

# 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: 300-1632-1  
TestAmerica Sample Delivery Group: WC0622  
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 2:12:45 PM  
Steven Campbell, Quality Assurance Assistant  
[steven.campbell@testamericainc.com](mailto:steven.campbell@testamericainc.com)

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



### LINKS

Review your project results through  
**TotalAccess**

Have a Question?



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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Chain of Custody . . . . .	5
Detection Summary . . . . .	19
Client Sample Results . . . . .	22
QC Sample Results . . . . .	26
QC Association Summary . . . . .	28
Lab Chronicle . . . . .	29
Method Summary . . . . .	35
Sample Summary . . . . .	36
Receipt Checklists . . . . .	37

## 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
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)

**Job ID: 300-1632-1**

**Laboratory: TestAmerica Richland**

**Narrative**

**Job Narrative  
300-1632-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 11/19/2015 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5° 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: B33341 (300-1632-1), B33343 (300-1632-2), B334T4 (300-1632-3), B334T6 (300-1632-4), B33394 (300-1632-5), B33396 (300-1632-6), B33328 (300-1632-7), B33330 (300-1632-8), B333L4 (300-1632-11), B333L8 (300-1632-12), B333L9 (300-1632-13), B333L5 (300-1632-14), B334P1 (300-1632-15) and B334P3 (300-1632-16). 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.



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	100KRR4, NOVEMBER 2015	Logbook No.	HNF-N-506 <u>82/10</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 PRIORITY	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
B33341	N	W	11-18-15	1337	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B33343	Y	W	11-18-15	1337	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C



300-1632 COC

WCOG22

#1632

December 02, 2015

Relinquished By	K.M. Campbell/CHPRC	Print	<i>[Signature]</i>	Sign	<i>[Signature]</i>	Date/Time	NOV 18 2015 1515	Received By	SSU-1	Print	<i>[Signature]</i>	Sign	<i>[Signature]</i>	Date/Time	NOV 18 2015 1515	Matrix *
Relinquished By	SSU-1					Date/Time	NOV 19 2015 0740	Received By	BE Briggs		<i>[Signature]</i>		<i>[Signature]</i>	Date/Time	NOV 19 2015 0740	S = Soil
Relinquished By	BE Briggs		<i>[Signature]</i>			Date/Time	NOV 19 2015 0740	Received By	BE Briggs		<i>[Signature]</i>		<i>[Signature]</i>	Date/Time	NOV 19 2015 0740	SE = Sediment
Relinquished By	CHPRC					Date/Time	NOV 19 2015 0740	Received By	J. Friesz, TARI		<i>[Signature]</i>		<i>[Signature]</i>	Date/Time	NOV 19 2015 0740	SO = Solid
Relinquished By	CHPRC					Date/Time	NOV 19 2015 0740	Received By						Date/Time	NOV 19 2015 0740	SL = Sludge
Relinquished By						Date/Time	NOV 19 2015 0740	Received By						Date/Time	NOV 19 2015 0740	W = Water
Relinquished By						Date/Time	NOV 19 2015 0740	Received By						Date/Time	NOV 19 2015 0740	O = Oil
Relinquished By						Date/Time	NOV 19 2015 0740	Received By						Date/Time	NOV 19 2015 0740	A = Air

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

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	116-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KR4, NOVEMBER 2015	Logbook No.	HNF-N-506 <u>80 / 35</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>		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
*** 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
B334T4	N	W	11-18-15	1402	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B334T6	Y	W	11-18-15	1402	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

#11632

W 10622

December 02, 2015

Relinquished By	J.R. Aguilar/CHPRC	Print	Sign	NOV 18 2015	Date/Time	1455	Received By	SSU H 1	Print	Sign	NOV 18 2015	Date/Time	1455	Matrix *
Relinquished By	SSU-1			NOV 19 2015	Date/Time	0740	Received By	B.E. Briggs/CHPRC			NOV 19 2015	Date/Time	0740	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By	B.E. Briggs/CHPRC			NOV 19 2015	Date/Time	0920	Received By	J. Friesz, TARI			NOV 19 2015	Date/Time	0920	DS = Drums Solids DL = Drums Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other

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

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

I16-002-189

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>82/10</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	Holding Time	Preservative
B33394	N	W	11-18-15	1401	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B33396	Y	W	11-18-15	1401	1x60-ml aG	7196_CR6: COMMON	24 Hours	Cool <=6C

#1632

u00622

December 02, 2015

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
K.M. Campbell/CHPRC	<i>K.M. Campbell</i>	<i>[Signature]</i>	NOV 18 2015 1515	SSU-1			NOV 18 2015 1515	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	Matrix *
SSU-1		<i>[Signature]</i>	NOV 19 2015 0740	B.E. Briggs/CHPRC	<i>[Signature]</i>		NOV 19 2015 0740	DS = Drum Solids DL = Drum Liquids T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
B.E. Briggs/CHPRC	<i>[Signature]</i>	<i>[Signature]</i>	NOV 19 2015 0920	Rec'd by: P. Resz, TARA	<i>[Signature]</i>		NOV 19 2015 0920	

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

**CH2M/Hill Plateau Remediation Company**

**CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

C.O.C. #

**I16-002-168**

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>82/10</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	Holding Time	Preservative
B33328	N	W	11-18-15	1316	1x60-mL aG	7196_CRE6: COMMON	24 Hours	Cool <=6C
B33330	Y	W	11-18-15	1316	1x60-mL aG	7196_CRE6: COMMON	24 Hours	Cool <=6C

#1632  
w c6622

December 02, 2015

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
K.M. Campbell/CHPRC	<i>[Signature]</i>	<i>[Signature]</i>	NOV 18 2015 1515	SSU-1			NOV 18 2015 1515	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By			NOV 19 2015 0740	B.E. Briggs CHPRC	<i>[Signature]</i>		NOV 19 2015 0740	DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By		<i>[Signature]</i>	NOV 19 2015 0920	J. Friesz, TARL	<i>[Signature]</i>		NOV 19 2015 0920	

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

**CH2M Hill Plateau Remediation Company**

**CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

C.O.C. #

**116-002-170**

Page 1 of 1

Collector <b>K.M. Campbell/CHPRC</b>	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650
SAF No. 116-002	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071
Project Title 100KR4, NOVEMBER 2015	Logbook No. HNF-N-506 <b>82410</b>	Ice Chest No. N/A
Shipped To (Lab) <b>TestAmerica Incorporated, Richland</b>	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>		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
*** 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
B33335	N	W	11-18-15	1419	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B33337	Y	W	11-18-15	1419	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

#1632  
L100622

December 02, 2015

Relinquished By <b>K.M. Campbell/CHPRC</b>	Print <i>K.M. Campbell</i>	Sign <i>K.M. Campbell</i>	Date/Time NOV 18 2015 1515	Received By <b>SSU-1</b>	Print <i>SSU-1</i>	Sign <i>SSU-1</i>	Date/Time NOV 18 2015 1515	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By <b>SSU-1</b>			Date/Time NOV 19 2015 0740	Received By <b>B.E. Briggs</b>			Date/Time NOV 19 2015 0740	
Relinquished By <b>CHPRC</b>			Date/Time NOV 19 2015 0920	Received By <b>J. Hesz, TARI</b>			Date/Time NOV 19 2015 0920	

<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
---------------------------------	--	-------------	-----------

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

116-002-214

Page 1 of 1

Collector	J.R. Aguilar/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	116-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KRR4, NOVEMBER 2015	Logbook No.	HNF-N-506 <u>80</u> / <u>35</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	Holding Time	Preservative
B333L4	N	W	11-18-15	1336	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B333L8	Y	W	11-18-15	1336	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

#1632  
W 10622

December 02, 2015

Relinquished By	J.R. Aguilar/CHPRC	Print	Sign	Date/Time	NOV 18 2015	1455	Received By	SSU #1	Print	Sign	Date/Time	NOV 18 2015	1455	Matrix *	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solids DL = Drum Liquids T = Tissue WL = Wipe L = Liquid V = Vegetation X = Other
Relinquished By	SSU-1	Print	Sign	Date/Time	NOV 19 2015	0740	Received By	B.E. Briggs/CHPRC	Print	Sign	Date/Time	NOV 19 2015	0740			
Relinquished By	B.E. Briggs/CHPRC	Print	Sign	Date/Time	NOV 19 2015	0920	Received By	J. Friesz, TART	Print	Sign	Date/Time	NOV 19 2015	0920			

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

Collector	J.R. Aguilar/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>50 / 35</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	Holding Time	Preservative
B333L9	Y	W	11-18-15	1336	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B333L5	N	W	11-18-15	1336	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

W60622  
#1632

December 02, 2015

Relinquished By	J.R. Aguilar/CHPRC	Print	Sign	Date/Time	NOV 18 2015 1455	Received By	SSU #1	Print	Sign	Date/Time	NOV 18 2015 1455	Matrix *
Relinquished By	SSU-1			Date/Time	NOV 19 2015 0740	Received By	BE Briggs/CHPRC			Date/Time	NOV 19 2015 0740	S = Soil
Relinquished By	BE Briggs/CHPRC			Date/Time	NOV 19 2015 0930	Received By	J. Friesz, TARL			Date/Time	NOV 19 2015 0920	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		DL = Drum Liquids
Relinquished By				Date/Time		Received By				Date/Time		T = Tissue
Relinquished By				Date/Time		Received By				Date/Time		WI = Wipe
Relinquished By				Date/Time		Received By				Date/Time		L = Liquid
Relinquished By				Date/Time		Received By				Date/Time		V = Vegetation
Relinquished By				Date/Time		Received By				Date/Time		X = Other

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

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #  
I16-002-2998  
Page 1 of 1

Collector	J.R. Aquilar/CH2M	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 80 / 35	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 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		
			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
B334P1	N	W	11-18-15	1310	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C
B334P3	Y	W	11-18-15	1310	1x60-mL aG	7196_CR6: COMMON	24 Hours	Cool <=6C

W 6622  
#1632

Relinquished By	J.R. Aquilar/CH2M	Print	Sign	Date/Time	NOV 18 2015 1455	Received By	SSU #1	Print	Sign	Date/Time	NOV 18 2015 1455	Matrix *
Relinquished By	SSU-1	Print	Sign	Date/Time	NOV 19 2015 0740	Received By	BE Briggs/CH2M	Print	Sign	Date/Time	NOV 19 2015 0740	S = Soil
Relinquished By	BE Briggs/CH2M	Print	Sign	Date/Time	NOV 19 2015 0740	Received By	J. Friesz, TARA	Print	Sign	Date/Time	NOV 19 2015 0740	SE = Sediment
Relinquished By	CH2M	Print	Sign	Date/Time		Received By		Print	Sign	Date/Time		SO = Solid
												SL = Sludge
												W = Water
												O = Oil
												A = Air

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

December 02, 2015



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	100KRR4, NOVEMBER 2015		Logbook No.	HNF-N-506 <u>82/10</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>PRIORITY</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
B33B84	N	W	11-18-15	1401	1x500-mL P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

u cover  
#1632

December 02, 2015

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
K.M. Campbell/CHPRC	<i>KM Campbell</i>	<i>[Signature]</i>	NOV 18 2015 1515	SSU-1			NOV 18 2015 1525	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	Matrix *
SSU-1			NOV 19 2015 0740	B.E. Briggs/CHPRC	<i>[Signature]</i>		NOV 19 2015 0740	DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
B.E. Briggs/CHPRC	<i>[Signature]</i>	<i>[Signature]</i>	NOV 19 2015 0920	J. Friesz, TART	<i>[Signature]</i>		NOV 19 2015 0920	
FINAL SAMPLE DISPOSITION				Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Date/Time
Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By				Date/Time

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #  
I16-002-378  
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	100KRR4, NOVEMBER 2015		Logbook No.	HNF-N-506 <u>82/10</u>		Ice Chest No.	N/A	
Shipped To (Lab)	Test/America 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>PRIORITY</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
B33B79	N	W	11-18-15	1316	1x500-mL P	300.0_ANIONS_IC: COMMON	48 Hours	Cool <=6C

WCC622  
#1632

December 02, 2015

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
Relinquished By	K.M. Campbell/CHPRC	<i>K.M. Campbell</i>	NOV 18 2015 1515	Received By	SSU-1		NOV 18 2015 1515	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By	B.E. Briggs/CHPRC	<i>B.E. Briggs</i>	NOV 19 2015 0740	Received By	B.E. Briggs/CHPRC	<i>B.E. Briggs</i>	NOV 19 2015 0740	DS = Drum Solids DL = Tissue T = Tissue WT = Wipe L = Liquid V = Vegetation X = Other
Relinquished By	B.E. Briggs/CHPRC	<i>B.E. Briggs</i>	NOV 19 2015 0920	Received By	J. Friesz, TARL	<i>J. Friesz</i>	NOV 19 2015 0920	
FINAL SAMPLE DISPOSITION				Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Date/Time
PRINTED ON				10/8/2015				FSR ID = FSR7861

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#  
116-002-379

Page 1 of 1

Collector	K.M. Campbell/CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	116-002	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071
Project Title	100KRR4, NOVEMBER 2015	Logbook No.	HNF-N-506 <u>82/10</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
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		
			Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Sample No.	Filter	Date	Time	No./Type Container	Sample Analysis
B33B80	N	11-18-15	1337	1x500-mL P	300.0 ANIONS_IC: COMMON
					Holding Time
					48 Hours
					Preservative
					Cool <=6C

W0622  
#1632

December 02, 2015

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
K.M. Campbell/CHPRC	<i>[Signature]</i>	<i>[Signature]</i>	NOV 18 2015 1515	SSU-1	<i>[Signature]</i>	<i>[Signature]</i>	NOV 18 2015 1515	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 WI = Wipe L = Liquid V = Vegetation X = Other
SSU-1	<i>[Signature]</i>	<i>[Signature]</i>	NOV 19 2015 0740	B.E. Briggs/CHPRC	<i>[Signature]</i>	<i>[Signature]</i>	NOV 19 2015 0740	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
B.E. Briggs/CHPRC	<i>[Signature]</i>	<i>[Signature]</i>	NOV 19 2015 0720	J. Friesz, TARL	<i>[Signature]</i>	<i>[Signature]</i>	NOV 19 2015 0720	

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

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

I16-002-414

Page 1 of 1

Collector	JR Aguiar/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 80 / 35	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
B33BD1	N	W	11-18-15	1310	1x500-mL P
Sample Analysis			Holding Time		
300.0_ANIONS_IC: COMMON			48 Hours		
Preservative			Cool <=6C		

W06622  
#1632

December 02, 2015

Relinquished By	JR Aguiar/CHPRC	Print	Sign	Date/Time	NOV 18 2015 1455	Received By	SSU #1	Print	Sign	Date/Time	NOV 18 2015 1455	Matrix *
Relinquished By	SSU-1			Date/Time	NOV 19 2015 0740	Received By	B.E. Briggs CHPRC			Date/Time	NOV 19 2015 0740	S = Soil
Relinquished By	B.E. Briggs CHPRC			Date/Time	NOV 19 2015 0920	Received By	J. Friesz, TARL			Date/Time	NOV 19 2015 0920	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		DL = Drum Liquids
Relinquished By				Date/Time		Received By				Date/Time		T = Tissue
Relinquished By				Date/Time		Received By				Date/Time		WI = Wipe
Relinquished By				Date/Time		Received By				Date/Time		L = Liquid
Relinquished By				Date/Time		Received By				Date/Time		V = Vegetation
Relinquished By				Date/Time		Received By				Date/Time		X = Other

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



# SAMPLE ISSUE RESOLUTION

<b>SIR NUM</b>	SIR16-109
<b>REV NUM</b>	0
<b>DATE INITIATED</b>	11/23/2015



## SAMPLE EVENT INFORMATION

**SAF NUM(S)** I16-002  
**OPERABLE UNIT(S)**  
**PROJECT(S)** CERC16  
**SAMPLE EVENT TITLE(S)** CERC16  
**LABORATORY** TestAmerica Incorporated, Richland

## SAMPLING INFORMATION

**NUMBER OF SAMPLES** 14  
**SAMPLE NUMBERS** B33328, B33330, B33341, B33343, B33394, B33396, B333L4, B333L5, B333L8, B333L9, B334P1, B334P3, B334T3, B334T4  
**SAMPLE MATRIX** WATER  
**COLLECTION DATE** 11/18/2015 - 11/18/2015  
**SDG NUM** WC0622

## 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: 11/23/15  
 ACCEPTED BY: Karen Waters-Husted/CHPRC DATE: 11/23/15

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

TestAmerica Job ID: 300-1632-1  
 SDG: WC0622

**Client Sample ID: B33341****Lab Sample ID: 300-1632-1**

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

**Client Sample ID: B33343****Lab Sample ID: 300-1632-2**

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

**Client Sample ID: B334T4****Lab Sample ID: 300-1632-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.016		0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B334T6****Lab Sample ID: 300-1632-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.019		0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B33394****Lab Sample ID: 300-1632-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0023	B	0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B33396****Lab Sample ID: 300-1632-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0026	B	0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B33328****Lab Sample ID: 300-1632-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0020	B	0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B33330****Lab Sample ID: 300-1632-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0020	B	0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B33335****Lab Sample ID: 300-1632-9**

No Detections.

**Client Sample ID: B33337****Lab Sample ID: 300-1632-10**

No Detections.

**Client Sample ID: B333L4****Lab Sample ID: 300-1632-11**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.023		0.0040	0.0015	mg/L	1		7196A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

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

TestAmerica Job ID: 300-1632-1  
 SDG: WC0622

**Client Sample ID: B333L8****Lab Sample ID: 300-1632-12**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.024		0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B333L9****Lab Sample ID: 300-1632-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.024		0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B333L5****Lab Sample ID: 300-1632-14**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.025		0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B334P1****Lab Sample ID: 300-1632-15**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.024		0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B334P3****Lab Sample ID: 300-1632-16**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.023		0.0040	0.0015	mg/L	1		7196A	Total/NA

**Client Sample ID: B33B84****Lab Sample ID: 300-1632-17**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.1	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	0.15	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.16	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	12	D	0.50	0.25	mg/L	2		300.0	Total/NA

**Client Sample ID: B33B79****Lab Sample ID: 300-1632-18**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.6	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	0.25	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.11	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	14	D	0.50	0.25	mg/L	2		300.0	Total/NA

**Client Sample ID: B33B80****Lab Sample ID: 300-1632-19**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.91	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	0.11	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.091	B D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	10	D	0.50	0.25	mg/L	2		300.0	Total/NA

**Client Sample ID: B33BD1****Lab Sample ID: 300-1632-20**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	11	D	0.40	0.20	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 300-1632-1  
 SDG: WC0622

Client Sample ID: B33BD1 (Continued)

Lab Sample ID: 300-1632-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	5.1	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.18	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	36	D	0.50	0.25	mg/L	2		300.0	Total/NA

Client Sample ID: B334T3

Lab Sample ID: 300-1632-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.2	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	3.4	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.29	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	42	D	0.50	0.25	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.



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

TestAmerica Job ID: 300-1632-1  
 SDG: WC0622

**Client Sample ID: B33341**

Date Collected: 11/18/15 13:37

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-1**

Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	B	0.0040	0.0015	mg/L	-		11/19/15 14:09	1

**Client Sample ID: B33343**

Date Collected: 11/18/15 13:37

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-2**

Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	B	0.0040	0.0015	mg/L	-		11/19/15 14:09	1

**Client Sample ID: B334T4**

Date Collected: 11/18/15 14:02

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-3**

Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.016		0.0040	0.0015	mg/L	-		11/19/15 14:09	1

**Client Sample ID: B334T6**

Date Collected: 11/18/15 14:02

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-4**

Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.019		0.0040	0.0015	mg/L	-		11/19/15 14:10	1

**Client Sample ID: B33394**

Date Collected: 11/18/15 14:01

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-5**

Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0023	B	0.0040	0.0015	mg/L	-		11/19/15 14:10	1

**Client Sample ID: B33396**

Date Collected: 11/18/15 14:01

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-6**

Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0026	B	0.0040	0.0015	mg/L	-		11/19/15 14:10	1

**Client Sample ID: B33328**

Date Collected: 11/18/15 13:16

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-7**

Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0020	B	0.0040	0.0015	mg/L	-		11/19/15 14:14	1

December 02, 2015

### Client Sample Results

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

TestAmerica Job ID: 300-1632-1  
SDG: WC0622

**Client Sample ID: B33330**  
Date Collected: 11/18/15 13:16  
Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-8**  
Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0020	B	0.0040	0.0015	mg/L	-		11/19/15 14:14	1

**Client Sample ID: B33335**  
Date Collected: 11/18/15 14:19  
Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-9**  
Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		11/19/15 14:14	1

**Client Sample ID: B33337**  
Date Collected: 11/18/15 14:19  
Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-10**  
Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0015	U	0.0040	0.0015	mg/L	-		11/19/15 14:15	1

**Client Sample ID: B333L4**  
Date Collected: 11/18/15 13:36  
Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-11**  
Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.023		0.0040	0.0015	mg/L	-		11/19/15 14:15	1

**Client Sample ID: B333L8**  
Date Collected: 11/18/15 13:36  
Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-12**  
Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.024		0.0040	0.0015	mg/L	-		11/19/15 14:15	1

**Client Sample ID: B333L9**  
Date Collected: 11/18/15 13:36  
Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-13**  
Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.024		0.0040	0.0015	mg/L	-		11/19/15 14:15	1

**Client Sample ID: B333L5**  
Date Collected: 11/18/15 13:36  
Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-14**  
Matrix: Water

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.025		0.0040	0.0015	mg/L	-		11/19/15 14:18	1

TestAmerica Richland

Client Sample Results

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

TestAmerica Job ID: 300-1632-1  
 SDG: WC0622

**Client Sample ID: B334P1**  
**Date Collected: 11/18/15 13:10**  
**Date Received: 11/19/15 09:20**

**Lab Sample ID: 300-1632-15**  
**Matrix: Water**

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.024		0.0040	0.0015	mg/L			11/19/15 14:18	1

**Client Sample ID: B334P3**  
**Date Collected: 11/18/15 13:10**  
**Date Received: 11/19/15 09:20**

**Lab Sample ID: 300-1632-16**  
**Matrix: Water**

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.023		0.0040	0.0015	mg/L			11/19/15 14:19	1

**Client Sample ID: B33B84**  
**Date Collected: 11/18/15 14:01**  
**Date Received: 11/19/15 09:20**

**Lab Sample ID: 300-1632-17**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.1	D	0.40	0.20	mg/L			11/19/15 14:31	2
Nitrate as N	0.15	D	0.056	0.028	mg/L			11/19/15 14:31	2
Fluoride	0.16	D	0.10	0.050	mg/L			11/19/15 14:31	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			11/19/15 14:31	2
Sulfate	12	D	0.50	0.25	mg/L			11/19/15 14:31	2

**Client Sample ID: B33B79**  
**Date Collected: 11/18/15 13:16**  
**Date Received: 11/19/15 09:20**

**Lab Sample ID: 300-1632-18**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.6	D	0.40	0.20	mg/L			11/19/15 15:17	2
Nitrate as N	0.25	D	0.056	0.028	mg/L			11/19/15 15:17	2
Fluoride	0.11	D	0.10	0.050	mg/L			11/19/15 15:17	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			11/19/15 15:17	2
Sulfate	14	D	0.50	0.25	mg/L			11/19/15 15:17	2

**Client Sample ID: B33B80**  
**Date Collected: 11/18/15 13:37**  
**Date Received: 11/19/15 09:20**

**Lab Sample ID: 300-1632-19**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.91	D	0.40	0.20	mg/L			11/19/15 15:32	2
Nitrate as N	0.11	D	0.056	0.028	mg/L			11/19/15 15:32	2
Fluoride	0.091	B D	0.10	0.050	mg/L			11/19/15 15:32	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			11/19/15 15:32	2
Sulfate	10	D	0.50	0.25	mg/L			11/19/15 15:32	2

## Client Sample Results

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

TestAmerica Job ID: 300-1632-1  
 SDG: WC0622

## Client Sample ID: B33BD1

Date Collected: 11/18/15 13:10

Date Received: 11/19/15 09:20

## Lab Sample ID: 300-1632-20

Matrix: Water

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11	D	0.40	0.20	mg/L			11/19/15 15:47	2
Nitrate as N	5.1	D	0.056	0.028	mg/L			11/19/15 15:47	2
Fluoride	0.18	D	0.10	0.050	mg/L			11/19/15 15:47	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			11/19/15 15:47	2
Sulfate	36	D	0.50	0.25	mg/L			11/19/15 15:47	2

## Client Sample ID: B334T3

Date Collected: 11/18/15 14:02

Date Received: 11/19/15 09:20

## Lab Sample ID: 300-1632-21

Matrix: Water

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.2	D	0.40	0.20	mg/L			11/19/15 16:02	2
Nitrate as N	3.4	D	0.056	0.028	mg/L			11/19/15 16:02	2
Fluoride	0.29	D	0.10	0.050	mg/L			11/19/15 16:02	2
Nitrite as N	0.038	U	0.076	0.038	mg/L			11/19/15 16:02	2
Sulfate	42	D	0.50	0.25	mg/L			11/19/15 16:02	2

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-2071/5  
 Matrix: Water  
 Analysis Batch: 2071

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 14:01	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			11/19/15 14:01	1

Lab Sample ID: LCS 300-2071/6  
 Matrix: Water  
 Analysis Batch: 2071

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	2.42		mg/L		107	80 - 120
Nitrite as N	3.04	3.28		mg/L		108	80 - 120

Lab Sample ID: 300-1632-17 MS  
 Matrix: Water  
 Analysis Batch: 2071

Client Sample ID: B33B84  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.15	D	0.452	0.576	D	mg/L		95	75 - 125
Nitrite as N	0.038	U	0.609	0.586	D	mg/L		96	75 - 125

Lab Sample ID: 300-1632-17 DU  
 Matrix: Water  
 Analysis Batch: 2071

Client Sample ID: B33B84  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	0.15	D	0.147	D	mg/L		0.7	20
Nitrite as N	0.038	U	0.038	U	mg/L		NC	20

Lab Sample ID: MB 300-2072/5  
 Matrix: Water  
 Analysis Batch: 2072

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 14:01	1
Fluoride	0.025	U	0.050	0.025	mg/L			11/19/15 14:01	1
Sulfate	0.13	U	0.25	0.13	mg/L			11/19/15 14:01	1

Lab Sample ID: LCS 300-2072/6  
 Matrix: Water  
 Analysis Batch: 2072

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	16.9		mg/L		106	80 - 120
Fluoride	4.00	4.26		mg/L		106	80 - 120
Sulfate	20.0	21.4		mg/L		107	80 - 120

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

Lab Sample ID: 300-1632-17 MS  
 Matrix: Water  
 Analysis Batch: 2072

Client Sample ID: B33B84  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.1	D	3.20	4.39	D	mg/L		101	75 - 125
Fluoride	0.16	D	0.800	0.934	D	mg/L		96	75 - 125
Sulfate	12	D	4.00	16.0	D	mg/L		108	75 - 125

Lab Sample ID: 300-1632-17 DU  
 Matrix: Water  
 Analysis Batch: 2072

Client Sample ID: B33B84  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	1.1	D	1.14	D	mg/L		0.5	20
Fluoride	0.16	D	0.163	D	mg/L		0.5	20
Sulfate	12	D	11.7	D	mg/L		0.2	20

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

Lab Sample ID: MB 300-2121/3  
 Matrix: Water  
 Analysis Batch: 2121

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 14:05	1

Lab Sample ID: LCS 300-2121/4  
 Matrix: Water  
 Analysis Batch: 2121

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	0.265		mg/L		106	80 - 120

Lab Sample ID: 300-1632-1 MS  
 Matrix: Water  
 Analysis Batch: 2121

Client Sample ID: B33341  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.0015	B	0.0500	0.0534		mg/L		104	85 - 115

Lab Sample ID: 300-1632-1 DU  
 Matrix: Water  
 Analysis Batch: 2121

Client Sample ID: B33341  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	0.0015	B	0.00150	B	mg/L		0	20

## HPLC/IC

## Analysis Batch: 2071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1632-17	B33B84	Total/NA	Water	300.0	
300-1632-17 DU	B33B84	Total/NA	Water	300.0	
300-1632-17 MS	B33B84	Total/NA	Water	300.0	
300-1632-18	B33B79	Total/NA	Water	300.0	
300-1632-19	B33B80	Total/NA	Water	300.0	
300-1632-20	B33BD1	Total/NA	Water	300.0	
300-1632-21	B334T3	Total/NA	Water	300.0	
LCS 300-2071/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-2071/5	Method Blank	Total/NA	Water	300.0	

## Analysis Batch: 2072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1632-17	B33B84	Total/NA	Water	300.0	
300-1632-17 DU	B33B84	Total/NA	Water	300.0	
300-1632-17 MS	B33B84	Total/NA	Water	300.0	
300-1632-18	B33B79	Total/NA	Water	300.0	
300-1632-19	B33B80	Total/NA	Water	300.0	
300-1632-20	B33BD1	Total/NA	Water	300.0	
300-1632-21	B334T3	Total/NA	Water	300.0	
LCS 300-2072/6	Lab Control Sample	Total/NA	Water	300.0	
MB 300-2072/5	Method Blank	Total/NA	Water	300.0	

## General Chemistry

## Analysis Batch: 2121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-1632-1	B33341	Total/NA	Water	7196A	
300-1632-1 DU	B33341	Total/NA	Water	7196A	
300-1632-1 MS	B33341	Total/NA	Water	7196A	
300-1632-2	B33343	Total/NA	Water	7196A	
300-1632-3	B334T4	Total/NA	Water	7196A	
300-1632-4	B334T6	Total/NA	Water	7196A	
300-1632-5	B33394	Total/NA	Water	7196A	
300-1632-6	B33396	Total/NA	Water	7196A	
300-1632-7	B33328	Total/NA	Water	7196A	
300-1632-8	B33330	Total/NA	Water	7196A	
300-1632-9	B33335	Total/NA	Water	7196A	
300-1632-10	B33337	Total/NA	Water	7196A	
300-1632-11	B333L4	Total/NA	Water	7196A	
300-1632-12	B333L8	Total/NA	Water	7196A	
300-1632-13	B333L9	Total/NA	Water	7196A	
300-1632-14	B333L5	Total/NA	Water	7196A	
300-1632-15	B334P1	Total/NA	Water	7196A	
300-1632-16	B334P3	Total/NA	Water	7196A	
LCS 300-2121/4	Lab Control Sample	Total/NA	Water	7196A	
MB 300-2121/3	Method Blank	Total/NA	Water	7196A	

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

TestAmerica Job ID: 300-1632-1  
 SDG: WC0622

**Client Sample ID: B33341**

Date Collected: 11/18/15 13:37

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-1**

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			2121	11/19/15 14:09	AMC	TAL RCH

**Client Sample ID: B33343**

Date Collected: 11/18/15 13:37

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-2**

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			2121	11/19/15 14:09	AMC	TAL RCH

**Client Sample ID: B334T4**

Date Collected: 11/18/15 14:02

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-3**

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			2121	11/19/15 14:09	AMC	TAL RCH

**Client Sample ID: B334T6**

Date Collected: 11/18/15 14:02

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-4**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			2121	11/19/15 14:10	AMC	TAL RCH

**Client Sample ID: B33394**

Date Collected: 11/18/15 14:01

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-5**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1			2121	11/19/15 14:10	AMC	TAL RCH

**Client Sample ID: B33396**

Date Collected: 11/18/15 14:01

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-6**

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	7196A		1			2121	11/19/15 14:10	AMC	TAL RCH

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

TestAmerica Job ID: 300-1632-1  
 SDG: WC0622

**Client Sample ID: B33328**  
**Date Collected: 11/18/15 13:16**  
**Date Received: 11/19/15 09:20**

**Lab Sample ID: 300-1632-7**  
**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			2121	11/19/15 14:14	AMC	TAL RCH

**Client Sample ID: B33330**  
**Date Collected: 11/18/15 13:16**  
**Date Received: 11/19/15 09:20**

**Lab Sample ID: 300-1632-8**  
**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			2121	11/19/15 14:14	AMC	TAL RCH

**Client Sample ID: B33335**  
**Date Collected: 11/18/15 14:19**  
**Date Received: 11/19/15 09:20**

**Lab Sample ID: 300-1632-9**  
**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			2121	11/19/15 14:14	AMC	TAL RCH

**Client Sample ID: B33337**  
**Date Collected: 11/18/15 14:19**  
**Date Received: 11/19/15 09:20**

**Lab Sample ID: 300-1632-10**  
**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			2121	11/19/15 14:15	AMC	TAL RCH

**Client Sample ID: B333L4**  
**Date Collected: 11/18/15 13:36**  
**Date Received: 11/19/15 09:20**

**Lab Sample ID: 300-1632-11**  
**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			2121	11/19/15 14:15	AMC	TAL RCH

**Client Sample ID: B333L8**  
**Date Collected: 11/18/15 13:36**  
**Date Received: 11/19/15 09:20**

**Lab Sample ID: 300-1632-12**  
**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			2121	11/19/15 14:15	AMC	TAL RCH

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

TestAmerica Job ID: 300-1632-1  
 SDG: WC0622

**Client Sample ID: B333L9**

Date Collected: 11/18/15 13:36  
 Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-13**

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			2121	11/19/15 14:15	AMC	TAL RCH

**Client Sample ID: B333L5**

Date Collected: 11/18/15 13:36  
 Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-14**

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	7196A		1			2121	11/19/15 14:18	AMC	TAL RCH

**Client Sample ID: B334P1**

Date Collected: 11/18/15 13:10  
 Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-15**

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			2121	11/19/15 14:18	AMC	TAL RCH

**Client Sample ID: B334P3**

Date Collected: 11/18/15 13:10  
 Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-16**

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			2121	11/19/15 14:19	AMC	TAL RCH

**Client Sample ID: B33B84**

Date Collected: 11/18/15 14:01  
 Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-17**

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		2071	11/19/15 14:31	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2072	11/19/15 14:31	CPM	TAL RCH

**Client Sample ID: B33B79**

Date Collected: 11/18/15 13:16  
 Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-18**

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		2071	11/19/15 15:17	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2072	11/19/15 15:17	CPM	TAL RCH

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

TestAmerica Job ID: 300-1632-1  
 SDG: WC0622

**Client Sample ID: B33B80**

Date Collected: 11/18/15 13:37

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-19**

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		2071	11/19/15 15:32	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2072	11/19/15 15:32	CPM	TAL RCH

**Client Sample ID: B33BD1**

Date Collected: 11/18/15 13:10

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-20**

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		2071	11/19/15 15:47	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2072	11/19/15 15:47	CPM	TAL RCH

**Client Sample ID: B334T3**

Date Collected: 11/18/15 14:02

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-21**

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		2071	11/19/15 16:02	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2072	11/19/15 16:02	CPM	TAL RCH

**Client Sample ID: B33341**

Date Collected: 11/18/15 13:37

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-1 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			2121	11/19/15 14:09	AMC	TAL RCH

**Client Sample ID: B33B84**

Date Collected: 11/18/15 14:01

Date Received: 11/19/15 09:20

**Lab Sample ID: 300-1632-17 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	300.0		2	10 mL		2071	11/19/15 15:02	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2072	11/19/15 15:02	CPM	TAL RCH

**Client Sample ID: Lab Control Sample**

Date Collected: N/A

Date Received: N/A

**Lab Sample ID: LCS 300-2071/6**

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		2071	11/19/15 14:16	CPM	TAL RCH

**Client Sample ID: Lab Control Sample**

**Lab Sample ID: LCS 300-2072/6**

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		2072	11/19/15 14:16	CPM	TAL RCH

**Client Sample ID: Lab Control Sample**

**Lab Sample ID: LCS 300-2121/4**

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			2121	11/19/15 14:06	AMC	TAL RCH

**Client Sample ID: Method Blank**

**Lab Sample ID: MB 300-2071/5**

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		2071	11/19/15 14:01	CPM	TAL RCH

**Client Sample ID: Method Blank**

**Lab Sample ID: MB 300-2072/5**

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		2072	11/19/15 14:01	CPM	TAL RCH

**Client Sample ID: Method Blank**

**Lab Sample ID: MB 300-2121/3**

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			2121	11/19/15 14:05	AMC	TAL RCH

**Client Sample ID: B33341**

**Lab Sample ID: 300-1632-1 MS**

Date Collected: 11/18/15 13:37

Matrix: Water

Date Received: 11/19/15 09:20

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	2121	11/19/15 14:06	AMC	TAL RCH

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

TestAmerica Job ID: 300-1632-1  
SDG: WC0622

**Client Sample ID: B33B84**

**Lab Sample ID: 300-1632-17 MS**

**Date Collected: 11/18/15 14:01**

**Matrix: Water**

**Date Received: 11/19/15 09:20**

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		2071	11/19/15 14:46	CPM	TAL RCH
Total/NA	Analysis	300.0		2	10 mL		2072	11/19/15 14:46	CPM	TAL RCH

**Laboratory References:**

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

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

TestAmerica Job ID: 300-1632-1  
SDG: WC0622

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: 300-1632-1  
 SDG: WC0622

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-1632-1	B33341	Water	11/18/15 13:37	11/19/15 09:20
300-1632-2	B33343	Water	11/18/15 13:37	11/19/15 09:20
300-1632-3	B334T4	Water	11/18/15 14:02	11/19/15 09:20
300-1632-4	B334T6	Water	11/18/15 14:02	11/19/15 09:20
300-1632-5	B33394	Water	11/18/15 14:01	11/19/15 09:20
300-1632-6	B33396	Water	11/18/15 14:01	11/19/15 09:20
300-1632-7	B33328	Water	11/18/15 13:16	11/19/15 09:20
300-1632-8	B33330	Water	11/18/15 13:16	11/19/15 09:20
300-1632-9	B33335	Water	11/18/15 14:19	11/19/15 09:20
300-1632-10	B33337	Water	11/18/15 14:19	11/19/15 09:20
300-1632-11	B333L4	Water	11/18/15 13:36	11/19/15 09:20
300-1632-12	B333L8	Water	11/18/15 13:36	11/19/15 09:20
300-1632-13	B333L9	Water	11/18/15 13:36	11/19/15 09:20
300-1632-14	B333L5	Water	11/18/15 13:36	11/19/15 09:20
300-1632-15	B334P1	Water	11/18/15 13:10	11/19/15 09:20
300-1632-16	B334P3	Water	11/18/15 13:10	11/19/15 09:20
300-1632-17	B33B84	Water	11/18/15 14:01	11/19/15 09:20
300-1632-18	B33B79	Water	11/18/15 13:16	11/19/15 09:20
300-1632-19	B33B80	Water	11/18/15 13:37	11/19/15 09:20
300-1632-20	B33BD1	Water	11/18/15 13:10	11/19/15 09:20
300-1632-21	B334T3	Water	11/18/15 14:02	11/19/15 09:20



### Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-1632-1

SDG Number: WC0622

**Login Number: 1632**

**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	

