

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: 300-3592-1

TestAmerica Sample Delivery Group: WC1305

Client Project/Site: S16-007

For:

CH2M Hill Plateau Remediation Company

PO BOX 1600

Mail Stop R3-50

Richland, Washington 99352

Attn: CPP Sample Management



Authorized for release by:

8/22/2016 8:31:55 AM

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Designee for

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LINKS

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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. The sample/ sample duplicate RPD agreement is not applicable if one or both results are less than five times the MDL.

SAMPLE ISSUE RESOLUTION

SIR NUM	SIR17-188
REV NUM	0
DATE INITIATED	11/28/2016

SAMPLE EVENT INFORMATION

SAF NUM(S)	S16-007
OPERABLE UNIT(S)	
PROJECT(S)	SURV16
SAMPLE EVENT TITLE(S)	SURV16
LABORATORY	TestAmerica Incorporated, Richland

SAMPLING INFORMATION

NUMBER OF SAMPLES	1
SAMPLE NUMBERS	B35VW3
SAMPLE MATRIX	WATER
COLLECTION DATE	7/27/2016 - 7/27/2016
SDG NUM	WC1305

ISSUE BACKGROUND

CLASS	Chain of Custody Issue (Field)
TYPE	Crossed-out Information not Dated/Initialed
DESCRIPTION	COC S16-007-333, SAMPLE B35VW3 Crossed out sample time not initialed and dated

DISPOSITION

DESCRIPTION	DOCUMENT AND CLOSE
JUSTIFICATION	DOCUMENT AND CLOSE

SUBMITTED BY: Erika Cutsforth DATE: 11/17/2016
ACCEPTED BY: Kirsten Killand DATE: 11/28/2016

August 22, 2016

REV. 1

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-007

TestAmerica Job ID: 300-3592-1
SDG: WC1305

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Client: CH2M Hill Plateau Remediation Company
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TestAmerica Job ID: 300-3592-1
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Qualifiers

HPLC/IC

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

Glossary

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

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-007

TestAmerica Job ID: 300-3592-1
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Job ID: 300-3592-1

Laboratory: TestAmerica Richland

Narrative

**Job Narrative
300-3592-1**

Comments

No additional comments.

Receipt

The samples were received on 7/27/2016 2:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 6.5° C.

HPLC/IC

Method 300.0: The following sample required filtration to reduce matrix interferences and solids: B35VW3 (300-3592-2). Manual integration was performed on the following sample for Nitrite as N: B35VW3 (300-3592-2).

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

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

S16-007-331

Page 1 of 1

Collector Kevin Patterson CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650
SAF No. S16-007	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071
Project Title SURV, JULY 2016	Logbook No. HNF-N-506 881916	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A
Protocol SURV	Priority: 30 Days	Offsite Property No. N/A
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		SPECIAL INSTRUCTIONS N/A Special Handling: N/A
Sample No. B35VW5	Filter *	Date Time
N	JUL 27 2016 1135	1x500-mL P
No/Type Container	Sample Analysis	Holding Time
300.0 ANIONS_IC: COMMON		48 Hours
Preservative		Cool <=6C

3592
WCE1305



300-3592 COC

Relinquished By Kevin Patterson CHPRC	Sign	Date/Time JUL 27 2016 1210	Received By Janelle Zunker CHPRC	Print Janelle Zunker	Sign	Date/Time JUL 27 2016 1210	Matrix *
Relinquished By Janelle Zunker CHPRC	Sign	Date/Time JUL 27 2016 1450	Received By J. Bock, TARI	Print	Sign	Date/Time JUL 27 2016 1450	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By	Sign	Date/Time	Received By	Print	Sign	Date/Time	
Relinquished By	Sign	Date/Time	Received By	Print	Sign	Date/Time	
Relinquished By	Sign	Date/Time	Received By	Print	Sign	Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time				

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

S16-007-333

Page 1 of 1

Collector Kevin Patterson CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650
SAF No. S16-007	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071
Project Title SURV, JULY 2016	Logbook No. HNF-N-506 92 95	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A
Protocol SURV	Priority: 30 Days	Offsite Property No. N/A
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		
SPECIAL INSTRUCTIONS N/A Special Handling: N/A		
Sample No. B35VW3	Filter N	Date JUL 27 2016
* W	Date JUL 27 2016	Time 1201105
No/Type Container 1x500-ml P	Sample Analysis 300.0 ANIONS_IC: COMMON	Holding Time 48 Hours
		Preservative Cool <=6C

August 22, 2016

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w c1305

Relinquished By Kevin Patterson CHPRC	Print [Signature]	Sign [Signature]	Date/Time JUL 27 2016 1210	Received By Janelle Zunker CHPRC	Print [Signature]	Sign [Signature]	Date/Time JUL 27 2016 1210	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By Janelle Zunker CHPRC	Print [Signature]	Sign [Signature]	Date/Time JUL 27 2016 1430	Received By J. Beck, TARI	Print [Signature]	Sign [Signature]	Date/Time JUL 27 2016 1450	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By Date/Time				

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

S16-007-323

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REV 1

Collector Kevin Patterson CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650
SAF No. S16-007	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071
Project Title SURV, JULY 2016	Logbook No. HNF-N-506 <i>88/95</i>	Ice Chest No. N/A
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A
Protocol SURV	Priority: 30 Days	Offsite Property No. N/A
POSSIBLE SAMPLE HAZARDS/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		
SPECIAL INSTRUCTIONS N/A Special Handling: N/A		
HOLD TIME Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B35VW2	N	W JUL 27 2016	0948	1x500-mL P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

August 22, 2016

3593
w c 1305

Relinquished By Kevin Patterson CHPRC	Print 	Sign	Date/Time JUL 27 2016 1210	Received By Janelle Zunke CHPRC	Print 	Sign	Date/Time JUL 27 2016 1210	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By Janelle Zunke CHPRC	Print 	Sign	Date/Time JUL 27 2016 1450	Received By J. Bock, TARL	Print 	Sign	Date/Time JUL 27 2016 1450	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process)								Disposed By Date/Time

CH2M Hill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
S16-007-330

Page 1 of 1

Collector Kevin Patterson CHPRC	SAF No. S16-007	Project Title SURV, JULY 2016	Shipped To (Lab) TestAmerica Incorporated, Richland	Protocol SURV	Contact/Requester Karen Waters-Husted	Sampling Origin Hanford Site	Logbook No. HNF-N-506 82-05	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	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
POSSIBLE SAMPLE HAZARDS/REMARKS ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1					SPECIAL INSTRUCTIONS N/A Special Handling: N/A										
Sample No. B35VW6	Filter N	* W	Date JUL 27 2016	Time 0900	No/Type Container 1x500-mL P	Sample Analysis 300.0_ANIONS_IC: COMMON		Holding Time 48 Hours	Preservative Cool <=6C						

3592
we1305

Relinquished By Kevin Patterson CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time JUL 27 2016 1240	Received By Janelle Zunker CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time JUL 27 2016 1240	Matrix *
Relinquished By Janelle Zunker CHPRC	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time JUL 27 2016 1450	Received By J. Bock, TARL	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time JUL 27 2016 1450	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION				Disposed Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By
PRINTED ON 5/26/2016				FSR ID = FSR32576				A-6004-842 (REV 2)

August 22, 2016

REV. 1

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-007

TestAmerica Job ID: 300-3592-1
SDG: WC1305

Client Sample ID: B35VW5

Lab Sample ID: 300-3592-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.5	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	0.25	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.26	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	21	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B35VW3

Lab Sample ID: 300-3592-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	22	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	7.6	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.26	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	110	D	2.5	1.3	mg/L	10		300.0	Total/NA

Client Sample ID: B35VW2

Lab Sample ID: 300-3592-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	24	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	17	D	0.28	0.14	mg/L	10		300.0	Total/NA
Fluoride	0.32	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	51	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B35VW6

Lab Sample ID: 300-3592-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.7	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	1.2	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.26	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	21	D	0.50	0.25	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-007TestAmerica Job ID: 300-3592-1
SDG: WC1305

Client Sample ID: B35VW5

Lab Sample ID: 300-3592-1

Date Collected: 07/27/16 11:35

Matrix: Water

Date Received: 07/27/16 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.5	D	0.40	0.20	mg/L			07/27/16 17:18	2
Nitrate as N	0.25	D	0.056	0.028	mg/L			07/27/16 17:18	2
Fluoride	0.26	D	0.10	0.050	mg/L			07/27/16 17:18	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			07/27/16 17:18	2
Sulfate	21	D	0.50	0.25	mg/L			07/27/16 17:18	2

Client Sample ID: B35VW3

Lab Sample ID: 300-3592-2

Date Collected: 07/27/16 11:05

Matrix: Water

Date Received: 07/27/16 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22	D	0.40	0.20	mg/L			07/27/16 18:03	2
Nitrate as N	7.6	D	0.056	0.028	mg/L			07/27/16 18:03	2
Fluoride	0.26	D	0.10	0.050	mg/L			07/27/16 18:03	2
Nitrite as N	0.050	B D	0.076	0.038	mg/L			07/27/16 18:03	2
Sulfate	110	D	2.5	1.3	mg/L			07/27/16 20:05	10

Client Sample ID: B35VW2

Lab Sample ID: 300-3592-3

Date Collected: 07/27/16 09:48

Matrix: Water

Date Received: 07/27/16 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24	D	0.40	0.20	mg/L			07/27/16 18:18	2
Nitrate as N	17	D	0.28	0.14	mg/L			07/27/16 20:20	10
Fluoride	0.32	D	0.10	0.050	mg/L			07/27/16 18:18	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			07/27/16 18:18	2
Sulfate	51	D	0.50	0.25	mg/L			07/27/16 18:18	2

Client Sample ID: B35VW6

Lab Sample ID: 300-3592-4

Date Collected: 07/27/16 09:00

Matrix: Water

Date Received: 07/27/16 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7	D	0.40	0.20	mg/L			07/27/16 18:33	2
Nitrate as N	1.2	D	0.056	0.028	mg/L			07/27/16 18:33	2
Fluoride	0.26	D	0.10	0.050	mg/L			07/27/16 18:33	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			07/27/16 18:33	2
Sulfate	21	D	0.50	0.25	mg/L			07/27/16 18:33	2

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-007

TestAmerica Job ID: 300-3592-1
SDG: WC1305

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-5058/5

Matrix: Water

Analysis Batch: 5058

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			07/27/16 16:47	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			07/27/16 16:47	1

Lab Sample ID: LCS 300-5058/6

Matrix: Water

Analysis Batch: 5058

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	2.32		mg/L		103	80 - 120
Nitrite as N	3.04	3.16		mg/L		104	80 - 120

Lab Sample ID: 300-3592-1 MS

Matrix: Water

Analysis Batch: 5058

Client Sample ID: B35VW5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.25	D	0.452	0.676	D	mg/L		95	75 - 125
Nitrite as N	0.038	U D	0.609	0.550	D	mg/L		90	75 - 125

Lab Sample ID: 300-3592-1 DU

Matrix: Water

Analysis Batch: 5058

Client Sample ID: B35VW5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Nitrate as N	0.25	D	0.248	D	mg/L		0	20
Nitrite as N	0.038	U D	0.038	U D	mg/L		NC	20

Lab Sample ID: MB 300-5059/5

Matrix: Water

Analysis Batch: 5059

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			07/27/16 16:47	1
Fluoride	0.025	U	0.050	0.025	mg/L			07/27/16 16:47	1
Sulfate	0.13	U	0.25	0.13	mg/L			07/27/16 16:47	1

Lab Sample ID: LCS 300-5059/6

Matrix: Water

Analysis Batch: 5059

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	16.0	16.2		mg/L		101	80 - 120
Fluoride	4.00	4.07		mg/L		102	80 - 120
Sulfate	20.0	20.3		mg/L		102	80 - 120

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-007

TestAmerica Job ID: 300-3592-1
SDG: WC1305

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 300-3592-1 MS

Matrix: Water

Analysis Batch: 5059

Client Sample ID: B35VW5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.5	D	3.20	5.77	D	mg/L		102	75 - 125
Fluoride	0.26	D	0.800	1.02	D	mg/L		95	75 - 125
Sulfate	21	D	4.00	25.5	D	mg/L		107	75 - 125

Lab Sample ID: 300-3592-1 DU

Matrix: Water

Analysis Batch: 5059

Client Sample ID: B35VW5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	2.5	D	2.52	D	mg/L		0.3	20
Fluoride	0.26	D	0.259	D	mg/L		0.3	20
Sulfate	21	D	21.2	D	mg/L		0.3	20

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-007

TestAmerica Job ID: 300-3592-1
SDG: WC1305

HPLC/IC

Analysis Batch: 5058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3592-1	B35VW5	Total/NA	Water	300.0	
300-3592-2	B35VW3	Total/NA	Water	300.0	
300-3592-3	B35VW2	Total/NA	Water	300.0	
300-3592-3	B35VW2	Total/NA	Water	300.0	
300-3592-4	B35VW6	Total/NA	Water	300.0	
MB 300-5058/5	Method Blank	Total/NA	Water	300.0	
LCS 300-5058/6	Lab Control Sample	Total/NA	Water	300.0	
300-3592-1 MS	B35VW5	Total/NA	Water	300.0	
300-3592-1 DU	B35VW5	Total/NA	Water	300.0	

Analysis Batch: 5059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3592-1	B35VW5	Total/NA	Water	300.0	
300-3592-2	B35VW3	Total/NA	Water	300.0	
300-3592-2	B35VW3	Total/NA	Water	300.0	
300-3592-3	B35VW2	Total/NA	Water	300.0	
300-3592-4	B35VW6	Total/NA	Water	300.0	
MB 300-5059/5	Method Blank	Total/NA	Water	300.0	
LCS 300-5059/6	Lab Control Sample	Total/NA	Water	300.0	
300-3592-1 MS	B35VW5	Total/NA	Water	300.0	
300-3592-1 DU	B35VW5	Total/NA	Water	300.0	

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-007TestAmerica Job ID: 300-3592-1
SDG: WC1305

Client Sample ID: B35VW5

Date Collected: 07/27/16 11:35

Date Received: 07/27/16 14:50

Lab Sample ID: 300-3592-1

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			5058	07/27/16 17:18	CPM	TAL RCH
Total/NA	Analysis	300.0		2			5059	07/27/16 17:18	CPM	TAL RCH

Client Sample ID: B35VW3

Date Collected: 07/27/16 11:05

Date Received: 07/27/16 14:50

Lab Sample ID: 300-3592-2

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			5058	07/27/16 18:03	CPM	TAL RCH
Total/NA	Analysis	300.0		2			5059	07/27/16 18:03	CPM	TAL RCH
Total/NA	Analysis	300.0		10			5059	07/27/16 20:05	CPM	TAL RCH

Client Sample ID: B35VW2

Date Collected: 07/27/16 09:48

Date Received: 07/27/16 14:50

Lab Sample ID: 300-3592-3

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			5058	07/27/16 18:18	CPM	TAL RCH
Total/NA	Analysis	300.0		2			5059	07/27/16 18:18	CPM	TAL RCH
Total/NA	Analysis	300.0		10			5058	07/27/16 20:20	CPM	TAL RCH

Client Sample ID: B35VW6

Date Collected: 07/27/16 09:00

Date Received: 07/27/16 14:50

Lab Sample ID: 300-3592-4

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			5058	07/27/16 18:33	CPM	TAL RCH
Total/NA	Analysis	300.0		2			5059	07/27/16 18:33	CPM	TAL RCH

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 300-5058/5

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		1			5058	07/27/16 16:47	CPM	TAL RCH

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-007

TestAmerica Job ID: 300-3592-1
SDG: WC1305

Client Sample ID: Method Blank

Lab Sample ID: MB 300-5059/5

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			5059	07/27/16 16:47	CPM	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-5058/6

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			5058	07/27/16 17:02	CPM	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-5059/6

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			5059	07/27/16 17:02	CPM	TAL RCH

Client Sample ID: B35VW5

Lab Sample ID: 300-3592-1 MS

Date Collected: 07/27/16 11:35

Matrix: Water

Date Received: 07/27/16 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			5058	07/27/16 17:33	CPM	TAL RCH
Total/NA	Analysis	300.0		2			5059	07/27/16 17:33	CPM	TAL RCH

Laboratory References:

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

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-007

TestAmerica Job ID: 300-3592-1
SDG: WC1305

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

August 22, 2016
Sample Summary

REV. 1

Client: CH2M Hill Plateau Remediation Company
Project/Site: S16-007

TestAmerica Job ID: 300-3592-1
SDG: WC1305

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-3592-1	B35VW5	Water	07/27/16 11:35	07/27/16 14:50
300-3592-2	B35VW3	Water	07/27/16 11:05	07/27/16 14:50
300-3592-3	B35VW2	Water	07/27/16 09:48	07/27/16 14:50
300-3592-4	B35VW6	Water	07/27/16 09:00	07/27/16 14:50

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-3592-1

SDG Number: WC1305

Login Number: 3592

List Number: 1

Creator: Bock, Julie A

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	