



December 22, 2017

Contract #: 54813

CH2M HILL Plateau Remediation Company
 2420 Stevens Center Place
 P.O. Box 1600
 Richland, WA 99354
 Attn.: Tracey A. Burch

Subject: Geotechnical Laboratory Testing Services, Data Deliverable for work order W709089, Rev. 1

Enclosed is the final report on geotechnical analyses performed by RJ Lee Group Inc. in conjunction with PBS Engineering and Environmental, Inc. (PBS) for one Sample Delivery Group (SDG) numbers, Borehole C9513.

General Set Comments

RJ Lee Group received from CH2M-Hill Plateau Remediation Company (CHPRC) 36 cores (for a total of 156 feet) to be tested for geotechnical analysis at the Columbia Basin Analytical Laboratories. There are no SIRs associated with this SDG.

The CHPRC assigned HEIS#s have been assigned SDG#s according to the following table:

Sample Data Group # W709089 Borehole C9513, H-0180

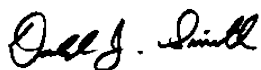
SDG #	CHPRC Sample #	Borehole Core ID	Length Logged (ft)	Interval Logged (ft bgs)	Aliquots	Aliquot Depth	Date Processed
W709089	B39WV0	C9513 Core 1	3	45-47.5	No	NA	10/13/17
W709089	B39WV4	C9513 Core 2	3	47.5-50	No	NA	10/13/17
W709089	B39WV6	C9513 Core 3	5	50-55	No	NA	10/13/17
W709089	B39WV8	C9513 Core 4	5	55-60	No	NA	10/13/17
W709089	B39WW0	C9513 Core 5	5	60-65	Yes	61-63	09/21/17
W709089	B39WW0 Dup	C9513 Core 5 Dup	0	60-65	No	NA	09/21/17
W709089	B39WW2	C9513 Core 6	5	65-70	No	NA	10/13/17
W709089	B39WW4	C9513 Core 7	5	70-75	No	NA	10/13/17
W709089	B39WX0	C9513 Core 10	5	75-80	Yes	76-79	09/22/17
W709089	B39WX5	C9513 Core 11	5	80-85	No	NA	10/26/17
W709089	B39WX7	C9513 Core 12	5	85-90	No	NA	10/26/17
W709089	B39WX9	C9513 Core 13	5	90-95	Yes	90.5-92	09/22/17
W709089	B39WY3	C9513 Core 14A	3	95-97.5	No	NA	10/26/17
W709089	B39WY1	C9513 Core 14B	3	97.5-100	No	NA	10/26/17
W709089	B39WY6	C9513 Core 15	5	100-105	No	NA	10/26/17
W709089	B39WY8	C9513 Core 16	5	105.5-110.5	No	NA	10/26/17
W709089	B39X18	C9513 Core 20A	3	127.3-129.8	No	NA	10/26/17
W709089	B39X20	C9513 Core 20B	3	124.8-127.3	No	NA	10/26/17
W709089	B39X41	C9513 Core 21	5	130.5-135.5	Yes	131.5-133.5	09/29/17
W709089	B39X43	C9513 Core 22	5	135.2	No	NA	10/27/17
W709089	B39X45	C9513 Core 23A	3	104.2	No	NA	10/27/17

W709089	B39X47	C9513 Core 23B	3	143-145.5	No	NA	10/27/17
W709089	B39X50	C9513 Core 24	5	145.1-150.1	Yes	146.1-148.8	10/05/17
W709089	B39X72	C9513 Core 28	5	165.3-170.3	No	NA	10/27/17
W709089	B39X74	C9513 Core 29A	3	173.0-175.5	Yes	173.3-175	10/05/17
W709089	B39X76	C9513 Core 29B	3	170.5-173	Yes	171-172	10/05/17
W709089	B39X79	C9513 Core 30	5	175.1-180.1	No	NA	10/27/17
W709089	B39X81	C9513 Core 31	5	180.6-185.6	No	NA	10/27/17
W709089	B39X83	C9513 Core 32	5	184.9-189.9	No	NA	10/27/17
W709089	B39X85	C9513 Core 33A	3	192.9-195.4	Yes	193.4-194.7	10/06/17
W709089	B39X87	C9513 Core 33B	3	190.4-192.9	Yes	190.9-192.5	10/06/17
W709089	B39X90	C9513 Core 34	5	194.7-199.7	No	NA	10/12/17
W709089	B39X92	C9513 Core 35	5	200.5-205.5	No	NA	10/12/17
W709089	B39X94	C9513 Core 36	5	205.5-210.5	No	NA	10/12/17
W709089	B39XC6	C9513 Core 40	5	224.7-229.7	Yes	225-227	10/06/17
W709089	B39XC8	C9513 Core 41	5	230.4-235.4	No	NA	10/06/17
W709089	B39XD0	C9513 Core 42	5	235.5-240.5	Yes	235.5-240.5	10/12/17

This project deliverable, provided in Attachment 1, contains the reports of the requested analytical results and a copy of the associated chain of custody for the sample listed above.

The analytical results provided in this deliverable relate only to the items tested. The sample was 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.



Don Smith
Lab Director, Columbia Basin Analytical Laboratories

12/22/2017

Date

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

Attachment 1

PBS Geotechnical Laboratory Testing Results, SDG#s W709089
Dated December 22, 2017.



November 30, 2017

Mr. Larry Lockrem
RJ Lee Group, Inc.
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, Washington 99301

Via email: llockrem@rjleegroup.com

Regarding: C9513 Geologic Core Logging
Sample Delivery Group No. W709089 and W709120
PBS Project No. 63797.000.0003
PBS Sample ID H-0180

Dear Mr. Lockrem:

In accordance with your request, PBS Engineering and Environmental Inc. (PBS) has prepared this report summarizing the completed geologic core logging and aliquot sampling for Borehole C9513. Our services were performed per the request provided with Sample Delivery Group #W709089 and #W709120.

Samples were processed in accordance with the following procedures and inclusive standards and practices:

- Sample receipt per "Sample Receipt and Management" (RJ Lee Group procedure GEN-008.09)
- Core logging per "Geologic Logging of Soils" (GTL-009.00) and "Geologic Logging" (CHPRC procedure GRP-EE-01-7.0)
- Core aliquot sampling per "Sample Aliquot Collection" (GTL-011.00)

Thirty-six cores were processed to include 156 feet of geologically logged sediment and 11 aliquot samples, and are outlined in the table below.

Sample Data Group #W709080 and #W709120, Borehole C9513, H-0180

Core	Core HEIS#	Depth (ft bgs)	Core Length (ft)	Aliquot Depth (ft bgs)	Aliquot HEIS#			Open Date
					GEL	TASL	PNNL Isotope/ Leachate	
1	B39WV0	45 – 47.5	3	--	--	--	--	10/13/2017
2	B39WV4	47.5 – 50	3	--	--	--	--	10/13/2017
3	B39WV6	50 – 55	5	--	--	--	--	10/13/2017
4	B39WV8	55 – 60	5	--	--	--	--	10/13/2017
5	B39WW0	60 – 65	5	61 – 63	B3DCF8	B3DCH1	B3DCF7	9/21/2017
					B3DCF9	--	--	
					B3DCH0	--	--	

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Core	Core HEIS#	Depth (ft bgs)	Core Length (ft)	Aliquot Depth (ft bgs)	Aliquot HEIS#			Open Date
					GEL	TASL	PNNL Isotope/ Leachate	
DUP	B39WW0	60 – 65	0	61 - 63	B3DCH3	--	--	9/21/2017
					B3DCH4	--	--	
					B3DCH5	--	--	
6	B39WW2	65 – 70	5	--	--	--	--	10/13/2017
7	B39WW4	70 - 75	5	--	--	--	--	10/13/2017
8 – 9	No Cores							
10	B39WX0	75 – 80	5	76 – 79	B3DCH8	B3DCJ1	B3DCH7	9/22/2017
					B3DCH9	--	--	
					B3DCJ0	--	--	
11	B39WX5	80 – 85	5	--	--	--	--	10/26/2017
12	B39WX7	85 – 90	5	--	--	--	--	10/26/2017
13	B39WX9	90 – 95	5	90.5 – 92	B3DCJ3	B3DCJ6	B3DCJ2	9/22/2017
					B3DCJ4	--	--	
					B3DCJ5	--	--	
14A	B39WY3	95 – 97.5	3	--	--	--	--	10/26/2017
14B	B39WY1	97.5 – 100	3	--	--	--	--	10/26/2017
15	B39WY6	100 – 105	5	--	--	--	--	10/26/2017
16	B39WY8	105.5 – 110.5	5	--	--	--	--	10/26/2017
17 – 19	Cores to PNNL							
20A	B39X18	127.3 – 129.8	3	--	--	--	--	10/26/2017
20B	B39X20	124.8 – 127.3	3	--	--	--	--	10/26/2017
21	B39X41	130.5 – 135.5	5	131.5 – 133.5	B3DCJ8	B3DCK1	B3DCJ7	9/29/2017
					B3DCJ9	--	--	
					B3DCK0	--	--	
22	B39X43	135.2 – 140.2	5	--	--	--	--	10/27/2017
23A	B39X45	143 – 145.5	3	--	--	--	--	10/27/2017
23B	B39X47	140.5 – 143	3	--	--	--	--	10/27/2017
24	B39X50	145.1 – 150.1	5	146.1 – 148.8	B3DCK3	B3DCK6	B3DCK2	10/5/2017
					B3DCK4	--	--	
					B3DCK5	-	--	
25 – 27	Cores to PNNL							
28	B39X72	165.3 – 170.3	5	--	--	--	--	10/27/2017
29A 29B	B39X74	173.0 – 175.5	3	173.3 – 175 171 – 172	B3DCK8	B3DCL1	B3DCK7	10/5/2017
	B39X76	170.5 – 173	3		B3DCK9	--	--	
					B3DCL0	--	--	
30	B39X79	175.1 – 180.1	5	--	--	--	--	10/27/2017
31	B39X81	180.6 – 185.6	5	--	--	--	--	10/27/2017

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Core	Core HEIS#	Depth (ft bgs)	Core Length (ft)	Aliquot Depth (ft bgs)	Aliquot HEIS#			
					GEL	TASL	PNNL Isotope/ Leachate	Open Date
32	B39X83	184.9 – 189.9	5	--	--	--	--	10/27/2017
33A 33B	B39X85	192.9 – 195.4	3	193.4 – 194.7 190.9 – 192.5	B3DCL3	B3DCL5	B3DCL2	10/6/2017
	B39X87	190.4 – 192.9	3		B3DCL4	--	--	
					B3DCL5	--	--	
34	B39X90	194.7 – 199.7	5	--	--	--	--	10/12/2017
35	B39X92	200.5 – 205.5	5	--	--	--	--	10/12/2017
36	B39X94	205.5 – 210.5	5	--	--	--	--	10/12/2017
37 – 39	Cores to PNNL							
40	B39XC6	224.7 – 229.7	5	225 – 227	B3DCL8	B3DCM1	B3DCL7	10/6/2017
					B3DCL9	--	--	
					B3DCM0	--	--	
41	B39XC8	230.4 – 235.4	5	--	--	--	--	10/6/2017
42	B39XD0	235.5 – 240.5	5	235.5 – 240.5	B3DCM3	B3DCM6	B3DCM2	10/12/2017
					B3DCM4	--	--	
					B3DCM5	--	--	
Total: 36								
			156	11 Aliquots				

bgs: below ground surface

HEIS: Hanford Environmental Information System

GEL: GEL Laboratories, LLC

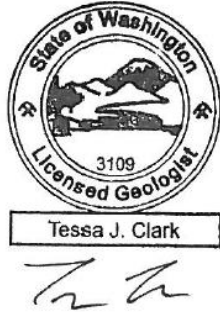
TASL: TestAmerica St. Louis Laboratory

PNNL: Pacific Northwest National Laboratory

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We appreciate this opportunity to work with you on this project. Please feel free to contact me at 509.375.7836 or tessa.clark@pbsusa.com with any questions or comments.

Sincerely,

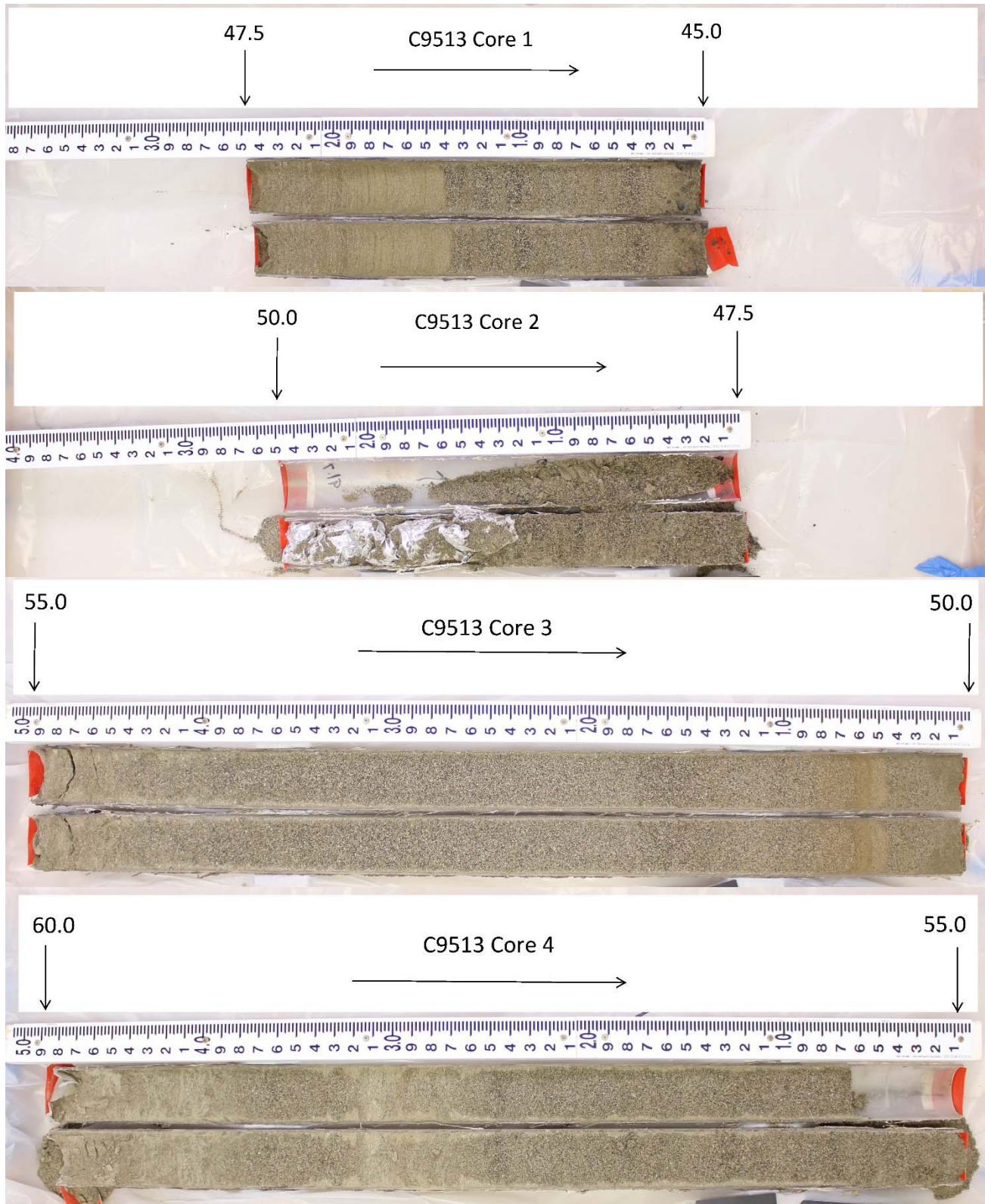


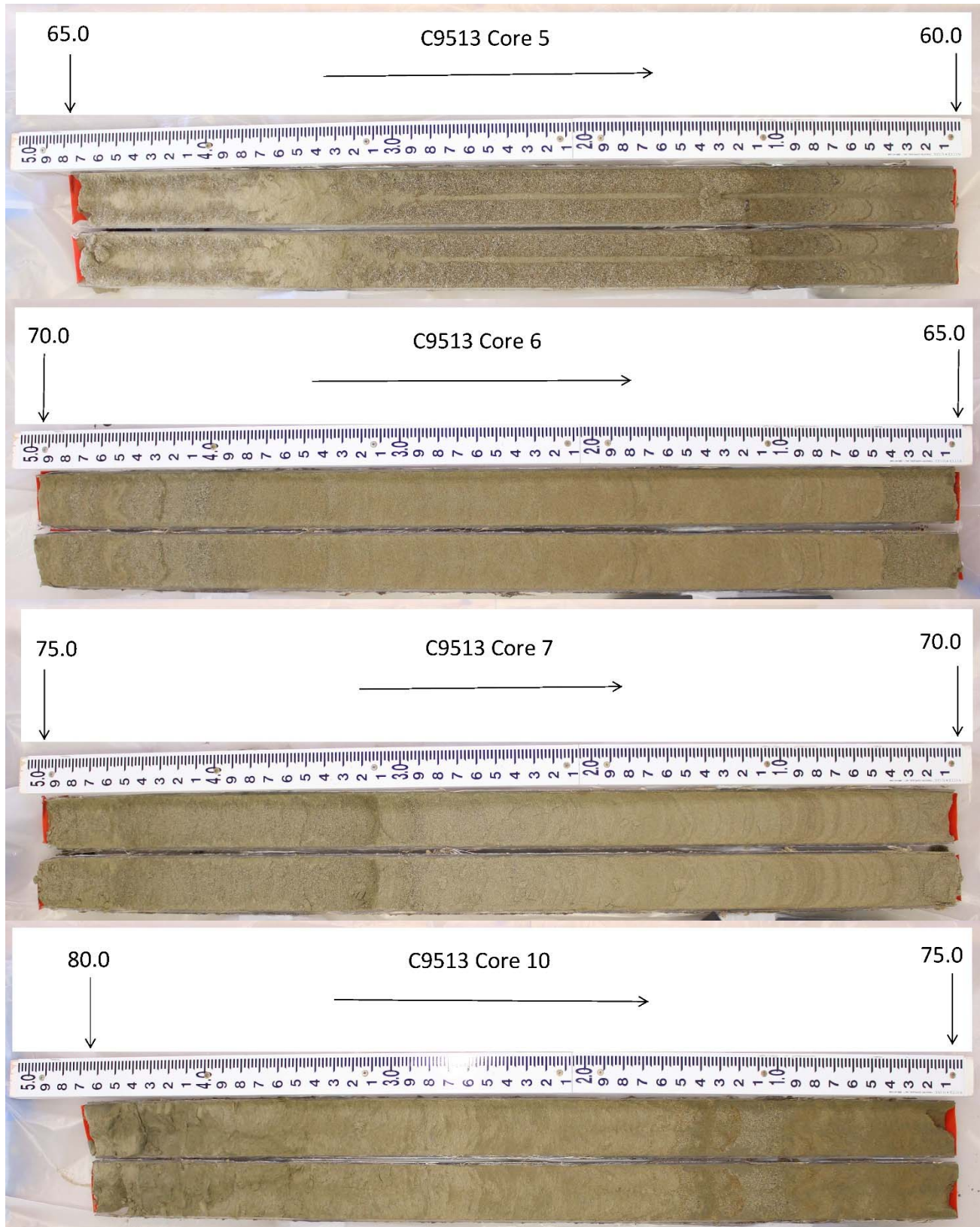
Tessa Clark, LG
Project Geologist

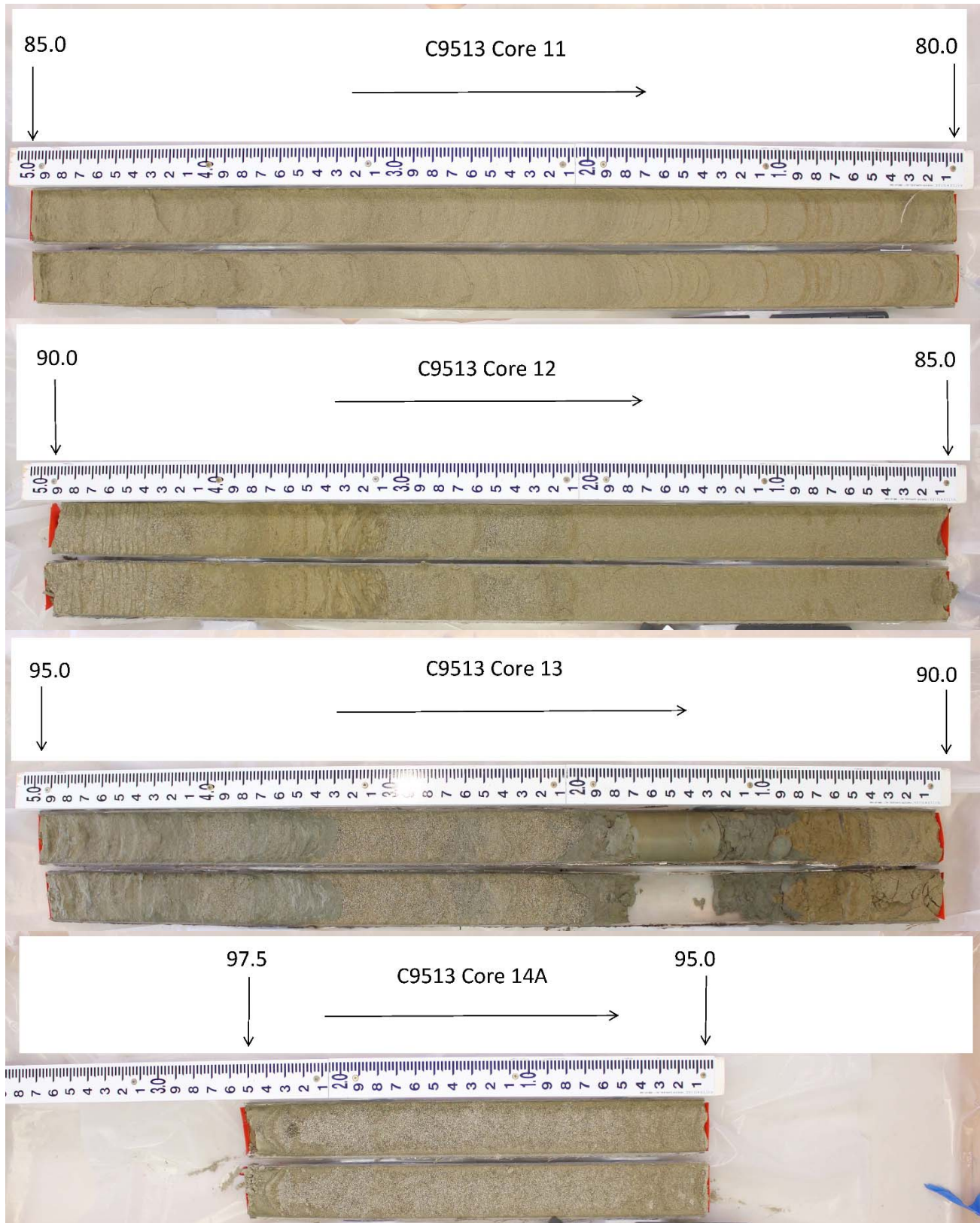
Attachment(s): A – Core Photographs
B – Borehole Logs
C – Work Order Chains of Custody

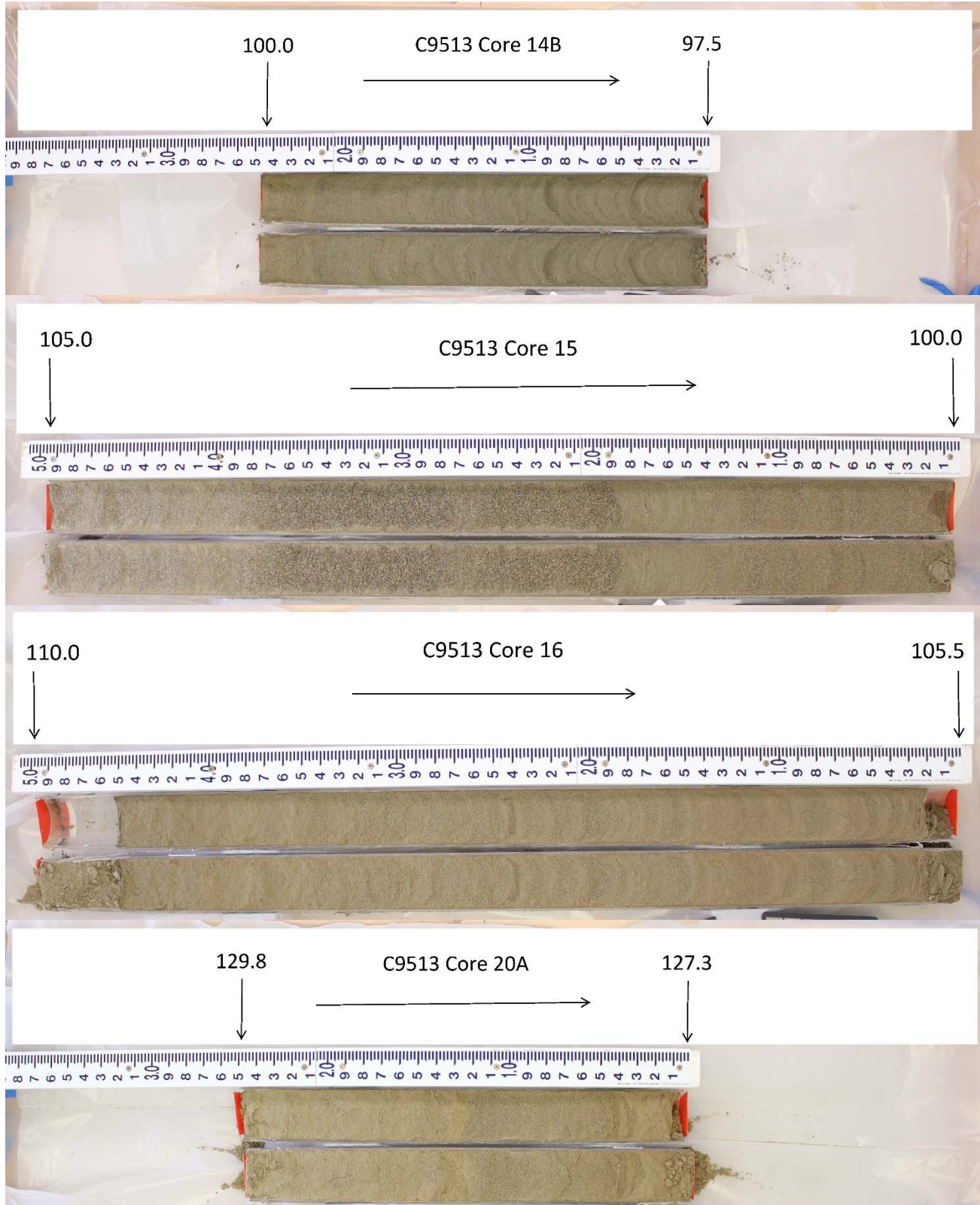
APPENDIX A

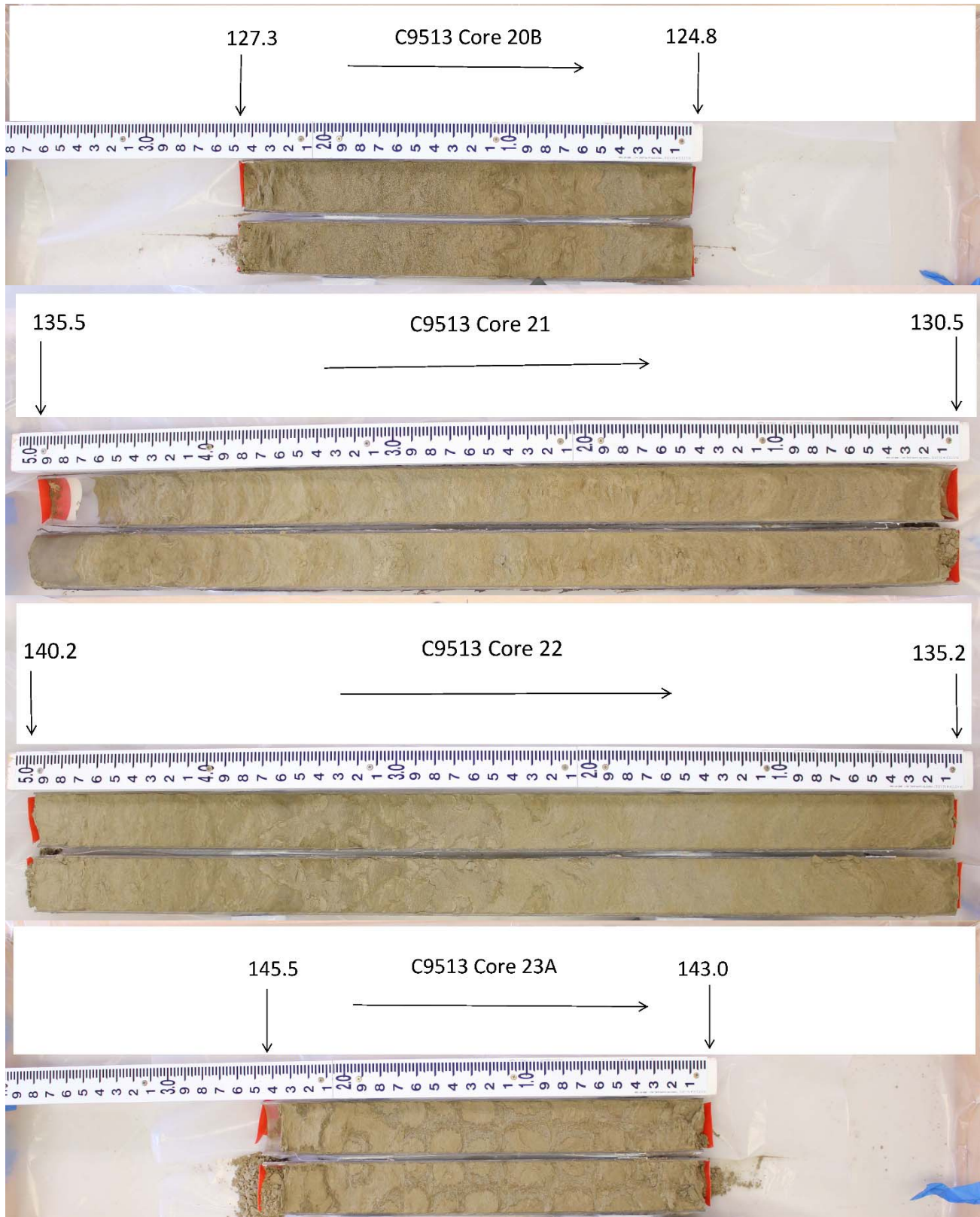
Core Photographs

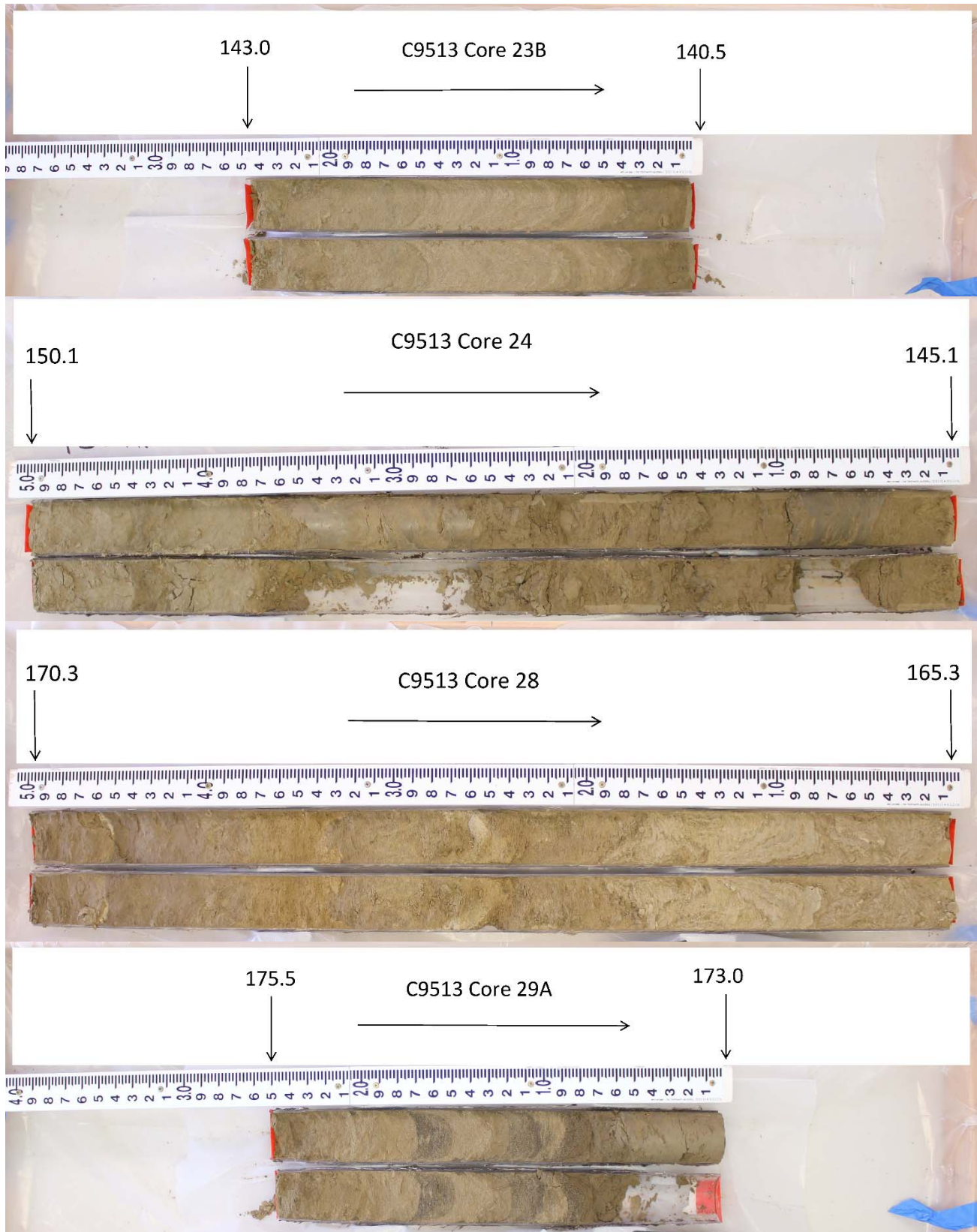


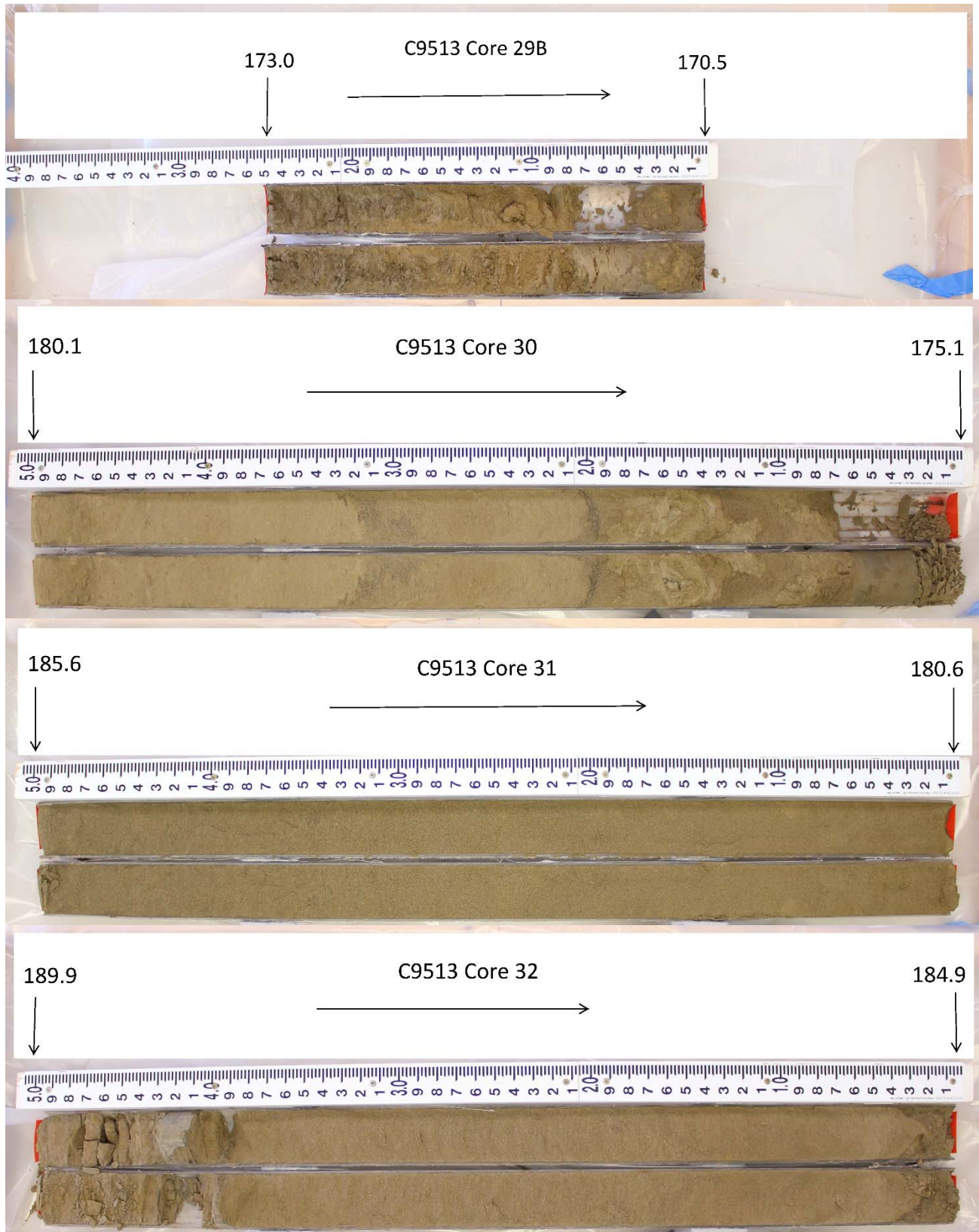


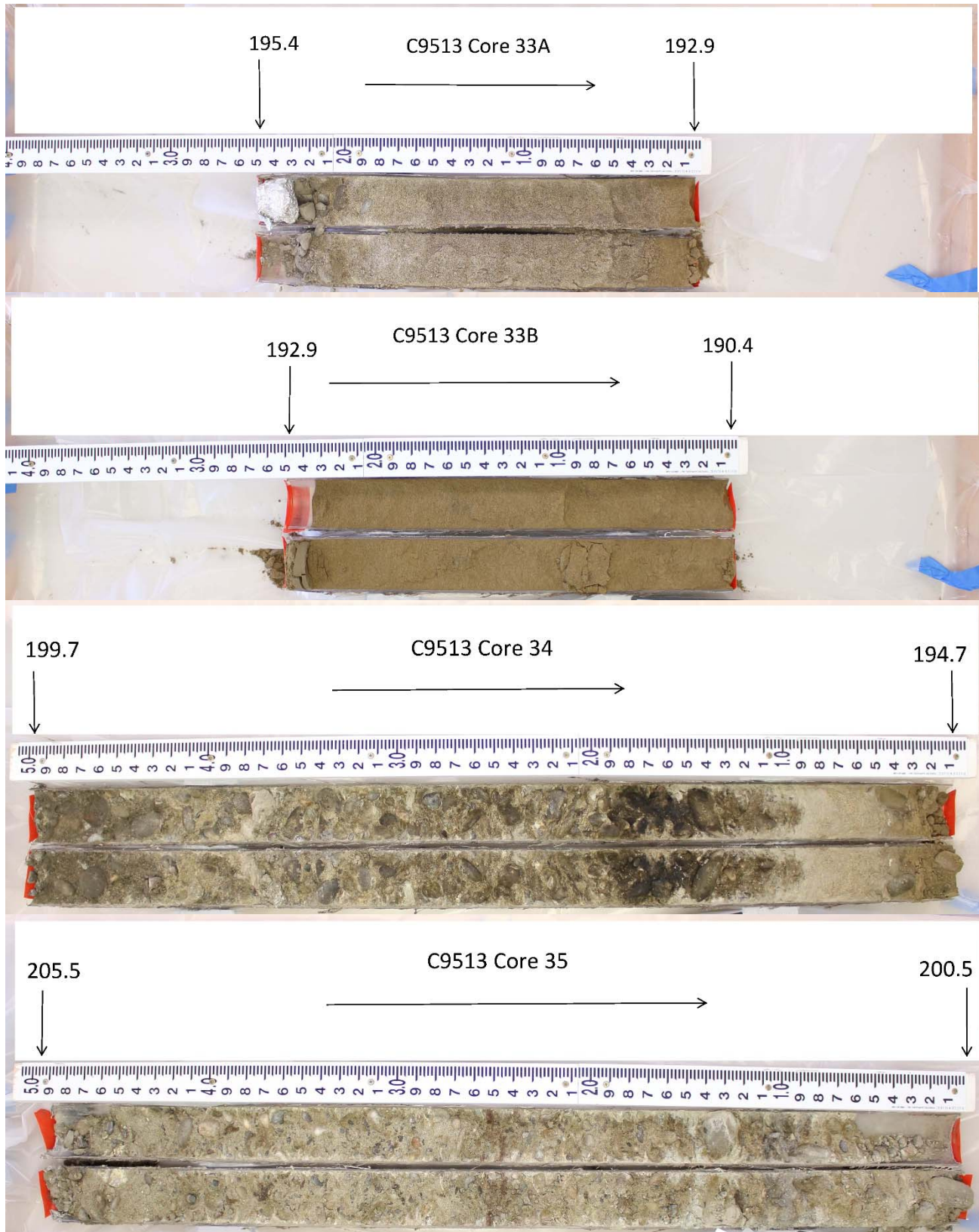


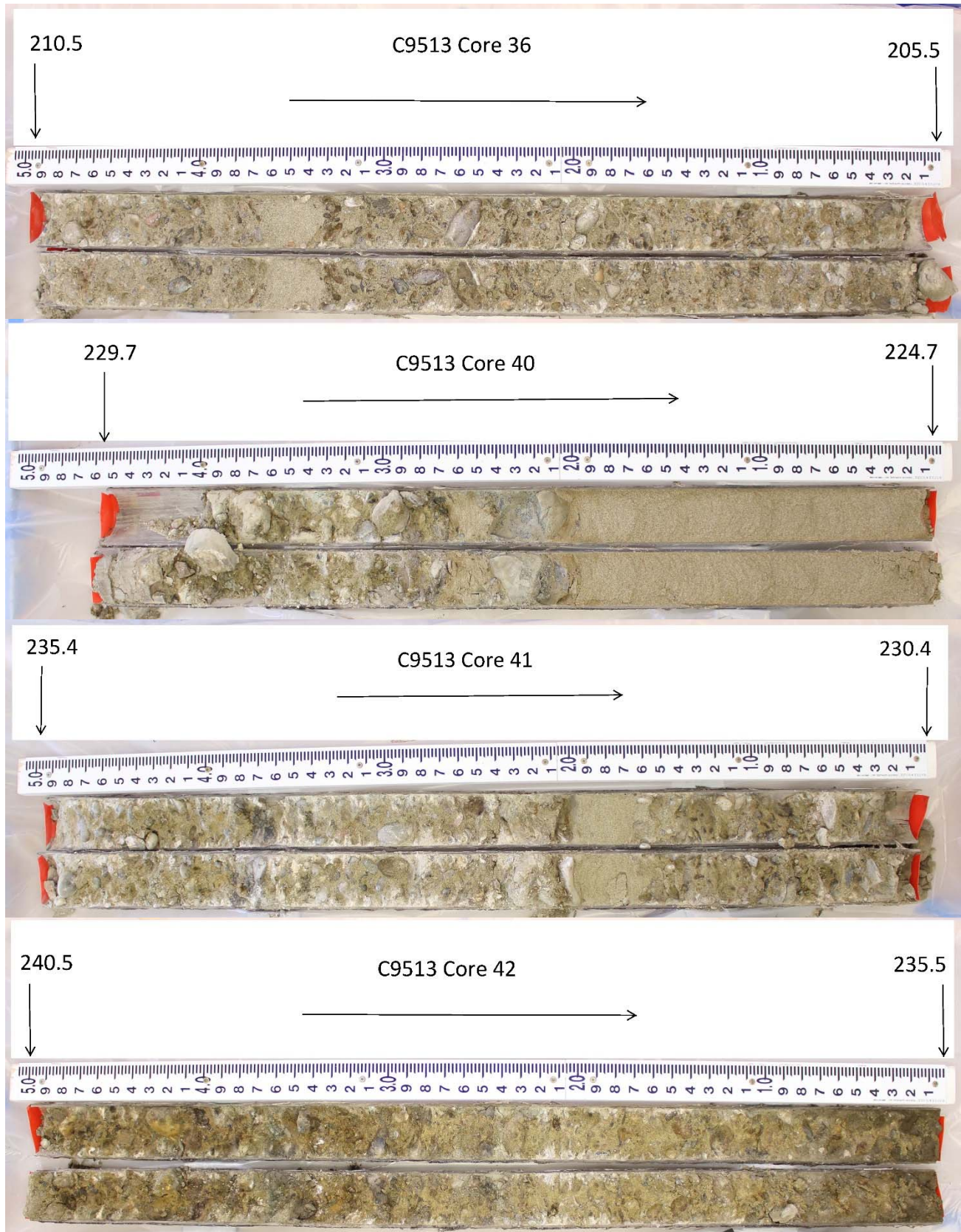












APPENDIX B

Borehole Logs

BOREHOLE LOG

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Date: 9/21/17

Well ID: C9513

Well Name: NA

Location: 216-S-13 Crib

Project: 200-DV-1 Operable Unit

Reference Measure Point: Ground Surface

Depth (ft)	Sample	Graphic Log	Sample Description: Sediment Classification, Grain Size Distribution, Color, Moisture Content, Sorting, Angularity, Mineralogy, Particle Size, Reaction to HCl, Other	Comments: Depth of Casing, Drilling Method, Sampling Method, Sampler Size, Water Level, Other	
45	Core 1		Core 1 B39WV8 45.0-47.5		
47.5			Core 2	46.4-47.5: Slightly Silty Sand (MS): 80% s, 20% clay; S: v. fn - crs, 75% s, 25% clay, grayish brown, dry, no rxn w/ HCl; PS, interbedded/coarsens downward, rhythmites & fin s/m interbeds (~1mm). 47.5-48.8: Gravelly Sand (GS): 10% g, 90% s; Giv. fn - m pebbles (10mm max); A-SA, 80% sand, 20% silt; S: v. fn - vc, 50% sand, 50% silt, 5% clay; SR-A, 2.5 1/2, dark grayish brown, dry, no rxn w/ HCl; WS, massive; fn sand interbed @ 48.3' by 3' (3cm). 50.0-50.2: Silty Sand (MS): 50% s, 50% clay; S: v. fn - m, 50% sand, 50% silt; SA-SR, m: non-plastic; 2.5 1/2 drk. gray brown; moist, comp, massive, mod rxn w/ HCl.	Core 2 B39WV4 47.5-50.0
50				Core 3	50.0-50.2: Silty Sand (MS): 50% s, 50% clay; S: v. fn - m, 50% sand, 50% silt; SA-SR, m: non-plastic; 2.5 1/2 drk. gray brown; moist, comp, massive, mod rxn w/ HCl.
52.5	Core 4	50.2-54.5: Sand (S): 5% g, 95% s; Giv. fn - m pebbles (max 9mm); A-SA, 60% sand, 40% silt; S: v. fn - vc, 50% sand, 50% silt; SR-A, 2.5 1/2 dark gray, dry, no rxn w/ HCl; WS, massive; fn - fn. s. interbeds @ 50.3 (1mm), 50.4 (3cm) + 50.5 (2cm); Fer staining @ s. interbeds; gnd. contact @ 54.5. 54.5-55.0: Sand (S): 5% g, 95% s; Giv. fn - m pebbles (max 9mm); A-SA, 60% sand, 40% silt; S: v. fn - vc, 50% sand, 50% silt; SR-A, 2.5 1/2, dark gray, dry, strong rxn w/ HCl; WS, mass; Ca-cementation.			Core 4 B39WV8 55-60
55		Core 5	55-57.8: Sand (S): 5% g, 95% s; Giv. fn - m pebbles; A-SA, 60% sand, 40% silt; S: v. fn - vc, 50% sand, 50% silt; SR-A, 2.5 1/2, dark gray, dry, no rxn w/ HCl; WS, massive; micas; gnd. contact @ 57.8. 57.8-58.3: Silty Sand (MS): 75% s, 25% clay; S: v. fn - c, predom v. fn - m, brown, 40% sand, SR-A; m: non-plastic; 2.5 1/2 H. brown, gray, dry, massive; strong rxn w/ HCl; minor rhythmites, cemented; PS. 58.3-59: Sand (S): 5% g, 95% s; Giv. fn - m pebbles (9mm); A-SA, 60% sand, 40% silt; S: v. fn - vc, 50% sand, 50% silt; SR-A, 2.5 1/2, dark gray, dry, no rxn w/ HCl (mod @ 58.3 + 59 contacts); WS, massive; micas; gnd. contact @ 59'. 59.0-60.0: Silty Sand (MS): 50% s, 50% clay; S: v. fn - vc, 70% sand, 30% silt; SA, m: non-plastic; 2.5 1/2, gray, dry, strong rxn w/ HCl; silt (85% sand, 15% v. fn matrix s); drk ends @ 59.6; silt interbeds and nodules present throughout; all silt = v. strong rxn w/ HCl; lower 2" brown,="" brown.="" cm="" dike="" dike,="" dry,="" fn="" fn;="" grayish="" hcl,="" hcl.="" hcl.<="" laminae="" liner="melted/warped." m,="" massive="" mica,="" moist,="" no="" non="" non-plastic,="" of="" pale="" plastic,="" predom="" rhythmites="" rxn="" sa,="" sand="" sand,="" sand:="" sandy="" silt="" silt,="" silt;="" strong="" td="" trace="" v.="" vc,="" w="" ws,=""/>		Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.5			Core 5	60.0-61.1: Silty Sand (MS): 75% s, 25% clay; S: v. fn - c, predom v. fn - m, brown, 40% sand, SR-A; m: non-plastic; 2.5 1/2 H. brown, gray, dry, massive; strong rxn w/ HCl; minor rhythmites, cemented; PS. 61.1-63.3: Sand (S): 100% v. fn - m, 30% sand, 70% silt, trace mica, WS, SA, 2.5 1/2, grayish brown, massive w/ 1 um silt dike, no rxn w/ HCl. 63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			61.1-63.3: Sand (S): 100% v. fn - m, 30% sand, 70% silt, trace mica, WS, SA, 2.5 1/2, grayish brown, massive w/ 1 um silt dike, no rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2			Core 5	63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2	Core 5			63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	Core 5 B39WV8 60-65' Aliquot 61.0-63.0'
57.2		Core 5		63.3-63.8: Silt (M): 100%, non-plastic, dry, 2.5 1/3 pale brown, strong rxn w/ HCl.	

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BOREHOLE LOG (Cont.)				Page <u>2</u> of <u>10</u>
Well ID: C9513		Well Name: NA	Location: 216-S-13 Crib	
Depth (ft)	Sample	Graphic Log	Sample Description: Sediment Classification, Grain Size Distribution, Color, Moisture Content, Sorting, Angularity, Mineralogy, Particle Size, Reaction to HCl, Other	Comments: Depth of Casing, Drilling Method, Sampling Method, Sampler Size, Water Level, Other
62.5	Core 5		63.8-65.0: Sand (S) 100%: m-c, 10% m, 90% f, no rxn w/ HCl, dry, SA, WS, 4cm silt dike - strong rxn w/ HCl	Core 5 B39WWD 60-65' Aliquot 61.0-63.0'
65	Core 6		65-65.4: Sand (S): 90% s, 10% m; v. fn-c, predom vf-m; SA, 70% fcl, 30% maf, PS, dry, 2.5Y 5/2 grayish brn, no rxn w/ HCl, massive; silt nodules @ corners @ 65' top of core (strong rxn w/ HCl); ~1 cm.	Core 6 B39WW2 65-70
67.5			65.4-69.0: Slightly Silty Sand (mS): 80% s, 20% m; S: v. fn-m, 30% maf, 70% fcl, trace mica, WS, SA, 2.5Y 5/3, 1 l. olive brn, no rxn w/ HCl, dry; rhythmites throughout; grad. contact @ 69.	
70	Core 7		69.0-69.8: Sand (S): 90% s, 10% m; S: v. fn-ve, 50% fcl, 50% maf, SA, SR, mica, PS, 2.5Y 5/2 grayish brn, dry, no rxn w/ HCl; massive; dark gray silty sand interbed (0.6m) @ 69.3; 1 l. olive brn (mS) interbed (2.5m) @ 69.6, 1 cm @ 69.7; strong rxn w/ HCl.	Core 7 B39WW4 70-75 No Core 8 or 9.
72.5			69.8-73.1: Slightly Silty Sand (mS): 80% s, 20% m; S: v. fn-m, 30% maf, 70% fcl, mica, WS, SA, 2.5Y 5/3, 1 l. olive brn, dry, no rxn w/ HCl; rhythmites throughout; 2 cm thick c. sand interbed @ 72.9 (2.5Y 1 1/2).	
75	Core 10		73.1-74.5: Silty Sand (mS): 80% s, 20% m; S: v. fn-c, predom vf-m, SA, 60% f, 40% m, MS, 2.5Y 1 1/2 l. brnish gray; moist upper 2 cm to dat. (10-13-17) w/ rxn to HCl. (10-13-17)	
77.5			74.5-75.0: Sandy Silt (sm): 30% s, 70% m; S: v. fn-c, predom vf, 90% f, 10% m, SA; m: non-plastic; wk. str rxn w/ HCl; moist, massive; 2.5Y 4/3 ol. brn, MS (minor rhythmites 73.1-73.3; grad contact @ 74.5)	Core 10 B39WWD 75-80'
80	Core 11		75.0-80.0: Sandy Silt (sm): 30% Sand, 70% Silt; Sand: vf-c, predom vf, 90% f, 10% m, SA; non-plastic, wk. strong rxn w/ HCl, moist, platy structure from 76.5-80.0, 2, MS	Aliquot 76-79.0'
			75.0-76.5: 2.5Y 4/3 olive brn	
			75.9-76.2: c. sand 76.4-76.5: c. sand	
			75.8-76.5: iron staining, prominent @ 76.2	
			76.5-79.0: 2.5Y 4/2 light brnish gray w/ f sand laminae throughout	
			79.0-80.0: 2.5Y 4/2 grayish brn, decreased sand content	
			80.0-85.0: Silty Sand (mS): 50% s, 50% m; Sand: vf-c, predom vf, 75% fcl, 25% maf, SA; m: non-plastic; no rxn w/ HCl; dry; platy structure (80-80.4) (80.4-82.7); MS, 2.5Y 5/3	Core 11 80.0-85.0'
			light olive brn; Fe staining on laminae (80.4-81.6); silt laminae @ 81.1, 81.3, 81.4, 81.6; Fe-stained m.	

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Well ID: C9513

Well Name: NA

Location: 216-S-13 Crib

Depth (ft)	Sample	Graphic Log	Sample Description: Sediment Classification, Grain Size Distribution, Color, Moisture Content, Sorting, Angularity, Mineralogy, Particle Size, Reaction to HCl, Other	Comments: Depth of Casing, Drilling Method, Sampling Method, Sampler Size, Water Level, Other
82.5	Core 11		80.0-85.0: Silty Sand (MS): 50% s, 50% s; Sand: vf-c, predom vf-f; 75% fcls, 25% m, SA; m: non-plast; no rxn w/ HCl; dry; platy structure @ 80.0-85.0'	Core 11 80.0-85.0'
85			80-80.4+82.7-85.0: laminae @ 80.4-82.7; MS; 2.5Y 5/3 light olive brn; Fe staining on laminae (80.4-81.6); silt laminae @ 81.1, 81.3, 81.6 (+Fe stained). 85.0-88.1: Silty Sand (MS): 75% s, 25% m; S: vf-m, SA, 75% fcls, 25% maf; m: non-plast; no rxn w/ HCl; dry; mass; MS; 2.5Y 5/3 olive brn; mica present. → 87.1-87.6: S. coarsens downward to vf-m to vf-c (to 2.5Y 4/2 H. brnsh gray). → 87.6-88.1: S. coarsens down from vf-m to vf-c (to 2.5Y 4/2). 88.1-88.9: Silt (M): 90% s, 10% m; S: 75% s, 25% f, vf-f; m: non-plast; wk rxn w/ HCl; dry; cross-bedded; silt lamina dipping 20° from 88.1-88.3; laterals 88.3-88.6 massive; 2.5Y 4/3 olive brn; 88.6-88.9: → lateral beds 88.3-88.6; 2.5Y 5/3 l. olive brn; in c. sand 10 to 20%; m: 80%. → Massive 88.6-88.9; 2.5Y 4/3 olive brn; graded contact @ 88.9.	Core 12 85.0-90.0
87.5	Core 12		88.9-90: Silty Sand (MS): 70% s, 30% m; S: vf-m to vf-c; 70% fcls, 30% maf; SA; m: non-plast; no rxn w/ HCl; dry; massive to 89.3; w/s, 2.5Y 4/2 H. brnsh gray. → 89.3-90: interbedded (1.5-2 cm) sand beds w/ silt (2-5 mm) laminae; silt: strong rxn w/ HCl; 2.5Y 4/3 olive brn.	
90			90.0-90.4: Sand (S): 100% vf-f, WS, SA, 90% fcls, 10% maf; small rhythmites moist, no rxn w/ HCl, 2.5Y 4/2 light brn gray, strong VOC odor (MIBK) 90.4-91.9: Silt (M) 100%; non-plastic, wk rxn w/ HCl, moist, 2.5Y 5/4 light olive brn from 90.4-90.8, 2.5Y 5/1 gray from 90.8-91.9, clay nodules (5 cm diameter) @ 90.9, strong MIBK odor	Core 13 B39WX9 90.0-95.0'
92.5	Core 13		91.9-93.3: Sand (S): 100% vf-m, predom f, trace mica, 25% maf, 75% fcls, WS, silt cross bedding from 92.5-92.7; strong MIBK odor, 2.5Y 4/2 light brnsh gray, no rxn w/ HCl	
95			93.3-95.0: Silty Sand (MS): 60% s, 40% silt; Sand: vf-f, 90% fcls, 10% maf, trace mica, SA, WS; v. wk rxn w/ HCl, laminae throughout, med. gr. sand sand 93.8-94.1, 2.5Y 5/1 gray, strong MIBK odor	Aliquot 90.5-92.0'
97.5	Core 14 A		95.0-97.5: Silty Sand (MS): 75% s, 25% m; S: vf-c, predom vf-m; 80% fcls, 20% maf; SA; trace mica; PS; no rxn w/ HCl; dry; 2.5Y 5/1 gray; minor silt laminae @ 97.4-97.5 (poss. altered by drilling); rhythmites @ 95.0-95.3; strong MIBK odor.	Core 14 A 95.0-97.5
97.5	Core 14 B		97.5-99.7: Silty Sand (MS): 50% s, 50% m; S: vf-f, 85% fcls, 15% maf; trace mica, SA, WS; m: non-plast; no rxn w/ HCl; dry to moist; laminae throughout (silt); 5Y 5/1 gray; v. strong MIBK odor.	Core 14 B 97.5-100
100	Core 15		99.7-100: Silty Sand (MS): 60% s, 40% m; S: vf-m, 75% fcls, 25% maf; SA, WS; massive; m: non-plast; no rxn w/ HCl; dry; 2.5Y 5/2 grayish brn; strong MIBK odor. 100-101.9: Silty Sand (MS): 70% s, 30% m; S: vf-c, 70% fcls, 30% maf; SA, MS; m: non-plast; no rxn w/ HCl; dry; 2.5Y 5/2 grayish brn; strong MIBK odor. → Intervals of predom. m-cse sand @ 100.4, 100.6, 100.7, 100.9, + 101.1: (1.5-2 cm thick) → Silt lamina (4 mm) @ 101.7.	Core 15 100-105

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Location: 216-S-13 Crib

Depth (ft)	Sample	Graphic Log	Sample Description: Sediment Classification, Grain Size Distribution, Color, Moisture Content, Sorting, Angularity, Mineralogy, Particle Size, Reaction to HCl, Other	Comments: Depth of Casing, Drilling Method, Sampling Method, Sampler Size, Water Level, Other
102.5	Core 15		101.9-103.9: Slightly Silty Sand (ms): 80% s, 20% m; s: vfn-v-crse (predom m-crse); 60% f, 40% m; SA: SR; no rxn w/HCl; dry; 2.5Y 5/2 grayish brn; mIBK odor; 100-105 (massive); 10.26.17	Core 15
105			103.9-105: Silty Sand (ms): 60% s, 40% m; s: vfn-crse (predom. fn med); 70% f, 30% m; SA, WS; m: non-plast/cementation; wk med rxn w/HCl; dry; 2.5Y 6/2+ brn/gray; mIBK odor; massive.	
107.5	Core 16		105.5-110.5: Silty Sand (ms): 70% s, 30% m; s: vfn-crse, predom. vfn med; SA, 70% f, 30% m; MS; m: non-plast; no rxn w/HCl; dry; 2.5Y 5/3 light olive brown, strong mIBK odor; rhythmites throughout; mica present; -> Silt laminae (1mm) @ 109.4-109.5.	Core 16
110				105.5-110.5
112.5				
115				
117.5				
120				

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Depth (ft)	Sample	Graphic Log	Sample Description:		Comments:
			Sediment Classification, Grain Size Distribution, Color, Moisture Content, Sorting, Angularity, Mineralogy, Particle Size, Reaction to HCl, Other		Depth of Casing, Drilling Method, Sampling Method, Sampler Size, Water Level, Other
142.5	Core 23B		142.0-143.0: Silt(m): 90%om, 10%os; s: vfn (too small to determine distribution); m: low plast; platy structure; dry; mod rxn w/HCl; 2.5' 5/3 lt. olive brn; mIBK odor; clay nodules (2.5' 1/3 d. brn) @ 142.6 (2cm).		Core 23B 140.5-143.0
145	Core 23A		143.0-145.5: Sandy Silt(sm): 20%os, 80%om; s: v-f, 90%of, 10%omf, SA, PS; m: non-plast; low to mod rxn w/HCl; dry; 2.5' 5/3 lt. du brn; mIBK odor; platy		Core 23A 143.0-145.5
145	Core 24		145.1-145.5: Sandy Silt(sm): 20%os, 80%om; s: v-f, 90%of, 10%omf, SA; Silt: non-plastic; mod rxn w/HCl; 2.5' 5/3 lt. olive brn; dry; ms; platy structure; strong mIBK odor. Trace mica in sand.		Core 24 B39X50 145.1-150.1
147.5	Core 24		145.5-148.8: Silt(m): 10%osand, 90%osilt; sand: v-f, predom v-f, 90%of, 10%om, SA; Silt: non-plastic; ms; mod rxn w/HCl; 2.5' 1/3 olive brn; dry; platy structure; strong mIBK odor; Fe-staining @ 148.7-148.8; → 2cm sandy silt (20%os, 80%om) interbeds @ 146.9 + 148.3; 2.5' 5/3 lt. olive brn		Alignot 146.1-148.8
150			148.8-150.1: Sandy Silt(sm): 20%os, 80%om; Sand: v-f, predom v-f, 90%of, 10%om, SA-SR; Silt: non-plastic; no rxn w/HCl; 2.5' 5/2 grayish brn; dry, ms; platy structure; strong mIBK odor; → @ 149.5: 3cm interbed silt (100%ic), non-plastic, 2.5' 1/2 dk grayish brn		• Clastic sand dike (2cm max) from 1430-1415.0: 100%os, v-f; 80%of, 20%omf, SA-SR; 2.5' 1/2 lt. brownish gray; PS; brown clay btw sand and sandy silt unit. → clay lamina (1mm) @ 145.2, + nodules @ 145.3.
152.5			Cores to PNNL @ 10-27-17		
155					
157.5					
160					

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Date:

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Location: 216-S-13 Crib

Depth (ft)	Sample	Graphic Log	Sample Description: Sediment Classification, Grain Size Distribution, Color, Moisture Content, Sorting, Angularity, Mineralogy, Particle Size, Reaction to HCl, Other	Comments: Depth of Casing, Drilling Method, Sampling Method, Sampler Size, Water Level, Other
162.5				
165			165.3-167.0: Sandy Silt (SM): 80%om, 20%os; s: vf-f, 80%of, 20%om; SA, PS; m: low plat; dry; mod. rxn w/HCl; platy structure; 2.5" 1/3 lt. yellowish brn; strong MIBK odor.	
			→ Sand dike @ 165.7-167.0: 100%os (vf-m, 90%of, 20%om, SA, trace mica, no rxn w/HCl) with sandy silt rip-up clasts throughout; 2.5" 1/3 lt. yellowish brn.	@ 10.27.17
			167.0-167.8: Sandy Silt (SM): 60%om, 40%os; s: vf-f, 90%of, 10%om; SA, PS; m: low plat; no rxn w/HCl; platy; 2.5" 1/4 lt. olive brn; dry; MIBK odor.	Core 28 165.3-170.3
			167.8-170.3: Silt/clay (M): 100%om; high plasticity; strong rxn w/HCl; dry; MIBK odor.	
167.5			→ 167.8-168.6: 2.5" 3/3 lt. olive brn; platy structure; clay ball (dry, v. strong HCl rxn, 2.5" 1/3 lt. yellowish brn @ 167.8, 7cm diameter).	
			→ 168.6-169.3: 2.5" 5/4 lt. olive brn; platy structure & wood(?) chips throughout.	
			→ 169.3-169.9: 2.5" 1/3 olive brn; massive	
			→ 169.9-170.3: 2.5" 5/3 lt. olive brn; platy; clay nodules (2.5" 1/3 lt. olive brn) @ 169.9 (sum).	
170			170.5-172.0: Silt (M): 95%om, 5%os; s: vf-f, 50%of, 50%om; SA, PS; m: low plat; mod rxn w/HCl; 2.5" 5/4 lt. olive brn; moist; massive; MIBK odor.	Core 29 B 39X76
			172.0-173.0: Silt (M): 90%om, 10%os; s: vf-f, SA; trace mica; silt: low-plat; mod rxn w/HCl; 2.5" 1/3 lt. brn; moist; platy; MIBK odor; grad. contact; gray clay nodules @ 172.1; wood @ 172.2.	Aliquot @ 171-172
172.5			173.0-173.8: Silt (M): 50%om, 50%os; silt: non-plastic; mod. rxn w/HCl; 2.5" 1/3 olive brn; moist; massive; strong MIBK odor.	Core 29 A B39X74
			173.8-173.9: Sand (S): 100%os; vf-m; predom m; WS, SA; 40%om, 60%of; moist; no rxn w/HCl; 10" 1/2 dk grayish brn; massive; MIBK odor.	173.0-175.5
175			173.9-174.2: Silty Sand (MS): 70%os, 30%om; s: vf-f, 80%of, 20%om; (mat. inc. w/ depth to 50%); trace mica, SA, WS; no rxn w/HCl; 2.5" 1/2 dark grayish brn; laminae throughout; s: size inc to predom f; strong MIBK odor.	Core 30
			174.2-174.3: Silt (M): 100%om; non-plat; mod rxn w/HCl; 2.5" 1/2 dk grayish brn; moist; massive; strong MIBK odor (Sandy Silt (SM))	175.1-180.1
			174.3-174.5: Silt (M): 80%om, 20%os; s: vf-f, predom f, 50%of, 50%om; silt: non-plat; no rxn w/HCl; 2.5" 1/3 lt. olive brn; moist; platy; strong MIBK odor.	
177.5			174.5-174.7: Sand (S): 90%os, 10%om; s: vf-m; predom f; WS, SA; 40%om, 60%of; moist; no rxn w/HCl; 10" 1/2 dk grayish brn; laminae; MIBK odor.	
			174.7-175.5: Sandy Silt (SM): 70%om, 30%os; s: vf-f, 80%of, 20%om; SA; size inc to predom m. w/ depth; silt: non-plastic; no rxn w/HCl; 2.5" 1/3 lt. olive brn; dry; platy; strong MIBK odor.	
180			→ clay nodules (0.5cm) @ 174.7, 174.9, 175.0 + 175.3; mod rxn w/HCl.	@ 10.27.17
			175.1-175.9: Silt/clay (M): 100%om; high plasticity; strong rxn w/HCl; moist; platy; 2.5" 1/3 olive brown; no odor.	unconformity @ 175.9 contact
			175.9-176.9: Sandy Silt (SM): 70%om, 30%os; s: vf-f, 90%of, 10%om; SA, PS; m: med plat; mod rxn w/HCl; 2.5" 5/3 lt. olive brown; platy; moist; no odor.	
			→ 176.6-176.7: silty sand dike (nodules); 2.5" 1/3 lt. olive brn; silt laminae betw sand dikes. @ 10.27.17	
			→ unconformity @ 176.4 contact.	

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10.5.17 10.27.17

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BOREHOLE LOG (Cont.)

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Date: 10/12/17

Well ID: C9513

Well Name: NA

Location: 216-S-13 Crib

Depth (ft)	Sample	Graphic Log	Sample Description: Sediment Classification, Grain Size Distribution, Color, Moisture Content, Sorting, Angularity, Mineralogy, Particle Size, Reaction to HCl, Other	Comments: Depth of Casing, Drilling Method, Sampling Method, Sampler Size, Water Level, Other
182.5	Core 31		176.9-180.1: Sandy Silt (SM): 60% s, 40% f; SA, PS, 70% f, 30% m; m: low plat; platy; dry; 2.5% 1/3 olive brn; ¹⁰⁻²⁷⁻¹⁷ 10-27-17 → 100% sand lens (9cm) bet @ 170.7-170.8; 30% f - sandy silt fine grain size bet f-m; s=50% to 178.3'. → Plat, sandy silt to 180.1 (60% s, 40% f).	Core 31 180.6-185.6
185	Core 32		180.6-185.6: Sand (S): 90% s, 10% m; sand: vfn-med; 60% f, 40% m; SA, trace mica; m: non-plastic; moist; no rxn w/ HCl; 2.5% 1/3 olive brn; no odor; minor rhythmites throughout 184.9-189.9: Sand (S): 90% s, 10% m; sand: vfn-med; 60% f, 40% m; SA, PS, trace mica; m: non-plastic; moist; no rxn w/ HCl; 2.5% 1/3 olive brn; ¹⁰⁻²⁷⁻¹⁷ 10-27-17 → Top 3" altered by drilling (184.9-185.2). → @ 188.8-189.9: silt bedding (1cm) + laminae (2mm) present: 100% m, wk rxn w/ HCl; 2.5% 1/3 dark gray; trace gravels in sand interbeds (fclst, SA-SR, vfn pebbles)	Core 32 184.9-189.9
190	Core 33 B		190.4-192.9: Slightly silty Sand (mS): 80% s, 20% m; sand: vfn-m; predom vfn-f; 60% f, 40% m; SA, trace mica; m: non-plast; trace gravels (vfn pebbles); dry to silt; moist; no rxn w/ HCl; 2.5% 1/3 olive brn; no odor; minor rhythmites @ 191.2'. ¹⁰⁻⁵⁻¹⁷ 10-5-17	Core 33 B 190.4-192.9; aliquot @ 190.9-192.5
192.5	Core 33 A		192.9-194.9: Sand (S): 100% s; 60% f, 40% m; vfn-c; predom f-m; c-grains = mica; dry; no rxn w/ HCl; moist 192.9-193.4; dry 193.4-194.9; 2.5% 1/3 grayish brn; mod mizk color; small rhythmites throughout. 194.9-195.2: Sandy Gravel (SG): 50% g, 40% s, 10% m; gravel: vfn-peb-4cm; SR; 60% m, 40% f; sand: vfn-vr; predom f-m; 70% m, 30% f; SR-SA; mica; m: non-plast; 2.5% 1/3 lt. ol brn; dry; PS; no rxn w/ HCl; consolidated/semi-cem.	Core 33 A 192.9-195.4; aliquot @ 193.4-194.7
195	Core 34		194.7-195.7: Slightly silty Sand (mS): 5% Gravel, 80% Sand, 15% Silt; Gravel: m peb-5 cm; 5% fclst, 25% matc, SK; Sand: f-m, 75% 10/12/17 ACm 80% matc, 20% fclst, c, SA, trace mica, quartz; Silt: non-plastic; 2.5% 1/2 H brownish gray, dry, no rxn w/ HCl, PS, ¹⁰⁻¹²⁻¹⁷ 10-12-17 fines downward, v. thin laminae of silt throughout and increasing in number toward contact at 195.7; silt laminae somewhat deformed. 195.7-199.7: Sandy Gravel (SG): 50% Gravel, 50% Sand; Gravel: vfn-peb-10cm, 70% fclst, 30% matc, SR-R, dom. atzile; Sand: f-vr; 40% fclst, 30% matc, SA, qtz, trace mica; 2.5% 1/3 H olive brown dry, no rxn w/ HCl, PS, massive, Fe staining throughout, dark blackish staining around cobbles at 196.2-196.4; 10/12/17 ACm 196.2-196.4; 10/12/17 ACm	Core 34 - B39X90 194.7-199.7
200	Core 35		200.5-205.5: Sandy Gravel (SG): 40% gravel, 60%	Core 35 - B39X92 200.5-205.5

Reported By:

T. Clark/A. McGuire
Print NameGeologist/Geologist
TitleZ. Z. / Angela McGuire
Signature10-5-17/10-27-17
Date

BOREHOLE LOG (Cont.)				Page 9 of 10
Well ID: C9513		Well Name: NA		Date: 10/12/17
Location: 216-S-13 Crib				
Depth (ft)	Sample	Graphic Log	Sample Description: Sediment Classification, Grain Size Distribution, Color, Moisture Content, Sorting, Angularity, Mineralogy, Particle Size, Reaction to HCl, Other	Comments: Depth of Casing, Drilling Method, Sampling Method, Sampler Size, Water Level, Other
202.5	Core 35		200.5-205.5-Sandy Gravel (SG): 40% Gravel, 60% Sand; Gravel: fpeb-10 cm, 70% felsic, 30% mafic, SR, med-coarse peb dominate especially through 202.0-209.5 bgs; Sand: f-c, dom-m, 80% felsic, 20% mafic, SA, qtz, trace mica;	Core 35-B39X92 200.5-205.5
205			2.5x6/2 H brownish gray, PS, dry, massive, no rxn w/ HCl, slight Fe staining 209.2, unconsolidated, band of red clay/mud at 203.0	
207.5	Core 36		205.5-208.8: Sandy Gravel (SG): 50% Gravel, 50% Sand; Gravel: fpeb-9 cm, 90% felsic, 10% mafic, quartzite, SR; Sand: vf-c, dom-med, 85% felsic, 15% mafic; SA: 2.5x6/2 H brownish grey, dry, massive, PS, Fe staining around pebbles/cobbles	Core 36-B39X94 205.5-210.5
210			208.8-210.5: Sandy Gravel (SG): 30% Gravel, 70% Sand; Gravel: fpeb-4 cm, 75% felsic, 25% mafic, SA-SR, dom-SR; Sand: 80% felsic, 20% mafic, vf-m, trace mica, SA: 2.5x6/2 H brownish grey, dry, massive, PS, Fe staining at 209.2, Fe staining at transitional contact at 208.8 bgs. layer of pink gravel (f. peb) size at 210.2 bgs.	
212.5				
215				
217.5				
220				

Cores to PNL (10-27-17)

Reported By:	Geologist		
A. McGuire	Angela McGuire	10-27-17	
Print Name	Title	Signature	Date

BOREHOLE LOG (Cont.)				Page <u>10</u> of <u>10</u>
Well ID: C9513		Well Name: NA	Location: 216-S-13 Crib	
Depth (ft)	Sample	Graphic Log	Sample Description: Sediment Classification, Grain Size Distribution, Color, Moisture Content, Sorting, Angularity, Mineralogy, Particle Size, Reaction to HCl, Other	Comments: Depth of Casing, Drilling Method, Sampling Method, Sampler Size, Water Level, Other
222.5			Cores to PNAAL 10.22.17	
225	Core 40		224.7-226.6: Sand(s): 100% s, vfn-m, predom f; 70% of, 30% w/s, SA, 2.5' 1/2 ft. brnsh gray, dry, no rxn w/ HCl, rhythmites from 225.5-226.6.	Core 40 224.7-229.7; aliquot @ 225.0-227.0
227.5			226.6-229.7: Silty Sandy Gravel (ms(n): 40% g, 30% s, 30% m; Gravel: vfn prb-10cm SR-A, 50% fels, 50% maf (qtz, basalt); sand: vfn-vc, 60% of, 40% m, SA, PS; m: non-plast; dry; no rxn w/ HCl; 2.5' 1/3 ft. yel. brn. v. consolidated. → @ 227.2-227.3: thin sand bed (5cm); 70% of, 30% m, vfn-m, 2.5' 1/2 ft. brnsh gray, dry, rhythmites	
230	Core 41		230.4-235.4: Silty Sandy Gravel (ms(n): 40% g, 30% s, 30% m; Gravel: vfn prb-10cm SR-A, 50% fels (qtz), 50% maf (bas); sand: vfn-vc, SA, PS, 60% of, 40% m; m: non-plast; dry, no rxn w/ HCl; 2.5' 1/3 ft. yel. brn. v. consolidated; minor Fe-staining. → @ 232.1-232.3: thin (6cm) sand interbed: 100% of, 70% of, 30% m, vfn-m, 2.5' 1/2 ft. brnsh gray; dry; massive.	Core 41 230.4-235.4 Aliquot @ 231.4-234.4
232.5				
235	Core 42		235.5-240.5: Sandy Gravel (SG): 40% gravel, 55% sand, 5% silt; Gravel: fpeb-7cm, 70% felsic, 30% mafic, SR, qtzite, basalt; Sand: f-c, 75% felsic, 25% mafic, SA, qtz, trace mica; Silt: non-plastic, present at lens at 237.5 bgs; 2.5' 1/3 ft. yellowish brown, dry, massive, no rxn w/ HCl, PS, Fe staining throughout especially around cobbles 235.5-236.2 and 237.0-237.17 bgs. 238.5-240.5 bgs.	Core 42 - B39XD0 235.5-240.5
237.5				
240			Total Depth 240.5 bgs	
Reported By: T. Clark / A. McGuire Geologist / Geologist Signature: Z. Z. / Angela Melvin Date: 10.6.17 / 10.27.17				

APPENDIX C

Work Order Chains of Custody

12/22/2017

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CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F17-009-389	PAGE 1 OF 1
COLLECTOR Roger Fitzgerald Jr. /CHPRC	COMPANY CONTACT FITZGERALD, SL	TELEPHONE NO. 373-7495	PROJECT COORDINATOR FITZGERALD, SL	PRICE CODE 8H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C9513, Core 1	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20	FIELD LOGBOOK NO. HNF-N-645	SAF NO. F17-009	AIR QUALITY ☐	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO. NA	FIELD LOGBOOK NO. HNF-N-645	ACTUAL SAMPLE DEPTH 45-47.5	COA 302632		ORIGINAL
SHIPPED TO RJ LEE - GEOTECHNICAL	OFFSITE PROPERTY NO. NA		BILL OF LADING/AIR BILL NO. NA		2.8°C
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	PRESERVATION NEW		6 Months		
SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TO: B39W19 N/A	HOLDING TIME		6 Months		
	TYPE OF CONTAINER		Liners/G jar		
	NO. OF CONTAINER(S)		1		
VOLUME		6L			
SAMPLE ANALYSIS		GEOLOGIC LITHOLOGY;			
SAMPLE NO. B39WV0	MATRIX* SOIL	SAMPLE DATE JUL 10 2017	SAMPLE TIME 1110		

CHAIN OF POSSESSION		SIGN/PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Roger Fitzgerald Jr. /CHPRC	DATE/TIME JUL 10 2017	RECEIVED BY/STORED IN Deni Woeble CHPRC	DATE/TIME JUL 10 2017	TRVL-17-119; SAMPLE B39WV0 AND B39WV1 PORTION B	
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 20 2017	RECEIVED BY/STORED IN CHPRC	DATE/TIME SEP 20 2017		
RELINQUISHED BY/REMOVED FROM Dan Woeble CHPRC	DATE/TIME SEP 20 2017	RECEIVED BY/STORED IN CHPRC	DATE/TIME SEP 20 2017		
RELINQUISHED BY/REMOVED FROM Planned for storage	DATE/TIME 10/13/17	RECEIVED BY/STORED IN Patricia Sica	DATE/TIME 10/13/17		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE			
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY			

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FSR ID = FSR44413

TRVL NUM = TRVL-17-119

A-6003-618 (REV 2)



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A-6003-618 (REV 2)

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				FLZ-009-395	PAGE 1 OF 1
COLLECTOR Roger Fiteaz Jr ICHPRC	COMPANY CONTACT FITZGERALD, SL	TELEPHONE NO. 373-7495	PROJECT COORDINATOR FITZGERALD, SL	PRICE CODE 8H	DATA TURNAROUND 30 Days / 30 Days		
SAMPLING LOCATION C9513, Core 3	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20		SAF NO. F17-009	AIR QUALITY ☐			
ICE CHEST NO. NA	FIELD LOGBOOK NO. HNF-N-645 5-50	ACTUAL SAMPLE DEPTH 50-55 ft	COA 302632	METHOD OF SHIPMENT GOVERNMENT VEHICLE			
SHIPPED TO RJ LEE - GEOTECHNICAL	OFFSITE PROPERTY NO. NA		BILL OF LADING/AIR BILL NO. NA				
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR/ATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION Cooler N/CNC	HOLDING TIME 6 Months				
	TYPE OF CONTAINER Liners/G Jar						
	NO. OF CONTAINER(S) 1						
	VOLUME 12L						
	SAMPLE ANALYSIS GEOLOGIC LITHOLOGY;						
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B39WV6		JUL 10 2017	1259				

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM CHPRC	DATE/TIME JUL 10 2017 1520	RECEIVED BY/STORED IN SSU-1	DATE/TIME JUL 10 2017 1520	TRVL-17-119	
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 20 2017 0730	RECEIVED BY/STORED IN CHPRC	DATE/TIME SEP 20 2017 0730		
RELINQUISHED BY/REMOVED FROM Dan Woelke	DATE/TIME SEP 20 2017 0900	RECEIVED BY/STORED IN Dan Woelke	DATE/TIME SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM CHPRC	DATE/TIME SEP 20 2017 0830	RECEIVED BY/STORED IN CHPRC	DATE/TIME SEP 20 2017 0830		
RELINQUISHED BY/REMOVED FROM Kane Skov	DATE/TIME SEP 20 2017 0830	RECEIVED BY/STORED IN Kane Skov	DATE/TIME SEP 20 2017 0830		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
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	

12/22/2017

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F17-009-397	PAGE 1 OF 1
COLLECTOR Roger Friesz Jr. ICHPRC		COMPANY CONTACT FITZGERALD, SL		TELEPHONE NO. 373-7495	PROJECT COORDINATOR FITZGERALD, SL	PRICE CODE 8H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C9513, Core 4		PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20		FIELD LOGBOOK NO. HNF-N-645 5-50	ACTUAL SAMPLE DEPTH 55-60 ft	SAF NO. F17-009	
ICE CHEST NO. NA		OFFSITE PROPERTY NO. NA		BILL OF LADING/AIR BILL NO. NA		METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO RJ LEE - GEOTECHNICAL		PRESERVATION 6 Months		COA 302632		ORIGINAL	
MATRIX* A=Air DL=Drum L=Liquid DS=Drum S=Soil O=Oil L=Liquid S=Soil SF=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	HOLDING TIME 6 Months		NO. OF CONTAINER(S) 1		VOLUME 12L	
		TYPE OF CONTAINER Lines/6 Jar		SAMPLE ANALYSIS GEOLOGIC LITHOLOGY			
SAMPLE NO. B39WV8	MATRIX* ✓	SAMPLE DATE JUL 10 2017	SAMPLE TIME 1320				



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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Roger Frieser Jr. CHPRC	DATE/TIME JUL 10 2017 1520	RECEIVED BY/STORED IN SSU-1	DATE/TIME JUL 10 2017 1520		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0730	Dan Woahle CHPRC	SEP 20 2017 0730		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
Dan Woahle CHPRC	SEP 20 2017 0900	James R. Stegenga	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
James R. Stegenga	SEP 20 2017 0900	Patrick Dine	SEP 20 2017 0900		
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-17-119

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FSR ID = FSR44417

TRVL NUM = TRVL-17-119

A-6003-618 (REV 2)

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F17-009-399	PAGE 1 OF 1				
COLLECTOR	Roger Fienetz Jr. /CHPRC	COMPANY CONTACT	FITZGERALD, SL	TELEPHONE NO.	373-7495	PROJECT COORDINATOR	FITZGERALD, SL	PRICE CODE	8H	DATA TURNAROUND	
SAMPLING LOCATION	C9513, Core 5	PROJECT DESIGNATION	200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20				SAF NO.	F17-009	AIR QUALITY	☐ 30 Days / 30 Days	
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	H20F-N-445-5 / 50				ACTUAL SAMPLE DEPTH	60-65'	COA	302632	
SHIPPED TO	RJ LEE - GEOTECHNICAL	OFFSITE PROPERTY NO.	NA				BILL OF LADING / AIR BILL NO.	NA			
MATRIX*	A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Issue 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/ATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.								
SAMPLE NO.	MATRIX*	PRESERVATION	Cool <=6C								
		HOLDING TIME	6 Months								
		TYPE OF CONTAINER	Liners/G jar								
		NO. OF CONTAINER(S)	1								
SPECIAL HANDLING AND/OR STORAGE	RADIOACTIVE TAG TO-89HW9 OF 7/10/12	VOLUME	12L								
		SAMPLE ANALYSIS	GEOLOGIC LITHOLOGY;								
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B39WW0	SOIL	✓	JUL 10 2017	1424					✓		

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CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	TRVL-17-119	
<i>Roger Friesz Jr</i>	<i>JUL 10 2017</i>	<i>SSU-1</i>	<i>JUL 10 2017 1530</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<i>CHPCC</i>	<i>SEP 20 2017 0730</i>	<i>Dan Moehle</i>	<i>SEP 20 2017 0730</i>		
<i>SSU-1</i>	<i>SEP 20 2017 0730</i>	<i>CHPCC</i>	<i>SEP 20 2017 0730</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<i>Dan CHPCC</i>	<i>SEP 20 2017 0900</i>	<i>SSU-1</i>	<i>SEP 20 2017 0900</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<i>NAME SKY RISE</i>	<i>SEP 20 2017 1345</i>	<i>NAME SKY RISE</i>	<i>SEP 20 2017 0900</i>		
<i>RELINQUISHED BY/REMOVED FROM</i>	<i>DATE/TIME</i>	<i>RECEIVED BY/STORED IN</i>	<i>DATE/TIME</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<i>RELINQUISHED BY/REMOVED FROM</i>	<i>DATE/TIME</i>	<i>RECEIVED BY/STORED IN</i>	<i>DATE/TIME</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<i>RELINQUISHED BY/REMOVED FROM</i>	<i>DATE/TIME</i>	<i>RECEIVED BY/STORED IN</i>	<i>DATE/TIME</i>		
<i>RELINQUISHED BY/REMOVED FROM</i>	<i>DATE/TIME</i>	<i>RECEIVED BY/STORED IN</i>	<i>DATE/TIME</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<i>RELINQUISHED BY/REMOVED FROM</i>	<i>DATE/TIME</i>	<i>RECEIVED BY/STORED IN</i>	<i>DATE/TIME</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<i>RELINQUISHED BY/REMOVED FROM</i>	<i>DATE/TIME</i>	<i>RECEIVED BY/STORED IN</i>	<i>DATE/TIME</i>		
<i>RELINQUISHED BY/REMOVED FROM</i>	<i>DATE/TIME</i>	<i>RECEIVED BY/STORED IN</i>	<i>DATE/TIME</i>		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	

12/22/2017

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F17-009-401	PAGE 1 OF 1
COLLECTOR Roger Fitzerald Jr. CHPRC		COMPANY CONTACT FITZGERALD, SL	TELEPHONE NO. 373-7495	PROJECT COORDINATOR FITZGERALD, SL	PRICE CODE 8H
SAMPLING LOCATION C9513, Core 6		PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20		SAF NO. F17-009	AIR QUALITY ☐
ICE CHEST NO. NA		FIELD LOGBOOK NO. HNF-N-645 5-SL	ACTUAL SAMPLE DEPTH 65'-70' Fth	COA 302632	METHOD OF SHIPMENT GOVERNMENT VEHICLE
SHIPPED TO RJ LEE - GEOTECHNICAL		OFFSITE PROPERTY NO. NA	BILL OF LADING/AIR BILL NO. NA	ORIGINAL 2.8°C	
MATRIX* A=Air DL=Drum L=Liquid DS=Drum S=Solid O=Oil S=Soil SF=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/ATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION None	HOLDING TIME 6 Months	NO. OF CONTAINER(S) 1	VOLUME 12L
SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE-THE TO: B39WWT 7/11/17		SAMPLE ANALYSIS GEOLOGIC LITHOLOGY;			
SAMPLE NO. B39WW2	MATRIX* ✓	SAMPLE DATE JUL 11 2017	SAMPLE TIME 0815	✓	

CHAIN OF POSSESSION		SIGN/PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Roger Fitzerald Jr. CHPRC	DATE/TIME JUL 11 2017 1415	RECEIVED BY/STORED IN SSU-1	DATE/TIME JUL 11 2017 1415	TRVL-17-119	
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 20 2017 0730	RECEIVED BY/STORED IN Dan Woelke CHPRC	DATE/TIME SEP 20 2017 0730		
RELINQUISHED BY/REMOVED FROM Dan Woelke	DATE/TIME SEP 20 2017 0902	RECEIVED BY/STORED IN JAMES R. HAYES	DATE/TIME SEP 20 2017 0902		
RELINQUISHED BY/REMOVED FROM JAMES R. HAYES	DATE/TIME SEP 19 2017 0830	RECEIVED BY/STORED IN KIMBLE B. BROWN	DATE/TIME SEP 19 2017 0830		
RELINQUISHED BY/REMOVED FROM KIMBLE B. BROWN	DATE/TIME SEP 19 2017 0830	RECEIVED BY/STORED IN KIMBLE B. BROWN	DATE/TIME SEP 19 2017 0830		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		

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FSR ID = FSR44419

TRVL NUM = TRVL-17-119

A-6003-618 (REV 2)

SAMPLE NO.		MATRIX*	SAMPLE DATE	SAMPLE TIME
B39VWW4	SOIL	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 RADIOACTIVE TIE TO B39VWWS <i>7/11/17</i>	JUL 11 2017	0901
SAMPLE ANALYSIS			NO. OF CONTAINER(S)	1
			VOLUME	12L
			TYPE OF CONTAINER	Liners/G Jar
			PRESERVATION	6 Months
			HOLDING TIME	

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CH2MHILL Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F17-009-409	PAGE 1 OF 1
COLLECTOR	Roger Friesz Jr. /CHPRC	COMPANY CONTACT	FITZGERALD, SL	TELEPHONE NO.	373-7495
SAMPLING LOCATION	C9513, Core 10	PROJECT DESIGNATION	200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20		
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	HNF-N-645	ACTUAL SAMPLE DEPTH	5 - 51 75 - 80
SHIPPED TO	RJ LEE - GEOTECHNICAL	OFFSITE PROPERTY NO.	NA	COA	302632
		BILL OF LADING/AIR BILL NO.	NA		
		PRICE CODE		8H	DATA
		AIR QUALITY		☐	TURNAROUND
		METHOD OF SHIPMENT		GOVERNMENT VEHICLE	30 Days / 30 Days
		ORIGINAL			
		2.6°C			

MATRIX*		PRESERVATION		COOL <=6C
POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.		HOLDING TIME	6 Months	
		TYPE OF CONTAINER	Liners/G jar	
		NO. OF CONTAINER(S)	1	
		VOLUME	6L	
SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B39WW9 <i>meec 7/11/17</i>		SAMPLE ANALYSIS	GEOLOGIC LITHOLOGY;	
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B39WX0	SOIL ✓	JUL 11 2017	0929	✓
B39WX2	SOIL			





W709089

meec

7/11/17

CHAIN OF POSSESSION	SIGN / PRINT NAMES	SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Roger Fries Jr. CHPRC	DATE/TIME JUL 11 2017 1435	RECEIVED BY/STORED IN SSU-1	DATE/TIME JUL 11 2017 1935
RELINQUISHED BY/REMOVED FROM <i>[Signature]</i> SSU-1	DATE/TIME SEP 20 2017 0730	RECEIVED BY/STORED IN Dan Woehle CHPRC	DATE/TIME SEP 20 2017 0730
RELINQUISHED BY/REMOVED FROM Dan Woehle CHPRC	DATE/TIME SEP 20 2017 0900	RECEIVED BY/STORED IN <i>[Signature]</i> Jedson Pineda Hernandez	DATE/TIME SEP 20 2017 0900
RELINQUISHED BY/REMOVED FROM James Skay Bice Jedson Pineda Hernandez	DATE/TIME SEP 20 2017 1345	RECEIVED BY/STORED IN AS- 9/21/17 1345	DATE/TIME SEP 20 2017 1345
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-17-119; SAMPLE B39WX0 & B39WX1 PORTION A, SAMPLE B39WX2 PORTION B

PRINTED ON 4/26/2017

FSR ID = FSR44422

TRVL NUM = TRVL-17-119

A-6003-618 (REV 2)

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A-6003-618 (REV 2)

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F17-009-415	PAGE 1 OF 1			
COLLECTOR	Roger Friesz Jr. /CHPRC	COMPANY CONTACT	FITZGERALD, SL	TELEPHONE NO.	373-7495	PROJECT COORDINATOR	FITZGERALD, SL	PRICE CODE	8H	DATA TURNAROUND
SAMPLING LOCATION	C9513, Core 12	PROJECT DESIGNATION	200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20			SAF NO.	F17-009	AIR QUALITY	☐	30 Days / 30 Days
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	HNF-N-645 <u>5-51</u>	ACTUAL SAMPLE DEPTH	85-90 <u>ft</u>	COA	302632	METHOD OF SHIPMENT	GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO	RJ LEE - GEOTECHNICAL	OFFSITE PROPERTY NO.	NA	BILL OF LADING/AIR BILL NO.	NA	2.8°C				
MATRIX*	A=Air DL=Drum LI=Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SF=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION HOLDING TIME TYPE OF CONTAINER NO. OF CONTAINER(S) VOLUME SAMPLE ANALYSIS	6 Months Lined/G Jar 1 12L GEOLOGIC LITHOLOGY;	\$10,912.017 JUL 11 2017 1144 ✓ N/A mec 7/11/17 SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TO: B39W6 N/A mec 7/11/17					
SAMPLE NO.	B39WX7	MATRIX*	SOIL	SAMPLE DATE	JUL 11 2017	SAMPLE TIME	1144			



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12/22/2017

CH2MHILL Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F17-009-417	PAGE 1 OF 1
COLLECTOR Roger Phares Jr. ICPRC	COMPANY CONTACT FITZGERALD, SL	TELEPHONE NO. 373-7495	PROJECT COORDINATOR FITZGERALD, SL	PRICE CODE 8H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C9513, Core 13	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20	FIELD LOGBOOK NO. HNF-N-645 5 - 51	ACTUAL SAMPLE DEPTH 90 - 95 ft	SAF NO. F17-009	AIR QUALITY ☐
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	COA 302632	BILL OF LADING/AIR BILL NO. NA	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO RJ LEE - GEOTECHNICAL	ORIGINAL				

MATRIX* A=Air DL=Drum L=Liquid DS=Drum S=Solid O=Oil S=Sediment T=Tissue V=Vegetation W=Water WT=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.	PRESERVATION Cool <=6C	HOLDING TIME 6 Months	TYPE OF CONTAINER Liners/G Jar	NO. OF CONTAINER(S) 1	VOLUME 12L	SAMPLE ANALYSIS GEOLOGIC LITHOLOGY
SPECIAL HANDLING AND/OR STORAGE -RADIOACTIVE TIE TO-B39WX9- MDC 7/11/17							
SAMPLE NO. B39WX9	MATRIX* SOIL	SAMPLE DATE JUL 11 2017	SAMPLE TIME 1349				

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CHAIN OF POSSESSION

SIGN / PRINT NAMES

SPECIAL INSTRUCTIONS

TRVL-17-119

RELINQUISHED BY/REMOVED FROM Roger Phares Jr. ICPRC	DATE/TIME JUL 11 2017 1435	RECEIVED BY/STORED IN SSU-1	DATE/TIME JUL 11 2017 1435
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 20 2017 0730	RECEIVED BY/STORED IN Dan Woohle CHPRC	DATE/TIME SEP 20 2017 0730
RELINQUISHED BY/REMOVED FROM Dan Woohle CHPRC	DATE/TIME SEP 20 2017 0900	RECEIVED BY/STORED IN KUNO SKYRIS	DATE/TIME SEP 20 2017 0900
RELINQUISHED BY/REMOVED FROM KUNO SKYRIS	DATE/TIME SEP 20 2017 0900	RECEIVED BY/STORED IN STICKER	DATE/TIME SEP 20 2017 0900
RELINQUISHED BY/REMOVED FROM STICKER	DATE/TIME SEP 20 2017 0900	RECEIVED BY/STORED IN STICKER	DATE/TIME SEP 20 2017 0900
RELINQUISHED BY/REMOVED FROM STICKER	DATE/TIME SEP 20 2017 0900	RECEIVED BY/STORED IN STICKER	DATE/TIME SEP 20 2017 0900

TITLE

DATE/TIME

DISPOSED BY

DATE/TIME

PRINTED ON 4/24/2017

FSR ID = FSR44426

TRVL NUM = TRVL-17-119

A-6003-618 (REV 2)



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CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F17-009-419	PAGE 1 OF 1	
COLLECTOR Larry Rossini ICPRC		COMPANY CONTACT FITZGERALD, SL		TELEPHONE NO. 373-7495		PROJECT COORDINATOR FITZGERALD, SL	PRICE CODE 8H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C9513, Core 14		PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20		SAF NO. F17-009		AIR QUALITY ☐	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
ICE CHEST NO. NA		FIELD LOGBOOK NO. HNF-1645-12-1		ACTUAL SAMPLE DEPTH 95ft 100ft		COA 302632		
SHIPPED TO RJ LEE - GEOTECHNICAL		OFFSITE PROPERTY NO. NA		BILL OF LADING/AIR BILL NO. NA		ORIGINAL		
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WT=Wire 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.		PRESERVATION 6 Months		2/17/17		
		HOLDING TIME		6 Months				
		TYPE OF CONTAINER		Liners/6 Jar				
		NO. OF CONTAINER(S)		1				
		VOLUME		6L				
SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE THE TO: 829WV6 2/17/17		SAMPLE ANALYSIS		GEOLOGIC LITHOLOGY;				
SAMPLE NO.		MATRIX*		SAMPLE DATE		SAMPLE TIME		
B39WY1		SOIL		JUL 17 2017		1038		✓
B39WY3		SOIL		JUL 17 2017		1038		✓

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2.8°C

CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS	
RECEIVED BY / REMOVED FROM <i>James Ryan</i>	DATE/TIME JUL 17 2017 1340	RECEIVED BY / STORED IN SSU-1	DATE/TIME JUL 17 2017 1340	TRVL-17-119; SAMPLE B39WY1 & B39WY2 PORTION A, SAMPLE B39WY3 PORTION B	
RELINQUISHED BY / REMOVED FROM	DATE/TIME	RECEIVED BY / STORED IN	DATE/TIME		
<i>SSU #1</i>	SEP 20 2017 0730	<i>Don Woelke</i>	SEP 20 2017 0730		
RELINQUISHED BY / REMOVED FROM <i>Don Woelke</i>	DATE/TIME SEP 20 2017 0700	RECEIVED BY / STORED IN	DATE/TIME		
RELINQUISHED BY / REMOVED FROM <i>CHPRC</i>	DATE/TIME SEP 20 2017 0700	RECEIVED BY / STORED IN	DATE/TIME		
RELINQUISHED BY / REMOVED FROM <i>James Ryan</i>	DATE/TIME SEP 20 2017 0830	RECEIVED BY / STORED IN <i>Atchafalaya</i>	DATE/TIME SEP 20 2017 0830		
RELINQUISHED BY / REMOVED FROM	DATE/TIME	RECEIVED BY / STORED IN	DATE/TIME		
RELINQUISHED BY / REMOVED FROM	DATE/TIME	RECEIVED BY / STORED IN	DATE/TIME		
RELINQUISHED BY / REMOVED FROM	DATE/TIME	RECEIVED BY / STORED IN	DATE/TIME		
RELINQUISHED BY / REMOVED FROM	DATE/TIME	RECEIVED BY / STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD			DATE/TIME	

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F17-009-423	PAGE 1 OF 1			
COLLECTOR	Larry Rosane CH2MPC	COMPANY CONTACT	FITZGERALD, SL	TELEPHONE NO.	373-7495	PROJECT COORDINATOR	FITZGERALD, SL	PRICE CODE	8H	DATA
SAMPLING LOCATION	C9513, Core 15	PROJECT DESIGNATION	200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20			SAF NO.	F17-009	AIR QUALITY	☐	TURNAROUND 30 Days / 30 Days
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	HMF-N-645 12-1			ACTUAL SAMPLE DEPTH	100ft - 105	COA	302632	METHOD OF SHIPMENT GOVERNMENT VEHICLE
SHIPPED TO	RJ LEE - GEOTECHNICAL	OFFSITE PROPERTY NO.	NA			BILL OF LADING/AIR BILL NO.	2.8°C			
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/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.		PRESERVATION Good - 6 Months NO. OF CONTAINER(S) 1 VOLUME 12L		HOLDING TIME 6 Months TYPE OF CONTAINER Lines/G jar		SAMPLE ANALYSIS GEOLOGIC LITHOLOGY;		
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE - R-0-032415 7/17/12						
B39WY6	SOIL	JUL 17 2017	1150	COPY V0709089						

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CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY / REMOVED FROM CHPRC	DATE/TIME JUL 17 2017 1340	RECEIVED BY / STORED IN SSU-1	DATE/TIME JUL 17 2017 1340	TRVL-17-119	
RELINQUISHED BY / REMOVED FROM Sen #1	DATE/TIME SEP 20 2017 0730	RECEIVED BY / STORED IN Dan Woeltje	DATE/TIME SEP 20 2017 0730		
RELINQUISHED BY / REMOVED FROM Dan Woeltje CHPRC	DATE/TIME SEP 20 2017 0900	RECEIVED BY / STORED IN CHPRC	DATE/TIME SEP 20 2017 0900		
RELINQUISHED BY / REMOVED FROM [Signature]	DATE/TIME SEP 20 2017 1015	RECEIVED BY / STORED IN [Signature]	DATE/TIME SEP 20 2017 1015		
RELINQUISHED BY / REMOVED FROM	DATE/TIME	RECEIVED BY / STORED IN	DATE/TIME		
RELINQUISHED BY / REMOVED FROM	DATE/TIME	RECEIVED BY / STORED IN	DATE/TIME		
RELINQUISHED BY / REMOVED FROM	DATE/TIME	RECEIVED BY / STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F17-009-425	PAGE 1 OF 1
COLLECTOR Ed Kauer CHPRC	COMPANY CONTACT FITZGERALD, SL	TELEPHONE NO. 373-7495	PROJECT COORDINATOR FITZGERALD, SL	PRICE CODE 8H	DATA TURNAROUND 30 Days / 30 Days		
SAMPLING LOCATION C9513, Core 16	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20	FIELD LOGBOOK NO. NA	ACTUAL SAMPLE DEPTH FT 105.5 - 110.5	SAF NO. F17-009	AIR QUALITY ☐		
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	COA 302632	BILL OF LADING/AIR BILL NO. NA	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL	2.80c	
SHIPPED TO RJ LEE - GEOTECHNICAL							

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	*Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR/JATTA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	6 Months		Liners/G Jar	1	12L	GEOLOGIC LITHOLOGY;
SAMPLE NO.							
B39WY8	✓ SOIL						

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Ed Kauer CHPRC	DATE/TIME AUG 22 2017 1455	RECEIVED BY/STORED IN SSU-1	DATE/TIME AUG 22 2017 1455	TRVL-17-119	
RELINQUISHED BY/REMOVED FROM Dan Woehle CHPRC	DATE/TIME SEP 20 2017 0730	RECEIVED BY/STORED IN CHPRC	DATE/TIME SEP 20 2017 0730		
RELINQUISHED BY/REMOVED FROM Dan Woehle CHPRC	DATE/TIME SEP 20 2017 0900	RECEIVED BY/STORED IN CHPRC	DATE/TIME SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	
PRINTED ON 7/17/2017 FSR ID = FSR44430 TRVL NUM = TRVL-17-119 A-6003-618 (REV 2)					

12/22/2017

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F17-009-433	PAGE 1 OF 1
COLLECTOR Ed Kauer CHPRC	COMPANY CONTACT FITZGERALD, SL	TELEPHONE NO. 373-7495	PROJECT COORDINATOR FITZGERALD, SL	PRICE CODE 8H	DATA TURNAROUND 30 Days / 30 Days		
SAMPLING LOCATION C9513, Core 20	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20	FIELD LOGBOOK NO. HNF-N-645 5 - 66	ACTUAL SAMPLE DEPTH 124.8 - 129.8 ft	COA 302632	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL	
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	BILL OF LADING/AIR BILL NO. NA					
SHIPPED TO RJ LEE - GEOTECHNICAL							
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/DATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.		PRESERVATION Cool <=6C	HOLDING TIME 6 Months	TYPE OF CONTAINER Lines/G jar	NO. OF CONTAINER(S) 2	VOLUME 6L
SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO 839X18			SAMPLE ANALYSIS GEOLOGIC LITHOLOGY;				
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME				
B39X18	SOIL	08-23-17	0845	127.3 to 129.8			
B39X20	SOIL	08-23-17	0845	124.8 to 127.3			

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12/22/17

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Ed Kauer CHPRC	DATE/TIME 8-23-17 1500	RECEIVED BY/STORED IN SSU-1	DATE/TIME 8-23-17 1500	TRVL-17-119; SAMPLE B39X18 & B39X19 PORTION A, SAMPLE B39X20 PORTION B	
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 21 2017 1115	RECEIVED BY/STORED IN Frank Hall	DATE/TIME SEP 21 2017 1115		
RELINQUISHED BY/REMOVED FROM Frank Hall CHPRC	DATE/TIME SEP 21 2017 1300	RECEIVED BY/STORED IN Janae Key	DATE/TIME SEP 21 2017 1300		
RELINQUISHED BY/REMOVED FROM Janae Key	DATE/TIME SEP 21 2017 1015	RECEIVED BY/STORED IN Patrick Brie	DATE/TIME SEP 21 2017 1015		
RELINQUISHED BY/REMOVED FROM Patrick Brie	DATE/TIME SEP 21 2017 1015	RECEIVED BY/STORED IN Patrick Brie	DATE/TIME SEP 21 2017 1015		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME		
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME		

PRINTED ON 4/26/2017

FSR ID = FSR44434

TRVL NUM = TRVL-17-119

A-6003-618 (REV 2)

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A-6003-618 (REV 2)

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F17-009-439	PAGE 1 OF 1
COLLECTOR	Ed Kauer CHPRC	COMPANY CONTACT	FITZGERALD, SL	TELEPHONE NO.	373-7495
SAMPLING LOCATION	C9513, Core 22	PROJECT DESIGNATION	200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20		
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	HNF-N-645 <u>5</u> - <u>66</u>	ACTUAL SAMPLE DEPTH	135.2 - 140.2 ft
SHIPPED TO	RJ LEE - GEOTECHNICAL	OFFSITE PROPERTY NO.	NA	COA	302632
BILL OF LADING/AIR BILL NO.	NA	PRICE CODE	8H	AIR QUALITY	☐ 30 Days / 30 Days
METHOD OF SHIPMENT	GOVERNMENT VEHICLE	ORIGINAL	2.8°C		
MATRIX*	A=Air DL=Drum L=Liquid DS=Drum Solids L=Liquid O=Oil S=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	PRESERVATION	Good None	DATE	9/20/17
POSSIBLE SAMPLE HAZARDS/REMARKS	*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/DATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.				
SPECIAL HANDLING AND/OR STORAGE	RADIOACTIVE TIE TO: B39X42 8-23-17				
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	VOLUME	NO. OF CONTAINER(S)
B39X43	SOIL	✓	08-23-17	1015	✓
					12L
					GEOLGIC LITHOLOGY;

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CHAIN OF POSSESSION		SIGN/PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	TRVL-17-119	
Ed Kauer CHPRC	8-23-17 1500	SSU-1	8-23-17 1500		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0730	Dan Woelke CHPRC	SEP 20 2017 0730		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
Dan Woelke CHPRC	SEP 20 2017 0900	SSU-1	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
SSU-1	SEP 20 2017 0900	Dan Woelke CHPRC	SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED			

CH2MHILL Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
COLLECTOR Ed Kauer CHPRC	COMPANY CONTACT FITZGERALD, SL	TELEPHONE NO. 373-7495	PROJECT COORDINATOR FITZGERALD, SL	F17-009-441	PAGE 1 OF 1
SAMPLING LOCATION C9513, Core 23	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20		PRICE CODE 8H	AIR QUALITY ☐	DATA TURNAROUND 30 Days / 30 Days
ICE CHEST NO. NA	FIELD LOGBOOK NO. 4NF-N-645 5 - 64	ACTUAL SAMPLE DEPTH 140.5 - 145.5 ft	COA 302632	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO RJ LEE - GEOTECHNICAL	OFFSITE PROPERTY NO. NA	BILL OF LADING/AIR BILL NO. NA	ORIGINAL		
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.		PRESERVATION Cool <=6C	NO. OF CONTAINER(S) 12	
SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: B39X44 98 8-23-17		SAMPLE ANALYSIS GEOLOGIC LITHOLOGY,	HOLDING TIME 6 Months	VOLUME 6L	
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B39X45	SOIL	08-23-17	1125	143.0 to 145.5 ft	
B39X47	SOIL	08-23-17	1125	140.5 to 143.0	

W709089



COPY

11/13/17

12/22/2017

11/13/17

CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

TRVL-17-119, SAMPLE B39X45 & B39X46 PORTION A, SAMPLE B39X47 PORTION B

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Ed Kauer CHPRC	8-23-17 1500	SSU-1	8-23-17 1500
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
SSU-1	SEP 21 2017 1115	Frank Hall CHPRC	SEP 21 2017 1115
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Frank Hall CHPRC	SEP 21 2017 1300	James Lee CHPRC	SEP 21 2017 1300
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
James Lee CHPRC	SEP 21 2017 1300	Patricia Brice CHPRC	SEP 21 2017 1300
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Patricia Brice CHPRC	10/26/17 1015		10/26/17 1015
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

TITLE

DATE/TIME

LABORATORY SECTION	RECEIVED BY
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD

DISPOSED BY

DATE/TIME

PRINTED ON 4/26/2017

FSR ID = FSR44438

TRVL NUM = TRVL-17-119

A-6003-618 (REV 2)

CH2M Hill Plateau Remediation Company						CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						
COLLECTOR		COMPANY CONTACT		TELEPHONE NO.		PROJECT COORDINATOR		F17-009-445		PAGE 1 OF 1		
Ed Kauer CHPRC		FITZGERALD, SL		373-7495		FITZGERALD, SL						
SAMPLING LOCATION		PROJECT DESIGNATION		FIELD LOGBOOK NO.		ACTUAL SAMPLE DEPTH		PRICE CODE		DATA TURNAROUND		
C9513, Core 24		200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20		HNF-N-645 5 - 64		145.1 - 150.1		8H		30 Days / 30 Days		
ICE CHEST NO.		NO. OF CONTAINER(S)		PRESERVATION		COA		AIR QUALITY		METHOD OF SHIPMENT		
NA		1		Cool <=6C		302632 <td colspan="2">☐</td> <td colspan="2">GOVERNMENT VEHICLE</td>		☐		GOVERNMENT VEHICLE		
SHIPPED TO		SAMPLE DATE		DATE/TIME		BILL OF LADING/AIR BILL NO.				ORIGINAL		
RJ LEE - GEOTECHNICAL		08-23-17		1200		NA				2.6°C		
MATRIX*		POSSIBLE SAMPLE HAZARDS/ REMARKS		PRESERVATION		HOLDING TIME		TYPE OF CONTAINER		VOLUME		
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other		*Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.		Cool <=6C		6 Months		Lines/G jar		12L		
SPECIAL HANDLING AND/OR STORAGE		RADIOACTIVE MATERIAL - 039K49		GEOLOGIC LITHOLOGY:								
SAMPLE NO.		MATRIX*		SAMPLE DATE		SAMPLE TIME						
B39X50		SOIL		08-23-17		1200						

COPY

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TRVL-17-119

CH2M Hill Plateau Remediation Company			CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	FIT-009-455	PAGE 1 OF 1	
Larry Roseano RCH/PLC	FITZGERALD, SL	373-7495	FITZGERALD, SL	PRICE CODE 8H	DATA TURNAROUND 30 Days / 30 Days	
SAMPLING LOCATION	PROJECT DESIGNATION					
C9513, Core 28	200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20					
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT		
NA	HNF-N-645 5 - 108	165.3 - 170.3	302632	GOVERNMENT VEHICLE		
SHIPPED TO	OFFSITE PROPERTY NO.	BILL OF LADING/AIR BILL NO.				
RJ LEE - GEOTECHNICAL	NA	NA				
MATRIX*	POSSIBLE SAMPLE HAZARDS/REMARKS	PRESERVATION				
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/DATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	HOLDING TIME	6 Months			
		TYPE OF CONTAINER	Liners/G Jar			
		NO. OF CONTAINER(S)	1			
		VOLUME	12L			
	SPECIAL HANDLING AND/OR STORAGE	SAMPLE ANALYSIS	GEOLOGIC LITHOLOGY:			
	RADIOACTIVE HT TO: B39X72					
	8-28-17					
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B39X72	SOIL	8-28-17	1035			

CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM CHPRC Jenny Boone	DATE/TIME AUG 28 2017 1510	RECEIVED BY/STORED IN SSU-1	DATE/TIME AUG 28 2017 1510	TRVL-17-119	
RELINQUISHED BY/REMOVED FROM SEP 20 2017 0730	DATE/TIME SEP 20 2017 0730	RECEIVED BY/STORED IN CHPRC Dan Woehle	DATE/TIME SEP 20 2017 0730		
RELINQUISHED BY/REMOVED FROM Dan Woehle	DATE/TIME SEP 20 2017 0900	RECEIVED BY/STORED IN Jenny Boone	DATE/TIME SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM CHPRC Jenny Boone	DATE/TIME SEP 20 2017 1015	RECEIVED BY/STORED IN Patrick Brown	DATE/TIME SEP 20 2017 1015		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F17-009-457	PAGE 1 OF 1		
COLLECTOR	Larry Rosane FCHPMC	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE	8H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION	C9513, Core 29	PROJECT DESIGNATION	200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20	SAF NO.	AIR QUALITY	☐	
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT		
SHIPPED TO	RJ LEE - GEOTECHNICAL	HNF-N-645	5' - 68"	302632	GOVERNMENT VEHICLE		ORIGINAL
		OFFSITE PROPERTY NO.	170.5 - 175.5	BILL OF LADING/AIR BILL NO.			
MATERIALITY*				NA			2.6°C

		PRESERVATION		Cool <=6C
		HOLDING TIME	6 Months	
		TYPE OF CONTAINER	Liners/G jar	
		NO. OF CONTAINER(S)	2	
		VOLUME	6L	
SPECIAL HANDLING AND/OR STORAGE		SAMPLE ANALYSIS	GEOLOGIC LITHOLOG;	
RADIOACTIVE HAZARDS: 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				
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B39X74 ✓	SOIL	8-28-17	1145	✓
B39X76 ✓	SOIL	8-28-17	1145	✓
				173.0 to 175.5
				170.5 to 173.0

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM CHPRC <i>Sam Brown</i>	DATE/TIME AUG 28 2017 1510	RECEIVED BY/STORED IN \$SU-1	DATE/TIME AUG 28 2017 1510	TRVL-17-119; SAMPLE B39X74 & B39X75 PORTION A, SAMPLE B39X76 PORTION B	
RELINQUISHED BY/REMOVED FROM \$SU-1	DATE/TIME SEP 20 2017 0730	RECEIVED BY/STORED IN Dan Woahle CHPRC <i>Ally Hink</i>	DATE/TIME SEP 20 2017 0730		
RELINQUISHED BY/REMOVED FROM Dan Woahle	DATE/TIME SEP 20 2017 0900	RECEIVED BY/STORED IN <i>Jameson</i>	DATE/TIME SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM <i>Jameson</i>	DATE/TIME SEP 20 2017 0945	RECEIVED BY/STORED IN <i>Jameson</i>	DATE/TIME SEP 20 2017 0945		
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		

PRINTED ON 4/26/2017

FSR ID = FSR44452

TRVL NUM = TRVL-17-119

A-6003-618 (REV 2)

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F17-009-461	PAGE 1 OF 1
COLLECTOR Larry Rosano IC/PRC	COMPANY CONTACT FITZGERALD, SL 373-7495	TELEPHONE NO.	PROJECT COORDINATOR FITZGERALD, SL	PRICE CODE 8H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C9513, Core 30	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20	FIELD LOGBOOK NO. H N-645 2 - 68	ACTUAL SAMPLE DEPTH 175.1 ~ 180.1	SAF NO. F17-009	AIR QUALITY ☐
ICE CHEST NO. NA	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA 302632	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO RJ LEE - GEOTECHNICAL	OFFSITE PROPERTY NO. NA	BILL OF LADING/AIR BILL NO. NA	2.8c		
MATRIX* A=Air DL=Drum L=Liquid PS=Drum Solids L=Liquid O=Oil S=Soil SF=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/ATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. SPECIAL HANDLING AND/OR STORAGE *RADIOACTIVE TO: B39X79- 8-28-17		PRESERVATION HOLDING TIME 6 Months TYPE OF CONTAINER Liners/G Jar NO. OF CONTAINER(S) 1 VOLUME 12L SAMPLE ANALYSIS GEOLOGIC LITHOLOGY,		
SAMPLE NO. B39X79	MATRIX* ✓	SAMPLE DATE 8-28-17	SAMPLE TIME 1815	✓	

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM IC/PRC Jenny Kneave	DATE/TIME AUG 28 2017 1510	RECEIVED BY/STORED IN 330-211	DATE/TIME AUG 28 2017 1510	TRVL-17-119	
RELINQUISHED BY/REMOVED FROM 330-211	DATE/TIME SEP 20 2017 0730	RECEIVED BY/STORED IN Dan Woble CHPRC	DATE/TIME SEP 20 2017 0730		
RELINQUISHED BY/REMOVED FROM Dan Woble CHPRC	DATE/TIME SEP 20 2017 0730	RECEIVED BY/STORED IN Jenny Kneave CHPRC	DATE/TIME SEP 20 2017 0730		
RELINQUISHED BY/REMOVED FROM Jenny Kneave CHPRC	DATE/TIME SEP 20 2017 0730	RECEIVED BY/STORED IN Patrick Brien CHPRC	DATE/TIME SEP 20 2017 0730		
RELINQUISHED BY/REMOVED FROM Patrick Brien CHPRC	DATE/TIME SEP 20 2017 0730	RECEIVED BY/STORED IN 10/24/17 1015	DATE/TIME 10/24/17 1015		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	
PRINTED ON 4/24/2017 FSR ID = FSR44454 TRVL NUM = TRVL-17-119 A-6003-618 (REV 2)					

CH2M Hill Plateau Remediation Company			CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST				F17-009-463		PAGE 1 OF 1	
COLLECTOR	Larry Rosano KHPRC	COMPANY CONTACT	FITZGERALD, SL	TELEPHONE NO.	373-7495	PROJECT COORDINATOR	FITZGERALD, SL	PRICE CODE	8H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION	C9513, Core 31	PROJECT DESIGNATION	200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20	SAF NO.	F17-009	AIR QUALITY	☐			
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	14NF-N-645 <u>5</u> - <u>108</u>	ACTUAL SAMPLE DEPTH	54	COA	302632	METHOD OF SHIPMENT GOVERNMENT VEHICLE		
SHIPPED TO	RJ LEE - GEOTECHNICAL	OFFSITE PROPERTY NO.	NA	BILL OF LADING / AIR BILL NO.	NA	ORIGINAL				
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/MTA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION	Cool <=6C					
		HOLDING TIME	6 Months							
		TYPE OF CONTAINER	Liners/G Jar							
		NO. OF CONTAINER(S)	1							
		VOLUME	12L							
		SAMPLE ANALYSIS	GEOLOGIC LITHOLOGY,							
SPECIAL HANDLING AND/OR STORAGE										
RADIOACTIVE TO: B39X81										
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME							
B39X81	SOIL	8-28-17	1410							

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CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM <i>Larry Rosenberg</i> ICHPRC	DATE/TIME AUG 28 2017 1510	RECEIVED BY/STORED IN <i>SSU-1</i>	DATE/TIME AUG 28 2017 1510	TRVL-17-119
RELINQUISHED BY/REMOVED FROM <i>[Signature]</i>	DATE/TIME SEP 21 2017 1115	RECEIVED BY/STORED IN <i>[Signature]</i> ICHPRC	DATE/TIME SEP 21 2017 1115	
RELINQUISHED BY/REMOVED FROM <i>Frank Hall</i> ICHPRC	DATE/TIME SEP 21 2017 1300	RECEIVED BY/STORED IN <i>[Signature]</i> ICHPRC	DATE/TIME SEP 21 2017 1300	
RELINQUISHED BY/REMOVED FROM <i>[Signature]</i>	DATE/TIME SEP 21 2017 1300	RECEIVED BY/STORED IN <i>[Signature]</i> ICHPRC	DATE/TIME SEP 21 2017 1300	
RELINQUISHED BY/REMOVED FROM <i>[Signature]</i>	DATE/TIME SEP 21 2017 1300	RECEIVED BY/STORED IN <i>[Signature]</i> ICHPRC	DATE/TIME SEP 21 2017 1300	
RELINQUISHED BY/REMOVED FROM <i>[Signature]</i>	DATE/TIME SEP 21 2017 1300	RECEIVED BY/STORED IN <i>[Signature]</i> ICHPRC	DATE/TIME SEP 21 2017 1300	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME	

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	F17-009-465	PAGE 1 OF 1
SAMPLING LOCATION	PROJECT DESIGNATION	SAF NO.	PRICE CODE	DATA TURNAROUND	
C9513, Core 32	200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20	F17-009	8H	30 Days / 30 Days	
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	METHOD OF SHIPMENT	GOVERNMENT VEHICLE	ORIGINAL
NA	INF-N-645 <u>5</u> - <u>108</u>	184.9 - 189.9 <u>FT</u>	COA		
302632	OFFSITE PROPERTY NO.	NA	BILL OF LADING/AIR BILL NO.		
NA					
SHIPPED TO					
RJ LEE - GEOTECHNICAL					
MATRIX*	PRESERVATION	Cool <= 6C			
A=Air					
DL=Drum					
Liquids					
DS=Drum					
Solids					
L=Liquid					
O=Oil					
S=Soil					
SE=Settlement					
T=Tissue					
V=Vegetation					
W=Water					
X=Other					
	HOLDING TIME	6 Months			
	TYPE OF CONTAINER	Lines/G Jar			
	NO. OF CONTAINER(S)	1			
	VOLUME	12L			
	SAMPLE ANALYSIS	GEOLOGIC LITHOLOGY			
	SPECIAL HANDLING AND/OR STORAGE				
	PRODUCTIVE TO: 039982				
	<u>8-28-17</u>				
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME		
B39X83	✓ SOIL	8-28-17	1445	✓	

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/ REMOVED FROM <i>CHPDC Jany Lorne</i>	DATE/TIME <i>AUG 28 2017 1810</i>	RECEIVED BY/ STORED IN <i>SSU-1</i>	DATE/TIME <i>AUG 28 2017 1510</i>	<i>TRVL-17-119</i>	
RELINQUISHED BY/ REMOVED FROM <i>SEP 21 2017 1115</i>	DATE/TIME <i>SEP 21 2017 1115</i>	RECEIVED BY/ STORED IN <i>Frank Hall</i>	DATE/TIME <i>SEP 21 2017 1115</i>		
RELINQUISHED BY/ REMOVED FROM <i>Frank Hall</i>	DATE/TIME <i>SEP 21 2017 1300</i>	RECEIVED BY/ STORED IN <i>CHPDC</i>	DATE/TIME <i>SEP 21 2017 1300</i>		
RELINQUISHED BY/ REMOVED FROM <i>James Kou</i>	DATE/TIME <i>SEP 21 2017 1015</i>	RECEIVED BY/ STORED IN <i>James Kou</i>	DATE/TIME <i>SEP 21 2017 1300</i>		
RELINQUISHED BY/ REMOVED FROM <i>James Kou</i>	DATE/TIME <i>SEP 21 2017 1015</i>	RECEIVED BY/ STORED IN <i>Patric Brta</i>	DATE/TIME <i>SEP 21 2017 1015</i>		
RELINQUISHED BY/ REMOVED FROM	DATE/TIME	RECEIVED BY/ STORED IN	DATE/TIME		
RELINQUISHED BY/ REMOVED FROM	DATE/TIME	RECEIVED BY/ STORED IN	DATE/TIME		
RELINQUISHED BY/ REMOVED FROM	DATE/TIME	RECEIVED BY/ STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F17-009-467	PAGE 1 OF 1
COLLECTOR	Jeff Trucksen CHPRC	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE
		FITZGERALD, SL	373-7495	FITZGERALD, SL	8H
SAMPLING LOCATION		PROJECT DESIGNATION		SAF NO.	AIR QUALITY
C9513, Core 33		200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20		F17-009	☐
ICE CHEST NO.		FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
NA		HNF-N-645 <u>5 - 69</u>	<u>190.4 - 195.4</u>	302632	GOVERNMENT VEHICLE
SHIPPED TO		OFFSITE PROPERTY NO.		BILL OF LADING/AIR BILL NO.	ORIGINAL
RJ LEE - GEOTECHNICAL		NA		NA	
MATRIX*					

MATRIX*		PRESERVATION		Cool <= 6C
*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.		HOLDING TIME	6 Months	
		TYPE OF CONTAINER	Liners/5 jar	
		NO. OF CONTAINER(S)	4 2	
		VOLUME	6L	
SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE 8-29-17		SAMPLE ANALYSIS	GEOLOGIC LITHOLOGY;	
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				
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B39X85	SOIL	8-29-17	0835	✓
B39X87	SOIL	8-29-17	0835	✓
				192.9 to 195.4
				190.4 to 192.9

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Jeff Hackett CHPRC	DATE/TIME 8-29-17 1447	RECEIVED BY/STORED IN	DATE/TIME 8-29-17 1447	TRVL-17-119; SAMPLE B39X85 & B39X86 PORTION A, SAMPLE B39X87 PORTION B	
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 20 2017 0732	RECEIVED BY/STORED IN Dan Woehle CHPRC	DATE/TIME SEP 20 2017 0730		
RELINQUISHED BY/REMOVED FROM Dan Woehle CHPRC	DATE/TIME SEP 20 2017 0900	RECEIVED BY/STORED IN N. Hackett	DATE/TIME SEP 20 2017 0900		
RELINQUISHED BY/REMOVED FROM Dan Woehle CHPRC	DATE/TIME SEP 20 2017 0945	RECEIVED BY/STORED IN N. Hackett	DATE/TIME SEP 20 2017 0945		
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		

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FSR ID = FSR44445

TRVL NUM = TRVL-17-119

A-6003-618 (REV 2)

CH2MHILL Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F17-009-471	PAGE 1 OF 1			
COLLECTOR	Jeff Tuckman CH2M	COMPANY CONTACT	FITZGERALD, SL	TELEPHONE NO.	373-7495	PROJECT COORDINATOR	FITZGERALD, SL	PRICE CODE	8H	DATA TURNAROUND
SAMPLING LOCATION	C9513, Core 34	PROJECT DESIGNATION	200-DY-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20			SAF NO.	F17-009	AIR QUALITY	☐	30 Days / 30 Days
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	F17-N-645 <u>5</u> - <u>62</u>			ACTUAL SAMPLE DEPTH	54	COA	302632	METHOD OF SHIPMENT GOVERNMENT VEHICLE
SHIPPED TO		OFFSITE PROPERTY NO.	NA			BILL OF LADING/AIR BILL NO.	ORIGINAL			
RJ LEE - GEOTECHNICAL										8.1°C
MATRIX*	A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SF=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS	*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/ATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.			PRESERVATION	Cool <=6C	W709089		
		HOLDING TIME	6 Months							
		TYPE OF CONTAINER	Liners/G Jar							
		NO. OF CONTAINER(S)	1							
		VOLUME	12L							
		SAMPLE ANALYSIS	GEOLOGIC LITHOLOGY;							
SPECIAL HANDLING AND/OR STORAGE	-RADIOACTIVE TO TO: B39X89- 8-29-17									
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME							
B39X90	SOIL	08-29-17	0915	✓						

CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Jeff Thackston CHPRC	DATE/TIME 8-26-17 141	RECEIVED BY/STORED IN STU-1	DATE/TIME 8-29-17 147	TRVL-17-119	
RELINQUISHED BY/REMOVED FROM SEP 21 2017 1115	DATE/TIME	RECEIVED BY/STORED IN Frank Hall CHPRC	DATE/TIME SEP 21 2017 1115		
RELINQUISHED BY/REMOVED FROM Frank Hall CHPRC	DATE/TIME SEP 21 2017 1300	RECEIVED BY/STORED IN P. Kelly CHPRC	DATE/TIME SEP 21 2017 1300		
RELINQUISHED BY/REMOVED FROM James Stuy CHPRC	DATE/TIME 10/17/17 0830	RECEIVED BY/STORED IN P. Kelly CHPRC	DATE/TIME SEP 21 2017 1300		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN P. Kelly CHPRC	DATE/TIME SEP 21 2017 1300		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	

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CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				F17-009-473	PAGE 1 OF 1
COLLECTOR Jeff Tucker CHPRC	COMPANY CONTACT FITZGERALD, SL	TELEPHONE NO. 373-7495	PROJECT COORDINATOR FITZGERALD, SL	PRICE CODE 8H	DATA TURNAROUND 30 Days / 30 Days		
SAMPLING LOCATION C9513, Core 35	PROJECT DESIGNATION 200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20	FIELD LOGBOOK NO. NF-N-645 5 - 62	SAF NO. F17-009	AIR QUALITY ☐	METHOD OF SHIPMENT GOVERNMENT VEHICLE		
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	ACTUAL SAMPLE DEPTH 200.5 - 205.5 ft	COA 302632	ORIGINAL			
SHIPPED TO RJ LEE - GEOTECHNICAL	BILL OF LADING/AIR BILL NO. NA						
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	PRESERVATION Cool <=6C		HOLDING TIME 6 Months		NO. OF CONTAINER(S) 1		VOLUME 12L
POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.		SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE-TO-B39X92 28 8-29-17		SAMPLE ANALYSIS GEOLOGIC LITHOLOGY,			
SAMPLE NO. B39X92	MATRIX* SOIL	SAMPLE DATE 08-29-17	SAMPLE TIME 1135	✓			

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CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Jeff Tucker CHPRC	DATE/TIME 8-29-17 1447	RECEIVED BY/STORED IN SSU-1	DATE/TIME 8-29-17 1447	TRVL-17-119	
RELINQUISHED BY/REMOVED FROM SSU-1	DATE/TIME SEP 21 2017 1115	RECEIVED BY/STORED IN CHPRC	DATE/TIME SEP 21 2017 1115		
RELINQUISHED BY/REMOVED FROM CHPRC	DATE/TIME SEP 21 2017 1300	RECEIVED BY/STORED IN CHPRC	DATE/TIME SEP 21 2017 1300		
RELINQUISHED BY/REMOVED FROM James Stoy	DATE/TIME 10/12/2017 0800	RECEIVED BY/STORED IN James Stoy	DATE/TIME 10/12/2017 0800		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	

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FSR ID = FSR44448

TRVL NUM = TRVL-17-119

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				FL7-009-475	PAGE 1 OF 1			
COLLECTOR	Jeff Tuckesen CHPRC	COMPANY CONTACT	FITZGERALD, SL	TELEPHONE NO.	373-7495	PROJECT COORDINATOR	FITZGERALD, SL	PRICE CODE	8H	DATA
SAMPLING LOCATION	C9513, Core 36	PROJECT DESIGNATION	200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20			SAFE NO.	FL7-009	AIR QUALITY	☐	TURNAROUND
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	INF-N-645 <u>5</u> - <u>69</u>			ACTUAL SAMPLE DEPTH	205.5 - 210.5	COA	302632	METHOD OF SHIPMENT
SHIPPED TO	RJ LEE - GEOTECHNICAL	OFFSITE PROPERTY NO.	NA			BILL OF LADING/AIR BILL NO.	NA			
MATRIX*	A-Air DL=Drum L=Liquid DS=Drum S=Solids L=Liquid O=Oil S=Soil SF=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS	*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/ATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.							
SAMPLE NO.	MATRIX*	PRESERVATION	Cool <=6C	W709089						
		HOLDING TIME	6 Months							
		TYPE OF CONTAINER	Uners/G Jar							
		NO. OF CONTAINER(S)	1							
		VOLUME	12L							
		SAMPLE ANALYSIS	GEOLGIC LITHOLOGY,							
SPECIAL HANDLING AND/OR STORAGE		RADIOACTIVE TIE TO: B39X93								
82 8.19.17										
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME							
B39X94	✓	SOIL	08-29-17 1415	✓						

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CH2M/Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F17-009-485	PAGE 1 OF 1
COLLECTOR	IVAN SCHAEFFER CHPRC	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE
		FITZGERALD, SL	373-7495	FITZGERALD, SL	8H
SAMPLING LOCATION		PROJECT DESIGNATION		SAFE NO.	AIR QUALITY
C9513, Core 40		200-DV-1 Operable Unit Characterization of Waste Sites Sampling - Soil 20		F17-009	☐
ICE CHEST NO.		FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	METHOD OF SHIPMENT
NA		HNF-N-645 <u>5</u> - <u>2d</u>	<u>4 1/2</u> <u>8-30-17</u>	302632	GOVERNMENT VEHICLE
SHIPPED TO		OFFSITE PROPERTY NO.		BILL OF LADING/AIR BILL NO.	
RJ LEE - GEOTECHNICAL		NA	224.7 to 229.7 ft	NA	
					DATA TURNAROUND 30 Days / 30 Days
					ORIGINAL

MATRIX*		PRESERVATION		Cool <= 6C
Air				
DL=Drum				
Liquids				6 Months
DS=Drum				
Solids				
L=Liquid				Liners/G Jar
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/LATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.		NO. OF CONTAINER(S) 1		
		VOLUME 12L		
SPECIAL HANDLING AND/OR STORAGE RADIOACTIVE TIE TO: 839K65 <i>See</i> 8-30-17		SAMPLE ANALYSIS		GEOLOGIC LITHOLOGY;
SAMPLE NO. B39/C6		MATRIX* SOIL	SAMPLE DATE AUG 30 2017	SAMPLE TIME 11 50

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM SCHAEFFER	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
<i>Paul Schaeffer</i>	AUG 30 2017 1936		
RELINQUISHED BY/REMOVED FROM CHPRC	DATE/TIME	RECEIVED BY/STORED IN Dan Woehle CHPRC	DATE/TIME
<i>SEP 20 2017 0730</i>	<i>SEP 20 2017 0730</i>		
RELINQUISHED BY/REMOVED FROM <i>SSU-1</i>	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Dan Woehle CHPRC	SEP 20 2017 0900	<i>J. Stogklee</i>	SEP 20 2017 0900
RELINQUISHED BY/REMOVED FROM CHPRC	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
<i>SEP 20 2017 0900</i>	<i>SEP 20 2017 0900</i>		
RELINQUISHED BY/REMOVED FROM <i>James Stogklee</i>	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
<i>SEP 20 2017 0900</i>	<i>SEP 20 2017 0900</i>		
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-17-119

Had to cut off 5 inches of liner at the shoe end to be melting.

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FSR ID = FSR44460

TRVL NUM = TRVL-17-119

A-6003-618 (REV 2)

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SPECIAL INSTRUCTIONS
TRVL-17-119

A-6003-618 (REV 2)

