

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 160-4590-1

TestAmerica Sample Delivery Group: SL1413  
Client Project/Site: F13-018

For:

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

Attn: General Mailbox



Authorized for release by:  
12/2/2013 8:57:25 PM

Jayna Awalt, Project Manager I  
(314)298-8566  
[jayna.awalt@testamericainc.com](mailto:jayna.awalt@testamericainc.com)

### LINKS

Review your project results through  
**TotalAccess**

Have a Question?



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

*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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Client: CH2M Hill Plateau Remediation Company  
Project/Site: F13-018

TestAmerica Job ID: 160-4590-1  
SDG: SL1413

Job ID: 160-4590-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

CH2MHill Plateau Remediation Company  
P.O. Box 1600  
MS B3-60  
Richland, Washington 99352  
November 27, 2013  
Attention: Scot Fitzgerald

SDG : SL1413  
Number of Samples : 3 samples  
Sample Matrix : Water  
Data Deliverable : Summary  
Date SDG Closed : November 21, 2013

II. Introduction

On November 21, 3 water samples were received by TestAmerica - St. Louis for chemical analysis. **The samples were received outside temperature criteria with on ice in the cooler. Per SDR14-036, the analysis was performed and note made of excursion.** See the COC and receipt checklist for documentation of any variations on receipt conditions and temperature. Upon receipt, the 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: F13-018

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 a LCS/LCS duplicate.

Deviation from Request: None

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.



Client: CH2M Hill Plateau Remediation Company  
Project/Site: F13-018

TestAmerica Job ID: 160-4590-1  
SDG: SL1413

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**Job ID: 160-4590-1 (Continued)**

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**Laboratory: TestAmerica St. Louis (Continued)**

- **B** - For organic analyses, Method Blank contamination. The Method Blank contains the target analyte at a concentration above the MDL.
- **J** - For organic analyses, the sample is estimated and less than the RL.
- **C** - For inorganic analyses, Method Blank contamination. The Method Blank contains the target analyte at a concentration above the MDL.
- **D** - For all analyses, the sample result was obtained from the analysis of a dilution.
- **N** - For inorganics 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.
- **M** - For inorganic analyses, the precision was outside control 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.

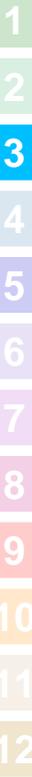
There were no observations or nonconformances for the following methods:

**Sulfide**

I certify that this Summary Package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the signature on the cover page has authorized release of the data contained in this hard copy data package.

Reviewed and approved:

Jayna Awalt  
St. Louis Project Manager



# SAMPLE ISSUE RESOLUTION

SIR NUM SDR14-036  
 REV NUM 0  
 DATE INITIATED 11/21/2013



## SAMPLE EVENT INFORMATION

SAF NUM(S) F13-018  
 OPERABLE UNIT(S) 200-ZP-1  
 PROJECT(S) P&T - 200W  
 SAMPLE EVENT TITLE(S) 200W Pump & Treat - Misc Sampling  
 LABORATORY TestAmerica St. Louis

## SAMPLING INFORMATION

NUMBER OF SAMPLES 3  
 SAMPLE NUMBERS B2T1M7, B2T1N1, B2T1N5  
 SAMPLE MATRIX WATER  
 COLLECTION DATE 11/20/2013 - 11/20/2013  
 SDG NUM SL1413

## ISSUE BACKGROUND

CLASS Field Sampling Issue  
 TYPE Incorrect Sample Preservation  
 DESCRIPTION Samples were received for Sulfide analysis with no ice in cooler. Cooler temp was 19.4 C. Cooler temp should be < 6 C. Sample pH for the each of the three sample bottles was >9.

## DISPOSITION

DESCRIPTION PROPOSED DISPOSITION:  
 (1) TASL PROPOSES TO ANALYZE SAMPLES OUTSIDE TEMP CRITERIA AND NOTE EXCURSION IN CASE NARRATIVE.  
 OR  
 (2) CANCEL ANALYSIS

JUSTIFICATION ACCEPTED DISPOSITION: Accept proposed resolution 1. Analyze samples outside temp criteria and note excursion in case narrative

SUBMITTED BY: JAYNA AWALT/TASL DATE: 11/21/13  
 ACCEPTED BY: Jim Douglas/CHPRC DATE: 12/2/13

**SAMPLE ISSUE RESOLUTION**

**SIR NUM** SDR14-042  
**REV NUM** 0  
**DATE INITIATED** 12/4/2013

**SAMPLE EVENT INFORMATION**

**SAF NUM(S)** F13-018  
**OPERABLE UNIT(S)** 200-ZP-1  
**PROJECT(S)** P&T - 200W  
**SAMPLE EVENT TITLE(S)** 200W Pump & Treat - Misc Sampling  
**LABORATORY** TestAmerica St. Louis

**SAMPLING INFORMATION**

**NUMBER OF SAMPLES** 3  
**SAMPLE NUMBERS** B2T1M7, B2T1N1, B2T1N5  
**SAMPLE MATRIX** WATER  
**COLLECTION DATE** 11/20/2013 - 11/20/2013  
**SDG NUM** SL1413

**ISSUE BACKGROUND**

**CLASS** Chain of Custody Issue (Field)  
**TYPE** No/Illegible Relinquish/Receipt Date/Time  
**DESCRIPTION** There is no relinquished time given for COC#s F13-018-019, -015, -011.

**DISPOSITION**

**DESCRIPTION** PROPOSED DISPOSITION: Document the excursion, insert the SIR into the data package and close the SIR.  
**JUSTIFICATION** ACCEPTED DISPOSITION: Accept the proposed disposition.  
 SUBMITTED BY: Sara Champoux/CHPRC Date: 12/04/13  
 ACCEPTED BY: Susan Puckett/CHPRC Date: 12/4/13

CH2M Hill Plateau Remediation Company		F13-018-011		PAGE 1 OF 1	
COLLECTOR KAVUC FLOYD	SL1413	COMPANY CONTACT EVANS, RT	TELEPHONE NO. 373-7924	PROJECT COORDINATOR EVANS, RT	PRICE CODE 7B
SAMPLING LOCATION 289-T, FBR-A Effluent, valve V47-Y40A1	25 (11/20/13)	PROJECT DESIGNATION 200W Pump & Treat - FBR Micronutrient Analysis - Water	SAF NO. F13-018	SAF NO. F13-018	AIR QUALITY <input type="checkbox"/>
ICE CHEST NO. GWS-205		FIELD LOGBOOK NO. HNF-N-491-9/96	ACTUAL SAMPLE DEPTH N/A	COA 303110ES10	METHOD OF SHIPMENT FEDERAL EXPRESS
SHIPPED TO TestAmerica St. Louis	SL1413	OFFSITE PROPERTY NO. SEE PTR	BILL OF LADING/AIR BILL NO. SEE PTR 797205954861		

MATRIX* A=Air DL=Drum L=Liquids DS=Drum S=Solids 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 may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.**	PRESERVATION ZnAc+NaOH to pH > 9	7 Days
		HOLDING TIME	G/P
		TYPE OF CONTAINER	1
		NO. OF CONTAINER(S)	1L
		VOLUME	376.1 TOTAL SULFIDE COMMON;
		SAMPLE ANALYSIS	
SAMPLE NO. B2T1M7	MATRIX* WATER	SAMPLE DATE 11-20-13	SAMPLE TIME 0920

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM KAVUC FLOYD	DATE/TIME 11-20-13	RECEIVED BY/STORED IN FED X	DATE/TIME 11-20-13	** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-13-114	
RELINQUISHED BY/REMOVED FROM FedEx	DATE/TIME	RECEIVED BY/STORED IN Jill Clark J-11 Clark	DATE/TIME 11-21-13 0900	TRVL-13-114	
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	



CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		F13-018-015	PAGE 1 OF 1
COLLECTOR Ed Kauer	FLoyd	SL1413	COMPANY CONTACT EVANS, RT	TELEPHONE NO. 373-7924	PROJECT COORDINATOR EVANS, RT
SAMPLING LOCATION 289-T, FBR-B Effluent, valve V47-Y40B1	25	(WB) 11/20/13	PROJECT DESIGNATION 200W Pump & Treat - FBR Micronutrient Analysis - Water	PRICE CODE 7B	DATA TURNAROUND 7 Days / 15 Days
ICE CHEST NO. Gws-205	HNF-N-491-9/94	N/A	FIELD LOGBOOK NO.	AIR QUALITY	METHOD OF SHIPMENT FEDERAL EXPRESS
SHIPPED TO TestAmerica St. Louis	SEE PTR		OFFSITE PROPERTY NO.	COA 303110ES10	<b>ORIGINAL</b>
BILL OF LADING/AIR BILL NO. SEE PTR 797205954861					

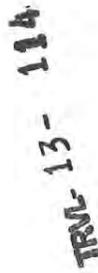
MATRIX*	ZnAc+NaOH to pH > 9
A=Air	7 Days
DL=Drum	G/P
Liquids	
DS=Drum	1
Solids	1L
L=Liquid	376.1 TOTAL SULFIDE COMMON;
O=Oil	
S=Soil	
SE=Sediment	
T=Tissue	
V=Vegetation	
W=Water	
WI=Wipe	
X=Other	

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Ed Kauer	DATE/TIME 11-20-13	RECEIVED BY/STORED IN FED-X	DATE/TIME 11-20-13	** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-13-114	
RELINQUISHED BY/REMOVED FROM Ed Kauer	DATE/TIME 11-20-13	RECEIVED BY/STORED IN Jill Clark	DATE/TIME 11-21-13 0900	TRVL-13-114	
RELINQUISHED BY/REMOVED FROM FedEx	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 81413		CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST		F13-018-019	PAGE 1 OF 1
COLLECTOR Kasey Floyd	COMPANY CONTACT EVANS, RT	TELEPHONE NO. 373-7924	PROJECT COORDINATOR EVANS, RT	PRICE CODE 7B	DATA TURNAROUND 7 Days / 15 Days
SAMPLING LOCATION 289-T, Effluent Tank, Valve V07-Y80	PROJECT DESIGNATION 200W Pump & Treat - FBR Micronutrient Analysis - Water	FIELD LOGBOOK NO. HNF-N-491-9/46	SAF NO. FL3-018	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT FEDERAL EXPRESS
ICE CHEST NO. Gws-205	ACTUAL SAMPLE DEPTH N/A	COA 303110ES10	BILL OF LADING/AIR BILL NO. SEE PTR 797205954861		
SHIPPED TO TestAmerica St. Louis	OFFSITE PROPERTY NO. SEE PTR	ORIGINAL			

MATRIX*	PRESERVATION	ZnAc+NaOH to pH > 9
A=Air	HOLDING TIME	7 Days
DL=Drum	TYPE OF CONTAINER	G/P
Liquids	NO. OF CONTAINER(S)	1
DS=Drum	VOLUME	1L
Solids	SAMPLE ANALYSIS	376.1 TOTAL SULFIDE: COMMON;
L=Liquid	SAMPLE DATE	11-20-13
O=Oil	SAMPLE TIME	1000
S=Soil	SPECIAL HANDLING AND/OR STORAGE	
SE=Sediment		
T=Tissue		
V=Vegetation		
W=Water		
WI=Wipe		
X=Other		

CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM Edwin Blaylock	DATE/TIME 11-20-13	RECEIVED BY/STORED IN FED-X	DATE/TIME 11-20-13	** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. TRVL-13-114	
RELINQUISHED BY/REMOVED FROM FedEx	DATE/TIME	RECEIVED BY/STORED IN Jill Clark	DATE/TIME 11-21-13 0900		
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	





<b>797205954861</b>			
Ship (P/U) date : <b>Wed 11/20/2013 3:57 pm</b> RICHLAND, WA US	<p><b>Delivered</b> Signed for by: R. CASTELLO</p>	Actual delivery : <b>Thur 11/21/2013 8:58 am</b> EARTH CITY, MO US	
<b>Travel History</b>			
<b>Date/Time</b>	<b>Activity</b>	<b>Location</b>	
- 11/21/2013 - Thursday			
8:58 am	Delivered	EARTH CITY, MO	
7:17 am	On FedEx vehicle for delivery	EARTH CITY, MO	
7:12 am	At local FedEx facility	EARTH CITY, MO	
5:19 am	At destination sort facility	BERKELEY, MO	
4:31 am	Departed FedEx location	MEMPHIS, TN	
1:02 am	Arrived at FedEx location	MEMPHIS, TN	
- 11/20/2013 - Wednesday			
5:23 pm	Left FedEx origin facility	PASCO, WA	
3:57 pm	Picked up	PASCO, WA	
1:24 pm	Shipment information sent to FedEx		
		<b>Local Scan Time</b>	
<b>Shipment Facts</b>			
<b>Tracking number</b>	797205954861	<b>Service</b>	FedEx Priority Overnight
<b>Weight</b>	12 lbs	<b>Delivered To</b>	Shipping/Receiving
<b>Total pieces</b>	1	<b>Total shipment weight</b>	12 lbs / 5.4 kgs
<b>Shipper reference</b>	GWS-205	<b>Packaging</b>	Your Packaging
<b>Special handling section</b>	Deliver Weekday, Additional Handling Surcharge		



Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 160-4590-1

SDG Number: SL1413

Login Number: 4590

List Number: 1

Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	False	Cooler temp was 19.4. SIR request sent.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Client: CH2M Hill Plateau Remediation Company  
 Project/Site: F13-018

TestAmerica Job ID: 160-4590-1  
 SDG: SL1413

**Qualifiers**

**General Chemistry**

Qualifier	Qualifier Description
U	Analyzed for but not detected.

**Glossary**

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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: F13-018

TestAmerica Job ID: 160-4590-1  
SDG: SL1413

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Method	Method Description	Protocol	Laboratory
376.1	Sulfide	MCAWW	TAL SL

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**Protocol References:**

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

**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: F13-018

TestAmerica Job ID: 160-4590-1  
SDG: SL1413

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-4590-1	B2T1M7	Water	11/20/13 09:20	11/21/13 09:00
160-4590-2	B2T1N1	Water	11/20/13 09:40	11/21/13 09:00
160-4590-3	B2T1N5	Water	11/20/13 10:00	11/21/13 09:00

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Client: CH2M Hill Plateau Remediation Company  
Project/Site: F13-018

TestAmerica Job ID: 160-4590-1  
SDG: SL1413

**Client Sample ID: B2T1M7**

**Lab Sample ID: 160-4590-1**

No Detections.

**Client Sample ID: B2T1N1**

**Lab Sample ID: 160-4590-2**

No Detections.

**Client Sample ID: B2T1N5**

**Lab Sample ID: 160-4590-3**

No Detections.

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This Detection Summary does not include radiochemical test results.

TestAmerica St. Louis

Client: CH2M Hill Plateau Remediation Company  
Project/Site: F13-018

TestAmerica Job ID: 160-4590-1  
SDG: SL1413

**General Chemistry**

**Client Sample ID: B2T1M7**  
**Date Collected: 11/20/13 09:20**  
**Date Received: 11/21/13 09:00**

**Lab Sample ID: 160-4590-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.45	U	1.0	0.45	mg/L			11/27/13 10:01	1

**Client Sample ID: B2T1N1**  
**Date Collected: 11/20/13 09:40**  
**Date Received: 11/21/13 09:00**

**Lab Sample ID: 160-4590-2**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.45	U	1.0	0.45	mg/L			11/27/13 10:01	1

**Client Sample ID: B2T1N5**  
**Date Collected: 11/20/13 10:00**  
**Date Received: 11/21/13 09:00**

**Lab Sample ID: 160-4590-3**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.45	U	1.0	0.45	mg/L			11/27/13 10:01	1

Client: CH2M Hill Plateau Remediation Company  
Project/Site: F13-018

TestAmerica Job ID: 160-4590-1  
SDG: SL1413

Method: 376.1 - Sulfide

Lab Sample ID: MB 160-88420/1  
Matrix: Water  
Analysis Batch: 88420

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	0.45	U	1.0	0.45	mg/L			11/27/13 10:01	1

Lab Sample ID: LCS 160-88420/2  
Matrix: Water  
Analysis Batch: 88420

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	9.60		mg/L		96	90 - 110

Lab Sample ID: 160-4590-1 MS  
Matrix: Water  
Analysis Batch: 88420

Client Sample ID: B2T1M7  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	0.45	U	10.0	9.60		mg/L		96	90 - 110

Lab Sample ID: 160-4590-1 DU  
Matrix: Water  
Analysis Batch: 88420

Client Sample ID: B2T1M7  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	0.45	U	0.45	U	mg/L		NC	20

Client: CH2M Hill Plateau Remediation Company  
Project/Site: F13-018

TestAmerica Job ID: 160-4590-1  
SDG: SL1413

**General Chemistry**

**Analysis Batch: 88420**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-4590-1	B2T1M7	Total/NA	Water	376.1	
160-4590-1 DU	B2T1M7	Total/NA	Water	376.1	
160-4590-1 MS	B2T1M7	Total/NA	Water	376.1	
160-4590-2	B2T1N1	Total/NA	Water	376.1	
160-4590-3	B2T1N5	Total/NA	Water	376.1	
LCS 160-88420/2	Lab Control Sample	Total/NA	Water	376.1	
MB 160-88420/1	Method Blank	Total/NA	Water	376.1	

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