

7/29/2016

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: 300-3530-1
TestAmerica Sample Delivery Group: WC1280
Client Project/Site: F16-046

For:
CH2M Hill Plateau Remediation Company
PO BOX 1600
Mail Stop R3-50
Richland, Washington 99352

Attn: CPP Sample Management



Authorized for release by:
7/29/2016 4:10:47 PM
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Designee for
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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: F16-046

TestAmerica Job ID: 300-3530-1
SDG: WC1280

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

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: F16-046

TestAmerica Job ID: 300-3530-1
SDG: WC1280

Job ID: 300-3530-1

Laboratory: TestAmerica Richland

Narrative

Job Narrative
300-3530-1

Comments

No additional comments.

Receipt

The samples were received on 7/20/2016 2:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.9° 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		FIG-046-064	PAGE 1 OF 1
COLLECTOR	CHRIS FULTON CHPRC	COMPANY CONTACT	SUMNER, LC 376-3922	PROJECT COORDINATOR	SUMNER, LC
SAMPLING LOCATION	289-T, Effluent Tank, Valve V07-X802 * DUP	PROJECT DESIGNATION	200W Pump & Treat - Treatment Plant Compliance Sampling - Water	PRICE CODE	7H
ICE CHEST NO.	N/A	FIELD LOGBOOK NO.	HNF-N-491-15	AIR QUALITY	<input type="checkbox"/> 30 Days / 30 Days
SHIPPED TO	TestAmerica Incorporated, Richland	OFFSITE PROPERTY NO.	N/A	BILL OF LADING/AIR BILL NO.	N/A
MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS *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. N/A	PRESERVATION	Cool <=6C	METHOD OF SHIPMENT	ORIGINAL
		HOLDING TIME	24 Hours	GOVERNMENT VEHICLE	
		TYPE OF CONTAINER	3G		
		NO. OF CONTAINER(S)	1		
		VOLUME	60mL		
		SAMPLE ANALYSIS	7196, CR6, COMMON		

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B36272	WATER	JUL 20 2016	10:15

300-3530 COC



#3530
WCI1280

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	CHRIS FULTON	DATE/TIME	JUL 20 2016 11:10	RECEIVED BY/STORED IN	Janelle Zunker CHPRC
RELINQUISHED BY/REMOVED FROM	Janelle Zunker CHPRC	DATE/TIME	JUL 20 2016 14:50	RECEIVED BY/STORED IN	J. Bock, TRVL 20 2016 14:50
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	DATE/TIME	DISPOSED BY	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD				



7/29/2016

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-046-065	PAGE 1 OF 1								
COLLECTOR	CHRIS FULTON CH2MRC	COMPANY CONTACT	SUMNER, LC	TELEPHONE NO.	376-3922	PROJECT COORDINATOR	SUMNER, LC	PRICE CODE	7H	DATA TURNOURND	30 Days / 30 Days			
SAMPLING LOCATION	289-T, Effluent Tank, Valve V07-1800	PROJECT DESIGNATION	200W Pump & Treat - Treatment Plant Compliance Sampling - Water	FIELD LOGBOOK NO.	HNF-N-471-15	ACTUAL SAMPLE DEPTH	COA	SAF NO.	F16-046	AIR QUALITY	<input type="checkbox"/>	METHOD OF SHIPMENT	GOVERNMENT VEHICLE	ORIGINAL
ICE CHEST NO.	N/A	OFFSITE PROPERTY NO.	N/A	BILL OF LADING/AIR BILL NO.	N/A									
SHIPPED TO	TestAmerica Incorporated, Richland													

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	Cool <=6C
A=Air	*Contains Radioactive Material at concentrations that are not be regulated for	HOLDING TIME	48 Hours
DL=Drum	Liquids	TYPE OF CONTAINER	P
DS=Drum	transportation per 49 CFR/LATA Dangerous Goods Regulations but are not releasable per	NO. OF CONTAINER(S)	1
Solids	DOE Order 458.1. N/A	VOLUME	250ml
L=Liquid			
O=Oil			
S=Soil			
SE=Sediment			
T=Tissue			
V=Vegetation			
W=Water			
WI=Sludge			
X=Other			
SPECIAL HANDLING AND/OR STORAGE		SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B36273	WATER	JUL 20 2016	1015

3530
WFC1280

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	(1) 300.0 ANIONS_IC: COMMON; 300.0 ANIONS_IC: COMMON (Add-on) (Bromide);	
CHRIS FULTON	JUL 20 2016 11:10	Chris Fult	JUL 20 2016 11:10		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
Leadly West	JUL 20 2016 14:50	J. Bock, TAYLOR	JUL 20 2016 14:50		
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 6/22/2016 FSR ID = FSR33504 TRVL NUM = TRVL-16-181 A-6003-618 (REV 2)

Detection Summary

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F16-046

TestAmerica Job ID: 300-3530-1
 SDG: WC1280

Client Sample ID: B36272

Lab Sample ID: 300-3530-1

No Detections.

Client Sample ID: B36273

Lab Sample ID: 300-3530-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	47	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	7.9	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.35	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	0.59	D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	94	D	0.50	0.25	mg/L	2		300.0	Total/NA
Bromide	0.21	B D	0.25	0.13	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: F16-046

TestAmerica Job ID: 300-3530-1
 SDG: WC1280

Client Sample ID: B36272

Lab Sample ID: 300-3530-1

Date Collected: 07/20/16 10:15

Matrix: Water

Date Received: 07/20/16 14:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L			07/20/16 18:16	1

Client Sample ID: B36273

Lab Sample ID: 300-3530-2

Date Collected: 07/20/16 10:15

Matrix: Water

Date Received: 07/20/16 14:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47	D	0.40	0.20	mg/L			07/20/16 19:44	2
Nitrate as N	7.9	D	0.056	0.028	mg/L			07/20/16 19:44	2
Fluoride	0.35	D	0.10	0.050	mg/L			07/20/16 19:44	2
Nitrite as N	0.59	D	0.076	0.038	mg/L			07/20/16 19:44	2
Sulfate	94	D	0.50	0.25	mg/L			07/20/16 19:44	2
Bromide	0.21	B D	0.25	0.13	mg/L			07/20/16 19:44	2

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-046

TestAmerica Job ID: 300-3530-1
SDG: WC1280

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-4964/5
Matrix: Water
Analysis Batch: 4964

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			07/20/16 18:28	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			07/20/16 18:28	1

Lab Sample ID: LCS 300-4964/6
Matrix: Water
Analysis Batch: 4964

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	2.29		mg/L		101	80 - 120
Nitrite as N	3.04	3.11		mg/L		102	80 - 120

Lab Sample ID: 300-3529-A-3 MS
Matrix: Water
Analysis Batch: 4964

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	6.3	D	0.452	6.69	D	mg/L		89	75 - 125
Nitrite as N	0.038	U D	0.609	0.533	D	mg/L		88	75 - 125

Lab Sample ID: 300-3529-A-3 DU
Matrix: Water
Analysis Batch: 4964

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Nitrate as N	6.3	D	6.21	D	mg/L		1	20
Nitrite as N	0.038	U D	0.038	U D	mg/L		NC	20

Lab Sample ID: MB 300-4965/5
Matrix: Water
Analysis Batch: 4965

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			07/20/16 18:28	1
Fluoride	0.025	U	0.050	0.025	mg/L			07/20/16 18:28	1
Sulfate	0.13	U	0.25	0.13	mg/L			07/20/16 18:28	1
Bromide	0.063	U	0.13	0.063	mg/L			07/20/16 18:28	1

Lab Sample ID: LCS 300-4965/6
Matrix: Water
Analysis Batch: 4965

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	16.0		mg/L		100	80 - 120
Fluoride	4.00	3.99		mg/L		100	80 - 120
Sulfate	20.0	19.9		mg/L		100	80 - 120
Bromide	10.0	10.1		mg/L		101	80 - 120

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-046

TestAmerica Job ID: 300-3530-1
SDG: WC1280

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 300-3529-A-3 MS
Matrix: Water
Analysis Batch: 4965

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	22	D	3.20	25.3	D	mg/L		94	75 - 125
Fluoride	0.44	D	0.800	1.21	D	mg/L		97	75 - 125
Bromide	0.28	D	2.00	1.98	D	mg/L		85	75 - 125

Lab Sample ID: 300-3529-A-3 MS
Matrix: Water
Analysis Batch: 4965

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
Sulfate	100	D	40.0	137	D	mg/L		88	75 - 125

Lab Sample ID: 300-3529-A-3 DU
Matrix: Water
Analysis Batch: 4965

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	22	D	22.1	D	mg/L		1	20
Fluoride	0.44	D	0.431	D	mg/L		0.9	20
Bromide	0.28	D	0.282	D	mg/L		0.9	20

Lab Sample ID: 300-3529-A-3 DU
Matrix: Water
Analysis Batch: 4965

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	100	D	101	D	mg/L		2	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 300-5013/3
Matrix: Water
Analysis Batch: 5013

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			07/20/16 18:07	1

Lab Sample ID: LCS 300-5013/4
Matrix: Water
Analysis Batch: 5013

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	0.254		mg/L		101	80 - 120

Lab Sample ID: 300-3526-A-1 MS
Matrix: Water
Analysis Batch: 5013

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)	0.017		0.0500	0.0672		mg/L		101	75 - 125

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QC Sample Results

Client: CH2M Hill Plateau Remediation Company
 Project/Site: F16-046

TestAmerica Job ID: 300-3530-1
 SDG: WC1280

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 300-3526-A-1 DU
 Matrix: Water
 Analysis Batch: 5013

Client Sample ID: Duplicate
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	0.017		0.0169		mg/L		0	20

- 1
- 2
- 3
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- 9
- 10
- 11
- 12
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QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-046

TestAmerica Job ID: 300-3530-1
SDG: WC1280

HPLC/IC

Analysis Batch: 4964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3530-2	B36273	Total/NA	Water	300.0	
MB 300-4964/5	Method Blank	Total/NA	Water	300.0	
LCS 300-4964/6	Lab Control Sample	Total/NA	Water	300.0	
300-3529-A-3 MS	Matrix Spike	Total/NA	Water	300.0	
300-3529-A-3 DU	Duplicate	Total/NA	Water	300.0	

Analysis Batch: 4965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3530-2	B36273	Total/NA	Water	300.0	
MB 300-4965/5	Method Blank	Total/NA	Water	300.0	
LCS 300-4965/6	Lab Control Sample	Total/NA	Water	300.0	
300-3529-A-3 MS	Matrix Spike	Total/NA	Water	300.0	
300-3529-A-3 MS	Matrix Spike	Total/NA	Water	300.0	
300-3529-A-3 DU	Duplicate	Total/NA	Water	300.0	
300-3529-A-3 DU	Duplicate	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 5013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-3530-1	B36272	Total/NA	Water	7196A	
MB 300-5013/3	Method Blank	Total/NA	Water	7196A	
LCS 300-5013/4	Lab Control Sample	Total/NA	Water	7196A	
300-3526-A-1 MS	Matrix Spike	Total/NA	Water	7196A	
300-3526-A-1 DU	Duplicate	Total/NA	Water	7196A	

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-046

TestAmerica Job ID: 300-3530-1
SDG: WC1280

Client Sample ID: B36272

Date Collected: 07/20/16 10:15

Date Received: 07/20/16 14:50

Lab Sample ID: 300-3530-1

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			5013	07/20/16 18:16	RLC	TAL RCH

Client Sample ID: B36273

Date Collected: 07/20/16 10:15

Date Received: 07/20/16 14:50

Lab Sample ID: 300-3530-2

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			4964	07/20/16 19:44	CPM	TAL RCH
Total/NA	Analysis	300.0		2			4965	07/20/16 19:44	CPM	TAL RCH

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 300-4964/5

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			4964	07/20/16 18:28	CPM	TAL RCH

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 300-4965/5

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			4965	07/20/16 18:28	CPM	TAL RCH

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 300-5013/3

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			5013	07/20/16 18:07	RLC	TAL RCH

Client Sample ID: Lab Control Sample

Date Collected: N/A

Date Received: N/A

Lab Sample ID: LCS 300-4964/6

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			4964	07/20/16 18:43	CPM	TAL RCH

Lab Chronicle

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-046

TestAmerica Job ID: 300-3530-1
SDG: WC1280

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-4965/6

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			4965	07/20/16 18:43	CPM	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-5013/4

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			5013	07/20/16 18:07	RLC	TAL RCH

Client Sample ID: Matrix Spike

Lab Sample ID: 300-3526-A-1 MS

Date Collected: 07/20/16 11:58

Matrix: Water

Date Received: 07/20/16 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	7196A		1			5013	07/20/16 18:07	RLC	TAL RCH

Client Sample ID: Matrix Spike

Lab Sample ID: 300-3529-A-3 MS

Date Collected: 07/20/16 11:08

Matrix: Water

Date Received: 07/20/16 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			4964	07/20/16 19:13	CPM	TAL RCH
Total/NA	Analysis	300.0		2			4965	07/20/16 19:13	CPM	TAL RCH
Total/NA	Analysis	300.0		20			4965	07/20/16 22:31	CPM	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: F16-046

TestAmerica Job ID: 300-3530-1
SDG: WC1280

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



7/29/2016

Sample Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: F16-046

TestAmerica Job ID: 300-3530-1
SDG: WC1280

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-3530-1	B36272	Water	07/20/16 10:15	07/20/16 14:50
300-3530-2	B36273	Water	07/20/16 10:15	07/20/16 14:50

- 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: 300-3530-1

SDG Number: WC1280

Login Number: 3530

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	