

# 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: 300-1672-1  
TestAmerica Sample Delivery Group: WC0627  
Client Project/Site: CHPRC Chemical Hanford

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

Attn: CPP Sample Management



Authorized for release by:  
12/2/2015 2:17:56 PM  
Steven Campbell, Quality Assurance Assistant  
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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 elss than five times the MDL.*



### LINKS

Review your project results through  
**TotalAccess**

Have a Question?



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

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## Qualifiers

### HPLC/IC

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

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**Job ID: 300-1672-1**

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**Laboratory: TestAmerica Richland**

**Narrative**

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**Job Narrative  
300-1672-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 11/19/2015 2:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

**HPLC/IC**

Method 300.0: The matrix spike (MS) recoveries for analytical batch 300-2069 were outside control limits for Nitrate as N. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

**General Chemistry**

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



**CH2M/Hill Plateau Remediation Company**

**CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

C.O.C. #  
**116-002-211**  
Page 1 of 1

Collector <b>KM Campbell/CHPRC</b>	Contact/Requester <b>Karen Waters-Husted</b>	Telephone No. <b>509-376-4650</b>
SAF No. <b>116-002</b>	Sampling Origin <b>Hanford Site</b>	Purchase Order/Charge Code <b>300071</b>
Project Title <b>100KR4, NOVEMBER 2015</b>	Logbook No. <b>HNF-N-506 82/11</b>	Ice Chest No. <b>N/A</b>
Shipped To (Lab) <b>TestAmerica Incorporated, Richland</b>	Method of Shipment <b>GOVERNMENT VEHICLE</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>

**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

Sample No.	Filter	*	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative
B33K1	N	W	11-19-15	0942	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B33K3	Y	W	11-19-15	0942	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

*Alena  
USCOBAN  
Due 12-4-15*



300-1672 COC

Relinquished By <b>KM Campbell/CHPRC</b>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time <b>NOV 19 2015 1200</b>	Received By <b>DON BROTHERTON / CHPRC</b>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time <b>NOV 19 2015 1200</b>	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By <b>DON BROTHERTON / CHPRC</b>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time <b>NOV 19 2015 1455</b>	Received By <b>J. Friesz, TARL</b>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time <b>NOV 19 2015 1455</b>	

Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
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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December 02, 2015

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #  
I16-002-210  
Page 1 of 1

Collector	K.M. Campbell/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	I16-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KR4, NOVEMBER 2015	Logbook No.	HNF-N-506 <u>82/11</u>	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
<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
B333KO	N	11-19-15	0942	1x500-ml P	300.0_ANIONS_IC: COMMON
					Holding Time
					48 Hours
					Preservative
					Cool <=6C

*Handwritten:*  
#1672  
WCCOlean  
Due 12-4-15

December 02, 2015

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
K.M. Campbell/CHPRC	<i>Print</i>	<i>Sign</i>	NOV 19 2015 1200	DON BROTHERTON/CHPRC	<i>Print</i>	<i>Sign</i>	NOV 19 2015 1200	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
DON BROTHERTON/CHPRC	<i>Print</i>	<i>Sign</i>	NOV 19 2015 1455	J. Bock, TARL	<i>Print</i>	<i>Sign</i>	NOV 19 2015 1455	
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	

### Detection Summary

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

TestAmerica Job ID: 300-1672-1  
 SDG: WC0627

**Client Sample ID: B333K1**

**Lab Sample ID: 300-1672-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0091		0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B333K3**

**Lab Sample ID: 300-1672-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0089		0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B333K0**

**Lab Sample ID: 300-1672-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	6.3	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.25	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	85	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: CHPRC Chemical Hanford

TestAmerica Job ID: 300-1672-1  
 SDG: WC0627

**Client Sample ID: B333K1**  
**Date Collected: 11/19/15 09:42**  
**Date Received: 11/19/15 14:55**

**Lab Sample ID: 300-1672-1**  
**Matrix: Water**

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0091		0.0040	0.0015	mg/L			11/19/15 18:59	1

**Client Sample ID: B333K3**  
**Date Collected: 11/19/15 09:42**  
**Date Received: 11/19/15 14:55**

**Lab Sample ID: 300-1672-2**  
**Matrix: Water**

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0089		0.0040	0.0015	mg/L			11/19/15 18:59	1

**Client Sample ID: B333K0**  
**Date Collected: 11/19/15 09:42**  
**Date Received: 11/19/15 14:55**

**Lab Sample ID: 300-1672-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17	D	0.40	0.20	mg/L			11/19/15 19:30	2
Nitrate as N	6.3	D	0.056	0.028	mg/L			11/19/15 19:30	2
Fluoride	0.25	D	0.10	0.050	mg/L			11/19/15 19:30	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			11/19/15 19:30	2
Sulfate	85	D	0.50	0.25	mg/L			11/19/15 19:30	2

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-2069/5  
 Matrix: Water  
 Analysis Batch: 2069

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			11/19/15 13:59	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			11/19/15 13:59	1

Lab Sample ID: LCS 300-2069/6  
 Matrix: Water  
 Analysis Batch: 2069

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	2.43		mg/L		107	80 - 120
Nitrite as N	3.04	3.29		mg/L		108	80 - 120

Lab Sample ID: 300-1669-A-1 MS  
 Matrix: Water  
 Analysis Batch: 2069

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
Nitrite as N	0.038	U	0.609	0.590	D	mg/L		97	75 - 125

Lab Sample ID: 300-1669-A-1 MS  
 Matrix: Water  
 Analysis Batch: 2069

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	32	D	4.52	38.0	D	mg/L		126	75 - 125

Lab Sample ID: 300-1669-A-1 DU  
 Matrix: Water  
 Analysis Batch: 2069

Client Sample ID: Duplicate  
 Prep Type: Total/NA

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

Lab Sample ID: 300-1669-A-1 DU  
 Matrix: Water  
 Analysis Batch: 2069

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	32	D	33.4	D	mg/L		3	20

Lab Sample ID: MB 300-2070/5  
 Matrix: Water  
 Analysis Batch: 2070

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			11/19/15 13:59	1
Fluoride	0.025	U	0.050	0.025	mg/L			11/19/15 13:59	1
Sulfate	0.13	U	0.25	0.13	mg/L			11/19/15 13:59	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 300-2070/6  
Matrix: Water  
Analysis Batch: 2070

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	17.0		mg/L		106	80 - 120
Fluoride	4.00	4.27		mg/L		107	80 - 120
Sulfate	20.0	21.4		mg/L		107	80 - 120

Lab Sample ID: 300-1669-A-1 MS  
Matrix: Water  
Analysis Batch: 2070

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	12	D	3.20	15.3	D	mg/L		104	75 - 125
Fluoride	0.079	B D	0.800	0.837	D	mg/L		95	75 - 125
Sulfate	46	D	4.00	49.8	D	mg/L		97	75 - 125

Lab Sample ID: 300-1669-A-1 DU  
Matrix: Water  
Analysis Batch: 2070

Client Sample ID: Duplicate  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	12	D	11.8	D	mg/L		2	20
Fluoride	0.079	B D	0.0782	B D	mg/L		1	20
Sulfate	46	D	45.2	D	mg/L		2	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 300-2122/3  
Matrix: Water  
Analysis Batch: 2122

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			11/19/15 18:51	1

Lab Sample ID: LCS 300-2122/4  
Matrix: Water  
Analysis Batch: 2122

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	0.258		mg/L		103	80 - 120

Lab Sample ID: 300-1670-A-1 MS  
Matrix: Water  
Analysis Batch: 2122

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	0.0490		mg/L		98	85 - 115

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

TestAmerica Job ID: 300-1672-1  
 SDG: WC0627

**Method: 7196A - Chromium, Hexavalent (Continued)**

Lab Sample ID: 300-1670-A-1 DU  
 Matrix: Water  
 Analysis Batch: 2122

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
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Client: CH2M Hill Plateau Remediation Company  
 Project/Site: CHPRC Chemical Hanford

TestAmerica Job ID: 300-1672-1  
 SDG: WC0627

## HPLC/IC

### Analysis Batch: 2069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1669-A-1 DU	Duplicate	Total/NA	Water	300.0	
300-1669-A-1 DU	Duplicate	Total/NA	Water	300.0	
300-1669-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
300-1669-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
300-1672-3	B333K0	Total/NA	Water	300.0	
LCS 300-2069/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-2069/5	Method Blank	Total/NA	Water	300.0	

### Analysis Batch: 2070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1669-A-1 DU	Duplicate	Total/NA	Water	300.0	
300-1669-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
300-1672-3	B333K0	Total/NA	Water	300.0	
LCS 300-2070/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-2070/5	Method Blank	Total/NA	Water	300.0	

## General Chemistry

### Analysis Batch: 2122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1670-A-1 DU	Duplicate	Total/NA	Water	7196A	
300-1670-A-1 MS	Matrix Spike	Total/NA	Water	7196A	
300-1672-1	B333K1	Total/NA	Water	7196A	
300-1672-2	B333K3	Total/NA	Water	7196A	
LCS 300-2122/4	Lab Control Sample	Total/NA	Water	7196A	
MB 300-2122/3	Method Blank	Total/NA	Water	7196A	

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

TestAmerica Job ID: 300-1672-1  
 SDG: WC0627

**Client Sample ID: B333K1**

Date Collected: 11/19/15 09:42

Date Received: 11/19/15 14:55

**Lab Sample ID: 300-1672-1**

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			2122	11/19/15 18:59	AMC	TAL RCH

**Client Sample ID: B333K3**

Date Collected: 11/19/15 09:42

Date Received: 11/19/15 14:55

**Lab Sample ID: 300-1672-2**

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			2122	11/19/15 18:59	AMC	TAL RCH

**Client Sample ID: B333K0**

Date Collected: 11/19/15 09:42

Date Received: 11/19/15 14:55

**Lab Sample ID: 300-1672-3**

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		2069	11/19/15 19:30	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2070	11/19/15 19:30	CPM	TAL RCH

**Client Sample ID: Duplicate**

Date Collected: 11/19/15 10:41

Date Received: 11/19/15 14:55

**Lab Sample ID: 300-1669-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		2069	11/19/15 19:14	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2070	11/19/15 19:14	CPM	TAL RCH
Total/NA	Analysis	300.0		20	10 mL		2069	11/19/15 20:30	CPM	TAL RCH

**Client Sample ID: Duplicate**

Date Collected: 11/19/15 07:30

Date Received: 11/19/15 14:55

**Lab Sample ID: 300-1670-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			2122	11/19/15 18:54	AMC	TAL RCH

**Client Sample ID: Lab Control Sample**

Date Collected: N/A

Date Received: N/A

**Lab Sample ID: LCS 300-2069/6**

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		2069	11/19/15 14:14	CPM	TAL RCH

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

TestAmerica Job ID: 300-1672-1  
 SDG: WC0627

**Client Sample ID: Lab Control Sample****Lab Sample ID: LCS 300-2070/6**

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		2070	11/19/15 14:14	CPM	TAL RCH

**Client Sample ID: Lab Control Sample****Lab Sample ID: LCS 300-2122/4**

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			2122	11/19/15 18:51	AMC	TAL RCH

**Client Sample ID: Method Blank****Lab Sample ID: MB 300-2069/5**

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		2069	11/19/15 13:59	CPM	TAL RCH

**Client Sample ID: Method Blank****Lab Sample ID: MB 300-2070/5**

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		2070	11/19/15 13:59	CPM	TAL RCH

**Client Sample ID: Method Blank****Lab Sample ID: MB 300-2122/3**

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			2122	11/19/15 18:51	AMC	TAL RCH

**Client Sample ID: Matrix Spike****Lab Sample ID: 300-1669-A-1 MS**

Date Collected: 11/19/15 10:41

Matrix: Water

Date Received: 11/19/15 14:55

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		2069	11/19/15 18:59	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2070	11/19/15 18:59	CPM	TAL RCH
Total/NA	Analysis	300.0		20	10 mL		2069	11/19/15 20:15	CPM	TAL RCH

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

TestAmerica Job ID: 300-1672-1  
SDG: WC0627

**Client Sample ID: Matrix Spike**

**Lab Sample ID: 300-1670-A-1 MS**

**Date Collected: 11/19/15 07:30**

**Matrix: Water**

**Date Received: 11/19/15 14:55**

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	2122	11/19/15 18:51	AMC	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: CHPRC Chemical Hanford

TestAmerica Job ID: 300-1672-1  
SDG: WC0627

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: CHPRC Chemical Hanford

TestAmerica Job ID: 300-1672-1  
SDG: WC0627

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-1672-1	B333K1	Water	11/19/15 09:42	11/19/15 14:55
300-1672-2	B333K3	Water	11/19/15 09:42	11/19/15 14:55
300-1672-3	B333K0	Water	11/19/15 09:42	11/19/15 14:55

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### Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-1672-1

SDG Number: WC0627

**Login Number: 1672**

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

