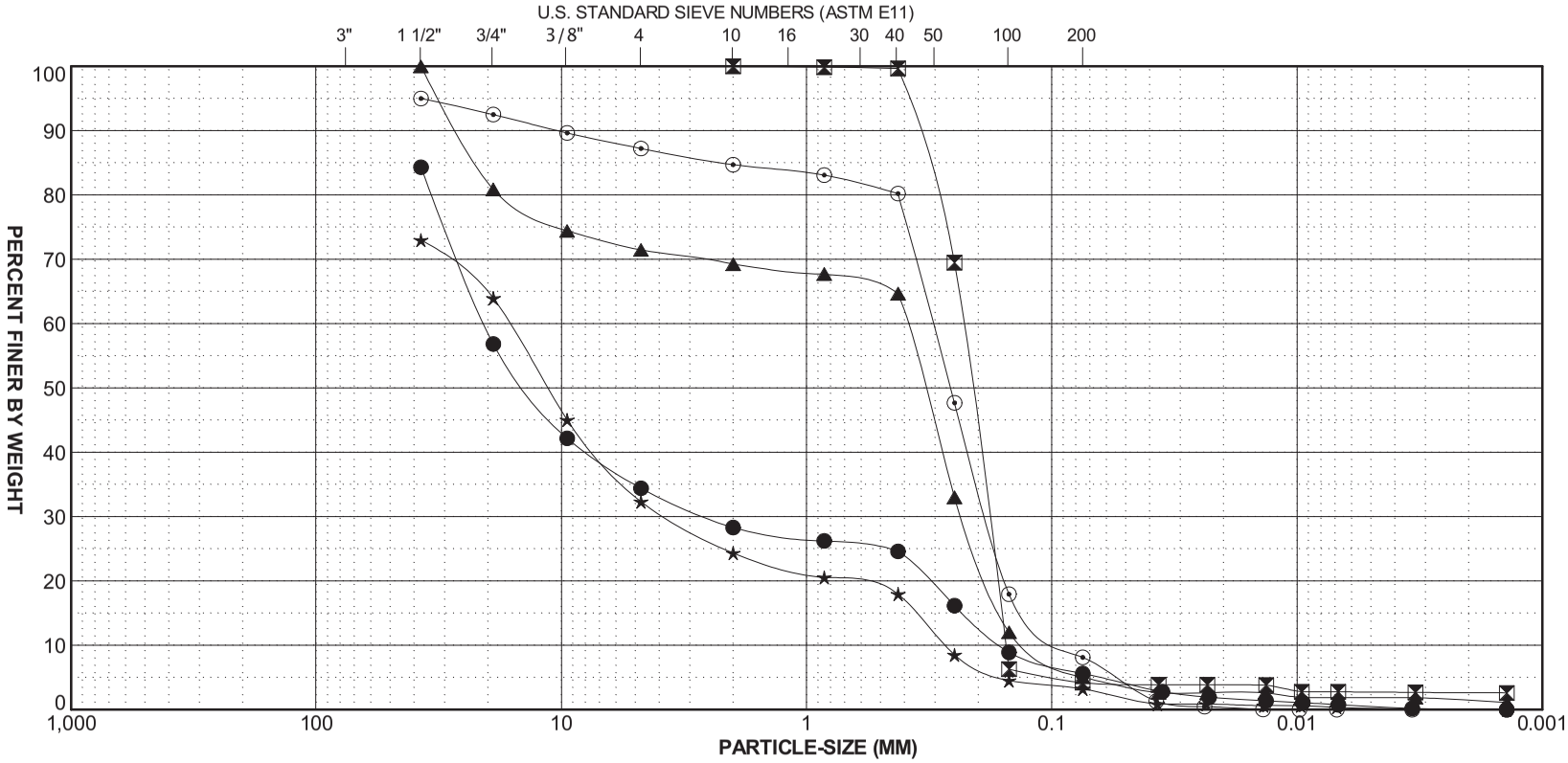
PARTICLE-SIZE ANALYSIS TEST RESULTS
(continued)

CHPRC - GEOTECHNICAL LABORATORY

PBS PROJECT NUMBER:
63797

TEST METHOD: ASTM C136

BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY



KEY	LAB NUMBER	SAMPLE NUMBER	SAMPLE DEPTH (FEET)	MOISTURE CONTENT (PERCENT)	D60 (MM)	D50 (MM)	D30 (MM)	D10 (MM)	D5 (MM)	GRAVEL (PERCENT)	SAND (PERCENT)	FINES (PERCENT)
●	H-012	B2W321	70.1		20.5	13.7	2.5	0.2	0.06	50	29	6
⊠	H-013	B2W9Y4	109.5		0.2	0.2	0.2	0.2	0.10		96	4
▲	H-014	B2XPH3	75.0		0.4	0.3	0.2	0.1	0.07	29	66	5
★	H-015	B2XPH6	114.5		16.4	11.4	3.7	0.3	0.2	41	29	3
⊙	H-016	B2XPH9	153.4		0.3	0.3	0.2	0.09	0.05	8	79	8

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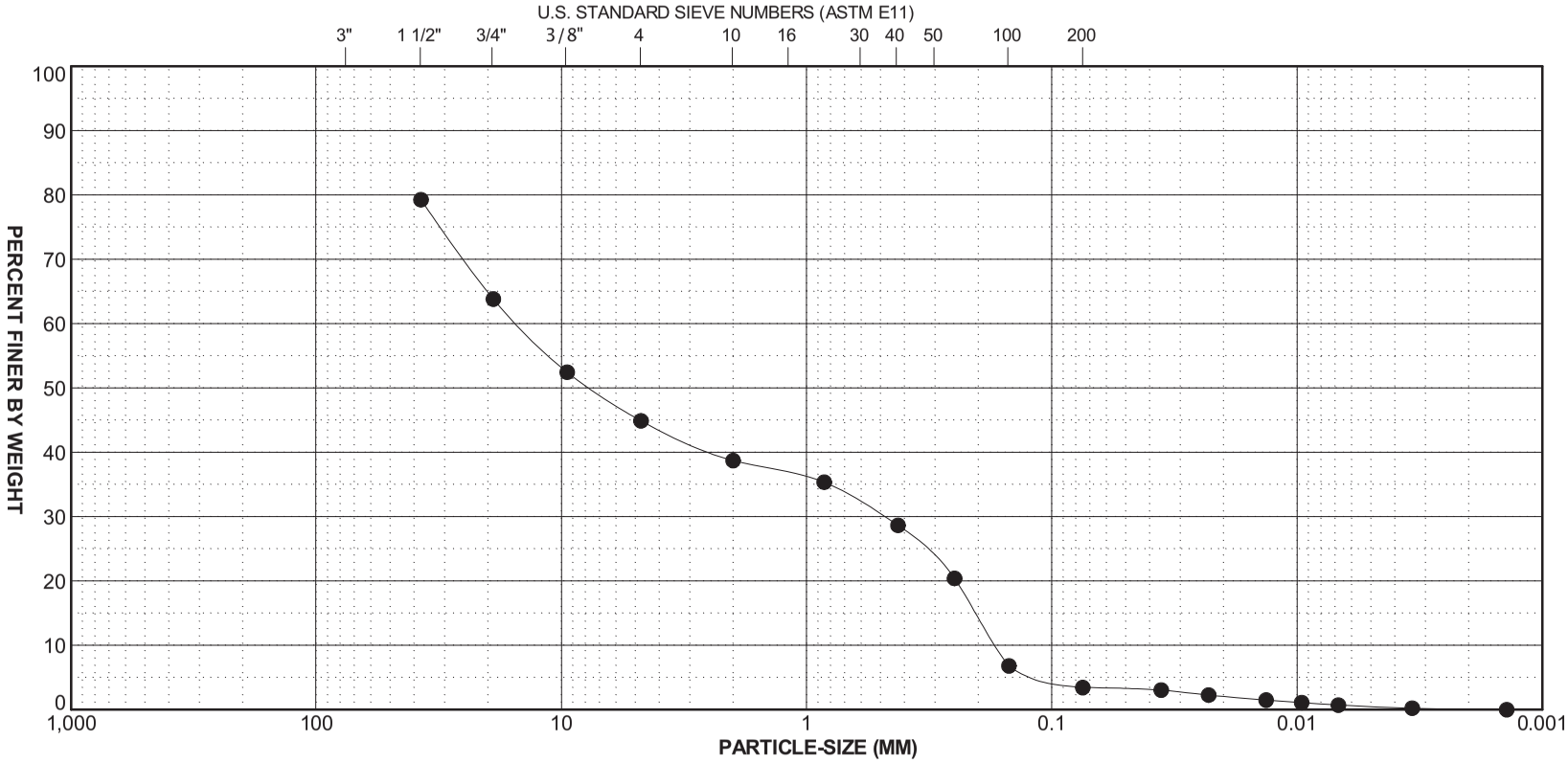
PARTICLE-SIZE ANALYSIS TEST RESULTS
(continued)

CHPRC - GEOTECHNICAL LABORATORY

PBS PROJECT NUMBER:
63797

TEST METHOD: ASTM C136

BOULDERS	COBBLES	GRAVEL		SAND			FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY



KEY	LAB NUMBER	SAMPLE NUMBER	SAMPLE DEPTH (FEET)	MOISTURE CONTENT (PERCENT)	D60 (MM)	D50 (MM)	D30 (MM)	D10 (MM)	D5 (MM)	GRAVEL (PERCENT)	SAND (PERCENT)	FINES (PERCENT)
●	H-017	B2T1L2	84.7		15.0	7.6	0.5	0.2	0.1	34	41	3

February 27, 2015

REPORT OF LABORATORY TESTING

Report to:	CH2M-Hill - Plateau Remediation 2420 Stevens Center Place P.O. Box 1600 Richland, WA 99352	**Date:** **Sample Delivery Group No.:** **Sample Authorization No.:**	2/24/2015 WA011020140001 F13-046

Project:	CHPRC Laboratory	**Project No.:**	63797.000
Report of:	Hydraulic Conductivity - Constant Head (ASTM D2434)	**Lab Tech:**	B. Russell

Items Received:

16 samples were provided to us containing soil material obtained by you, the client.
We performed the following test:

Hydraulic Conductivity - Constant Head (ASTM D2434).

The hydraulic conductivity of the representative soil was determined in the laboratory using the above referenced samples. The samples were prepared for the permeameter and all the required measures were taken. Air was evacuated from the samples and were then saturated with low mineral content water. The manometer system was attached and a stable head condition was attained. The quantity of flow, water temperature, water head and time were measured. This was repeated, if necessary, to establish an accurate region of laminar flow with velocity.

LABORATORY TEST RESULTS

Hydraulic Conductivity - Constant Head (ASTM D2434)

Customer Sample Number	Laboratory Sample Number	Date of Analysis	Quantity of flow discharged (cm^3)	Dist. between manometers, L (cm)	Specimen area, A (cm^2)	Total discharge time, t (sec)	Head dif. betw. manometers, h (cm)	Avg. Hydraulic Conductivity, k (cm/s)
B2T038	H-0001	12/29/2014	75	7.62	45.843	180	33.8	1.61E-03
B2T034	H-0002	1/7/2015	120	7.62	45.843	180	46.1	1.32E-01
B2T036	H-0004	1/7/2015	120	7.62	45.843	180	46.1	2.44E-03
B2WB58	H-0005	1/8/2015	101	7.62	45.843	300	81.6	7.80E-04
B2WB60	H-0006	1/9/2015	125	7.62	45.843	300	58	1.23E-03
B2R2X0	H-0007	1/23/2015	35	6.35	31.48	420	65.1	2.66E-05
B2T036	H-0008	1/12/2015	1079	7.62	45.843	300	38.7	1.80E-02
B2WB59	H-0009	1/13/2015	98	7.62	45.843	300	86.9	7.43E-04
B2W317	H-0010	1/23/2015	70	6.35	31.48	300	19.1	2.79E-03
B2W319	H-0011	1/14/2015	485	7.62	45.843	300	15.1	1.95E-02
B2W321	H-0012	1/15/2015	82	7.62	45.843	300	81	6.34E-04
B2W9Y4	H-0013	1/16/2015	1400	7.62	45.843	300	27.4	2.90E-02
B2XPH3	H-0014	1/19/2015	843	7.62	45.843	300	47.4	1.02E-02
B2XPH6	H-0015	1/20/2015	107.5	6.35	31.48	360	59.4	1.13E-03
B2XPH9	H-0016	1/21/2015	977	7.62	45.843	300	45.6	1.20E-02
B2T1L2	H-0017	1/22/2015	157	7.62	45.843	300	66.4	1.33E-03

SHEET 1 OF 1

REVIEWED BY: T. North, P.E.

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February 27, 2015

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F13-046-027	PAGE 1 OF 1
COLLECTOR C. Fulton	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D	**PRICE CODE** 8H	**DATA TURNAROUND**
SAMPLING LOCATION C8293, I-005	**PROJECT DESIGNATION** 100-KR-4 Long Term & Interim Action Monitoring - Soil		**SAF NO.** F13-046	**AIR QUALITY** ☐	**30 Days / 30 Days**
ICE CHEST NO. N/A	**FIELD LOGBOOK NO.** HNF-N-507-29-20	**ACTUAL SAMPLE DEPTH** 182.9-185.4 FT	**COA** 300085ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	**ORIGINAL**
SHIPPED TO ~~SHAW 10/2/13~~ ~~Environmental Sciences Laboratory~~ RJ Lee KS 9/30/14	**OFFSITE PROPERTY NO.** SEE PTR		**BILL OF LADING/AIR BILL NO.** SEE PTR		

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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 458.1.

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B2T037

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
~~B2T038~~ B24F05	SOIL	10/9/13	1547	✓

NO 10/3/14

H-001

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-13-111 (1) Particle Size (Dry Sieve) - D422; Saturated Hydraulic Conductivity {Hydraulic Conductivity}; AIR PERMEABILITY; Calcium Carbonate Content;
C. Fulton	10/9/13 1615	SSU #1	10/9/13 1615	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
SSU-1	SEP 30 2014 0815	P.M. Hall CHPRC	SEP 30 2014 0815	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
P.M. Hall CHPRC	SEP 30 2014 1030	R Thomas	SEP 30 2014 1030	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RJ Lee Group L Thomas	9/30/14 16:30	RJ Lee Group Cloppas Christina	9/30/14 1030	
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	

TRVL-13-111

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

PRINTED ON 9/25/2013

A-6003-618 (REV

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F13-046-023	PAGE 1 OF 1
COLLECTOR: D. Floyd	COMPANY CONTACT: TODAK, D	TELEPHONE NO.: 376-6427	PROJECT COORDINATOR: TODAK, D	PRICE CODE: 8H	DATA TURNAROUND: 30 Days / 30 Days
SAMPLING LOCATION: C8293, I-001	PROJECT DESIGNATION: ~~HNF-N-507~~ Long-Term & Interim Action Monitoring - Soil		SAF NO.: F13-046	AIR QUALITY: ☐	
ICE CHEST NO.: N/A	FIELD LOGBOOK NO.: HNF-N-507-26-42	ACTUAL SAMPLE DEPTH: 105-107.5'	COA: 300085ES10	METHOD OF SHIPMENT: GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO: SHAW KS 10/2/13 KS 10/2/13 ~~Environmental Sciences Laboratory~~ RJ Lee KS 9/30/14 ICB+E	OFFSITE PROPERTY NO.: SEE PTR		BILL OF LADING/AIR BILL NO.: SEE PTR		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	None
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	**Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.**	HOLDING TIME	6 Months
		TYPE OF CONTAINER	Liner
		NO. OF CONTAINER(S)	1
		VOLUME	1000g
	SPECIAL HANDLING AND/OR STORAGE: RADIOACTIVE TIE TO: B2T033	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
~~B2T034~~ B2Y F04	SOIL	10/3/13	1107	✓

MB 10/3/14

H002

February 27, 2015

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM: D. Floyd DATE/TIME: 10/3/13 1033	RECEIVED BY/STORED IN: SSU#1 DATE/TIME: 10/3/13 1033	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-13-111 (1) Particle Size (Dry Sieve) - D422; Saturated Hydraulic Conductivity {Hydraulic Conductivity}; ~~AIR PERMEABILITY;~~ Calcium Carbonate Content; KS 10/8/13
RELINQUISHED BY/REMOVED FROM: SSU-1 DATE/TIME: SEP 30 2014 0815	RECEIVED BY/STORED IN: F.M. Hall DATE/TIME: SEP 30 2014 0815	
RELINQUISHED BY/REMOVED FROM: F.M. Hall CHPRC DATE/TIME: SEP 30 2014 1012	RECEIVED BY/STORED IN: RJ Lee L Thomas DATE/TIME: SEP 30 2014 1030	
RELINQUISHED BY/REMOVED FROM: RJ Lee Group L Thomas DATE/TIME: 9/30/14 10:30	RECEIVED BY/STORED IN: RJ Lee Group Clapa Christina DATE/TIME: 9/30/14 1030	
RELINQUISHED BY/REMOVED FROM: DATE/TIME:	RECEIVED BY/STORED IN: DATE/TIME:	TRVL-13-111
RELINQUISHED BY/REMOVED FROM: DATE/TIME:	RECEIVED BY/STORED IN: DATE/TIME:	
RELINQUISHED BY/REMOVED FROM: DATE/TIME:	RECEIVED BY/STORED IN: DATE/TIME:	

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

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F13-046-040

COLLECTOR
CROW

COMPANY CONTACT
TODAK, D

TELEPHONE NO.
376-6427

PROJECT COORDINATOR
TODAK, D

PRICE CODE 8H

DATA TURNAROUND
30 Days / 30 Days

SAMPLING LOCATION
C8297, I-003

PROJECT DESIGNATION
100-KR-4 Long Term & Interim Action Monitoring - Soil

SAF NO.
F13-046

AIR QUALITY ☐

ICE CHEST NO.
N/A

FIELD LOGBOOK NO.
HNF-N-507-~~26~~-65

ACTUAL SAMPLE DEPTH
61.3 FT

COA
300085ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO
~~Shaw Group~~ RJ Lee KS 9/30/14

OFFSITE PROPERTY NO.
SEE PTR

BILL OF LADING/AIR BILL NO.
SEE PTR

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B2T038

PRESERVATION	None
HOLDING TIME	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

H-004

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
~~B2T036~~ B24F06	SOIL	3/20/14	0925	✓

NB 10/3/14

February 27, 2015

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

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
R CROW R CROW	3/20/14 1326	SSU TF 1	3/20/14 1326
SSU-1	SEP 3 0 2014 0815	F.M. Hall CHPRC	SEP 3 0 2014 0815
F.M. Hall CHPRC	SEP 3 0 2014 1030	RJ Lee Thomas Ryde	SEP 3 0 2014 1030
RJ Lee Group Thomas Ryde	9/30/14 10:30	RJ Lee Group Corey Chastain	9/30/14 1030

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-060; ~~DO NOT SHIP SAMPLE~~ KS 9/30/. (1) Particle Size (Dry Sieve) - D422; Permeability - D2434; Saturated Hydraulic Conductivity; Saturated Hydraulic Conductivity {Hydraulic Conductivity, No CAS}; Calcium Carbonate Content;

TRVL-14-060

LABORATORY SECTION — **RECEIVED BY** — **TITLE** — **DATE/TIME**

FINAL SAMPLE DISPOSITION — **DISPOSAL METHOD** — **DISPOSED BY** — **DATE/TIME**

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February 27, 2015

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F13-046-033	PAGE 1 OF 1
COLLECTOR Robert Crow	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D	**PRICE CODE** 8H	**DATA TURNAROUND**
SAMPLING LOCATION C8795, I-002,	**PROJECT DESIGNATION** 100-KR-4 Long Term & Interim Action Monitoring - Soil		**SAF NO.** F13-046	**AIR QUALITY** ☐	30 Days / 30 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-507-28-14	**ACTUAL SAMPLE DEPTH** 85.7 - 88.2 FT	**COA** 300085ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO ~~Environmental Sciences Laboratory~~ RJ Lee KS 9/30/14	**OFFSITE PROPERTY NO.** SEE PTR		**BILL OF LADING/AIR BILL NO.** SEE PTR		

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B2T1K9

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
~~B2T1L0~~ B2W858 KS 4/9/14	SOIL	4-7-14	1115	/

H-005

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM Robert Crow R Crow DATE/TIME APR 07 2014 1522	RECEIVED BY/STORED IN SSU-1 DATE/TIME APR 07 2014 1522	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-13-112 (1) Particle Size (Dry Sieve) - D422; Saturated Hydraulic Conductivity {Hydraulic Conductivity}; AIR PERMEABILITY; Calcium Carbonate Content;
RELINQUISHED BY/REMOVED FROM SSU-1 DATE/TIME SEP 30 2014 0815	RECEIVED BY/STORED IN CHPRC DATE/TIME SEP 30 2014 0815	
RELINQUISHED BY/REMOVED FROM CHPRC DATE/TIME SEP 30 2014 1020	RECEIVED BY/STORED IN RJ Lee DATE/TIME SEP 30 2014 1030	
RELINQUISHED BY/REMOVED FROM RJ Lee Group Thomas Owens 9/30/14 10:30	RECEIVED BY/STORED IN RJ Lee Group Cloyd Chesting 9/30/14 1030	
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	

TRVL-13-112

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

PRINTED ON 9/26/2013

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F13-046-037	PAGE 1 OF 1
COLLECTOR Brotherton	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D	**PRICE CODE** 8H	**DATA TURNAROUND**
SAMPLING LOCATION C8795, I-006,	**PROJECT DESIGNATION** 100-KR-4 Long Term & Interim Action Monitoring - Soil		**SAF NO.** F13-046	**AIR QUALITY** ☐	**30 Days / 30 Days**
ICE CHEST NO. N/A	**FIELD LOGBOOK NO.** INF -N-507-~~28-16~~	**ACTUAL SAMPLE DEPTH** 157.5 → 160 FT	**COA** 300085ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	**ORIGINAL**
SHIPPED TO ~~Environmental Sciences Laboratory~~ RJ Lee KS 4/30/14	**OFFSITE PROPERTY NO.** SEE PTR		**BILL OF LADING/AIR BILL NO.** SEE PTR		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	None
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	**Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.**	HOLDING TIME	6 Months
		TYPE OF CONTAINER	Liner
		NO. OF CONTAINER(S)	1
		VOLUME	1000g
	SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B2T1L3	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
~~B2T1L4~~ B2WB60 KS 4/9/14	SOIL	4-17-14	1110	V

H-006

February 07, 2015

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-13-112☐☐** All requests for Hexavlent Chromium are to have a unique HEIS sample number and be assigned to a separate COC. TRVL-13-111 (1) Particle Size (Dry Sieve) - D422; Saturated Hydraulic Conductivity {Hydraulic Conductivity}; AIR PERMEABILITY; Calcium Carbonate Content;
Brotherton	4-17-14/1420	SSU #1	4-17-14/1420	
SSU-1	SEP 30 2014 0815	F.M. Hall CHPRC	SEP 30 2014 0815	
F.M. Hall CHPRC	SEP 30 2014 1030	RJ Lee Thomas	SEP 30 2014 1030	
RJ Lee Group Thomas	9/30/14 10.30	RJ Lee Group Clopez	9/30/14 1030	
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	

TRVL-13-112

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

PRINTED ON 9/26/2013

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F13-046-038	PAGE 1 OF 1
COLLECTOR Ed Kauer Crew	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D	**PRICE CODE** 8H **DATA TURNAROUND**
SAMPLING LOCATION C8297, I-001	**PROJECT DESIGNATION** 100-KR-4 Long Term & Interim Action Monitoring - Soil		**SAF NO.** F13-046	**AIR QUALITY** ☐ 30 Days / 30 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-507-26-64	**ACTUAL SAMPLE DEPTH** 26.8 to 29.2 Ft	**COA** 300085ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE **ORIGINAL**
SHIPPED TO ~~Shaw Group~~ RJ Lee KS 9/30/14	**OFFSITE PROPERTY NO.** SEE PTR		**BILL OF LADING/AIR BILL NO.** SEE PTR	

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B2T034

PRESERVATION	None
HOLDING TIME	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2R2X0	SOIL	3-13-14	0846	✓

H-007

CHAIN OF POSSESSION	SIGN/ PRINT NAMES				SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-060; ~~DO NOT SHIP SAMPLE~~ KS 9/30/14 (1) Particle Size (Dry Sieve) - D422; Permeability - D2434; Saturated Hydraulic Conductivity; Saturated Hydraulic Conductivity {Hydraulic Conductivity, No CAS}; Calcium Carbonate Content;
Ed Kauer	3-13-14 1447	SSU #1	3-13-14 1447		
SSU #1	SEP 30 2014	F.M. Hall CHPRC	SEP 30 2014		
F.M. Hall CHPRC	SEP 30 2014	Thomas Ryde	SEP 30 2014		
RJ Lee Group Thomas Ryde	9/30/14 10:30	RJ Lee Group Cleopatra Gutierrez	9/30/14 1030		
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		

TRVL-14-060

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

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February 27, 2015

CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F13-046-025	PAGE 1 OF 1
COLLECTOR F. HALL E. Kower 10/8/13	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D	**PRICE CODE** 8H	**DATA TURNAROUND**
SAMPLING LOCATION C8293, I-003	**PROJECT DESIGNATION** 100-KR-4 Long Term & Interim Action Monitoring - Soil		**SAF NO.** F13-046	**AIR QUALITY** ☐	30 Days / 30 Days
ICE CHEST NO. N/A	**FIELD LOGBOOK NO.** HNF-N-507-99-18	**ACTUAL SAMPLE DEPTH** 140.6-143.1 FT	**COA** 300085ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO ~~SHAW~~ ~~Environmental Sciences Laboratory~~ KS 10/2/13 KS 9/30/14 RJ Lee	**OFFSITE PROPERTY NO.** SEE PTR		**BILL OF LADING/AIR BILL NO.** SEE PTR		

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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 458.1.

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B2T035

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

H-008

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2T036	SOIL	10/8/13	1050	✓

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	
RW 10/8/13		
RELINQUISHED BY/REMOVED FROM E. Kower F. Hall 10/8/13 0845	RECEIVED BY/STORED IN SSU #1	DATE/TIME 10/8/13 1425
RELINQUISHED BY/REMOVED FROM SSU-1	RECEIVED BY/STORED IN F.M. Hall CHPRC	DATE/TIME SEP 30 2014 0845
RELINQUISHED BY/REMOVED FROM F.M. Hall CHPRC	RECEIVED BY/STORED IN L Thomas	DATE/TIME SEP 30 2014 1030
RELINQUISHED BY/REMOVED FROM RJ Lee Group/ L Thomas 9/29/14 1030	RECEIVED BY/STORED IN RJ Lee Group/ Lopez Christian Lopez 9/30/14	DATE/TIME 1030
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS
** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-13-111
(1) Particle Size (Dry Sieve) - D422; Saturated Hydraulic Conductivity {Hydraulic Conductivity}; AIR PERMEABILITY; Calcium Carbonate Content;

TRVL-13-111

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

PRINTED ON 9/25/2013

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CH2MHill Plateau Remediation Company	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F13-046-035	PAGE 1 OF 1
COLLECTOR Robert Crow	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D	**PRICE CODE** 8H; **AIR QUALITY** ☐
SAMPLING LOCATION C8795, I-004,	**PROJECT DESIGNATION** 100-KR-4 Long Term & Interim Action Monitoring - Soil		**SAF NO.** F13-046	**DATA TURNAROUND** 30 Days / 30 Days
ICE CHEST NO.	**FIELD LOGBOOK NO.** INF-N-507-29-64	**ACTUAL SAMPLE DEPTH** 121.1-123.6 FT	**COA** 300085ES10	**METHOD OF SHIPMENT** GOVERNMENT VEHICLE
SHIPPED TO ~~Environmental Sciences Laboratory~~ RJ Lee ES 9/2/14	**OFFSITE PROPERTY NO.** SEE PTR		**BILL OF LADING/AIR BILL NO.** SEE PTR	ORIGINAL

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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 458.1.

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B2T1L1

PRESERVATION	None
HOLDING TIME	6 Months
TYPE OF CONTAINER	Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
~~B2T1L2~~ B2W359 ES 4/18/14	SOIL	4-10-14	1025	/

H-009

February 27, 2015

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM Robert Crow R Crow DATE/TIME APR 10 2014 1352	RECEIVED BY/STORED IN SSU-1 DATE/TIME APR 10 2014 1352	** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-13-112☐☐** All requests for Hexavlent Chromium are to have a unique HEIS sample number and be assigned to a separate COC. TRVL-13-111 (1) Particle Size (Dry Sieve) - D422; Saturated Hydraulic Conductivity {Hydraulic Conductivity}; AIR PERMEABILITY; Calcium Carbonate Content;
RELINQUISHED BY/REMOVED FROM SSU-1 DATE/TIME SEP 30 2014 0815	RECEIVED BY/STORED IN F.M. Hall CHPRC DATE/TIME SEP 30 2014 0815	
RELINQUISHED BY/REMOVED FROM F.M. Hall CHPRC DATE/TIME SEP 30 2014 1030	RECEIVED BY/STORED IN L Thomas DATE/TIME SEP 30 2014 1030	
RELINQUISHED BY/REMOVED FROM RJ Lee Group LT Lanes DATE/TIME 9/30/14 10:30	RECEIVED BY/STORED IN RJ Lee Group Clara Ochoa DATE/TIME 9/30/14 1030	
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	

TRVL-13-112

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

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F13-046-044

COLLECTOR
J. Aguilar

COMPANY CONTACT
TODAK, D

TELEPHONE NO.
376-6427

PROJECT COORDINATOR
TODAK, D

PRICE CODE 8H

DATA TURNAROUND
30 Days / 30 Days

SAMPLING LOCATION
C8299, I-001

PROJECT DESIGNATION
100-KR-4 Long Term & Interim Action Monitoring - Soil

SAF NO.
F13-046

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-P-507-26/64

ACTUAL SAMPLE DEPTH
39.5"

COA
300085ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

SHIPPED TO
~~Shaw Group~~ RJ Lee KS 9/30/14

OFFSITE PROPERTY NO.
SEE PTR

BILL OF LADING/AIR BILL NO.
SEE PTR

ORIGINAL

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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 458.1.

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B2W318

PRESERVATION	None
HOLDING TIME	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

H-010

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2W317	SOIL	3-24-14	0940	✓

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Aguilar	3-24-14 1455	SSU #1 F.M. Hall	3-24-14 1455
SSU-1 F.M. Hall	SEP 30 2014 0915	CHPRC	SEP 30 2014 0915
CHPRC	SEP 30 2014 1030	RJ Lee L. Thomas	SEP 30 2014 1030
RJ Lee Group	9/30/14 10:30	RJ Lee Group Clopez	9/30/14 1030

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-061; ~~DO NOT SHIP SAMPLE~~ KS 9/30/14 (1) Particle Size (Dry Sieve) - D422; Permeability - D2434; Saturated Hydraulic Conductivity; Saturated Hydraulic Conductivity {Hydraulic Conductivity, No CAS}; Calcium Carbonate Content;

TRVL-14-061

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

PRINTED ON 2/10/2014

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F13-046-046

COLLECTOR
Ed Kauer Floyd

COMPANY CONTACT
TODAK, D

TELEPHONE NO.
376-6427

PROJECT COORDINATOR
TODAK, D

PRICE CODE 8H

DATA TURNAROUND
30 Days / 30 Days

SAMPLING LOCATION
C8299, I-003

PROJECT DESIGNATION
100-KR-4 Long Term & Interim Action Monitoring - Soil

SAF NO.
F13-046

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-507-29/55

ACTUAL SAMPLE DEPTH
59.2 to 62.3 ft

COA
300085ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO
~~Shaw Group~~ RJ Lee KS 9/30/14

OFFSITE PROPERTY NO.
SEE PTR

BILL OF LADING/AIR BILL NO.
SEE PTR

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B2W320

PRESERVATION	None
HOLDING TIME	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

A-011

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2W319	SOIL	3-25-14	1130	✓

February 27, 2015

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	3-25-14 1554	SSU #1	3-25-14 1554
SSU-1	SEP 30 2014 0815	F.M. Hall CHPRC	SEP 30 2014 0815
F.M. Hall CHPRC	SEP 30 2014 1030	RJ Lee	SEP 30 2014 1030
RJ Lee Group Thomas	9/30/14 1030	RJ Lee Group	9/30/14 1030

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-061; ~~DO NOT SHIP SAMPLE~~ KS 9/30/14 (1) Particle Size (Dry Sieve) - D422; Permeability - D2434; Saturated Hydraulic Conductivity; Saturated Hydraulic Conductivity {Hydraulic Conductivity, No CAS}; Calcium Carbonate Content;

TRVL-14-061

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

PRINTED ON 2/10/2014

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F13-046-049

COLLECTOR
Ed Kauer Floyd

COMPANY CONTACT
TODAK, D

TELEPHONE NO.
376-6427

PROJECT COORDINATOR
TODAK, D

PRICE CODE 8H

DATA TURNAROUND
30 Days / 30 Days

SAMPLING LOCATION
C8299, I-006

PROJECT DESIGNATION
100-KR-4 Long Term & Interim Action Monitoring - Soil

SAF NO.
F13-046

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO.
HNF-N-507-29.60

ACTUAL SAMPLE DEPTH
70.1 to 72.6 Ft

COA
300085ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO
~~Shaw Group~~ RJ Lee KS 9/30/14

OFFSITE PROPERTY NO.
SEE PTR

BILL OF LADING/AIR BILL NO.
SEE PTR

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B2W322

PRESERVATION	None
HOLDING TIME	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

H-012

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2W321	SOIL	3-26-14	0852	L

February 27, 2015

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CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer	3-26-14 1240	SSU #1	3-26-14 1240
SSU-1	SEP 30 2014 0815	CHPRC	SEP 30 2014 0815
P.M. Han CHPRC	SEP 30 2014 1030	RT Lee Lt Thomas	SEP 30 2014 1030
RJ Lee Group Lt Thomas	9/29/14 10:30	RJ Lee Group Cloper Christian	9/30/14 1030

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-061; ~~DO NOT SHIP SAMPLE~~ KS 9/30/14 (1) Particle Size (Dry Sieve) - D422; Permeability - D2434; Saturated Hydraulic Conductivity; Saturated Hydraulic Conductivity {Hydraulic Conductivity, No CAS}; Calcium Carbonate Content;

TRVL-14-061

LABORATORY SECTION RECEIVED BY | TITLE | DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD | DISPOSED BY | DATE/TIME

PRINTED ON 2/10/2014

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F13-046-051

COLLECTOR White

SAMPLING LOCATION C8297, I-009

ICE CHEST NO. N/A

SHIPPED TO ~~Shaw Group~~ RJ Lee KS 9/30/14

COMPANY CONTACT TODAK, D

TELEPHONE NO. 376-6427

PROJECT COORDINATOR TODAK, D

PRICE CODE 8H

DATA TURNAROUND 30 Days / 30 Days

AIR QUALITY ☐

PROJECT DESIGNATION 100-KR-4 Long Term & Interim Action Monitoring - Soil

SAF NO. F13-046

FIELD LOGBOOK NO. HNF-N-507-29

ACTUAL SAMPLE DEPTH 109.5 - 112.0 ft

COA 300085ES10

METHOD OF SHIPMENT GOVERNMENT VEHICLE

OFFSITE PROPERTY NO. SEE PTR

BILL OF LADING/AIR BILL NO. SEE PTR

ORIGINAL

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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 458.1.

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B2W9Y5

PRESERVATION	None
HOLDING TIME	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

H-013

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2W9Y4	SOIL	4-1-14	1133	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
M White / SSU-1	4-1-14 1430	SSU #1 / T.M. Hall	4-1-14 1430
T.M. Hall / CHPRC	SEP 30 2014 0815	CHPRC	SEP 30 2014 0815
RJ Lee Group / T Thomas	SEP 30 2014 1030	RJ Lee / T Thomas	SEP 30 2014 1030
RJ Lee Group / T Thomas	9/30/14 10:30	RJ Lee Group / Chris Adams	9/30/14 1030

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-061; ~~DO NOT SHIP SAMPLE~~ KS 9/30/14 (1) Particle Size (Dry Sieve) - D422; Permeability - D2434; Saturated Hydraulic Conductivity; Saturated Hydraulic Conductivity {Hydraulic Conductivity, No CAS}; Calcium Carbonate Content;

TRVL-14-060

LABORATORY SECTION RECEIVED BY — TITLE — DATE/TIME

FINAL SAMPLE DISPOSITION DISPOSAL METHOD — DISPOSED BY — DATE/TIME

PRINTED ON 4/1/2014

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F13-046-059

ORIGINAL

COLLECTOR Kruse white	**COMPANY CONTACT** TODAK, D	**TELEPHONE NO.** 376-6427	**PROJECT COORDINATOR** TODAK, D
SAMPLING LOCATION C8291, I-001	**PROJECT DESIGNATION** 100-KR-4 Long Term & Interim Action Monitoring - Soil		**SAF NO.** F13-046
ICE CHEST NO.	**FIELD LOGBOOK NO.** ~~HNF-N-507-~~ 28.51	**ACTUAL SAMPLE DEPTH** ~~81.5~~ FF 75.0 - 75.5	**COA** 300085ES10
SHIPPED TO ~~Shaw Group~~ RJ Lee KS 9/30/14	**OFFSITE PROPERTY NO.** SEE PTR		**BILL OF LADING/AIR BILL NO.** SEE PTR

PRICE CODE 8H

AIR QUALITY ☐

DATA TURNAROUND 30 Days / 30 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 are not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

H-014

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1XPH3	SOIL	9-2-14	0935	✓

CHAIN OF POSSESSION / SIGN/ PRINT NAMES

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
M White CHPRC M White	9-2-14 1300	SSU-1	9-2-14 1300
SSU-1	SEP 30 2014 0815	T.M. Hall CHPRC	SEP 30 2014 0815
T.M. Hall CHPRC	SEP 30 2014 1230	R Thomas R Lee	SEP 30 2014 1230
RJ Lee Group L Thomas	9/30/14 10:30	RJ Lee Group Cooper Christina DS	9/30/14 1030

SPECIAL INSTRUCTIONS

TRVL-14-150 ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.** All requests for Geotechnical Parameters will be given a unique HEIS sample number and be assigned to a separate COC. In addition, all split spoon sleeves will be properly stored until authorized for shipment. D 8-26-14
~~(1) Particle Size (Dry Sieve) D422; Permeability~~ D2434; Saturated Hydraulic Conductivity; Saturated Hydraulic Conductivity {Hydraulic Conductivity, No CAS}; Calcium Carbonate Content;

TRVL 14 - 150

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

PRINTED ON 8/26/2014

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February 27, 2015

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F13-046-062

COLLECTOR
J. Aguilar

SAMPLING LOCATION
C8291, I-003

ICE CHEST NO.

SHIPPED TO
~~Shaw Group~~ RJ Lee KS 9/30/14

COMPANY CONTACT
TODAK, D

TELEPHONE NO.
376-6427

PROJECT COORDINATOR
TODAK, D

PROJECT DESIGNATION
100-KR-4 Long Term & Interim Action Monitoring - Soil

SAF NO.
F13-046

FIELD LOGBOOK NO.
HNF-N-507-29 Pg 67

ACTUAL SAMPLE DEPTH
114.5 115.8"

COA
300085ES10

OFFSITE PROPERTY NO.
SEE PTR

BILL OF LADING/AIR BILL NO.
SEE PTR

PRICE CODE 8H

AIR QUALITY ☐

DATA TURNAROUND
30 Days / 30 Days

METHOD OF SHIPMENT
FEDERAL EXPRESS

ORIGINAL

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

H-015

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2XPH6	SOIL	9-9-14	1000	✓

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Aguilar CHPRC	9-9-14 1250	RA Shepard	9-9-14 1250
RA Shepard	9/9/14 1315	SSU#1	9/9/14 1315
SSU#1	SEP 30 2014 0815	F.M. Hall CHPRC	SEP 30 2014 0815
F.M. Hall CHPRC	SEP 30 2014 1030	RJ Lee Group Thomas Rude Jones	SEP 30 2014 1030
RJ Lee Group LT Homes Jones	9/30/14 10:30	RJ Lee Group Clipper Christine Jones	9/30/14 1030

SIGN/ PRINT NAMES

9/9/14 1250

9/9/14 1315

SEP 30 2014 0815

SEP 30 2014 1030

9/30/14 1030

SPECIAL INSTRUCTIONS

TRVL-14-150 ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.** All requests for Geotechnical Parameters will be given a unique HEIS sample number and be assigned to a separate COC. In addition, all split spoon sleeves will be properly stored until authorized for shipment. 9.26-14

(1) ~~Particle Size (Dry Sieve) - D422; Permeability - D2434;~~ Saturated Hydraulic Conductivity; Saturated Hydraulic Conductivity {Hydraulic Conductivity, No CAS}; Calcium Carbonate Content;

TRVL-14-150

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

PRINTED ON 8/26/2014

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February 27, 2015

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F13-046-065

COLLECTOR
J. Aguilar

SAMPLING LOCATION
C8291, I-005

ICE CHEST NO.

SHIPPED TO
~~Shaw Group~~ RJ Lee KS 9/30/14

COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR
TODAK, D	376-6427	TODAK, D

PROJECT DESIGNATION
100-KR-4 Long Term & Interim Action Monitoring - Soil

SAF NO.
F13-046

FIELD LOGBOOK NO.
HNF-N-507-29/70

ACTUAL SAMPLE DEPTH
153.4" - 156.2"

COA
300085ES10

OFFSITE PROPERTY NO.
SEE PTR

BILL OF LADING/AIR BILL NO.
SEE PTR

PRICE CODE 8H

AIR QUALITY ☐

DATA TURNAROUND
30 Days / 30 Days

METHOD OF SHIPMENT
FEDERAL EXPRESS

ORIGINAL

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	None
HOLDING TIME	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2KPH9	SOIL	9-18-14	0840	✓

14-016

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
J. Aguilar CHPRC	9-18-14 1055	R.C. Patterson CHPRC	9-18-14 1055
R.C. Patterson CHPRC	SEP 18 2014 1125	SSU-1	SEP 18 2014 1125
SSU-1	SEP 30 2014 0815	T.M. Hall CHPRC	SEP 30 2014 0815
T.M. Hall CHPRC	SEP 30 2014 1020	RJ Lee E Thomas	SEP 30 2014 1030
RJ Lee Group E Thomas	9/30/14 1030	RJ Lee Group Lopez Christina	9/30/14

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

TRVL-14-150 ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.** All requests for Geotechnical Parameters will be given a unique HEIS sample number and be assigned to a separate COC. In addition, all split spoon sleeves will be properly stored until authorized for shipment. JD 9.26.14
(1) Particle Size (Dry Sieve) D422; Permeability D2434; Saturated Hydraulic Conductivity; Saturated Hydraulic Conductivity {Hydraulic Conductivity, No CAS}; Calcium Carbonate Content;

TRVL-14-150

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

PRINTED ON 8/26/2014

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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F13-046-043 PAGE 1 OF 1

COLLECTOR
Ed Kauer Floyd

COMPANY CONTACT
TODAK, D

TELEPHONE NO.
376-6427

PROJECT COORDINATOR
TODAK, D

PRICE CODE 8H

DATA TURNAROUND
30 Days / 30 Days

SAMPLING LOCATION
C8297, I-006,

PROJECT DESIGNATION
100-KR-4 Long Term & Interim Action Monitoring - Soil

SAF NO.
F13-046

AIR QUALITY ☐

ICE CHEST NO.

FIELD LOGBOOK NO.
WF-N-507-29.59

ACTUAL SAMPLE DEPTH
84.7 to 87.2

COA
300085ES10

METHOD OF SHIPMENT
GOVERNMENT VEHICLE

ORIGINAL

SHIPPED TO
~~Shaw Group~~ RJ Lee KS 9/30/14

OFFSITE PROPERTY NO.
SEE PTR

BILL OF LADING/AIR BILL NO.
SEE PTR

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

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.

SPECIAL HANDLING AND/OR STORAGE
RADIOACTIVE TIE TO: B2T1L0

PRESERVATION	None
HOLDING TIME	None
TYPE OF CONTAINER	Split Spoon Liner
NO. OF CONTAINER(S)	1
VOLUME	1000g
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B2T1L2	SOIL	3 25-14	1014	✓

H-017

CHAIN OF POSSESSION

RELINQUISHED BY/REMOVED FROM	DATE/TIME
Ed Kauer	3-25-14 1554
SSU-1	SEP 30 2014 0815
F.M. Hall CHPRC	SEP 30 2014 1030
RJ Lee Group L Thomas	9/30/14 10:30

SIGN/ PRINT NAMES

RECEIVED BY/STORED IN	DATE/TIME
SSU-1	3-25-14 1554
F.M. Hall CHPRC	SEP 30 2014 0815
RJ Lee L Thomas	SEP 30 2014 1030
RJ Lee Group C Lopez Christina	9/30/14 1030

SPECIAL INSTRUCTIONS

** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-14-060; ~~DO NOT SHIP SAMPLE~~ KS 9/30 (1) Particle Size (Dry Sieve) - D422; Permeability - D2434; Saturated Hydraulic Conductivity; Saturated Hydraulic Conductivity {Hydraulic Conductivity, No CAS}; Calcium Carbonate Content;

TRVL-14-060

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

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A-6003-618 (REV 2)

February 27, 2015

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