

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: 300-6871-1
TestAmerica Sample Delivery Group: WC2768
Client Project/Site: W18-003
Revision: 1

For:
CH2M Hill Plateau Remediation Company
825 Jadwin Avenue
Richland, Washington 99352

Attn: CPP Sample Management



Authorized for release by:
4/19/2018 11:04:55 AM

Ashley Worthy, Project Manager I
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LINKS

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www.testamericainc.com

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

The laboratory is accredited to EPA 7196A in Solid and Chemical Materials, per Washington State Department of Ecology this is approved for non-discharge water samples.

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Definitions/Glossary

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-003

TestAmerica Job ID: 300-6871-1
SDG: WC2768

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.
Z	Sample was prepped or analyzed beyond the specified holding time

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: W18-003

TestAmerica Job ID: 300-6871-1
 SDG: WC2768

Job ID: 300-6871-1

Laboratory: TestAmerica Richland

Narrative

Job Narrative
300-6871-1

Comments

No additional comments.

Receipt

The samples were received on 3/14/2018 2:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

Receipt Exceptions

Nitrate/Nitrite QC was not in the original report.

HPLC/IC

Method(s) 300.0: Sample results reported from calibration integrated to meet % error requirement for short hold analytes. Client has requested initial results and results from reanalyzed samples for comparison. For more information see the attached SIR.

B3HJW8 (300-6871-1) and B3HJW9 (300-6871-2)

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

Job 6867	mg/L	
	3/13/2018	3/20/2018
B3HKL6		
NITRATE AS N	16	16
NITRITE AS N	0.11	0.019
B3HKL7		
NITRATE AS N	16	16
NITRITE AS N	0.11	0.2
B3HKK0		
NITRATE AS N	10	9.1
NITRITE AS N	0.12	0.11
B3HK34		
NITRATE AS N	1.4	1.2
NITRITE AS N	0.069	0.13
B3HKRO		
NITRATE AS N	3	3
NITRITE AS N	0.083	0.086
B3HKP1		
NITRATE AS N	10	9
NITRITE AS N	0.12	0.1

Job 6871	mg/L	
	3/14/2018	3/21/2018
B3HJW8		
NITRATE AS N	0.028	0.028
NITRITE AS N	0.038	0.038
B3HJW9		
NITRATE AS N	17	16
NITRITE AS N	0.24	0.66
B3HKK0		
NITRATE AS N	10	9.1
NITRITE AS N	0.12	0.11

Job 6870	mg/L	
	3/14/2018	3/21/2018
B3HHN4		
NITRATE AS N	3.7	3.7
NITRITE AS N	0.12	0.11
B3HFL7		
NITRATE AS N	5.2	4.2
NITRITE AS N	0.13	0.28
B3HFM3		
NITRATE AS N	1.9	1.9
NITRITE AS N	0.079	0.071
B3HFK0		
NITRATE AS N	0.11	0.089
NITRITE AS N	0.038	0.038
B3HH09		
NITRATE AS N	3.2	3.1
NITRITE AS N	0.091	0.076
B3HJ0H		
NITRATE AS N	2.8	2.6
NITRITE AS N	0.083	0.069

Job 6873	mg/L	
	3/14/2018	3/21/2018
B3HFW9		
NITRATE AS N	4.2	4
NITRITE AS N	0.087	0.1

Job 6874	mg/L	
	3/15/2018	3/21/2018
B3HK88		
NITRATE AS N	9.3	8.8
NITRITE AS N	0.15	0.32
B3HJRO		
NITRATE AS N	9.5	8.6
NITRITE AS N	0.19	0.34

Job 6877	mg/L	
	3/15/2018	3/20/2018

B3HY90

NITRATE AS N	0.12	0.13
NITRITE AS N	0.063	0.081
Orthophos as P	0.082	0.082

B3HY85

NITRATE AS N	0.028	0.082
NITRITE AS N	0.038	0.038
Orthophos as P	0.082	0.082

B3HY95

NITRATE AS N	0.15	0.17
NITRITE AS N	0.052	0.038
Orthophos as P	0.082	0.082

Job 6878	mg/L	
	3/15/2018	3/21/2018

B3HK76

NITRATE AS N	10	9.5
NITRITE AS N	0.18	0.32

B3HJP6

NITRATE AS N	13	13
NITRITE AS N	0.21	0.36

B3HK81

NITRATE AS N	8.7	7.9
NITRITE AS N	0.18	0.34

Job 6879	mg/L	
	3/15/2018	3/20/2018

B3HYB0

NITRATE AS N	0.081	0.7
NITRITE AS N	0.038	0.95
Orthophos as P	0.082	2.1

Job 6881	mg/L	
	3/16/2018	3/21/2018

B3HHC9

NITRATE AS N	11	11
NITRITE AS N	0.16	0.19

Job 6880	mg/L	
	3/16/2018	3/20/2018

B3HKN6

NITRATE AS N	2.4	2.4
NITRITE AS N	0.11	0.097

B3HK43

NITRATE AS N	33	39
NITRITE AS N	0.15	0.34

B3HKM2

NITRATE AS N	1.2	1.3
NITRITE AS N	0.078	0.064

B3HK56

NITRATE AS N	2	2.2
NITRITE AS N	0.098	0.077

B3HK26

NITRATE AS N	2.8	3
NITRITE AS N	0.096	0.073

B3HK70

NITRATE AS N	8	7.4
NITRITE AS N	0.17	0.31

B3HJN5

NITRATE AS N	2.4	2.2
NITRITE AS N	0.12	0.15

B3HJP1

NITRATE AS N	8.4	7.8
NITRITE AS N	0.19	0.33

B3HK63

NITRATE AS N	12	11
NITRITE AS N	0.17	0.2

B3HK69

NITRATE AS N	0.028	0.028
NITRITE AS N	0.038	0.038

SAMPLE ISSUE RESOLUTION (SIR) REPORT		SIR Number: SIR18-0563
		Rev. Number: 0
		Date Initiated: 03/20/2018
<u>SAMPLE EVENT INFORMATION</u>		
SAF NUM(S):	W18-003	
LABORATORY:	TARL	
<u>SAMPLING INFORMATION</u>		
NUMBER OF SAMPLES:	2	
SAMPLE NUMBERS:	B3HJW8, B3HJW9	
SAMPLE MATRIX:	WATER	
SDG NUM(S):	WC2768	
<u>ISSUE BACKGROUND</u>		
CLASS:	Laboratory Issue	
TYPE:	Calibration Issue	
DESCRIPTION:	In the initial run, the calibration was initially accepted but further review resulted in the nitrite and orthophosphate (where applicable) RSD outside the acceptable limit. The error was not resolved in time to run the samples within the 96 hour window. A new calibration was approved and both instruments have passed daily QC checks. The second analysis for nitrite, nitrate, and orthophosphate are outside the 48 and 96 hour hold times.	
<u>RESOLUTION</u>		
PROPOSED RESOLUTION:	Initiate SIR, either report initial results with the calibration issue or report results obtained outside hole time. Include comments in the case narrative.	
FINAL RESOLUTION:	Report initial results (with calibration issue). Narrate the issue and include data from second run for comparison.	
SUBMITTED BY:		
WORTHY, A	03/19/2018	
ACCEPTED BY:		
FITZGERALD, SL	03/27/2018	

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C.# W18-003-157		
Page 1 of 1								
Collector: Malcom Chunn CHPRC		Contact/Requester: Karen Waters-Husted		Telephone No.: 509-376-4650				
SAF No.: W18-003		Sampling Origin: Hanford Site		Purchase Order/Charge Code: 300071				
Project Title: RCRA, MARCH 2018		Logbook No.: HNF-N-506 <i>99114</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
B3HJW8	N		MAR 14 2018	0740	1x125-mL P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

6871
~~WC68~~
WC2768



300-6871 COC

Relinquished By: Malcom Chunn CHPRC <i>MRC</i>	MAR 14 2018 1000	Received By: Daniel Klug CHPRC <i>D. Klug</i>	MAR 14 2018 1000	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
Print First and Last Name	Signature	Date/Time	Date/Time	
Relinquished By: Daniel Klug CHPRC <i>D. Klug</i>	MAR 14 2018 1438	Received By: B. Jorgenson, TARL <i>B. Jorgenson</i>	3-14-18 1430	
Print First and Last Name	Signature	Date/Time	Date/Time	
Relinquished By:		Received By:		
Print First and Last Name	Signature	Date/Time	Date/Time	
Relinquished By:		Received By:		
Print First and Last Name	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:



CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C.# W18-003-158		
						Page 1 of 1		
Collector: Melson Chum CHPRC		Contact/Requester: Karen Waters-Husted		Telephone No.: 509-376-4650				
SAF No.: W18-003		Sampling Origin: Hanford Site		Purchase Order/Charge Code: 300071				
Project Title: RCRA, MARCH 2018 5-2151X		Logbook No.: HNF-N-506 99116		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 KS 3/13/18 TARC		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
B3HJW9	N	W	MAR 14 2018	0913	1x125-mL P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

6871
WC 2768

Relinquished By: Melson Chum Signature: MRC Date/Time: MAR 14 2018 1000	Received By: Daniel Klug Signature: D. Klug Date/Time: MAR 14 2018 1000	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: Daniel Klug Signature: D. Klug Date/Time: MAR 14 2018 1430	Received By: B. Jorgenson, TARC Signature: B. Jorgenson Date/Time: 3-14-18/1430		
Relinquished By: Signature: _____ Date/Time: _____	Received By: Signature: _____ 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):	Disposed By:	Date/Time:

Detection Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: W18-003

TestAmerica Job ID: 300-6871-1
 SDG: WC2768

Client Sample ID: B3HJW8

Lab Sample ID: 300-6871-1

No Detections.

Client Sample ID: B3HJW9

Lab Sample ID: 300-6871-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	43	D	4.0	2.0	mg/L	20		300.0	Total/NA
Nitrate as N	16	D Z	0.56	0.28	mg/L	20		300.0	Total/NA
Fluoride	0.53	B D	1.0	0.50	mg/L	20		300.0	Total/NA
Nitrite as N	0.66	B D Z	0.76	0.38	mg/L	20		300.0	Total/NA
Sulfate	350	D	5.0	2.5	mg/L	20		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: W18-003

TestAmerica Job ID: 300-6871-1
 SDG: WC2768

Client Sample ID: B3HJW8
Date Collected: 03/14/18 07:40
Date Received: 03/14/18 14:30

Lab Sample ID: 300-6871-1
Matrix: Water

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			03/21/18 02:10	2
Nitrate as N	0.028	U D Z	0.056	0.028	mg/L			03/21/18 02:10	2
Fluoride	0.050	U D	0.10	0.050	mg/L			03/21/18 02:10	2
Nitrite as N	0.038	U D Z	0.076	0.038	mg/L			03/21/18 02:10	2
Sulfate	0.25	U D	0.50	0.25	mg/L			03/21/18 02:10	2

Client Sample ID: B3HJW9
Date Collected: 03/14/18 09:13
Date Received: 03/14/18 14:30

Lab Sample ID: 300-6871-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43	D	4.0	2.0	mg/L			03/21/18 02:26	20
Nitrate as N	16	D Z	0.56	0.28	mg/L			03/21/18 02:26	20
Fluoride	0.53	B D	1.0	0.50	mg/L			03/21/18 02:26	20
Nitrite as N	0.66	B D Z	0.76	0.38	mg/L			03/21/18 02:26	20
Sulfate	350	D	5.0	2.5	mg/L			03/21/18 02:26	20

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-003

TestAmerica Job ID: 300-6871-1
SDG: WC2768

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-10654/35
Matrix: Water
Analysis Batch: 10654

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			03/20/18 22:42	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			03/20/18 22:42	1

Lab Sample ID: LCS 300-10654/36
Matrix: Water
Analysis Batch: 10654

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	2.18		mg/L		96	80 - 120
Nitrite as N	3.04	3.00		mg/L		99	80 - 120

Lab Sample ID: 300-6870-A-39 MS
Matrix: Water
Analysis Batch: 10654

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	3.1	D	0.452	3.59	D	mg/L		100	75 - 125
Nitrite as N	0.076	D	0.609	0.535	D	mg/L		75	75 - 125

Lab Sample ID: 300-6870-A-39 DU
Matrix: Water
Analysis Batch: 10654

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	3.1	D	3.09	D	mg/L		1	20
Nitrite as N	0.076	D	0.0749	B D	mg/L		1	20

Lab Sample ID: MB 300-10655/35
Matrix: Water
Analysis Batch: 10655

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			03/20/18 22:42	1
Fluoride	0.025	U	0.050	0.025	mg/L			03/20/18 22:42	1
Sulfate	0.13	U	0.25	0.13	mg/L			03/20/18 22:42	1

Lab Sample ID: LCS 300-10655/36
Matrix: Water
Analysis Batch: 10655

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	15.7		mg/L		98	80 - 120
Fluoride	4.00	3.98		mg/L		99	80 - 120
Sulfate	20.0	19.7		mg/L		99	80 - 120

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: W18-003

TestAmerica Job ID: 300-6871-1
 SDG: WC2768

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 300-6870-A-39 MS

Matrix: Water

Analysis Batch: 10655

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	8.5	D	3.20	11.8	D	mg/L		101	75 - 125
Fluoride	0.22	D	0.800	0.956	D	mg/L		93	75 - 125
Sulfate	51	D	4.00	55.0	D	mg/L		103	75 - 125

Lab Sample ID: 300-6870-A-39 DU

Matrix: Water

Analysis Batch: 10655

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	8.5	D	8.44	D	mg/L		1	20
Fluoride	0.22	D	0.213	D	mg/L		1	20
Sulfate	51	D	50.3	D	mg/L		1	20

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: W18-003

TestAmerica Job ID: 300-6871-1
 SDG: WC2768

HPLC/IC

Analysis Batch: 10654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-6871-1	B3HJW8	Total/NA	Water	300.0	
300-6871-2	B3HJW9	Total/NA	Water	300.0	
MB 300-10654/35	Method Blank	Total/NA	Water	300.0	
LCS 300-10654/36	Lab Control Sample	Total/NA	Water	300.0	
300-6870-A-39 MS	Matrix Spike	Total/NA	Water	300.0	
300-6870-A-39 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 10655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-6871-1	B3HJW8	Total/NA	Water	300.0	
300-6871-2	B3HJW9	Total/NA	Water	300.0	
MB 300-10655/35	Method Blank	Total/NA	Water	300.0	
LCS 300-10655/36	Lab Control Sample	Total/NA	Water	300.0	
300-6870-A-39 MS	Matrix Spike	Total/NA	Water	300.0	
300-6870-A-39 DU	Duplicate	Total/NA	Water	300.0	

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
Project/Site: W18-003

TestAmerica Job ID: 300-6871-1
SDG: WC2768

Client Sample ID: B3HJW8

Date Collected: 03/14/18 07:40

Date Received: 03/14/18 14:30

Lab Sample ID: 300-6871-1

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			10654	03/21/18 02:10	RTQ	TAL RCH
Total/NA	Analysis	300.0		2			10655	03/21/18 02:10	RTQ	TAL RCH

Client Sample ID: B3HJW9

Date Collected: 03/14/18 09:13

Date Received: 03/14/18 14:30

Lab Sample ID: 300-6871-2

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		20			10654	03/21/18 02:26	RTQ	TAL RCH
Total/NA	Analysis	300.0		20			10655	03/21/18 02:26	RTQ	TAL RCH

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 300-10654/35

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			10654	03/20/18 22:42	RTQ	TAL RCH

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 300-10655/35

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			10655	03/20/18 22:42	RTQ	TAL RCH

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 300-10654/36

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			10654	03/20/18 22:58	RTQ	TAL RCH

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 300-10655/36

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			10655	03/20/18 22:58	RTQ	TAL RCH

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
 Project/Site: W18-003

TestAmerica Job ID: 300-6871-1
 SDG: WC2768

Client Sample ID: Matrix Spike

Lab Sample ID: 300-6870-A-39 MS

Date Collected: 03/14/18 09:35

Matrix: Water

Date Received: 03/14/18 14:30

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			10654	03/20/18 23:30	RTQ	TAL RCH
Total/NA	Analysis	300.0		2			10655	03/20/18 23:30	RTQ	TAL RCH

Client Sample ID: Duplicate

Lab Sample ID: 300-6870-A-39 DU

Date Collected: 03/14/18 09:35

Matrix: Water

Date Received: 03/14/18 14:30

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			10654	03/21/18 00:18	RTQ	TAL RCH
Total/NA	Analysis	300.0		2			10655	03/21/18 00:18	RTQ	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: W18-003

TestAmerica Job ID: 300-6871-1
SDG: WC2768

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: W18-003

TestAmerica Job ID: 300-6871-1
SDG: WC2768

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-6871-1	B3HJW8	Water	03/14/18 07:40	03/14/18 14:30
300-6871-2	B3HJW9	Water	03/14/18 09:13	03/14/18 14:30

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

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-6871-1

SDG Number: WC2768

Login Number: 6871**List Number: 1****Creator: Holm, Tina R****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.	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.	N/A	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	