

October 30, 2015

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Richland
2800 George Washington Way
Richland, WA 99352
Tel: (509)375-3131

TestAmerica Job ID: 300-1207-1
TestAmerica Sample Delivery Group: WC0495
Client Project/Site: CH2M Hill Chemical

For:
CH2M Hill Plateau Remediation Company
PO BOX 1600
Mail Stop R3-50
Richland, Washington 99352

Attn: CPP Sample Management



Authorized for release by:
10/30/2015 5:51:27 PM

Whitney Ritari, Project Manager I
(509)375-3131 ext164
whitney.ritari@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed in this package. 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 attached signature.

The laboratory is accredited to EPA 7196A in Solid and Chemical Materials, per Washington State Department of Ecology this is approved for non-discharge water samples. The sample/ sample duplicate RPD agreement is not applicable if one or both results are elss than five times the MDL.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Chain of Custody	5
Detection Summary	19
Client Sample Results	21
QC Sample Results	25
QC Association Summary	28
Lab Chronicle	29
Method Summary	35
Sample Summary	36
Receipt Checklists	37

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D	The reported value is from a dilution.
U	Analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: CH2M Hill Plateau Remediation Company
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
SDG: WC0495

Job ID: 300-1207-1

Laboratory: TestAmerica Richland

Narrative

**Job Narrative
300-1207-1**

Comments

No additional comments.

Receipt

The samples were received on 10/23/2015 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.0° C.

HPLC/IC

Method(s) 300.0: The following samples required filtration to reduce matrix interferences and solids: B32W47 (300-1207-21) and B32YB3 (300-1207-24).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X16-002-157**

Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X16-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303064
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 78 / 65	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	Hold Time	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			N/A		

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B32W52	N	W	10-23-15	1038	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B32W53	Y	W	10-23-15	1038	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

#1207
W20495



300-1207 COC

Relinquished By	J.R. Aguilar/CHPRC	Print	Sign	OCT 23 2015	Date/Time	11:25	Received By	F.M. Hall/CHPRC	Print	Sign	OCT 23 2015	Date/Time	11:25	Matrix *
Relinquished By	F.M. Hall/CHPRC	Print	Sign	OCT 23 2015	Date/Time	15:00	Received By	J. Friesz, TARI	Print	Sign	OCT 23 2015	Date/Time	15:00	S = Soil
Relinquished By							Received By							SE = Sediment
Relinquished By							Received By							SO = Solid
Relinquished By							Received By							SL = Sludge
Relinquished By							Received By							W = Water
Relinquished By							Received By							O = Oil
Relinquished By							Received By							A = Air
Relinquished By							Received By							DS = Drum Solids
Relinquished By							Received By							DL = Drum Liquids
Relinquished By							Received By							T = Tissue
Relinquished By							Received By							WT = Wipe
Relinquished By							Received By							L = Liquid
Relinquished By							Received By							V = Vegetation
Relinquished By							Received By							X = Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
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October 30, 2015

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
X16-002-247

Page 1 of 1

Collector	J.R. Aguilar	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X16-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303064
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 <u>78/64</u>	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		PRIORITY		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

Sample No.	Filter	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B32X14	N	10-23-15	1103	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B32X15	Y	10-23-15	1103	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

October 30, 2015

W 1201
W 2045

Relinquished By	J.R. Aguilar	Print	Sign	OCT 23 2015	Date/Time	1125
Relinquished By	F.M. Hall	Print	Sign	OCT 23 2015	Date/Time	1125
Relinquished By	F.M. Hall	Print	Sign	OCT 23 2015	Date/Time	1500
Relinquished By		Print	Sign		Date/Time	

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

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
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CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

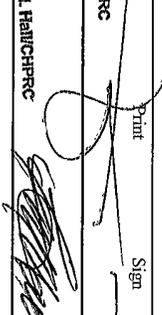
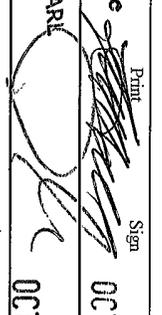
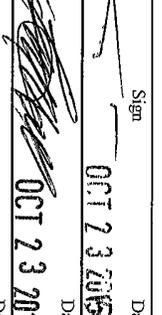
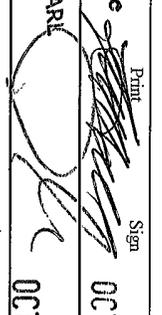
C.O.C.# **X16-002-199**
Page 1 of 1

Collector	JR Aguiar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X16-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303064
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 <u>78/65</u>	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			PRIORITY		
*** 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		
			N/A		
			Hold Time		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B32WK5	N	W	10-23-15	0952	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B32WK6	Y	W	10-23-15	0952	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C

October 30, 2015

11201
W 02495

Relinquished By JR Aguiar/CHPRC  Date/Time OCT 23 2015 1125	Received By F.M. Hall/CHPRC  Date/Time OCT 23 2015 1125
Relinquished By F.M. Hall/CHPRC  Date/Time OCT 23 2015 1500	Received By J. Friesz, TARI  Date/Time OCT 23 2015 1500
Relinquished By Date/Time	Received By Date/Time
FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process)	
Disposed 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

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
X16-002-155

Page 1 of 1

Collector	JR. Aguilera/CHRC	Contact/Requester	Karen Waters-Husted
SAF No.	X16-002	Sampling Origin	Hanford Site
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 78 / G.S.
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE
Protocol	CERCLA	Priority:	30 Days PRIORITY
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	N/A
		Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B32W48	N	W	10-23-15	0917	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B32W49	Y	W	10-23-15	0917	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C

October 30, 2015

12001
W COYAS

Relinquished By J.R. Aguilera/CHRC [Signature] Date/Time OCT 23 2015 1125	Received By F.M. Hall/CHRC [Signature] Date/Time OCT 23 2015 1125
Relinquished By F.M. Hall/CHRC [Signature] Date/Time OCT 23 2015 1500	Received By J. Friesz, TARL [Signature] Date/Time OCT 23 2015 1500

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
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Relinquished By	Date/Time
Received By	Date/Time
Disposed By	Date/Time



CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X16-002-200**
Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X16-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303064
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 <u>78/65</u>	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		
*** 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			N/A		
Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Hold Time		

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B32WK8	N	W	10-23-15	0945	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B32WK9	Y	W	10-23-15	0945	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

October 30, 2015

1201
W 6049S

Relinquished By	J.R. Aguilar/CHPRC	Print	Sign	Date/Time	Received By	F.M. Halc/CHPRC	Print	Sign	Date/Time	Matrix *
Relinquished By	F.M. Halc/CHPRC	Print	Sign	Date/Time	Received By	J. Fiesz, TARI	Print	Sign	Date/Time	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

Collector	J.R. Aguilar/CH2MRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X16-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303064
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 78 / 65	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			SPECIAL INSTRUCTIONS	Hold Time	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			N/A		

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B32W56	Y	W	10-23-15	1030	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B32W55	N	W	10-23-15	1030	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

#1201
WCOYAS

October 30, 2015

Relinquished By	J.R. Aguilar/CH2MRC	Print	Sign	Date/Time	Received By	F.M. Hall/CH2MRC	Print	Sign	Date/Time	Matrix *
				OCT 23 2015 11:25					OCT 23 2015 11:25	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By	F.M. Hall/CH2MRC	Print	Sign	Date/Time	Received By	J. Friesz, TARL	Print	Sign	Date/Time	DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
				OCT 23 2015 1500					OCT 23 2015 1500	

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

Collector	JR Aguirre/CH2M	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X16-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303064
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 78 / 65	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		
*** 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			N/A		
Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B32W58	N	W	10-23-15	1021	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B32W59	Y	W	10-23-15	1021	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

October 30, 2015

Wilson
W02045

Relinquished By	JR Aguirre/CH2M	Print	Sign	OCT 23 2015	Date/Time	1125	Received By	#11 Hanf/CH2M	Print	Sign	OCT 23 2015	Date/Time	1125	Matrix *
Relinquished By	F.M. Hanf/CH2M	Print	Sign	OCT 23 2015	Date/Time	1500	Received By	J. Friesz, TARI	Print	Sign	OCT 23 2015	Date/Time	1500	S = Soil
Relinquished By					Date/Time		Received By					Date/Time	DS = Drum Solids	
Relinquished By					Date/Time		Received By					Date/Time	DL = Drum Liquids	
					Date/Time							Date/Time	T = Tissue	
					Date/Time							Date/Time	WI = Wipe	
					Date/Time							Date/Time	L = Liquid	
					Date/Time							Date/Time	V = Vegetation	
					Date/Time							Date/Time	X = Other	
					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. # **X16-002-197**
Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted
SAF No.	X16-002	Sampling Origin	Hanford Site
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 78 / 65
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE
Protocol	CERCLA	Priority:	30 Days
POSSIBLE SAMPLE HAZARDS/REMARKS		PRIORITY	
*** 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 N/A	
		Hold Time N/A	
		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B32WK1	N	W	10-23-15	1004	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B32WK2	Y	W	10-23-15	1004	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C

October 30, 2015

Waters
Husted

Relinquished By J.R. Aguilar/CHPRC	Print	Sign	Date/Time	OCT 23 2015 1125	Received By F.M. Hain/CHPRC	Print	Sign	Date/Time	OCT 23 2015 1125
Relinquished By			Date/Time		Received By			Date/Time	
Relinquished By F.M. Hain/CHPRC			Date/Time	OCT 23 2015 1500	Received By J. Friesz, TARI			Date/Time	OCT 23 2015 1500
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

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

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- 10
- 11
- 12
- 13

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
X16-002-249

Page 1 of 1

Collector	J.R. Aguirre/CH2MRC		Contact/Requester	Karen Waters-Husted		Telephone No.	509-376-4650	
SAF No.	X16-002		Sampling Origin	Hanford Site		Purchase Order/Charge Code	303064	
Project Title	AQUIFER TUBES, OCTOBER 2015		Logbook No.	HNF-N-506 <u>78/66</u>		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			Hold Time		
*** 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 438.1			N/A			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B32X18	N	W	10-23-15	1112	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B32X19	Y	W	10-23-15	1112	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C

October 30, 2015

#1201
used

Reinquished By: <u>J.R. Aguirre/CH2MRC</u> <small>Print</small> Sign <u>[Signature]</u> <small>Sign</small> Date/Time: <u>OCT 23 2015</u> / <u>1125</u>	Received By: <u>F.M. Hanich/CH2MRC</u> <small>Print</small> Sign <u>[Signature]</u> <small>Sign</small> Date/Time: <u>OCT 23 2015</u> / <u>1125</u>
Reinquished By: <u>F.M. Hanich/CH2MRC</u> <small>Print</small> Sign <u>[Signature]</u> <small>Sign</small> Date/Time: <u>OCT 23 2015</u> / <u>1500</u>	Received By: <u>J. Friesz, TARL</u> <small>Print</small> Sign <u>[Signature]</u> <small>Sign</small> Date/Time: <u>OCT 23 2015</u> / <u>1500</u>
Reinquished By: _____ <small>Print</small> Sign _____ <small>Sign</small> Date/Time: _____	Received By: _____ <small>Print</small> Sign _____ <small>Sign</small> Date/Time: _____

Matrix *	
S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquids
SO = Solid	T = Tissue
SL = Sludge	WL = 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: _____
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CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
X16-002-246

Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X16-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303064
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 <u>78/64</u>	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		
*** 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			Hold Time		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B32X11	N	W	10-23-15	1055	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B32X12	Y	W	10-23-15	1055	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

October 30, 2015

12201
W000495

Relinquished By	J.R. Aguilar/CHPRC	Print	Sign	Date/Time	OCT 23 2015 1125	Received By	F.M. HailochPRC	Print	Sign	Date/Time	OCT 23 2015 1125
Relinquished By	F.M. HailochPRC	Print	Sign	Date/Time	OCT 23 2015 1500	Received By	J. Friesz, TARL	Print	Sign	Date/Time	OCT 23 2015 1500
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time	

Matrix *			
S	= Soil	DS	= Drum Solids
SE	= Sediment	DJL	= 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
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Collector	J.R. Aguilar/CH2M	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X16-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303064
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 78 / 65	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		
*** 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			N/A		
Sample No.	B32W47	Filter	N	Date	10-23-15
		* Date	W	Time	0917
		No/Type Container	1x500-mL P	Sample Analysis	300.0 ANIONS_IC: COMMON
		Holding Time	48 Hours	Preservative	Cool <=6C

October 30, 2015

1201
WCC0495

Relinquished By	J.R. Aguilar/CH2M	Print	Sign	Date/Time	OCT 23 2015 1105	Received By	F.M. Hall/CH2M	Print	Sign	Date/Time	OCT 23 2015 1125	Matrix *
Relinquished By	F.M. Hall/CH2M	Print	Sign	Date/Time	OCT 23 2015 1500	Received By	J. Bock, TARL	Print	Sign	Date/Time	OCT 23 2015 1500	S = Soil
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		SE = Sediment
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		SO = Solid
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		SL = Sludge
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		W = Water
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		O = Oil
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		A = Air
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		DS = Drum Solids
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		DL = Drum Liquids
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		T = Tissue
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		WI = Wipe
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		L = Liquid
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		V = Vegetation
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		X = Other
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)											
PRINTED ON	9/15/2015											
	FSR ID = FSR5434											
	A-6004-842 (REV 2)											

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CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
X16-002-353

Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted
SAF No.	X16-002	Sampling Origin	Hanford Site
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 78 / 65
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE
Protocol	CERCLA	Priority:	30 Days
POSSIBLE SAMPLE HAZARDS/REMARKS		PRIORITY	
*** 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.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B32YB9	N	W	10-23-15	1038	1x500-mL P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

#1200
WCDHAS

October 30, 2015

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
J.R. Aguilar/CHPRC			OCT 23 2015 1125	F.M. HAUICH/PRC			OCT 23 2015 1125	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By			Date/Time	Received By			Date/Time	DS = Drum Solids DL = Tissue T = Wipe WT = Liquid L = Vegetation V = Other X =
F.M. HAUICH/PRC			OCT 23 2015 1500	J. BOCK, TARL			OCT 23 2015 1500	
Relinquished By			Date/Time	Received By			Date/Time	
			Date/Time				Date/Time	

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

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
X16-002-361
Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X16-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303064
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 78/66	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		PRIORITY		Hold Time	
*** 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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	
		N/A			

Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative	
B32YC7	N	W	10-23-15	1112	1X500-ML P	300.0 ANIONS_IC: COMMON	48 Hours	Cool <=6C

Wason
WATSON

October 30, 2015

Relinquished By	J.R. Aguilar/CHPRC	Print	Sign	Date/Time	Received By	F.M. Hall/CHPRC	Date/Time	Sign	Date/Time	Matrix *
Relinquished By	F.M. Hall/CHPRC	Print	Sign	Date/Time	Received By	J. Beck, TARI	Date/Time	Sign	Date/Time	Matrix *

Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time



CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
X16-002-347
Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X16-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303064
Project Title	AQUIFER TUBES, OCTOBER 2015	Logbook No.	HNF-N-506 <u>78/125</u>	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			PRIORITY	SPECIAL INSTRUCTIONS	Hold Time
*** Contaminants 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				N/A	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B32YB3	N	W	10-23-15	0952	1x500-ml P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

*H 1200
W 0495*

Relinquished By	<i>Print</i> J.R. Aguilar/CHPRC	Sign	<i>Signature</i>	Date/Time	OCT 23 2015 1125	Received By	<i>Print</i> F.M. Hall/CHPRC	Sign	<i>Signature</i>	Date/Time	OCT 23 2015 1125
Relinquished By	F.M. Hall/CHPRC		<i>Signature</i>	Date/Time	OCT 23 2015 1500	Received By	J. Bock, TARL		<i>Signature</i>	Date/Time	OCT 23 2015 1500

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

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

October 30, 2015
Detection Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
SDG: WC0495

Client Sample ID: B32W52 **Lab Sample ID: 300-1207-1**

No Detections.

Client Sample ID: B32W53 **Lab Sample ID: 300-1207-2**

No Detections.

Client Sample ID: B32X14 **Lab Sample ID: 300-1207-3**

No Detections.

Client Sample ID: B32X15 **Lab Sample ID: 300-1207-4**

No Detections.

Client Sample ID: B32WK5 **Lab Sample ID: 300-1207-5**

No Detections.

Client Sample ID: B32WK6 **Lab Sample ID: 300-1207-6**

No Detections.

Client Sample ID: B32W48 **Lab Sample ID: 300-1207-7**

No Detections.

Client Sample ID: B32W49 **Lab Sample ID: 300-1207-8**

No Detections.

Client Sample ID: B32WK8 **Lab Sample ID: 300-1207-9**

No Detections.

Client Sample ID: B32WK9 **Lab Sample ID: 300-1207-10**

No Detections.

Client Sample ID: B32W56 **Lab Sample ID: 300-1207-11**

No Detections.

Client Sample ID: B32W55 **Lab Sample ID: 300-1207-12**

No Detections.

Client Sample ID: B32W58 **Lab Sample ID: 300-1207-13**

No Detections.

Client Sample ID: B32W59 **Lab Sample ID: 300-1207-14**

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

October 30, 2015
Detection Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
SDG: WC0495

Client Sample ID: B32WK1

Lab Sample ID: 300-1207-15

No Detections.

Client Sample ID: B32WK2

Lab Sample ID: 300-1207-16

No Detections.

Client Sample ID: B32X18

Lab Sample ID: 300-1207-17

No Detections.

Client Sample ID: B32X19

Lab Sample ID: 300-1207-18

No Detections.

Client Sample ID: B32X11

Lab Sample ID: 300-1207-19

No Detections.

Client Sample ID: B32X12

Lab Sample ID: 300-1207-20

No Detections.

Client Sample ID: B32W47

Lab Sample ID: 300-1207-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.91	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	0.18	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.12	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	11	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B32YB9

Lab Sample ID: 300-1207-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	15	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	3.3	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.30	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	61	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B32YC7

Lab Sample ID: 300-1207-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	14	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	3.3	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	1.0	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	63	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B32YB3

Lab Sample ID: 300-1207-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.80	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	0.13	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.12	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	9.1	D	0.50	0.25	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

October 30, 2015
Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
SDG: WC0495

Client Sample ID: B32W52
Date Collected: 10/23/15 10:38
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:27	1

Client Sample ID: B32W53
Date Collected: 10/23/15 10:38
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:30	1

Client Sample ID: B32X14
Date Collected: 10/23/15 11:03
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:30	1

Client Sample ID: B32X15
Date Collected: 10/23/15 11:03
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:31	1

Client Sample ID: B32WK5
Date Collected: 10/23/15 09:52
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-5
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:32	1

Client Sample ID: B32WK6
Date Collected: 10/23/15 09:52
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-6
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:32	1

Client Sample ID: B32W48
Date Collected: 10/23/15 09:17
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-7
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:32	1

TestAmerica Richland

October 30, 2015
Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
SDG: WC0495

Client Sample ID: B32W49
Date Collected: 10/23/15 09:17
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-8
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:35	1

Client Sample ID: B32WK8
Date Collected: 10/23/15 09:45
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-9
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:35	1

Client Sample ID: B32WK9
Date Collected: 10/23/15 09:45
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-10
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:35	1

Client Sample ID: B32W56
Date Collected: 10/23/15 10:30
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-11
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:36	1

Client Sample ID: B32W55
Date Collected: 10/23/15 10:30
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-12
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:36	1

Client Sample ID: B32W58
Date Collected: 10/23/15 10:21
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-13
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:36	1

Client Sample ID: B32W59
Date Collected: 10/23/15 10:21
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-14
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:37	1

TestAmerica Richland

October 30, 2015
Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
SDG: WC0495

Client Sample ID: B32WK1
Date Collected: 10/23/15 10:04
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-15
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:40	1

Client Sample ID: B32WK2
Date Collected: 10/23/15 10:04
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-16
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:40	1

Client Sample ID: B32X18
Date Collected: 10/23/15 11:12
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-17
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:41	1

Client Sample ID: B32X19
Date Collected: 10/23/15 11:12
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-18
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:44	1

Client Sample ID: B32X11
Date Collected: 10/23/15 10:55
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-19
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:45	1

Client Sample ID: B32X12
Date Collected: 10/23/15 10:55
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-20
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		10/23/15 18:45	1

Client Sample ID: B32W47
Date Collected: 10/23/15 09:17
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-21
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.91	D	0.40	0.20	mg/L	-		10/23/15 20:15	2
Nitrate as N	0.18	D	0.056	0.028	mg/L	-		10/23/15 20:15	2
Fluoride	0.12	D	0.10	0.050	mg/L	-		10/23/15 20:15	2

TestAmerica Richland

October 30, 2015
Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
SDG: WC0495

Client Sample ID: B32W47
Date Collected: 10/23/15 09:17
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-21
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.038	U	0.076	0.038	mg/L			10/23/15 20:15	2
Sulfate	11	D	0.50	0.25	mg/L			10/23/15 20:15	2

Client Sample ID: B32YB9
Date Collected: 10/23/15 10:38
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-22
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15	D	0.40	0.20	mg/L			10/23/15 20:30	2
Nitrate as N	3.3	D	0.056	0.028	mg/L			10/23/15 20:30	2
Fluoride	0.30	D	0.10	0.050	mg/L			10/23/15 20:30	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			10/23/15 20:30	2
Sulfate	61	D	0.50	0.25	mg/L			10/23/15 20:30	2

Client Sample ID: B32YC7
Date Collected: 10/23/15 11:12
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-23
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14	D	0.40	0.20	mg/L			10/23/15 20:45	2
Nitrate as N	3.3	D	0.056	0.028	mg/L			10/23/15 20:45	2
Fluoride	1.0	D	0.10	0.050	mg/L			10/23/15 20:45	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			10/23/15 20:45	2
Sulfate	63	D	0.50	0.25	mg/L			10/23/15 20:45	2

Client Sample ID: B32YB3
Date Collected: 10/23/15 09:52
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-24
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.80	D	0.40	0.20	mg/L			10/23/15 21:30	2
Nitrate as N	0.13	D	0.056	0.028	mg/L			10/23/15 21:30	2
Fluoride	0.12	D	0.10	0.050	mg/L			10/23/15 21:30	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			10/23/15 21:30	2
Sulfate	9.1	D	0.50	0.25	mg/L			10/23/15 21:30	2

Client: CH2M Hill Plateau Remediation Company
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
SDG: WC0495

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-1623/5
Matrix: Water
Analysis Batch: 1623

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.014	U	0.028	0.014	mg/L			10/23/15 18:29	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			10/23/15 18:29	1

Lab Sample ID: LCS 300-1623/6
Matrix: Water
Analysis Batch: 1623

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.26	2.38		mg/L		105	80 - 120
Nitrite as N	3.04	3.22		mg/L		106	80 - 120

Lab Sample ID: 300-1208-A-1 MS
Matrix: Water
Analysis Batch: 1623

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	4.6	D	0.452	5.04	D	mg/L		104	75 - 125
Nitrite as N	0.038	U	0.609	0.580	D	mg/L		95	75 - 125

Lab Sample ID: 300-1208-A-1 DU
Matrix: Water
Analysis Batch: 1623

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	4.6	D	4.57	D	mg/L		0	20
Nitrite as N	0.038	U	0.038	U	mg/L		NC	20

Lab Sample ID: MB 300-1624/5
Matrix: Water
Analysis Batch: 1624

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.10	U	0.20	0.10	mg/L			10/23/15 18:29	1
Fluoride	0.025	U	0.050	0.025	mg/L			10/23/15 18:29	1
Sulfate	0.13	U	0.25	0.13	mg/L			10/23/15 18:29	1

Lab Sample ID: LCS 300-1624/6
Matrix: Water
Analysis Batch: 1624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	16.0	16.6		mg/L		104	80 - 120
Fluoride	4.00	4.15		mg/L		104	80 - 120
Sulfate	20.0	20.7		mg/L		104	80 - 120

Client: CH2M Hill Plateau Remediation Company
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
SDG: WC0495

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 300-1208-A-1 MS
Matrix: Water
Analysis Batch: 1624

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	11	D	3.20	14.6	D	mg/L		106	75 - 125
Fluoride	0.40	D	0.800	1.22	D	mg/L		102	75 - 125
Sulfate	53	D	4.00	57.3	D	mg/L		102	75 - 125

Lab Sample ID: 300-1208-A-1 DU
Matrix: Water
Analysis Batch: 1624

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	11	D	11.2	D	mg/L		0	20
Fluoride	0.40	D	0.404	D	mg/L		0.2	20
Sulfate	53	D	53.3	D	mg/L		0	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 300-1669/59
Matrix: Water
Analysis Batch: 1669

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			10/23/15 18:22	1

Lab Sample ID: MB 300-1669/89
Matrix: Water
Analysis Batch: 1669

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			10/23/15 18:41	1

Lab Sample ID: LCS 300-1669/60
Matrix: Water
Analysis Batch: 1669

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.259		mg/L		104	80 - 120

Lab Sample ID: LCS 300-1669/90
Matrix: Water
Analysis Batch: 1669

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.259		mg/L		104	80 - 120

Lab Sample ID: 300-1207-17 MS
Matrix: Water
Analysis Batch: 1669

Client Sample ID: B32X18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.0015	U	0.0500	0.0532		mg/L		106	85 - 115

TestAmerica Richland

Client: CH2M Hill Plateau Remediation Company
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
 SDG: WC0495

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 300-1207-17 DU
Matrix: Water
Analysis Batch: 1669

Client Sample ID: B32X18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	0.0015	U	0.0015	U	mg/L	--	NC	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

October 30, 2015
QC Association Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
 SDG: WC0495

HPLC/IC

Analysis Batch: 1623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1207-21	B32W47	Total/NA	Water	300.0	
300-1207-22	B32YB9	Total/NA	Water	300.0	
300-1207-23	B32YC7	Total/NA	Water	300.0	
300-1207-24	B32YB3	Total/NA	Water	300.0	
300-1208-A-1 DU	Duplicate	Total/NA	Water	300.0	
300-1208-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
LCS 300-1623/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-1623/5	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 1624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1207-21	B32W47	Total/NA	Water	300.0	
300-1207-22	B32YB9	Total/NA	Water	300.0	
300-1207-23	B32YC7	Total/NA	Water	300.0	
300-1207-24	B32YB3	Total/NA	Water	300.0	
300-1208-A-1 DU	Duplicate	Total/NA	Water	300.0	
300-1208-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
LCS 300-1624/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-1624/5	Method Blank	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 1669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1207-1	B32W52	Total/NA	Water	7196A	
300-1207-2	B32W53	Total/NA	Water	7196A	
300-1207-3	B32X14	Total/NA	Water	7196A	
300-1207-4	B32X15	Total/NA	Water	7196A	
300-1207-5	B32WK5	Total/NA	Water	7196A	
300-1207-6	B32WK6	Total/NA	Water	7196A	
300-1207-7	B32W48	Total/NA	Water	7196A	
300-1207-8	B32W49	Total/NA	Water	7196A	
300-1207-9	B32WK8	Total/NA	Water	7196A	
300-1207-10	B32WK9	Total/NA	Water	7196A	
300-1207-11	B32W56	Total/NA	Water	7196A	
300-1207-12	B32W55	Total/NA	Water	7196A	
300-1207-13	B32W58	Total/NA	Water	7196A	
300-1207-14	B32W59	Total/NA	Water	7196A	
300-1207-15	B32WK1	Total/NA	Water	7196A	
300-1207-16	B32WK2	Total/NA	Water	7196A	
300-1207-17	B32X18	Total/NA	Water	7196A	
300-1207-17 DU	B32X18	Total/NA	Water	7196A	
300-1207-17 MS	B32X18	Total/NA	Water	7196A	
300-1207-18	B32X19	Total/NA	Water	7196A	
300-1207-19	B32X11	Total/NA	Water	7196A	
300-1207-20	B32X12	Total/NA	Water	7196A	
LCS 300-1669/60	Lab Control Sample	Total/NA	Water	7196A	
LCS 300-1669/90	Lab Control Sample	Total/NA	Water	7196A	
MB 300-1669/59	Method Blank	Total/NA	Water	7196A	
MB 300-1669/89	Method Blank	Total/NA	Water	7196A	

TestAmerica Richland

Client: CH2M Hill Plateau Remediation Company
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
 SDG: WC0495

Client Sample ID: B32W52
Date Collected: 10/23/15 10:38
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:27	AMC	TAL RCH

Client Sample ID: B32W53
Date Collected: 10/23/15 10:38
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:30	AMC	TAL RCH

Client Sample ID: B32X14
Date Collected: 10/23/15 11:03
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:30	AMC	TAL RCH

Client Sample ID: B32X15
Date Collected: 10/23/15 11:03
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:31	AMC	TAL RCH

Client Sample ID: B32WK5
Date Collected: 10/23/15 09:52
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:32	AMC	TAL RCH

Client Sample ID: B32WK6
Date Collected: 10/23/15 09:52
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:32	AMC	TAL RCH

Client: CH2M Hill Plateau Remediation Company
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
 SDG: WC0495

Client Sample ID: B32W48
Date Collected: 10/23/15 09:17
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:32	AMC	TAL RCH

Client Sample ID: B32W49
Date Collected: 10/23/15 09:17
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:35	AMC	TAL RCH

Client Sample ID: B32WK8
Date Collected: 10/23/15 09:45
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:35	AMC	TAL RCH

Client Sample ID: B32WK9
Date Collected: 10/23/15 09:45
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:35	AMC	TAL RCH

Client Sample ID: B32W56
Date Collected: 10/23/15 10:30
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:36	AMC	TAL RCH

Client Sample ID: B32W55
Date Collected: 10/23/15 10:30
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:36	AMC	TAL RCH

Client: CH2M Hill Plateau Remediation Company
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
 SDG: WC0495

Client Sample ID: B32W58
Date Collected: 10/23/15 10:21
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:36	AMC	TAL RCH

Client Sample ID: B32W59
Date Collected: 10/23/15 10:21
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:37	AMC	TAL RCH

Client Sample ID: B32WK1
Date Collected: 10/23/15 10:04
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:40	AMC	TAL RCH

Client Sample ID: B32WK2
Date Collected: 10/23/15 10:04
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:40	AMC	TAL RCH

Client Sample ID: B32X18
Date Collected: 10/23/15 11:12
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:41	AMC	TAL RCH

Client Sample ID: B32X19
Date Collected: 10/23/15 11:12
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:44	AMC	TAL RCH

Client: CH2M Hill Plateau Remediation Company
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
 SDG: WC0495

Client Sample ID: B32X11
Date Collected: 10/23/15 10:55
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:45	AMC	TAL RCH

Client Sample ID: B32X12
Date Collected: 10/23/15 10:55
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:45	AMC	TAL RCH

Client Sample ID: B32W47
Date Collected: 10/23/15 09:17
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		1623	10/23/15 20:15	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1624	10/23/15 20:15	CPM	TAL RCH

Client Sample ID: B32YB9
Date Collected: 10/23/15 10:38
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		1623	10/23/15 20:30	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1624	10/23/15 20:30	CPM	TAL RCH

Client Sample ID: B32YC7
Date Collected: 10/23/15 11:12
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		1623	10/23/15 20:45	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1624	10/23/15 20:45	CPM	TAL RCH

Client Sample ID: B32YB3
Date Collected: 10/23/15 09:52
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		1623	10/23/15 21:30	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1624	10/23/15 21:30	CPM	TAL RCH

Client: CH2M Hill Plateau Remediation Company
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
 SDG: WC0495

Client Sample ID: B32X18
Date Collected: 10/23/15 11:12
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1207-17 DU
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:42	AMC	TAL RCH

Client Sample ID: Duplicate
Date Collected: 10/23/15 10:51
Date Received: 10/23/15 15:00

Lab Sample ID: 300-1208-A-1 DU
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		1623	10/23/15 19:29	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1624	10/23/15 19:29	CPM	TAL RCH

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 300-1623/6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		1623	10/23/15 18:44	CPM	TAL RCH

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 300-1624/6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		1624	10/23/15 18:44	CPM	TAL RCH

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 300-1669/60
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:22	AMC	TAL RCH

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 300-1669/90
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:41	AMC	TAL RCH

Client: CH2M Hill Plateau Remediation Company
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
 SDG: WC0495

Client Sample ID: Method Blank

Lab Sample ID: MB 300-1623/5

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		1623	10/23/15 18:29	CPM	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-1624/5

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	10 mL		1624	10/23/15 18:29	CPM	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-1669/59

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:22	AMC	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-1669/89

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			1669	10/23/15 18:41	AMC	TAL RCH

Client Sample ID: B32X18

Lab Sample ID: 300-1207-17 MS

Date Collected: 10/23/15 11:12

Matrix: Water

Date Received: 10/23/15 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1		3.0 mL	1669	10/23/15 18:41	AMC	TAL RCH

Client Sample ID: Matrix Spike

Lab Sample ID: 300-1208-A-1 MS

Date Collected: 10/23/15 10:51

Matrix: Water

Date Received: 10/23/15 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		2	10 mL		1623	10/23/15 19:14	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1624	10/23/15 19:14	CPM	TAL RCH

Laboratory References:

TAL RCH = TestAmerica Richland, 2800 George Washington Way, Richland, WA 99352, TEL (509)375-3131

Client: CH2M Hill Plateau Remediation Company
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
SDG: WC0495

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL RCH
7196A	Chromium, Hexavalent	SW846	TAL RCH

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL RCH = TestAmerica Richland, 2800 George Washington Way, Richland, WA 99352, TEL (509)375-3131



Client: CH2M Hill Plateau Remediation Company
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1207-1
 SDG: WC0495

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-1207-1	B32W52	Water	10/23/15 10:38	10/23/15 15:00
300-1207-2	B32W53	Water	10/23/15 10:38	10/23/15 15:00
300-1207-3	B32X14	Water	10/23/15 11:03	10/23/15 15:00
300-1207-4	B32X15	Water	10/23/15 11:03	10/23/15 15:00
300-1207-5	B32WK5	Water	10/23/15 09:52	10/23/15 15:00
300-1207-6	B32WK6	Water	10/23/15 09:52	10/23/15 15:00
300-1207-7	B32W48	Water	10/23/15 09:17	10/23/15 15:00
300-1207-8	B32W49	Water	10/23/15 09:17	10/23/15 15:00
300-1207-9	B32WK8	Water	10/23/15 09:45	10/23/15 15:00
300-1207-10	B32WK9	Water	10/23/15 09:45	10/23/15 15:00
300-1207-11	B32W56	Water	10/23/15 10:30	10/23/15 15:00
300-1207-12	B32W55	Water	10/23/15 10:30	10/23/15 15:00
300-1207-13	B32W58	Water	10/23/15 10:21	10/23/15 15:00
300-1207-14	B32W59	Water	10/23/15 10:21	10/23/15 15:00
300-1207-15	B32WK1	Water	10/23/15 10:04	10/23/15 15:00
300-1207-16	B32WK2	Water	10/23/15 10:04	10/23/15 15:00
300-1207-17	B32X18	Water	10/23/15 11:12	10/23/15 15:00
300-1207-18	B32X19	Water	10/23/15 11:12	10/23/15 15:00
300-1207-19	B32X11	Water	10/23/15 10:55	10/23/15 15:00
300-1207-20	B32X12	Water	10/23/15 10:55	10/23/15 15:00
300-1207-21	B32W47	Water	10/23/15 09:17	10/23/15 15:00
300-1207-22	B32YB9	Water	10/23/15 10:38	10/23/15 15:00
300-1207-23	B32YC7	Water	10/23/15 11:12	10/23/15 15:00
300-1207-24	B32YB3	Water	10/23/15 09:52	10/23/15 15:00



Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-1207-1
SDG Number: WC0495

Login Number: 1207
List Number: 1
Creator: Bock, Julie A

List Source: TestAmerica Richland

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

