

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: 300-6383-1

TestAmerica Sample Delivery Group: WC2517

Client Project/Site: I18-002

For:

CH2M Hill Plateau Remediation Company

825 Jadwin Avenue

Richland, Washington 99352

Attn: CPP Sample Management

Kristine D. Allen

Authorized for release by:

11/29/2017 4:37:16 PM

Kristine Allen, Manager of Project Management

(253)248-4970

kristine.allen@testamericainc.com

Designee for

Ashley Worthy, Project Manager I

(509)375-3131

ashley.worthy@testamericainc.com

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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.



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Definitions/Glossary

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
SDG: WC2517

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
D	The reported value is from a dilution.
B	Estimated result. Result is less than the RL, but greater than MDL
U	Analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
B	Estimated result. Result is less than the RL, but greater than MDL
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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Case Narrative

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
SDG: WC2517

Job ID: 300-6383-1

Laboratory: TestAmerica Richland**Narrative**

**Job Narrative
300-6383-1****Comments**

No additional comments.

Receipt

The samples were received on 11/14/2017 11:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3° C.

HPLC/IC

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

General Chemistry

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

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**CH2M Hill Plateau
Remediation Company**

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

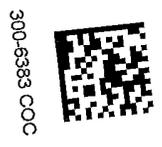
C.O.C.#
118-002-400
Page 1 of 1

Collector: IVAN SCHAEFFER CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: 118-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071
Project Title: CERCLA, NOVEMBER 2017	Logbook No.: HNF-N-506 <i>9726</i>	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Rich	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/REMARK
 ** * 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
B3F2J9	N		NOV 14 2017	0503	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B3F2K1	Y	W	NOV 14 2017	0503	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C

WC 2517
10383



Relinquished By: IVAN SCHAEFFER <i>Ivan Schaeffer</i> Signature	Received By: Jeff Lucas <i>Jeff Lucas</i> Signature	NOV 14 2017 1000 Date/Time	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquid T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By: Jeff Lucas <i>Jeff Lucas</i> Signature	Received By: Jeff Lucas <i>Jeff Lucas</i> Signature	NOV 14 2017 1100 Date/Time	
Relinquished By: Jeff Lucas <i>Jeff Lucas</i> Signature	Received By: Jeff Lucas <i>Jeff Lucas</i> Signature	NOV 14 2017 1100 Date/Time	
Relinquished By: Jeff Lucas <i>Jeff Lucas</i> Signature	Received By: Jeff Lucas <i>Jeff Lucas</i> Signature	NOV 14 2017 1100 Date/Time	

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

Disposed By: _____ Date/Time: _____

CH2MHILL Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

I18-002-393

Page 1 of 1

Collector:	IVAN SCHAEFFER CHPRC	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	I18-002	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	CERCLA, NOVEMBER 2017	Logbook No.:	HNF-N-506 87/26	Ice Chest No.:	N/A
Shipped To (Lab):	TestAmerica Incorporated, Rich	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/REMARK			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.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3F3J9	N		NOV 14 2017	0854	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B3F3K1	Y		NOV 14 2017	0854	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C

WE2517
LE383

Relinquished By:	IVAN SCHAEFFER	Received By:	Jeffrey KATRC	Matrix *
Print First and Last Name	IVAN SCHAEFFER	Print First and Last Name	Jeffrey KATRC	S = Soil DS = Drum Solids
Signature	<i>[Signature]</i>	Signature	<i>[Signature]</i>	SE = Sediment DL = Drum Liquid
Date/Time	NOV 14 2017 1000	Date/Time	NOV 14 2017 1000	SO = Solid T = Tissue
Relinquished By:	Jeffrey KATRC	Received By:	J. Bock, TARI	SL = Sludge WI = Wipe
Print First and Last Name	Jeffrey KATRC	Print First and Last Name	J. Bock, TARI	W = Water L = Liquid
Signature	<i>[Signature]</i>	Signature	<i>[Signature]</i>	O = Oil V = Vegetation
Date/Time	NOV 14 2017 1100	Date/Time	11-14-17 1100	A = Air X = Other
Relinquished By:		Received By:		
Print First and Last Name		Print First and Last Name		
Signature		Signature		
Date/Time		Date/Time		
Relinquished By:		Received By:		
Print First and Last Name		Print First and Last Name		
Signature		Signature		
Date/Time		Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:		Date/Time:

CH2MHill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#
I18-002-399
Page 1 of 1

Collector: VAN SCHAEFFER CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: I18-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071
Project Title: CERCLA, NOVEMBER 2017	Logbook No.: HNF-N-506 <i>87/26</i>	Ice Chest No.: N/A
Shipped To (Lab): RestAmerica Incorporated, Rich	Method of Shipment: GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days	Offsite Property No.: N/A
<p>POSSIBLE SAMPLE HAZARDS/REMARK</p> <p>** ** 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</p>		<p>SPECIAL INSTRUCTIONS</p> <p>N/A</p>

Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3F2J8	N	NOV 14 2017	0903	1x125-mL P	300.0_ANTIONS_IC: COMMON	48 Hours	COOL <=6C

W027517
W383

Relinquished By: VAN SCHAEFFER <i>Van Schaeffer</i> Signature NOV 14 2017 1000	Received By: <i>B. Jorgenson</i> B. JORGENSEN, TARI Signature NOV 14 2017 1000	Matrix *
Relinquished By: <i>Van Schaeffer</i> Signature NOV 14 2017 1100	Received By: <i>B. Jorgenson</i> Signature NOV 14 2017 1100	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By: <i>Van Schaeffer</i> Signature Date/Time	Received By: <i>B. Jorgenson</i> Signature Date/Time	DS = Drum Solids DL = Drum Liquid T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By: <i>Van Schaeffer</i> Signature Date/Time	Received By: <i>B. Jorgenson</i> Signature Date/Time	
FINAL SAMPLE DISPOSITION		Date/Time:



CH2MH11 Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.# 118-002-392 Page 1 of 1

Collector:	IVAN SCHAEFFER CHPRC	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	118-002	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	CERCLA, NOVEMBER 2017	Logbook No.:	HNF-N-506 97/2c	Ice Chest No.:	N/A
Shipped To (Lab):	TestAmerica Incorporated, Rich	Method of Shipment:	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.:	N/A
Protocol:	CERCLA	Priority:	30 Days	Offsite Property No.:	N/A
<p>POSSIBLE SAMPLE HAZARDS/REMARK</p> <p>** ** 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</p>		<p>SPECIAL INSTRUCTIONS</p> <p>N/A</p>			

Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3F3J8	N	NOV 14 2017	0854	1x125-mL P	300.0_ANTONS_IC: COMMON	48 Hours	COOL <=6C

WE 2517
WE 383

Relinquished By:	IVAN SCHAEFFER CHPRC	Received By:	JEFF LUSK CHPRC	Matrix *
Print First and Last Name	Ivan Schaeffer	Print First and Last Name	Jeff Lusk	S = Soil DS = Drum Solids
Signature	<i>Ivan Schaeffer</i>	Signature	<i>Jeff Lusk</i>	SE = Sediment DL = Drum Liquid
Date/Time	NOV 14 2017 1000	Date/Time	NOV 14 2017 1000	SO = Solid T = Tissue
Relinquished By:	JEFF LUSK CHPRC	Received By:	B. JORGENSEN CHPRC	SL = Sludge WI = Wipe
Print First and Last Name	Jeff Lusk	Print First and Last Name	B. Jorgensen	W = Water L = Liquid
Signature	<i>Jeff Lusk</i>	Signature	<i>B. Jorgensen</i>	O = Oil V = Vegetation
Date/Time	NOV 14 2017 1100	Date/Time	NOV 14 2017 1100	A = Air X = Other
Relinquished By:		Received By:		
Print First and Last Name		Print First and Last Name		
Signature		Signature		
Date/Time		Date/Time		
Relinquished By:		Received By:		
Print First and Last Name		Print First and Last Name		
Signature		Signature		
Date/Time		Date/Time		
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process):		Date/Time:

CH2MHill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
I18-002-360

Page 1 of 1

Collector: IVAN SCHAEFFER CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: I18-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071
Project Title: CERCLA, NOVEMBER 2017	Logbook No.: HNF-N-506 <i>8726</i>	Ice Chest No.: N/A
Shipped To (Lab): TestAmerica Incorporated, Rich	Method of Shipment: GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 30 Days	Offsite Property No.: N/A
<p>POSSIBLE SAMPLE HAZARDS/REMARK</p> <p>** ** 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</p>		<p>SPECIAL INSTRUCTIONS</p> <p>N/A</p>

Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3F304	N	NOV 14 2017	0937	1x125-mL P	300.0_ANTIONS_IC: COMMON	48 Hours	COOL <=6C

WC 2517
LC 383

Relinquished By: <i>Juan Schuchman</i> Signature: <i>Juan Schuchman</i> Date/Time: NOV 14 2017 1000	Received By: <i>Jefferson</i> Signature: <i>Jefferson</i> Date/Time: NOV 14 2017 1000	<p>Matrix *</p> <p>S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wipe W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other</p>
Relinquished By: <i>Jefferson</i> Signature: <i>Jefferson</i> Date/Time: NOV 14 2017 1100	Received By: <i>Jefferson</i> Signature: <i>Jefferson</i> Date/Time: 11-14-17 1000	
Relinquished By: _____ Signature: _____ Date/Time: _____	Received By: _____ Signature: _____ Date/Time: _____	
Relinquished By: _____ Signature: _____ Date/Time: _____	Received By: _____ Signature: _____ Date/Time: _____	
<p>FINAL SAMPLE DISPOSITION</p> <p>Disposal Method (e.g., Return to customer, per lab procedure, used in process):</p>		Disposed By: _____ Date/Time: _____

CH2M Hill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#
I18-002-362
Page 1 of 1

Collector:	IVAN SCHAEFFER CHPRC	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	I18-002	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	CERCLA, NOVEMBER 2017	Logbook No.:	HNF-N-506 <i>97/26</i>	Ice Chest No.:	N/A
Shipped To (Lab):	TestAmerica Incorporated, Rich	Method of Shipment:	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.:	N/A
Protocol:	CERCLA	Priority:	30 Days	Offsite Property No.:	N/A
<p>POSSIBLE SAMPLE HAZARDS/REMARK</p> <p>** ** 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</p>			<p>SPECIAL INSTRUCTIONS</p> <p>N/A</p>		

Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3F310	N	NOV 14 2017	0943	1x125-ml P	300.0_ANTIONS_IC: COMMON	48 Hours	Cool <=6C

WC2517
U383

Relinquished By:	<i>[Signature]</i> CHPRC	Signature	NOV 14 2017 1000	Date/Time	Received By:	<i>[Signature]</i> CHPRC	Signature	NOV 14 2017 1000	Date/Time	<p>Matrix *</p> <p>S = Soil DS = Drum Solids</p> <p>SE = Sediment DL = Drum Liquid</p> <p>SO = Solid T = Tissue</p> <p>SL = Sludge WL = Wipe</p> <p>W = Water L = Liquid</p> <p>O = Oil V = Vegetation</p> <p>A = Air X = Other</p>
Relinquished By:	<i>[Signature]</i> CHPRC	Signature	NOV 14 2017 1100	Date/Time	Received By:	<i>[Signature]</i> CHPRC	Signature	NOV 14 2017 1147	Date/Time	
Relinquished By:	<i>[Signature]</i>	Signature		Date/Time	Received By:	<i>[Signature]</i>	Signature		Date/Time	
Relinquished By:	<i>[Signature]</i>	Signature		Date/Time	Received By:	<i>[Signature]</i>	Signature		Date/Time	
<p>FINAL SAMPLE DISPOSITION</p> <p>Disposal Method (e.g., Return to customer, per lab procedure, used in process):</p>					Disposed By:		Date/Time:			

CE2M Hill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#
I18-002-387
Page 1 of 1

Collector:	N/VAN SCHAEFFER CHRR	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	I18-002	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	CERCIA, NOVEMBER 2017	Logbook No.:	HNF-N-506 97/26	Ice Chest No.:	N/A
Shipped To (Lab):	TestAmerica Incorporated, Rich	Method of Shipment:	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.:	N/A
Protocol:	CERCIA	Priority:	30 Days	Offsite Property No.:	N/A
POSSIBLE SAMPLE HAZARDS/REMARK			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.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3F3H6	N	W	NOV 14 2017	0824	1x125-ml P	300.0_ANTIONS_IC: COMMON	48 Hours	Cool <=6C

W02517
Le 383

Relinquished By:	N/VAN SCHAEFFER Signature	NOV 14 2017 1000	Received By:	Jeffrey KERRC Signature	NOV 14 2017 1000	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drumm Solids DL = Drumm Liquid T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By:	Jeffrey KERRC Signature	NOV 14 2017 1100	Received By:	B. JOHNSON, TARI Signature	NOV 14 2017 1100	
Relinquished By:	Signature	Date/Time	Received By:	Signature	Date/Time	
Relinquished By:	Signature	Date/Time	Received By:	Signature	Date/Time	
Relinquished By:	Signature	Date/Time	Received By:	Signature	Date/Time	
Relinquished By:	Signature	Date/Time	Received By:	Signature	Date/Time	

CH2MHill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#
I18-002-389
Page 1 of 1

Collector:	IVAN SCHAEFFER CH2MHC	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	I18-002	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	CERCIA, NOVEMBER 2017	Logbook No.:	HNF-N-506 97/26	Ice Chest No.:	N/A
Shipped To (Lab):	RestAmerica Incorporated, Rich	Method of Shipment:	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.:	N/A
Protocol:	CERCIA	Priority:	30 Days	Offsite Property No.:	N/A
POSSIBLE SAMPLE HAZARDS/REMARK ** ** 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		

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3F3H7	N		NOV 14 2017	0824	1x125-mL P	300.0_ANTIONS_IC: COMMON	48 Hours	COOL <=6C

WC2517
6383

Relinquished By:	IVAN SCHAEFFER Print First and Last Name <i>Ivan Schaeffer</i> Signature NOV 14 2017 1000 Date/Time	Received By:	Jeff Lucas KCHRC Print First and Last Name <i>Jeff Lucas</i> Signature NOV 14 2017 1000 Date/Time	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquid T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By:	Jeff Lucas KCHRC Print First and Last Name <i>Jeff Lucas</i> Signature NOV 14 2017 1100 Date/Time	Received By:	B. Jorgenson, TARL Print First and Last Name <i>B. Jorgenson</i> Signature 11.14.17 Date/Time	
Relinquished By:	Print First and Last Name Signature Date/Time	Received By:	Print First and Last Name Signature Date/Time	
Relinquished By:	Print First and Last Name Signature Date/Time	Received By:	Print First and Last Name Signature Date/Time	
Relinquished By:	Print First and Last Name Signature Date/Time	Received By:	Print First and Last Name Signature Date/Time	
FINAL SAMPLE DISPOSITION		Disposal Method (e.g., Return to customer, per lab procedure, used in process):		Date/Time:

Detection Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
SDG: WC2517

Client Sample ID: B3F2J9

Lab Sample ID: 300-6383-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.012		0.0040	0.0015	mg/L	1		7196A	Total/NA

Client Sample ID: B3F2K1

Lab Sample ID: 300-6383-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.012		0.0040	0.0015	mg/L	1		7196A	Total/NA

Client Sample ID: B3F3J9

Lab Sample ID: 300-6383-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0031	B	0.0040	0.0015	mg/L	1		7196A	Total/NA

Client Sample ID: B3F3K1

Lab Sample ID: 300-6383-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0027	B	0.0040	0.0015	mg/L	1		7196A	Total/NA

Client Sample ID: B3F311

Lab Sample ID: 300-6383-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0061		0.0040	0.0015	mg/L	1		7196A	Total/NA

Client Sample ID: B3F313

Lab Sample ID: 300-6383-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0052		0.0040	0.0015	mg/L	1		7196A	Total/NA

Client Sample ID: B3F307

Lab Sample ID: 300-6383-7

No Detections.

Client Sample ID: B3F305

Lab Sample ID: 300-6383-8

No Detections.

Client Sample ID: B3F2J8

Lab Sample ID: 300-6383-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.3	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	4.1	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.11	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.070	B D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	42	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3F3J8

Lab Sample ID: 300-6383-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.0	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	1.6	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.18	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.060	B D	0.076	0.038	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

Detection Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
SDG: WC2517

Client Sample ID: B3F3J8 (Continued)

Lab Sample ID: 300-6383-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	31	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3F304

Lab Sample ID: 300-6383-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.8	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	0.39	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.13	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.050	B D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	12	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3F310

Lab Sample ID: 300-6383-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.6	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	1.4	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.16	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.055	B D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	18	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3F3H6

Lab Sample ID: 300-6383-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.8	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	4.9	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.21	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.061	B D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	23	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3F3H7

Lab Sample ID: 300-6383-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.8	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	4.8	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.24	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.051	B D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	23	D	0.50	0.25	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
SDG: WC2517

Client Sample ID: B3F2J9
Date Collected: 11/14/17 09:03
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.012		0.0040	0.0015	mg/L			11/14/17 13:13	1

Client Sample ID: B3F2K1
Date Collected: 11/14/17 09:03
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.012		0.0040	0.0015	mg/L			11/14/17 13:12	1

Client Sample ID: B3F3J9
Date Collected: 11/14/17 08:54
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0031	B	0.0040	0.0015	mg/L			11/14/17 13:13	1

Client Sample ID: B3F3K1
Date Collected: 11/14/17 08:54
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0027	B	0.0040	0.0015	mg/L			11/14/17 13:13	1

Client Sample ID: B3F311
Date Collected: 11/14/17 09:43
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-5
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0061		0.0040	0.0015	mg/L			11/14/17 13:14	1

Client Sample ID: B3F313
Date Collected: 11/14/17 09:43
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-6
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0052		0.0040	0.0015	mg/L			11/14/17 13:14	1

Client Sample ID: B3F307
Date Collected: 11/14/17 09:31
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-7
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			11/14/17 13:17	1

TestAmerica Richland

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
SDG: WC2517

Client Sample ID: B3F305

Lab Sample ID: 300-6383-8

Date Collected: 11/14/17 09:31

Matrix: Water

Date Received: 11/14/17 11:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			11/14/17 13:18	1

Client Sample ID: B3F2J8

Lab Sample ID: 300-6383-9

Date Collected: 11/14/17 09:03

Matrix: Water

Date Received: 11/14/17 11:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.3	D	0.40	0.20	mg/L			11/14/17 17:01	2
Nitrate as N	4.1	D	0.056	0.028	mg/L			11/14/17 17:01	2
Fluoride	0.11	D	0.10	0.050	mg/L			11/14/17 17:01	2
Nitrite as N	0.070	B D	0.076	0.038	mg/L			11/14/17 17:01	2
Sulfate	42	D	0.50	0.25	mg/L			11/14/17 17:01	2

Client Sample ID: B3F3J8

Lab Sample ID: 300-6383-10

Date Collected: 11/14/17 08:54

Matrix: Water

Date Received: 11/14/17 11:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.0	D	0.40	0.20	mg/L			11/14/17 17:46	2
Nitrate as N	1.6	D	0.056	0.028	mg/L			11/14/17 17:46	2
Fluoride	0.18	D	0.10	0.050	mg/L			11/14/17 17:46	2
Nitrite as N	0.060	B D	0.076	0.038	mg/L			11/14/17 17:46	2
Sulfate	31	D	0.50	0.25	mg/L			11/14/17 17:46	2

Client Sample ID: B3F304

Lab Sample ID: 300-6383-11

Date Collected: 11/14/17 09:31

Matrix: Water

Date Received: 11/14/17 11:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8	D	0.40	0.20	mg/L			11/14/17 18:01	2
Nitrate as N	0.39	D	0.056	0.028	mg/L			11/14/17 18:01	2
Fluoride	0.13	D	0.10	0.050	mg/L			11/14/17 18:01	2
Nitrite as N	0.050	B D	0.076	0.038	mg/L			11/14/17 18:01	2
Sulfate	12	D	0.50	0.25	mg/L			11/14/17 18:01	2

Client Sample ID: B3F310

Lab Sample ID: 300-6383-12

Date Collected: 11/14/17 09:43

Matrix: Water

Date Received: 11/14/17 11:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6	D	0.40	0.20	mg/L			11/14/17 18:16	2
Nitrate as N	1.4	D	0.056	0.028	mg/L			11/14/17 18:16	2
Fluoride	0.16	D	0.10	0.050	mg/L			11/14/17 18:16	2
Nitrite as N	0.055	B D	0.076	0.038	mg/L			11/14/17 18:16	2
Sulfate	18	D	0.50	0.25	mg/L			11/14/17 18:16	2

TestAmerica Richland

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
 SDG: WC2517

Client Sample ID: B3F3H6

Lab Sample ID: 300-6383-13

Date Collected: 11/14/17 08:24

Matrix: Water

Date Received: 11/14/17 11:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8	D	0.40	0.20	mg/L			11/14/17 18:31	2
Nitrate as N	4.9	D	0.056	0.028	mg/L			11/14/17 18:31	2
Fluoride	0.21	D	0.10	0.050	mg/L			11/14/17 18:31	2
Nitrite as N	0.061	B D	0.076	0.038	mg/L			11/14/17 18:31	2
Sulfate	23	D	0.50	0.25	mg/L			11/14/17 18:31	2

Client Sample ID: B3F3H7

Lab Sample ID: 300-6383-14

Date Collected: 11/14/17 08:24

Matrix: Water

Date Received: 11/14/17 11:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8	D	0.40	0.20	mg/L			11/14/17 18:46	2
Nitrate as N	4.8	D	0.056	0.028	mg/L			11/14/17 18:46	2
Fluoride	0.24	D	0.10	0.050	mg/L			11/14/17 18:46	2
Nitrite as N	0.051	B D	0.076	0.038	mg/L			11/14/17 18:46	2
Sulfate	23	D	0.50	0.25	mg/L			11/14/17 18:46	2

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
SDG: WC2517

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-9665/27
Matrix: Water
Analysis Batch: 9665

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			11/14/17 16:30	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			11/14/17 16:30	1

Lab Sample ID: LCS 300-9665/28
Matrix: Water
Analysis Batch: 9665

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	2.31		mg/L		102	80 - 120
Nitrite as N	3.04	3.13		mg/L		103	80 - 120

Lab Sample ID: 300-6383-9 MS
Matrix: Water
Analysis Batch: 9665

Client Sample ID: B3F2J8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	4.1	D	0.452	4.62	D	mg/L		118	75 - 125
Nitrite as N	0.070	B D	0.609	0.546	D	mg/L		78	75 - 125

Lab Sample ID: 300-6383-9 DU
Matrix: Water
Analysis Batch: 9665

Client Sample ID: B3F2J8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	4.1	D	4.12	D	mg/L		0.9	20
Nitrite as N	0.070	B D	0.0730	B D	mg/L		4	20

Lab Sample ID: MB 300-9666/27
Matrix: Water
Analysis Batch: 9666

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			11/14/17 16:30	1
Fluoride	0.025	U	0.050	0.025	mg/L			11/14/17 16:30	1
Sulfate	0.13	U	0.25	0.13	mg/L			11/14/17 16:30	1

Lab Sample ID: LCS 300-9666/28
Matrix: Water
Analysis Batch: 9666

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	15.8		mg/L		99	80 - 120
Fluoride	4.00	4.03		mg/L		101	80 - 120
Sulfate	20.0	20.4		mg/L		102	80 - 120

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
 SDG: WC2517

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 300-6383-9 MS
 Matrix: Water
 Analysis Batch: 9666

Client Sample ID: B3F2J8
 Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				
Chloride	7.3	D	3.20	10.5	D	mg/L		102	75 - 125
Fluoride	0.11	D	0.800	0.825	D	mg/L		89	75 - 125
Sulfate	42	D	4.00	46.0	D	mg/L		104	75 - 125

Lab Sample ID: 300-6383-9 DU
 Matrix: Water
 Analysis Batch: 9666

Client Sample ID: B3F2J8
 Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier					
Chloride	7.3	D	7.33	D	mg/L		1	1	20
Fluoride	0.11	D	0.112	D	mg/L		0.7	0.7	20
Sulfate	42	D	42.2	D	mg/L		0.9	0.9	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 300-9674/3
 Matrix: Water
 Analysis Batch: 9674

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			11/14/17 13:09	1

Lab Sample ID: LCS 300-9674/4
 Matrix: Water
 Analysis Batch: 9674

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
Cr (VI)	0.250	0.259		mg/L		103	80 - 120

Lab Sample ID: 300-6383-2 MS
 Matrix: Water
 Analysis Batch: 9674

Client Sample ID: B3F2K1
 Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				
Cr (VI)	0.012		0.0501	0.0632		mg/L		102	75 - 125

Lab Sample ID: 300-6383-2 DU
 Matrix: Water
 Analysis Batch: 9674

Client Sample ID: B3F2K1
 Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier					
Cr (VI)	0.012		0.0124		mg/L		2	2	20

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
 SDG: WC2517

HPLC/IC

Analysis Batch: 9665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-6383-9	B3F2J8	Total/NA	Water	300.0	
300-6383-10	B3F3J8	Total/NA	Water	300.0	
300-6383-11	B3F304	Total/NA	Water	300.0	
300-6383-12	B3F310	Total/NA	Water	300.0	
300-6383-13	B3F3H6	Total/NA	Water	300.0	
300-6383-14	B3F3H7	Total/NA	Water	300.0	
MB 300-9665/27	Method Blank	Total/NA	Water	300.0	
LCS 300-9665/28	Lab Control Sample	Total/NA	Water	300.0	
300-6383-9 MS	B3F2J8	Total/NA	Water	300.0	
300-6383-9 DU	B3F2J8	Total/NA	Water	300.0	

Analysis Batch: 9666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-6383-9	B3F2J8	Total/NA	Water	300.0	
300-6383-10	B3F3J8	Total/NA	Water	300.0	
300-6383-11	B3F304	Total/NA	Water	300.0	
300-6383-12	B3F310	Total/NA	Water	300.0	
300-6383-13	B3F3H6	Total/NA	Water	300.0	
300-6383-14	B3F3H7	Total/NA	Water	300.0	
MB 300-9666/27	Method Blank	Total/NA	Water	300.0	
LCS 300-9666/28	Lab Control Sample	Total/NA	Water	300.0	
300-6383-9 MS	B3F2J8	Total/NA	Water	300.0	
300-6383-9 DU	B3F2J8	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 9674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-6383-1	B3F2J9	Total/NA	Water	7196A	
300-6383-2	B3F2K1	Total/NA	Water	7196A	
300-6383-3	B3F3J9	Total/NA	Water	7196A	
300-6383-4	B3F3K1	Total/NA	Water	7196A	
300-6383-5	B3F311	Total/NA	Water	7196A	
300-6383-6	B3F313	Total/NA	Water	7196A	
300-6383-7	B3F307	Total/NA	Water	7196A	
300-6383-8	B3F305	Total/NA	Water	7196A	
MB 300-9674/3	Method Blank	Total/NA	Water	7196A	
LCS 300-9674/4	Lab Control Sample	Total/NA	Water	7196A	
300-6383-2 MS	B3F2K1	Total/NA	Water	7196A	
300-6383-2 DU	B3F2K1	Total/NA	Water	7196A	

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
 SDG: WC2517

Client Sample ID: B3F2J9

Date Collected: 11/14/17 09:03

Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-1

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			9674	11/14/17 13:13	TRH	TAL RCH

Client Sample ID: B3F2K1

Date Collected: 11/14/17 09:03

Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-2

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			9674	11/14/17 13:12	TRH	TAL RCH

Client Sample ID: B3F3J9

Date Collected: 11/14/17 08:54

Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-3

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			9674	11/14/17 13:13	TRH	TAL RCH

Client Sample ID: B3F3K1

Date Collected: 11/14/17 08:54

Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-4

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			9674	11/14/17 13:13	TRH	TAL RCH

Client Sample ID: B3F311

Date Collected: 11/14/17 09:43

Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-5

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			9674	11/14/17 13:14	TRH	TAL RCH

Client Sample ID: B3F313

Date Collected: 11/14/17 09:43

Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-6

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			9674	11/14/17 13:14	TRH	TAL RCH

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
SDG: WC2517

Client Sample ID: B3F307

Date Collected: 11/14/17 09:31
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-7

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			9674	11/14/17 13:17	TRH	TAL RCH

Client Sample ID: B3F305

Date Collected: 11/14/17 09:31
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-8

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			9674	11/14/17 13:18	TRH	TAL RCH

Client Sample ID: B3F2J8

Date Collected: 11/14/17 09:03
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-9

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	300.0		2			9665	11/14/17 17:01	DRM	TAL RCH
Total/NA	Analysis	300.0		2			9666	11/14/17 17:01	DRM	TAL RCH

Client Sample ID: B3F3J8

Date Collected: 11/14/17 08:54
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-10

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	300.0		2			9665	11/14/17 17:46	DRM	TAL RCH
Total/NA	Analysis	300.0		2			9666	11/14/17 17:46	DRM	TAL RCH

Client Sample ID: B3F304

Date Collected: 11/14/17 09:31
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-11

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	300.0		2			9665	11/14/17 18:01	DRM	TAL RCH
Total/NA	Analysis	300.0		2			9666	11/14/17 18:01	DRM	TAL RCH

Client Sample ID: B3F310

Date Collected: 11/14/17 09:43
Date Received: 11/14/17 11:00

Lab Sample ID: 300-6383-12

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	300.0		2			9665	11/14/17 18:16	DRM	TAL RCH
Total/NA	Analysis	300.0		2			9666	11/14/17 18:16	DRM	TAL RCH

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
 SDG: WC2517

Client Sample ID: B3F3H6

Lab Sample ID: 300-6383-13

Date Collected: 11/14/17 08:24

Matrix: Water

Date Received: 11/14/17 11:00

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			9665	11/14/17 18:31	DRM	TAL RCH
Total/NA	Analysis	300.0		2			9666	11/14/17 18:31	DRM	TAL RCH

Client Sample ID: B3F3H7

Lab Sample ID: 300-6383-14

Date Collected: 11/14/17 08:24

Matrix: Water

Date Received: 11/14/17 11:00

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			9665	11/14/17 18:46	DRM	TAL RCH
Total/NA	Analysis	300.0		2			9666	11/14/17 18:46	DRM	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-9665/27

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			9665	11/14/17 16:30	DRM	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-9666/27

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			9666	11/14/17 16:30	DRM	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-9674/3

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			9674	11/14/17 13:09	TRH	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-9665/28

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			9665	11/14/17 16:45	DRM	TAL RCH

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
 SDG: WC2517

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-9666/28

Date Collected: N/A
 Date Received: N/A

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			9666	11/14/17 16:45	DRM	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-9674/4

Date Collected: N/A
 Date Received: N/A

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			9674	11/14/17 13:09	TRH	TAL RCH

Client Sample ID: B3F2K1

Lab Sample ID: 300-6383-2 MS

Date Collected: 11/14/17 09:03
 Date Received: 11/14/17 11:00

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			9674	11/14/17 13:10	TRH	TAL RCH

Client Sample ID: B3F2J8

Lab Sample ID: 300-6383-9 MS

Date Collected: 11/14/17 09:03
 Date Received: 11/14/17 11:00

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			9665	11/14/17 17:16	DRM	TAL RCH
Total/NA	Analysis	300.0		2			9666	11/14/17 17:16	DRM	TAL RCH

Laboratory References:

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

Method Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
 SDG: WC2517

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



Sample Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-002

TestAmerica Job ID: 300-6383-1
 SDG: WC2517

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-6383-1	B3F2J9	Water	11/14/17 09:03	11/14/17 11:00
300-6383-2	B3F2K1	Water	11/14/17 09:03	11/14/17 11:00
300-6383-3	B3F3J9	Water	11/14/17 08:54	11/14/17 11:00
300-6383-4	B3F3K1	Water	11/14/17 08:54	11/14/17 11:00
300-6383-5	B3F311	Water	11/14/17 09:43	11/14/17 11:00
300-6383-6	B3F313	Water	11/14/17 09:43	11/14/17 11:00
300-6383-7	B3F307	Water	11/14/17 09:31	11/14/17 11:00
300-6383-8	B3F305	Water	11/14/17 09:31	11/14/17 11:00
300-6383-9	B3F2J8	Water	11/14/17 09:03	11/14/17 11:00
300-6383-10	B3F3J8	Water	11/14/17 08:54	11/14/17 11:00
300-6383-11	B3F304	Water	11/14/17 09:31	11/14/17 11:00
300-6383-12	B3F310	Water	11/14/17 09:43	11/14/17 11:00
300-6383-13	B3F3H6	Water	11/14/17 08:24	11/14/17 11:00
300-6383-14	B3F3H7	Water	11/14/17 08:24	11/14/17 11:00

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-6383-1

SDG Number: WC2517

Login Number: 6383

List Number: 1

Creator: Jorgenson, Briana F

List Source: TestAmerica Richland

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
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 (excluding tests with immediate HTs)	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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	