

March 29, 2017

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: 300-5142-1
TestAmerica Sample Delivery Group: WC1951
Client Project/Site: F16-046

For:
CH2M Hill Plateau Remediation Company
825 Jadwin Avenue
Richland, Washington 99352

Attn: CPP Sample Management



Authorized for release by:
3/29/2017 2:23:47 PM
Steven Campbell, Project Mgmt. Assistant
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Designee for
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(509)375-3131 ext164
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.



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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
X	See case narrative notes for explanation of the 'X' flag

General Chemistry

Qualifier	Qualifier Description
B	Estimated result. Result is less than the RL, but greater than MDL
U	Analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Job ID: 300-5142-1

Laboratory: TestAmerica Richland

Narrative

**Job Narrative
300-5142-1**

Comments

No additional comments.

Receipt

The samples were received on 3/10/2017 2:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 10.9° C.

HPLC/IC

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

An X flag indicates that the associated sample result exceeds four times the amount spiked into the MS sample for a given analyte.

General Chemistry

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

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CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			F16-046-662	PAGE 1 OF 1								
COLLECTOR	CHRIS FULTON CHPRC	COMPANY CONTACT	SUMNER, LC	TELEPHONE NO.	376-3922	PROJECT COORDINATOR	SUMNER, LC	PRICE CODE	7C	DATA TURNAROUND	15 Days / 15 Days			
SAMPLING LOCATION	289-1, Effluent Tank, Valve V07-X80	PROJECT DESIGNATION	200W Pump & Treat - Treatment Plant Compliance Sampling - Water		FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA	SAF NO.	F16-046	AIR QUALITY	<input type="checkbox"/>	METHOD OF SHIPMENT	GOVERNMENT VEHICLE	ORIGINAL
ICE CHEST NO.	NA	OFFSITE PROPERTY NO.	NA	FIELD LOGBOOK NO.	NA	ACTUAL SAMPLE DEPTH	N/A	COA	304235	BILL OF LADING/AIR BILL NO.	NA			
SHIPPED TO		Testamerica Incorporated, Richland												

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/DATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION	Cool <=6C
		HOLDING TIME	24 Hours
		TYPE OF CONTAINER	2G
		NO. OF CONTAINER(S)	1
SPECIAL HANDLING AND/OR STORAGE		VOLUME	60mL
		SAMPLE ANALYSIS	7196 CR6; COMMON;

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B395D2	WATER	MAR 10 2017	0815

#5194
W061951

300-5142 COC



March 29, 2017

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM CHRIS FULTON	RECEIVED BY/STORED IN Frank Hill MAR 10 2017 0930	TRVL-17-079
RELINQUISHED BY/REMOVED FROM Frank Hill	RECEIVED BY/STORED IN CHRIS FULTON MAR 10 2017 0930	
RELINQUISHED BY/REMOVED FROM Frank Hill	RECEIVED BY/STORED IN J. BOCK, TARL MAR 10 2017 1135	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

March 29, 2017

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-046-670	PAGE 1 OF 1
COLLECTOR CHRIS FULTON CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 289-T, Effluent Tank, Valve V07-Y80 <i>A</i> DUP	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water	FIELD LOGBOOK NO. HNF-N-491-110	ACTUAL SAMPLE DEPTH N/A	SAF NO. F16-046	<input type="checkbox"/> ORIGINAL
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	COA 304235	BILL OF LADING/AIR BILL NO. NA	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO TestAmerica Incorporated, Richland					

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	*Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR/LATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION	Cool <=6C
		HOLDING TIME	24 Hours
		TYPE OF CONTAINER	ag
		NO. OF CONTAINER(S)	1
SPECIAL HANDLING AND/OR STORAGE NA		VOLUME	60ml
		SAMPLE ANALYSIS	7196 CR6: COMMON;

*Siya
US1951*

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM CHRIS FULTON CHPRC	RECEIVED BY/STORED IN <i>Frank Hall</i> MAR 10 2017 0930	TRVL-17-079
RELINQUISHED BY/REMOVED FROM <i>Frank Hall</i> CHPRC	RECEIVED BY/STORED IN <i>J. Bock, TARL</i> MAR 10 2017 1130	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

March 29, 2017

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
COLLECTOR Chris Fulton CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	PAGE 1 OF 1
SAMPLING LOCATION 289-T, Influent Tank, Valve V12-Y30	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water	FIELD LOGBOOK NO. HNF-N-491-14	SAF NO. F16-046	AIR QUALITY <input type="checkbox"/>	DATA TURNAROUND 15 Days / 15 Days
ICE CHEST NO. NA	FIELD LOGBOOK NO. HNF-N-491-14	ACTUAL SAMPLE DEPTH N/A	COA 304235	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO Testamerica Incorporated, Richland	OFFSITE PROPERTY NO. NA	COA 304235	BILL OF LADING/AIR BILL NO. NA		

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WT=Water X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION Cool <=6C	HOLDING TIME 24 Hours	TYPE OF CONTAINER aG	NO. OF CONTAINER(S) 1	VOLUME 60ml	SAMPLE ANALYSIS 7196 CR6: COMMON;
SAMPLE NO. B395C3	MATRIX* WATER	SAMPLE DATE MAR 10 2017	SAMPLE TIME 1005				

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CHAIN OF POSSESSION

SIGN/ PRINT NAMES

SPECIAL INSTRUCTIONS

RELINQUISHED BY/REMOVED FROM Chris Fulton CHPRC	RECEIVED BY/STORED IN Frank Hall CHPRC	DATE/TIME MAR 10 2017 1035	DATE/TIME MAR 10 2017 1035	TRVL-17-079
RELINQUISHED BY/REMOVED FROM Frank Hall CHPRC	RECEIVED BY/STORED IN J. Beck, TARI	DATE/TIME MAR 10 2017 1035	DATE/TIME MAR 10 2017 1035	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	DATE/TIME	DATE/TIME	

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

March 29, 2017

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		FIG-046-677	PAGE 1 OF 1
COLLECTOR Chris Fulton CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 289-7A, Pre UDX Resin Column, Valve V25-Y11A1	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water	FIELD LOGBOOK NO. HNFN-4991-14	ACTUAL SAMPLE DEPTH N/A	SAF NO. F16-046	AIR QUALITY <input type="checkbox"/>
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	COA 304235	BILL OF LADING/AIR BILL NO. NA	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland					

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION Cool <=6C	HOLDING TIME 24 Hours	TYPE OF CONTAINER ag	NO. OF CONTAINER(S) 1	VOLUME 60mL	SAMPLE ANALYSIS 7196_CR6: COMMON;
SAMPLE NO. B395F7	MATRIX* WATER	SAMPLE DATE MAR 10 2017	SAMPLE TIME 1130	SPECIAL HANDLING AND/OR STORAGE NA			

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Chris Fulton	DATE/TIME MAR 10 2017 1207	RECEIVED BY/STORED IN Frank Hall CHRIS	DATE/TIME MAR 10 2017 1207	TRVL-17-079	
RELINQUISHED BY/REMOVED FROM Frank Hall	DATE/TIME MAR 10 2017 1430	RECEIVED BY/STORED IN J. Bock, TARI	DATE/TIME MAR 10 2017 1430		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	DATE/TIME

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		FIG-046-701	PAGE 1 OF 1
COLLECTOR	Chris Fulton CHPRC	COMPANY CONTACT	SUMNER, LC	PROJECT COORDINATOR	SUMNER, LC
SAMPLING LOCATION	289-7A, Pre T99DX Resin Tanks, Valve V05-Y20	PROJECT DESIGNATION	200W Pump & Treat - Treatment Plant Compliance Sampling - Water	PRICE CODE	7C
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	HNF-N-481-14	AIR QUALITY	<input type="checkbox"/>
SHIPPED TO	TestAmerica Incorporated, Richland	OFFSITE PROPERTY NO.	NA	METHOD OF SHIPMENT	GOVERNMENT VEHICLE
		ACTUAL SAMPLE DEPTH	N/A		ORIGINAL
		SAF NO.	F16-046		15 Days / 15 Days
		COA	304235		
		BILL OF LADING/AIR BILL NO.	NA		

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	Cool <=6C
A=Air	*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	HOLDING TIME	24 Hours
DL=Drum		TYPE OF CONTAINER	ag
Liquids		NO. OF CONTAINER(S)	1
DS=Drum		VOLUME	60ml
Solids		SAMPLE ANALYSIS	7196 CRG: COMMON;
L=Liquid			
O=Oil			
S=Soil			
SE=Sediment			
T=Tissue			
V=Vegetation			
W=Water			
WT=Wipe			
X=Other			
SPECIAL HANDLING AND/OR STORAGE	NA		

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME
B399K1	WATER	MAR 10 2017	1055

SINX
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March 29, 2017

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	TRVL-17-079	
Chris Fulton	MAR 10 2017	Frank Hall CHPRC	MAR 10 2017		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
Frank Hall	MAR 10 2017	J. Bock, TARL	MAR 10 2017		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME		
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME		

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-046-719	PAGE 1 OF 1
COLLECTOR Chris Fulton CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 289-TA, Post T6991X Resin Tanks, Valve V06-Y22	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water	FIELD LOGBOOK NO. HNF-NL 44114	ACTUAL SAMPLE DEPTH N/A	SAF NO. F16-046	AIR QUALITY <input type="checkbox"/>
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	NO. OF CONTAINER(S) 1	VOLUME 60ml	COA 304235	METHOD OF SHIPMENT GOVERNMENT VEHICLE
SHIPPED TO TestAmerica Incorporated, Richland	PRESERVATION Cool <=6C	HOLDING TIME 24 Hours	TYPE OF CONTAINER ag	BILL OF LADING/AIR BILL NO. NA	ORIGINAL

SAMPLE NO.	MATRIX*	SPECIAL HANDLING AND/OR STORAGE	SAMPLE DATE	SAMPLE TIME	PRESERVATION		HOLDING TIME		TYPE OF CONTAINER		NO. OF CONTAINER(S)		VOLUME		SAMPLE ANALYSIS	
					PREP	STORAGE	TEMP	TIME	TYPE	NO.	NO.	NO.	NO.	NO.	NO.	NO.
B395M0	WATER	NA	MAR 10 2017	1115												

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March 29, 2017

CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	TRVL-17-079	
Chris Fulton	MAR 10 2017 1201	RECEIVED BY/STORED IN Frank Hill	MAR 10 2017 1207		
RELINQUISHED BY/REMOVED FROM Frank Hill	MAR 10 2017 1201	RECEIVED BY/STORED IN J. Bock, TABL	MAR 10 2017 1208		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

March 29, 2017

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-046-654	PAGE 1 OF 1
COLLECTOR Chris Fujton CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 289-T, Influent Tank, Valve V12-Y30	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water	FIELD LOGBOOK NO. HNF-N-491-16	ACTUAL SAMPLE DEPTH N/A	SAF NO. F16-046	<input type="checkbox"/>
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	COA 304235	BILL OF LADING/AIR BILL NO. NA	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland					

MATRIX*	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SPECIAL HANDLING AND/OR STORAGE
A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WF=Wipe X=Other	*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/LATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	Cool <=6C	48 Hours	P	1	250ml	SEE ITEM (1) IN SPECIAL INSTRUCTIONS
B395C4	WATER						

Siua
USA951

CHAIN OF POSSESSION	SIGN/ PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM Chris Fujton CHPRC	RECEIVED BY/STORED IN MAR 10 2017/035	TRVL-17-079 (1) 300.0_ANIONS_IC: COMMON; 300.0_ANIONS_IC: COMMON (Add-on) {Bromide};
RELINQUISHED BY/REMOVED FROM Frank Hall	RECEIVED BY/STORED IN MAR 10 2017/035	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 2/27/2017 FSR ID = FSR42117 TRVL NUM = TRVL-17-079 A-6003-618 (REV 2)

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-046-663	PAGE 1 OF 1
COLLECTOR CHRIS FULTON CH2PRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 289-T, Effluent Tank, Valve V07-Y80	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water	FIELD LOGBOOK NO. HMF-N- 491-16	ACTUAL SAMPLE DEPTH N/A	SAF NO. F16-046	AIR QUALITY <input type="checkbox"/>
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	COA 304235	BILL OF LADING/AIR BILL NO. NA	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland					

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/LATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION Cool <=6C	HOLDING TIME 48 Hours	TYPE OF CONTAINER P	NO. OF CONTAINER(S) 1	VOLUME 250ml	SEE ITEM (1) IN SPECIAL INSTRUCTIONS
SAMPLE NO. B395D3	MATRIX* WATER	SAMPLE DATE MAR 10 2017	SAMPLE TIME 0815				

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W C1951

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM CHRIS FULTON CH2PRC	DATE/TIME MAR 10 2017 09 30	RECEIVED BY/STORED IN Frank Hadd	DATE/TIME MAR 10 2017 09 30	TRVL-17-079 (1) 300.0 ANIONS_IC: COMMON, 300.0 ANIONS_IC: COMMON (Add-on) {Bromide};	
RELINQUISHED BY/REMOVED FROM Frank Hadd	DATE/TIME MAR 10 2017 10 10	RECEIVED BY/STORED IN J. Bock, TABL	DATE/TIME MAR 10 2017 10 10		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD			DATE/TIME	

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PRINTED ON 2/27/2017

FSR ID = FSR421220

TRVL NUM = TRVL-17-079

A-6003-618 (REV 2)

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CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		FIG-046-720	PAGE 1 OF 1
COLLECTOR Chris Fulton CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 289-1A, Post T99JX Resin Tanks, Valve V06-722	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water	FIELD LOGBOOK NO. HNF-N-491-14	ACTUAL SAMPLE DEPTH N/A	SAF NO. F16-046	<input type="checkbox"/>
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	COA 304235	BILL OF LADING/AIR BILL NO. NA	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland					

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WR=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION Cool <=6C	HOLDING TIME 48 Hours	TYPE OF CONTAINER P	NO. OF CONTAINER(S) 1	VOLUME 250mL	SEE ITEM (1) IN SPECIAL INSTRUCTIONS
SAMPLE NO. B395M1	MATRIX* WATER	SAMPLE DATE MAR 10 2007	SAMPLE TIME 1115				

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
REMOVED BY/REMOVED FROM Chris Fulton CHPRC	DATE/TIME MAR 10 2007 1207	RECEIVED BY/STORED IN Frank Hand CHPRC	DATE/TIME MAR 10 2007 1207	TRVL-17-079 (1) 300.0_ANIONS_IC: COMMON; 300.0_ANIONS_IC: COMMON (Add-on) {Bromide};	
REMOVED BY/REMOVED FROM Frank Hand	DATE/TIME MAR 10 2007 1207	RECEIVED BY/STORED IN J. Bock, TARL	DATE/TIME MAR 10 2007 1207		
REMOVED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
REMOVED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
REMOVED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
REMOVED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
REMOVED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
REMOVED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
REMOVED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME		
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME		

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-046-702	PAGE 1 OF 1
COLLECTOR	Chris Fulton CHPRC	COMPANY CONTACT	SUMNER, LC	TELEPHONE NO.	376-3922
SAMPLING LOCATION	289-TA, Pre T-691X Resin Tanks, Valve V05-Y20	PROJECT DESIGNATION	200W Pump & Treat - Treatment Plant Compliance Sampling - Water	PROJECT COORDINATOR	SUMNER, LC
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	HNF-N-491.14	SAF NO.	F16-046
SHIPPED TO	TestAmerica Incorporated, Richland	OFFSITE PROPERTY NO.	NA	ACTUAL SAMPLE DEPTH	N/A
MATRIX*	<p>POSSIBLE SAMPLE HAZARDS/ REMARKS</p> <p>*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.</p> <p>A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WF=Wipe X=Other</p>	PRESERVATION	Cool <=6C	PRICE CODE	7C
		HOLDING TIME	48 Hours	AIR QUALITY	<input type="checkbox"/>
		TYPE OF CONTAINER	P	METHOD OF SHIPMENT	GOVERNMENT VEHICLE
		NO. OF CONTAINER(S)	1	COA	304235
		VOLUME	250ml	BILL OF LADING/AIR BILL NO.	NA
SPECIAL HANDLING AND/OR STORAGE	NA	SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS		ORIGINAL

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SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B395K2	WATER	MAR 10 2017	1055	✓

March 29, 2017

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	Chris Fulton	RECEIVED BY/STORED IN	Frank Hill	TRVL-17-079	(1) 300.0 ANIONS_IC: COMMON; 300.0 ANIONS_IC: COMMON (Add-on) {Bromide};
RELINQUISHED BY/REMOVED FROM	Frank Hill	RECEIVED BY/STORED IN	J. Bock, TARL		
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN			
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN			
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN			
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN			
RELINQUISHED BY/REMOVED FROM		RECEIVED BY/STORED IN			

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
COLLECTOR Chris Fulton CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	FIG-046-686	PAGE 1 OF 1
SAMPLING LOCATION 289-TA, Post-UX Resin Column C1, Valve V03-Y11A1	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water		PRICE CODE 7C	AIR QUALITY <input type="checkbox"/>	DATA TURNAROUND 15 Days / 15 Days
ICE CHEST NO. NA	FIELD LOGBOOK NO. HMF-N-491-11	ACTUAL SAMPLE DEPTH N/A	SAF NO. F16-046	METHOD OF SHIPMENT GOVERNMENT VEHICLE	ORIGINAL
SHIPPED TO TestAmerica Incorporated, Richland	OFFSITE PROPERTY NO. NA	BILL OF LADING/AIR BILL NO. NA			

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION Cool <=6C	HOLDING TIME 48 Hours	TYPE OF CONTAINER P	NO. OF CONTAINERS(S) 1	VOLUME 250mL	SAMPLE ANALYSIS SEE ITEM (1) IN SPECIAL INSTRUCTIONS
SAMPLE NO. B395H6	MATRIX* WATER	SAMPLE DATE MAR 10 2017	SAMPLE TIME 1143				

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March 29, 2017

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	TRVL-17-079	
RELINQUISHED BY/REMOVED FROM CHPRC	MAR 10 2017 1207	RECEIVED BY/STORED IN Frank Hill CHPRC	MAR 10 2017 1207	(1) 300.0 ANIONS_IC: COMMON; 300.0 ANIONS_IC: COMMON (Add-on) {Bromide};	
RELINQUISHED BY/REMOVED FROM Frank Hill CHPRC	MAR 10 2017 1207	RECEIVED BY/STORED IN J. Bock, TARL	MAR 10 2017 1207		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-046-678	PAGE 1 OF 1
COLLECTOR	Chris Fulton CHPRC	COMPANY CONTACT	SUMNER, LC	TELEPHONE NO.	376-3922
SAMPLING LOCATION	289-TA, Pre UJX Resin Column, Valve V25-Y11A1	PROJECT DESIGNATION	200W Pump & Treat - Treatment Plant Compliance Sampling - Water		
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	HNF-N-49116	ACTUAL SAMPLE DEPTH	N/A
SHIPPED TO	TestAmerica Incorporated, Richland	OFFSITE PROPERTY NO.	NA	PROJECT COORDINATOR	SUMNER, LC
MATRIX*	<p>POSSIBLE SAMPLE HAZARDS/REMARKS</p> <p>*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.</p> <p>A=Air DL=Drum L=Liquid DS=Drum S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other</p>	<p>PRESERVATION</p> <p>Cool <=6C</p>	<p>HOLDING TIME</p> <p>48 Hours</p>	<p>PRICE CODE</p> <p>7C</p>	<p>AIR QUALITY</p> <p><input type="checkbox"/></p>
SPECIAL HANDLING AND/OR STORAGE	NA	NO. OF CONTAINER(S)	1	<p>SAF NO.</p> <p>F16-046</p>	<p>METHOD OF SHIPMENT</p> <p>GOVERNMENT VEHICLE</p>
SAMPLE NO.	B395F8	MATRIX*	WATER	<p>VOLUME</p> <p>250ml</p>	<p>BILL OF LADING/AIR BILL NO.</p> <p>NA</p>
		SAMPLE DATE	MAR 10 2017	<p>SEE ITEM (1) IN SPECIAL INSTRUCTIONS</p>	<p>DATA TURNAROUND</p> <p>15 Days / 15 Days</p>
		SAMPLE TIME	1:30	<p>SIH2 WSCI951</p>	<p>ORIGINAL</p>

March 29, 2017

CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	Chris Fulton CHPRC	DATE/TIME	MAR 10 2017 12:01	RECEIVED BY/STORED IN	Frank Hill CHPRC
RELINQUISHED BY/REMOVED FROM	Frank Hill	DATE/TIME	MAR 10 2017 12:01	RECEIVED BY/STORED IN	J. Bock, TARL
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN	
RELINQUISHED BY/REMOVED FROM		DATE/TIME		RECEIVED BY/STORED IN	
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	

TRVL-17-079
 (1) 300.0 ANIONS_IC: COMMON; 300.0 ANIONS_IC: COMMON (Add-on) {Bromide};
 TRVL NUM = TRVL-17-079
 PRINTED ON 2/27/2017
 FSR ID = FSR42123
 A-6003-618 (REV 2)

March 29, 2017

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CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-046-691	PAGE 1 OF 1
COLLECTOR Chris Fulton CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 289-TA, Post UDX Resin Column C2, Valve V03-Y1JAZ	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH N/A	SAF NO. F16-046	<input type="checkbox"/> ORIGINAL
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	COA 304235	BILL OF LADING/AIR BILL NO. NA	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Testamerica Incorporated, Richland	PRESERVATION Cool <=6C				

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WF=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/DATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	HOLDING TIME 48 Hours	NO. OF CONTAINER(S) 1	VOLUME 250ml	SEE ITEM (1) IN SPECIAL INSTRUCTIONS
SAMPLE NO. B39511	MATRIX* WATER	SAMPLE DATE MAR 10 2017	SAMPLE TIME 1148	✓	

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Chris Fulton	DATE/TIME MAR 10 2017	RECEIVED BY/STORED IN Chris Fulton	DATE/TIME MAR 10 2017	TRVL-17-079 (1) 300.0 ANIONS_IC: COMMON; 300.0 ANIONS_IC: COMMON (Add-on) {Bromide};	
RELINQUISHED BY/REMOVED FROM Frank Hall	DATE/TIME MAR 10 2017	RECEIVED BY/STORED IN Frank Hall	DATE/TIME MAR 10 2017		
RELINQUISHED BY/REMOVED FROM Frank Hall	DATE/TIME MAR 10 2017	RECEIVED BY/STORED IN J. Bock, TARL	DATE/TIME MAR 10 2017		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME		
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME		

PRINTED ON 2/27/2017

FSR ID = FSR42126

TRVL NUM = TRVL-17-079

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		FIG-046-696	PAGE 1 OF 1
COLLECTOR Chris Fulton CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 289-TA, Post UJX Resin Column C3, Valve V03-Y11A3	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water	FIELD LOGBOOK NO. HNF-N-491-1C	ACTUAL SAMPLE DEPTH N/A	SAF NO. F16-046	METHOD OF SHIPMENT GOVERNMENT VEHICLE ORIGINAL
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	COA 304235	BILL OF LADING/AIR BILL NO. NA		
SHIPPED TO TestAmerica Incorporated, Richland					

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	*Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR/JA1A Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION	Cool <=6C
		HOLDING TIME	48 Hours
		TYPE OF CONTAINER	P
		NO. OF CONTAINERS(S)	1
		VOLUME	250mL
SPECIAL HANDLING AND/OR STORAGE NA		SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS
SAMPLE NO. B3395J6	MATRIX* WATER	SAMPLE DATE MAR 10 2017	SAMPLE TIME 1208

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Chris Fulton CHPRC	DATE/TIME MAR 10 2017 1208	RECEIVED BY/STORED IN JCHPRC	DATE/TIME MAR 10 2017	TRVL-17-079 (1) 300.0 ANIONS_IC: COMMON; 300.0 ANIONS_IC: COMMON (Add-on) {Bromide};	
RELINQUISHED BY/REMOVED FROM Frank Hall JCHPRC	DATE/TIME MAR 10 2017 1208	RECEIVED BY/STORED IN JCHPRC	DATE/TIME MAR 10 2017		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME		
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME		

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		FIG-046-741	PAGE 1 OF 1
COLLECTOR Chris Fulton CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 289-TA, Intra resin, Valve V19-Y11A1	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water	FIELD LOGBOOK NO. HMF-N 491.16	ACTUAL SAMPLE DEPTH N/A	SAF NO. FI6-046	METHOD OF SHIPMENT GOVERNMENT VEHICLE ORIGINAL
ICE CHEST NO. NA	OFFSITE PROPERTY NO. NA	COA 304235	BILL OF LADING/AIR BILL NO. NA		
SHIPPED TO TestAmerica Incorporated, Richland					

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SF=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/JATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION Cool <=6C	HOLDING TIME 48 Hours	TYPE OF CONTAINER P	NO. OF CONTAINER(S) 1	VOLUME 250ml	SAMPLE ANALYSIS SEE ITEM (1) IN SPECIAL INSTRUCTIONS
SPECIAL HANDLING AND/OR STORAGE NA	<i>SINCE WEI951</i>						
SAMPLE NO. B395P2	MATRIX* WATER	SAMPLE DATE MAR 10 2017	SAMPLE TIME 1813				

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CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Chris Fulton CHPRC	DATE/TIME MAR 10 2017	RECEIVED BY/STORED IN Frank Hatt CHPRC	DATE/TIME MAR 10 2017	TRVL-17-079 (1) 300.0 ANIONS_IC: COMMON; 300.0 ANIONS_IC: COMMON (Add- (n) {Bromide});	
RELINQUISHED BY/REMOVED FROM Frank Hatt CHPRC	DATE/TIME MAR 10 2017	RECEIVED BY/STORED IN J. Bock, TARL	DATE/TIME MAR 10 2017		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME		
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME		

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-046-737	PAGE 1 OF 1
COLLECTOR Chris Fulton CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 289-TA, Intra resin, Valve V18-Y11A1	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water		FIELD LOGBOOK NO. 200W	SAF NO. F16-046	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO. NA	FIELD LOGBOOK NO. 200W	ACTUAL SAMPLE DEPTH N/A	COA 304235	BILL OF LADING/AIR BILL NO. NA	
SHIPPED TO Testamerica Incorporated, Richland	OFFSITE PROPERTY NO. NA	OFFSITE PROPERTY NO. NA	ORIGINAL		

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/147A Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION Cool <=6C	HOLDING TIME 48 Hours	TYPE OF CONTAINER P	NO. OF CONTAINER(S) 1	VOLUME 250ml	SPECIAL HANDLING AND/OR STORAGE NA	SAMPLE ANALYSIS SEE ITEM (1) IN SPECIAL INSTRUCTIONS
SAMPLE NO. B395N8	MATRIX* WATER	SAMPLE DATE MAR 10 2017	SAMPLE TIME 1218	SPECIAL HANDLING AND/OR STORAGE S142 WCI951				

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Chris Fulton	DATE/TIME MAR 10 2017 1230	RECEIVED BY/STORED IN Frank Hall CHPRC	DATE/TIME MAR 10 2017 1230	TRVL-17-079 (1) 300.0 ANIONS_IC: COMMON; 300.0 ANIONS_IC: COMMON (Add-on) {Bromide};	
RELINQUISHED BY/REMOVED FROM Frank Hall	DATE/TIME MAR 10 2017 1230	RECEIVED BY/STORED IN J. Bock, TARL	DATE/TIME MAR 10 2017 1230		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE		DATE/TIME	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY		DATE/TIME	DATE/TIME

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CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		FIG-046-733	PAGE 1 OF 1
COLLECTOR	Chris Fulton CHPRC	COMPANY CONTACT	SUMNER, LC 376-3922	PROJECT COORDINATOR	SUMNER, LC
SAMPLING LOCATION	289-TA, Intra resin, Valve V17-Y11A1	PROJECT DESIGNATION	200W Pump & Treat - Treatment Plant Compliance Sampling - Water	PRICE CODE	7C
ICE CHEST NO.	NA	FIELD LOGBOOK NO.	NA	SAF NO.	F16-046
SHIPPED TO	TestAmerica Incorporated, Richland	NO. OF CONTAINERS(S)	1	AIR QUALITY	<input type="checkbox"/> 15 Days / 15 Days
MATRIX*	A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other	PRESERVATION	Cool <=6C	BILL OF LADING/AIR BILL NO.	NA
POSSIBLE SAMPLE HAZARDS/REMARKS	*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/ATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	HOLDING TIME	48 Hours	METHOD OF SHIPMENT	GOVERNMENT VEHICLE
SPECIAL HANDLING AND/OR STORAGE	NA	TYPE OF CONTAINER	P	DATA TURNAROUND	15 Days / 15 Days
SAMPLE NO.	B395N4	VOLUME	250ml	ORIGINAL	
MATRIX*	WATER	NO. OF CONTAINERS(S)	1		
SAMPLE DATE	MAR 10 2017	SAMPLE TIME	1020		
		SEE ITEM (1) IN SPECIAL INSTRUCTIONS			

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CHAIN OF POSSESSION	SIGN/PRINT NAMES	SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM Chris Fulton CHPRC	RECEIVED BY/STORED IN FRANK HILL CHPRC	TRVL-17-079 (1) 300.0 ANIONS_IC: COMMON; 300.0 ANIONS_IC: COMMON (Add-on) {Bromide};
DATE/TIME MAR 10 2017 1300	DATE/TIME MAR 10 2017	
RELINQUISHED BY/REMOVED FROM [Signature]	RECEIVED BY/STORED IN J. BOCK, TARL	
DATE/TIME MAR 10 2017 1300	DATE/TIME MAR 10 2017	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
DATE/TIME	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
DATE/TIME	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
DATE/TIME	DATE/TIME	
RELINQUISHED BY/REMOVED FROM	RECEIVED BY/STORED IN	
DATE/TIME	DATE/TIME	

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

PRINTED ON 2/27/2017 FSR ID = FSR42111 TRVL NUM = TRVL-17-079 A-6003-618 (REV 2)

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CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F16-046-745	PAGE 1 OF 1
COLLECTOR Chris Fulton CHPRC	COMPANY CONTACT SUMNER, LC	TELEPHONE NO. 376-3922	PROJECT COORDINATOR SUMNER, LC	PRICE CODE 7C	DATA TURNAROUND 15 Days / 15 Days
SAMPLING LOCATION 289-TA, Pre-Resin Column, Valve V05-Y10	PROJECT DESIGNATION 200W Pump & Treat - Treatment Plant Compliance Sampling - Water		SAF NO. F16-046	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO. NA	FIELD LOGBOOK NO. HNF-N-491-12	ACTUAL SAMPLE DEPTH N/A	COA 304235	ORIGINAL	
SHIPPED TO TestAmerica Incorporated, Richland	OFFSITE PROPERTY NO. NA		BILL OF LADING/AIR BILL NO. NA		

MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS *Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR/ATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.	PRESERVATION Cool <=6C	HOLDING TIME 48 Hours	TYPE OF CONTAINER P	NO. OF CONTAINER(S) 1	VOLUME 250ml	SPECIAL HANDLING AND/OR STORAGE NA	SAMPLE ANALYSIS SEE ITEM (1) IN SPECIAL INSTRUCTIONS
SAMPLE NO. 8396P6	MATRIX* WATER	SAMPLE DATE MAR 10 2017	SAMPLE TIME 1240					

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Chris Fulton CHPRC	DATE/TIME MAR 10 2017	RECEIVED BY/STORED IN Frank Haag CHPRC	DATE/TIME MAR 10 2017	TRVL-17-079 (1) 300.0 ANIONS_IC: COMMON; 300.0 ANIONS_IC: COMMON (Add-on) {Bromide};	
RELINQUISHED BY/REMOVED FROM Frank Haag CHPRC	DATE/TIME MAR 10 2017	RECEIVED BY/STORED IN J. Bock, TARL	DATE/TIME MAR 10 2017		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME		
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME		

March 29, 2017 Detection Summary

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: B395D2

Lab Sample ID: 300-5142-1

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: B395F0

Lab Sample ID: 300-5142-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0028	B	0.0040	0.0015	mg/L	1		7196A	Total/NA

Client Sample ID: B395C3

Lab Sample ID: 300-5142-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.022		0.0040	0.0015	mg/L	1		7196A	Total/NA

Client Sample ID: B395F7

Lab Sample ID: 300-5142-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0076		0.0040	0.0015	mg/L	1		7196A	Total/NA

Client Sample ID: B395K1

Lab Sample ID: 300-5142-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.029		0.0040	0.0015	mg/L	1		7196A	Total/NA

Client Sample ID: B395M0

Lab Sample ID: 300-5142-6

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: B395C4

Lab Sample ID: 300-5142-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	25	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	27	D	0.28	0.14	mg/L	10		300.0	Total/NA
Fluoride	0.34	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	62	D	0.50	0.25	mg/L	2		300.0	Total/NA
Bromide	0.22	B D	0.25	0.13	mg/L	2		300.0	Total/NA

Client Sample ID: B395F1

Lab Sample ID: 300-5142-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	50	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	4.8	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.34	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	1.6	D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	98	D	0.50	0.25	mg/L	2		300.0	Total/NA
Bromide	0.21	B D	0.25	0.13	mg/L	2		300.0	Total/NA

Client Sample ID: B395D3

Lab Sample ID: 300-5142-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	50	D	0.40	0.20	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

March 29, 2017 Detection Summary

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: B395D3 (Continued)

Lab Sample ID: 300-5142-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	4.7	D	0.056	0.028	mg/L	2		300.0	Total/NA
Fluoride	0.34	D	0.10	0.050	mg/L	2		300.0	Total/NA
Nitrite as N	1.7	D	0.076	0.038	mg/L	2		300.0	Total/NA
Sulfate	98	D	0.50	0.25	mg/L	2		300.0	Total/NA
Bromide	0.21	B D	0.25	0.13	mg/L	2		300.0	Total/NA

Client Sample ID: B395M1

Lab Sample ID: 300-5142-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	22	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	40	D	0.28	0.14	mg/L	10		300.0	Total/NA
Fluoride	0.42	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	94	D	0.50	0.25	mg/L	2		300.0	Total/NA
Bromide	0.23	B D	0.25	0.13	mg/L	2		300.0	Total/NA

Client Sample ID: B395K2

Lab Sample ID: 300-5142-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	22	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	40	D	0.28	0.14	mg/L	10		300.0	Total/NA
Fluoride	0.42	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	67	D	0.50	0.25	mg/L	2		300.0	Total/NA
Bromide	0.23	B D	0.25	0.13	mg/L	2		300.0	Total/NA

Client Sample ID: B395H6

Lab Sample ID: 300-5142-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	28	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	50	D	0.56	0.28	mg/L	20		300.0	Total/NA
Fluoride	0.32	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	90	D	5.0	2.5	mg/L	20		300.0	Total/NA
Bromide	0.26	D	0.25	0.13	mg/L	2		300.0	Total/NA

Client Sample ID: B395F8

Lab Sample ID: 300-5142-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	48	D	0.56	0.28	mg/L	20		300.0	Total/NA
Fluoride	0.31	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	90	D	5.0	2.5	mg/L	20		300.0	Total/NA
Bromide	0.25	D	0.25	0.13	mg/L	2		300.0	Total/NA

Client Sample ID: B395J1

Lab Sample ID: 300-5142-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	29	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	51	D	0.56	0.28	mg/L	20		300.0	Total/NA
Fluoride	0.31	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	99	D	0.50	0.25	mg/L	2		300.0	Total/NA
Bromide	0.26	D	0.25	0.13	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

March 29, 2017 Detection Summary

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: B395J6

Lab Sample ID: 300-5142-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	29	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	50	D	0.56	0.28	mg/L	20		300.0	Total/NA
Fluoride	0.31	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	99	D	0.50	0.25	mg/L	2		300.0	Total/NA
Bromide	0.26	D	0.25	0.13	mg/L	2		300.0	Total/NA

Client Sample ID: B395P2

Lab Sample ID: 300-5142-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	28	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	49	D	0.56	0.28	mg/L	20		300.0	Total/NA
Fluoride	0.31	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	88	D	5.0	2.5	mg/L	20		300.0	Total/NA
Bromide	0.26	D	0.25	0.13	mg/L	2		300.0	Total/NA

Client Sample ID: B395N8

Lab Sample ID: 300-5142-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	28	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	50	D	0.56	0.28	mg/L	20		300.0	Total/NA
Fluoride	0.32	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	91	D	5.0	2.5	mg/L	20		300.0	Total/NA
Bromide	0.26	D	0.25	0.13	mg/L	2		300.0	Total/NA

Client Sample ID: B395N4

Lab Sample ID: 300-5142-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	28	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	49	D	0.56	0.28	mg/L	20		300.0	Total/NA
Fluoride	0.32	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	93	D	5.0	2.5	mg/L	20		300.0	Total/NA
Bromide	0.25	D	0.25	0.13	mg/L	2		300.0	Total/NA

Client Sample ID: B395P6

Lab Sample ID: 300-5142-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27	D	0.40	0.20	mg/L	2		300.0	Total/NA
Nitrate as N	49	D	0.56	0.28	mg/L	20		300.0	Total/NA
Fluoride	0.31	D	0.10	0.050	mg/L	2		300.0	Total/NA
Sulfate	94	D	5.0	2.5	mg/L	20		300.0	Total/NA
Bromide	0.25	D	0.25	0.13	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Richland

March 29, 2017 Client Sample Results

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: B395D2
Date Collected: 03/10/17 08:15
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-1
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	-		03/10/17 16:15	1

Client Sample ID: B395F0
Date Collected: 03/10/17 08:15
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0028	B	0.0040	0.0015	mg/L	-		03/10/17 16:15	1

Client Sample ID: B395C3
Date Collected: 03/10/17 10:05
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.022		0.0040	0.0015	mg/L	-		03/10/17 16:16	1

Client Sample ID: B395F7
Date Collected: 03/10/17 11:30
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0076		0.0040	0.0015	mg/L	-		03/10/17 16:16	1

Client Sample ID: B395K1
Date Collected: 03/10/17 10:55
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-5
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.029		0.0040	0.0015	mg/L	-		03/10/17 16:16	1

Client Sample ID: B395M0
Date Collected: 03/10/17 11:15
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-6
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	-		03/10/17 16:16	1

Client Sample ID: B395C4
Date Collected: 03/10/17 10:05
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-7
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25	D	0.40	0.20	mg/L	-		03/10/17 21:35	2
Nitrate as N	27	D	0.28	0.14	mg/L	-		03/12/17 01:35	10
Fluoride	0.34	D	0.10	0.050	mg/L	-		03/10/17 21:35	2

TestAmerica Richland

March 29, 2017 Client Sample Results

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: B395C4
Date Collected: 03/10/17 10:05
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-7
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.038	U D	0.076	0.038	mg/L			03/10/17 21:35	2
Sulfate	62	D	0.50	0.25	mg/L			03/10/17 21:35	2
Bromide	0.22	B D	0.25	0.13	mg/L			03/10/17 21:35	2

Client Sample ID: B395F1
Date Collected: 03/10/17 08:15
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-8
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50	D	0.40	0.20	mg/L			03/11/17 11:32	2
Nitrate as N	4.8	D	0.056	0.028	mg/L			03/11/17 11:32	2
Fluoride	0.34	D	0.10	0.050	mg/L			03/11/17 11:32	2
Nitrite as N	1.6	D	0.076	0.038	mg/L			03/11/17 11:32	2
Sulfate	98	D	0.50	0.25	mg/L			03/11/17 11:32	2
Bromide	0.21	B D	0.25	0.13	mg/L			03/11/17 11:32	2

Client Sample ID: B395D3
Date Collected: 03/10/17 08:15
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-9
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50	D	0.40	0.20	mg/L			03/11/17 12:17	2
Nitrate as N	4.7	D	0.056	0.028	mg/L			03/11/17 12:17	2
Fluoride	0.34	D	0.10	0.050	mg/L			03/11/17 12:17	2
Nitrite as N	1.7	D	0.076	0.038	mg/L			03/11/17 12:17	2
Sulfate	98	D	0.50	0.25	mg/L			03/11/17 12:17	2
Bromide	0.21	B D	0.25	0.13	mg/L			03/11/17 12:17	2

Client Sample ID: B395M1
Date Collected: 03/10/17 11:15
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-10
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22	D	0.40	0.20	mg/L			03/11/17 13:02	2
Nitrate as N	40	D	0.28	0.14	mg/L			03/12/17 04:51	10
Fluoride	0.42	D	0.10	0.050	mg/L			03/11/17 13:02	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			03/11/17 13:02	2
Sulfate	94	D	0.50	0.25	mg/L			03/11/17 13:02	2
Bromide	0.23	B D	0.25	0.13	mg/L			03/11/17 13:02	2

Client Sample ID: B395K2
Date Collected: 03/10/17 10:55
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-11
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22	D	0.40	0.20	mg/L			03/11/17 13:17	2

TestAmerica Richland

March 29, 2017 Client Sample Results

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: B395K2

Date Collected: 03/10/17 10:55

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-11

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	40	D	0.28	0.14	mg/L			03/12/17 05:06	10
Fluoride	0.42	D	0.10	0.050	mg/L			03/11/17 13:17	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			03/11/17 13:17	2
Sulfate	67	D	0.50	0.25	mg/L			03/11/17 13:17	2
Bromide	0.23	B D	0.25	0.13	mg/L			03/11/17 13:17	2

Client Sample ID: B395H6

Date Collected: 03/10/17 11:43

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28	D	0.40	0.20	mg/L			03/11/17 13:32	2
Nitrate as N	50	D	0.56	0.28	mg/L			03/12/17 05:21	20
Fluoride	0.32	D	0.10	0.050	mg/L			03/11/17 13:32	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			03/11/17 13:32	2
Sulfate	90	D	5.0	2.5	mg/L			03/12/17 05:21	20
Bromide	0.26	D	0.25	0.13	mg/L			03/11/17 13:32	2

Client Sample ID: B395F8

Date Collected: 03/10/17 11:30

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-13

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27	D	0.40	0.20	mg/L			03/11/17 13:47	2
Nitrate as N	48	D	0.56	0.28	mg/L			03/12/17 05:36	20
Fluoride	0.31	D	0.10	0.050	mg/L			03/11/17 13:47	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			03/11/17 13:47	2
Sulfate	90	D	5.0	2.5	mg/L			03/12/17 05:36	20
Bromide	0.25	D	0.25	0.13	mg/L			03/11/17 13:47	2

Client Sample ID: B395J1

Date Collected: 03/10/17 11:48

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29	D	0.40	0.20	mg/L			03/11/17 14:02	2
Nitrate as N	51	D	0.56	0.28	mg/L			03/12/17 05:51	20
Fluoride	0.31	D	0.10	0.050	mg/L			03/11/17 14:02	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			03/11/17 14:02	2
Sulfate	99	D	0.50	0.25	mg/L			03/11/17 14:02	2
Bromide	0.26	D	0.25	0.13	mg/L			03/11/17 14:02	2

TestAmerica Richland

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: B395J6
Date Collected: 03/10/17 12:08
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-15
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29	D	0.40	0.20	mg/L			03/11/17 14:18	2
Nitrate as N	50	D	0.56	0.28	mg/L			03/12/17 06:06	20
Fluoride	0.31	D	0.10	0.050	mg/L			03/11/17 14:18	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			03/11/17 14:18	2
Sulfate	99	D	0.50	0.25	mg/L			03/11/17 14:18	2
Bromide	0.26	D	0.25	0.13	mg/L			03/11/17 14:18	2

Client Sample ID: B395P2
Date Collected: 03/10/17 12:13
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-16
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28	D	0.40	0.20	mg/L			03/11/17 14:33	2
Nitrate as N	49	D	0.56	0.28	mg/L			03/12/17 06:21	20
Fluoride	0.31	D	0.10	0.050	mg/L			03/11/17 14:33	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			03/11/17 14:33	2
Sulfate	88	D	5.0	2.5	mg/L			03/12/17 06:21	20
Bromide	0.26	D	0.25	0.13	mg/L			03/11/17 14:33	2

Client Sample ID: B395N8
Date Collected: 03/10/17 12:18
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-17
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28	D	0.40	0.20	mg/L			03/11/17 15:48	2
Nitrate as N	50	D	0.56	0.28	mg/L			03/12/17 07:06	20
Fluoride	0.32	D	0.10	0.050	mg/L			03/11/17 15:48	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			03/11/17 15:48	2
Sulfate	91	D	5.0	2.5	mg/L			03/12/17 07:06	20
Bromide	0.26	D	0.25	0.13	mg/L			03/11/17 15:48	2

Client Sample ID: B395N4
Date Collected: 03/10/17 12:20
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-18
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28	D	0.40	0.20	mg/L			03/11/17 16:33	2
Nitrate as N	49	D	0.56	0.28	mg/L			03/12/17 07:51	20
Fluoride	0.32	D	0.10	0.050	mg/L			03/11/17 16:33	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			03/11/17 16:33	2
Sulfate	93	D	5.0	2.5	mg/L			03/12/17 07:51	20
Bromide	0.25	D	0.25	0.13	mg/L			03/11/17 16:33	2

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

TestAmerica Job ID: 300-5142-1
 SDG: WC1951

Client Sample ID: B395P6

Lab Sample ID: 300-5142-19

Date Collected: 03/10/17 12:40

Matrix: Water

Date Received: 03/10/17 14:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27	D	0.40	0.20	mg/L			03/11/17 16:49	2
Nitrate as N	49	D	0.56	0.28	mg/L			03/12/17 08:06	20
Fluoride	0.31	D	0.10	0.050	mg/L			03/11/17 16:49	2
Nitrite as N	0.038	U D	0.076	0.038	mg/L			03/11/17 16:49	2
Sulfate	94	D	5.0	2.5	mg/L			03/12/17 08:06	20
Bromide	0.25	D	0.25	0.13	mg/L			03/11/17 16:49	2

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 300-7403/5
Matrix: Water
Analysis Batch: 7403

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			03/10/17 11:31	1
Nitrite as N	0.019	U	0.038	0.019	mg/L			03/10/17 11:31	1

Lab Sample ID: LCS 300-7403/6
Matrix: Water
Analysis Batch: 7403

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	2.22		mg/L		98	80 - 120
Nitrite as N	3.04	3.07		mg/L		101	80 - 120

Lab Sample ID: 300-5142-9 MS
Matrix: Water
Analysis Batch: 7403

Client Sample ID: B395D3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	4.7	D	0.452	5.11	X D	mg/L		96	75 - 125
Nitrite as N	1.7	D	0.609	2.32	D	mg/L		109	75 - 125

Lab Sample ID: 300-5142-9 DU
Matrix: Water
Analysis Batch: 7403

Client Sample ID: B395D3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	4.7	D	4.66	D	mg/L		0.4	20
Nitrite as N	1.7	D	1.65	D	mg/L		0.4	20

Lab Sample ID: MB 300-7404/5
Matrix: Water
Analysis Batch: 7404

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			03/10/17 11:31	1
Fluoride	0.025	U	0.050	0.025	mg/L			03/10/17 11:31	1
Sulfate	0.13	U	0.25	0.13	mg/L			03/10/17 11:31	1
Bromide	0.063	U	0.13	0.063	mg/L			03/10/17 11:31	1

Lab Sample ID: LCS 300-7404/6
Matrix: Water
Analysis Batch: 7404

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	15.6		mg/L		98	80 - 120
Fluoride	4.00	3.94		mg/L		99	80 - 120
Sulfate	20.0	19.8		mg/L		99	80 - 120
Bromide	10.0	9.91		mg/L		99	80 - 120

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 300-5142-9 MS
Matrix: Water
Analysis Batch: 7404

Client Sample ID: B395D3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50	D	3.20	52.6	X D	mg/L		93	75 - 125
Fluoride	0.34	D	0.800	1.10	D	mg/L		95	75 - 125
Bromide	0.21	B D	2.00	1.95	D	mg/L		87	75 - 125

Lab Sample ID: 300-5142-9 MS
Matrix: Water
Analysis Batch: 7404

Client Sample ID: B395D3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	91	D	20.0	109	X D	mg/L		92	75 - 125

Lab Sample ID: 300-5142-9 DU
Matrix: Water
Analysis Batch: 7404

Client Sample ID: B395D3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	50	D	49.4	D	mg/L		0.4	20
Fluoride	0.34	D	0.341	D	mg/L		0.5	20
Sulfate	98	D	97.5	D	mg/L		0.3	20
Bromide	0.21	B D	0.208	B D	mg/L		0.1	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 300-7409/3
Matrix: Water
Analysis Batch: 7409

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			03/10/17 16:11	1

Lab Sample ID: LCS 300-7409/4
Matrix: Water
Analysis Batch: 7409

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	0.249		mg/L		99	80 - 120

Lab Sample ID: 300-5142-1 MS
Matrix: Water
Analysis Batch: 7409

Client Sample ID: B395D2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.0026	B	0.0499	0.0504		mg/L		96	75 - 125

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

TestAmerica Job ID: 300-5142-1
 SDG: WC1951

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 300-5142-1 DU
 Matrix: Water
 Analysis Batch: 7409

Client Sample ID: B395D2
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cr (VI)	0.0026	B	0.00260	B	mg/L	--	0	20

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March 29, 2017 QC Association Summary

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

HPLC/IC

Analysis Batch: 7403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-5142-7	B395C4	Total/NA	Water	300.0	
300-5142-7	B395C4	Total/NA	Water	300.0	
300-5142-8	B395F1	Total/NA	Water	300.0	
300-5142-9	B395D3	Total/NA	Water	300.0	
300-5142-10	B395M1	Total/NA	Water	300.0	
300-5142-10	B395M1	Total/NA	Water	300.0	
300-5142-11	B395K2	Total/NA	Water	300.0	
300-5142-11	B395K2	Total/NA	Water	300.0	
300-5142-12	B395H6	Total/NA	Water	300.0	
300-5142-12	B395H6	Total/NA	Water	300.0	
300-5142-13	B395F8	Total/NA	Water	300.0	
300-5142-13	B395F8	Total/NA	Water	300.0	
300-5142-14	B395J1	Total/NA	Water	300.0	
300-5142-14	B395J1	Total/NA	Water	300.0	
300-5142-15	B395J6	Total/NA	Water	300.0	
300-5142-15	B395J6	Total/NA	Water	300.0	
300-5142-16	B395P2	Total/NA	Water	300.0	
300-5142-16	B395P2	Total/NA	Water	300.0	
300-5142-17	B395N8	Total/NA	Water	300.0	
300-5142-17	B395N8	Total/NA	Water	300.0	
300-5142-18	B395N4	Total/NA	Water	300.0	
300-5142-18	B395N4	Total/NA	Water	300.0	
300-5142-19	B395P6	Total/NA	Water	300.0	
300-5142-19	B395P6	Total/NA	Water	300.0	
MB 300-7403/5	Method Blank	Total/NA	Water	300.0	
LCS 300-7403/6	Lab Control Sample	Total/NA	Water	300.0	
300-5142-9 MS	B395D3	Total/NA	Water	300.0	
300-5142-9 DU	B395D3	Total/NA	Water	300.0	

Analysis Batch: 7404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-5142-7	B395C4	Total/NA	Water	300.0	
300-5142-8	B395F1	Total/NA	Water	300.0	
300-5142-9	B395D3	Total/NA	Water	300.0	
300-5142-10	B395M1	Total/NA	Water	300.0	
300-5142-11	B395K2	Total/NA	Water	300.0	
300-5142-12	B395H6	Total/NA	Water	300.0	
300-5142-12	B395H6	Total/NA	Water	300.0	
300-5142-13	B395F8	Total/NA	Water	300.0	
300-5142-13	B395F8	Total/NA	Water	300.0	
300-5142-14	B395J1	Total/NA	Water	300.0	
300-5142-15	B395J6	Total/NA	Water	300.0	
300-5142-16	B395P2	Total/NA	Water	300.0	
300-5142-16	B395P2	Total/NA	Water	300.0	
300-5142-17	B395N8	Total/NA	Water	300.0	
300-5142-17	B395N8	Total/NA	Water	300.0	
300-5142-18	B395N4	Total/NA	Water	300.0	
300-5142-18	B395N4	Total/NA	Water	300.0	
300-5142-19	B395P6	Total/NA	Water	300.0	
300-5142-19	B395P6	Total/NA	Water	300.0	
MB 300-7404/5	Method Blank	Total/NA	Water	300.0	

TestAmerica Richland

March 29, 2017
QC Association Summary

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

TestAmerica Job ID: 300-5142-1
 SDG: WC1951

HPLC/IC (Continued)

Analysis Batch: 7404 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 300-7404/6	Lab Control Sample	Total/NA	Water	300.0	
300-5142-9 MS	B395D3	Total/NA	Water	300.0	
300-5142-9 MS	B395D3	Total/NA	Water	300.0	
300-5142-9 DU	B395D3	Total/NA	Water	300.0	

General Chemistry

Analysis Batch: 7409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
300-5142-1	B395D2	Total/NA	Water	7196A	
300-5142-2	B395F0	Total/NA	Water	7196A	
300-5142-3	B395C3	Total/NA	Water	7196A	
300-5142-4	B395F7	Total/NA	Water	7196A	
300-5142-5	B395K1	Total/NA	Water	7196A	
300-5142-6	B395M0	Total/NA	Water	7196A	
MB 300-7409/3	Method Blank	Total/NA	Water	7196A	
LCS 300-7409/4	Lab Control Sample	Total/NA	Water	7196A	
300-5142-1 MS	B395D2	Total/NA	Water	7196A	
300-5142-1 DU	B395D2	Total/NA	Water	7196A	



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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: B395D2

Date Collected: 03/10/17 08:15

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-1

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			7409	03/10/17 16:15	HR	TAL RCH

Client Sample ID: B395F0

Date Collected: 03/10/17 08:15

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-2

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			7409	03/10/17 16:15	HR	TAL RCH

Client Sample ID: B395C3

Date Collected: 03/10/17 10:05

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-3

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			7409	03/10/17 16:16	HR	TAL RCH

Client Sample ID: B395F7

Date Collected: 03/10/17 11:30

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-4

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			7409	03/10/17 16:16	HR	TAL RCH

Client Sample ID: B395K1

Date Collected: 03/10/17 10:55

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-5

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			7409	03/10/17 16:16	HR	TAL RCH

Client Sample ID: B395M0

Date Collected: 03/10/17 11:15

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-6

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			7409	03/10/17 16:16	HR	TAL RCH

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: B395C4

Date Collected: 03/10/17 10:05

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-7

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	300.0		2			7403	03/10/17 21:35	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/10/17 21:35	ALR	TAL RCH
Total/NA	Analysis	300.0		10			7403	03/12/17 01:35	ALR	TAL RCH

Client Sample ID: B395F1

Date Collected: 03/10/17 08:15

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-8

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	300.0		2			7403	03/11/17 11:32	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 11:32	ALR	TAL RCH

Client Sample ID: B395D3

Date Collected: 03/10/17 08:15

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-9

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	300.0		2			7403	03/11/17 12:17	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 12:17	ALR	TAL RCH

Client Sample ID: B395M1

Date Collected: 03/10/17 11:15

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-10

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	300.0		2			7403	03/11/17 13:02	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 13:02	ALR	TAL RCH
Total/NA	Analysis	300.0		10			7403	03/12/17 04:51	ALR	TAL RCH

Client Sample ID: B395K2

Date Collected: 03/10/17 10:55

Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-11

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	300.0		2			7403	03/11/17 13:17	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 13:17	ALR	TAL RCH
Total/NA	Analysis	300.0		10			7403	03/12/17 05:06	ALR	TAL RCH

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: B395H6

Lab Sample ID: 300-5142-12

Date Collected: 03/10/17 11:43

Matrix: Water

Date Received: 03/10/17 14:00

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			7403	03/11/17 13:32	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 13:32	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7403	03/12/17 05:21	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7404	03/12/17 05:21	ALR	TAL RCH

Client Sample ID: B395F8

Lab Sample ID: 300-5142-13

Date Collected: 03/10/17 11:30

Matrix: Water

Date Received: 03/10/17 14:00

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			7403	03/11/17 13:47	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 13:47	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7403	03/12/17 05:36	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7404	03/12/17 05:36	ALR	TAL RCH

Client Sample ID: B395J1

Lab Sample ID: 300-5142-14

Date Collected: 03/10/17 11:48

Matrix: Water

Date Received: 03/10/17 14:00

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			7403	03/11/17 14:02	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 14:02	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7403	03/12/17 05:51	ALR	TAL RCH

Client Sample ID: B395J6

Lab Sample ID: 300-5142-15

Date Collected: 03/10/17 12:08

Matrix: Water

Date Received: 03/10/17 14:00

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			7403	03/11/17 14:18	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 14:18	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7403	03/12/17 06:06	ALR	TAL RCH

Client Sample ID: B395P2

Lab Sample ID: 300-5142-16

Date Collected: 03/10/17 12:13

Matrix: Water

Date Received: 03/10/17 14:00

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			7403	03/11/17 14:33	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 14:33	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7403	03/12/17 06:21	ALR	TAL RCH

TestAmerica Richland

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: B395P2

Date Collected: 03/10/17 12:13
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-16

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	300.0		20			7404	03/12/17 06:21	ALR	TAL RCH

Client Sample ID: B395N8

Date Collected: 03/10/17 12:18
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-17

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			7403	03/11/17 15:48	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 15:48	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7403	03/12/17 07:06	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7404	03/12/17 07:06	ALR	TAL RCH

Client Sample ID: B395N4

Date Collected: 03/10/17 12:20
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-18

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			7403	03/11/17 16:33	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 16:33	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7403	03/12/17 07:51	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7404	03/12/17 07:51	ALR	TAL RCH

Client Sample ID: B395P6

Date Collected: 03/10/17 12:40
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-19

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			7403	03/11/17 16:49	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 16:49	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7403	03/12/17 08:06	ALR	TAL RCH
Total/NA	Analysis	300.0		20			7404	03/12/17 08:06	ALR	TAL RCH

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 300-7403/5

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			7403	03/10/17 11:31	ALR	TAL RCH

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Client Sample ID: Method Blank

Lab Sample ID: MB 300-7404/5

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			7404	03/10/17 11:31	ALR	TAL RCH

Client Sample ID: Method Blank

Lab Sample ID: MB 300-7409/3

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			7409	03/10/17 16:11	HR	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-7403/6

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			7403	03/10/17 11:46	ALR	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-7404/6

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			7404	03/10/17 11:46	ALR	TAL RCH

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 300-7409/4

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			7409	03/10/17 16:12	HR	TAL RCH

Client Sample ID: B395D2

Lab Sample ID: 300-5142-1 MS

Date Collected: 03/10/17 08:15

Matrix: Water

Date Received: 03/10/17 14:00

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			7409	03/10/17 16:12	HR	TAL RCH

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

TestAmerica Job ID: 300-5142-1
 SDG: WC1951

Client Sample ID: B395D3
Date Collected: 03/10/17 08:15
Date Received: 03/10/17 14:00

Lab Sample ID: 300-5142-9 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	300.0		2			7403	03/11/17 12:32	ALR	TAL RCH
Total/NA	Analysis	300.0		2			7404	03/11/17 12:32	ALR	TAL RCH
Total/NA	Analysis	300.0		10			7404	03/12/17 04:21	ALR	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: F16-046

TestAmerica Job ID: 300-5142-1
SDG: WC1951

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



March 29, 2017 Sample Summary

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

TestAmerica Job ID: 300-5142-1
SDG: WC1951

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
300-5142-1	B395D2	Water	03/10/17 08:15	03/10/17 14:00
300-5142-2	B395F0	Water	03/10/17 08:15	03/10/17 14:00
300-5142-3	B395C3	Water	03/10/17 10:05	03/10/17 14:00
300-5142-4	B395F7	Water	03/10/17 11:30	03/10/17 14:00
300-5142-5	B395K1	Water	03/10/17 10:55	03/10/17 14:00
300-5142-6	B395M0	Water	03/10/17 11:15	03/10/17 14:00
300-5142-7	B395C4	Water	03/10/17 10:05	03/10/17 14:00
300-5142-8	B395F1	Water	03/10/17 08:15	03/10/17 14:00
300-5142-9	B395D3	Water	03/10/17 08:15	03/10/17 14:00
300-5142-10	B395M1	Water	03/10/17 11:15	03/10/17 14:00
300-5142-11	B395K2	Water	03/10/17 10:55	03/10/17 14:00
300-5142-12	B395H6	Water	03/10/17 11:43	03/10/17 14:00
300-5142-13	B395F8	Water	03/10/17 11:30	03/10/17 14:00
300-5142-14	B395J1	Water	03/10/17 11:48	03/10/17 14:00
300-5142-15	B395J6	Water	03/10/17 12:08	03/10/17 14:00
300-5142-16	B395P2	Water	03/10/17 12:13	03/10/17 14:00
300-5142-17	B395N8	Water	03/10/17 12:18	03/10/17 14:00
300-5142-18	B395N4	Water	03/10/17 12:20	03/10/17 14:00
300-5142-19	B395P6	Water	03/10/17 12:40	03/10/17 14:00

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 300-5142-1

SDG Number: WC1951

Login Number: 5142

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.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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	

