

5/4/2016

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: 300-2960-1

TestAmerica Sample Delivery Group: WC1038

Client Project/Site: F16-029

For:

CH2M Hill Plateau Remediation Company

PO BOX 1600

Mail Stop R3-50

Richland, Washington 99352

Attn: CPP Sample Management



Authorized for release by:

5/4/2016 9:02:14 AM

Steven Campbell, Quality Assurance 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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Definitions/Glossary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-029

TestAmerica Job ID: 300-2960-1
SDG: WC1038

Qualifiers

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.
□	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: F16-029

TestAmerica Job ID: 300-2960-1
SDG: WC1038

Job ID: 300-2960-1

Laboratory: TestAmerica Richland

Narrative

Job Narrative
300-2960-1

Comments

No additional comments.

Receipt

The samples were received on 5/3/2016 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 7.2° C.

General Chemistry

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

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5/4/2016

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		FIG-029-046	PAGE 1 OF 1
COLLECTOR K.C. Patterson/CH2MPC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE C09	DATA TURNAROUND 24 Hours / 3 Days
SAMPLING LOCATION 100-DX, Train E valve V-M128E	PROJECT DESIGNATION 100-DX R&T Resin Reconditioning	FIELD LOGBOOK NO. HNF-N-49115	ACTUAL SAMPLE DEPTH (N/A)	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE ORIGINAL
ICE CHEST NO. (N/A)	OFFSITE PROPERTY NO. (N/A)	COA 302841	BILL OF LADING/AIR BILL NO. (N/A)		
SHIPPED TO TestAmerica Incorporated, Richland	PRESERVATION Cool <=6C	HOLDING TIME 24 Hours	NO. OF CONTAINER(S) 1		
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil SE=Slurry T=Tissue V=Vegetation W=Water WF=Wipe X=Other	<p>POSSIBLE SAMPLE HAZARDS/ REMARKS</p> <p>*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/DATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. NA</p>		VOLUME 60ml	<p>7196, CR6: COMMON</p>	
SPECIAL HANDLING AND/OR STORAGE	<p><i>2960</i> <i>used</i> <i>Due 5-4-16</i></p>				

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B357F8	WATER	MAY 03 2016	0745	✓

300-2960 CO



CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM K.C. Patterson/CH2MPC	DATE/TIME MAY 03 2016 0850	RECEIVED BY/STORED IN Frank Hall CH2MPC	DATE/TIME MAY 03 2016 0850	TEST 2 - E TRAIN	
RELINQUISHED BY/REMOVED FROM Frank Hall	DATE/TIME MAY 03 2016 0950	RECEIVED BY/STORED IN [Signature]	DATE/TIME MAY 03 2016 0950		
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	



CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-029-048	PAGE 1 OF 1
COLLECTOR K.C. Patterson/CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE C09	DATA TURNAROUND 24 Hours / 3 Days
SAMPLING LOCATION 100-DX, Train E valve V-W228E	PROJECT DESIGNATION 100-DX P&T Resin Reconditioning	FIELD LOGBOOK NO. HNF-N-49115	ACTUAL SAMPLE DEPTH (N/A)	SAF NO. F16-029	<input type="checkbox"/> ORIGINAL
ICE CHEST NO. (N/A)	FIELD LOGBOOK NO. HNF-N-49115	ACTUAL SAMPLE DEPTH (N/A)	COA 302841	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO TestAmerica Incorporated, Richland	OFFSITE PROPERTY NO. (N/A)	BILL OF LADING/AIR BILL NO. (N/A)			

MATRIX*	SPECIAL HANDLING AND/OR STORAGE	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS	SAMPLE DATE	SAMPLE TIME	REMARKS
B357H0	WATER	COOL <=6C	24 Hours	ag	1	60ml	7196, CR6; COMMON;	MAY 03 2016	0747	✓
<p>MATRIX* POSSIBLE SAMPLE HAZARDS/ REMARKS A=Air DL=Drum LI=Liquid DS=Drum S=Solids L=Liquid O=Oil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other</p> <p>*Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR/DATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1, NA</p>										

Handwritten notes: 2960, 2021554

CHAIN OF POSSESSION	SIGN / PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM K.C. Patterson/CHPRC	RECEIVED BY/STORED IN Frank Hill CHPRC	TEST 2 - E TRAIN
RELINQUISHED BY/REMOVED FROM CHPRC	RECEIVED BY/STORED IN L. Anderson, TARI CHPRC	
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	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
LABORATORY SECTION	RECEIVED BY	TITLE
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DATE/TIME

PRINTED ON 4/14/2016 FSR ID = FSR31402 TRVL NUM = TRVL-16-116 A-6003-618 (REV 2)

5/4/2016

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-029-050	PAGE 1 OF 1
COLLECTOR K.C. Patterson/CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE C09	DATA TURNAROUND 24 Hours / 3 Days
SAMPLING LOCATION 100-DX, Train E valve V-M228E -- DUP	PROJECT DESIGNATION 100-DX P&T Resin Reconditioning	FIELD LOGBOOK NO. HNF-N-49115	SAF NO. F16-029	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO. (N/A)	OFFSITE PROPERTY NO. (N/A)	ACTUAL SAMPLE DEPTH (N/A)	COA 302841	BILL OF LADING/AIR BILL NO. (N/A)	
SHIPPED TO TestAmerica Incorporated, Richland					

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	SPECIAL HANDLING AND/OR STORAGE	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	NO. OF CONTAINER(S) 1	
		TYPE OF CONTAINER aG	VOLUME 60ml	
		SAMPLE ANALYSIS 7196 CR6: COMMON;		
SAMPLE NO. B357H2	MATRIX* WATER	SAMPLE DATE MAY 03 2016	SAMPLE TIME 0747	

2960
wcl1334

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM K.C. Patterson/CHPRC	RECEIVED BY/STORED IN Frank Hall	TEST 2 - E TRAIN
DATE/TIME MAY 03 2016 0850	DATE/TIME MAY 03 2016 0850	
RELINQUISHED BY/REMOVED FROM Frank Hall	RECEIVED BY/STORED IN E. Anderson, MAR	
DATE/TIME MAY 03 2016 0850	DATE/TIME MAY 03 2016 0850	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
DATE/TIME	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
DATE/TIME	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
DATE/TIME	DATE/TIME	
LABORATORY SECTION	RECEIVED BY	TITLE
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY

5/4/2016

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-029-052	PAGE 1 OF 1
COLLECTOR K.C. Paterson/CH2MRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE C09	DATA TURNAROUND 24 Hours / 3 Days
SAMPLING LOCATION 100-DX, Train E Valve V-M328E	PROJECT DESIGNATION 100-DX P&T Resin Reconditioning	FIELD LOGBOOK NO. HNF-N-49115	ACTUAL SAMPLE DEPTH (N/A)	SAF NO. F16-029	METHOD OF SHIPMENT GOVERNMENT VEHICLE ORIGINAL
ICE CHEST NO. (N/A)	OFFSITE PROPERTY NO. (N/A)	COA 302841	BILL OF LADING/AIR BILL NO. (N/A)		
SHIPPED TO TestAmerica Incorporated, Richland					

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WF=Wipe X=Other	SPECIAL HANDLING AND/OR STORAGE	PRESERVATION		Cool <=6C
		HOLDING TIME		24 Hours
		TYPE OF CONTAINER		gG
		NO. OF CONTAINER(S)		1
VOLUME		60ml		7196, CR6: COMMON;
SAMPLE NO. B357H4	MATRIX*	SAMPLE DATE	SAMPLE TIME	
		MAY 03 2016	0749	✓

2900
W21358

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM K.C. Paterson/CH2MRC	DATE/TIME MAY 03 2016 0830	RECEIVED BY/STORED IN FRANK HART CH2MRC
RELINQUISHED BY/REMOVED FROM Frank Hart CH2MRC	DATE/TIME MAY 03 2016	RECEIVED BY/STORED IN L. Anderson, TARI J. Underwood
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN
LABORATORY SECTION	RECEIVED BY	TITLE
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY



CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		FIG-029-054	PAGE 1 OF 1
COLLECTOR K.C. Patterson/CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE C09	DATA TURNAROUND 24 Hours / 3 Days
SAMPLING LOCATION 100-DX, Train E valve V-M428E	PROJECT DESIGNATION 100-DX P&T Resin Reconditioning	FIELD LOGBOOK NO. HNF-N-49115	SAF NO. FIG-029	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO. (N/A)	OFFSITE PROPERTY NO. (N/A)	ACTUAL SAMPLE DEPTH (N/A)	COA 302841	BILL OF LADING/AIR BILL NO. (N/A)	
SHIPPED TO TestAmerica Incorporated, Richland					

MATRIX*	SPECIAL HANDLING AND/OR STORAGE	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS	SAMPLE DATE	SAMPLE TIME	REMARKS
B357H6	WATER	COOL <=6C	24 Hours	ag	1	60ml	7196, CR6; COMMON;	MAY 03 2016	0751	2960 226154
*Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1. NA										

CHAIN OF POSSESSION	SIGN / PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM K.C. Patterson/CHPRC	RECEIVED BY/STORED IN Frank Hall CHPRC	TEST 2 - E TRAIN
RELINQUISHED BY/REMOVED FROM Frank Hall	RECEIVED BY/STORED IN L. AMBERSON, TARI	
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
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DATE/TIME

DATE/TIME: MAY 03 2016
DATE/TIME: MAY 03 2016

PRINTED ON 4/14/2016 FSR ID = FSR31405 TRVL NUM = TRVL-16-116 A-6003-6-18 (REV 2)

Detection Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-029

TestAmerica Job ID: 300-2960-1
SDG: WC1038

Client Sample ID: B35758

Lab Sample ID: 300-2960-1

No Detections.

Client Sample ID: B357H0

Lab Sample ID: 300-2960-2

No Detections.

Client Sample ID: B357H2

Lab Sample ID: 300-2960-3

No Detections.

Client Sample ID: B357H4

Lab Sample ID: 300-2960-4

No Detections.

Client Sample ID: B357H6

Lab Sample ID: 300-2960-5

No Detections.

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This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-029

TestAmerica Job ID: 300-2960-1
SDG: WC1038

Client Sample ID: B35758

Date Collected: 05/03/16 07:45

Date Received: 05/03/16 09:50

Lab Sample ID: 300-2960-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			05/03/16 13:21	1

Client Sample ID: B357H0

Date Collected: 05/03/16 07:47

Date Received: 05/03/16 09:50

Lab Sample ID: 300-2960-2

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			05/03/16 13:22	1

Client Sample ID: B357H2

Date Collected: 05/03/16 07:47

Date Received: 05/03/16 09:50

Lab Sample ID: 300-2960-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			05/03/16 13:22	1

Client Sample ID: B357H4

Date Collected: 05/03/16 07:49

Date Received: 05/03/16 09:50

Lab Sample ID: 300-2960-4

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			05/03/16 13:23	1

Client Sample ID: B357H6

Date Collected: 05/03/16 07:51

Date Received: 05/03/16 09:50

Lab Sample ID: 300-2960-5

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			05/03/16 13:23	1

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F16-029

TestAmerica Job ID: 300-2960-1
 SDG: WC1038

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 300-4014/3
 Matrix: Water
 Analysis Batch: 4014

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	-		05/03/16 13:18	1

Lab Sample ID: LCS 300-4014/4
 Matrix: Water
 Analysis Batch: 4014

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	0.249		mg/L	-	100	80 - 120

Lab Sample ID: 300-2960-1 MS
 Matrix: Water
 Analysis Batch: 4014

Client Sample ID: B35758
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.0015	U	0.0500	0.0505		mg/L	-	101	75 - 125

Lab Sample ID: 300-2960-1 DU
 Matrix: Water
 Analysis Batch: 4014

Client Sample ID: B35758
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	0.0015	U	0.0015	U	mg/L	-	NC	20

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QC Association Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F16-029

TestAmerica Job ID: 300-2960-1
 SDG: WC1038

General Chemistry

Analysis Batch: 4014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-2960-1	B35758	Total/NA	Water	7196A	
300-2960-1 DU	B35758	Total/NA	Water	7196A	
300-2960-1 MS	B35758	Total/NA	Water	7196A	
300-2960-2	B357H0	Total/NA	Water	7196A	
300-2960-3	B357H2	Total/NA	Water	7196A	
300-2960-4	B357H4	Total/NA	Water	7196A	
300-2960-5	B357H6	Total/NA	Water	7196A	
LCS 300-4014/4	Lab Control Sample	Total/NA	Water	7196A	
MB 300-4014/3	Method Blank	Total/NA	Water	7196A	

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-029

TestAmerica Job ID: 300-2960-1
SDG: WC1038

Client Sample ID: B35758

Date Collected: 05/03/16 07:45

Date Received: 05/03/16 09:50

Lab Sample ID: 300-2960-1

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			4014	05/03/16 13:21	RLC	TAL RCH

Client Sample ID: B357H0

Date Collected: 05/03/16 07:47

Date Received: 05/03/16 09:50

Lab Sample ID: 300-2960-2

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			4014	05/03/16 13:22	RLC	TAL RCH

Client Sample ID: B357H2

Date Collected: 05/03/16 07:47

Date Received: 05/03/16 09:50

Lab Sample ID: 300-2960-3

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	7196A		1			4014	05/03/16 13:22	RLC	TAL RCH

Client Sample ID: B357H4

Date Collected: 05/03/16 07:49

Date Received: 05/03/16 09:50

Lab Sample ID: 300-2960-4

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	7196A		1			4014	05/03/16 13:23	RLC	TAL RCH

Client Sample ID: B357H6

Date Collected: 05/03/16 07:51

Date Received: 05/03/16 09:50

Lab Sample ID: 300-2960-5

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	7196A		1			4014	05/03/16 13:23	RLC	TAL RCH

Client Sample ID: B35758

Date Collected: 05/03/16 07:45

Date Received: 05/03/16 09:50

Lab Sample ID: 300-2960-1 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			4014	05/03/16 13:22	RLC	TAL RCH

TestAmerica Richland

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-029

TestAmerica Job ID: 300-2960-1
SDG: WC1038

Client Sample ID: Lab Control Sample**Lab Sample ID: LCS 300-4014/4**

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			4014	05/03/16 13:18	RLC	TAL RCH

Client Sample ID: Method Blank**Lab Sample ID: MB 300-4014/3**

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			4014	05/03/16 13:18	RLC	TAL RCH

Client Sample ID: B35758**Lab Sample ID: 300-2960-1 MS**

Date Collected: 05/03/16 07:45

Matrix: Water

Date Received: 05/03/16 09:50

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	4014	05/03/16 13:19	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: F16-029

TestAmerica Job ID: 300-2960-1
SDG: WC1038

Method	Method Description	Protocol	Laboratory
7196A	Chromium, Hexavalent	SW846	TAL RCH

Protocol References:

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: F16-029

TestAmerica Job ID: 300-2960-1
SDG: WC1038

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-2960-1	B35758	Water	05/03/16 07:45	05/03/16 09:50
300-2960-2	B357H0	Water	05/03/16 07:47	05/03/16 09:50
300-2960-3	B357H2	Water	05/03/16 07:47	05/03/16 09:50
300-2960-4	B357H4	Water	05/03/16 07:49	05/03/16 09:50
300-2960-5	B357H6	Water	05/03/16 07:51	05/03/16 09:50

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Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-2960-1

SDG Number: WC1038

Login Number: 2960**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.	True	