

April 29, 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: 300-2717-1

TestAmerica Sample Delivery Group: WC0950

Client Project/Site: F15-015

For:

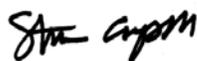
CH2M Hill Plateau Remediation Company

PO BOX 1600

Mail Stop R3-50

Richland, Washington 99352

Attn: CPP Sample Management



Authorized for release by:

4/29/2016 11:28:43 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 elss than five times the MDL.



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Definitions/Glossary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F15-015

TestAmerica Job ID: 300-2717-1
 SDG: WC0950

Qualifiers

HPLC/IC

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

General Chemistry

Qualifier	Qualifier Description
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, 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: F15-015

TestAmerica Job ID: 300-2717-1
SDG: WC0950

Job ID: 300-2717-1

Laboratory: TestAmerica Richland

Narrative

Job Narrative
300-2717-1

Comments

No additional comments.

Receipt

The samples were received on 3/30/2016 2:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9° C.

HPLC/IC

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

General Chemistry

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





CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		PAGE 1 OF 1	
COLLECTOR Curt Hoffman CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 7H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C8735, I-001, post development	PROJECT DESIGNATION FY15 100-HR-3 Drilling - Water	FIELD LOGBOOK NO. HNF-N-645	SAF NO. F15-015	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO. N/A	OFFSITE PROPERTY NO. N/A	ACTUAL SAMPLE DEPTH 420'	COA 300115	BILL OF LADING/AIR BILL NO. N/A	
SHIPPED TO TestAmerica Incorporated, Richland	PRESERVATION Cool <=6C				

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. NA	PRESERVATION Cool <=6C	HOLDING TIME 24 Hours	TYPE OF CONTAINER aG	NO. OF CONTAINER(S) 1	VOLUME 60ml	7196 CR6: COMMON;
SAMPLE NO. B34R31	MATRIX* WATER	SAMPLE DATE MAR 30 2016	SAMPLE TIME 0951	SPECIAL HANDLING AND/OR STORAGE			

FILTER

22117
W20950

300-2717 CO



CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM Curt Hoffman	RECEIVED BY/STORED IN M.A. White	FILTER
DATE/TIME MAR 30 2016 1120	DATE/TIME MAR 30 2016 1120	
RELINQUISHED BY/REMOVED FROM M.A. White	RECEIVED BY/STORED IN J. Bock, TARL	
DATE/TIME MAR 30 2016 1425	DATE/TIME MAR 30 2016 1425	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME



CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		PAGE 1 OF 1	
COLLECTOR Qurt Hoffman CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 7H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C8735, I-001, DUP	PROJECT DESIGNATION F15 100-HR-3 Drilling - Water	FIELD LOGBOOK NO. HNF-N-645 3-58	SAF NO. F15-015	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO. N/A	OFFSITE PROPERTY NO. N/A	ACTUAL SAMPLE DEPTH 42.0'	COA 300115	ORIGINAL	
SHIPPED TO TestAmerica Incorporated, Richland	BILL OF LADING/AIR BILL NO. N/A				

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. NA	PRESERVATION	Cool <=6C
		HOLDING TIME	24 Hours
		TYPE OF CONTAINER	ag
		NO. OF CONTAINERS(S)	1
		VOLUME	60ml
		SAMPLE ANALYSIS	7196 CR6: COMMON;
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B34R36	WATER	MAR 30 2016	0951

Handwritten notes: 42min, 0000950

FILTER

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Curt Hoffman CHPRC	DATE/TIME MAR 30 2016 1120	RECEIVED BY/STORED IN M.A. White CHPRC	DATE/TIME MAR 30 2016 1120	FILTER	
RELINQUISHED BY/REMOVED FROM M.A. White CHPRC	DATE/TIME MAR 30 2016 1425	RECEIVED BY/STORED IN J. Beck, TABL	DATE/TIME MAR 30 2016 1425		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	
PRINTED ON	2/17/2016	FSR ID = FSR25571		TRVL NUM = TRVL-16-084	



CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F15-015-218	PAGE 1 OF 1
COLLECTOR Curt Hoffman CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 7H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION C8735, I-001, post development	PROJECT DESIGNATION F15 100-HR-3 Drilling - Water	FIELD LOGBOOK NO. HNF-N-645	SAF NO. F15-015	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO. N/A	OFFSITE PROPERTY NO. N/A	ACTUAL SAMPLE DEPTH 170'	COA 300115	ORIGINAL	
SHIPPED TO Testamerica Incorporated, Richland	PRESERVATION Cool <=6C		BILL OF LADING/AIR BILL NO. N/A		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/LATA Dangerous Goods Regulations but are not releasable per DOE Order 438.1. NA	HOLDING TIME		TYPE OF CONTAINER		NO. OF CONTAINER(S)		VOLUME	
			48 Hours		P		1		500ml
		SPECIAL HANDLING AND/OR STORAGE		SAMPLE ANALYSIS		SEE ITEM (1) IN SPECIAL INSTRUCTIONS			
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME						
B3AR32	WATER	MAR 30 2016	6951	✓					

FILTER

Handwritten notes:
B2M11
W00950

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Curt Hoffman CHPRC	DATE/TIME MAR 30 2016 1120	RECEIVED BY/STORED IN M.A. White	DATE/TIME MAR 30 2016 1120	(1) 300.0 ANIONS_IC: COMMON {Nitrogen in Nitrate, Sulfate}; FILTER	
RELINQUISHED BY/REMOVED FROM M.A. White	DATE/TIME MAR 30 2016 1425	RECEIVED BY/STORED IN J. Bock, TARB	DATE/TIME MAR 30 2016 1425		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	DATE/TIME



CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F15-015-223	PAGE 1 OF 1
COLLECTOR Curt Hoffman CHPRC	COMPANY CONTACT TODAK, D	TELEPHONE NO. 376-6427	PROJECT COORDINATOR TODAK, D	PRICE CODE 7H	DATA TURNAROUND 30 Days / 30 Days
SAMPLING LOCATION CB733, 1-001, DUP	PROJECT DESIGNATION FY15 100-HR-3 Drilling - Water	ACTUAL SAMPLE DEPTH 420'	SAF NO. F15-015	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE ORIGINAL
ICE CHEST NO. N/A	FIELD BOOK NO. N/A	OFFSITE PROPERTY NO. N/A	COA 300115	BILL OF LADING/AIR BILL NO. N/A	
SHIPPED TO TestAmerica Incorporated, Richland					

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION		HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SPECIAL HANDLING AND/OR STORAGE	SAMPLE DATE	SAMPLE TIME	SEE ITEM (1) IN SPECIAL INSTRUCTIONS
		COOL <=6C	48 Hours								
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	*Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR/ATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. NA				P	1	500ml		MAR 30 2016	0951	✓
B34R37	WATER								MAR 30 2016	0951	✓

FILTER

420114
W00950

CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Curt Hoffman CHPRC	DATE/TIME MAR 30 2016 1120	RECEIVED BY/STORED IN M.A. White CHPRC	DATE/TIME MAR 30 2016 1120	(1) 300.0_ANIONS_IC: COMMON {Nitrogen in Nitrate, Sulfate}; FILTER	
RELINQUISHED BY/REMOVED FROM M.A. White CHPRC	DATE/TIME MAR 30 2016 1425	RECEIVED BY/STORED IN J. Bock, TARL	DATE/TIME MAR 30 2016 1425		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	TITLE	
LABORATORY SECTION	RECEIVED BY	DISPOSED BY		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD			DATE/TIME	

PRINTED ON 2/17/2016 FSR.ID = FSR25571 TRVL NUM = TRVL-16-084 A-6003-618 (REV 2)

Detection Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F15-015

TestAmerica Job ID: 300-2717-1
 SDG: WC0950

Client Sample ID: B34R31

Lab Sample ID: 300-2717-1

No Detections.

Client Sample ID: B34R36

Lab Sample ID: 300-2717-2

No Detections.

Client Sample ID: B34R32

Lab Sample ID: 300-2717-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	2.8	D	0.056	0.028	mg/L	2		300.0	Total/NA
Sulfate	91	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B34R37

Lab Sample ID: 300-2717-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	2.8	D	0.056	0.028	mg/L	2		300.0	Total/NA
Sulfate	91	D	0.50	0.25	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F15-015

TestAmerica Job ID: 300-2717-1
 SDG: WC0950

Client Sample ID: B34R31

Lab Sample ID: 300-2717-1

Date Collected: 03/30/16 09:51

Matrix: Water

Date Received: 03/30/16 14:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			03/30/16 19:22	1

Client Sample ID: B34R36

Lab Sample ID: 300-2717-2

Date Collected: 03/30/16 09:51

Matrix: Water

Date Received: 03/30/16 14:25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			03/30/16 19:22	1

Client Sample ID: B34R32

Lab Sample ID: 300-2717-3

Date Collected: 03/30/16 09:51

Matrix: Water

Date Received: 03/30/16 14:25

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	2.8	D	0.056	0.028	mg/L			03/30/16 16:57	2
Sulfate	91	D	0.50	0.25	mg/L			03/30/16 16:57	2

Client Sample ID: B34R37

Lab Sample ID: 300-2717-4

Date Collected: 03/30/16 09:51

Matrix: Water

Date Received: 03/30/16 14:25

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	2.8	D	0.056	0.028	mg/L			03/30/16 17:42	2
Sulfate	91	D	0.50	0.25	mg/L			03/30/16 17:42	2

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F15-015

TestAmerica Job ID: 300-2717-1
 SDG: WC0950

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-3580/5
 Matrix: Water
 Analysis Batch: 3580

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			03/30/16 16:27	1

Lab Sample ID: LCS 300-3580/6
 Matrix: Water
 Analysis Batch: 3580

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	2.34		mg/L		104	80 - 120

Lab Sample ID: 300-2717-3 MS
 Matrix: Water
 Analysis Batch: 3580

Client Sample ID: B34R32
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.8	D	0.452	3.23	D	mg/L		99	75 - 125

Lab Sample ID: 300-2717-3 DU
 Matrix: Water
 Analysis Batch: 3580

Client Sample ID: B34R32
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	2.8	D		2.76	D	mg/L		0.8	20

Lab Sample ID: MB 300-3581/5
 Matrix: Water
 Analysis Batch: 3581

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.13	U	0.25	0.13	mg/L			03/30/16 16:27	1

Lab Sample ID: LCS 300-3581/6
 Matrix: Water
 Analysis Batch: 3581

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	20.5		mg/L		102	80 - 120

Lab Sample ID: 300-2717-3 MS
 Matrix: Water
 Analysis Batch: 3581

Client Sample ID: B34R32
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	91	D	4.00	94.3	D	mg/L		82	75 - 125

Lab Sample ID: 300-2717-3 DU
 Matrix: Water
 Analysis Batch: 3581

Client Sample ID: B34R32
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	91	D		90.6	D	mg/L		0.5	20

TestAmerica Richland

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F15-015

TestAmerica Job ID: 300-2717-1
SDG: WC0950

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 300-3606/3
Matrix: Water
Analysis Batch: 3606

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			03/30/16 19:13	1

Lab Sample ID: LCS 300-3606/4
Matrix: Water
Analysis Batch: 3606

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.251		mg/L		101	80 - 120

Lab Sample ID: 300-2704-A-1 MS
Matrix: Water
Analysis Batch: 3606

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
Cr (VI)	0.012		0.0499	0.0622		mg/L		101	75 - 125

Lab Sample ID: 300-2704-A-1 DU
Matrix: Water
Analysis Batch: 3606

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	0.012		0.0115		mg/L		0.9	20

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F15-015

TestAmerica Job ID: 300-2717-1
 SDG: WC0950

HPLC/IC

Analysis Batch: 3580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-2717-3	B34R32	Total/NA	Water	300.0	
300-2717-3 DU	B34R32	Total/NA	Water	300.0	
300-2717-3 MS	B34R32	Total/NA	Water	300.0	
300-2717-4	B34R37	Total/NA	Water	300.0	
LCS 300-3580/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-3580/5	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 3581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-2717-3	B34R32	Total/NA	Water	300.0	
300-2717-3 DU	B34R32	Total/NA	Water	300.0	
300-2717-3 MS	B34R32	Total/NA	Water	300.0	
300-2717-4	B34R37	Total/NA	Water	300.0	
LCS 300-3581/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-3581/5	Method Blank	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 3606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-2704-A-1 DU	Duplicate	Total/NA	Water	7196A	
300-2704-A-1 MS	Matrix Spike	Total/NA	Water	7196A	
300-2717-1	B34R31	Total/NA	Water	7196A	
300-2717-2	B34R36	Total/NA	Water	7196A	
LCS 300-3606/4	Lab Control Sample	Total/NA	Water	7196A	
MB 300-3606/3	Method Blank	Total/NA	Water	7196A	

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F15-015

TestAmerica Job ID: 300-2717-1
 SDG: WC0950

Client Sample ID: B34R31

Date Collected: 03/30/16 09:51

Date Received: 03/30/16 14:25

Lab Sample ID: 300-2717-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			3606	03/30/16 19:22	RLC	TAL RCH

Client Sample ID: B34R36

Date Collected: 03/30/16 09:51

Date Received: 03/30/16 14:25

Lab Sample ID: 300-2717-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			3606	03/30/16 19:22	RLC	TAL RCH

Client Sample ID: B34R32

Date Collected: 03/30/16 09:51

Date Received: 03/30/16 14:25

Lab Sample ID: 300-2717-3

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	10 mL		3580	03/30/16 16:57	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		3581	03/30/16 16:57	CPM	TAL RCH

Client Sample ID: B34R37

Date Collected: 03/30/16 09:51

Date Received: 03/30/16 14:25

Lab Sample ID: 300-2717-4

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	10 mL		3580	03/30/16 17:42	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		3581	03/30/16 17:42	CPM	TAL RCH

Client Sample ID: Duplicate

Date Collected: 03/30/16 08:03

Date Received: 03/30/16 11:25

Lab Sample ID: 300-2704-A-1 DU

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			3606	03/30/16 19:17	RLC	TAL RCH

Client Sample ID: B34R32

Date Collected: 03/30/16 09:51

Date Received: 03/30/16 14:25

Lab Sample ID: 300-2717-3 DU

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	10 mL		3580	03/30/16 17:27	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		3581	03/30/16 17:27	CPM	TAL RCH

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F15-015

TestAmerica Job ID: 300-2717-1
 SDG: WC0950

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-3580/6

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	10 mL		3580	03/30/16 16:42	CPM	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-3581/6

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	10 mL		3581	03/30/16 16:42	CPM	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-3606/4

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			3606	03/30/16 19:13	RLC	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-3580/5

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	10 mL		3580	03/30/16 16:27	CPM	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-3581/5

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	10 mL		3581	03/30/16 16:27	CPM	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-3606/3

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			3606	03/30/16 19:13	RLC	TAL RCH

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F15-015

TestAmerica Job ID: 300-2717-1
 SDG: WC0950

Client Sample ID: Matrix Spike

Lab Sample ID: 300-2704-A-1 MS

Date Collected: 03/30/16 08:03

Matrix: Water

Date Received: 03/30/16 11:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1		3.0 mL	3606	03/30/16 19:14	RLC	TAL RCH

Client Sample ID: B34R32

Lab Sample ID: 300-2717-3 MS

Date Collected: 03/30/16 09:51

Matrix: Water

Date Received: 03/30/16 14:25

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	10 mL		3580	03/30/16 17:12	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		3581	03/30/16 17:12	CPM	TAL RCH

Laboratory References:

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

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Method Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F15-015

TestAmerica Job ID: 300-2717-1
SDG: WC0950

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL RCH
7196A	Chromium, Hexavalent	SW846	TAL RCH

Protocol References:

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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



Sample Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F15-015

TestAmerica Job ID: 300-2717-1
SDG: WC0950

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-2717-1	B34R31	Water	03/30/16 09:51	03/30/16 14:25
300-2717-2	B34R36	Water	03/30/16 09:51	03/30/16 14:25
300-2717-3	B34R32	Water	03/30/16 09:51	03/30/16 14:25
300-2717-4	B34R37	Water	03/30/16 09:51	03/30/16 14:25

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Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-2717-1

SDG Number: WC0950

Login Number: 2717

List Number: 1

Creator: Bock, Julie A

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.	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.	True	
Residual Chlorine Checked.	N/A	

