

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: 300-6367-1
TestAmerica Sample Delivery Group: WC2509
Client Project/Site: W18-011

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 11:58:27 AM
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

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.



LINKS

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Definitions/Glossary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

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.

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: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Job ID: 300-6367-1

Laboratory: TestAmerica Richland

Narrative

**Job Narrative
300-6367-1**

Comments

No additional comments.

Receipt

The samples were received on 11/10/2017 2:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

HPLC/IC

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

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CH2MHill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

COC #
W18-011-122
Page 1 of 1

Collector:	Larry Rosame /CHPRC	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	W18-011	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, NOVEMBER 2017	Logbook No.:	HNF-N-506 95/62	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:	RCRA	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
B3DHKS	N	W	NOV 1	1350	1x125-mL P	300.0_ANTIONS_IC: COMMON	48 Hours	COOL <=6C

#6367
WFC2509



300-6367 COC

Relinquished By:	Larry Rosame /CHPRC	Signature	NOV 12 2017	1450	Received By:	L Anderson, TARI	Signature	11/10/17	1450
Relinquished By:		Signature			Received By:		Signature		
Relinquished By:		Signature			Received By:		Signature		
Relinquished By:		Signature			Received By:		Signature		

- 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

CH2M Hill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
W18-011-123

Page 1 of 1

Collector: Larry Roseme /CHPRC Contact/Requester: Karen Waters-Husted Telephone No.: 509-376-4650

SAF No.: W18-011 Sampling Origin: Hanford Site Purchase Order/Charge Code: 300071

Project Title: RCRA, NOVEMBER 2017 Logbook No.: HNF-N-506 95/62 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: RCRA 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
B3DHL0	N	NOV 10 2017	0715	1x125-ml P	300.0_ANTIONS_IC: COMMON	48 Hours	Cool <=6C

#6367
WJC2509

Relinquished By: <u>Larry Roseme /CHPRC</u> <i>Larry Roseme</i> Signature NOV 10 2017 1140 Date/Time	Received By: <u>Janelle Zunker /CHRC</u> <i>Janelle Zunker</i> Signature NOV 10 2017 1140 Date/Time	Matrix * 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
Relinquished By: <u>Janelle Zunker /CHRC</u> <i>Janelle Zunker</i> Signature NOV 10 2017 1230 Date/Time	Received By: <u>Jeff Lucas /CHRC</u> <i>Jeff Lucas</i> Signature NOV 10 2017 1230 Date/Time	
Relinquished By: <u>Jeff Lucas /CHRC</u> <i>Jeff Lucas</i> Signature NOV 10 2017 1450 Date/Time	Received By: <u>L Anderson, TARI /CHRC</u> <i>L Anderson</i> Signature 11/10/17 1450 Date/Time	
Relinquished By: _____ Signature Date/Time	Received By: _____ Signature Date/Time	
FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process):		Date/Time:

CE2M Hill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
W18-011-124
Page 1 of 1

Collector: Larry Roseme /CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: W18-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071
Project Title: RCRA, NOVEMBER 2017	Logbook No.: HNF-N-506 95/62	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: RCRA	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
B3DHL1	N	W	NOV 10 2017	12:46	1x125-ml P	300.0_ANTIONS_IC: COMMON	48 Hours	COOL <=6C

#6367
WC2509

Relinquished By: Larry Roseme /CHPRC	Received By: Janelle Zunker /CHPRC	NOV 10 2017 11:40	NOV 10 2017 11:40	S = Soil	DS = Drum Solids
Signature: [Signature]	Signature: [Signature]	Date/Time	Date/Time	SE = Sediment	DL = Drum Liquid
Relinquished By: Janelle Zunker /CHPRC	Received By: Jeff Lucas /CHPRC	NOV 10 2017 12:30	NOV 10 2017 12:30	SO = Solid	T = Tissue
Signature: [Signature]	Signature: [Signature]	Date/Time	Date/Time	SL = Sludge	WI = Wipe
Relinquished By: Jeff Lucas /CHPRC	Received By: Anderson, T.J.	NOV 10 2017 14:50	NOV 10 2017 14:50	W = Water	L = Liquid
Signature: [Signature]	Signature: [Signature]	Date/Time	Date/Time	O = Oil	V = Vegetation
Relinquished By: [Signature]	Received By: [Signature]	Date/Time	Date/Time	A = Air	X = Other

Printed On 10/5/2017 FSR ID = FSR52031 A-6004-842 (REV 3)

CH2MHILL Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
W18-011-125
Page 1 of 1

Collector: Malcom Gunn
CHPRC

Contact/Requester: Karen Waters-Husted

Telephone No.: 509-376-4650

SAF No.: W18-011

Sampling Origin: Hanford Site

Purchase Order/Charge Code: 300071

Project Title: RCRA, NOVEMBER 2017

Logbook No.: HNF-N-506

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: RCRA

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
B3DHL6	N	NOV 10 2017	1410	1x125-ml P	300.0_ANTIONS_IC: COMMON	48 HOURS	Cool <=6C

#6367
WFC 2509

Relinquished By: Malcom Gunn <i>Malcom Gunn</i> Signature	NOV 10 2017	1416	Received By: Larry Roseme CHPRC <i>Larry Roseme</i> Signature	NOV 10 2017	1416	Matrix * 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	
Relinquished By: Larry Roseme CHPRC <i>Larry Roseme</i> Signature	NOV 10 2017	1450	Received By: Larry Roseme TARI <i>TARI</i> Signature	NOV 10 2017	1450		
Relinquished By: <i>[Signature]</i> Signature			Received By: <i>[Signature]</i> Signature				
Relinquished By: <i>[Signature]</i> Signature			Received By: <i>[Signature]</i> Signature				
Relinquished By: <i>[Signature]</i> Signature			Received By: <i>[Signature]</i> Signature				
Relinquished By: <i>[Signature]</i> Signature			Received By: <i>[Signature]</i> Signature				
FINAL SAMPLE DISPOSITION			Disposal Method (e.g., Return to customer, per lab procedure, used in process):			Disposed By:	Date/Time:

CH2M Hill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#
W18-011-126
Page 1 of 1

Collector:	Larry Rosane /CHPRC	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	W18-011	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, NOVEMBER 2017	Logbook No.:	HNF-N-506 95/62	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:	RCRA	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
B3DHM1	N	W	NOV 10 2017	6:18	1x125-mL P	300.0_ANIONS_IC: COMMON	48 Hours	COOL <=6C

#6367
WCE2509

Relinquished By:	Larry Rosane /CHPRC	Signature	NOV 10 2017 11:40	Received By:	Jamie Zunker /CHPRC	Signature	NOV 10 2017 11:40	<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 WI = Wipe</p> <p>W = Water L = Liquid</p> <p>O = Oil V = Vegetation</p> <p>A = Air X = Other</p>
Relinquished By:	Jamie Zunker /CHPRC	Signature	NOV 10 2017 12:30	Received By:	Jeff Lucas /CHPRC	Signature	NOV 10 2017 12:30	
Relinquished By:	Jeff Lucas /CHPRC	Signature	NOV 10 2017 14:50	Received By:	L Anderson, TARI /CHPRC	Signature	11/10/17 14:50	
Relinquished By:		Signature		Received By:		Signature		

CH2MHill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#
W18-011-127
Page 1 of 1

Collector:	Larry Roseme /CHPRC	Contact/Requester:	Karen Waters-Husted	Telephone No.:	509-376-4650
SAF No.:	W18-011	Sampling Origin:	Hanford Site	Purchase Order/Charge Code:	300071
Project Title:	RCRA, NOVEMBER 2017	Logbook No.:	HNF-N-506 95/62	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:	RCRA	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
B3DHM2	N	NOV 1 2017	0937	1x125-ml P	300.0_ANTONS_IC: COMMON	48 Hours	Cool <=6C

#6367
W182509

Relinquished By:	Larry Roseme /CHPRC	Signature	NOV 1 0 2017 1146	Received By:	Janelle Zunker /CHPRC	Signature	NOV 1 0 2017 1140	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
Print First and Last Name	Larry Roseme	Signature	NOV 1 0 2017 1146	Print First and Last Name	Janelle Zunker	Signature	NOV 1 0 2017 1140	
Relinquished By:	Janelle Zunker /CHPRC	Signature	NOV 1 0 2017 1230	Received By:	Jeff Lucas /CHPRC	Signature	NOV 1 0 2017 1230	
Print First and Last Name	Janelle Zunker	Signature	NOV 1 0 2017 1230	Print First and Last Name	Jeff Lucas	Signature	NOV 1 0 2017 1230	
Relinquished By:	Jeff Lucas /CHPRC	Signature	NOV 1 0 2017 1458	Received By:	L. Anderson, TARI	Signature	11/01/17 1450	
Print First and Last Name	Jeff Lucas	Signature	NOV 1 0 2017 1458	Print First and Last Name	L. Anderson, TARI	Signature	11/01/17 1450	
Relinquished By:		Signature		Received By:		Signature		
Print First and Last Name		Signature		Print First and Last Name		Signature		
FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process):				Disposed By:		Date/Time:		

CH2M Hill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
WI8-011-128
Page 1 of 1

Collector: Larry Roseme /CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: WI8-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071
Project Title: RCRA, NOVEMBER 2017	Logbook No.: HNF-N-506 95/62	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: RCRA	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
B3DHW7	N	NOV 19 2017	230	1x125-mL P	300.0_ANTIONS_IC: COMMON	48 Hours	COOL <=6C

#6367
WC2509

Relinquished By: Larry Roseme /CHPRC	Received By: L. Anderson, TARI	Matrix *
<i>Signature</i>	<i>Signature</i>	S = Soil
Date/Time: NOV 18 2017 1450	Date/Time: 11/19/17 1450	SE = Sediment
Relinquished By:	Received By:	SO = Solid
<i>Signature</i>	<i>Signature</i>	SL = Sludge
Date/Time:	Date/Time:	W = Water
<i>Signature</i>	<i>Signature</i>	O = Oil
Date/Time:	Date/Time:	A = Air
Relinquished By:	Received By:	DS = Drum Solids
<i>Signature</i>	<i>Signature</i>	DL = Drum Liquid
Date/Time:	Date/Time:	T = Tissue
<i>Signature</i>	<i>Signature</i>	WI = Wipe
Date/Time:	Date/Time:	L = Liquid
<i>Signature</i>	<i>Signature</i>	V = Vegetation
Date/Time:	Date/Time:	X = Other

CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.# W18-011-132 Page 1 of 1

Collector: Malcom Chunn
CHPRC

SAF No.: W18-011

Project Title: RCRA, NOVEMBER 2017

Shipped To (Lab): TestAmerica Incorporated, Rich

Protocol: RCRA

Contact/Requester: Karen Waters-Husted

Sampling Origin: Hanford Site

Logbook No.: HNF-N-506 96152

Method of Shipment: GOVERNMENT VEHICLE

Priority: 30 Days

Telephone No.: 509-376-4650

Purchase Order/Charge Code: 300071

Ice Chest No.: N/A

Bill of Lading/Air Bill No.: N/A

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
B3DJ83	N		NOV 10 2017	0942	1x125-ml P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

#6367
WFC2509

Relinquished By: Malcom Chunn CHPRC	M.R. <i>[Signature]</i>	NOV 10 2017	0950	Received By: Lesly West KCHPRC	<i>[Signature]</i>	NOV 10 2017	0950	Matrix * 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
Relinquished By:	Lesly West KCHPRC	NOV 10 2017	1100	Received By:	<i>[Signature]</i>	NOV 10 2017	1100	
Relinquished By:	Jeff Lucas KCHPRC	NOV 10 2017	1450	Received By:	L. Anderson TARL	11/10/17	1450	
Relinquished By:	<i>[Signature]</i>			Received By:	<i>[Signature]</i>			

CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W18-011-133
Page 1 of 1

Collector: Malcolm Churns CHRC
Contact/Requester: Karen Waters-Husted
Telephone No.: 509-376-4650

SAF No.: W18-011
Sampling Origin: Hanford Site
Purchase Order/Charge Code: 300071

Project Title: RCRA, NOVEMBER 2017
Logbook No.: HNF-N-506 96152
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: RCRA
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
B3DJ90	N		NOV 10 2017	0909	1x125-mL P	300.0_ANIONS_IC: COMMON	48 Hours	COOL <=6C

#6367
WCA2509

Relinquished By: Malcolm Churns Print First and Last Name	M.R. Churns Signature	NOV 10 2017 Date/Time	0950 Date/Time	Received By: Leahy Weir Print First and Last Name	Leahy Weir Signature	NOV 10 2017 Date/Time	0950 Date/Time	Matrix * 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
Relinquished By: Leahy Weir Print First and Last Name	Leahy Weir Signature	NOV 10 2017 Date/Time	1100 Date/Time	Received By: Jeff Lucas Print First and Last Name	Jeff Lucas Signature	NOV 10 2017 Date/Time	1100 Date/Time	
Relinquished By: Jeff Lucas Print First and Last Name	Jeff Lucas Signature	NOV 10 2017 Date/Time	1450 Date/Time	Received By: L. Anderson Print First and Last Name	L. Anderson Signature	NOV 10 2017 Date/Time	1450 Date/Time	
Relinquished By: [Signature] Print First and Last Name	[Signature]	[Date/Time]	[Date/Time]	Received By: [Signature] Print First and Last Name	[Signature]	[Date/Time]	[Date/Time]	

CH2MHill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
W18-011-134
Page 1 of 1

Collector: Malcom Chuma CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: W18-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071
Project Title: RCRA, NOVEMBER 2017	Logbook No.: HNF-N-506 96152	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: RCRA	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
B3DJ96	N		NOV 10 2017	0840	1X125-ML P	300.0_ANIONS_IC: COMMON	48 Hours	COOL <=6C

#6367
WCG2509

Relinquished By: M.R. Clark CHPRC	Signature: <i>M.R. Clark</i>	Date/Time: NOV 10 2017 0950	Received By: Jeff Lucas CHPRC	Signature: <i>Jeff Lucas</i>	Date/Time: NOV 10 2017 0950	Matrix * 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
Relinquished By: Jeff Lucas CHPRC	Signature: <i>Jeff Lucas</i>	Date/Time: NOV 10 2017 1100	Received By: Jeff Lucas CHPRC	Signature: <i>Jeff Lucas</i>	Date/Time: NOV 10 2017 1100	
Relinquished By: Jeff Lucas CHPRC	Signature: <i>Jeff Lucas</i>	Date/Time: NOV 10 2017 1450	Received By: Jeff Lucas CHPRC	Signature: <i>Jeff Lucas</i>	Date/Time: NOV 10 2017 1450	
Relinquished By: Jeff Lucas CHPRC	Signature: <i>Jeff Lucas</i>	Date/Time: NOV 10 2017 1450	Received By: Jeff Lucas CHPRC	Signature: <i>Jeff Lucas</i>	Date/Time: NOV 10 2017 1450	
Relinquished By: Jeff Lucas CHPRC	Signature: <i>Jeff Lucas</i>	Date/Time: NOV 10 2017 1450	Received By: Jeff Lucas CHPRC	Signature: <i>Jeff Lucas</i>	Date/Time: NOV 10 2017 1450	
Relinquished By: Jeff Lucas CHPRC	Signature: <i>Jeff Lucas</i>	Date/Time: NOV 10 2017 1450	Received By: Jeff Lucas CHPRC	Signature: <i>Jeff Lucas</i>	Date/Time: NOV 10 2017 1450	

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.#
W18-011-137

Page 1 of 1

Collector: Malcom Chunn CHRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: W18-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071
Project Title: RCRA, NOVEMBER 2017	Logbook No.: HNF-N-506 96152453	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: RCRA	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
B3DHV5	N	NOV 10 2017	1029	1x125-ml P	300.0_ANIONS_IC: COMMON	48 Hours	COOL <=6C

#6367
WC2509

Relinquished By: Malcom Chunn CHRC	<i>MC</i>	NOV 10 2017	1250	Received By: Jeff Lucas CHRC	<i>Jeff Lucas</i>	NOV 10 2017	1250
Print First and Last Name	Signature	Date/Time		Print First and Last Name	Signature	Date/Time	
Relinquished By: Jeff Lucas CHRC	<i>Jeff Lucas</i>	NOV 10 2017	1450	Received By: L. Anderson, TARI	<i>L. Anderson</i>	11/10/17	1450
Print First and Last Name	Signature	Date/Time		Print First and Last Name	Signature	Date/Time	
Relinquished By:	Signature	Date/Time		Received By:	Signature	Date/Time	
Print First and Last Name	Signature	Date/Time		Print First and Last Name	Signature	Date/Time	

Matrix *

S = Soil	DS = Drum Solids
SE = Sediment	DL = Drum Liquid
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: _____

CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
W18-011-142
Page 1 of 1

Collector: Malcom Chum CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: W18-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071
Project Title: RCRA, NOVEMBER 2017	Logbook No.: HNF-N-506 <i>91053</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: RCRA	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
B3DHY1	N	NOV 10 2017	11:3	1x125-mL P	300.0_ANIONS_IC: COMMON	48 Hours	COOL <=6C

#6367
WFC2509

Relinquished By: Malcom Chum CHPRC	<i>MC</i>	NOV 10 2017	1250	Received By: Jeff Lucas CHPRC	<i>JL</i>	NOV 10 2017	1250
Relinquished By: Jeff Lucas CHPRC	<i>JL</i>	NOV 10 2017	1450	Received By: L Anderson TAP	<i>L Anderson</i>	11/10/17	1450
Relinquished By: _____	Signature	Date/Time		Received By: _____	Signature	Date/Time	
Relinquished By: _____	Signature	Date/Time		Received By: _____	Signature	Date/Time	

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

CH2MHill Plateau
Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#
WI8-011-147
Page 1 of 1

Collector: Malcom Chama CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: WI8-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071
Project Title: RCRA, NOVEMBER 2017	Logbook No.: HNF-N-506 a6152	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: RCRA	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
B3DJ53	N		NOV 10 2017	0606	1x125-mL P	300.0_ANTIONS_IC: COMMON	48 Hours	COOL, <=6C

#6367
WFC2509

Relinquished By: Malcom Chama CHPRC	Received By: Lesly Neal CHPRC	Matrix *
Signature: <i>M.R. Chama</i>	Signature: <i>Lesly Neal</i>	S = Soil
Date/Time: NOV 10 2017 0950	Date/Time: NOV 10 2017 0950	SE = Sediment
Relinquished By: Lesly Neal CHPRC	Received By: Jeff Lucas CHPRC	SO = Solid
Signature: <i>Lesly Neal</i>	Signature: <i>Jeff Lucas</i>	SL = Sludge
Date/Time: NOV 10 2017 1000	Date/Time: NOV 10 2017 1100	W = Water
Relinquished By: Jeff Lucas CHPRC	Received By: Reje Anderson, TARI	WO = Oil
Signature: <i>Jeff Lucas</i>	Signature: <i>Reje Anderson</i>	A = Air
Date/Time: NOV 10 2017 1450	Date/Time: 11/10/17 1450	DS = Drum Solids
Relinquished By: _____	Received By: _____	DL = Drum Liquid
Signature: _____	Signature: _____	T = Tissue
Date/Time: _____	Date/Time: _____	WI = Wipe
Relinquished By: _____	Received By: _____	L = Liquid
Signature: _____	Signature: _____	V = Vegetation
Date/Time: _____	Date/Time: _____	X = Other

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

Disposed By: _____ Date/Time: _____

Detection Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Client Sample ID: B3DHK5

Lab Sample ID: 300-6367-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.8	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	2.5	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.17	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	42	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3DHL0

Lab Sample ID: 300-6367-2

No Detections.

Client Sample ID: B3DHL1

Lab Sample ID: 300-6367-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.9	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	6.9	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	0.054	B D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	69	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3DHL6

Lab Sample ID: 300-6367-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.21	B D	0.40	0.20	mg/L	2		300.0	Total/NA
Sulfate	0.29	B D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3DHM1

Lab Sample ID: 300-6367-5

No Detections.

Client Sample ID: B3DHM2

Lab Sample ID: 300-6367-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	11	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	10	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.15	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.12	D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	100	D	2.5	1.3	mg/L	10		300.0	Total/NA

Client Sample ID: B3DHM7

Lab Sample ID: 300-6367-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.9	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	11	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.15	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.052	B D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	80	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3DJ77

Lab Sample ID: 300-6367-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	28	D	0.40	0.20	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: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Client Sample ID: B3DJ77 (Continued)

Lab Sample ID: 300-6367-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	71	D	0.56	0.28	mg/L	20		300.0	Total/NA
Fluoride	0.32	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.10	D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	130	D	5.0	2.5	mg/L	20		300.0	Total/NA

Client Sample ID: B3DJ83

Lab Sample ID: 300-6367-9

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	18	D	0.14	0.070	mg/L	5		300.0	Total/NA
Fluoride	0.36	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.086	D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	76	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3DJ90

Lab Sample ID: 300-6367-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	11	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.44	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.052	B D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	52	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3DJ96

Lab Sample ID: 300-6367-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	10	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.44	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.064	B D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	50	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3DHV5

Lab Sample ID: 300-6367-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	11	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.43	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.064	B D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	51	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B3DHY1

Lab Sample ID: 300-6367-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	16	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	20	D	0.14	0.070	mg/L	5		300.0	Total/NA
Fluoride	0.36	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.081	D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	80	D	0.50	0.25	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: W18-011

TestAmerica Job ID: 300-6367-1
 SDG: WC2509

Client Sample ID: B3DJ53

Lab Sample ID: 300-6367-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	13	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	11	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.45	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.072	B D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	51	D	0.50	0.25	mg/L	2		300.0	Total/NA

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- 11
- 12
- 13

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Client Sample ID: B3DHK5

Lab Sample ID: 300-6367-1

Date Collected: 11/10/17 13:50

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.8	D	0.40	0.20	mg/L			11/10/17 18:47	2
Nitrate as N	2.5	D	0.056	0.028	mg/L			11/10/17 18:47	2
Fluoride	0.17	D	0.10	0.050	mg/L			11/10/17 18:47	2
Nitrite as N	0.050	B D	0.076	0.038	mg/L			11/10/17 18:47	2
Sulfate	42	D	0.50	0.25	mg/L			11/10/17 18:47	2

Client Sample ID: B3DHL0

Lab Sample ID: 300-6367-2

Date Collected: 11/10/17 07:15

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.20	U D	0.40	0.20	mg/L			11/10/17 19:32	2
Nitrate as N	0.028	U D	0.056	0.028	mg/L			11/10/17 19:32	2
Fluoride	0.050	U D	0.10	0.050	mg/L			11/10/17 19:32	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			11/10/17 19:32	2
Sulfate	0.25	U D	0.50	0.25	mg/L			11/10/17 19:32	2

Client Sample ID: B3DHL1

Lab Sample ID: 300-6367-3

Date Collected: 11/10/17 10:46

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.9	D	0.40	0.20	mg/L			11/10/17 19:47	2
Nitrate as N	6.9	D	0.056	0.028	mg/L			11/10/17 19:47	2
Fluoride	0.16	D	0.10	0.050	mg/L			11/10/17 19:47	2
Nitrite as N	0.054	B D	0.076	0.038	mg/L			11/10/17 19:47	2
Sulfate	69	D	0.50	0.25	mg/L			11/10/17 19:47	2

Client Sample ID: B3DHL6

Lab Sample ID: 300-6367-4

Date Collected: 11/10/17 14:10

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.21	B D	0.40	0.20	mg/L			11/10/17 20:02	2
Nitrate as N	0.028	U D	0.056	0.028	mg/L			11/10/17 20:02	2
Fluoride	0.050	U D	0.10	0.050	mg/L			11/10/17 20:02	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			11/10/17 20:02	2
Sulfate	0.29	B D	0.50	0.25	mg/L			11/10/17 20:02	2

Client Sample ID: B3DHM1

Lab Sample ID: 300-6367-5

Date Collected: 11/10/17 07:18

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.20	U D	0.40	0.20	mg/L			11/10/17 20:17	2
Nitrate as N	0.028	U D	0.056	0.028	mg/L			11/10/17 20:17	2

TestAmerica Richland

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Client Sample ID: B3DHM1

Lab Sample ID: 300-6367-5

Date Collected: 11/10/17 07:18

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.050	U D	0.10	0.050	mg/L			11/10/17 20:17	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			11/10/17 20:17	2
Sulfate	0.25	U D	0.50	0.25	mg/L			11/10/17 20:17	2

Client Sample ID: B3DHM2

Lab Sample ID: 300-6367-6

Date Collected: 11/10/17 09:37

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11	D	0.40	0.20	mg/L			11/10/17 20:32	2
Nitrate as N	10	D	0.056	0.028	mg/L			11/10/17 20:32	2
Fluoride	0.15	D	0.10	0.050	mg/L			11/10/17 20:32	2
Nitrite as N	0.12	D	0.076	0.038	mg/L			11/10/17 20:32	2
Sulfate	100	D	2.5	1.3	mg/L			11/11/17 02:04	10

Client Sample ID: B3DHM7

Lab Sample ID: 300-6367-7

Date Collected: 11/10/17 12:30

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.9	D	0.40	0.20	mg/L			11/10/17 20:48	2
Nitrate as N	11	D	0.056	0.028	mg/L			11/10/17 20:48	2
Fluoride	0.15	D	0.10	0.050	mg/L			11/10/17 20:48	2
Nitrite as N	0.052	B D	0.076	0.038	mg/L			11/10/17 20:48	2
Sulfate	80	D	0.50	0.25	mg/L			11/10/17 20:48	2

Client Sample ID: B3DJ77

Lab Sample ID: 300-6367-8

Date Collected: 11/10/17 12:01

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28	D	0.40	0.20	mg/L			11/10/17 21:03	2
Nitrate as N	71	D	0.56	0.28	mg/L			11/11/17 03:05	20
Fluoride	0.32	D	0.10	0.050	mg/L			11/10/17 21:03	2
Nitrite as N	0.10	D	0.076	0.038	mg/L			11/10/17 21:03	2
Sulfate	130	D	5.0	2.5	mg/L			11/11/17 03:05	20

Client Sample ID: B3DJ83

Lab Sample ID: 300-6367-9

Date Collected: 11/10/17 09:42

Matrix: Water

Date Received: 11/10/17 14:50

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			11/10/17 21:18	2
Nitrate as N	18	D	0.14	0.070	mg/L			11/11/17 03:20	5
Fluoride	0.36	D	0.10	0.050	mg/L			11/10/17 21:18	2
Nitrite as N	0.086	D	0.076	0.038	mg/L			11/10/17 21:18	2

TestAmerica Richland

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Client Sample ID: B3DJ83

Lab Sample ID: 300-6367-9

Date Collected: 11/10/17 09:42

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	76	D	0.50	0.25	mg/L			11/10/17 21:18	2

Client Sample ID: B3DJ90

Lab Sample ID: 300-6367-10

Date Collected: 11/10/17 09:09

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12	D	0.40	0.20	mg/L			11/10/17 21:33	2
Nitrate as N	11	D	0.056	0.028	mg/L			11/10/17 21:33	2
Fluoride	0.44	D	0.10	0.050	mg/L			11/10/17 21:33	2
Nitrite as N	0.052	B D	0.076	0.038	mg/L			11/10/17 21:33	2
Sulfate	52	D	0.50	0.25	mg/L			11/10/17 21:33	2

Client Sample ID: B3DJ96

Lab Sample ID: 300-6367-11

Date Collected: 11/10/17 08:40

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12	D	0.40	0.20	mg/L			11/10/17 21:48	2
Nitrate as N	10	D	0.056	0.028	mg/L			11/10/17 21:48	2
Fluoride	0.44	D	0.10	0.050	mg/L			11/10/17 21:48	2
Nitrite as N	0.064	B D	0.076	0.038	mg/L			11/10/17 21:48	2
Sulfate	50	D	0.50	0.25	mg/L			11/10/17 21:48	2

Client Sample ID: B3DHV5

Lab Sample ID: 300-6367-12

Date Collected: 11/10/17 10:29

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12	D	0.40	0.20	mg/L			11/10/17 22:33	2
Nitrate as N	11	D	0.056	0.028	mg/L			11/10/17 22:33	2
Fluoride	0.43	D	0.10	0.050	mg/L			11/10/17 22:33	2
Nitrite as N	0.064	B D	0.076	0.038	mg/L			11/10/17 22:33	2
Sulfate	51	D	0.50	0.25	mg/L			11/10/17 22:33	2

Client Sample ID: B3DHY1

Lab Sample ID: 300-6367-13

Date Collected: 11/10/17 11:13

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16	D	0.40	0.20	mg/L			11/10/17 22:48	2
Nitrate as N	20	D	0.14	0.070	mg/L			11/11/17 04:50	5
Fluoride	0.36	D	0.10	0.050	mg/L			11/10/17 22:48	2
Nitrite as N	0.081	D	0.076	0.038	mg/L			11/10/17 22:48	2
Sulfate	80	D	0.50	0.25	mg/L			11/10/17 22:48	2

TestAmerica Richland

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
 SDG: WC2509

Client Sample ID: B3DJ53

Lab Sample ID: 300-6367-14

Date Collected: 11/10/17 08:06

Matrix: Water

Date Received: 11/10/17 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13	D	0.40	0.20	mg/L			11/10/17 23:03	2
Nitrate as N	11	D	0.056	0.028	mg/L			11/10/17 23:03	2
Fluoride	0.45	D	0.10	0.050	mg/L			11/10/17 23:03	2
Nitrite as N	0.072	B D	0.076	0.038	mg/L			11/10/17 23:03	2
Sulfate	51	D	0.50	0.25	mg/L			11/10/17 23:03	2

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

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-9646/29
Matrix: Water
Analysis Batch: 9646

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			11/10/17 23:49	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			11/10/17 23:49	1

Lab Sample ID: MB 300-9646/5
Matrix: Water
Analysis Batch: 9646

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			11/10/17 17:47	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			11/10/17 17:47	1

Lab Sample ID: LCS 300-9646/30
Matrix: Water
Analysis Batch: 9646

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	2.26		mg/L		100	80 - 120
Nitrite as N	3.04	3.12		mg/L		102	80 - 120

Lab Sample ID: LCS 300-9646/6
Matrix: Water
Analysis Batch: 9646

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	2.26		mg/L		100	80 - 120
Nitrite as N	3.04	3.11		mg/L		102	80 - 120

Lab Sample ID: 300-6367-1 MS
Matrix: Water
Analysis Batch: 9646

Client Sample ID: B3DHK5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	2.5	D	0.452	2.90	D	mg/L		88	75 - 125
Nitrite as N	0.050	B D	0.609	0.546	D	mg/L		82	75 - 125

Lab Sample ID: 300-6367-1 DU
Matrix: Water
Analysis Batch: 9646

Client Sample ID: B3DHK5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	2.5	D	2.56	D	mg/L		2	20
Nitrite as N	0.050	B D	0.0489	B D	mg/L		2	20

Lab Sample ID: MB 300-9647/29
Matrix: Water
Analysis Batch: 9647

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			11/10/17 23:49	1

TestAmerica Richland

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
 SDG: WC2509

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 300-9647/29
 Matrix: Water
 Analysis Batch: 9647

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.025	U	0.050	0.025	mg/L			11/10/17 23:49	1
Sulfate	0.13	U	0.25	0.13	mg/L			11/10/17 23:49	1

Lab Sample ID: MB 300-9647/5
 Matrix: Water
 Analysis Batch: 9647

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			11/10/17 17:47	1
Fluoride	0.025	U	0.050	0.025	mg/L			11/10/17 17:47	1
Sulfate	0.13	U	0.25	0.13	mg/L			11/10/17 17:47	1

Lab Sample ID: LCS 300-9647/30
 Matrix: Water
 Analysis Batch: 9647

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	15.9		mg/L		99	80 - 120
Fluoride	4.00	4.06		mg/L		101	80 - 120
Sulfate	20.0	20.5		mg/L		103	80 - 120

Lab Sample ID: LCS 300-9647/6
 Matrix: Water
 Analysis Batch: 9647

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	15.9		mg/L		99	80 - 120
Fluoride	4.00	4.04		mg/L		101	80 - 120
Sulfate	20.0	20.5		mg/L		102	80 - 120

Lab Sample ID: 300-6367-11 MS
 Matrix: Water
 Analysis Batch: 9647

Client Sample ID: B3DJ96
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	12	D	3.20	15.1	D	mg/L		97	75 - 125
Fluoride	0.44	D	0.800	1.25	D	mg/L		101	75 - 125
Sulfate	50	D	4.00	54.0	D	mg/L		95	75 - 125

Lab Sample ID: 300-6367-11 DU
 Matrix: Water
 Analysis Batch: 9647

Client Sample ID: B3DJ96
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	12	D	12.0	D	mg/L		0.2	20
Fluoride	0.44	D	0.441	D	mg/L		0.08	20
Sulfate	50	D	48.9	D	mg/L		2	20

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

HPLC/IC

Analysis Batch: 9646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-6367-1	B3DHK5	Total/NA	Water	300.0	
300-6367-2	B3DHL0	Total/NA	Water	300.0	
300-6367-3	B3DHL1	Total/NA	Water	300.0	
300-6367-4	B3DHL6	Total/NA	Water	300.0	
300-6367-5	B3DHM1	Total/NA	Water	300.0	
300-6367-6	B3DHM2	Total/NA	Water	300.0	
300-6367-7	B3DHM7	Total/NA	Water	300.0	
300-6367-8	B3DJ77	Total/NA	Water	300.0	
300-6367-8	B3DJ77	Total/NA	Water	300.0	
300-6367-9	B3DJ83	Total/NA	Water	300.0	
300-6367-9	B3DJ83	Total/NA	Water	300.0	
300-6367-10	B3DJ90	Total/NA	Water	300.0	
300-6367-11	B3DJ96	Total/NA	Water	300.0	
300-6367-12	B3DHY5	Total/NA	Water	300.0	
300-6367-13	B3DHY1	Total/NA	Water	300.0	
300-6367-13	B3DHY1	Total/NA	Water	300.0	
300-6367-14	B3DJ53	Total/NA	Water	300.0	
MB 300-9646/29	Method Blank	Total/NA	Water	300.0	
MB 300-9646/5	Method Blank	Total/NA	Water	300.0	
LCS 300-9646/30	Lab Control Sample	Total/NA	Water	300.0	
LCS 300-9646/6	Lab Control Sample	Total/NA	Water	300.0	
300-6367-1 MS	B3DHK5	Total/NA	Water	300.0	
300-6367-1 DU	B3DHK5	Total/NA	Water	300.0	

Analysis Batch: 9647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-6367-1	B3DHK5	Total/NA	Water	300.0	
300-6367-2	B3DHL0	Total/NA	Water	300.0	
300-6367-3	B3DHL1	Total/NA	Water	300.0	
300-6367-4	B3DHL6	Total/NA	Water	300.0	
300-6367-5	B3DHM1	Total/NA	Water	300.0	
300-6367-6	B3DHM2	Total/NA	Water	300.0	
300-6367-6	B3DHM2	Total/NA	Water	300.0	
300-6367-7	B3DHM7	Total/NA	Water	300.0	
300-6367-8	B3DJ77	Total/NA	Water	300.0	
300-6367-8	B3DJ77	Total/NA	Water	300.0	
300-6367-9	B3DJ83	Total/NA	Water	300.0	
300-6367-10	B3DJ90	Total/NA	Water	300.0	
300-6367-11	B3DJ96	Total/NA	Water	300.0	
300-6367-12	B3DHY5	Total/NA	Water	300.0	
300-6367-13	B3DHY1	Total/NA	Water	300.0	
300-6367-14	B3DJ53	Total/NA	Water	300.0	
MB 300-9647/29	Method Blank	Total/NA	Water	300.0	
MB 300-9647/5	Method Blank	Total/NA	Water	300.0	
LCS 300-9647/30	Lab Control Sample	Total/NA	Water	300.0	
LCS 300-9647/6	Lab Control Sample	Total/NA	Water	300.0	
300-6367-11 MS	B3DJ96	Total/NA	Water	300.0	
300-6367-11 DU	B3DJ96	Total/NA	Water	300.0	

TestAmerica Richland

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Client Sample ID: B3DHK5

Date Collected: 11/10/17 13:50

Date Received: 11/10/17 14:50

Lab Sample ID: 300-6367-1

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	300.0		2			9646	11/10/17 18:47	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 18:47	ALR	TAL RCH

Client Sample ID: B3DHL0

Date Collected: 11/10/17 07:15

Date Received: 11/10/17 14:50

Lab Sample ID: 300-6367-2

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	300.0		2			9646	11/10/17 19:32	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 19:32	ALR	TAL RCH

Client Sample ID: B3DHL1

Date Collected: 11/10/17 10:46

Date Received: 11/10/17 14:50

Lab Sample ID: 300-6367-3

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	300.0		2			9646	11/10/17 19:47	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 19:47	ALR	TAL RCH

Client Sample ID: B3DHL6

Date Collected: 11/10/17 14:10

Date Received: 11/10/17 14:50

Lab Sample ID: 300-6367-4

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	300.0		2			9646	11/10/17 20:02	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 20:02	ALR	TAL RCH

Client Sample ID: B3DHM1

Date Collected: 11/10/17 07:18

Date Received: 11/10/17 14:50

Lab Sample ID: 300-6367-5

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	300.0		2			9646	11/10/17 20:17	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 20:17	ALR	TAL RCH

Client Sample ID: B3DHM2

Date Collected: 11/10/17 09:37

Date Received: 11/10/17 14:50

Lab Sample ID: 300-6367-6

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		2			9646	11/10/17 20:32	ALR	TAL RCH

TestAmerica Richland

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Client Sample ID: B3DHM2

Lab Sample ID: 300-6367-6

Date Collected: 11/10/17 09:37

Matrix: Water

Date Received: 11/10/17 14:50

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			9647	11/10/17 20:32	ALR	TAL RCH
Total/NA	Analysis	300.0		10			9647	11/11/17 02:04	ALR	TAL RCH

Client Sample ID: B3DHM7

Lab Sample ID: 300-6367-7

Date Collected: 11/10/17 12:30

Matrix: Water

Date Received: 11/10/17 14:50

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			9646	11/10/17 20:48	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 20:48	ALR	TAL RCH

Client Sample ID: B3DJ77

Lab Sample ID: 300-6367-8

Date Collected: 11/10/17 12:01

Matrix: Water

Date Received: 11/10/17 14:50

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			9646	11/10/17 21:03	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 21:03	ALR	TAL RCH
Total/NA	Analysis	300.0		20			9646	11/11/17 03:05	ALR	TAL RCH
Total/NA	Analysis	300.0		20			9647	11/11/17 03:05	ALR	TAL RCH

Client Sample ID: B3DJ83

Lab Sample ID: 300-6367-9

Date Collected: 11/10/17 09:42

Matrix: Water

Date Received: 11/10/17 14:50

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			9646	11/10/17 21:18	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 21:18	ALR	TAL RCH
Total/NA	Analysis	300.0		5			9646	11/11/17 03:20	ALR	TAL RCH

Client Sample ID: B3DJ90

Lab Sample ID: 300-6367-10

Date Collected: 11/10/17 09:09

Matrix: Water

Date Received: 11/10/17 14:50

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			9646	11/10/17 21:33	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 21:33	ALR	TAL RCH

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Client Sample ID: B3DJ96

Lab Sample ID: 300-6367-11

Date Collected: 11/10/17 08:40
Date Received: 11/10/17 14:50

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			9646	11/10/17 21:48	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 21:48	ALR	TAL RCH

Client Sample ID: B3DHV5

Lab Sample ID: 300-6367-12

Date Collected: 11/10/17 10:29
Date Received: 11/10/17 14:50

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			9646	11/10/17 22:33	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 22:33	ALR	TAL RCH

Client Sample ID: B3DHY1

Lab Sample ID: 300-6367-13

Date Collected: 11/10/17 11:13
Date Received: 11/10/17 14:50

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			9646	11/10/17 22:48	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 22:48	ALR	TAL RCH
Total/NA	Analysis	300.0		5			9646	11/11/17 04:50	ALR	TAL RCH

Client Sample ID: B3DJ53

Lab Sample ID: 300-6367-14

Date Collected: 11/10/17 08:06
Date Received: 11/10/17 14:50

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			9646	11/10/17 23:03	ALR	TAL RCH
Total/NA	Analysis	300.0		2			9647	11/10/17 23:03	ALR	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-9646/29

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			9646	11/10/17 23:49	ALR	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-9646/5

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			9646	11/10/17 17:47	ALR	TAL RCH

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Client Sample ID: Method Blank

Lab Sample ID: MB 300-9647/29

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			9647	11/10/17 23:49	ALR	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-9647/5

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			9647	11/10/17 17:47	ALR	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-9646/30

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			9646	11/11/17 00:04	ALR	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-9646/6

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			9646	11/10/17 18:02	ALR	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-9647/30

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			9647	11/11/17 00:04	ALR	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-9647/6

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			9647	11/10/17 18:02	ALR	TAL RCH

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Client Sample ID: B3DHK5

Lab Sample ID: 300-6367-1 MS

Date Collected: 11/10/17 13:50

Matrix: Water

Date Received: 11/10/17 14:50

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			9646	11/10/17 19:02	ALR	TAL RCH

Client Sample ID: B3DJ96

Lab Sample ID: 300-6367-11 MS

Date Collected: 11/10/17 08:40

Matrix: Water

Date Received: 11/10/17 14:50

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			9647	11/10/17 22:03	ALR	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: W18-011

TestAmerica Job ID: 300-6367-1
SDG: WC2509

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL RCH

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: W18-011

TestAmerica Job ID: 300-6367-1
 SDG: WC2509

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-6367-1	B3DHK5	Water	11/10/17 13:50	11/10/17 14:50
300-6367-2	B3DHL0	Water	11/10/17 07:15	11/10/17 14:50
300-6367-3	B3DHL1	Water	11/10/17 10:46	11/10/17 14:50
300-6367-4	B3DHL6	Water	11/10/17 14:10	11/10/17 14:50
300-6367-5	B3DHM1	Water	11/10/17 07:18	11/10/17 14:50
300-6367-6	B3DHM2	Water	11/10/17 09:37	11/10/17 14:50
300-6367-7	B3DHM7	Water	11/10/17 12:30	11/10/17 14:50
300-6367-8	B3DJ77	Water	11/10/17 12:01	11/10/17 14:50
300-6367-9	B3DJ83	Water	11/10/17 09:42	11/10/17 14:50
300-6367-10	B3DJ90	Water	11/10/17 09:09	11/10/17 14:50
300-6367-11	B3DJ96	Water	11/10/17 08:40	11/10/17 14:50
300-6367-12	B3DHV5	Water	11/10/17 10:29	11/10/17 14:50
300-6367-13	B3DHY1	Water	11/10/17 11:13	11/10/17 14:50
300-6367-14	B3DJ53	Water	11/10/17 08:06	11/10/17 14:50



Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-6367-1

SDG Number: WC2509

Login Number: 6367

List Number: 1

Creator: Anderson, Lori F

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.	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.	N/A	
Cooler Temperature is recorded.	N/A	
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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

