

October 30, 2015

# 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: 300-1209-1  
TestAmerica Sample Delivery Group: WC0498  
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:  
10/30/2015 5:03:40 PM

Whitney Ritari, Project Manager I  
(509)375-3131 ext164  
[whitney.ritari@testamericainc.com](mailto:whitney.ritari@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

TestAmerica Job ID: 300-1209-1  
SDG: WC0498

## 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)

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

TestAmerica Job ID: 300-1209-1  
SDG: WC0498

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**Job ID: 300-1209-1**

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**Laboratory: TestAmerica Richland**

**Narrative**

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**Job Narrative  
300-1209-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 10/23/2015 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.0° C.

**HPLC/IC**

Method(s) 300.0: The following samples required filtration to reduce matrix interferences and solids: B32V36 (300-1209-3).

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

**General Chemistry**

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. #  
**X16-001-153**

Page 1 of 1

Collector <i>K.C. Patterson/CHPRC</i> OCT 23 2015	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650
SAF No. X16-001	Sampling Origin Hanford Site	Purchase Order/Charge Code 303271
Project Title 100-BC-5 RI, OCTOBER 2015	Logbook No. HNF-N-506 81 / 1	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 CERCLA	Priority: 30 Days	Offsite Property No. N/A

**POSSIBLE SAMPLE HAZARDS/REMARKS**  
\*\*\* Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order-458.1

**SPECIAL INSTRUCTIONS**  
Submit deliverables & invoices to CHPR Sample Management

Total Activity Exemption: Yes  No

Sample No.	Filter	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B32V39	Y	OCT 23 2015	0838	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B32V37	N	OCT 23 2015	0838	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C



#1209  
WCO498

300-1209 COC

October 30, 2015

Relinquished By <i>K.C. Patterson/CHPRC</i> Print Sign OCT 23 2015	Date/Time 1116	Received By <i>L.D. Wall/CHPRC</i> Print Sign OCT 23 2015	Date/Time 1110	Matrix *
Relinquished By <i>L.D. Wall/CHPRC</i> OCT 23 2015	Date/Time 1500	Received By <i>J. Friesz, TARR</i> OCT 23 2015	Date/Time 1500	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Dura Solids DL = Dura Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By	Date/Time	Received By	Date/Time	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
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**CH2MHM Plateau Remediation Company**

**CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

C.O.C. #  
**X16-001-079**  
Page 1 of 1

Collector <b>K.C. Patterson/CHPRC</b>	Contact/Requester <b>Karen Waters-Husted</b>	Telephone No. <b>509-376-4650</b>
SAF No. <b>X16-001</b>	Sampling Origin <b>Hanford Site</b>	Purchase Order/Charge Code <b>303271</b>
Project Title <b>100-BC-5 RI, OCTOBER 2015</b>	Logbook No. <b>HNF-N-506 8111</b>	Ice Chest No. <b>N/A</b>
Shipped To (Lab) <b>GEL Laboratories, LLC TARR</b>	Method of Shipment <b>Commercial Carrier</b>	Bill of Lading/Air Bill No. <b>N/A</b>
Protocol <b>CERCLA</b>	Priority: <b>30 Days</b>	Offsite Property No. <b>N/A</b>
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</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		
<b>SPECIAL INSTRUCTIONS</b> Submit deliverables & invoices to CPP Sample Management.		
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
B32V36	N	W	OCT 23 2015	0838	1x250-mL G/P	9056_ANIONS_IC: COMMON	28 Days/48 Hours	Cool <=6C

October 30, 2015

#1209  
W00498

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
K.C. Patterson/CHPRC			OCT 23 2015 1116	LD. Wall			OCT 23 2015 1116	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By	LD. Wall		OCT 23 2015 1500	Received By	J. Bock, TARR		OCT 23 2015 1500	DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By				Received By				

**Nagel, Sarah**

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**From:** Loeber, Bob  
**Sent:** Tuesday, July 21, 2015 2:22 PM  
**To:** Nagel, Sarah  
**Subject:** Direction on IC samples diverted to TARL from GEL

**From:** Fitzgerald, Scot L [[mailto:Scot\\_L\\_Fitzgerald@rl.gov](mailto:Scot_L_Fitzgerald@rl.gov)]  
**Sent:** Tuesday, November 25, 2014 3:40 PM  
**To:** Seger, Sandra  
**Cc:** Fitzgerald, Scot L; Waters-husted, Karen S  
**Subject:** Direction on IC samples diverted to TARL from GEL

Sandra,

This e-mail serves as a blanket instruction to allow Test America Richland to change the method from 9056\_Anions\_IC to 300.0\_Anions\_IC on all chains that are diverted from GEL laboratory.

Please place a copy of this e-mail in each affected data package. An individual SIR form will not be needed.

Scot Fitzgerald  
Analytical Support Group  
Soil & Groundwater Remediation Project (S&GRP)  
Phone: (509) 373-7495



October 30, 2015  
**Detection Summary**

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

TestAmerica Job ID: 300-1209-1  
 SDG: WC0498

**Client Sample ID: B32V39**

**Lab Sample ID: 300-1209-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0081		0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B32V37**

**Lab Sample ID: 300-1209-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0079		0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B32V36**

**Lab Sample ID: 300-1209-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.0	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	1.0	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.31	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	32	D	0.50	0.25	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland



October 30, 2015  
**Client Sample Results**

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

TestAmerica Job ID: 300-1209-1  
 SDG: WC0498

**Client Sample ID: B32V39**  
**Date Collected: 10/23/15 08:38**  
**Date Received: 10/23/15 15:00**

**Lab Sample ID: 300-1209-1**  
**Matrix: Water**

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0081		0.0040	0.0015	mg/L			10/23/15 18:46	1

**Client Sample ID: B32V37**  
**Date Collected: 10/23/15 08:38**  
**Date Received: 10/23/15 15:00**

**Lab Sample ID: 300-1209-2**  
**Matrix: Water**

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0079		0.0040	0.0015	mg/L			10/23/15 18:47	1

**Client Sample ID: B32V36**  
**Date Collected: 10/23/15 08:38**  
**Date Received: 10/23/15 15:00**

**Lab Sample ID: 300-1209-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.0	D	0.40	0.20	mg/L			10/23/15 21:45	2
Nitrate as N	1.0	D	0.056	0.028	mg/L			10/23/15 21:45	2
Fluoride	0.31	D	0.10	0.050	mg/L			10/23/15 21:45	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			10/23/15 21:45	2
Sulfate	32	D	0.50	0.25	mg/L			10/23/15 21:45	2

October 30, 2015  
**QC Sample Results**

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

TestAmerica Job ID: 300-1209-1  
SDG: WC0498

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

**Lab Sample ID: MB 300-1623/5**  
**Matrix: Water**  
**Analysis Batch: 1623**

**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			10/23/15 18:29	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			10/23/15 18:29	1

**Lab Sample ID: LCS 300-1623/6**  
**Matrix: Water**  
**Analysis Batch: 1623**

**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	2.38		mg/L		105	80 - 120
Nitrite as N	3.04	3.22		mg/L		106	80 - 120

**Lab Sample ID: 300-1208-A-1 MS**  
**Matrix: Water**  
**Analysis Batch: 1623**

**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	4.6	D	0.452	5.04	D	mg/L		104	75 - 125
Nitrite as N	0.038	U	0.609	0.580	D	mg/L		95	75 - 125

**Lab Sample ID: 300-1208-A-1 DU**  
**Matrix: Water**  
**Analysis Batch: 1623**

**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	4.6	D	4.57	D	mg/L		0	20
Nitrite as N	0.038	U	0.038	U	mg/L		NC	20

**Lab Sample ID: MB 300-1624/5**  
**Matrix: Water**  
**Analysis Batch: 1624**

**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			10/23/15 18:29	1
Fluoride	0.025	U	0.050	0.025	mg/L			10/23/15 18:29	1
Sulfate	0.13	U	0.25	0.13	mg/L			10/23/15 18:29	1

**Lab Sample ID: LCS 300-1624/6**  
**Matrix: Water**  
**Analysis Batch: 1624**

**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	16.6		mg/L		104	80 - 120
Fluoride	4.00	4.15		mg/L		104	80 - 120
Sulfate	20.0	20.7		mg/L		104	80 - 120

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

TestAmerica Job ID: 300-1209-1  
SDG: WC0498

**Method: 300.0 - Anions, Ion Chromatography (Continued)**

**Lab Sample ID: 300-1208-A-1 MS**  
**Matrix: Water**  
**Analysis Batch: 1624**

**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	11	D	3.20	14.6	D	mg/L		106	75 - 125
Fluoride	0.40	D	0.800	1.22	D	mg/L		102	75 - 125
Sulfate	53	D	4.00	57.3	D	mg/L		102	75 - 125

**Lab Sample ID: 300-1208-A-1 DU**  
**Matrix: Water**  
**Analysis Batch: 1624**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	11	D	11.2	D	mg/L		0	20
Fluoride	0.40	D	0.404	D	mg/L		0.2	20
Sulfate	53	D	53.3	D	mg/L		0	20

**Method: 7196A - Chromium, Hexavalent**

**Lab Sample ID: MB 300-1669/89**  
**Matrix: Water**  
**Analysis Batch: 1669**

**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			10/23/15 18:41	1

**Lab Sample ID: LCS 300-1669/90**  
**Matrix: Water**  
**Analysis Batch: 1669**

**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	0.259		mg/L		104	80 - 120

**Lab Sample ID: 300-1207-A-17 MS**  
**Matrix: Water**  
**Analysis Batch: 1669**

**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)	0.0015	U	0.0500	0.0532		mg/L		106	85 - 115

**Lab Sample ID: 300-1207-A-17 DU**  
**Matrix: Water**  
**Analysis Batch: 1669**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

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

October 30, 2015  
**QC Association Summary**

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

TestAmerica Job ID: 300-1209-1  
 SDG: WC0498

**HPLC/IC**

**Analysis Batch: 1623**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1208-A-1 DU	Duplicate	Total/NA	Water	300.0	
300-1208-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
300-1209-3	B32V36	Total/NA	Water	300.0	
LCS 300-1623/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-1623/5	Method Blank	Total/NA	Water	300.0	

**Analysis Batch: 1624**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1208-A-1 DU	Duplicate	Total/NA	Water	300.0	
300-1208-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
300-1209-3	B32V36	Total/NA	Water	300.0	
LCS 300-1624/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-1624/5	Method Blank	Total/NA	Water	300.0	

**General Chemistry**

**Analysis Batch: 1669**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1207-A-17 DU	Duplicate	Total/NA	Water	7196A	
300-1207-A-17 MS	Matrix Spike	Total/NA	Water	7196A	
300-1209-1	B32V39	Total/NA	Water	7196A	
300-1209-2	B32V37	Total/NA	Water	7196A	
LCS 300-1669/90	Lab Control Sample	Total/NA	Water	7196A	
MB 300-1669/89	Method Blank	Total/NA	Water	7196A	



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

TestAmerica Job ID: 300-1209-1  
 SDG: WC0498

**Client Sample ID: B32V39**  
**Date Collected: 10/23/15 08:38**  
**Date Received: 10/23/15 15:00**

**Lab Sample ID: 300-1209-1**  
**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			1669	10/23/15 18:46	AMC	TAL RCH

**Client Sample ID: B32V37**  
**Date Collected: 10/23/15 08:38**  
**Date Received: 10/23/15 15:00**

**Lab Sample ID: 300-1209-2**  
**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			1669	10/23/15 18:47	AMC	TAL RCH

**Client Sample ID: B32V36**  
**Date Collected: 10/23/15 08:38**  
**Date Received: 10/23/15 15:00**

**Lab Sample ID: 300-1209-3**  
**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		1623	10/23/15 21:45	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1624	10/23/15 21:45	CPM	TAL RCH

**Client Sample ID: Duplicate**  
**Date Collected: 10/23/15 11:12**  
**Date Received: 10/23/15 15:00**

**Lab Sample ID: 300-1207-A-17 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			1669	10/23/15 18:42	AMC	TAL RCH

**Client Sample ID: Duplicate**  
**Date Collected: 10/23/15 10:51**  
**Date Received: 10/23/15 15:00**

**Lab Sample ID: 300-1208-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	300.0		2	10 mL		1623	10/23/15 19:29	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1624	10/23/15 19:29	CPM	TAL RCH

**Client Sample ID: Lab Control Sample**  
**Date Collected: N/A**  
**Date Received: N/A**

**Lab Sample ID: LCS 300-1623/6**  
**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	10 mL		1623	10/23/15 18:44	CPM	TAL RCH

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

TestAmerica Job ID: 300-1209-1  
 SDG: WC0498

**Client Sample ID: Lab Control Sample**  
 Date Collected: N/A  
 Date Received: N/A

**Lab Sample ID: LCS 300-1624/6**  
 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	10 mL		1624	10/23/15 18:44	CPM	TAL RCH

**Client Sample ID: Lab Control Sample**  
 Date Collected: N/A  
 Date Received: N/A

**Lab Sample ID: LCS 300-1669/90**  
 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			1669	10/23/15 18:41	AMC	TAL RCH

**Client Sample ID: Method Blank**  
 Date Collected: N/A  
 Date Received: N/A

**Lab Sample ID: MB 300-1623/5**  
 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	10 mL		1623	10/23/15 18:29	CPM	TAL RCH

**Client Sample ID: Method Blank**  
 Date Collected: N/A  
 Date Received: N/A

**Lab Sample ID: MB 300-1624/5**  
 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	10 mL		1624	10/23/15 18:29	CPM	TAL RCH

**Client Sample ID: Method Blank**  
 Date Collected: N/A  
 Date Received: N/A

**Lab Sample ID: MB 300-1669/89**  
 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			1669	10/23/15 18:41	AMC	TAL RCH

**Client Sample ID: Matrix Spike**  
 Date Collected: 10/23/15 11:12  
 Date Received: 10/23/15 15:00

**Lab Sample ID: 300-1207-A-17 MS**  
 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		3.0 mL	1669	10/23/15 18:41	AMC	TAL RCH

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

TestAmerica Job ID: 300-1209-1  
SDG: WC0498

**Client Sample ID: Matrix Spike**

**Lab Sample ID: 300-1208-A-1 MS**

**Date Collected: 10/23/15 10:51**

**Matrix: Water**

**Date Received: 10/23/15 15:00**

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		1623	10/23/15 19:14	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		1624	10/23/15 19:14	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: 300-1209-1  
SDG: WC0498

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



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

TestAmerica Job ID: 300-1209-1  
SDG: WC0498

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-1209-1	B32V39	Water	10/23/15 08:38	10/23/15 15:00
300-1209-2	B32V37	Water	10/23/15 08:38	10/23/15 15:00
300-1209-3	B32V36	Water	10/23/15 08:38	10/23/15 15:00

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Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-1209-1  
SDG Number: WC0498

**Login Number: 1209**  
**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	

