

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-27211-1

TestAmerica Sample Delivery Group: SL2817
Client Project/Site: I18-007

For:

CH2M Hill Plateau Remediation Company
PO BOX 1600, MS H8-41
Richland, Washington 99352

Attn: Mr. Scot Fitzgerald



Authorized for release by:
4/9/2018 1:53:47 PM

Jayna Awalt, Project Manager II
(314)298-8566
jayna.awalt@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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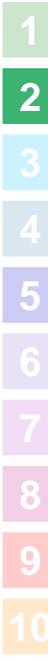


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Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
SDG: SL2817

Job ID: 160-27211-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
Richland, Washington 99352
April 9, 2018
Attention: Scot Fitzgerald

SDG	: SL2817
Number of Samples	: 4 samples
Sample Matrix	: Water
Data Deliverable	: Summary
Date SDG Closed	: March 8, 2018

II. Introduction

On March 8, 4 samples were received by TestAmerica - St. Louis for analysis. The samples were received within temperature criteria. See the COC and receipt checklists for documentation of any variations on receipt conditions and temperature. Upon receipt, samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

The following SAFs are associated with this SDG: I18-007

III. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits. All results are based upon samples as they were received, i.e. wet weight, unless otherwise noted on the data sheets. See the attached Methods Summary Form for the methods used in this SDG.

MS/MSD/Dup analysis was done per the client requirements. Analytical batches that did not contain matrix QC were analyzed with an LCS/LCS duplicate.

Note: For Metals analyses, per standard practice, all 6020 water and soil samples are initially prepared at 2x dilution. This standard dilution does not affect reporting limits as MDL studies are also prepared in the same manner. These dilutions do not necessitate a narrative note; however, they are flagged "D" due to a limitation in the LIMS.

For solid matrices, all Metals analyses (including Hg) use a Standard Reference Material for the Laboratory Control Sample (LCS). Certificate for this source material may be obtained from TASL.

For Anion analysis, samples have been started at a 2x dilution per CHPRC direction. The samples are flagged accordingly with a "D" flag if sample concentration is above the MDL/RL. Non-conformance will be included in the below section only if dilution is greater than 2x.

For WTPH methods, the lab utilizes method 8015B. Per CHPRC direction, the method name in the electronic data has been modified to read WTPH in the place of 8015B.

Per CHPRC direction, due to the short hold times for Nitrate, Nitrite and Phosphate by IC (48 hours) as well as pH analysis (24 hours), a SIR request is not needed when samples are run outside 1x hold but within 2x hold. A narrative comment will be included below if a sample is run outside the lab-specified hold time for waters.

For extractable and volatile organic analyses, several analytes are considered poor performers and will not meet CHPRC QC limits. Per CHPRC direction, the lab's statistical limits have been reported. Excursions outside these statistical limits will include a non-conformance in the sections below.

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
SDG: SL2817

Job ID: 160-27211-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

IV. Definitions

QCBLK-	Quality Control Blank, Method Blank
QCLCS-	Quality Control Laboratory Control Sample, Blank Spike
DUP-	Laboratory Duplicate
MS-	Matrix Spike
MSD-	Matrix Spike Duplicate

The term "Detection Limit" used in the analytical data report refers to either the lab's standard reporting limits or contractually required reporting limits, whichever is applicable.

The following data qualifiers may be applicable to the results in this report, as appropriate.

- **B** - For inorganic analyses, the sample result is greater than the MDL but less than the RL.
- **B** - For organic analyses, Method Blank contamination. The Method Blank contains the target analyte above the MDL/RL and Method Blank is greater than 5% of the sample concentration.
- **B** - For inorganics and radiochemistry, Method Blank reported above the MDC/MDL.
- **J** - For organic analyses, the sample is estimated and less than the RL. If on Method Blank, indicates Method Blank contamination.
- **C** - For inorganic analyses, Method Blank contamination. The Method Blank contains the target analyte at a concentration above the MDL/RL and Method Blank concentration is greater than 5% of the sample concentration.
- **D** - For all analyses, the sample result was obtained from the analysis of a dilution. For ICPMS Metals analyses, per standard practice, all samples are initially prepared at a 2x dilution. This standard dilution does not affect reporting limits as MDL studies are also prepared in the same manner and will not be narrated below. Only dilutions above 2x will be narrated and considered a true dilution for these samples.
- **N** - For inorganics, rad and GC analyses, the spike/spike duplicate recoveries are outside QC limits.
- **T** - For GCMS analyses, the spike/spike duplicate recoveries are outside QC limits.
- **o** - For all analyses, the LCS (LCSD) recoveries are outside QC limits.
- **P** - For organic analyses (PCB/Pests only), the aroclor target analyte has greater than 25% difference for detected concentrations between the two GC columns.
- **X**- Organics and Anions IC - Sample concentration over calibration and/or surrogate recovery outside QC limits.
- **X**- Inorganics - The analyte present in the original sample is > 4x the spike concentration.
- **X**- Radiochemistry - Carrier or Tracer recovery is outside limits.
- **Z**- Sample was prepped or analyzed beyond the specified sample holding time.
- **y** - RPD is outside established limits.

ICP Metals**Batch: 355710**

The serial dilution performed for the following sample associated with batch preparation batch 160-355260 and analytical batch 160-355710 was outside control limits for Calcium indicating a potential matrix interference: (160-27211-A-1-A SD ^).

ICPMS Metals**Batch: 356788**

The low level check (CCVL) was outside the upper QC limits for Thorium. Associated samples which are below the reporting limit for the contaminant do not require re-analysis. Original results are reported. (CRI 160-356788/10)

There were no observations or non-conformances associated with the following methods:

TOX

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
SDG: SL2817

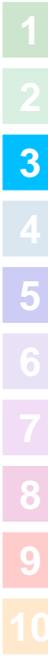
Job ID: 160-27211-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

We certify that this data package is in compliance with the SOW, both technically and for completeness, including a full description of, explanation of, and corrective actions for, any and all deviations, from either the analyses requested or the case narrative requested. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager or designee and the laboratory's client services representative as verified by their signature on this report.

Reviewed and approved:

Jayna Awalt
St. Louis Project Manager



Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 160-27211-1

SDG Number: SL2817

Login Number: 27211

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian J

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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	0.2
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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CH2M Hill Plateau Remediation Company <i>SL2817</i>	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C.# I18-007-016
		Page 1 of 1

Collector: Larry Rosane <small>ICPRC</small>	Contact/Requester: Karen Waters-Husted	Telephone No.: 509-376-4650
SAF No.: I18-007	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071 304121
Project Title: ERDF, MARCH 2018	Logbook No.: HNF-N-506 <i>98/52</i>	Ice Chest No.: <i>6005-541</i> <i>KS 3/6/18</i>
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Commercial Carrier	Bill of Lading/Air Bill No.: <i>771746096720</i>
Protocol: CERCLA	Priority: 30 Days	Offsite Property No.: <i>N/A</i>

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

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3HLR7	N	W	<i>3-7-18</i>	<i>0955</i>	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	6 Months	HNO3 to pH <2
B3HDP2	Y	W	<i>3-7-18</i>	<i>0955</i>	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	6 Months	HNO3 to pH <2

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Relinquished By: Larry Rosane <small>ICPRC</small> <i>Larry Rosane</i> MAR 07 2018 <i>1250</i> <small>Print First and Last Name Signature Date/Time</small>	Received By: Larry Wall <small>ICPRC</small> <i>Larry Wall</i> MAR 07 2018 <i>1250</i> <small>Print First and Last Name Signature Date/Time</small>	Matrix * S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wipe W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By: Larry Wall <small>ICPRC</small> <i>Larry Wall</i> MAR 07 2018 <i>1400</i> <small>Print First and Last Name Signature Date/Time</small>	Received By: FEDEX <small>Print First and Last Name Signature Date/Time</small>	
Relinquished By: FEDEX <small>Print First and Last Name Signature Date/Time</small>	Received By: Bill Davis <small>Print First and Last Name Signature Date/Time</small> <i>3/8/18 1000</i>	
Relinquished By: _____ <small>Print First and Last Name Signature Date/Time</small>	Received By: _____ <small>Print First and Last Name Signature Date/Time</small>	
FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process): _____		Disposed By: _____ Date/Time: _____

4/9/2018

REV.0



CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C.# I18-007-022		
						Page 1 of 1		
Collector: Larry Rosano ICHPRC		Contact/Requester: Karen Waters-Husted		Telephone No.: 509-376-4650				
SAF No.: I18-007		Sampling Origin: Hanford Site		Purchase Order/Charge Code: 900071 304121				
Project Title: ERDF, MARCH 2018		Logbook No.: HNF-N-506 98/52		Ice Chest No.: GUS-541 KS 3/6/18				
Shipped To (Lab): TestAmerica St. Louis		Method of Shipment Commercial Carrier		Bill of Lading/Air Bill No.: 771746096720				
Protocol CERCLA		Priority: 30 Days		Offsite Property No.: N/A				
POSSIBLE SAMPLE HAZARDS/REMARK ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1				SPECIAL INSTRUCTIONS N/A				
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3HLT4	N	W	3-7-18	0836	1x1-L aGs*	9020_TOX: COMMON	28 Days	H2SO4 to pH <2 / Cool <=6C

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Relinquished By: Larry Rosano ICHPRC	Signature: <i>Larry Rosano</i>	Date/Time: MAR 07 2018 0845	Received By: Frank Hall ICHPRC	Signature: <i>Frank Hall</i>	Date/Time: MAR 07 2018 0845	Matrix * S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wipe W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By: Frank Hall ICHPRC	Signature: <i>Frank Hall</i>	Date/Time: MAR 07 2018 1400	Received By: FEDEX	Signature: _____	Date/Time: _____	
Relinquished By: FEDEX	Signature: _____	Date/Time: _____	Received By: <i>Ben Jones</i>	Signature: <i>B-Jones</i>	Date/Time: 3/8/18 1:00	
Relinquished By: _____	Signature: _____	Date/Time: _____	Received By: _____	Signature: _____	Date/Time: _____	
FINAL SAMPLE DISPOSITION			Disposal Method (e.g., Return to customer, per lab procedure, used in process):		Disposed By: _____	Date/Time: _____

REV.0

4/9/2018



CH2M Hill Plateau Remediation Company <i>9/28/17</i>		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C.# 118-007-026		
						Page 1 of 1		
Collector: Larry Rosano ICHPRC		Contact/Requester: Karen Waters-Husted			Telephone No.: 509-376-4650			
SAF No.: I18-007		Sampling Origin: Hanford Site			Purchase Order/Charge Code: 300071 304121			
Project Title: ERDF, MARCH 2018		Logbook No.: HNF-N-506 <i>98/52</i>			Ice Chest No.: <i>60854</i> <i>LS 3/6/18</i>			
Shipped To (Lab): TestAmerica St. Louis		Method of Shipment Commercial Carrier			Bill of Lading/Air Bill No.: 771746096720			
Protocol CERCLA		Priority: 30 Days			Offsite Property No.: <i>N/A</i>			
POSSIBLE SAMPLE HAZARDS/REMARK ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1				SPECIAL INSTRUCTIONS N/A				
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B3HLT8	N	W	<i>3-7-18</i>	<i>0730</i>	1x1-L aGs*	9020_TOX: COMMON	28 Days	H2SO4 to pH <2 / Cool <=6C

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Relinquished By: Larry Rosano ICHPRC <i>Larry Rosano</i> MAR 07 2018 0845	Received By: Frank Heil ICHPRC <i>Frank Heil</i> MAR 07 2018 0845	Matrix * S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wipe W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By: Frank Heil ICHPRC <i>Frank Heil</i> MAR 07 2018 1400	Received By: FEDEX		
Relinquished By: FEDEX	Received By: Brian Davis <i>Brian Davis</i> 3/8/18 1000		
Relinquished By:	Received By:		
Print First and Last Name Signature Date/Time	Print First and Last Name Signature Date/Time		
Print First and Last Name Signature Date/Time	Print First and Last Name Signature Date/Time		
Print First and Last Name Signature Date/Time	Print First and Last Name Signature Date/Time		
Print First and Last Name Signature Date/Time	Print First and Last Name Signature Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process):	Disposed By:	Date/Time:

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1/16/2018





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771746096720

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Wed 3/07/2018

Richland, WA US

Actual delivery:

Thu 3/08/2018 9:49 am

EARTH CITY, MO US

Delivered

Signed for by: B.DANIELS

Travel History

Date/Time	Activity	Location
3/08/2018 - Thursday		
9:49 am	Delivered	EARTH CITY, MO
7:08 am	On FedEx vehicle for delivery	EARTH CITY, MO
7:04 am	At local FedEx facility	EARTH CITY, MO
5:46 am	At destination sort facility	BERKELEY, MO
4:55 am	Departed FedEx location	MEMPHIS, TN
12:21 am	Arrived at FedEx location	MEMPHIS, TN
3/07/2018 - Wednesday		
4:51 pm	Left FedEx origin facility	PASCO, WA
3:43 pm	Shipment information sent to FedEx	
3:17 pm	Picked up	PASCO, WA

Shipment Facts

Tracking Number	771746096720	Service	FedEx Standard Overnight
Weight	75 lbs / 34.02 kgs	Delivered To	Shipping/Receiving
Total pieces	1	Total shipment weight	75 lbs / 34.02 kgs
Terms	Recipient	Shipper reference	GWS 541
Packaging	Your Packaging	Special handling section	Deliver Weekday
Standard transit	3/08/2018 by 3:00 pm		

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Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
SDG: SL2817

Qualifiers

Metals

Qualifier	Qualifier Description
U	Analyzed for but not detected.
B	Estimated result. Result is less than the RL, but greater than MDL
D	The reported value is from a dilution.
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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: I18-007

TestAmerica Job ID: 160-27211-1
SDG: SL2817

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL SL
6020A	Metals (ICP/MS)	SW846	TAL SL
9020B	Organic Halides, Total (TOX)	SW846	TAL SL

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
SDG: SL2817

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-27211-1	B3HLR7	Water	03/07/18 09:55	03/08/18 10:00
160-27211-2	B3HDP2	Water	03/07/18 09:55	03/08/18 10:00
160-27211-3	B3HLT4	Water	03/07/18 08:36	03/08/18 10:00
160-27211-4	B3HLT8	Water	03/07/18 07:30	03/08/18 10:00

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04/09/2018
Client Sample Results

REV.0

Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
 SDG: SL2817

Method: 6010C - Metals (ICP)

Client Sample ID: B3HLR7
Date Collected: 03/07/18 09:55
Date Received: 03/08/18 10:00

Lab Sample ID: 160-27211-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	42800		1000	300	ug/L		03/13/18 10:24	03/14/18 14:28	1
Iron	220		100	30.0	ug/L		03/13/18 10:24	03/14/18 14:28	1
Magnesium	11400		1000	300	ug/L		03/13/18 10:24	03/14/18 14:28	1
Potassium	5090		5000	1500	ug/L		03/13/18 10:24	03/14/18 14:28	1
Sodium	18900		1000	300	ug/L		03/13/18 10:24	03/14/18 14:28	1
Vanadium	27.4	B	50.0	4.0	ug/L		03/13/18 10:24	03/14/18 14:28	1
Boron	25.0	U	100	25.0	ug/L		03/13/18 10:24	03/14/18 14:28	1

Method: 6010C - Metals (ICP) - Dissolved

Client Sample ID: B3HDP2
Date Collected: 03/07/18 09:55
Date Received: 03/08/18 10:00

Lab Sample ID: 160-27211-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	25.0	U	100	25.0	ug/L		03/13/18 10:24	03/14/18 14:45	1
Calcium	42200		1000	300	ug/L		03/13/18 10:24	03/14/18 14:45	1
Iron	30.0	U	100	30.0	ug/L		03/13/18 10:24	03/14/18 14:45	1
Magnesium	11200		1000	300	ug/L		03/13/18 10:24	03/14/18 14:45	1
Potassium	4990	B	5000	1500	ug/L		03/13/18 10:24	03/14/18 14:45	1
Sodium	18600		1000	300	ug/L		03/13/18 10:24	03/14/18 14:45	1
Vanadium	22.4	B	50.0	4.0	ug/L		03/13/18 10:24	03/14/18 14:45	1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: B3HLR7
Date Collected: 03/07/18 09:55
Date Received: 03/08/18 10:00

Lab Sample ID: 160-27211-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	47.4	B D	50.0	20.0	ug/L		03/13/18 10:27	03/20/18 23:50	2
Antimony	2.0	U D	5.0	2.0	ug/L		03/13/18 10:27	03/20/18 23:50	2
Arsenic	4.0	U D	10.0	4.0	ug/L		03/13/18 10:27	03/20/18 23:50	2
Barium	36.5	D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:50	2
Beryllium	0.20	U D	0.50	0.20	ug/L		03/13/18 10:27	03/20/18 23:50	2
Cadmium	0.20	U D	0.50	0.20	ug/L		03/13/18 10:27	03/20/18 23:50	2
Chromium	20.1	D	10.0	4.0	ug/L		03/13/18 10:27	03/20/18 23:50	2
Cobalt	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:50	2
Copper	1.4	D	1.0	0.40	ug/L		03/13/18 10:27	03/21/18 17:38	2
Lead	1.8	B D	3.0	1.0	ug/L		03/13/18 10:27	03/20/18 23:50	2
Manganese	27.0	D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:50	2
Molybdenum	10.7	D	5.0	2.0	ug/L		03/13/18 10:27	03/20/18 23:50	2
Nickel	2.0	U D	5.0	2.0	ug/L		03/13/18 10:27	03/20/18 23:50	2
Selenium	6.5	D	5.0	2.0	ug/L		03/13/18 10:27	03/20/18 23:50	2
Silver	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:50	2
Strontium	179	D	5.0	0.50	ug/L		03/13/18 10:27	03/20/18 23:50	2
Thallium	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:50	2
Thorium	1.5	B D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:50	2
Tin	1.2	U D	2.0	1.2	ug/L		03/13/18 10:27	03/20/18 23:50	2
Uranium	2.2	D	1.0	0.40	ug/L		03/13/18 10:27	03/20/18 23:50	2
Zinc	7.5	U D	20.0	7.5	ug/L		03/13/18 10:27	03/20/18 23:50	2

TestAmerica St. Louis

04/09/2018
Client Sample Results

REV.0

Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
 SDG: SL2817

Method: 6020A - Metals (ICP/MS) - Dissolved

Client Sample ID: B3HDP2
Date Collected: 03/07/18 09:55
Date Received: 03/08/18 10:00

Lab Sample ID: 160-27211-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U D	50.0	20.0	ug/L		03/13/18 10:27	03/21/18 00:17	2
Antimony	2.0	U D	5.0	2.0	ug/L		03/13/18 10:27	03/21/18 00:17	2
Arsenic	4.0	U D	10.0	4.0	ug/L		03/13/18 10:27	03/21/18 00:17	2
Barium	33.3	D	2.0	0.90	ug/L		03/13/18 10:27	03/21/18 00:17	2
Beryllium	0.20	U D	0.50	0.20	ug/L		03/13/18 10:27	03/21/18 00:17	2
Cadmium	0.41	B D	0.50	0.20	ug/L		03/13/18 10:27	03/21/18 00:17	2
Chromium	18.0	D	10.0	4.0	ug/L		03/13/18 10:27	03/21/18 00:17	2
Cobalt	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/21/18 00:17	2
Copper	0.40	U D	1.0	0.40	ug/L		03/13/18 10:27	03/21/18 18:25	2
Lead	1.0	U D	3.0	1.0	ug/L		03/13/18 10:27	03/21/18 00:17	2
Manganese	2.0	D	2.0	0.90	ug/L		03/13/18 10:27	03/21/18 00:17	2
Molybdenum	9.0	D	5.0	2.0	ug/L		03/13/18 10:27	03/21/18 00:17	2
Nickel	2.0	U D	5.0	2.0	ug/L		03/13/18 10:27	03/21/18 00:17	2
Selenium	5.1	D	5.0	2.0	ug/L		03/13/18 10:27	03/21/18 00:17	2
Silver	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/21/18 00:17	2
Strontium	174	D	5.0	0.50	ug/L		03/13/18 10:27	03/21/18 00:17	2
Thallium	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/21/18 00:17	2
Thorium	1.6	B D	2.0	0.90	ug/L		03/13/18 10:27	03/21/18 00:17	2
Tin	1.2	U D	2.0	1.2	ug/L		03/13/18 10:27	03/21/18 00:17	2
Uranium	2.4	D	1.0	0.40	ug/L		03/13/18 10:27	03/21/18 00:17	2
Zinc	7.5	U D	20.0	7.5	ug/L		03/13/18 10:27	03/21/18 00:17	2

General Chemistry

Client Sample ID: B3HLT4
Date Collected: 03/07/18 08:36
Date Received: 03/08/18 10:00

Lab Sample ID: 160-27211-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	3.6	B	5.0	2.1	ug/L		04/02/18 12:00	04/03/18 00:38	1

Client Sample ID: B3HLT8
Date Collected: 03/07/18 07:30
Date Received: 03/08/18 10:00

Lab Sample ID: 160-27211-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	2.1	U	5.0	2.1	ug/L		04/02/18 12:00	04/03/18 01:09	1

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
SDG: SL2817

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-355260/1-A
Matrix: Water
Analysis Batch: 355710

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 355260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	300	U	1000	300	ug/L		03/13/18 10:24	03/14/18 14:19	1
Iron	30.0	U	100	30.0	ug/L		03/13/18 10:24	03/14/18 14:19	1
Magnesium	300	U	1000	300	ug/L		03/13/18 10:24	03/14/18 14:19	1
Potassium	1500	U	5000	1500	ug/L		03/13/18 10:24	03/14/18 14:19	1
Sodium	300	U	1000	300	ug/L		03/13/18 10:24	03/14/18 14:19	1
Boron	25.0	U	100	25.0	ug/L		03/13/18 10:24	03/14/18 14:19	1
Vanadium	4.0	U	50.0	4.0	ug/L		03/13/18 10:24	03/14/18 14:19	1

Lab Sample ID: LCS 160-355260/2-A
Matrix: Water
Analysis Batch: 355710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 355260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Calcium	10000	10580		ug/L		106	80 - 120
Iron	10000	9657		ug/L		97	80 - 120
Magnesium	10000	9574		ug/L		96	80 - 120
Potassium	10000	9734		ug/L		97	80 - 120
Sodium	10000	9908		ug/L		99	80 - 120
Boron	200	192.5		ug/L		96	80 - 120
Vanadium	1000	947.5		ug/L		95	80 - 120

Lab Sample ID: 160-27211-1 MS
Matrix: Water
Analysis Batch: 355710

Client Sample ID: B3HLR7
Prep Type: Total/NA
Prep Batch: 355260

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Calcium	42800		10000	52390	X	ug/L		96	75 - 125
Iron	220		10000	9888		ug/L		97	75 - 125
Magnesium	11400		10000	20850		ug/L		94	75 - 125
Potassium	5090		10000	14790		ug/L		97	75 - 125
Sodium	18900		10000	28670		ug/L		98	75 - 125
Boron	25.0	U	200	201.6		ug/L		101	75 - 125
Vanadium	27.4	B	1000	983.0		ug/L		96	75 - 125

Lab Sample ID: 160-27211-1 MSD
Matrix: Water
Analysis Batch: 355710

Client Sample ID: B3HLR7
Prep Type: Total/NA
Prep Batch: 355260

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Calcium	42800		10000	51450	X	ug/L		87	75 - 125	2	20
Iron	220		10000	9725		ug/L		95	75 - 125	2	20
Magnesium	11400		10000	20550		ug/L		91	75 - 125	1	20
Potassium	5090		10000	14740		ug/L		96	75 - 125	0	20
Sodium	18900		10000	28330		ug/L		95	75 - 125	1	20
Boron	25.0	U	200	200.6		ug/L		100	75 - 125	0	20
Vanadium	27.4	B	1000	975.4		ug/L		95	75 - 125	1	20

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
SDG: SL2817

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 160-355261/1-A
Matrix: Water
Analysis Batch: 356788

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 355261

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20.0	U D	50.0	20.0	ug/L		03/13/18 10:27	03/20/18 23:37	2
Antimony	2.0	U D	5.0	2.0	ug/L		03/13/18 10:27	03/20/18 23:37	2
Arsenic	4.0	U D	10.0	4.0	ug/L		03/13/18 10:27	03/20/18 23:37	2
Barium	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:37	2
Beryllium	0.20	U D	0.50	0.20	ug/L		03/13/18 10:27	03/20/18 23:37	2
Cadmium	0.20	U D	0.50	0.20	ug/L		03/13/18 10:27	03/20/18 23:37	2
Chromium	4.0	U D	10.0	4.0	ug/L		03/13/18 10:27	03/20/18 23:37	2
Cobalt	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:37	2
Lead	1.0	U D	3.0	1.0	ug/L		03/13/18 10:27	03/20/18 23:37	2
Manganese	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:37	2
Molybdenum	2.0	U D	5.0	2.0	ug/L		03/13/18 10:27	03/20/18 23:37	2
Nickel	2.0	U D	5.0	2.0	ug/L		03/13/18 10:27	03/20/18 23:37	2
Selenium	2.0	U D	5.0	2.0	ug/L		03/13/18 10:27	03/20/18 23:37	2
Silver	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:37	2
Strontium	0.50	U D	5.0	0.50	ug/L		03/13/18 10:27	03/20/18 23:37	2
Thallium	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:37	2
Thorium	0.90	U D	2.0	0.90	ug/L		03/13/18 10:27	03/20/18 23:37	2
Tin	1.2	U D	2.0	1.2	ug/L		03/13/18 10:27	03/20/18 23:37	2
Uranium	0.40	U D	1.0	0.40	ug/L		03/13/18 10:27	03/20/18 23:37	2
Zinc	7.5	U D	20.0	7.5	ug/L		03/13/18 10:27	03/20/18 23:37	2

Lab Sample ID: MB 160-355261/1-A
Matrix: Water
Analysis Batch: 356991

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 355261

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.40	U D	1.0	0.40	ug/L		03/13/18 10:27	03/21/18 17:25	2

Lab Sample ID: LCS 160-355261/2-A
Matrix: Water
Analysis Batch: 356788

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 355261

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aluminum	10000	9840	D	ug/L		98	80 - 120
Antimony	500	482.1	D	ug/L		96	80 - 120
Arsenic	1000	971.4	D	ug/L		97	80 - 120
Barium	1000	993.9	D	ug/L		99	80 - 120
Beryllium	100	95.26	D	ug/L		95	80 - 120
Cadmium	1000	969.7	D	ug/L		97	80 - 120
Chromium	1000	1016	D	ug/L		102	80 - 120
Cobalt	1000	1080	D	ug/L		108	80 - 120
Lead	1000	962.2	D	ug/L		96	80 - 120
Manganese	1000	1043	D	ug/L		104	80 - 120
Molybdenum	500	486.7	D	ug/L		97	80 - 120
Nickel	1000	1032	D	ug/L		103	80 - 120
Selenium	500	472.3	D	ug/L		94	80 - 120
Silver	200	198.6	D	ug/L		99	80 - 120
Strontium	1000	977.8	D	ug/L		98	80 - 120

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
SDG: SL2817

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 160-355261/2-A
Matrix: Water
Analysis Batch: 356788

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 355261

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Thallium	200	203.4	D	ug/L		102	80 - 120
Thorium	1000	982.3	D	ug/L		98	80 - 120
Tin	1000	958.5	D	ug/L		96	80 - 120
Uranium	1000	984.3	D	ug/L		98	80 - 120
Zinc	1000	975.4	D	ug/L		98	80 - 120

Lab Sample ID: LCS 160-355261/2-A
Matrix: Water
Analysis Batch: 356991

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 355261

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Copper	1000	1078	D	ug/L		108	80 - 120

Lab Sample ID: 160-27211-1 MS
Matrix: Water
Analysis Batch: 356788

Client Sample ID: B3HLR7
Prep Type: Total/NA
Prep Batch: 355261

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Aluminum	47.4	B D	10000	10130	D	ug/L		101	75 - 125
Antimony	2.0	U D	500	485.4	D	ug/L		97	75 - 125
Arsenic	4.0	U D	1000	1003	D	ug/L		100	75 - 125
Barium	36.5	D	1000	1003	D	ug/L		97	75 - 125
Beryllium	0.20	U D	100	94.54	D	ug/L		95	75 - 125
Cadmium	0.20	U D	1000	969.8	D	ug/L		97	75 - 125
Chromium	20.1	D	1000	1065	D	ug/L		104	75 - 125
Cobalt	0.90	U D	1000	1073	D	ug/L		107	75 - 125
Lead	1.8	B D	1000	940.7	D	ug/L		94	75 - 125
Manganese	27.0	D	1000	1083	D	ug/L		106	75 - 125
Molybdenum	10.7	D	500	487.9	D	ug/L		95	75 - 125
Nickel	2.0	U D	1000	1025	D	ug/L		102	75 - 125
Selenium	6.5	D	500	497.5	D	ug/L		98	75 - 125
Silver	0.90	U D	200	191.3	D	ug/L		96	75 - 125
Strontium	179	D	1000	1128	D	ug/L		95	75 - 125
Thallium	0.90	U D	200	201.3	D	ug/L		101	75 - 125
Thorium	1.5	B D	1000	976.8	D	ug/L		98	75 - 125
Tin	1.2	U D	1000	952.4	D	ug/L		95	75 - 125
Uranium	2.2	D	1000	976.1	D	ug/L		97	75 - 125
Zinc	7.5	U D	1000	993.7	D	ug/L		99	75 - 125

Lab Sample ID: 160-27211-1 MS
Matrix: Water
Analysis Batch: 356991

Client Sample ID: B3HLR7
Prep Type: Total/NA
Prep Batch: 355261

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Copper	1.4	D	1000	1058	D	ug/L		106	75 - 125

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
SDG: SL2817

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 160-27211-1 MSD
Matrix: Water
Analysis Batch: 356788

Client Sample ID: B3HLR7
Prep Type: Total/NA
Prep Batch: 355261

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Aluminum	47.4	B D	10000	9555	D	ug/L		95	75 - 125	6	20
Antimony	2.0	U D	500	494.2	D	ug/L		99	75 - 125	2	20
Arsenic	4.0	U D	1000	971.8	D	ug/L		97	75 - 125	3	20
Barium	36.5	D	1000	1020	D	ug/L		98	75 - 125	2	20
Beryllium	0.20	U D	100	95.44	D	ug/L		95	75 - 125	1	20
Cadmium	0.20	U D	1000	969.0	D	ug/L		97	75 - 125	0	20
Chromium	20.1	D	1000	1009	D	ug/L		99	75 - 125	5	20
Cobalt	0.90	U D	1000	1035	D	ug/L		103	75 - 125	4	20
Lead	1.8	B D	1000	938.5	D	ug/L		94	75 - 125	0	20
Manganese	27.0	D	1000	1030	D	ug/L		100	75 - 125	5	20
Molybdenum	10.7	D	500	489.2	D	ug/L		96	75 - 125	0	20
Nickel	2.0	U D	1000	981.7	D	ug/L		98	75 - 125	4	20
Selenium	6.5	D	500	490.9	D	ug/L		97	75 - 125	1	20
Silver	0.90	U D	200	193.0	D	ug/L		96	75 - 125	1	20
Strontium	179	D	1000	1127	D	ug/L		95	75 - 125	0	20
Thallium	0.90	U D	200	198.4	D	ug/L		99	75 - 125	1	20
Thorium	1.5	B D	1000	971.8	D	ug/L		97	75 - 125	1	20
Tin	1.2	U D	1000	963.8	D	ug/L		96	75 - 125	1	20
Uranium	2.2	D	1000	970.6	D	ug/L		97	75 - 125	1	20
Zinc	7.5	U D	1000	956.6	D	ug/L		96	75 - 125	4	20

Lab Sample ID: 160-27211-1 MSD
Matrix: Water
Analysis Batch: 356991

Client Sample ID: B3HLR7
Prep Type: Total/NA
Prep Batch: 355261

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Copper	1.4	D	1000	1043	D	ug/L		104	75 - 125	1	20

Method: 9020B - Organic Halides, Total (TOX)

Lab Sample ID: MB 160-358732/1-A
Matrix: Water
Analysis Batch: 358956

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 358732

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	2.1	U	5.0	2.1	ug/L		04/02/18 12:00	04/02/18 15:25	1

Lab Sample ID: LCS 160-358732/2-A
Matrix: Water
Analysis Batch: 358956

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 358732

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Halogens, Total Organic	100	97.51		ug/L		98	90 - 116

Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
 SDG: SL2817

Method: 9020B - Organic Halides, Total (TOX) (Continued)

Lab Sample ID: 160-27163-A-13-C MS
Matrix: Water
Analysis Batch: 358956

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 358732
 %Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Halogens, Total Organic	5.0		100	103.8		ug/L		99	85 - 117

Lab Sample ID: 160-27163-A-13-B DU
Matrix: Water
Analysis Batch: 358956

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 358732

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Halogens, Total Organic	5.0		5.32		ug/L		7	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

Client: CH2M Hill Plateau Remediation Company
Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
SDG: SL2817

Metals

Prep Batch: 355260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27211-1	B3HLR7	Total/NA	Water	3010A	
160-27211-2	B3HDP2	Dissolved	Water	3010A	
MB 160-355260/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-355260/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-27211-1 MS	B3HLR7	Total/NA	Water	3010A	
160-27211-1 MSD	B3HLR7	Total/NA	Water	3010A	

Prep Batch: 355261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27211-1	B3HLR7	Total/NA	Water	3010A	
160-27211-2	B3HDP2	Dissolved	Water	3010A	
MB 160-355261/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-355261/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-27211-1 MS	B3HLR7	Total/NA	Water	3010A	
160-27211-1 MSD	B3HLR7	Total/NA	Water	3010A	

Analysis Batch: 355710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27211-1	B3HLR7	Total/NA	Water	6010C	355260
160-27211-2	B3HDP2	Dissolved	Water	6010C	355260
MB 160-355260/1-A	Method Blank	Total/NA	Water	6010C	355260
LCS 160-355260/2-A	Lab Control Sample	Total/NA	Water	6010C	355260
160-27211-1 MS	B3HLR7	Total/NA	Water	6010C	355260
160-27211-1 MSD	B3HLR7	Total/NA	Water	6010C	355260

Analysis Batch: 356788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27211-1	B3HLR7	Total/NA	Water	6020A	355261
160-27211-2	B3HDP2	Dissolved	Water	6020A	355261
MB 160-355261/1-A	Method Blank	Total/NA	Water	6020A	355261
LCS 160-355261/2-A	Lab Control Sample	Total/NA	Water	6020A	355261
160-27211-1 MS	B3HLR7	Total/NA	Water	6020A	355261
160-27211-1 MSD	B3HLR7	Total/NA	Water	6020A	355261

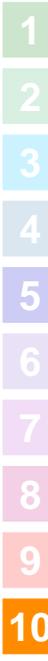
Analysis Batch: 356991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27211-1	B3HLR7	Total/NA	Water	6020A	355261
160-27211-2	B3HDP2	Dissolved	Water	6020A	355261
MB 160-355261/1-A	Method Blank	Total/NA	Water	6020A	355261
LCS 160-355261/2-A	Lab Control Sample	Total/NA	Water	6020A	355261
160-27211-1 MS	B3HLR7	Total/NA	Water	6020A	355261
160-27211-1 MSD	B3HLR7	Total/NA	Water	6020A	355261

General Chemistry

Prep Batch: 358732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27211-3	B3HLT4	Total/NA	Water	Carbon Trap	
160-27211-4	B3HLT8	Total/NA	Water	Carbon Trap	
MB 160-358732/1-A	Method Blank	Total/NA	Water	Carbon Trap	



Client: CH2M Hill Plateau Remediation Company
 Project/Site: I18-007

TestAmerica Job ID: 160-27211-1
 SDG: SL2817

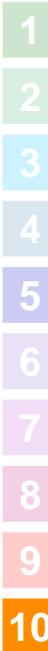
General Chemistry (Continued)

Prep Batch: 358732 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 160-358732/2-A	Lab Control Sample	Total/NA	Water	Carbon Trap	
160-27163-A-13-C MS	Matrix Spike	Total/NA	Water	Carbon Trap	
160-27163-A-13-B DU	Duplicate	Total/NA	Water	Carbon Trap	

Analysis Batch: 358956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-27211-3	B3HLT4	Total/NA	Water	9020B	358732
160-27211-4	B3HLT8	Total/NA	Water	9020B	358732
MB 160-358732/1-A	Method Blank	Total/NA	Water	9020B	358732
LCS 160-358732/2-A	Lab Control Sample	Total/NA	Water	9020B	358732
160-27163-A-13-C MS	Matrix Spike	Total/NA	Water	9020B	358732
160-27163-A-13-B DU	Duplicate	Total/NA	Water	9020B	358732



OPERATIONS RECORDS FOR SDG SL2817

USING THE TOOL PROVIDED BY ENVIRONMENTAL DATA INTEGRATION, **SL2817** IS NOT REQUIRED TO BE MARKED AS AN OPERATION RECORD.