

May 28, 2015

Analytical Data Package Prepared For
CH2M Hill Plateau Remediation

Chemical Analysis By
TestAmerica Inc

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Assigned Laboratory Code: TARL

Data Package Contains 34 Pages

Report No.: 65930

Results in this report relate only to the sample(s) analyzed.

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
WC0050	S15-004	B30N19 DUP	J5D100418-3	M6KNX1AD	M6KNX1AD	5100066
WC0051	X15-026	B30MD9	J5D130422-1	M6K0H1AA	M6K0H1AA	5104026
		B30MD9 DUP	J5D130422-1	M6K0H1AD	M6K0H1AD	5104026
		B30MF1	J5D130422-4	M6K0L1AA	M6K0L1AA	5103033
		B30MF5	J5D130422-3	M6K0K1AA	M6K0K1AA	5103033
		B30MF7	J5D100417-1	M6KNT1AA	M6KNT1AA	5100065
		B30MF7 DUP	J5D100417-1	M6KNT1AF	M6KNT1AF	5100065
		B30MF9	J5D100416-2	M6KNP1AA	M6KNP1AA	5100069
		B30MH1	J5D100416-1	M6KNM1AA	M6KNM1AA	5100069
		B30MH4	J5D100416-3	M6KNQ1AA	M6KNQ1AA	5100069
		B30MH6	J5D100416-4	M6KNR1AA	M6KNR1AA	5100069
		B30MJ1	J5D130422-2	M6K0J1AA	M6K0J1AA	5104026
		B30MJ3	J5D130422-5	M6K0M1AA	M6K0M1AA	5103033
		B30MJ7	J5D130422-6	M6K0N1AA	M6K0N1AA	5103033
		B30MJ9	J5D100424-1	M6KQW1AA	M6KQW1AA	5100068
		B30MJ9 DUP	J5D100424-1	M6KQW1AE	M6KQW1AE	5100068
		B30MK1	J5D100420-2	M6KN51AA	M6KN51AA	5100069
		B30MK3	J5D100420-1	M6KN41AA	M6KN41AA	5100069
		B30MK6	J5D100420-9	M6KPD1AA	M6KPD1AA	5100066
		B30MK7	J5D100420-4	M6KN71AA	M6KN71AA	5100069
		B30MK9	J5D100420-3	M6KN61AA	M6KN61AA	5100069
		B30ML3	J5D100420-5	M6KN81AA	M6KN81AA	5100069
		B30ML5	J5D100420-6	M6KN91AA	M6KN91AA	5100069
		B30ML8	J5D100420-10	M6KPE1AA	M6KPE1AA	5100066
	X15-026	B30ML9	J5D100420-7	M6KPA1AA	M6KPA1AA	5100069
		B30MM1	J5D100420-8	M6KPC1AA	M6KPC1AA	5100069

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Report No.: 65930

Results in this report relate only to the sample(s) analyzed.

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
WC0051	X15-026	B30MM1 DUP	J5D100420-8	M6KPC1AC	M6KPC1AC	5100069
		B30MM3	J5D100420-11	M6KPF1AA	M6KPF1AA	5100066
		B30MM9	J5D130426-1	M6K1A1AA	M6K1A1AA	5104025
		B30MM9 DUP	J5D130426-1	M6K1A1AE	M6K1A1AE	5104025
		B30MN1	J5D130422-7	M6K0P1AA	M6K0P1AA	5103033
		B30MN3	J5D130422-8	M6K0Q1AA	M6K0Q1AA	5103033
WC0055		B30MJ6 DUP	J5D130425-4	M6K061AC	M6K061AC	5103033

Sample Date: 4/10/2015

Receipt Date: 4/10/2015

Data Deliverable: 5/28/2015

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

Reviewed and Approved:



Digitally signed by Whitney Ritari
Date: 2015.05.28 18:47:18 -07'00'

Project Manager



Certificate of Analysis

CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop – R3-60
Richland, WA 99352

May 28, 2015

Attention: Scot Fitzgerald

SAF Number	:	X15-026
Date SDG Closed	:	April 24, 2015
Number of Samples	:	Twenty six (26)
Sample Type	:	Water
SDG Number	:	WC0051
Data Deliverable	:	30- Day/ Summary

CASE NARRATIVE

I. Introduction

Between April 10, 2015 and April 13, 2015, twenty six samples were received at TestAmerica (TARL). Upon receipt, the samples were assigned laboratory ID numbers to correspond with the CH2M specific IDs.

II. Sample Receipt

The chain of custodies for three of the samples originally requested both anions and radiochemistry analysis. The analysis was divided between two SDG's. For more information refer to the SIR that is attached to this report. All other samples were received in good condition and no other anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Chemical Analysis

Hexavalent Chromium by EPA method 7196A

Anions, Ion Chromatography by EPA method 300.0

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample

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CH2M Hill Plateau Remediation Company

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(LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Chemical Analysis

Hexavalent Chromium by EPA method 7196A

No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

Anions, Ion Chromatography by EPA method 300.0

No analytical or quality issues were noted. The sample results and associated batch QC results are within contractual requirements.

We certify that this data package is in compliance with the SOW, both technically and for completeness, including a full description of, explanation of, and corrective actions for, any and all deviations, from either the analyses requested or the case narrative requested. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager (or designee) and the laboratory's client services representative as verified by their signatures on this report.

SAMPLE ISSUE RESOLUTION

SIR NUM SDR15-273
REV NUM 0
DATE INITIATED 4/14/2015

SAMPLE EVENT INFORMATION

SAF NUM(S) X15-026
OPERABLE UNIT(S) 100-BC-5
PROJECT(S) CERC15
SAMPLE EVENT TITLE(S) CERC15
LABORATORY TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES 3
SAMPLE NUMBERS B30MF7, B30MJ9, B30MM9
SAMPLE MATRIX WATER
COLLECTION DATE -
SDG NUM WC0051, W07096

ISSUE BACKGROUND

CLASS Sample Management Issues
TYPE Other SDM Issue (specify)
DESCRIPTION The lab received samples requesting both radiochemistry and ion chromatography under the same COC and sample number.

DISPOSITION

DESCRIPTION SMR proposes that the lab "split" the COCs by appending each sample number and a copy of each effected chain with an "A". Copies of the appended COCs will be sent to SMR. In addition, if the same issue arises in the future those COCs will be handled in the same manner.

JUSTIFICATION

Final Disposition: Accept proposed resolution.

SUBMITTED BY: Scot Fitzgerald DATE: 04/14/2015
ACCEPTED BY: Sandra Seger DATE: 04/14/2015

CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#
X15-026-049

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Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X15-026	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303271
Project Title	100-BC-5 RI, APRIL 2015	Logbook No.	HNF-N-506 70/59	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days	Offsite Property No.	N/A

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Hold Time	Holding Time	Preservative
B30MH1	Y	W	4-10-15	1207	1x60-mL aG	7196_CR6: COMMON		24 Hours	Cool <=6C
B30MF9	N	W	4-10-15	1207	1x60-mL aG	7196_CR6: COMMON		24 Hours	Cool <=6C

SPECIAL INSTRUCTIONS

M6 KNJM
M6 KNJP

Total Activity Exemption: Yes No

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D5D100416
SDG# WCO05

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
J.R. Aguilar/CHPRC			APR 10 2015 1330	J. Priesz, TAGL			APR 10 2015 1330	S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solids, DL = Drum Liquids, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	

Disposal Method (e.g., Return to customer, per lab procedure, used in process)

Disposed By

Date/Time

FINAL SAMPLE DISPOSITION

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

X15-026-050

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Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X15-026	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303271
Project Title	100-BC-5 RI, APRIL 2015	Logbook No.	HNF-N-506 70 / 59	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days	Offsite Property No.	N/A

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

SPECIAL INSTRUCTIONS

Hold Time: _____ Total Activity Exemption: Yes No

Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30MH4	N	4-10-15	1108	1x60-mL aG	ML6KNQ	24 Hours	Cool <=6C
B30MH6	Y	4-10-15	1108	1x60-mL aG	ML6KNR	24 Hours	Cool <=6C



JF 411015
J5D00
J5D100416
SDG# W0051

Relinquished By	J.R. Aguilar/CHPRC	Date/Time	APR 10 2015 1330	Received By	J. Friesz, TARL	Date/Time	APR 10 2015 1330
Relinquished By		Date/Time		Received By		Date/Time	
Relinquished By		Date/Time		Received By		Date/Time	
Relinquished By		Date/Time		Received By		Date/Time	

Disposited By: _____ Date/Time: _____

Disposal Method (e.g., Return to customer, per lab procedure, used in process)

Matrix *	S	SE	SO	SL	W	O	A	Soil	Sediment	Solid	Sludge	Water	Oil	Air	Drum Solids	Drum Liquids	Tissue	Wipe	Liquid	Vegetation	Other

Date/Time Received: 4/10/15 1330 Container GM Screen Result: (Airlock) 40 cpm Initials [J]
Sample GM Screen Result (Sample Receiving) 20 cpm Initials [J]

Client: PGW SDG #: W00 WCO051 SAF #: X15-026 NA []
JF4/10/15

Lot Number: J50100416

Chain of Custody # J X15-026-049;050
JF4/10/15

Shipping Container ID or Air Bill Number : _____ NA [J]

Samples received inside shipping container/cooler/box Yes [J] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [J]
- 2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [J]
- 3. Cooler temperature: 3.3 ORICE NA []
- 4. Vermiculite/packing materials is NA [J] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [J] No []
- 6. Number of samples received (Each sample may contain multiple bottles): 4
- 7. Containers received: 4x60ml bag

- 8. Sample holding times exceeded? NA [] Yes [] No [J]
- 9. Samples have: _____ tape _____ hazard labels J custody seals J appropriate sample labels
- 10. Matrix: _____ A (FLT, Wipe, Solid, Soil) J I (Water) _____ S (Air, Niosh 7400) _____ T (Biological, Ni-63)

11. Samples:
J are in good condition _____ are leaking _____ are broken
_____ have air bubbles (Only for samples requiring no head space) _____ Other _____

12. Sample pH appropriate for analysis requested Yes [J] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO₃ added and pH after addition on table)

- 13. Were any anomalies identified in sample receipt? Yes [] No [J]
- 14. Description of anomalies (include sample numbers): NA [J] _____

15. Sample Location, Sample Collector Listed on COC? * Yes [J] No []
*For documentation only. No corrective action needed.

16. Additional Information: NIA

[] Client/Courier denied temperature check. [J] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: _____ Date: 4/10/15

Client Notification needed? Yes [] No [J] Date: _____
By: _____
Person contacted: _____

WMP No action necessary; process as is
Project Manager Whitney Mitani Date 4/13/15

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CH2M Hill Plateau Remediation Company		C.O.C. # X15-026-046	
Collector: Scott King/CHPRC		Telephone No. 509-376-4650	
SAF No. X15-026		Purchase Order/Charge Code 303271	
Project Title: 100-BC-5 RI, APRIL 2015		Ice Chest No. N/A	
Shipped To (Lab): TestAmerica Incorporated, Richland		Bill of Lading/Air Bill No. N/A	
Protocol: CERCLA		Offsite Property No. N/A	
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		SPECIAL INSTRUCTIONS: Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Sample No. B30MD9	Filter: N	Date: APR 13 2015	Time: 1008
No./Type Container: 1x500-mL P	Sample Analysis: COMMON	Holding Time: 48 Hours	Preservative: Cool <=6C

J5D130422
wcc051
ml6K0H



Relinquished By: S.W. King/CHPRC	Print: C.C. HOFFMAN/CHPRC	Sign: [Signature]	Date/Time: APR 13 2015 1155	Matrix * S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solids, DL = Drum Liquids, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, X = Other
Relinquished By: C.C. HOFFMAN/CHPRC	Print: J. Bock, TARL	Sign: [Signature]	Date/Time: APR 13 2015 1515	
Relinquished By: [Signature]	Print: [Signature]	Sign: [Signature]	Date/Time: APR 13 2015 1515	
Relinquished By: [Signature]	Print: [Signature]	Sign: [Signature]	Date/Time: APR 13 2015 1515	

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CH2MHill Plateau Remediation Company		C.O.C. # X15-026-053	
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		Page 1 of 1	
Collector S.W. King/CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650	
SAF No. X15-026	Sampling Origin Hanford Site	Purchase Order/Charge Code 303271	
Project Title 100-BC-5 RI, APRIL 2015	Logbook No. HNF-N-506 70/100	Ice Chest No. N/A	
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A	
Protocol CERCLA	Priority: 30 Days	Offsite Property No. N/A	
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		SPECIAL INSTRUCTIONS Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample No. B30MJ1	Filter N	Date APR 13 2015 1120	Sample Analysis 300.0_ANIONS_IC: COMMON
	No./Type Container 1x500-ml P	Time 1120	Holding Time 48 Hours
			Preservative Cool <=6C

550130422
wcc051

Relinquished By S.W. King/CHPRC	Print 	Date/Time APR 13 2015 1117	Received By C.G. HOFFMAN/CHPRC	Print 	Date/Time APR 13 2015 1115	Matrix * S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquids SO = Solid T = Tissue SL = Sludge WI = Wipe W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By C.G. HOFFMAN/CHPRC	Print J. Bock, TARL	Date/Time APR 13 2015 1515	Received By 	Date/Time APR 13 2015 1515		
Relinquished By	Print	Date/Time	Received By	Date/Time		
Relinquished By	Print	Date/Time	Received By	Date/Time		

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CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # X15-026-047	
				Page 1 of 1	
Collector	S.W. King/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X15-026	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303271
Project Title	100-BC-5 RI, APRIL 2015	Logbook No.	HNF-N-506 70/60	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days	Offsite Property No.	N/A
POSSIBLE SAMPLE HAZARDS/REMARKS		SPECIAL INSTRUCTIONS		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
*** ** 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					

Sample No.	Filter	* Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B30MF5	Y	APR 13 2015	1008	1x60-mL aG	mlekok	24 Hours	Cool <=6C
B30MF1	N	Y	Y	1x60-mL aG	mlekol	24 Hours	Cool <=6C

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w20051

Relinquished By S.W. King/CHPRC	Print <i>[Signature]</i>	Received By C.G. HOFFMAN/CHPRC	Print <i>[Signature]</i>	Date/Time APR 13 2015 1155	Date/Time APR 13 2015 1155	Matrix * S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquids SO = Solid T = Tissue SL = Sludge W = Wipe W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By C.G. HOFFMAN/CHPRC	Print <i>[Signature]</i>	Received By J. Friesz, TARL	Print <i>[Signature]</i>	Date/Time APR 13 2015 515	Date/Time APR 13 2015 515	
Relinquished By		Received By		Date/Time	Date/Time	
Relinquished By		Received By		Date/Time	Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time

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CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # X15-026-054 Page 1 of 1	
Collector S.W. King/CSPRC	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650			
SAF No. X15-026	Sampling Origin Hanford Site	Purchase Order/Charge Code 303271			
Project Title 100-BC-5 RI, APRIL 2015	Logbook No. HNF-N-5067D / led	Ice Chest No. N/A			
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A			
Protocol CERCLA	Priority: 30 Days	Offsite Property No. N/A			
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / LATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		SPECIAL INSTRUCTIONS Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Sample No. B30MJ3	Filter N	Date APR 13 2015 1120	No./Type Container 1x60-mL aG	Sample Analysis MUXOM	Holding Time 24 Hours
Sample No. B30MJ7	Filter Y	Date APR 13 2015 1120	No./Type Container 1x60-mL aG	Sample Analysis MUXOM	Holding Time 24 Hours

550130422
w coosi

Relinquished By S.W. King/CSPRC	Print 	Sign 	Received By C.G. HOFFMAN/CSPRC	Print 	Sign 	Date/Time APR 13 2015 1137	Date/Time APR 13 2015 1135	Matrix * DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By C.G. HOFFMAN/CSPRC	Print 	Sign 	Received By J. Friesz, TARL	Print 	Sign 	Date/Time APR 13 2015 1515	Date/Time APR 13 2015 1515	
Relinquished By S.W. King/CSPRC	Print 	Sign 	Received By J. Friesz, TARL	Print 	Sign 	Date/Time APR 13 2015 1515	Date/Time APR 13 2015 1515	
Relinquished By S.W. King/CSPRC	Print 	Sign 	Received By J. Friesz, TARL	Print 	Sign 	Date/Time APR 13 2015 1515	Date/Time APR 13 2015 1515	

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Disposal Method (e.g., Return to customer, per lab procedure, used in process)

Date/Time

Disposed By

Date/Time

FINAL SAMPLE DISPOSITION

CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X15-026-066**
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Contact/Requester: **Karen Waters-Husted** Telephone No. **509-376-4650**

Sampling Origin: **Hanford Site** Purchase Order/Charge Code: **303271**

Logbook No.: **ENF-N-506** Ice Chest No.: **N/A**

Method of Shipment: **GOVERNMENT VEHICLE** Bill of Lading/Air Bill No.: **N/A**

Priority: **30 Days** Offsite Property No.: **N/A**

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

SPECIAL INSTRUCTIONS: **Hold Time** Total Activity Exemption: Yes No

Sample No.	Filter	* Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B30MN1	N	APR 13 2015	1153	1x60-mL aG	COMMON	24 Hours	Cool <=6C
B30MN3	Y	W	✓	1x60-mL aG	COMMON	24 Hours	Cool <=6C

Handwritten: 550130422
W20051

Relinquished By	Print	Sign	Received By	Print	Sign	Date/Time	Date/Time	Matrix *
S.W. King/CHPRC			F.M. Hall/CHPRC			APR 13 2015 1315	APR 13 2015 1315	S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solids, DL = Drum Liquids, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, X = Other
F.M. Hall/CHPRC			J. Friesz, TARL			APR 13 2015 1515	APR 13 2015 1515	
Relinquished By			Received By			Date/Time	Date/Time	
Relinquished By			Received By			Date/Time	Date/Time	

Date/Time Received: 4-13-15/1515 Container GM Screen Result: (Airlock) 40 cpm Initials BS
Sample GM Screen Result (Sample Receiving) 0 cpm Initials BS

Client: PBW SDG #: WCOOS1 SAF #: X15-026 NA []

Lot Number: J50130422

Chain of Custody # X15-026-046;053;047;054;066

Shipping Container ID or Air Bill Number : _____ NA BS]

Samples received inside shipping container/cooler/box Yes BS] Continue with 1 through 4. Initial appropriate response.
No []] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal BS]
- 2. Custody Seals dated and signed? Yes [] No [] No Custody Seal BS]
- 3. Cooler temperature: 4.6 °C Ice NA []
- 4. Vermiculite/packing materials is NA BS] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes BS] No []
- 6. Number of samples received (Each sample may contain multiple bottles): 8
- 7. Containers received: 2 x 500mlp; 6 x 60mlALS

- 8. Sample holding times exceeded? NA [] Yes [] No BS]
- 9. Samples have: _____ tape _____ hazard labels BS custody seals BS appropriate sample labels
- 10. Matrix: _____ A (FLT, Wipe, Solid, Soil) BS I (Water) _____ S (Air, Niosh 7400) _____ T (Biological, Ni-63)

11. Samples: BS are in good condition _____ are leaking _____ are broken
_____ have air bubbles (Only for samples requiring no head space) _____ Other _____

12. Sample pH appropriate for analysis requested Yes BS] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO₃ added and pH after addition on table)

13. Were any anomalies identified in sample receipt? Yes [] No BS]

14. Description of anomalies (include sample numbers): NA BS]

15. Sample Location, Sample Collector Listed on COC? * Yes BS] No []
*For documentation only. No corrective action needed.

16. Additional Information: N/A

[] Client/Courier denied temperature check. BS] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:

Signature: [Signature] Date: 4-13-15

Client Notification needed? Yes [] No wmp Date: _____
By: _____
Person contacted: _____

wmp No action necessary; process as is

Project Manager: Whitney M. Pitari Date: 4/14/15

CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X15-026-056**
Page 1 of 1

Collector: **J.R. Aguilan/CHPRC** Telephone No. **509-376-4650**
 SAF No. **X15-026** Purchase Order/Charge Code **303271**
 Project Title **100-BC-5 RI, APRIL 2015** Ice Chest No. **N/A**
 Shipped To (Lab) **TestAmerica Incorporated, Richland** Bill of Lading/Air Bill No. **N/A**
 Protocol **CERCLA** Priority: **30 Days** Offsite Property No. **N/A**
 SPECIAL INSTRUCTIONS **PRIORITY** Hold Time **30 Days** Total Activity Exemption: Yes No

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30MK3	Y	W	4-10-15	0748	1x60-mL aG	7196_CR6: COMMON M6KN4	24 Hours	Cool <=6C
B30MK1	N	W	4-10-15	0748	1x60-mL aG	7196_CR6: COMMON M6KN5	24 Hours	Cool <=6C

May 28, 2015



J5D0 JF411015
 J5D 100420 JF41015
 SOC# 000054
 W00051

Relinquished By J.R. Aguilan/CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time APR 10 2015 1030	Received By <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time APR 10 2015 1830	Matrix* S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By J.R. Aguilan/CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time APR 10 2015 1445	Received By J. Friesz, TARL	Sign <i>[Signature]</i>	Date/Time APR 10 2015 1445	
Relinquished By	Print	Sign	Date/Time	Received By	Sign	Date/Time	
Relinquished By	Print	Sign	Date/Time	Received By	Sign	Date/Time	

FINAL SAMPLE DISPOSITION
 Disposal Method (e.g., Return to customer, per lab procedure, used in process)
 Disposed By
 Date/Time
 A-6004-842 (REV 2)

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
X15-026-062

Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X15-026	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303271
Project Title	100-BC-5 RI, APRIL 2015	Logbook No.	HNF-N-506 7D / 58	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days	Offsite Property No.	N/A

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

SPECIAL INSTRUCTIONS

Hold Time: _____ Total Activity Exemption: Yes No

Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30ML9	N	4-10-15	0946	1x60-mL aG	7196_CR6: COMMON M6KPA	24 Hours	Cool <=6C
B30MM1	Y	4-10-15	0946	1x60-mL aG	7196_CR6: COMMON M6KPC	24 Hours	Cool <=6C

Relinquished By	J.R. Aguilar/CHPRC	Date/Time	APR 10 2015 1020	Received By	<i>A.D. Ward</i>	Date/Time	APR 10 2015 1030
Relinquished By	<i>A.D. Ward</i>	Date/Time	APR 10 2015 1445	Received By	<i>J. Friesz, TARL</i>	Date/Time	APR 10 2015 1445
Relinquished By		Date/Time		Received By		Date/Time	
Relinquished By		Date/Time		Received By		Date/Time	

Matrix *

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

J50100420
6460050
JF410115 WCO051

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May 28, 2015

055D100420
JUC0050
JF 411015 W0051

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		C.O.C. # X15-026-057
Collector: J.R. Aguilar/CHPRC		Contact/Requester: Karen Waters-Husted	Telephone No. 509-376-4650	Page 1 of 1
SAF No. X15-026	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 303271	Ice Chest No. N/A	
Project Title: 100-BC-5 RI, APRIL 2015	Logbook No. HNF-N-506 70/58	Bill of Lading/Air Bill No. N/A	Offsite Property No. N/A	
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: GOVERNMENT VEHICLE	Priority: 30 Days	Priority: PRIORITY	
Protocol: CERCLA	SPECIAL INSTRUCTIONS: HOLD TIME	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
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				
Sample No. B30MK6	Filter: N	Date: 4-10-15	Time: 0819	No./Type Container: 1x500-mL P
				Sample Analysis: M L K P D
				Holding Time: 48 Hours
				Preservative: Cool <=6C

Relinquished By: J.R. Aguilar/CHPRC	Date/Time: APR 10 2015 1030	Received By: L.D. Wall	Date/Time: APR 10 2015 0830
Relinquished By: L.D. Wall	Date/Time: APR 10 2015 1445	Received By: J. Friesz, TARL	Date/Time: APR 10 2015 1445
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

Disposal Method (e.g., Return to customer, per lab procedure, used in process)

Disposed By

Matrix *

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

A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#
X15-026-102
Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X15-026	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303269
Project Title	100-BC-5 RI, APRIL 2015	Logbook No.	HNF-N-506 70 / 58	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days	Offsite Property No.	N/A

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

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B30MM3	N	W	4-10-15	0914	1x500-mL P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

SPECIAL INSTRUCTIONS
 Hold Time
 Total Activity Exemption: Yes No

May 28, 2015

JSD100420
 b60050
 JF 41015 w10051

Relinquished By	J.R. Aguilar/CHPRC	Print	<i>[Signature]</i>	Sign		Date/Time	APR 10 2015 1030	Received By	<i>[Signature]</i>	Sign		Date/Time	APR 10 2015 1030
Relinquished By	L.D. Wall CHPRC	Print	<i>[Signature]</i>	Sign		Date/Time	APR 10 2015 1445	Received By	<i>[Signature]</i>	Sign		Date/Time	APR 10 2015 1445
Relinquished By		Print		Sign		Date/Time		Received By		Sign		Date/Time	
Relinquished By		Print		Sign		Date/Time		Received By		Sign		Date/Time	

Matrix *

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

FINAL SAMPLE DISPOSITION
 Disposal Method (e.g., Return to customer, per lab procedure, used in process)
 Disposed By
 Date/Time

Date/Time Received: 4/10/15 1445 Container GM Screen Result: (Airlock) 40 cpm Initials [J]
Sample GM Screen Result (Sample Receiving) 20 cpm Initials [J]

Client: PGW SDG #: WC050 SAF #: X15-026 NA []

Lot Number: J5D100420
WC0051 wmr 4/10/15

Chain of Custody # X15-026-056; 058; 060; 062; 057; 061; 102

Shipping Container ID or Air Bill Number : _____ NA [J]

Samples received inside shipping container/cooler/box Yes [J] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [J]
- 2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [J]
- 3. Cooler temperature: 5.1 °C GN ICE NA []
- 4. Vermiculite/packing materials is NA [J] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [J] No []
- 6. Number of samples received (Each sample may contain multiple bottles): 11
- 7. Containers received: 8x60mlag; 3x500mlp

- 8. Sample holding times exceeded? NA [] Yes [] No [J]
- 9. Samples have: _____ tape _____ hazard labels J custody seals J appropriate sample labels
- 10. Matrix: _____ A (FLT, Wipe, Solid, Soil) J I (Water) _____ S (Air, Niosh 7400) _____ T (Biological, Ni-63)

11. Samples:
J are in good condition _____ are leaking _____ are broken
_____ have air bubbles (Only for samples requiring no head space) _____ Other _____

- 12. Sample pH appropriate for analysis requested Yes [J] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO₃ added and pH after addition on table)
- 13. Were any anomalies identified in sample receipt? Yes [] No [J]
- 14. Description of anomalies (include sample numbers): NA [J] _____

15. Sample Location, Sample Collector Listed on COC? * Yes [J] No []
*For documentation only. No corrective action needed.

16. Additional Information: NIA

[] Client/Courier denied temperature check. [J] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: [Signature] Date: 4/10/15

Client Notification needed? Yes [] No [WMP] Date: _____
By: _____
Person contacted: _____

WMP No action necessary; process as is
Project Manager Whitney M. Leteri Date 4/13/15

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

X15-026-048-A

Page 1 of 1

Collector	J.R. Aguilera/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X15-026	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303271
Project Title	100-BC-5 RI, APRIL 2015	Logbook No.	HNF-N-506 70 / 59	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days	Offsite Property No.	N/A

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

SPECIAL INSTRUCTIONS

Hold Time: Total Activity Exemption: Yes No

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30ME7-A	N	W	4-10-15	1207	1x500-mL P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C
B30ME7	N	W	4-10-15	1207	1x4LLP	906.0_TRITIUM_LSC: COMMON	6 Months	None
B30ME7	N	W	4-10-15	1207	3x4LLGP	SRISO_SEP_PRECIP_GPC: COMMON	6 Months	HNO3 to pH <=2



Handwritten notes: 5D100417, 4-14-15, 5KS, 4-14-15, SDS # 650-7096

Relinquished By	J.R. Aguilera/CHPRC	Sign	[Signature]	Date/Time	APR 10 2015 1330	Received By	J. Friesz, TARL	Sign	[Signature]	Date/Time	APR 10 2015 1330
Relinquished By		Sign		Date/Time		Received By		Sign		Date/Time	
Relinquished By		Sign		Date/Time		Received By		Sign		Date/Time	
Relinquished By		Sign		Date/Time		Received By		Sign		Date/Time	

Matrix *

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

Disposal Method (e.g., Return to customer, per lab procedure, used in process)

Disposed By

Date/Time

Disposal Method

Date/Time

Date/Time Received: 4/10/15 1330 Container GM Screen Result: (Airlock) 40 cpm Initials [J]
Sample GM Screen Result (Sample Receiving) 20 cpm Initials [J]

Client: PGW SDG #: two 7096 SKS 4-14-15 SAF #: X15-026 NA []

Lot Number: JSD100447 SKS 4-14-15

Chain of Custody # JF 4/10/15 X15-026-048-A

Shipping Container ID or Air Bill Number : _____ NA [J]

Samples received inside shipping container/cooler/box Yes [J] Continue with 1 through 4. Initial appropriate response.
No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [J]
- 2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [J]
- 3. Cooler temperature: 3-3 °C CONF NA []
- 4. Vermiculite/packing materials is NA [J] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [J] No []
- 6. Number of samples received (Each sample may contain multiple bottles): 1
- 7. Containers received: 1 x 1p; 1 x 500 mlp

- 8. Sample holding times exceeded? NA [] Yes [] No [J]
- 9. Samples have: _____ tape _____ hazard labels J custody seals J appropriate sample labels
- 10. Matrix: _____ A (FLT, Wipe, Solid, Soil) J I (Water) _____ S (Air, Niosh 7400) _____ T (Biological, Ni-63)
- 11. Samples: J are in good condition _____ are leaking _____ are broken
_____ have air bubbles (Only for samples requiring no head space) _____ Other _____
- 12. Sample pH appropriate for analysis requested Yes [J] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO₃ added and pH after addition on table)
- 13. Were any anomalies identified in sample receipt? Yes [] No [J]
- 14. Description of anomalies (include sample numbers): NA [J] _____
- 15. Sample Location, Sample Collector Listed on COC? * Yes [J] No []
*For documentation only. No corrective action needed.
- 16. Additional Information: N/A

[] Client/Courier denied temperature check. [J] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: _____ Date: 4/10/15

Client Notification needed? Yes [J] No [] Date: _____
By: _____
Person contacted: _____

[] No action necessary; process as is
Project Manager Whitney M. Otari Date 4/13/15

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

X15-026-055-A

Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X15-026	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303271
Project Title	100-BC-5 RI, APRIL 2015	Logbook No.	HNF-N-506 70 / 58	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days	Offsite Property No.	N/A

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

SPECIAL INSTRUCTIONS

Hold Time: Total Activity Exemption: Yes No

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30MJ9-A	N	W	4-10-15	0748	1x500-mL P	COMMON	4-14-15 48 Hours	Cool <=6C
B30MJ9	N	W	4-10-15	0748	1x1-LP	906.0-IRIDIUM-LSC-COMMON	6 Months	None 515-4-14-15

May 28, 2015



JSD100424
5154-14-15

LD. Wall
CHPRC

Received By: *[Signature]* Sign: *[Signature]* Date/Time: APR 10 2015 1050

Received By: *[Signature]* Sign: *[Signature]* Date/Time: APR 10 2015 1445

Received By: *[Signature]* Sign: *[Signature]* Date/Time: APR 10 2015 1445

Received By: *[Signature]* Sign: *[Signature]* Date/Time: APR 10 2015 1445

Relinquished By	J.R. Aguilar/CHPRC	Date/Time	APR 10 2015 1030	Received By	LD. Wall CHPRC	Date/Time	APR 10 2015 1445
Relinquished By	LD. Wall CHPRC	Date/Time	APR 10 2015 1445	Received By	LD. Wall CHPRC	Date/Time	APR 10 2015 1445
Relinquished By		Date/Time		Received By		Date/Time	
Relinquished By		Date/Time		Received By		Date/Time	

Matrix *

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

FINAL SAMPLE DISPOSITION

Date/Time Received: 4/10/15 1445 Container GM Screen Result: (Airlock) 40 epm Initials [J]
 Sample GM Screen Result (Sample Receiving) 20 epm Initials [J]
 Client: PGW SDG #: 5K54-14-15 SAF #: 207096 NA []
 Lot Number: 750100424
 Chain of Custody # X15-026-055-A

Shipping Container ID or Air Bill Number : _____ NA [J]

Samples received inside shipping container/cooler/box Yes [J] Continue with 1 through 4. Initial appropriate response.
 No [] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal [J]
- 2. Custody Seals dated and signed? Yes [] No [] No Custody Seal [J]
- 3. Cooler temperature: 5.1 °C ICE NA []
- 4. Vermiculite/packing materials is Wet NA [J] Wet [] Dry []

Item 5 through 16 for samples. Initial appropriate response.

- 5. Chain of Custody record present? Yes [J] No []
- 6. Number of samples received (Each sample may contain multiple bottles): 1
- 7. Containers received: 1x 500mlp, 1x 1l

- 8. Sample holding times exceeded? NA [] Yes [] No [J]
- 9. Samples have: _____ tape _____ hazard labels J custody seals J appropriate sample labels
- 10. Matrix: _____ A (FLT, Wipe, Solid, Soil) J I (Water) _____ S (Air, Niosh 7400) _____ T (Biological, Ni-63)
- 11. Samples: J are in good condition _____ are leaking _____ are broken
 _____ have air bubbles (Only for samples requiring no head space) _____ Other _____
- 12. Sample pH appropriate for analysis requested Yes [J] No [] NA []
 (If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO₃ added and pH after addition on table)
- 13. Were any anomalies identified in sample receipt? Yes [] No [J]
- 14. Description of anomalies (include sample numbers): NA [J] _____
- 15. Sample Location, Sample Collector Listed on COC? * Yes [J] No []
 *For documentation only. No corrective action needed.
- 16. Additional Information: N/A

[] Client/Courier denied temperature check. [J] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
 Signature: _____ Date: 4/10/15

Client Notification needed? Yes [J] No [] Date: _____
 By: _____
 Person contacted: _____

[] No action necessary; process as is
 Project Manager Whitney M. ... Date 4/13/15

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#

X15-026-065-A

Page 1 of 1

Collector	S.W. King/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X15-026	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303271
Project Title	100-BC-5 RI, APRIL 2015	Logbook No.	HNF-N-506 7D/6D	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA	Priority:	30 Days PRIORITY	Offsite Property No.	N/A

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

SPECIAL INSTRUCTIONS

Total Activity Exemption: Yes No

Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30MM9-A	N	APR 13 2015	1533	1x500-mL P	COMMON	48 Hours	Cool <=6C
B30MM9-B	N	APR 13 2015	1533	1x1-LP	COMMON	6 Months	Cool <=6C

May 28, 2015

JSD/BCH/CH
WENDY
SKS 4-14-15

JSD130426- SKS 4-14-15

Relinquished By	S.W. King/CHPRC	Print	Sign	Received By	F.M. Hall/CHPRC	Print	Sign	Date/Time	APR 13 2015 1315	Date/Time	APR 13 2015 1315	Matrix *
Relinquished By	F.M. Hall/CHPRC	Print	Sign	Received By	J. Bock, TARL	Print	Sign	Date/Time	4-13-15	Date/Time	4-13-15	Matrix *
Relinquished By		Print	Sign	Received By		Print	Sign	Date/Time		Date/Time		Matrix *
Relinquished By		Print	Sign	Received By		Print	Sign	Date/Time		Date/Time		Matrix *

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Disposal Method (e.g., Return to customer, per lab procedure, used in process)

Date/Time

Disposed By

FINAL SAMPLE DISPOSITION

Date/Time Received: 4-13-15/1515 Container GM Screen Result: (Airlock) 40 cpm Initials B
Sample GM Screen Result (Sample Receiving) 0 cpm Initials B
Client: Pbw SDG #: WD4096 SAF #: X15-026 NA []
Lot Number: JSA130426 SKS 4-14-15
Chain of Custody # X15-026-065-A

Shipping Container ID or Air Bill Number : _____ NA B]

Samples received inside shipping container/cooler/box Yes B] Continue with 1 through 4. Initial appropriate response.
No []] Go to 5, add comment to #16.

- 1. Custody Seals on shipping container intact? Yes [] No [] No Custody Seal B]
- 2. Custody Seals dated and signed? Yes [] No [] No Custody Seal B]
- 3. Cooler temperature: 4.6 °C Ice NA []]
- 4. Vermiculite/packing materials is NA B] Wet [] Dry []

- Item 5 through 16 for samples. Initial appropriate response.
- 5. Chain of Custody record present? Yes B] No []]
- 6. Number of samples received (Each sample may contain multiple bottles): 1
- 7. Containers received: 1x 500mlp; 1x 4p

- 8. Sample holding times exceeded? NA [] Yes [] No B]
- 9. Samples have: _____ tape _____ hazard labels B custody seals B appropriate sample labels
- 10. Matrix: _____ A (FLT, Wipe, Solid, Soil) B I (Water) _____ S (Air, Niosh 7400) _____ T (Biological, Ni-63)

- 11. Samples: B are in good condition _____ are leaking _____ are broken
_____ have air bubbles (Only for samples requiring no head space) _____ Other _____

- 12. Sample pH appropriate for analysis requested Yes [] No [] NA []
(If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO₃ added and pH after addition on table)
- 13. Were any anomalies identified in sample receipt? Yes [] No B]
- 14. Description of anomalies (include sample numbers): NA B] _____

- 15. Sample Location, Sample Collector Listed on COC? * Yes B] No []
*For documentation only. No corrective action needed.

16. Additional Information: N/A B 4-13-15 anion got put onto same coc w/ H-3. Logged into the WD sdg instead of WC SDG.
[] Client/Courier denied temperature check. B] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: [Signature] Date: 4-13-15

Client Notification needed? Yes NA No [] Date: _____
By: _____
Person contacted: _____

[] No action necessary; process as is
Project Manager Whitney Martini Date 4/14/15

May 28, 2015

Sample Results Summary

Date: 28-May-15

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 65930

SDG No: WC0051

Batch Client ID	Date Sampled	Work Order No.	Parameter	Result	Qual	Units	MDL	RL	Date Analyzed	Dil Fct
5100065 300.0_ANIONS_IC ,WATER										
B30MF7	04/10/15 12:07	M6KNT1AA	Chloride	8.50	D	mg/L	0.2	0.4	04/10/15 15:51	2
			Fluoride	0.216	D	mg/L	0.05	0.1		2
			Nitrite as N	<0.0380	U D	mg/L	0.038	0.076		2
			Nitrate as N	1.54	D	mg/L	0.028	0.056		2
			Sulfate	41.1	D	mg/L	0.25	0.5		2
5100066 300.0_ANIONS_IC ,WATER										
B30MK6	04/10/15 8:19	M6KPD1AA	Chloride	10.2	D	mg/L	0.2	0.4	04/10/15 19:51	2
			Fluoride	0.229	D	mg/L	0.05	0.1		2
			Nitrite as N	<0.0380	U D	mg/L	0.038	0.076		2
			Nitrate as N	2.06	D	mg/L	0.028	0.056		2
			Sulfate	45.2	D	mg/L	0.25	0.5		2
B30ML8	04/10/15 9:46	M6KPE1AA	Chloride	8.07	D	mg/L	0.2	0.4	04/10/15 20:06	2
			Fluoride	0.234	D	mg/L	0.05	0.1		2
			Nitrite as N	<0.0380	U D	mg/L	0.038	0.076		2
			Nitrate as N	1.63	D	mg/L	0.028	0.056		2
			Sulfate	31.6	D	mg/L	0.25	0.5		2
B30MM3	04/10/15 9:14	M6KPF1AA	Chloride	7.36	D	mg/L	0.2	0.4	04/10/15 20:21	2
			Fluoride	0.162	D	mg/L	0.05	0.1		2
			Nitrite as N	<0.0380	U D	mg/L	0.038	0.076		2
			Nitrate as N	1.63	D	mg/L	0.028	0.056		2
			Sulfate	33.5	D	mg/L	0.25	0.5		2
5100068 300.0_ANIONS_IC ,WATER										
B30MJ9	04/10/15 7:48	M6KQW1AA	Chloride	1.50	D	mg/L	0.2	0.4	04/10/15 17:34	2
			Fluoride	0.242	D	mg/L	0.05	0.1		2
			Nitrite as N	<0.0380	U D	mg/L	0.038	0.076		2
			Nitrate as N	0.220	D	mg/L	0.028	0.056		2
			Sulfate	13.7	D	mg/L	0.25	0.5		2
5100069 7196_CR6 ,WATER										
B30MF9	04/10/15 12:07	M6KNP1AA	HEXCHROME	0.0234		mg/L	0.0015	0.004	04/10/15 17:39	1
B30MH1	04/10/15 12:07	M6KNM1AA	HEXCHROME	0.0202		mg/L	0.0015	0.004	04/10/15 17:36	1
B30MH4	04/10/15 11:08	M6KNQ1AA	HEXCHROME	0.0336		mg/L	0.0015	0.004	04/10/15 17:39	1
B30MH6	04/10/15 11:08	M6KNR1AA	HEXCHROME	0.0270		mg/L	0.0015	0.004	04/10/15 17:40	1
B30MK1	04/10/15 7:48	M6KN51AA	HEXCHROME	0.0355		mg/L	0.0015	0.004	04/10/15 17:44	1
B30MK3	04/10/15 7:48	M6KN41AA	HEXCHROME	0.0339		mg/L	0.0015	0.004	04/10/15 17:44	1
B30MK7	04/10/15 8:19	M6KN71AA	HEXCHROME	0.0347		mg/L	0.0015	0.004	04/10/15 17:45	1
B30MK9	04/10/15 8:19	M6KN61AA	HEXCHROME	0.0352		mg/L	0.0015	0.004	04/10/15 17:45	1
B30ML3	04/10/15 9:14	M6KN81AA	HEXCHROME	0.0214		mg/L	0.0015	0.004	04/10/15 17:45	1

TestAmerica Inc
rptTALRchSample
SumC2 V5.3.6.8
A2002

D Qual - The reported value is from a dilution
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

May 28, 2015

Sample Results Summary

Date: 28-May-15

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 65930

SDG No: WC0051

Batch Client ID	Date Sampled	Work Order No.	Parameter	Result	Qual	Units	MDL	RL	Date Analyzed	Dil Fct
5100069 7196_CR6 ,WATER										
B30ML5	04/10/15 9:14	M6KN91AA	HEXCHROME	0.0189		mg/L	0.0015	0.004	04/10/15 17:46	1
B30ML9	04/10/15 9:46	M6KPA1AA	HEXCHROME	0.00230	B	mg/L	0.0015	0.004	04/10/15 17:48	1
B30MM1	04/10/15 9:46	M6KPC1AA	HEXCHROME	0.00260	B	mg/L	0.0015	0.004	04/10/15 17:49	1
5103033 7196_CR6 ,WATER										
B30MF1	04/13/15 10:08	M6K0L1AA	HEXCHROME	0.0142		mg/L	0.0015	0.004	04/13/15 18:27	1
B30MF5	04/13/15 10:08	M6K0K1AA	HEXCHROME	0.0150		mg/L	0.0015	0.004	04/13/15 18:24	1
B30MJ3	04/13/15 11:20	M6K0M1AA	HEXCHROME	0.00940		mg/L	0.0015	0.004	04/13/15 18:27	1
B30MJ7	04/13/15 11:20	M6K0N1AA	HEXCHROME	0.0101		mg/L	0.0015	0.004	04/13/15 18:28	1
B30MN1	04/13/15 11:53	M6K0P1AA	HEXCHROME	0.0351		mg/L	0.0015	0.004	04/13/15 18:28	1
B30MN3	04/13/15 11:53	M6K0Q1AA	HEXCHROME	0.0351		mg/L	0.0015	0.004	04/13/15 18:28	1
5104025 300.0_ANIONS_IC ,WATER										
B30MM9	04/13/15 11:53	M6K1A1AA	Chloride	5.52	D	mg/L	0.2	0.4	04/14/15 12:43	2
			Fluoride	0.197	D	mg/L	0.05	0.1		2
			Nitrite as N	<0.0380	U D	mg/L	0.038	0.076		2
			Nitrate as N	1.52	D	mg/L	0.028	0.056		2
			Sulfate	33.5	D	mg/L	0.25	0.5		2
5104026 300.0_ANIONS_IC ,WATER										
B30MD9	04/13/15 10:08	M6K0H1AA	Chloride	6.81	D	mg/L	0.2	0.4	04/14/15 15:39	2
			Fluoride	0.269	D	mg/L	0.05	0.1		2
			Nitrite as N	<0.0380	U D	mg/L	0.038	0.076		2
			Nitrate as N	1.30	D	mg/L	0.028	0.056		2
			Sulfate	34.0	D	mg/L	0.25	0.5		2
B30MJ1	04/13/15 11:20	M6K0J1AA	Chloride	9.44	D	mg/L	0.2	0.4	04/14/15 16:24	2
			Fluoride	0.216	D	mg/L	0.05	0.1		2
			Nitrite as N	<0.0380	U D	mg/L	0.038	0.076		2
			Nitrate as N	1.78	D	mg/L	0.028	0.056		2
			Sulfate	36.8	D	mg/L	0.25	0.5		2

No. of Results: 58

May 28, 2015

QC Results Summary
TestAmerica Inc TARL
 Ordered by Method, Batch No, QC Type,.

Date: 28-May-15

Report No. : 65930

SDG No.: WC0051

Batch	Work Work No.	Parameter	Result	Qual	Units	LCS Recovery	MDL	RL	RPD	Dil Fct
300.0_ANIONS_IC										
5100065 MS, B30MF7	M6KNT1AE	Chloride	4.18		mg/L	99%	0.1	0.2		1
		Fluoride	0.181		mg/L	91%	0.025	0.05		1
		Nitrite as N	0.0650		mg/L	84%	0.019	0.038		1
		Nitrate as N	0.745		mg/L	99%	0.014	0.028		1
		Sulfate	18.9		mg/L	100%	0.125	0.25		1
5100065 DUP, B30MF7 DUP	M6KNT1AF	Chloride	8.52 D		mg/L		0.2	0.4	0.3	2
		Fluoride	0.217 D		mg/L		0.05	0.1	0.5	2
		Nitrite as N	<0.0380 U D		mg/L		0.038	0.076		2
		Nitrate as N	1.55 D		mg/L		0.028	0.056	0.2	2
		Sulfate	41.3 D		mg/L		0.25	0.5	0.3	2
5100065 BLANK,	M6KN01AA	Chloride	<0.100 U		mg/L		0.1	0.2		1
		Fluoride	<0.0250 U		mg/L		0.025	0.05		1
		Nitrite as N	<0.0190 U		mg/L		0.019	0.038		1
		Nitrate as N	<0.0140 U		mg/L		0.014	0.028		1
		Sulfate	<0.125 U		mg/L		0.125	0.25		1
5100065 LCS,	M6KN01AC	Chloride	3.98		mg/L	100%	0.1	0.2		1
		Fluoride	1.00		mg/L	100%	0.025	0.05		1
		Nitrite as N	0.696		mg/L	91%	0.019	0.038		1
		Nitrate as N	0.544		mg/L	96%	0.014	0.028		1
		Sulfate	5.01		mg/L	100%	0.125	0.25		1
300.0_ANIONS_IC										
5100066 MS, B30N19	M6KNX1AC	Chloride	7.09		mg/L	100%	0.1	0.2		1
		Fluoride	0.164		mg/L	91%	0.025	0.05		1
		Nitrite as N	0.0940		mg/L	82%	0.019	0.038		1
		Nitrate as N	0.340		mg/L	99%	0.014	0.028		1
		Sulfate	24.1		mg/L	101%	0.125	0.25		1
5100066 DUP, B30N19 DUP	M6KNX1AD	Chloride	14.9 D		mg/L		0.2	0.4	0.0	2
		Fluoride	0.180 D		mg/L		0.05	0.1	0.0	2
		Nitrite as N	0.0860 D		mg/L		0.038	0.076	0.0	2
		Nitrate as N	0.640 D		mg/L		0.028	0.056	0.2	2
		Sulfate	52.4 D		mg/L		0.25	0.5	0.5	2
5100066 BLANK,	M6KQX1AA	Chloride	<0.100 U		mg/L		0.1	0.2		1
		Fluoride	<0.0250 U		mg/L		0.025	0.05		1
		Nitrite as N	<0.0190 U		mg/L		0.019	0.038		1

TestAmerica Inc D Qual - The reported value is from a dilution
 rptTALRchQcSummaryC V5.3.6.8 U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
 A2002

May 28, 2015

QC Results Summary
TestAmerica Inc TARL
Ordered by Method, Batch No, QC Type,.

Date: 28-May-15

Report No. : 65930

SDG No.: WC0050

Table with columns: Batch, Work No., Parameter, Result, Qual, Units, LCS Recovery, MDL, RL, RPD, Dil Fct. Rows include data for batches 5100066, 5100068, and 5100069.

300.0_ANIONS_IC

7196_CR6

7196_CR6

TestAmerica Inc rptTALRchQcSummaryC V5.3.6.8 A2002
D Qual - The reported value is from a dilution
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.
B Qual - The analyte was detected at a value less than the reporting limit (RL), but greater than or equal to the MDL.

May 28, 2015

QC Results Summary
TestAmerica Inc TARL
Ordered by Method, Batch No, QC Type,.

Date: 28-May-15

Report No. : 65930

SDG No.: WC0051

Table with columns: Batch, Work Work No., Parameter, Result, Qual, Units, LCS Recovery, MDL, RL, RPD, Dil Fct. Contains multiple rows of test results for various parameters like Chloride, Fluoride, Nitrite as N, Nitrate as N, Sulfate.

TestAmerica Inc rptTALRchQcSummaryC V5.3.6.8 A2002
D Qual - The reported value is from a dilution
U Qual - Analyzed for but not detected above limiting criteria, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

May 28, 2015

QC Results Summary
TestAmerica Inc TARL
Ordered by Method, Batch No, QC Type,.

Date: 28-May-15

Report No. : 65930

SDG No.: WC0051

Batch	Work Work No.	Parameter	Result	Qual	Units	LCS Recovery	MDL	RL	RPD	Dil Fct
5104026 DUP, B30MD9 DUP	M6K0H1AD	Nitrate as N	1.30	D	mg/L		0.028	0.056	0.2	2
		Sulfate	34.2	D	mg/L		0.25	0.5	0.5	2
5104026 BLANK,	M6K3P1AA	Chloride	<0.100	U	mg/L		0.1	0.2		1
		Fluoride	<0.0250	U	mg/L		0.025	0.05		1
		Nitrite as N	<0.0190	U	mg/L		0.019	0.038		1
		Nitrate as N	<0.0140	U	mg/L		0.014	0.028		1
		Sulfate	<0.125	U	mg/L		0.125	0.25		1
5104026 LCS,	M6K3P1AC	Chloride	3.96		mg/L	99%	0.1	0.2		1
		Fluoride	0.976		mg/L	98%	0.025	0.05		1
		Nitrite as N	0.705		mg/L	93%	0.019	0.038		1
		Nitrate as N	0.539		mg/L	95%	0.014	0.028		1
		Sulfate	4.92		mg/L	98%	0.125	0.25		1

No. of Results: 108