

8/11/2016

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: 300-3505-1
TestAmerica Sample Delivery Group: WC1268
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:
8/11/2016 8:33:02 AM
Steven Campbell, Project Mgmt. Assistant
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Designee for
Whitney Ritari, Project Manager I
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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.



LINKS

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Have a Question?



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Definitions/Glossary

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

TestAmerica Job ID: 300-3505-1
SDG: WC1268

Qualifiers

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	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)

Case Narrative

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

TestAmerica Job ID: 300-3505-1
SDG: WC1268

Job ID: 300-3505-1

Laboratory: TestAmerica Richland

Narrative

Job Narrative
300-3505-1

Comments

No additional comments.

Receipt

The samples were received on 7/18/2016 11:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 6.8° C.

HPLC/IC

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

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CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

CH2M/Hill Plateau Remediation Company

C.O.C. #
S16-007-253
Page 1 of 1

Collector	Scott King 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 <u>86/55</u>	Ice Chest No.	N/A
Shipped To (Lab)	TestAmerica Incorporated, Richland	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
Protocol	SURV	Priority:	30 Days	Offsite Property No.	N/A
POSSIBLE SAMPLE HAZARDS/REMARKS			PRIORITY		
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1			SPECIAL INSTRUCTIONS N/A Special Handling: N/A		
Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Hold Time		

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B35TM2	N		W JUL 17 2016	1215	1x500-ml P	300.0 ANIONS_IC: COMMON	48 Hours	Cool <=6C

#3505
WC1268



300-3505 COC

Reinquished By	Scott King CHPRC	Print	Sign	Date/Time	JUL 17 2016 1500	Received By	Print	Sign	Date/Time	JUL 17 2016 1500	Matrix *
Reinquished By	<i>[Signature]</i>			Date/Time	1000	550#1			Date/Time	1000	S = Soil
Reinquished By	550#1			Date/Time	JUL 18 2016	Received By			Date/Time	JUL 18 2016	SE = Sediment
Reinquished By	Frank Hill CHPRC			Date/Time	1145	Received By			Date/Time	1145	SO = Solid
Reinquished By	<i>[Signature]</i>			Date/Time	JUL 18 2016	L Anderson, TARI		<i>[Signature]</i>	Date/Time	JUL 18 2016	SL = Sludge
Reinquished By	<i>[Signature]</i>			Date/Time		<i>[Signature]</i>			Date/Time		W = Water
Reinquished By				Date/Time		<i>[Signature]</i>			Date/Time		O = Oil
Reinquished By				Date/Time		<i>[Signature]</i>			Date/Time		A = Air
Reinquished By				Date/Time		<i>[Signature]</i>			Date/Time		DS = Drum Solids
Reinquished By				Date/Time		<i>[Signature]</i>			Date/Time		DL = Drum Liquids
Reinquished By				Date/Time		<i>[Signature]</i>			Date/Time		T = Tissue
Reinquished By				Date/Time		<i>[Signature]</i>			Date/Time		WT = Wipe
Reinquished By				Date/Time		<i>[Signature]</i>			Date/Time		L = Liquid
Reinquished By				Date/Time		<i>[Signature]</i>			Date/Time		V = Vegetation
Reinquished By				Date/Time		<i>[Signature]</i>			Date/Time		X = Other

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
S16-007-258
Page 1 of 1

Collector	CHRIS FULTON 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 82/38	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		PRIORITY		Hold Time	
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		SPECIAL INSTRUCTIONS N/A Special Handling: N/A		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B35TF0	N		W	JUL 17 2016	1x500-mL P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

#3505
USC12168

Sample Filled 4/62
High Toxap

Relinquished By	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
CHRIS FULTON CHPRC		JUL 17 2016 1545	SSU-1			JUL 17 2016 1525	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
SSU-1		JUL 18 2016	Frank High CHPRC			JUL 18 2016	DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By		JUL 18 2016	L Anderson, TAIL			JUL 18 2016	

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. #
S16-007-328
Page 1 of 1

Collector CHRIS FULTON		Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650
SAF No. S16-007	Project Title SURV, JULY 2016	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment GOVERNMENT VEHICLE	Logbook No. HNF-N-506 <u>8288</u>	Ice Chest No. N/A
Protocol SURV	Priority: 30 Days	Method of Shipment GOVERNMENT VEHICLE	Bill of Lading/Air Bill No. N/A
POSSIBLE SAMPLE HAZARDS/REMARKS		Offsite Property No. N/A	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1		SPECIAL INSTRUCTIONS N/A Special Handling: N/A	Hold Time
Sample No. B35VW8	Filter N	Date JUL 17 2016	Time 1457
No./Type Container 1x500-ml P	Sample Analysis 300.0_ANIONS_IC: COMMON	Holding Time 48 Hours	Preservative Cool <=6C

#3505
WIC 1208

Relinquished By CHRIS FULTON	Sign 	Date/Time JUL 17 2016 1535	Received By 	Print SSO #1	Sign 	Date/Time JUL 17 2016 1535	Matrix *
Relinquished By CHERC		Date/Time JUL 18 2016	Received By Frank Hill			Date/Time JUL 18 2016 1000	S = Soil SE = Sediment SO = Solid T = Tissue SL = Sludge W = Water O = Oil A = Air
Relinquished By Frank Hill	Sign 	Date/Time JUL 18 2016	Received By L Anderson, TARA			Date/Time JUL 19 2016 1145	DS = Drum Solids DL = Drum Liquids T = Tissue WL = Wipe L = Liquid V = Vegetation X = Other
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	

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
S16-007-329
Page 1 of 1

Company CH2M/Hill Plateau Remediation				Contact/Requester CHRIS FULTON CHPRC	Karen Waters-Husted	Telephone No. 509-376-4650
Collector CHRIS FULTON CHPRC	SAF No. S16-007	Project Title SURV, JULY 2016	Shipped To (Lab) Test/America Incorporated, Richland	Sampling Origin Hanford Site	Logbook No. HNF-N-506 82/88	Purchase Order/Charge Code 300071
Protocol SURV	Method of Shipment GOVERNMENT VEHICLE	Priority: 30 Days	PRIORITY	Ice Chest No. N/A	Bill of Lading/Air Bill No. N/A	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
B35VW7	N	JUL 17 2016	1219	1x500-ml P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

#3505
WC1268

8/11/2016

Relinquished By CHRIS FULTON CHPRC		Print	Sign	Date/Time JUL 17 2016 1525	Received By SSU #1		Print	Sign	Date/Time JUL 17 2016			
Relinquished By SSU-1				Date/Time JUL 18 2016 1200	Received By Frank Hall CHPRC				Date/Time JUL 18 2016			
Relinquished By Frank Hall CHPRC				Date/Time JUL 18 2016 1149	Received By L. Anderson, TARI				Date/Time JUL 18 2016			
Relinquished By				Date/Time	Received By				Date/Time			

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

Detection Summary

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

TestAmerica Job ID: 300-3505-1
SDG: WC1268

Client Sample ID: B35TM2

Lab Sample ID: 300-3505-1

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	3.1	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.20	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	83	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B35TP0

Lab Sample ID: 300-3505-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	20	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	48	D	1.4	0.70	mg/L	50		300.0	Total/NA
Fluoride	0.34	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	97	D	13	6.3	mg/L	50		300.0	Total/NA

Client Sample ID: B35VW8

Lab Sample ID: 300-3505-3

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	1.4	0.70	mg/L	50		300.0	Total/NA
Fluoride	0.34	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	170	D	13	6.3	mg/L	50		300.0	Total/NA

Client Sample ID: B35VW7

Lab Sample ID: 300-3505-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	98	D	10	5.0	mg/L	50		300.0	Total/NA
Nitrate as N	13	D	1.4	0.70	mg/L	50		300.0	Total/NA
Fluoride	0.27	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	280	D	13	6.3	mg/L	50		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: S16-007

TestAmerica Job ID: 300-3505-1
SDG: WC1268

Client Sample ID: B35TM2

Lab Sample ID: 300-3505-1

Date Collected: 07/17/16 12:15

Matrix: Water

Date Received: 07/18/16 11:45

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			07/18/16 17:30	2
Nitrate as N	3.1	D	0.056	0.028	mg/L			07/18/16 17:30	2
Fluoride	0.20	D	0.10	0.050	mg/L			07/18/16 17:30	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			07/18/16 17:30	2
Sulfate	83	D	0.50	0.25	mg/L			07/18/16 17:30	2

Client Sample ID: B35TP0

Lab Sample ID: 300-3505-2

Date Collected: 07/17/16 13:43

Matrix: Water

Date Received: 07/18/16 11:45

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20	D	0.40	0.20	mg/L			07/18/16 17:45	2
Nitrate as N	48	D	1.4	0.70	mg/L			07/18/16 20:01	50
Fluoride	0.34	D	0.10	0.050	mg/L			07/18/16 17:45	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			07/18/16 17:45	2
Sulfate	97	D	13	6.3	mg/L			07/18/16 20:01	50

Client Sample ID: B35VW8

Lab Sample ID: 300-3505-3

Date Collected: 07/17/16 14:57

Matrix: Water

Date Received: 07/18/16 11:45

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			07/18/16 18:00	2
Nitrate as N	17	D	1.4	0.70	mg/L			07/18/16 20:16	50
Fluoride	0.34	D	0.10	0.050	mg/L			07/18/16 18:00	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			07/18/16 18:00	2
Sulfate	170	D	13	6.3	mg/L			07/18/16 20:16	50

Client Sample ID: B35VW7

Lab Sample ID: 300-3505-4

Date Collected: 07/17/16 12:19

Matrix: Water

Date Received: 07/18/16 11:45

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98	D	10	5.0	mg/L			07/18/16 20:32	50
Nitrate as N	13	D	1.4	0.70	mg/L			07/18/16 20:32	50
Fluoride	0.27	D	0.10	0.050	mg/L			07/18/16 18:15	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			07/18/16 18:15	2
Sulfate	280	D	13	6.3	mg/L			07/18/16 20:32	50

QC Sample Results

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

TestAmerica Job ID: 300-3505-1
 SDG: WC1268

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-4940/5
 Matrix: Water
 Analysis Batch: 4940

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			07/18/16 16:14	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			07/18/16 16:14	1

Lab Sample ID: LCS 300-4940/6
 Matrix: Water
 Analysis Batch: 4940

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.26	2.31		mg/L		102	80 - 120
Nitrite as N	3.04	3.12		mg/L		102	80 - 120

Lab Sample ID: 300-3504-A-1 MS
 Matrix: Water
 Analysis Batch: 4940

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	10	D	0.452	10.4	D	mg/L		79	75 - 125
Nitrite as N	0.038	U D	0.609	0.536	D	mg/L		88	75 - 125

Lab Sample ID: 300-3504-A-1 DU
 Matrix: Water
 Analysis Batch: 4940

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	10	D	10.1	D	mg/L		0.3	20
Nitrite as N	0.038	U D	0.038	U D	mg/L		NC	20

Lab Sample ID: MB 300-4941/5
 Matrix: Water
 Analysis Batch: 4941

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			07/18/16 16:14	1
Fluoride	0.025	U	0.050	0.025	mg/L			07/18/16 16:14	1
Sulfate	0.13	U	0.25	0.13	mg/L			07/18/16 16:14	1

Lab Sample ID: LCS 300-4941/6
 Matrix: Water
 Analysis Batch: 4941

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	16.1		mg/L		101	80 - 120
Fluoride	4.00	4.05		mg/L		101	80 - 120
Sulfate	20.0	20.1		mg/L		101	80 - 120

QC Sample Results

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

TestAmerica Job ID: 300-3505-1
 SDG: WC1268

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 300-3504-A-1 MS

Matrix: Water

Analysis Batch: 4941

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Chloride	15	D	3.20	18.2	D	mg/L		98	75 - 125	
Fluoride	0.17	D	0.800	0.909	D	mg/L		92	75 - 125	
Sulfate	42	D	4.00	45.5	D	mg/L		94	75 - 125	

Lab Sample ID: 300-3504-A-1 DU

Matrix: Water

Analysis Batch: 4941

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample	Sample	DU		Unit	D	RPD	RPD	
	Result	Qualifier	Result	Qualifier				RPD	Limit
Chloride	15	D	15.1	D	mg/L		0.3	20	
Fluoride	0.17	D	0.176	D	mg/L		1	20	
Sulfate	42	D	41.8	D	mg/L		0.1	20	

QC Association Summary

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

TestAmerica Job ID: 300-3505-1
 SDG: WC1268

HPLC/IC

Analysis Batch: 4940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3505-1	B35TM2	Total/NA	Water	300.0	
300-3505-2	B35TP0	Total/NA	Water	300.0	
300-3505-2	B35TP0	Total/NA	Water	300.0	
300-3505-3	B35VW8	Total/NA	Water	300.0	
300-3505-3	B35VW8	Total/NA	Water	300.0	
300-3505-4	B35VW7	Total/NA	Water	300.0	
300-3505-4	B35VW7	Total/NA	Water	300.0	
MB 300-4940/5	Method Blank	Total/NA	Water	300.0	
LCS 300-4940/6	Lab Control Sample	Total/NA	Water	300.0	
300-3504-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
300-3504-A-1 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 4941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3505-1	B35TM2	Total/NA	Water	300.0	
300-3505-2	B35TP0	Total/NA	Water	300.0	
300-3505-2	B35TP0	Total/NA	Water	300.0	
300-3505-3	B35VW8	Total/NA	Water	300.0	
300-3505-3	B35VW8	Total/NA	Water	300.0	
300-3505-4	B35VW7	Total/NA	Water	300.0	
300-3505-4	B35VW7	Total/NA	Water	300.0	
MB 300-4941/5	Method Blank	Total/NA	Water	300.0	
LCS 300-4941/6	Lab Control Sample	Total/NA	Water	300.0	
300-3504-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
300-3504-A-1 DU	Duplicate	Total/NA	Water	300.0	

Lab Chronicle

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

TestAmerica Job ID: 300-3505-1
 SDG: WC1268

Client Sample ID: B35TM2

Date Collected: 07/17/16 12:15

Date Received: 07/18/16 11:45

Lab Sample ID: 300-3505-1

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			4940	07/18/16 17:30	RLC	TAL RCH
Total/NA	Analysis	300.0		2			4941	07/18/16 17:30	RLC	TAL RCH

Client Sample ID: B35TP0

Date Collected: 07/17/16 13:43

Date Received: 07/18/16 11:45

Lab Sample ID: 300-3505-2

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			4940	07/18/16 17:45	RLC	TAL RCH
Total/NA	Analysis	300.0		2			4941	07/18/16 17:45	RLC	TAL RCH
Total/NA	Analysis	300.0		50			4940	07/18/16 20:01	RLC	TAL RCH
Total/NA	Analysis	300.0		50			4941	07/18/16 20:01	RLC	TAL RCH

Client Sample ID: B35VW8

Date Collected: 07/17/16 14:57

Date Received: 07/18/16 11:45

Lab Sample ID: 300-3505-3

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			4940	07/18/16 18:00	RLC	TAL RCH
Total/NA	Analysis	300.0		2			4941	07/18/16 18:00	RLC	TAL RCH
Total/NA	Analysis	300.0		50			4940	07/18/16 20:16	RLC	TAL RCH
Total/NA	Analysis	300.0		50			4941	07/18/16 20:16	RLC	TAL RCH

Client Sample ID: B35VW7

Date Collected: 07/17/16 12:19

Date Received: 07/18/16 11:45

Lab Sample ID: 300-3505-4

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			4940	07/18/16 18:15	RLC	TAL RCH
Total/NA	Analysis	300.0		2			4941	07/18/16 18:15	RLC	TAL RCH
Total/NA	Analysis	300.0		50			4940	07/18/16 20:32	RLC	TAL RCH
Total/NA	Analysis	300.0		50			4941	07/18/16 20:32	RLC	TAL RCH

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 300-4940/5

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			4940	07/18/16 16:14	RLC	TAL RCH

Lab Chronicle

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

TestAmerica Job ID: 300-3505-1
 SDG: WC1268

Client Sample ID: Method Blank

Lab Sample ID: MB 300-4941/5

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			4941	07/18/16 16:14	RLC	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-4940/6

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			4940	07/18/16 16:29	RLC	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-4941/6

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			4941	07/18/16 16:29	RLC	TAL RCH

Client Sample ID: Matrix Spike

Lab Sample ID: 300-3504-A-1 MS

Date Collected: 07/17/16 09:16

Matrix: Water

Date Received: 07/18/16 11:45

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			4940	07/18/16 16:59	RLC	TAL RCH
Total/NA	Analysis	300.0		2			4941	07/18/16 16:59	RLC	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: S16-007

TestAmerica Job ID: 300-3505-1
SDG: WC1268

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: S16-007

TestAmerica Job ID: 300-3505-1
SDG: WC1268

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-3505-1	B35TM2	Water	07/17/16 12:15	07/18/16 11:45
300-3505-2	B35TP0	Water	07/17/16 13:43	07/18/16 11:45
300-3505-3	B35VW8	Water	07/17/16 14:57	07/18/16 11:45
300-3505-4	B35VW7	Water	07/17/16 12:19	07/18/16 11:45

- 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: 300-3505-1

SDG Number: WC1268

Login Number: 3505

List Number: 1

Creator: Anderson, Lori F

List Source: TestAmerica Richland

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