

# 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: 300-1490-1  
TestAmerica Sample Delivery Group: WC0591  
Client Project/Site: CH2M Hill Chemical

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

Attn: CPP Sample Management



Authorized for release by:  
12/7/2015 11:58:14 AM  
Steven Campbell, Quality Assurance Assistant  
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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.*



### LINKS

Review your project results through  
**TotalAccess**

Have a Question?



Visit us at:  
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December 07, 2015

Client: CH2M Hill Plateau Remediation Company  
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1490-1  
SDG: WC0591



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**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
B	Estimated result. Result is less than the RL, but greater than MDL
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)

Client: CH2M Hill Plateau Remediation Company  
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1490-1  
SDG: WC0591

**Job ID: 300-1490-1**

**Laboratory: TestAmerica Richland**

**Narrative**

**Job Narrative  
300-1490-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 11/12/2015 9:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

**HPLC/IC**

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

**General Chemistry**

Method 7196A: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: B33219 (300-1490-1) and B33217 (300-1490-2). For more information refer to SIR attached to report.

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



CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W16-011-087  
Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	W16-011	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	RCRA, NOVEMBER 2015	Logbook No.	HNF-N-506 80 / 25	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	RCRA	Priority:	30 Days	Offsite Property No.	N/A
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b>			<b>SPECIAL INSTRUCTIONS</b>		
*** 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			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
B33219	Y	W	11-11-15	1352	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B33217	N	W	11-11-15	1352	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C



#490  
WCS91

300-1490 CCC

December 07 2015

Relinquished By	J.R. Aguilar/CHPRC	Print	Sign	Date/Time	NOV 11 2015 1500	Received By	SKL #1	Print	Sign	Date/Time	NOV 11 2015 1500	Matrix * S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquids SO = Solid T = Tissue SL = Sludge WT = Wipe W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By	M.A. White/CHPRC	Print	Sign	Date/Time	NOV 12 2015 0800	Received By	M.A. White/CHPRC	Print	Sign	Date/Time	NOV 12 2015 0800	
Relinquished By	M.A. White/CHPRC	Print	Sign	Date/Time	NOV 12 2015 0855	Received By	J. Friesz, TARL	Print	Sign	Date/Time	NOV 12 2015 0855	
Relinquished By		Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
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Collector	J.R. Aguirre/CH2MHC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	W16-011	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	RCRA, NOVEMBER 2015	Logbook No.	HNF-N-506 50 / 25	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	RCRA	Priority:	30 Days PRIORITY	Offsite Property No.	N/A
POSSIBLE SAMPLE HAZARDS/REMARKS			SPECIAL INSTRUCTIONS		
*** 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			Hold Time		
Sample No.	B33215	Filter	N	Date	11-11-15
		* Time			1352
		No./Type Container	1x500-mL P	Sample Analysis	300.0_ANIONS_IC: COMMON
		Holding Time	48 Hours	Preservative	Cool <=6C

#1496  
W60591

December 07 2015

Relinquished By	J.R. Aguirre/CH2MHC	Print	Sign	Date/Time	NOV 11 2015 1500	Received By	SSA #1	Print	Sign	Date/Time	NOV 11 2015 1500	Matrix *
Relinquished By	SSU-1			Date/Time	NOV 12 2015 0800	Received By	M.A. White			Date/Time	NOV 12 2015 0800	S = Soil
Relinquished By	M.A. White			Date/Time	NOV 12 2015 0955	Received By	1. Phasz, TARL			Date/Time	NOV 12 2015 0955	SE = Sediment
Relinquished By				Date/Time		Received By				Date/Time		SO = Solid
Relinquished By				Date/Time		Received By				Date/Time		SL = Sludge
Relinquished By				Date/Time		Received By				Date/Time		W = Water
Relinquished By				Date/Time		Received By				Date/Time		O = Oil
Relinquished By				Date/Time		Received By				Date/Time		A = Air
Relinquished By				Date/Time		Received By				Date/Time		DS = Drum Solids
Relinquished By				Date/Time		Received By				Date/Time		DJL = Drum Liquids
Relinquished By				Date/Time		Received By				Date/Time		T = Tissue
Relinquished By				Date/Time		Received By				Date/Time		WT = Wipe
Relinquished By				Date/Time		Received By				Date/Time		L = Liquid
Relinquished By				Date/Time		Received By				Date/Time		O = Oil
Relinquished By				Date/Time		Received By				Date/Time		V = Vegetation
Relinquished By				Date/Time		Received By				Date/Time		X = Other

# SAMPLE ISSUE RESOLUTION

SIR NUM SIR16-107  
REV NUM 0  
DATE INITIATED 11/20/2005



## SAMPLE EVENT INFORMATION

SAF NUM(S) W16-011  
OPERABLE UNIT(S) NONE  
PROJECT(S) RCRA16  
SAMPLE EVENT TITLE(S) RCRA16  
LABORATORY TestAmerica Incorporated, Richland

## SAMPLING INFORMATION

NUMBER OF SAMPLES 2  
SAMPLE NUMBERS B33217, B33219  
SAMPLE MATRIX WATER  
COLLECTION DATE 11/11/2015 - 11/11/2015  
SDG NUM WC0591

## ISSUE BACKGROUND

CLASS Field Sampling Issue  
TYPE Analysis Hold Time Exceeded  
DESCRIPTION The samples listed above were received with less than half the remaining on the hold time. As such the laboratory had insufficient time remaining to perform the analysis within analytical hold time.

## DISPOSITION

DESCRIPTION PROPOSED DISPOSITION: Initiate SIR, report results and include hold time comment in the case narrative

JUSTIFICATION ACCEPTED RESOLUTION: Accept the proposed resolution.

SUBMITTED BY: Steven Campbell/TARL DATE: 11/20/15  
ACCEPTED BY: Karen Waters-Husted/CHPRC DATE: 11/23/15

### Detection Summary

Client: CH2M Hill Plateau Remediation Company  
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1490-1  
 SDG: WC0591

**Client Sample ID: B33219**

**Lab Sample ID: 300-1490-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0022	B	0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B33217**

**Lab Sample ID: 300-1490-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0019	B	0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B33215**

**Lab Sample ID: 300-1490-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	10	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	4.0	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	95	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: CH2M Hill Chemical

TestAmerica Job ID: 300-1490-1  
 SDG: WC0591

**Client Sample ID: B33219**  
**Date Collected: 11/11/15 13:52**  
**Date Received: 11/12/15 09:55**

**Lab Sample ID: 300-1490-1**  
**Matrix: Water**

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0022	B	0.0040	0.0015	mg/L			11/12/15 13:57	1

**Client Sample ID: B33217**  
**Date Collected: 11/11/15 13:52**  
**Date Received: 11/12/15 09:55**

**Lab Sample ID: 300-1490-2**  
**Matrix: Water**

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0019	B	0.0040	0.0015	mg/L			11/12/15 13:57	1

**Client Sample ID: B33215**  
**Date Collected: 11/11/15 13:52**  
**Date Received: 11/12/15 09:55**

**Lab Sample ID: 300-1490-3**  
**Matrix: Water**

**Method: 300.0 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10	D	0.40	0.20	mg/L			11/12/15 17:29	2
Nitrate as N	4.0	D	0.056	0.028	mg/L			11/12/15 17:29	2
Fluoride	0.20	D	0.10	0.050	mg/L			11/12/15 17:29	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			11/12/15 17:29	2
Sulfate	95	D	0.50	0.25	mg/L			11/12/15 17:29	2

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-1965/13  
 Matrix: Water  
 Analysis Batch: 1965

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			11/12/15 14:12	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			11/12/15 14:12	1

Lab Sample ID: LCS 300-1965/14  
 Matrix: Water  
 Analysis Batch: 1965

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	2.37		mg/L		105	80 - 120
Nitrite as N	3.04	3.24		mg/L		106	80 - 120

Lab Sample ID: 300-1486-A-3 MS  
 Matrix: Water  
 Analysis Batch: 1965

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	6.7	D	0.452	7.15	D	mg/L		101	75 - 125
Nitrite as N	0.038	U	0.609	0.573	D	mg/L		94	75 - 125

Lab Sample ID: 300-1486-A-3 DU  
 Matrix: Water  
 Analysis Batch: 1965

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	6.7	D	6.71	D	mg/L		0.2	20
Nitrite as N	0.038	U	0.038	U	mg/L		NC	20

Lab Sample ID: MB 300-1966/13  
 Matrix: Water  
 Analysis Batch: 1966

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			11/12/15 14:12	1
Fluoride	0.025	U	0.050	0.025	mg/L			11/12/15 14:12	1
Sulfate	0.13	U	0.25	0.13	mg/L			11/12/15 14:12	1

Lab Sample ID: LCS 300-1966/14  
 Matrix: Water  
 Analysis Batch: 1966

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	16.7		mg/L		104	80 - 120
Fluoride	4.00	4.22		mg/L		105	80 - 120
Sulfate	20.0	21.0		mg/L		105	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 300-1486-A-3 MS  
 Matrix: Water  
 Analysis Batch: 1966

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	23	D	3.20	26.2	D	mg/L		104	75 - 125
Fluoride	0.26	D	0.800	1.07	D	mg/L		101	75 - 125
Sulfate	40	D	4.00	44.7	D	mg/L		108	75 - 125

Lab Sample ID: 300-1486-A-3 DU  
 Matrix: Water  
 Analysis Batch: 1966

Client Sample ID: Duplicate  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	23	D	22.9	D	mg/L		0.2	20
Fluoride	0.26	D	0.262	D	mg/L		0.1	20
Sulfate	40	D	40.5	D	mg/L		0.2	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 300-1972/3  
 Matrix: Water  
 Analysis Batch: 1972

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			11/12/15 13:43	1

Lab Sample ID: LCS 300-1972/4  
 Matrix: Water  
 Analysis Batch: 1972

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	0.252		mg/L		101	80 - 120

Lab Sample ID: 300-1485-A-1 MS  
 Matrix: Water  
 Analysis Batch: 1972

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)	0.076		0.0500	0.124		mg/L		97	85 - 115

Lab Sample ID: 300-1485-A-1 DU  
 Matrix: Water  
 Analysis Batch: 1972

Client Sample ID: Duplicate  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	0.076		0.0770		mg/L		2	20

Client: CH2M Hill Plateau Remediation Company  
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1490-1  
 SDG: WC0591

## HPLC/IC

### Analysis Batch: 1965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1486-A-3 DU	Duplicate	Total/NA	Water	300.0	
300-1486-A-3 MS	Matrix Spike	Total/NA	Water	300.0	
300-1490-3	B33215	Total/NA	Water	300.0	
LCS 300-1965/14	Lab Control Sample	Total/NA	Water	300.0	
MB 300-1965/13	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 1966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1486-A-3 DU	Duplicate	Total/NA	Water	300.0	
300-1486-A-3 MS	Matrix Spike	Total/NA	Water	300.0	
300-1490-3	B33215	Total/NA	Water	300.0	
LCS 300-1966/14	Lab Control Sample	Total/NA	Water	300.0	
MB 300-1966/13	Method Blank	Total/NA	Water	300.0	

## General Chemistry

### Analysis Batch: 1972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1485-A-1 DU	Duplicate	Total/NA	Water	7196A	
300-1485-A-1 MS	Matrix Spike	Total/NA	Water	7196A	
300-1490-1	B33219	Total/NA	Water	7196A	
300-1490-2	B33217	Total/NA	Water	7196A	
LCS 300-1972/4	Lab Control Sample	Total/NA	Water	7196A	
MB 300-1972/3	Method Blank	Total/NA	Water	7196A	

Client: CH2M Hill Plateau Remediation Company  
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1490-1  
 SDG: WC0591

**Client Sample ID: B33219**

Date Collected: 11/11/15 13:52

Date Received: 11/12/15 09:55

**Lab Sample ID: 300-1490-1**

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			1972	11/12/15 13:57	AMC	TAL RCH

**Client Sample ID: B33217**

Date Collected: 11/11/15 13:52

Date Received: 11/12/15 09:55

**Lab Sample ID: 300-1490-2**

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			1972	11/12/15 13:57	AMC	TAL RCH

**Client Sample ID: B33215**

Date Collected: 11/11/15 13:52

Date Received: 11/12/15 09:55

**Lab Sample ID: 300-1490-3**

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		1965	11/12/15 17:29	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1966	11/12/15 17:29	CPM	TAL RCH

**Client Sample ID: Duplicate**

Date Collected: 11/11/15 13:36

Date Received: 11/12/15 09:55

**Lab Sample ID: 300-1485-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			1972	11/12/15 13:46	AMC	TAL RCH

**Client Sample ID: Duplicate**

Date Collected: 11/11/15 13:47

Date Received: 11/12/15 09:55

**Lab Sample ID: 300-1486-A-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		1965	11/12/15 15:14	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1966	11/12/15 15:14	CPM	TAL RCH

**Client Sample ID: Lab Control Sample**

Date Collected: N/A

Date Received: N/A

**Lab Sample ID: LCS 300-1965/14**

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	10 mL		1965	11/12/15 14:29	CPM	TAL RCH

Client: CH2M Hill Plateau Remediation Company  
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1490-1  
 SDG: WC0591

**Client Sample ID: Lab Control Sample**

**Lab Sample ID: LCS 300-1966/14**

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		1966	11/12/15 14:29	CPM	TAL RCH

**Client Sample ID: Lab Control Sample**

**Lab Sample ID: LCS 300-1972/4**

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			1972	11/12/15 13:43	AMC	TAL RCH

**Client Sample ID: Method Blank**

**Lab Sample ID: MB 300-1965/13**

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		1965	11/12/15 14:12	CPM	TAL RCH

**Client Sample ID: Method Blank**

**Lab Sample ID: MB 300-1966/13**

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		1966	11/12/15 14:12	CPM	TAL RCH

**Client Sample ID: Method Blank**

**Lab Sample ID: MB 300-1972/3**

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			1972	11/12/15 13:43	AMC	TAL RCH

**Client Sample ID: Matrix Spike**

**Lab Sample ID: 300-1485-A-1 MS**

Date Collected: 11/11/15 13:36

Matrix: Water

Date Received: 11/12/15 09:55

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	1972	11/12/15 13:43	AMC	TAL RCH

Client: CH2M Hill Plateau Remediation Company  
 Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1490-1  
 SDG: WC0591

**Client Sample ID: Matrix Spike**

**Lab Sample ID: 300-1486-A-3 MS**

**Date Collected: 11/11/15 13:47**

**Matrix: Water**

**Date Received: 11/12/15 09:55**

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		1965	11/12/15 14:59	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1966	11/12/15 14:59	CPM	TAL RCH

**Laboratory References:**

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

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Client: CH2M Hill Plateau Remediation Company  
Project/Site: CH2M Hill Chemical

TestAmerica Job ID: 300-1490-1  
SDG: WC0591

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: CH2M Hill Chemical

TestAmerica Job ID: 300-1490-1  
SDG: WC0591

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-1490-1	B33219	Water	11/11/15 13:52	11/12/15 09:55
300-1490-2	B33217	Water	11/11/15 13:52	11/12/15 09:55
300-1490-3	B33215	Water	11/11/15 13:52	11/12/15 09:55

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### Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-1490-1

SDG Number: WC0591

**Login Number: 1490**

**List Number: 1**

**Creator: Friesz, Jordan D**

**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.	True	
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.	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.	N/A	
Residual Chlorine Checked.	N/A	

