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: 160-11385-1
TestAmerica Sample Delivery Group: SL1789
Client Project/Site: S,W,I,A ,X SAFS- GROUNDWATER

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

Attn: General Mailbox

Authorized for release by:
5/27/2015 12:02:11 PM

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

LINKS

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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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Job ID: 160-11385-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
Richland, Washington 99352
May 27, 2015
Attention: Scot Fitzgerald

SDG	: SL1789
Number of Samples	: 18 samples
Sample Matrix	: Water
Data Deliverable	: Summary
Date SDG Closed	: April 18, 2015

II. Introduction

On April 17 and 18, 18 samples were received by TestAmerica - St. Louis for chemical analysis. The samples were received within temperat 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.

On April 14th, samples B30M67 and B30M69 were not received with the sample shipment. Samples were received in the April 17th shipment. Per SDR15-279, the original COC, email describing the discrepancy and the final COC have been included with this SDG

The following SAFs are associated with this SDG: I15-020, W15-004, I15-013, I15-019, W15-002, X15-004

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 flagging unless otherwise noted in the case narrative.

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 (June 2014), Boron will be reported for Metals using method 6010. Boron will no longer be reported by method 6020.

IV. Definitions

Job ID: 160-11385-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

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 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. For Metals analyses, per standard practice, all solid 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. These dilutions do not necessitate qualification unless otherwise noted in the case narrative.
- **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.

Volatiles

Batch: 187781

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associat with batch 187781:2-Butanone, 1-Butanol, 2-Hexanone, 1,1,2,2-Tetrachloroethane, Acetone. A low level ccv was analyzed at the reporting li (1ug/L) and the affected analytes were detected. Target analytes recovering above the reporting limit will be qualified and reported. (CCVIS 160-187781/5)

The continuing calibration verification (CCV) associated with batch 187781 recovered above the upper control limit for 1,1,2,2-Tetrachloroethane and Vinyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 160-187781/5).

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for 187781 recovered outside control limits for the following analytes: 1,1,2,2-Tetrachloroethane and Vinyl acetate. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. (LCS 160-187781/6) and (LCSD 160-187781/7) These analytes have been qualifi accordingly with an "O" flag in the associated samples.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for 187781 were outside control limits. These analytes were biased high and were not detected in the associated samples; therefore, the data have been reported. (160-11405-K-8 MS) and (160-11405-L-8 MSD) These analytes have been qualified accordingly with a "T" flag in the associated samples.

Semivolatiles

Batch: 188422

Job ID: 160-11385-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Terphenyl d14 recovered low in the following samples. The samples are outside 2X holding time and will not be re-extracted. The data is reported with this narrative: B30KF5 (160-11405-3), (160-11405-B-3-B MS) and (160-11405-C-3-B MSD).

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for 187737/188422 were outside control limits. Sample matrix interference suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. (160-11405-B-3-B MS) and (160-11405-C-3-B MSD) This analyte has been qualified accordingly with a "T" flag in the associated samples.

ICP Metals

Batch: 191369

Arsenic, Beryllium, Cadmium, Boron, Iron, Nickel and Strontium were detected in method blank MB 160-189693/1-A at levels that were ab the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “B”. If the associated sample reported a result above the MDL and/or RL and is not greater than 5x the method blank, the result has been flagged “C”.

The low level check standard recovery associated with the following samples (CRI 160-191369/8) is outside the acceptance criteria for the following analyte: chromium. The bracketed samples are ND, and the associated samples are bracketed by passing CCVL.

ICPMS Metals

Batch: 190419

Due to LDR failures, the linear range for beryllium has been lowered to the concentration if the highest calibration standard (200ppb). The LCS/MS/MSD was above the LDR, but was within acceptable limits. (LCS 160-189695/2-A), (160-11405-E-12-E MS) and (160-11405-E-1 MSD)

TOX

Batch: 190442

The following samples in TOX batch 190442 exhibited bottom column results greater than 10% of the combined sum of the top and bottom columns: B30KF5 (160-11405-3), B30L10 (160-11405-4) and B30L09 (160-11405-5). However, the data is not believed to be adversely affe as the samples did not contain any residual chlorine and the carbon columns were not overloaded. Thus, this excursion is attributed to column channeling and results may be reported, per method 9020B.

The %RPD associated with batch 190442 was outside the control limits. RPD determinations are not applicable to values near the reporting limit (<5X RL). Precision criteria for concentrations near the reporting limit are +/- the RL.

Sulfide

Batch: 187787

Sulfide was detected in method blank MB 160-187774/1-A at a level exceeding the method detection limit but below the reporting limit. If t associated sample reported a result above the MDL and/or RL and is not greater than 5x the method blank, the result has been flagged “C”.

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

TDS
Alkalinity

Job ID: 160-11385-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Cyanide
TOC

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

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR15-279
REV NUM	0
DATE INITIATED	4/16/2015

SAMPLE EVENT INFORMATION

SAF NUM(S)	I15-020
OPERABLE UNIT(S)	100-KR-4
PROJECT(S)	CERC15
SAMPLE EVENT TITLE(S)	CERC15
LABORATORY	TestAmerica St. Louis

SAMPLING INFORMATION

NUMBER OF SAMPLES	2
SAMPLE NUMBERS	B30M67, B30M69
SAMPLE MATRIX	WATER
COLLECTION DATE	-
SDG NUM	SL1789

ISSUE BACKGROUND

CLASS	General Laboratory Direction
TYPE	Clarification of Direction
DESCRIPTION	Two samples were missing from the original shipping container.

DISPOSITION

DESCRIPTION	For the two samples listed above, please a copy of the original COC, the e-mail describing the shipment discrepancy and the final COC received with the samples in the SDG.
JUSTIFICATION	Final Disposition: Accept proposed resolution SUBMITTED BY: Scot Fitzgerald DATE: 04/16/2015 ACCEPTED BY: Jayna Awalt DATE: 04/20/2015

A-6003-640 (03/30)

PAGE 1 of 1

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 160-11385-1
SDG Number: SL1789

Login Number: 11385
List Number: 1
Creator: Daniels, Brian J

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.7
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	

CH2MHill Plateau Remediation Company 84789

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I15-020-070**

Collector	J.C. Fulton CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	509-376-4650
SAF No.	I15-020	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071
Project Title	100KR4, APRIL 2015	**Logbook No.**	HNF-N-506 71 79	**Ice Chest No.**	GWS-311
Shipped To (Lab)	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.**	7733 5766 745
Protocol	CERCLA	**Priority:**	**30 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30M67	N	W	4-10-15	1315	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01 ✓	6 Months	HNO3 to pH <2
B30M69	Y	W	4-10-15	1315	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01 ✓	6 Months	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
J.C. Fulton CHPRC			APR 1 0 2015 1405	SSU-1			APR 1 0 2015 1405
SSU-1			APR 1 3 2015 1120	F.M. Hall/CHPRC			APR 1 3 2015 1120
F.M. Hall/CHPRC			APR 1 3 2015 1400	FEDEX			
FEDEX				Brian Dannis B			4/17/15 0940

Matrix *

S = Soil		DS = Drum Solids	
SE = Sediment		DL = Drum Liquids	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

PRINTED O 2/23/2015

A-6004-842 (REV 2)

Awalt, Jayna

From: Stiles, Kyle K [Kyle_K_Stiles@rl.gov]
Sent: Thursday, April 16, 2015 9:21 AM
To: Awalt, Jayna; Waters-husted, Karen S
Cc: Briggs, Barbara E
Subject: FW: Missing CHPRC samples

Importance: High

Attachments: Document_20150414_130909.pdf

Document_20150414_130909.pdf (...

These samples were found today, miraculously. They will be shipped out this afternoon and should arrive in St. Louis tomorrow sometime. Thanks!

Kyle Stiles
Field Sampling Operations
373-5813 Office
(360) 921-1101 Cell

-----Original Message-----
From: Waters-husted, Karen S
Sent: Tuesday, April 14, 2015 3:47 PM
To: Stiles, Kyle K
Subject: FW: Missing CHPRC samples
Importance: High

Thank you for double checking your things.
Karen

-----Original Message-----
From: Awalt, Jayna [mailto:Jayna.Awalt@testamericainc.com]
Sent: Tuesday, April 14, 2015 11:15 AM
To: Fitzgerald, Scot L; Waters-husted, Karen S
Subject: FW: Missing CHPRC samples
Importance: High

Apparently we did not receive the attached samples. Please advise on how you would like us to proceed.

Thanks,

Jayna

TestAmerica St. Louis
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Earth City, MO 63045
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www.testamericainc.com

CH2MHill Plateau Remediation Company 81789

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I15-020-070**

Collector	J.C. Fulton CHPRC	**Contact/Requester**	Karen Waters-Husted
Telephone No.	509-376-4650	**SAF No.**	I15-020
Sampling Origin	Hanford Site	**Project Title**	100KR4, APRIL 2015
Purchase Order/Charge Code	300071	**Logbook No.**	HNF-N-506 71 79
Ice Chest No.	GWS-3H bb 4-16-15 121	**Shipped To (Lab)**	TestAmerica St. Louis
Method of Shipment	Commercial Carrier	**Bill of Lading/Air Bill No.**	~~7733 5766 745~~ bb 4-16-15 7733 8941 5880
Protocol	CERCLA	**Priority:**	30 Days **PRIORITY**
Offsite Property No.	N/A		

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30M67	N	W	4-10-15	1315	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	6 Months	HNO3 to pH <2
B30M69	Y	W	4-10-15	1315	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01	6 Months	HNO3 to pH <2

COPY

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
J.C. Fulton CHPRC			APR 1 0 2015 1405	SSU-1			APR 1 0 2015 1405
SSU-1			APR 1 6 2015 ~~APR 1 3 2015~~ 1200 bb 4-16-15	B.E. Briggs/CHPRC ~~F.M. Hall/CHPRC~~			APR 1 3 2015 1200 bb 4-16-15
B.E. Briggs/CHPRC ~~F.M. Hall/CHPRC~~ bb 4-16-15			4-16-15 ~~APR 1 3 2015~~ 1400 bb 4-16-15	FEDEX			1120 bb 4-16-15
FED EX				Brian Daniels			4/17/15 0940

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

PRINTED O 2/23/2015

A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company 521789

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I15-020-069**

Collector	S.W. King/CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	509-376-4650
SAF No.	I15-020	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071
Project Title	100KR4, APRIL 2015	**Logbook No.**	HNF-N-506 70 / 65	**Ice Chest No.**	GWS-121
Shipped To (Lab)	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.**	7733 8941 5880
Protocol	CERCLA	**Priority:**	30 Days **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30M64	Y	W	APR 16 2015	0905	1x500-mL G/P	6010_METALS_ICP: COMMON; 6010_METALS_ICP: GW 03 ✓	6 Months	HNO3 to pH <2
B30M59	N	W	↓	↓	1x500-mL G/P	6010_METALS_ICP: COMMON; 6010_METALS_ICP: GW 03 ✓	6 Months	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
S.W. King/CHPRC			APR 16 2015 1100	CC HOFFMAN JR.			APR 16 2015 1100
~~R.A. Shepard/CHPRC~~ 4-16-15	C.C. HOFFMAN/CHPRC		APR 16 2015 1400	FEDEX			
FED EX				Brian Daniels		4/17/15	0940

Matrix *

S = Soil		DS = Drum Solids	
SE = Sediment		DL = Drum Liquids	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

PRINTED O 2/23/2015

A-6004-842 (REV 2)

FedEx® Tracking

773389415880

Ship (P/U) date :
Thur 4/16/2015 3:24 pm

RICHLAND, WA US

Delivered
Signed for by: B.DANIELS

Actual delivery :
Fri 4/17/2015 9:37 am

EARTH CITY, MO US

Travel History

Date/Time	Activity	Location
- 4/17/2015 - Friday		
9:37 am	Delivered	EARTH CITY, MO
7:51 am	On FedEx vehicle for delivery	EARTH CITY, MO
7:46 am	At local FedEx facility	EARTH CITY, MO
5:31 am	At destination sort facility	BERKELEY, MO
4:42 am	Departed FedEx location	MEMPHIS, TN
1:02 am	Arrived at FedEx location	MEMPHIS, TN
- 4/16/2015 - Thursday		
5:00 pm	Left FedEx origin facility	PASCO, WA
3:24 pm	Picked up	PASCO, WA
3:19 pm	Shipment information sent to FedEx	

Shipment Facts

Tracking number	773389415880	Service	FedEx Priority Overnight
Weight	40 lbs / 18.14 kgs	Delivered To	Shipping/Receiving
Total pieces	1	Total shipment weight	40 lbs / 18.14 kgs
Shipper reference	gws-121	Packaging	Your Packaging
Special handling section	Deliver Weekday		

© FedEx 1995-2015

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 160-11405-1
SDG Number: SL1789

Login Number: 11405
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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.0, 0.7
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CH2MHill Plateau Remediation Company 214789

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W15-004-127**

Collector	CHRIS FULTON CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	509-376-4650
SAF No.	W15-004	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071
Project Title	RCRA, APRIL 2015	**Logbook No.**	HNF-N-506 757	**Ice Chest No.**	GWS-424 exp. 4/17/15
Shipped To (Lab)	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.**	7734000874784
Protocol	RCRA	**Priority:**	**30 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30L11	N	W	APR 17 2015	1039	1x1-L aGs*	9020_TOX: COMMON ✓	28 Days	H2SO4 to pH <2/Cool <=6C
B30L11	N	W			1x250-mL aG	9060_TOC: COMMON ✓	28 Days	HCl or H2SO4 to pH <2/Cool <=6C
B30KF6	Y	W			1x500-mL G/P	6010_METALS_ICP: COMMON ✓	6 Months	HNO3 to pH <2
B30KF5	N	W			1x500-mL G/P	310.1_ALKALINITY: GW 01 ✓	14 Days	Cool <=6C
B30KF5	N	W			1x500-mL G/P	6010_METALS_ICP: COMMON ✓	6 Months	HNO3 to pH <2
B30KF5	N	W			3x1-L aG	8270_PHENOLIC_GC: COMMON ✓	7/40 Days	Cool <=6C
B30KF5	N	W			1x1-L aGs*	9020_TOX: COMMON ✓	28 Days	H2SO4 to pH <2/Cool <=6C
B30KF5	N	W			1x250-mL aG	9060_TOC: COMMON ✓	28 Days	HCl or H2SO4 to pH <2/Cool <=6C
B30L10	N	W			1x1-L aGs*	9020_TOX: COMMON ✓	28 Days	H2SO4 to pH <2/Cool <=6C
B30L10	N	W			1x250-mL aG	9060_TOC: COMMON ✓	28 Days	HCl or H2SO4 to pH <2/Cool <=6C
B30L09	N	W			1x1-L aGs*	9020_TOX: COMMON ✓	28 Days	H2SO4 to pH <2/Cool <=6C
B30L09	N	W			1x250-mL aG	9060_TOC: COMMON ✓	28 Days	HCl or H2SO4 to pH <2/Cool <=6C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
CHRIS FULTON CHPRC			APR 17 2015 1105	L.D. Wall CHPRC		L.D. Wall	APR 17 2015 1105
L.D. Wall CHPRC		L.D. Wall	APR 17 2015 1400	FEDEX			
FED EX				Jill Clarke		Jill Clarke	4.18.15 0845

Matrix *

S	= Soil	DS	= Drum Solids		
SE	= Sediment	DL	= Drum Liquids		
SO	= Solid	T	= Tissue		
SL	= Sludge	WI	= Wipe		
W	= Water	L	= Liquid		
O	= Oil	V	= Vegetation		
A	= Air	X	= Other		

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

PRINTED O 4/6/2015

A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company 821789

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I15-013-118**

Collector	S.W. King/CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	509-376-4650
SAF No.	I15-013	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071
Project Title	100-KR-4, FEBRUARY 2015	**Logbook No.**	HNF-N-506 70 / 67	**Ice Chest No.**	GWS-330
Shipped To (Lab)	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.**	7734 0004 7026
Protocol	CERCLA	**Priority:**	**30 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B313W3	N	W	APR 17 2015	1205	1x500-mL G/P	6010_METALS_ICP: GW 04 ✓	6 Months	HNO3 to pH <2
B306K0	Y	W	↓	↓	1x500-mL G/P	6010_METALS_ICP: GW 04 ✓	6 Months	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
S.W. King/CHPRC			APR 17 2015 1215	L.D. Wall CHPRC			APR 17 2015 1215
L.D. Wall CHPRC			APR 17 2015 1400	FEDEX			
FED EX				Jill Clarke	Jill Clarke		4-18-15 0845

Matrix *

S = Soil		DS = Drum Solids	
SE = Sediment		DL = Drum Liquids	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

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

PRINTED O 4/9/2015

A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company 521789

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I15-019-058**

Collector	CHRIS FULTON CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	509-376-4650
SAF No.	I15-019	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071
Project Title	200ZP1, MARCH 2015	**Logbook No.**	HNF-N-506 75/7	**Ice Chest No.**	GWS-330
Shipped To (Lab)	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.**	7734 0004 7026
Protocol	CERCLA	**Priority:**	30 Days **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30H98	N	W	APR 17 2015	0820	1x500-mL G/P	160.1_TDS: COMMON ✓	7 Days	Cool <=6C
B30H98	N	W	↓	↓	1x500-mL G/P	310.1_ALKALINITY: GW 01 ✓	14 Days	Cool <=6C
B30H98	N	W	↓	↓	4x40-mL aGs*	8260_VOA_GCMS_IX: COMMON ✓	14 Days	HCl or H2SO4 to pH <2/Cool <=6C
B30H98	N	W	↓	↓	3x500-mL G/P	9034_SULFIDE: COMMON ✓	7 Days	ZnAc+NaOH to pH > 9/Cool <=6C
B30H98	N	W	↓	↓	1x250-mL aG	9060_TOC: COMMON ✓	28 Days	HCl or H2SO4 to pH <2/Cool <=6C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
CHRIS FULTON CHPRC			APR 17 2015 0850	L.D. Wall CHPRC		L.D. Wall	APR 17 2015 0850
L.D. Wall CHPRC		L.D. Wall	APR 17 2015 1400	FEDEX			
FED EX				Jill Clarke		Jill Clarke	4.18.15 0845

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

PRINTED O 4/16/2015 A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company 821789

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I15-020-065**

Collector	S.W. King/CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	509-376-4650
SAF No.	I15-020	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071
Project Title	100KR4, APRIL 2015	**Logbook No.**	HNF-N-506 70 67	**Ice Chest No.**	6605-330
Shipped To (Lab)	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.**	7734 0004 7026
Protocol	CERCLA	**Priority:**	**30 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30M22	N	W	APR 17 2015	0700	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01 ✓	6 Months	HNO3 to pH <2
B30M22	N	W	↓	↓	4x40-mL aGs*	8260_VOA_GCMS: COMMON; 8260_VOA_GCMS: GW 01 ✓	14 Days	HCl or H2SO4 to pH <2/Cool <=6C
B30M26	Y	W	APR 17 2015	0700	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01 ✓	6 Months	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
S.W. King/CHPRC			APR 17 2015 1107	L.D. Wall CHPRC		L.D. Wall	APR 17 2015 1107
L.D. Wall CHPRC		L.D. Wall	APR 17 2015 1400	FEDEX			
FED EX				Jill Clarke	Jill Clarke		4-18-15 0845

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

PRINTED O 2/23/2015

A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company 521789

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I15-020-066**

Collector	S.W. King/CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	509-376-4650
SAF No.	I15-020	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071
Project Title	100KR4, APRIL 2015	**Logbook No.**	HNF-N-506 70/67	**Ice Chest No.**	GWS-330
Shipped To (Lab)	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.**	7734 0004 7026
Protocol	CERCLA	**Priority:**	**30 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30M27	Y	W	APR 17 2015	0951	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01 ✓	6 Months	HNO3 to pH <2
B30M23	N	W	✓	✓	1x500-mL G/P	6010_METALS_ICP: GW 04; 6020_METALS_ICPMS: GW 01 ✓	6 Months	HNO3 to pH <2
B30M23	N	W	APR 17 2015	0951	4x40-mL aGs*	8260_VOA_GCMS: COMMON; 8260_VOA_GCMS: GW 01 ✓	14 Days	HCl or H2SO4 to pH <2/Cool <=6C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
S.W. King/CHPRC			APR 17 2015 1107	L.D. Wall CHPRC			APR 17 2015 1107
L.D. Wall CHPRC			APR 17 2015 1400	FEDEX			
FED EX				Jill Clarke	Jill Clarke		4.18.15 0845

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

PRINTED O 2/23/2015 A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company 521789

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W15-002-078**

Collector	CHRIS FULTON CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	509-376-4650
SAF No.	W15-002	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071
Project Title	RCRA, FEBRUARY 2015	**Logbook No.**	HNF-N-506 75 / 7	**Ice Chest No.**	GWS-330
Shipped To (Lab)	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.**	7734 0004 7026
Protocol	RCRA	**Priority:**	**30 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Submit deliverables & invoices to ^CPP Sample Management.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B305D3	N	W	APR 1 7 2015	0941	1x500-mL G/P	310.1_ALKALINITY: GW 01 ✓	14 Days	Cool <=6C
B305D3	N	W	↓	↓	1x250-mL G/P	9012_CYANIDE: COMMON ✓	14 Days	NaOH to pH >=12/Cool <=6C
B305D3	N	W	↓	↓	1x250-mL aG	9060_TOC: COMMON ✓	28 Days	HCl or H2SO4 to pH <2/Cool <=6C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
CHRIS FULTON CHPRC			APR 1 7 2015 1105	L.D. Wall CHPRC	L.D. Wall		APR 1 7 2015 1105
L.D. Wall CHPRC	L.D. Wall		APR 1 7 2015 1400	FEDEX			
FED EX				Jill Clarke	Jill Clarke		4-18-15 0845

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

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A-6004-842 (REV 2)

CH2MHill Plateau Remediation Company 217789

S.W. King/CHPRC

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X15-004-149**

Collector		**Contact/Requester**	WATERS-HUSTED, K	**Telephone No.**	376-4650
SAF No.	X15-004	**Sampling Origin**	HANFORD SITE	**Purchase Order/Charge Code**	300071
Project Title	GW Sitewide Surv, FY15	**Logbook No.**	HNF-N-506 70 / 67	**Ice Chest No.**	GWS-330
Shipped To (Lab)	TestAmerica St. Louis	**Method of Shipment**	Commercial Carrier	**Bill of Lading/Air Bill No.**	7734 0004 7026
Protocol	SURV	**Priority:**	**30 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

*Contains Radioactive Material at concentrations that are not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1.

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Batch with A, I, S, and W SAFs.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B30HP1	N	APR	17 2015	0951	4x40-mL aGs*	8260_VOA_GCMS: COMMON ✓	14 Days	HCl or H2SO4 to pH <2/Cool <=6C

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
S.W. King/CHPRC		APR 17 2015 1107	L.D. Wall CHPRC		APR 17 2015 1107
L.D. Wall CHPRC		APR 17 2015 1400	FEDEX		
FED EX			Jill Clarke	Jill Clarke	4.18.15 0845

Matrix *

S	= Soil	DS	= Drum Solids
SE	= Sediment	DL	= Drum Liquids
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

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

PRINTED O 1/21/2015

A-6004-842 (REV 2)

Delivered

Tracking No.or Nickname	Shipper city, state	Origin Terminal	Ship (P/U) date	Status
773400074784	RICHLAND, WA	PASCO, WA	4/17/2015 3:23 pm	
773400047026	RICHLAND, WA	PASCO, WA	4/17/2015 3:23 pm	

Delivered

773400074784

Travel History

Date/Time	Activity
4/18/2015 - Saturday	
8:37 am	Delivered
8:33 am	On FedEx vehicle for delivery
7:49 am	At local FedEx facility
5:28 am	At destination sort facility
4:40 am	Departed FedEx location
12:38 am	Arrived at FedEx location
4/17/2015 - Friday	
5:09 pm	Left FedEx origin facility
3:30 pm	Shipment information sent to FedEx
3:23 pm	Picked up

Shipment Facts

Tracking number	773400074784	Service	FedEx F
Weight	88 lbs / 39.92 kgs	Delivered To	Receptic
Total pieces	1	Total shipment weight	88 lbs / :
Shipper reference	gws-424	Packaging	Your Pa
Special			

Delivered

Tracking No.or Nickname	Shipper city, state	Origin Terminal	Ship (P/U) date	Status	Recipient city, state	Delivery date
773400074784	RICHLAND, WA	PASCO, WA	4/17/2015 3:23 pm		EARTH CITY, MO	4/18/2015 8:37 am
773400047026	RICHLAND, WA	PASCO, WA	4/17/2015 3:23 pm		EARTH CITY, MO	4/18/2015 8:37 am

Delivered Showing 2 of 2

773400047026

Travel History

Date/Time	Activity	Location
- 4/18/2015 - Saturday		
8:37 am	Delivered	EARTH CITY, MO
8:26 am	On FedEx vehicle for delivery	EARTH CITY, MO
7:46 am	At local FedEx facility	EARTH CITY, MO
5:28 am	At destination sort facility	BERKELEY, MO
4:40 am	Departed FedEx location	MEMPHIS, TN
12:38 am	Arrived at FedEx location	MEMPHIS, TN
- 4/17/2015 - Friday		
5:09 pm	Left FedEx origin facility	PASCO, WA
3:31 pm	Shipment information sent to FedEx	
3:23 pm	Picked up	PASCO, WA

Shipment Facts

Tracking number	773400047026	Service	FedEx Priority Overnight
Weight	80 lbs / 36.29 kgs	Delivered To	Receptionist/Front Desk
Total pieces	1	Total shipment weight	80 lbs / 36.29 kgs
Shipper reference	gws-330	Packaging	Your Packaging
Special handling section	For Saturday Delivery		

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
O	LCS, LCSD: Recovery exceeds upper or lower control limits.
T	MS, MSD: Recovery exceeds upper or lower control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.
T	MS, MSD: Recovery exceeds upper or lower control limits.

Metals

Qualifier	Qualifier Description
U	Analyzed for but not detected.
B	Estimated result. Result is less than the RL, but greater than MDL
C	The analyte was detected in both the sample and the assoicated QC blank, and the sample concentration was </= 5X the blank concentration.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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)

Method Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S,W,I,A ,X SAFS- GROUNDWATER

TestAmerica Job ID: 160-11385-1
SDG: SL1789

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL SL
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL SL
6010C	Metals (ICP)	SW846	TAL SL
6020A	Metals (ICP/MS)	SW846	TAL SL
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL SL
310.1	Alkalinity	MCAWW	TAL SL
9012B	Cyanide, Total andor Amenable	SW846	TAL SL
9020B	Organic Halides, Total (TOX)	SW846	TAL SL
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL SL
9060	Organic Carbon, Total (TOC)	SW846	TAL SL

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

Sample Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S,W,I,A ,X SAFS- GROUNDWATER

TestAmerica Job ID: 160-11385-1
SDG: SL1789

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-11385-1	B30M67	Water	04/10/15 13:15	04/17/15 09:40
160-11385-2	B30M69	Water	04/10/15 13:15	04/17/15 09:40
160-11385-3	B30M64	Water	04/16/15 09:05	04/17/15 09:40
160-11385-4	B30M59	Water	04/16/15 09:05	04/17/15 09:40
160-11405-1	B30L11	Water	04/17/15 10:39	04/18/15 08:45
160-11405-2	B30KF6	Water	04/17/15 10:39	04/18/15 08:45
160-11405-3	B30KF5	Water	04/17/15 10:39	04/18/15 08:45
160-11405-4	B30L10	Water	04/17/15 10:39	04/18/15 08:45
160-11405-5	B30L09	Water	04/17/15 10:39	04/18/15 08:45
160-11405-6	B313W3	Water	04/17/15 12:05	04/18/15 08:45
160-11405-7	B306K0	Water	04/17/15 12:05	04/18/15 08:45
160-11405-8	B30H98	Water	04/17/15 08:20	04/18/15 08:45
160-11405-9	B30M22	Water	04/17/15 07:00	04/18/15 08:45
160-11405-10	B30M26	Water	04/17/15 07:00	04/18/15 08:45
160-11405-11	B30M27	Water	04/17/15 09:51	04/18/15 08:45
160-11405-12	B30M23	Water	04/17/15 09:51	04/18/15 08:45
160-11405-13	B305D3	Water	04/17/15 09:41	04/18/15 08:45
160-11405-14	B30HP1	Water	04/17/15 09:51	04/18/15 08:45

Client: CH2M Hill Plateau Remediation Company
Project/Site: S,W,I,A ,X SAFS- GROUNDWATER

TestAmerica Job ID: 160-11385-1
SDG: SL1789

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: B30H98
Date Collected: 04/17/15 08:20
Date Received: 04/18/15 08:45

Lab Sample ID: 160-11405-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.090	U	1.0	0.090	ug/L			04/24/15 10:59	1
1,1,1-Trichloroethane	0.070	U	1.0	0.070	ug/L			04/24/15 10:59	1
1,1,2,2-Tetrachloroethane	0.10	U T O	1.0	0.10	ug/L			04/24/15 10:59	1
1,1,2-Trichloroethane	0.15	U	1.0	0.15	ug/L			04/24/15 10:59	1
1,1-Dichloroethane	0.070	U	1.0	0.070	ug/L			04/24/15 10:59	1
1,1-Dichloroethene	0.080	U	1.0	0.080	ug/L			04/24/15 10:59	1
1,2,3-Trichloropropane	0.15	U	1.0	0.15	ug/L			04/24/15 10:59	1
1,2-Dibromo-3-Chloropropane	0.41	U	1.0	0.41	ug/L			04/24/15 10:59	1
1,2-Dibromoethane (EDB)	0.13	U	1.0	0.13	ug/L			04/24/15 10:59	1
1,2-Dichloroethane	0.10	U	1.0	0.10	ug/L			04/24/15 10:59	1
1,2-Dichloroethene, Total	0.15	U	2.0	0.15	ug/L			04/24/15 10:59	1
1,2-Dichloropropane	0.10	U	1.0	0.10	ug/L			04/24/15 10:59	1
1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L			04/24/15 10:59	1
1-Butanol	12	U	50	12	ug/L			04/24/15 10:59	1
2-Butanone (MEK)	0.52	U	5.0	0.52	ug/L			04/24/15 10:59	1
2-Hexanone	0.22	U	5.0	0.22	ug/L			04/24/15 10:59	1
4-Methyl-2-pentanone (MIBK)	0.12	U	5.0	0.12	ug/L			04/24/15 10:59	1
Acetone	0.34	U	2.0	0.34	ug/L			04/24/15 10:59	1
Acetonitrile	2.0	U	10	2.0	ug/L			04/24/15 10:59	1
Acrolein	2.8	U	10	2.8	ug/L			04/24/15 10:59	1
Acrylonitrile	0.58	U	10	0.58	ug/L			04/24/15 10:59	1
Allyl chloride	0.11	U	2.0	0.11	ug/L			04/24/15 10:59	1
Benzene	0.060	U	1.0	0.060	ug/L			04/24/15 10:59	1
Bromodichloromethane	0.090	U	1.0	0.090	ug/L			04/24/15 10:59	1
Bromoform	0.17	U	1.0	0.17	ug/L			04/24/15 10:59	1
Bromomethane	0.25	U	2.0	0.25	ug/L			04/24/15 10:59	1
Carbon disulfide	0.050	U	1.0	0.050	ug/L			04/24/15 10:59	1
Carbon tetrachloride	**6.1**		1.0	0.13	ug/L			04/24/15 10:59	1
Chlorobenzene	0.15	U	1.0	0.15	ug/L			04/24/15 10:59	1
Chloroethane	0.10	U	2.0	0.10	ug/L			04/24/15 10:59	1
Chloroform	**0.27**	**J**	1.0	0.10	ug/L			04/24/15 10:59	1
Chloromethane	0.080	U	2.0	0.080	ug/L			04/24/15 10:59	1
Chloroprene	0.10	U	1.0	0.10	ug/L			04/24/15 10:59	1
cis-1,2-Dichloroethylene	0.090	U	1.0	0.090	ug/L			04/24/15 10:59	1
cis-1,3-Dichloropropene	0.070	U	1.0	0.070	ug/L			04/24/15 10:59	1
Dibromochloromethane	0.13	U	1.0	0.13	ug/L			04/24/15 10:59	1
Dibromomethane	0.21	U	1.0	0.21	ug/L			04/24/15 10:59	1
Dichlorodifluoromethane	0.080	U	2.0	0.080	ug/L			04/24/15 10:59	1
Ethyl Cyanide	1.4	U	10	1.4	ug/L			04/24/15 10:59	1
Ethyl methacrylate	0.11	U	1.0	0.11	ug/L			04/24/15 10:59	1
Ethylbenzene	0.090	U	1.0	0.090	ug/L			04/24/15 10:59	1
Iodomethane	0.090	U	2.0	0.090	ug/L			04/24/15 10:59	1
Isobutyl alcohol	8.7	U	80	8.7	ug/L			04/24/15 10:59	1
Methacrylonitrile	0.50	U	10	0.50	ug/L			04/24/15 10:59	1
Methyl methacrylate	0.26	U	2.0	0.26	ug/L			04/24/15 10:59	1
Methylene Chloride	0.27	U	1.0	0.27	ug/L			04/24/15 10:59	1
Styrene	0.070	U	1.0	0.070	ug/L			04/24/15 10:59	1
Tetrachloroethene	0.18	U	1.0	0.18	ug/L			04/24/15 10:59	1
Tetrahydrofuran	1.1	U	10	1.1	ug/L			04/24/15 10:59	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: B30H98 — **Lab Sample ID: 160-11405-8**
Date Collected: 04/17/15 08:20 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**1.7**		1.0	0.070	ug/L			04/24/15 10:59	1
trans-1,2-Dichloroethylene	0.080	U	1.0	0.080	ug/L			04/24/15 10:59	1
trans-1,3-Dichloropropene	0.080	U	1.0	0.080	ug/L			04/24/15 10:59	1
trans-1,4-Dichloro-2-butene	0.29	U	2.0	0.29	ug/L			04/24/15 10:59	1
Trichloroethene	0.25	U	1.0	0.25	ug/L			04/24/15 10:59	1
Trichloromonofluoromethane	0.11	U	1.0	0.11	ug/L			04/24/15 10:59	1
Vinyl acetate	0.18	U T O	2.0	0.18	ug/L			04/24/15 10:59	1
Vinyl chloride	0.080	U	2.0	0.080	ug/L			04/24/15 10:59	1
Xylenes, Total	0.20	U	3.0	0.20	ug/L			04/24/15 10:59	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/15 10:59*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 129*		*04/24/15 10:59*	*1*
4-Bromofluorobenzene (Surr)	*116*		*81 - 130*		*04/24/15 10:59*	*1*
Dibromofluoromethane (Surr)	*99*		*81 - 124*		*04/24/15 10:59*	*1*
Toluene-d8 (Surr)	*119*		*87 - 128*		*04/24/15 10:59*	*1*

Client Sample ID: B30M22 — **Lab Sample ID: 160-11405-9**
Date Collected: 04/17/15 07:00 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.070	U	1.0	0.070	ug/L			04/24/15 12:38	1
1,1,2-Trichloroethane	0.15	U	1.0	0.15	ug/L			04/24/15 12:38	1
1,1-Dichloroethane	0.070	U	1.0	0.070	ug/L			04/24/15 12:38	1
1,1-Dichloroethene	0.080	U	1.0	0.080	ug/L			04/24/15 12:38	1
1,2-Dichloroethane	0.10	U	1.0	0.10	ug/L			04/24/15 12:38	1
1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L			04/24/15 12:38	1
1-Butanol	12	U	50	12	ug/L			04/24/15 12:38	1
2-Butanone (MEK)	0.52	U	5.0	0.52	ug/L			04/24/15 12:38	1
4-Methyl-2-pentanone (MIBK)	0.12	U	5.0	0.12	ug/L			04/24/15 12:38	1
Acetone	0.34	U	2.0	0.34	ug/L			04/24/15 12:38	1
Benzene	0.060	U	1.0	0.060	ug/L			04/24/15 12:38	1
Carbon disulfide	0.050	U	1.0	0.050	ug/L			04/24/15 12:38	1
Carbon tetrachloride	0.13	U	1.0	0.13	ug/L			04/24/15 12:38	1
Chlorobenzene	0.15	U	1.0	0.15	ug/L			04/24/15 12:38	1
Chloroform	0.10	U	1.0	0.10	ug/L			04/24/15 12:38	1
cis-1,2-Dichloroethylene	0.090	U	1.0	0.090	ug/L			04/24/15 12:38	1
Ethyl Cyanide	1.4	U	10	1.4	ug/L			04/24/15 12:38	1
Ethylbenzene	0.090	U	1.0	0.090	ug/L			04/24/15 12:38	1
Methylene Chloride	**0.99**	**J**	1.0	0.27	ug/L			04/24/15 12:38	1
Tetrachloroethene	0.18	U	1.0	0.18	ug/L			04/24/15 12:38	1
Tetrahydrofuran	1.1	U	10	1.1	ug/L			04/24/15 12:38	1
Toluene	0.070	U	1.0	0.070	ug/L			04/24/15 12:38	1
trans-1,2-Dichloroethylene	0.080	U	1.0	0.080	ug/L			04/24/15 12:38	1
Trichloroethene	0.25	U	1.0	0.25	ug/L			04/24/15 12:38	1
Vinyl chloride	0.080	U	2.0	0.080	ug/L			04/24/15 12:38	1
Xylenes, Total	0.20	U	3.0	0.20	ug/L			04/24/15 12:38	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					04/24/15 12:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		75 - 129		04/24/15 12:38	1
4-Bromofluorobenzene (Surr)	118		81 - 130		04/24/15 12:38	1
Dibromofluoromethane (Surr)	103		81 - 124		04/24/15 12:38	1
Toluene-d8 (Surr)	120		87 - 128		04/24/15 12:38	1

Client Sample ID: B30M23 — **Lab Sample ID: 160-11405-12**
Date Collected: 04/17/15 09:51 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.070	U	1.0	0.070	ug/L			04/24/15 13:03	1
1,1,2-Trichloroethane	0.15	U	1.0	0.15	ug/L			04/24/15 13:03	1
1,1-Dichloroethane	0.070	U	1.0	0.070	ug/L			04/24/15 13:03	1
1,1-Dichloroethene	0.080	U	1.0	0.080	ug/L			04/24/15 13:03	1
1,2-Dichloroethane	0.10	U	1.0	0.10	ug/L			04/24/15 13:03	1
1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L			04/24/15 13:03	1
1-Butanol	12	U	50	12	ug/L			04/24/15 13:03	1
2-Butanone (MEK)	0.52	U	5.0	0.52	ug/L			04/24/15 13:03	1
4-Methyl-2-pentanone (MIBK)	0.12	U	5.0	0.12	ug/L			04/24/15 13:03	1
Acetone	0.34	U	2.0	0.34	ug/L			04/24/15 13:03	1
Benzene	0.060	U	1.0	0.060	ug/L			04/24/15 13:03	1
Carbon disulfide	0.050	U	1.0	0.050	ug/L			04/24/15 13:03	1
Carbon tetrachloride	0.13	U	1.0	0.13	ug/L			04/24/15 13:03	1
Chlorobenzene	0.15	U	1.0	0.15	ug/L			04/24/15 13:03	1
Chloroform	**2.0**		1.0	0.10	ug/L			04/24/15 13:03	1
cis-1,2-Dichloroethylene	0.090	U	1.0	0.090	ug/L			04/24/15 13:03	1
Ethyl Cyanide	1.4	U	10	1.4	ug/L			04/24/15 13:03	1
Ethylbenzene	0.090	U	1.0	0.090	ug/L			04/24/15 13:03	1
Methylene Chloride	0.27	U	1.0	0.27	ug/L			04/24/15 13:03	1
Tetrachloroethene	0.18	U	1.0	0.18	ug/L			04/24/15 13:03	1
Tetrahydrofuran	1.1	U	10	1.1	ug/L			04/24/15 13:03	1
Toluene	0.070	U	1.0	0.070	ug/L			04/24/15 13:03	1
trans-1,2-Dichloroethylene	0.080	U	1.0	0.080	ug/L			04/24/15 13:03	1
Trichloroethene	0.25	U	1.0	0.25	ug/L			04/24/15 13:03	1
Vinyl chloride	0.080	U	2.0	0.080	ug/L			04/24/15 13:03	1
Xylenes, Total	0.20	U	3.0	0.20	ug/L			04/24/15 13:03	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					04/24/15 13:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 129		04/24/15 13:03	1
4-Bromofluorobenzene (Surr)	117		81 - 130		04/24/15 13:03	1
Dibromofluoromethane (Surr)	109		81 - 124		04/24/15 13:03	1
Toluene-d8 (Surr)	116		87 - 128		04/24/15 13:03	1

Client Sample ID: B30HP1 — **Lab Sample ID: 160-11405-14**
Date Collected: 04/17/15 09:51 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	0.070	U	1.0	0.070	ug/L			04/24/15 13:28	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: B30HP1 **Lab Sample ID: 160-11405-14**
Date Collected: 04/17/15 09:51 **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	0.15	U	1.0	0.15	ug/L			04/24/15 13:28	1
1,1-Dichloroethane	0.070	U	1.0	0.070	ug/L			04/24/15 13:28	1
1,1-Dichloroethene	0.080	U	1.0	0.080	ug/L			04/24/15 13:28	1
1,2-Dichloroethane	0.10	U	1.0	0.10	ug/L			04/24/15 13:28	1
2-Butanone (MEK)	0.52	U	5.0	0.52	ug/L			04/24/15 13:28	1
4-Methyl-2-pentanone (MIBK)	0.12	U	5.0	0.12	ug/L			04/24/15 13:28	1
Acetone	0.34	U	2.0	0.34	ug/L			04/24/15 13:28	1
Benzene	0.060	U	1.0	0.060	ug/L			04/24/15 13:28	1
Carbon disulfide	0.050	U	1.0	0.050	ug/L			04/24/15 13:28	1
Carbon tetrachloride	0.13	U	1.0	0.13	ug/L			04/24/15 13:28	1
Chlorobenzene	0.15	U	1.0	0.15	ug/L			04/24/15 13:28	1
Chloroform	0.10	U	1.0	0.10	ug/L			04/24/15 13:28	1
Ethylbenzene	0.090	U	1.0	0.090	ug/L			04/24/15 13:28	1
Methylene Chloride	0.27	U	1.0	0.27	ug/L			04/24/15 13:28	1
Tetrachloroethene	0.18	U	1.0	0.18	ug/L			04/24/15 13:28	1
Toluene	0.070	U	1.0	0.070	ug/L			04/24/15 13:28	1
Trichloroethene	0.25	U	1.0	0.25	ug/L			04/24/15 13:28	1
Vinyl chloride	0.080	U	2.0	0.080	ug/L			04/24/15 13:28	1
Xylenes, Total	0.20	U	3.0	0.20	ug/L			04/24/15 13:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/15 13:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 129*		*04/24/15 13:28*	*1*
4-Bromofluorobenzene (Surr)	*115*		*81 - 130*		*04/24/15 13:28*	*1*
Dibromofluoromethane (Surr)	*106*		*81 - 124*		*04/24/15 13:28*	*1*
Toluene-d8 (Surr)	*118*		*87 - 128*		*04/24/15 13:28*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: B30KF5 **Lab Sample ID: 160-11405-3**
Date Collected: 04/17/15 10:39 **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,4,6-Tetrachlorophenol	0.95	U	47	0.95	ug/L		04/23/15 14:22	04/29/15 06:17	1
2,4,5-Trichlorophenol	0.95	U	9.5	0.95	ug/L		04/23/15 14:22	04/29/15 06:17	1
2,4,6-Trichlorophenol	0.95	U	9.5	0.95	ug/L		04/23/15 14:22	04/29/15 06:17	1
2,4-Dichlorophenol	0.95	U	9.5	0.95	ug/L		04/23/15 14:22	04/29/15 06:17	1
2,4-Dimethylphenol	0.95	U	9.5	0.95	ug/L		04/23/15 14:22	04/29/15 06:17	1
2,4-Dinitrophenol	1.9	U T	47	1.9	ug/L		04/23/15 14:22	04/29/15 06:17	1
2,6-Dichlorophenol	0.95	U	9.5	0.95	ug/L		04/23/15 14:22	04/29/15 06:17	1
2-Chlorophenol	0.95	U	9.5	0.95	ug/L		04/23/15 14:22	04/29/15 06:17	1
2-Methylphenol	0.95	U	9.5	0.95	ug/L		04/23/15 14:22	04/29/15 06:17	1
2-Nitrophenol	1.4	U	9.5	1.4	ug/L		04/23/15 14:22	04/29/15 06:17	1
3 & 4 Methylphenol	1.9	U	19	1.9	ug/L		04/23/15 14:22	04/29/15 06:17	1
4,6-Dinitro-2-methylphenol	1.2	U	9.5	1.2	ug/L		04/23/15 14:22	04/29/15 06:17	1
4-Chloro-3-methylphenol	0.95	U	9.5	0.95	ug/L		04/23/15 14:22	04/29/15 06:17	1
4-Nitrophenol	1.9	U	9.5	1.9	ug/L		04/23/15 14:22	04/29/15 06:17	1
Dinoseb	1.9	U	19	1.9	ug/L		04/23/15 14:22	04/29/15 06:17	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: B30KF5 — **Lab Sample ID: 160-11405-3**
Date Collected: 04/17/15 10:39 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	1.2	U	9.5	1.2	ug/L		04/23/15 14:22	04/29/15 06:17	1
Phenol	1.9	U	9.5	1.9	ug/L		04/23/15 14:22	04/29/15 06:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*75*		*47 - 103*	*04/23/15 14:22*	*04/29/15 06:17*	*1*
2-Fluorobiphenyl (Surr)	*75*		*30 - 99*	*04/23/15 14:22*	*04/29/15 06:17*	*1*
2-Fluorophenol (Surr)	*37*		*10 - 74*	*04/23/15 14:22*	*04/29/15 06:17*	*1*
Nitrobenzene-d5 (Surr)	*80*		*31 - 105*	*04/23/15 14:22*	*04/29/15 06:17*	*1*
Phenol-d5 (Surr)	*23*		*10 - 50*	*04/23/15 14:22*	*04/29/15 06:17*	*1*
Terphenyl-d14 (Surr)	*57*		*68 - 116*	*04/23/15 14:22*	*04/29/15 06:17*	*1*

Method: 6010C - Metals (ICP)

Client Sample ID: B30M67 — **Lab Sample ID: 160-11385-1**
Date Collected: 04/10/15 13:15 — **Matrix: Water**
Date Received: 04/17/15 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**55100**		1000	54.2	ug/L		05/06/15 14:32	05/18/15 19:57	1
Iron	**3310**		100	12.8	ug/L		05/06/15 14:32	05/18/15 19:57	1
Magnesium	**8800**		1000	50.5	ug/L		05/06/15 14:32	05/18/15 19:57	1
Potassium	**3380**	**B**	5000	456	ug/L		05/06/15 14:32	05/18/15 19:57	1
Sodium	**7870**		1000	105	ug/L		05/06/15 14:32	05/18/15 19:57	1
Vanadium	4.4	U	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 19:57	1
Boron	7.2	U	50.0	7.2	ug/L		05/06/15 14:32	05/18/15 19:57	1

Client Sample ID: B30M59 — **Lab Sample ID: 160-11385-4**
Date Collected: 04/16/15 09:05 — **Matrix: Water**
Date Received: 04/17/15 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.7	U	10.0	3.7	ug/L		05/06/15 14:32	05/18/15 20:09	1
Arsenic	**3.4**	**B C**	10.0	1.8	ug/L		05/06/15 14:32	05/18/15 20:09	1
Barium	**30.3**	**B**	50.0	2.1	ug/L		05/06/15 14:32	05/18/15 20:09	1
Beryllium	0.28	U	5.0	0.28	ug/L		05/06/15 14:32	05/18/15 20:09	1
Cadmium	0.34	U	5.0	0.34	ug/L		05/06/15 14:32	05/18/15 20:09	1
Calcium	**56100**		1000	54.2	ug/L		05/06/15 14:32	05/18/15 20:09	1
Chromium	**5.8**	**B**	10.0	3.4	ug/L		05/06/15 14:32	05/18/15 20:09	1
Cobalt	2.7	U	50.0	2.7	ug/L		05/06/15 14:32	05/18/15 20:09	1
Copper	2.1	U	25.0	2.1	ug/L		05/06/15 14:32	05/18/15 20:09	1
Iron	**417**		100	12.8	ug/L		05/06/15 14:32	05/18/15 20:09	1
Magnesium	**8860**		1000	50.5	ug/L		05/06/15 14:32	05/18/15 20:09	1
Manganese	**7.0**	**B**	15.0	1.0	ug/L		05/06/15 14:32	05/18/15 20:09	1
Nickel	**4.1**	**B C**	40.0	2.6	ug/L		05/06/15 14:32	05/18/15 20:09	1
Potassium	**3670**	**B**	5000	456	ug/L		05/06/15 14:32	05/18/15 20:09	1
Silver	0.99	U	10.0	0.99	ug/L		05/06/15 14:32	05/18/15 20:09	1
Sodium	**4380**		1000	105	ug/L		05/06/15 14:32	05/18/15 20:09	1
Strontium	**261**		5.0	0.24	ug/L		05/06/15 14:32	05/18/15 20:09	1
Vanadium	**7.2**	**B**	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 20:09	1
Zinc	**47.9**		20.0	8.3	ug/L		05/06/15 14:32	05/18/15 20:09	1

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S,W,I,A ,X SAFS- GROUNDWATER

TestAmerica Job ID: 160-11385-1
SDG: SL1789

Method: 6010C - Metals (ICP)

Client Sample ID: B30KF5
Date Collected: 04/17/15 10:39
Date Received: 04/18/15 08:45

Lab Sample ID: 160-11405-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.7	U	10.0	3.7	ug/L		05/06/15 14:32	05/18/15 20:17	1
Arsenic	**7.0**	**B C**	10.0	1.8	ug/L		05/06/15 14:32	05/18/15 20:17	1
Barium	**71.0**		50.0	2.1	ug/L		05/06/15 14:32	05/18/15 20:17	1
Cadmium	0.34	U	5.0	0.34	ug/L		05/06/15 14:32	05/18/15 20:17	1
Calcium	**61000**		1000	54.2	ug/L		05/06/15 14:32	05/18/15 20:17	1
Chromium	**30.7**		10.0	3.4	ug/L		05/06/15 14:32	05/20/15 12:19	1
Cobalt	2.7	U	50.0	2.7	ug/L		05/06/15 14:32	05/18/15 20:17	1
Copper	2.1	U	25.0	2.1	ug/L		05/06/15 14:32	05/18/15 20:17	1
Iron	**134**		100	12.8	ug/L		05/06/15 14:32	05/18/15 20:17	1
Magnesium	**17000**		1000	50.5	ug/L		05/06/15 14:32	05/18/15 20:17	1
Manganese	**3.3**	**B**	15.0	1.0	ug/L		05/06/15 14:32	05/18/15 20:17	1
Nickel	**22.9**	**B**	40.0	2.6	ug/L		05/06/15 14:32	05/18/15 20:17	1
Potassium	**8050**		5000	456	ug/L		05/06/15 14:32	05/18/15 20:17	1
Silver	0.99	U	10.0	0.99	ug/L		05/06/15 14:32	05/18/15 20:17	1
Sodium	**25500**		1000	105	ug/L		05/06/15 14:32	05/18/15 20:17	1
Vanadium	**17.6**	**B**	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 20:17	1
Zinc	8.3	U	20.0	8.3	ug/L		05/06/15 14:32	05/18/15 20:17	1

Client Sample ID: B313W3
Date Collected: 04/17/15 12:05
Date Received: 04/18/15 08:45

Lab Sample ID: 160-11405-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**65900**		1000	54.2	ug/L		05/06/15 14:32	05/18/15 20:20	1
Iron	**49.6**	**B C**	100	12.8	ug/L		05/06/15 14:32	05/18/15 20:20	1
Magnesium	**6420**		1000	50.5	ug/L		05/06/15 14:32	05/18/15 20:20	1
Potassium	**3740**	**B**	5000	456	ug/L		05/06/15 14:32	05/18/15 20:20	1
Sodium	**14200**		1000	105	ug/L		05/06/15 14:32	05/18/15 20:20	1
Vanadium	4.4	U	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 20:20	1
Boron	**258**		50.0	7.2	ug/L		05/06/15 14:32	05/18/15 20:20	1

Client Sample ID: B30M22
Date Collected: 04/17/15 07:00
Date Received: 04/18/15 08:45

Lab Sample ID: 160-11405-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	54.2	U	1000	54.2	ug/L		05/06/15 14:32	05/18/15 20:44	1
Iron	12.8	U	100	12.8	ug/L		05/06/15 14:32	05/18/15 20:44	1
Magnesium	50.5	U	1000	50.5	ug/L		05/06/15 14:32	05/18/15 20:44	1
Potassium	456	U	5000	456	ug/L		05/06/15 14:32	05/18/15 20:44	1
Sodium	105	U	1000	105	ug/L		05/06/15 14:32	05/18/15 20:44	1
Vanadium	4.4	U	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 20:44	1
Boron	7.2	U	50.0	7.2	ug/L		05/06/15 14:32	05/18/15 20:44	1

Client Sample ID: B30M23
Date Collected: 04/17/15 09:51
Date Received: 04/18/15 08:45

Lab Sample ID: 160-11405-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**34500**		1000	54.2	ug/L		05/06/15 14:32	05/18/15 20:56	1
Iron	12.8	U	100	12.8	ug/L		05/06/15 14:32	05/18/15 20:56	1
Magnesium	**10700**		1000	50.5	ug/L		05/06/15 14:32	05/18/15 20:56	1
Potassium	**4450**	**B**	5000	456	ug/L		05/06/15 14:32	05/18/15 20:56	1

Method: 6010C - Metals (ICP) (Continued)

Client Sample ID: B30M23 — **Lab Sample ID: 160-11405-12**
Date Collected: 04/17/15 09:51 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	34400		1000	105	ug/L		05/06/15 14:32	05/18/15 20:56	1
Vanadium	15.8	B	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 20:56	1
Boron	7.2	U	50.0	7.2	ug/L		05/06/15 14:32	05/18/15 20:56	1

Method: 6010C - Metals (ICP) - Dissolved

Client Sample ID: B30M69 — **Lab Sample ID: 160-11385-2**
Date Collected: 04/10/15 13:15 — **Matrix: Water**
Date Received: 04/17/15 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	7.2	U	50.0	7.2	ug/L		05/06/15 14:32	05/18/15 20:01	1
Calcium	53600		1000	54.2	ug/L		05/06/15 14:32	05/18/15 20:01	1
Iron	53.8	B C	100	12.8	ug/L		05/06/15 14:32	05/18/15 20:01	1
Magnesium	8590		1000	50.5	ug/L		05/06/15 14:32	05/18/15 20:01	1
Potassium	3700	B	5000	456	ug/L		05/06/15 14:32	05/18/15 20:01	1
Sodium	8020		1000	105	ug/L		05/06/15 14:32	05/18/15 20:01	1
Vanadium	4.4	U	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 20:01	1

Client Sample ID: B30M64 — **Lab Sample ID: 160-11385-3**
Date Collected: 04/16/15 09:05 — **Matrix: Water**
Date Received: 04/17/15 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.7	U	10.0	3.7	ug/L		05/06/15 14:32	05/18/15 20:05	1
Arsenic	2.8	B C	10.0	1.8	ug/L		05/06/15 14:32	05/18/15 20:05	1
Barium	31.1	B	50.0	2.1	ug/L		05/06/15 14:32	05/18/15 20:05	1
Beryllium	0.28	U	5.0	0.28	ug/L		05/06/15 14:32	05/18/15 20:05	1
Cadmium	0.34	U	5.0	0.34	ug/L		05/06/15 14:32	05/18/15 20:05	1
Calcium	58700		1000	54.2	ug/L		05/06/15 14:32	05/18/15 20:05	1
Chromium	8.6	B	10.0	3.4	ug/L		05/06/15 14:32	05/18/15 20:05	1
Cobalt	2.7	U	50.0	2.7	ug/L		05/06/15 14:32	05/18/15 20:05	1
Copper	2.1	U	25.0	2.1	ug/L		05/06/15 14:32	05/18/15 20:05	1
Iron	12.8	U	100	12.8	ug/L		05/06/15 14:32	05/18/15 20:05	1
Magnesium	9230		1000	50.5	ug/L		05/06/15 14:32	05/18/15 20:05	1
Manganese	1.9	B	15.0	1.0	ug/L		05/06/15 14:32	05/18/15 20:05	1
Nickel	4.1	B C	40.0	2.6	ug/L		05/06/15 14:32	05/18/15 20:05	1
Potassium	3840	B	5000	456	ug/L		05/06/15 14:32	05/18/15 20:05	1
Silver	0.99	U	10.0	0.99	ug/L		05/06/15 14:32	05/18/15 20:05	1
Sodium	4550		1000	105	ug/L		05/06/15 14:32	05/18/15 20:05	1
Strontium	272		5.0	0.24	ug/L		05/06/15 14:32	05/18/15 20:05	1
Vanadium	7.9	B	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 20:05	1
Zinc	24.9		20.0	8.3	ug/L		05/06/15 14:32	05/18/15 20:05	1

Client Sample ID: B30KF6 — **Lab Sample ID: 160-11405-2**
Date Collected: 04/17/15 10:39 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.7	U	10.0	3.7	ug/L		05/06/15 14:32	05/18/15 20:13	1
Arsenic	6.5	B C	10.0	1.8	ug/L		05/06/15 14:32	05/18/15 20:13	1
Barium	68.9		50.0	2.1	ug/L		05/06/15 14:32	05/18/15 20:13	1
Cadmium	0.34	U	5.0	0.34	ug/L		05/06/15 14:32	05/18/15 20:13	1

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Client Sample ID: B30KF6 — **Lab Sample ID: 160-11405-2**
Date Collected: 04/17/15 10:39 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**60400**		1000	54.2	ug/L		05/06/15 14:32	05/18/15 20:13	1
Chromium	3.4	U	10.0	3.4	ug/L		05/06/15 14:32	05/18/15 20:13	1
Cobalt	2.7	U	50.0	2.7	ug/L		05/06/15 14:32	05/18/15 20:13	1
Copper	2.1	U	25.0	2.1	ug/L		05/06/15 14:32	05/18/15 20:13	1
Iron	12.8	U	100	12.8	ug/L		05/06/15 14:32	05/18/15 20:13	1
Magnesium	**16600**		1000	50.5	ug/L		05/06/15 14:32	05/18/15 20:13	1
Manganese	**2.2**	**B**	15.0	1.0	ug/L		05/06/15 14:32	05/18/15 20:13	1
Nickel	**12.9**	**B C**	40.0	2.6	ug/L		05/06/15 14:32	05/18/15 20:13	1
Potassium	**7800**		5000	456	ug/L		05/06/15 14:32	05/18/15 20:13	1
Silver	0.99	U	10.0	0.99	ug/L		05/06/15 14:32	05/18/15 20:13	1
Sodium	**24900**		1000	105	ug/L		05/06/15 14:32	05/18/15 20:13	1
Vanadium	**15.7**	**B**	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 20:13	1
Zinc	8.3	U	20.0	8.3	ug/L		05/06/15 14:32	05/18/15 20:13	1

Client Sample ID: B306K0 — **Lab Sample ID: 160-11405-7**
Date Collected: 04/17/15 12:05 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**274**		50.0	7.2	ug/L		05/06/15 14:32	05/18/15 20:24	1
Calcium	**66300**		1000	54.2	ug/L		05/06/15 14:32	05/18/15 20:24	1
Iron	12.8	U	100	12.8	ug/L		05/06/15 14:32	05/18/15 20:24	1
Magnesium	**6410**		1000	50.5	ug/L		05/06/15 14:32	05/18/15 20:24	1
Potassium	**3820**	**B**	5000	456	ug/L		05/06/15 14:32	05/18/15 20:24	1
Sodium	**14300**		1000	105	ug/L		05/06/15 14:32	05/18/15 20:24	1
Vanadium	4.4	U	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 20:24	1

Client Sample ID: B30M26 — **Lab Sample ID: 160-11405-10**
Date Collected: 04/17/15 07:00 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	7.2	U	50.0	7.2	ug/L		05/06/15 14:32	05/18/15 20:48	1
Calcium	54.2	U	1000	54.2	ug/L		05/06/15 14:32	05/18/15 20:48	1
Iron	12.8	U	100	12.8	ug/L		05/06/15 14:32	05/18/15 20:48	1
Magnesium	50.5	U	1000	50.5	ug/L		05/06/15 14:32	05/18/15 20:48	1
Potassium	456	U	5000	456	ug/L		05/06/15 14:32	05/18/15 20:48	1
Sodium	105	U	1000	105	ug/L		05/06/15 14:32	05/18/15 20:48	1
Vanadium	4.4	U	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 20:48	1

Client Sample ID: B30M27 — **Lab Sample ID: 160-11405-11**
Date Collected: 04/17/15 09:51 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	7.2	U	50.0	7.2	ug/L		05/06/15 14:32	05/18/15 20:52	1
Calcium	**35300**		1000	54.2	ug/L		05/06/15 14:32	05/18/15 20:52	1
Iron	**26.2**	**B C**	100	12.8	ug/L		05/06/15 14:32	05/18/15 20:52	1
Magnesium	**10700**		1000	50.5	ug/L		05/06/15 14:32	05/18/15 20:52	1
Potassium	**4510**	**B**	5000	456	ug/L		05/06/15 14:32	05/18/15 20:52	1
Sodium	**35300**		1000	105	ug/L		05/06/15 14:32	05/18/15 20:52	1
Vanadium	**16.5**	**B**	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 20:52	1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: B30M67 — **Lab Sample ID: 160-11385-1**
Date Collected: 04/10/15 13:15 — **Matrix: Water**
Date Received: 04/17/15 09:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**33.6**		30.0	17.3	ug/L		05/06/15 14:36	05/11/15 23:10	2
Antimony	1.7	U	5.0	1.7	ug/L		05/06/15 14:36	05/11/15 23:10	2
Arsenic	**2.1**	**B**	10.0	1.2	ug/L		05/06/15 14:36	05/11/15 23:10	2
Barium	**23.3**		2.0	0.22	ug/L		05/06/15 14:36	05/11/15 23:10	2
Beryllium	0.35	U	0.50	0.35	ug/L		05/06/15 14:36	05/11/15 23:10	2
Cadmium	**0.16**	**B**	0.50	0.10	ug/L		05/06/15 14:36	05/11/15 23:10	2
Chromium	**3.7**	**B**	10.0	1.0	ug/L		05/06/15 14:36	05/11/15 23:10	2
Cobalt	**0.52**	**B**	2.0	0.22	ug/L		05/06/15 14:36	05/11/15 23:10	2
Copper	**1.3**		1.0	0.68	ug/L		05/06/15 14:36	05/11/15 23:10	2
Lead	**0.17**	**B**	3.0	0.17	ug/L		05/06/15 14:36	05/11/15 23:10	2
Manganese	**28.5**		2.0	0.88	ug/L		05/06/15 14:36	05/11/15 23:10	2
Molybdenum	**2.3**	**B**	5.0	1.0	ug/L		05/06/15 14:36	05/11/15 23:10	2
Nickel	**0.80**	**B**	5.0	0.80	ug/L		05/06/15 14:36	05/11/15 23:10	2
Selenium	**1.8**	**B**	5.0	1.6	ug/L		05/06/15 14:36	05/11/15 23:10	2
Silver	0.82	U	2.0	0.82	ug/L		05/06/15 14:36	05/11/15 23:10	2
Strontium	**264**		5.0	0.060	ug/L		05/06/15 14:36	05/11/15 23:10	2
Thallium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 23:10	2
Thorium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 23:10	2
Tin	1.1	U	2.0	1.1	ug/L		05/06/15 14:36	05/11/15 23:10	2
Uranium	**2.4**		1.0	0.23	ug/L		05/06/15 14:36	05/11/15 23:10	2
Zinc	**15.5**		10.0	9.3	ug/L		05/06/15 14:36	05/11/15 23:10	2

Client Sample ID: B30M22 — **Lab Sample ID: 160-11405-9**
Date Collected: 04/17/15 07:00 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17.3	U	30.0	17.3	ug/L		05/06/15 14:36	05/11/15 23:24	2
Antimony	1.7	U	5.0	1.7	ug/L		05/06/15 14:36	05/11/15 23:24	2
Arsenic	1.2	U	10.0	1.2	ug/L		05/06/15 14:36	05/11/15 23:24	2
Barium	0.22	U	2.0	0.22	ug/L		05/06/15 14:36	05/11/15 23:24	2
Beryllium	0.35	U	0.50	0.35	ug/L		05/06/15 14:36	05/11/15 23:24	2
Cadmium	0.10	U	0.50	0.10	ug/L		05/06/15 14:36	05/11/15 23:24	2
Chromium	**1.4**	**B**	10.0	1.0	ug/L		05/06/15 14:36	05/11/15 23:24	2
Cobalt	0.22	U	2.0	0.22	ug/L		05/06/15 14:36	05/11/15 23:24	2
Copper	0.68	U	1.0	0.68	ug/L		05/06/15 14:36	05/11/15 23:24	2
Lead	0.17	U	3.0	0.17	ug/L		05/06/15 14:36	05/11/15 23:24	2
Manganese	0.88	U	2.0	0.88	ug/L		05/06/15 14:36	05/11/15 23:24	2
Molybdenum	1.0	U	5.0	1.0	ug/L		05/06/15 14:36	05/11/15 23:24	2
Nickel	**1.7**	**B**	5.0	0.80	ug/L		05/06/15 14:36	05/11/15 23:24	2
Selenium	**1.6**	**B**	5.0	1.6	ug/L		05/06/15 14:36	05/11/15 23:24	2
Silver	0.82	U	2.0	0.82	ug/L		05/06/15 14:36	05/11/15 23:24	2
Strontium	0.060	U	5.0	0.060	ug/L		05/06/15 14:36	05/11/15 23:24	2
Thallium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 23:24	2
Thorium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 23:24	2
Tin	1.1	U	2.0	1.1	ug/L		05/06/15 14:36	05/11/15 23:24	2
Uranium	0.23	U	1.0	0.23	ug/L		05/06/15 14:36	05/11/15 23:24	2
Zinc	9.3	U	10.0	9.3	ug/L		05/06/15 14:36	05/11/15 23:24	2

Client Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S,W,I,A ,X SAFS- GROUNDWATER

TestAmerica Job ID: 160-11385-1
SDG: SL1789

Method: 6020A - Metals (ICP/MS)

Client Sample ID: B30M23
Date Collected: 04/17/15 09:51
Date Received: 04/18/15 08:45

Lab Sample ID: 160-11405-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17.3	U	30.0	17.3	ug/L		05/06/15 14:36	05/12/15 00:04	2
Antimony	1.7	U	5.0	1.7	ug/L		05/06/15 14:36	05/12/15 00:04	2
Arsenic	**5.0**	**B**	10.0	1.2	ug/L		05/06/15 14:36	05/12/15 00:04	2
Barium	**29.2**		2.0	0.22	ug/L		05/06/15 14:36	05/12/15 00:04	2
Beryllium	0.35	U	0.50	0.35	ug/L		05/06/15 14:36	05/12/15 00:04	2
Cadmium	0.10	U	0.50	0.10	ug/L		05/06/15 14:36	05/12/15 00:04	2
Chromium	**3.9**	**B**	10.0	1.0	ug/L		05/06/15 14:36	05/12/15 00:04	2
Cobalt	0.22	U	2.0	0.22	ug/L		05/06/15 14:36	05/12/15 00:04	2
Copper	0.68	U	1.0	0.68	ug/L		05/06/15 14:36	05/12/15 00:04	2
Lead	0.17	U	3.0	0.17	ug/L		05/06/15 14:36	05/12/15 00:04	2
Manganese	0.88	U	2.0	0.88	ug/L		05/06/15 14:36	05/12/15 00:04	2
Molybdenum	**7.4**		5.0	1.0	ug/L		05/06/15 14:36	05/12/15 00:04	2
Nickel	**1.5**	**B**	5.0	0.80	ug/L		05/06/15 14:36	05/12/15 00:04	2
Selenium	**1.7**	**B**	5.0	1.6	ug/L		05/06/15 14:36	05/12/15 00:04	2
Silver	0.82	U	2.0	0.82	ug/L		05/06/15 14:36	05/12/15 00:04	2
Strontium	**252**		5.0	0.060	ug/L		05/06/15 14:36	05/12/15 00:04	2
Thallium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/12/15 00:04	2
Thorium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/12/15 00:04	2
Tin	**1.1**	**B**	2.0	1.1	ug/L		05/06/15 14:36	05/12/15 00:04	2
Uranium	**2.7**		1.0	0.23	ug/L		05/06/15 14:36	05/12/15 00:04	2
Zinc	9.3	U	10.0	9.3	ug/L		05/06/15 14:36	05/12/15 00:04	2

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

Client Sample ID: B30M69
Date Collected: 04/10/15 13:15
Date Received: 04/17/15 09:40

Lab Sample ID: 160-11385-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**27.0**	**B**	30.0	17.3	ug/L		05/06/15 14:36	05/11/15 23:17	2
Antimony	1.7	U	5.0	1.7	ug/L		05/06/15 14:36	05/11/15 23:17	2
Arsenic	**1.7**	**B**	10.0	1.2	ug/L		05/06/15 14:36	05/11/15 23:17	2
Barium	**21.6**		2.0	0.22	ug/L		05/06/15 14:36	05/11/15 23:17	2
Beryllium	0.35	U	0.50	0.35	ug/L		05/06/15 14:36	05/11/15 23:17	2
Cadmium	0.10	U	0.50	0.10	ug/L		05/06/15 14:36	05/11/15 23:17	2
Chromium	**2.9**	**B**	10.0	1.0	ug/L		05/06/15 14:36	05/11/15 23:17	2
Cobalt	0.22	U	2.0	0.22	ug/L		05/06/15 14:36	05/11/15 23:17	2
Copper	**0.75**	**B**	1.0	0.68	ug/L		05/06/15 14:36	05/11/15 23:17	2
Lead	0.17	U	3.0	0.17	ug/L		05/06/15 14:36	05/11/15 23:17	2
Manganese	**1.8**	**B**	2.0	0.88	ug/L		05/06/15 14:36	05/11/15 23:17	2
Molybdenum	**2.4**	**B**	5.0	1.0	ug/L		05/06/15 14:36	05/11/15 23:17	2
Nickel	0.80	U	5.0	0.80	ug/L		05/06/15 14:36	05/11/15 23:17	2
Selenium	**2.1**	**B**	5.0	1.6	ug/L		05/06/15 14:36	05/11/15 23:17	2
Silver	0.82	U	2.0	0.82	ug/L		05/06/15 14:36	05/11/15 23:17	2
Strontium	**246**		5.0	0.060	ug/L		05/06/15 14:36	05/11/15 23:17	2
Thallium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 23:17	2
Thorium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 23:17	2
Tin	1.1	U	2.0	1.1	ug/L		05/06/15 14:36	05/11/15 23:17	2
Uranium	**2.3**		1.0	0.23	ug/L		05/06/15 14:36	05/11/15 23:17	2
Zinc	9.3	U	10.0	9.3	ug/L		05/06/15 14:36	05/11/15 23:17	2

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

Client Sample ID: B30M26 **Lab Sample ID: 160-11405-10**
Date Collected: 04/17/15 07:00 **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17.3	U	30.0	17.3	ug/L		05/06/15 14:36	05/11/15 23:31	2
Antimony	1.7	U	5.0	1.7	ug/L		05/06/15 14:36	05/11/15 23:31	2
Arsenic	1.2	U	10.0	1.2	ug/L		05/06/15 14:36	05/11/15 23:31	2
Barium	0.22	U	2.0	0.22	ug/L		05/06/15 14:36	05/11/15 23:31	2
Beryllium	0.35	U	0.50	0.35	ug/L		05/06/15 14:36	05/11/15 23:31	2
Cadmium	0.10	U	0.50	0.10	ug/L		05/06/15 14:36	05/11/15 23:31	2
Chromium	1.0	U	10.0	1.0	ug/L		05/06/15 14:36	05/11/15 23:31	2
Cobalt	0.22	U	2.0	0.22	ug/L		05/06/15 14:36	05/11/15 23:31	2
Copper	0.68	U	1.0	0.68	ug/L		05/06/15 14:36	05/11/15 23:31	2
Lead	0.17	U	3.0	0.17	ug/L		05/06/15 14:36	05/11/15 23:31	2
Manganese	0.88	U	2.0	0.88	ug/L		05/06/15 14:36	05/11/15 23:31	2
Molybdenum	1.0	U	5.0	1.0	ug/L		05/06/15 14:36	05/11/15 23:31	2
Nickel	0.80	U	5.0	0.80	ug/L		05/06/15 14:36	05/11/15 23:31	2
Selenium	1.6	U	5.0	1.6	ug/L		05/06/15 14:36	05/11/15 23:31	2
Silver	0.82	U	2.0	0.82	ug/L		05/06/15 14:36	05/11/15 23:31	2
Strontium	0.060	U	5.0	0.060	ug/L		05/06/15 14:36	05/11/15 23:31	2
Thallium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 23:31	2
Thorium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 23:31	2
Tin	1.1	U	2.0	1.1	ug/L		05/06/15 14:36	05/11/15 23:31	2
Uranium	0.23	U	1.0	0.23	ug/L		05/06/15 14:36	05/11/15 23:31	2
Zinc	9.3	U	10.0	9.3	ug/L		05/06/15 14:36	05/11/15 23:31	2

Client Sample ID: B30M27 **Lab Sample ID: 160-11405-11**
Date Collected: 04/17/15 09:51 **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17.3	U	30.0	17.3	ug/L		05/06/15 14:36	05/11/15 23:37	2
Antimony	1.7	U	5.0	1.7	ug/L		05/06/15 14:36	05/11/15 23:37	2
Arsenic	**4.9**	**B**	10.0	1.2	ug/L		05/06/15 14:36	05/11/15 23:37	2
Barium	**30.6**		2.0	0.22	ug/L		05/06/15 14:36	05/11/15 23:37	2
Beryllium	0.35	U	0.50	0.35	ug/L		05/06/15 14:36	05/11/15 23:37	2
Cadmium	0.10	U	0.50	0.10	ug/L		05/06/15 14:36	05/11/15 23:37	2
Chromium	**3.9**	**B**	10.0	1.0	ug/L		05/06/15 14:36	05/11/15 23:37	2
Cobalt	0.22	U	2.0	0.22	ug/L		05/06/15 14:36	05/11/15 23:37	2
Copper	0.68	U	1.0	0.68	ug/L		05/06/15 14:36	05/11/15 23:37	2
Lead	**2.6**	**B**	3.0	0.17	ug/L		05/06/15 14:36	05/11/15 23:37	2
Manganese	0.88	U	2.0	0.88	ug/L		05/06/15 14:36	05/11/15 23:37	2
Molybdenum	**7.3**		5.0	1.0	ug/L		05/06/15 14:36	05/11/15 23:37	2
Nickel	**0.86**	**B**	5.0	0.80	ug/L		05/06/15 14:36	05/11/15 23:37	2
Selenium	**1.6**	**B**	5.0	1.6	ug/L		05/06/15 14:36	05/11/15 23:37	2
Silver	0.82	U	2.0	0.82	ug/L		05/06/15 14:36	05/11/15 23:37	2
Strontium	**257**		5.0	0.060	ug/L		05/06/15 14:36	05/11/15 23:37	2
Thallium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 23:37	2
Thorium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 23:37	2
Tin	1.1	U	2.0	1.1	ug/L		05/06/15 14:36	05/11/15 23:37	2
Uranium	**2.7**		1.0	0.23	ug/L		05/06/15 14:36	05/11/15 23:37	2
Zinc	9.3	U	10.0	9.3	ug/L		05/06/15 14:36	05/11/15 23:37	2

General Chemistry

Client Sample ID: B30L11 — **Lab Sample ID: 160-11405-1**
Date Collected: 04/17/15 10:39 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	**4.2**	**B**	5.0	1.8	ug/L		05/07/15 16:00	05/11/15 13:32	1
Total Organic Carbon	0.35	U	1.0	0.35	mg/L			04/21/15 00:43	1

Client Sample ID: B30KF5 — **Lab Sample ID: 160-11405-3**
Date Collected: 04/17/15 10:39 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**96.0**		5.0	0.54	mg/L			04/24/15 09:07	1
Bicarbonate Alkalinity	**96.0**		5.0	0.54	mg/L			04/24/15 09:07	1
Carbonate Alkalinity	0.54	U	5.0	0.54	mg/L			04/24/15 09:07	1
Hydroxide Alkalinity	0.54	U	5.0	0.54	mg/L			04/24/15 09:07	1
Halogens, Total Organic	**6.4**		5.0	1.8	ug/L		05/07/15 16:00	05/11/15 13:32	1
Total Organic Carbon	0.35	U	1.0	0.35	mg/L			04/21/15 01:07	1

Client Sample ID: B30L10 — **Lab Sample ID: 160-11405-4**
Date Collected: 04/17/15 10:39 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	**6.8**		5.0	1.8	ug/L		05/08/15 10:00	05/11/15 13:32	1
Total Organic Carbon	0.35	U	1.0	0.35	mg/L			04/21/15 01:55	1

Client Sample ID: B30L09 — **Lab Sample ID: 160-11405-5**
Date Collected: 04/17/15 10:39 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	**6.2**		5.0	1.8	ug/L		05/08/15 10:00	05/11/15 13:32	1
Total Organic Carbon	0.35	U	1.0	0.35	mg/L			04/21/15 02:12	1

Client Sample ID: B30H98 — **Lab Sample ID: 160-11405-8**
Date Collected: 04/17/15 08:20 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**368**		5.0	3.5	mg/L			04/20/15 10:12	1
Alkalinity	**110**		5.0	0.54	mg/L			04/24/15 09:07	1
Bicarbonate Alkalinity	**110**		5.0	0.54	mg/L			04/24/15 09:07	1
Carbonate Alkalinity	0.54	U	5.0	0.54	mg/L			04/24/15 09:07	1
Hydroxide Alkalinity	0.54	U	5.0	0.54	mg/L			04/24/15 09:07	1
Sulfide	2.0	U	10.0	2.0	mg/L		04/24/15 08:16	04/24/15 09:25	1
Total Organic Carbon	**0.51**	**B**	1.0	0.35	mg/L			04/21/15 02:29	1

Client Sample ID: B305D3 — **Lab Sample ID: 160-11405-13**
Date Collected: 04/17/15 09:41 — **Matrix: Water**
Date Received: 04/18/15 08:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**107**		5.0	0.54	mg/L			04/24/15 09:07	1
Bicarbonate Alkalinity	**107**		5.0	0.54	mg/L			04/24/15 09:07	1
Carbonate Alkalinity	0.54	U	5.0	0.54	mg/L			04/24/15 09:07	1
Hydroxide Alkalinity	0.54	U	5.0	0.54	mg/L			04/24/15 09:07	1
Cyanide, Total	**276**		5.0	2.9	ug/L		04/30/15 08:16	04/30/15 17:56	1
Total Organic Carbon	0.35	U	1.0	0.35	mg/L			04/21/15 02:40	1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-187781/9
Matrix: Water
Analysis Batch: 187781

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	0.090	U	1.0	0.090	ug/L			04/24/15 10:30	1
1,1,1-Trichloroethane	0.070	U	1.0	0.070	ug/L			04/24/15 10:30	1
1,1,2,2-Tetrachloroethane	0.10	U	1.0	0.10	ug/L			04/24/15 10:30	1
1,1,2-Trichloroethane	0.15	U	1.0	0.15	ug/L			04/24/15 10:30	1
1,1-Dichloroethane	0.070	U	1.0	0.070	ug/L			04/24/15 10:30	1
1,1-Dichloroethene	0.080	U	1.0	0.080	ug/L			04/24/15 10:30	1
1,2,3-Trichloropropane	0.15	U	1.0	0.15	ug/L			04/24/15 10:30	1
1,2-Dibromo-3-Chloropropane	0.41	U	1.0	0.41	ug/L			04/24/15 10:30	1
1,2-Dibromoethane (EDB)	0.13	U	1.0	0.13	ug/L			04/24/15 10:30	1
1,2-Dichloroethane	0.10	U	1.0	0.10	ug/L			04/24/15 10:30	1
1,2-Dichloroethene, Total	0.15	U	2.0	0.15	ug/L			04/24/15 10:30	1
1,2-Dichloropropane	0.10	U	1.0	0.10	ug/L			04/24/15 10:30	1
1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L			04/24/15 10:30	1
1-Butanol	12	U	50	12	ug/L			04/24/15 10:30	1
2-Butanone (MEK)	0.52	U	5.0	0.52	ug/L			04/24/15 10:30	1
2-Hexanone	0.22	U	5.0	0.22	ug/L			04/24/15 10:30	1
4-Methyl-2-pentanone (MIBK)	0.12	U	5.0	0.12	ug/L			04/24/15 10:30	1
Acetone	0.34	U	2.0	0.34	ug/L			04/24/15 10:30	1
Acetonitrile	2.0	U	10	2.0	ug/L			04/24/15 10:30	1
Acrolein	2.8	U	10	2.8	ug/L			04/24/15 10:30	1
Acrylonitrile	0.58	U	10	0.58	ug/L			04/24/15 10:30	1
Allyl chloride	0.11	U	2.0	0.11	ug/L			04/24/15 10:30	1
Benzene	0.060	U	1.0	0.060	ug/L			04/24/15 10:30	1
Bromodichloromethane	0.090	U	1.0	0.090	ug/L			04/24/15 10:30	1
Bromoform	0.17	U	1.0	0.17	ug/L			04/24/15 10:30	1
Bromomethane	0.25	U	2.0	0.25	ug/L			04/24/15 10:30	1
Carbon disulfide	0.050	U	1.0	0.050	ug/L			04/24/15 10:30	1
Carbon tetrachloride	0.13	U	1.0	0.13	ug/L			04/24/15 10:30	1
Chlorobenzene	0.15	U	1.0	0.15	ug/L			04/24/15 10:30	1
Chloroethane	0.10	U	2.0	0.10	ug/L			04/24/15 10:30	1
Chloroform	0.10	U	1.0	0.10	ug/L			04/24/15 10:30	1
Chloromethane	0.080	U	2.0	0.080	ug/L			04/24/15 10:30	1
Chloroprene	0.10	U	1.0	0.10	ug/L			04/24/15 10:30	1
cis-1,2-Dichloroethylene	0.090	U	1.0	0.090	ug/L			04/24/15 10:30	1
cis-1,3-Dichloropropene	0.070	U	1.0	0.070	ug/L			04/24/15 10:30	1
Dibromochloromethane	0.13	U	1.0	0.13	ug/L			04/24/15 10:30	1
Dibromomethane	0.21	U	1.0	0.21	ug/L			04/24/15 10:30	1
Dichlorodifluoromethane	0.080	U	2.0	0.080	ug/L			04/24/15 10:30	1
Ethyl Cyanide	1.4	U	10	1.4	ug/L			04/24/15 10:30	1
Ethyl methacrylate	0.11	U	1.0	0.11	ug/L			04/24/15 10:30	1
Ethylbenzene	0.090	U	1.0	0.090	ug/L			04/24/15 10:30	1
Iodomethane	0.090	U	2.0	0.090	ug/L			04/24/15 10:30	1
Isobutyl alcohol	8.7	U	80	8.7	ug/L			04/24/15 10:30	1
Methacrylonitrile	0.50	U	10	0.50	ug/L			04/24/15 10:30	1
Methyl methacrylate	0.26	U	2.0	0.26	ug/L			04/24/15 10:30	1
Methylene Chloride	0.27	U	1.0	0.27	ug/L			04/24/15 10:30	1
Styrene	0.070	U	1.0	0.070	ug/L			04/24/15 10:30	1
Tetrachloroethene	0.18	U	1.0	0.18	ug/L			04/24/15 10:30	1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 160-187781/9 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187781

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	1.1	U	10	1.1	ug/L			04/24/15 10:30	1
Toluene	0.070	U	1.0	0.070	ug/L			04/24/15 10:30	1
trans-1,2-Dichloroethylene	0.080	U	1.0	0.080	ug/L			04/24/15 10:30	1
trans-1,3-Dichloropropene	0.080	U	1.0	0.080	ug/L			04/24/15 10:30	1
trans-1,4-Dichloro-2-butene	0.29	U	2.0	0.29	ug/L			04/24/15 10:30	1
Trichloroethene	0.25	U	1.0	0.25	ug/L			04/24/15 10:30	1
Trichloromonofluoromethane	0.11	U	1.0	0.11	ug/L			04/24/15 10:30	1
Vinyl acetate	0.18	U	2.0	0.18	ug/L			04/24/15 10:30	1
Vinyl chloride	0.080	U	2.0	0.080	ug/L			04/24/15 10:30	1
Xylenes, Total	0.20	U	3.0	0.20	ug/L			04/24/15 10:30	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*04/24/15 10:30*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 129*		*04/24/15 10:30*	*1*
4-Bromofluorobenzene (Surr)	*119*		*81 - 130*		*04/24/15 10:30*	*1*
Dibromofluoromethane (Surr)	*109*		*81 - 124*		*04/24/15 10:30*	*1*
Toluene-d8 (Surr)	*118*		*87 - 128*		*04/24/15 10:30*	*1*

Lab Sample ID: LCS 160-187781/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187781

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	10.0	10.4		ug/L		104	80 - 120
1,1,1-Trichloroethane	10.0	9.96		ug/L		100	85 - 116
1,1,2,2-Tetrachloroethane	10.0	13.3	O	ug/L		133	80 - 120
1,1,2-Trichloroethane	10.0	10.1		ug/L		101	80 - 120
1,1-Dichloroethane	10.0	9.62		ug/L		96	80 - 120
1,1-Dichloroethene	10.0	9.66		ug/L		97	80 - 120
1,2,3-Trichloropropane	10.0	11.2		ug/L		112	77 - 117
1,2-Dibromo-3-Chloropropane	10.0	10.5		ug/L		105	73 - 123
1,2-Dibromoethane (EDB)	10.0	9.57		ug/L		96	80 - 120
1,2-Dichloroethane	10.0	9.57		ug/L		96	80 - 115
1,2-Dichloroethene, Total	20.0	19.8		ug/L		99	80 - 120
1,2-Dichloropropane	10.0	9.79		ug/L		98	80 - 120
1,4-Dichlorobenzene	10.0	9.87		ug/L		99	80 - 120
1-Butanol	250	261		ug/L		105	62 - 128
2-Butanone (MEK)	10.0	9.17		ug/L		92	67 - 127
2-Hexanone	10.0	9.81		ug/L		98	70 - 123
4-Methyl-2-pentanone (MIBK)	10.0	9.06		ug/L		91	75 - 126
Acetone	10.0	11.3		ug/L		113	69 - 129
Acetonitrile	100	92.7		ug/L		93	67 - 122
Acrolein	50.0	49.1		ug/L		98	58 - 140
Acrylonitrile	100	94.6		ug/L		95	80 - 122
Allyl chloride	10.0	9.87		ug/L		99	25 - 140

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-187781/6
Matrix: Water
Analysis Batch: 187781

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	10.0		ug/L		100	80 - 120
Bromodichloromethane	10.0	10.1		ug/L		101	80 - 120
Bromoform	10.0	10.7		ug/L		107	80 - 120
Bromomethane	10.0	11.3		ug/L		113	70 - 124
Carbon disulfide	10.0	9.92		ug/L		99	80 - 121
Carbon tetrachloride	10.0	9.83		ug/L		98	83 - 125
Chlorobenzene	10.0	9.94		ug/L		99	80 - 120
Chloroethane	10.0	9.17		ug/L		92	73 - 119
Chloroform	10.0	9.84		ug/L		98	80 - 120
Chloromethane	10.0	8.79		ug/L		88	72 - 124
Chloroprene	10.0	9.52		ug/L		95	79 - 132
cis-1,2-Dichloroethylene	10.0	9.92		ug/L		99	80 - 120
cis-1,3-Dichloropropene	10.0	9.94		ug/L		99	80 - 120
Dibromochloromethane	10.0	10.3		ug/L		103	80 - 120
Dibromomethane	10.0	9.68		ug/L		97	80 - 120
Dichlorodifluoromethane	10.0	8.78		ug/L		88	24 - 140
Ethyl Cyanide	100	95.6		ug/L		96	77 - 121
Ethyl methacrylate	10.0	10.4		ug/L		104	69 - 123
Ethylbenzene	10.0	10.1		ug/L		101	80 - 120
Iodomethane	10.0	9.97		ug/L		100	69 - 129
Isobutyl alcohol	250	264		ug/L		105	64 - 124
Methacrylonitrile	100	100		ug/L		100	79 - 126
Methyl methacrylate	20.0	20.9		ug/L		104	70 - 123
Methylene Chloride	10.0	9.91		ug/L		99	80 - 120
Styrene	10.0	10.3		ug/L		103	81 - 133
Tetrachloroethene	10.0	9.49		ug/L		95	83 - 123
Tetrahydrofuran	20.0	19.7		ug/L		99	71 - 124
Toluene	10.0	9.95		ug/L		100	80 - 120
trans-1,2-Dichloroethylene	10.0	9.86		ug/L		99	80 - 120
trans-1,3-Dichloropropene	10.0	10.3		ug/L		103	82 - 124
trans-1,4-Dichloro-2-butene	10.0	9.52		ug/L		95	64 - 137
Trichloroethene	10.0	8.60		ug/L		86	80 - 120
Trichloromonofluoromethane	10.0	9.18		ug/L		92	71 - 132
Vinyl acetate	10.0	30.7	O	ug/L		307	63 - 140
Vinyl chloride	10.0	9.18		ug/L		92	77 - 122
Xylenes, Total	20.0	20.6		ug/L		103	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 129*
4-Bromofluorobenzene (Surr)	*101*		*81 - 130*
Dibromofluoromethane (Surr)	*103*		*81 - 124*
Toluene-d8 (Surr)	*105*		*87 - 128*

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-187781/7
Matrix: Water
Analysis Batch: 187781

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	10.0	9.93		ug/L		99	80 - 120	5	20
1,1,1-Trichloroethane	10.0	10.2		ug/L		102	85 - 116	2	20
1,1,2,2-Tetrachloroethane	10.0	12.9	O	ug/L		129	80 - 120	3	20
1,1,2-Trichloroethane	10.0	9.71		ug/L		97	80 - 120	4	20
1,1-Dichloroethane	10.0	9.84		ug/L		98	80 - 120	2	20
1,1-Dichloroethene	10.0	9.84		ug/L		98	80 - 120	2	20
1,2,3-Trichloropropane	10.0	10.7		ug/L		107	77 - 117	4	20
1,2-Dibromo-3-Chloropropane	10.0	10.1		ug/L		101	73 - 123	5	20
1,2-Dibromoethane (EDB)	10.0	9.55		ug/L		96	80 - 120	0	20
1,2-Dichloroethane	10.0	9.34		ug/L		93	80 - 115	2	20
1,2-Dichloroethene, Total	20.0	19.8		ug/L		99	80 - 120	0	20
1,2-Dichloropropane	10.0	9.55		ug/L		96	80 - 120	2	20
1,4-Dichlorobenzene	10.0	9.87		ug/L		99	80 - 120	0	20
1-Butanol	250	240		ug/L		96	62 - 128	8	20
2-Butanone (MEK)	10.0	9.03		ug/L		90	67 - 127	2	20
2-Hexanone	10.0	8.87		ug/L		89	70 - 123	10	20
4-Methyl-2-pentanone (MIBK)	10.0	8.69		ug/L		87	75 - 126	4	20
Acetone	10.0	9.48		ug/L		95	69 - 129	18	20
Acetonitrile	100	88.9		ug/L		89	67 - 122	4	20
Acrolein	50.0	46.5		ug/L		93	58 - 140	6	20
Acrylonitrile	100	92.7		ug/L		93	80 - 122	2	20
Allyl chloride	10.0	9.85		ug/L		98	25 - 140	0	20
Benzene	10.0	9.93		ug/L		99	80 - 120	1	20
Bromodichloromethane	10.0	10.0		ug/L		100	80 - 120	1	20
Bromoform	10.0	10.2		ug/L		102	80 - 120	5	20
Bromomethane	10.0	11.6		ug/L		116	70 - 124	3	20
Carbon disulfide	10.0	10.1		ug/L		101	80 - 121	2	20
Carbon tetrachloride	10.0	10.2		ug/L		102	83 - 125	4	20
Chlorobenzene	10.0	9.70		ug/L		97	80 - 120	2	20
Chloroethane	10.0	9.44		ug/L		94	73 - 119	3	20
Chloroform	10.0	10.3		ug/L		103	80 - 120	4	20
Chloromethane	10.0	8.60		ug/L		86	72 - 124	2	20
Chloroprene	10.0	9.70		ug/L		97	79 - 132	2	20
cis-1,2-Dichloroethylene	10.0	9.93		ug/L		99	80 - 120	0	20
cis-1,3-Dichloropropene	10.0	10.2		ug/L		102	80 - 120	3	20
Dibromochloromethane	10.0	10.3		ug/L		103	80 - 120	0	20
Dibromomethane	10.0	9.69		ug/L		97	80 - 120	0	20
Dichlorodifluoromethane	10.0	9.05		ug/L		91	24 - 140	3	20
Ethyl Cyanide	100	94.2		ug/L		94	77 - 121	2	20
Ethyl methacrylate	10.0	10.0		ug/L		100	69 - 123	4	20
Ethylbenzene	10.0	10.1		ug/L		101	80 - 120	0	20
Iodomethane	10.0	11.0		ug/L		110	69 - 129	10	20
Isobutyl alcohol	250	243		ug/L		97	64 - 124	8	20
Methacrylonitrile	100	95.9		ug/L		96	79 - 126	4	20
Methyl methacrylate	20.0	20.6		ug/L		103	70 - 123	1	20
Methylene Chloride	10.0	9.96		ug/L		100	80 - 120	1	20
Styrene	10.0	10.3		ug/L		103	81 - 133	0	20
Tetrachloroethene	10.0	9.60		ug/L		96	83 - 123	1	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 160-187781/7
Matrix: Water
Analysis Batch: 187781

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetrahydrofuran			20.0	21.6		ug/L		108	71 - 124	9	20
Toluene			10.0	10.2		ug/L		102	80 - 120	2	20
trans-1,2-Dichloroethylene			10.0	9.82		ug/L		98	80 - 120	0	20
trans-1,3-Dichloropropene			10.0	10.3		ug/L		103	82 - 124	1	20
trans-1,4-Dichloro-2-butene			10.0	9.48		ug/L		95	64 - 137	0	20
Trichloroethene			10.0	8.66		ug/L		87	80 - 120	1	20
Trichloromonofluoromethane			10.0	9.76		ug/L		98	71 - 132	6	20
Vinyl acetate			10.0	30.7	O	ug/L		307	63 - 140	0	20
Vinyl chloride			10.0	9.14		ug/L		91	77 - 122	0	20
Xylenes, Total			20.0	20.4		ug/L		102	80 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 129*
4-Bromofluorobenzene (Surr)	*102*		*81 - 130*
Dibromofluoromethane (Surr)	*106*		*81 - 124*
Toluene-d8 (Surr)	*105*		*87 - 128*

Lab Sample ID: 160-11405-8 MS
Matrix: Water
Analysis Batch: 187781

Client Sample ID: B30H98
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1,2-Tetrachloroethane	0.090	U	10.0	10.2		ug/L		102	80 - 120		
1,1,1-Trichloroethane	0.070	U	10.0	10.3		ug/L		103	82 - 124		
1,1,2,2-Tetrachloroethane	0.10	U T O	10.0	13.0	T	ug/L		130	75 - 121		
1,1,2-Trichloroethane	0.15	U	10.0	9.66		ug/L		97	80 - 120		
1,1-Dichloroethane	0.070	U	10.0	9.95		ug/L		99	80 - 122		
1,1-Dichloroethene	0.080	U	10.0	9.54		ug/L		95	80 - 120		
1,2,3-Trichloropropane	0.15	U	10.0	10.9		ug/L		109	71 - 119		
1,2-Dibromo-3-Chloropropane	0.41	U	10.0	9.50		ug/L		95	64 - 130		
1,2-Dibromoethane (EDB)	0.13	U	10.0	9.09		ug/L		91	82 - 122		
1,2-Dichloroethane	0.10	U	10.0	9.37		ug/L		94	80 - 120		
1,2-Dichloroethene, Total	0.15	U	20.0	19.9		ug/L		99	80 - 120		
1,2-Dichloropropane	0.10	U	10.0	10.1		ug/L		101	80 - 120		
1,4-Dichlorobenzene	0.12	U	10.0	9.97		ug/L		100	80 - 120		
1-Butanol	12	U	250	230		ug/L		92	58 - 144		
2-Butanone (MEK)	0.52	U	10.0	8.37		ug/L		84	53 - 145		
2-Hexanone	0.22	U	10.0	9.15		ug/L		91	59 - 132		
4-Methyl-2-pentanone (MIBK)	0.12	U	10.0	8.35		ug/L		83	70 - 131		
Acetone	0.34	U	10.0	9.44		ug/L		94	50 - 137		
Acetonitrile	2.0	U	100	87.3		ug/L		87	67 - 138		
Acrolein	2.8	U	50.0	46.8		ug/L		94	52 - 150		
Acrylonitrile	0.58	U	100	93.0		ug/L		93	73 - 137		
Allyl chloride	0.11	U	10.0	10.2		ug/L		102	49 - 150		
Benzene	0.060	U	10.0	10.3		ug/L		103	80 - 120		
Bromodichloromethane	0.090	U	10.0	10.5		ug/L		105	80 - 120		
Bromoform	0.17	U	10.0	10.5		ug/L		105	81 - 121		
Bromomethane	0.25	U	10.0	11.4		ug/L		114	55 - 137		

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 160-11405-8 MS — **Client Sample ID: B30H98**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187781

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	0.050	U	10.0	10.1		ug/L		101	80 - 121
Carbon tetrachloride	6.1		10.0	16.6		ug/L		104	77 - 131
Chlorobenzene	0.15	U	10.0	10.1		ug/L		101	80 - 120
Chloroethane	0.10	U	10.0	9.63		ug/L		96	71 - 126
Chloroform	0.27	J	10.0	10.7		ug/L		105	80 - 120
Chloromethane	0.080	U	10.0	8.54		ug/L		85	62 - 132
Chloroprene	0.10	U	10.0	9.76		ug/L		98	74 - 137
cis-1,2-Dichloroethylene	0.090	U	10.0	10.0		ug/L		100	80 - 120
cis-1,3-Dichloropropene	0.070	U	10.0	10.2		ug/L		102	83 - 127
Dibromochloromethane	0.13	U	10.0	10.4		ug/L		104	84 - 123
Dibromomethane	0.21	U	10.0	9.99		ug/L		100	78 - 122
Dichlorodifluoromethane	0.080	U	10.0	8.88		ug/L		89	67 - 135
Ethyl Cyanide	1.4	U	100	94.3		ug/L		94	67 - 141
Ethyl methacrylate	0.11	U	10.0	10.4		ug/L		104	69 - 123
Ethylbenzene	0.090	U	10.0	10.5		ug/L		105	84 - 125
Iodomethane	0.090	U	10.0	10.0		ug/L		100	53 - 141
Isobutyl alcohol	8.7	U	250	211		ug/L		84	59 - 138
Methacrylonitrile	0.50	U	100	96.7		ug/L		97	70 - 142
Methyl methacrylate	0.26	U	20.0	20.6		ug/L		103	66 - 131
Methylene Chloride	0.27	U	10.0	10.1		ug/L		101	80 - 120
Styrene	0.070	U	10.0	10.6		ug/L		106	77 - 139
Tetrachloroethene	0.18	U	10.0	9.90		ug/L		99	80 - 126
Tetrahydrofuran	1.1	U	20.0	20.8		ug/L		104	65 - 136
Toluene	1.7		10.0	12.1		ug/L		104	85 - 123
trans-1,2-Dichloroethylene	0.080	U	10.0	9.87		ug/L		99	80 - 120
trans-1,3-Dichloropropene	0.080	U	10.0	10.2		ug/L		102	83 - 125
trans-1,4-Dichloro-2-butene	0.29	U	10.0	8.60		ug/L		86	56 - 139
Trichloroethene	0.25	U	10.0	8.91		ug/L		89	81 - 125
Trichloromonofluoromethane	0.11	U	10.0	9.79		ug/L		98	69 - 133
Vinyl acetate	0.18	U T O	10.0	30.9	T	ug/L		309	58 - 150
Vinyl chloride	0.080	U	10.0	9.15		ug/L		91	70 - 129
Xylenes, Total	0.20	U	20.0	21.1		ug/L		106	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 129*
4-Bromofluorobenzene (Surr)	*100*		*81 - 130*
Dibromofluoromethane (Surr)	*106*		*81 - 124*
Toluene-d8 (Surr)	*102*		*87 - 128*

Lab Sample ID: 160-11405-8 MSD — **Client Sample ID: B30H98**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187781

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.090	U	10.0	10.3		ug/L		103	80 - 120	1	20
1,1,1-Trichloroethane	0.070	U	10.0	10.4		ug/L		104	82 - 124	1	20
1,1,2,2-Tetrachloroethane	0.10	U T O	10.0	12.9	T	ug/L		129	75 - 121	1	20
1,1,2-Trichloroethane	0.15	U	10.0	9.69		ug/L		97	80 - 120	0	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 160-11405-8 MSD
Matrix: Water
Analysis Batch: 187781

Client Sample ID: B30H98
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.070	U	10.0	10.1		ug/L		101	80 - 122	1	20
1,1-Dichloroethene	0.080	U	10.0	9.74		ug/L		97	80 - 120	2	20
1,2,3-Trichloropropane	0.15	U	10.0	9.83		ug/L		98	71 - 119	10	20
1,2-Dibromo-3-Chloropropane	0.41	U	10.0	9.62		ug/L		96	64 - 130	1	20
1,2-Dibromoethane (EDB)	0.13	U	10.0	8.80		ug/L		88	82 - 122	3	20
1,2-Dichloroethane	0.10	U	10.0	9.29		ug/L		93	80 - 120	1	20
1,2-Dichloroethene, Total	0.15	U	20.0	20.2		ug/L		101	80 - 120	2	20
1,2-Dichloropropane	0.10	U	10.0	10.0		ug/L		100	80 - 120	1	20
1,4-Dichlorobenzene	0.12	U	10.0	9.97		ug/L		100	80 - 120	0	20
1-Butanol	12	U	250	227		ug/L		91	58 - 144	1	20
2-Butanone (MEK)	0.52	U	10.0	8.28		ug/L		83	53 - 145	1	20
2-Hexanone	0.22	U	10.0	8.94		ug/L		89	59 - 132	2	20
4-Methyl-2-pentanone (MIBK)	0.12	U	10.0	8.46		ug/L		85	70 - 131	1	20
Acetone	0.34	U	10.0	9.46		ug/L		95	50 - 137	0	20
Acetonitrile	2.0	U	100	86.8		ug/L		87	67 - 138	1	20
Acrolein	2.8	U	50.0	47.5		ug/L		95	52 - 150	2	20
Acrylonitrile	0.58	U	100	90.9		ug/L		91	73 - 137	2	20
Allyl chloride	0.11	U	10.0	10.1		ug/L		101	49 - 150	1	20
Benzene	0.060	U	10.0	10.4		ug/L		104	80 - 120	1	20
Bromodichloromethane	0.090	U	10.0	10.3		ug/L		103	80 - 120	2	20
Bromoform	0.17	U	10.0	10.1		ug/L		101	81 - 121	4	20
Bromomethane	0.25	U	10.0	11.7		ug/L		117	55 - 137	2	20
Carbon disulfide	0.050	U	10.0	10.3		ug/L		103	80 - 121	2	20
Carbon tetrachloride	6.1		10.0	17.4		ug/L		112	77 - 131	5	20
Chlorobenzene	0.15	U	10.0	10.0		ug/L		100	80 - 120	1	20
Chloroethane	0.10	U	10.0	9.52		ug/L		95	71 - 126	1	20
Chloroform	0.27	J	10.0	10.8		ug/L		105	80 - 120	0	20
Chloromethane	0.080	U	10.0	8.89		ug/L		89	62 - 132	4	20
Chloroprene	0.10	U	10.0	9.74		ug/L		97	74 - 137	0	20
cis-1,2-Dichloroethylene	0.090	U	10.0	10.1		ug/L		101	80 - 120	1	20
cis-1,3-Dichloropropene	0.070	U	10.0	10.2		ug/L		102	83 - 127	1	20
Dibromochloromethane	0.13	U	10.0	10.1		ug/L		101	84 - 123	3	20
Dibromomethane	0.21	U	10.0	9.82		ug/L		98	78 - 122	2	20
Dichlorodifluoromethane	0.080	U	10.0	9.29		ug/L		93	67 - 135	5	20
Ethyl Cyanide	1.4	U	100	91.3		ug/L		91	67 - 141	3	20
Ethyl methacrylate	0.11	U	10.0	9.76		ug/L		98	69 - 123	7	20
Ethylbenzene	0.090	U	10.0	10.4		ug/L		104	84 - 125	1	20
Iodomethane	0.090	U	10.0	10.8		ug/L		108	53 - 141	8	20
Isobutyl alcohol	8.7	U	250	231		ug/L		93	59 - 138	9	20
Methacrylonitrile	0.50	U	100	95.0		ug/L		95	70 - 142	2	20
Methyl methacrylate	0.26	U	20.0	20.8		ug/L		104	66 - 131	1	20
Methylene Chloride	0.27	U	10.0	10.3		ug/L		103	80 - 120	3	20
Styrene	0.070	U	10.0	10.5		ug/L		105	77 - 139	0	20
Tetrachloroethene	0.18	U	10.0	9.84		ug/L		98	80 - 126	1	20
Tetrahydrofuran	1.1	U	20.0	22.0		ug/L		110	65 - 136	6	20
Toluene	1.7		10.0	12.3		ug/L		106	85 - 123	2	20
trans-1,2-Dichloroethylene	0.080	U	10.0	10.1		ug/L		101	80 - 120	3	20
trans-1,3-Dichloropropene	0.080	U	10.0	10.2		ug/L		102	83 - 125	0	20

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 160-11405-8 MSD — **Client Sample ID: B30H98**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187781

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,4-Dichloro-2-butene	0.29	U	10.0	9.04		ug/L		90	56 - 139	5	20
Trichloroethene	0.25	U	10.0	8.92		ug/L		89	81 - 125	0	20
Trichloromonofluoromethane	0.11	U	10.0	9.55		ug/L		95	69 - 133	2	20
Vinyl acetate	0.18	U T O	10.0	30.4	T	ug/L		304	58 - 150	2	20
Vinyl chloride	0.080	U	10.0	9.34		ug/L		93	70 - 129	2	20
Xylenes, Total	0.20	U	20.0	20.8		ug/L		104	80 - 120	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 129*
4-Bromofluorobenzene (Surr)	*103*		*81 - 130*
Dibromofluoromethane (Surr)	*108*		*81 - 124*
Toluene-d8 (Surr)	*106*		*87 - 128*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 160-187737/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 188422 — **Prep Batch: 187737**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,4,6-Tetrachlorophenol	1.0	U	50	1.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
2,4,5-Trichlorophenol	1.0	U	10	1.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
2,4,6-Trichlorophenol	1.0	U	10	1.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
2,4-Dichlorophenol	1.0	U	10	1.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
2,4-Dimethylphenol	1.0	U	10	1.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
2,4-Dinitrophenol	2.0	U	50	2.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
2,6-Dichlorophenol	1.0	U	10	1.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
2-Chlorophenol	1.0	U	10	1.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
2-Methylphenol	1.0	U	10	1.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
2-Nitrophenol	1.5	U	10	1.5	ug/L		04/23/15 14:22	04/29/15 00:16	1
3 & 4 Methylphenol	2.0	U	20	2.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
4,6-Dinitro-2-methylphenol	1.3	U	10	1.3	ug/L		04/23/15 14:22	04/29/15 00:16	1
4-Chloro-3-methylphenol	1.0	U	10	1.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
4-Nitrophenol	2.0	U	10	2.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
Dinoseb	2.0	U	20	2.0	ug/L		04/23/15 14:22	04/29/15 00:16	1
Pentachlorophenol	1.3	U	10	1.3	ug/L		04/23/15 14:22	04/29/15 00:16	1
Phenol	2.0	U	10	2.0	ug/L		04/23/15 14:22	04/29/15 00:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*71*		*47 - 103*	*04/23/15 14:22*	*04/29/15 00:16*	*1*
2-Fluorobiphenyl (Surr)	*71*		*30 - 99*	*04/23/15 14:22*	*04/29/15 00:16*	*1*
2-Fluorophenol (Surr)	*39*		*10 - 74*	*04/23/15 14:22*	*04/29/15 00:16*	*1*
Nitrobenzene-d5 (Surr)	*76*		*31 - 105*	*04/23/15 14:22*	*04/29/15 00:16*	*1*
Phenol-d5 (Surr)	*25*		*10 - 50*	*04/23/15 14:22*	*04/29/15 00:16*	*1*
Terphenyl-d14 (Surr)	*69*		*68 - 116*	*04/23/15 14:22*	*04/29/15 00:16*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 160-187737/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 188422 — **Prep Batch: 187737**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	200	157		ug/L		78	60 - 86
2,4,6-Trichlorophenol	200	153		ug/L		76	61 - 86
2,4-Dichlorophenol	200	149		ug/L		75	59 - 81
2,4-Dimethylphenol	200	140		ug/L		70	48 - 96
2,4-Dinitrophenol	200	75.2		ug/L		38	38 - 95
2-Chlorophenol	200	134		ug/L		67	54 - 81
2-Methylphenol	200	112		ug/L		56	47 - 75
2-Nitrophenol	200	158		ug/L		79	59 - 88
3 & 4 Methylphenol	200	110		ug/L		55	40 - 79
4,6-Dinitro-2-methylphenol	200	171		ug/L		85	60 - 98
4-Chloro-3-methylphenol	200	140		ug/L		70	56 - 83
4-Nitrophenol	200	47.2		ug/L		24	21 - 36
Pentachlorophenol	200	154		ug/L		77	47 - 96
Phenol	200	48.4		ug/L		24	21 - 37

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*83*		*47 - 103*
2-Fluorobiphenyl (Surr)	*82*		*30 - 99*
2-Fluorophenol (Surr)	*41*		*10 - 74*
Nitrobenzene-d5 (Surr)	*84*		*31 - 105*
Phenol-d5 (Surr)	*26*		*10 - 50*
Terphenyl-d14 (Surr)	*77*		*68 - 116*

Lab Sample ID: 160-11405-3 MS — **Client Sample ID: B30KF5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 188422 — **Prep Batch: 187737**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	0.95	U	192	150		ug/L		78	48 - 97
2,4,6-Trichlorophenol	0.95	U	192	147		ug/L		77	48 - 95
2,4-Dichlorophenol	0.95	U	192	140		ug/L		73	48 - 92
2,4-Dimethylphenol	0.95	U	192	130		ug/L		68	44 - 92
2,4-Dinitrophenol	1.9	U T	192	48.1	T	ug/L		25	40 - 96
2-Chlorophenol	0.95	U	192	125		ug/L		65	45 - 94
2-Methylphenol	0.95	U	192	103		ug/L		54	33 - 95
2-Nitrophenol	1.4	U	192	149		ug/L		78	49 - 96
3 & 4 Methylphenol	1.9	U	192	101		ug/L		53	26 - 113
4,6-Dinitro-2-methylphenol	1.2	U	192	127		ug/L		66	55 - 109
4-Chloro-3-methylphenol	0.95	U	192	131		ug/L		68	40 - 99
4-Nitrophenol	1.9	U	192	45.3		ug/L		24	10 - 76
Pentachlorophenol	1.2	U	192	155		ug/L		81	49 - 92
Phenol	1.9	U	192	42.7		ug/L		22	10 - 70

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*83*		*47 - 103*
2-Fluorobiphenyl (Surr)	*79*		*30 - 99*
2-Fluorophenol (Surr)	*38*		*10 - 74*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 160-11405-3 MS — **Client Sample ID: B30KF5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 188422 — **Prep Batch: 187737**

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5 (Surr)	*79*		*31 - 105*
Phenol-d5 (Surr)	*23*		*10 - 50*
Terphenyl-d14 (Surr)	*65*		*68 - 116*

Lab Sample ID: 160-11405-3 MSD — **Client Sample ID: B30KF5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 188422 — **Prep Batch: 187737**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	0.95	U	190	142		ug/L		75	48 - 97	6	20
2,4,6-Trichlorophenol	0.95	U	190	141		ug/L		74	48 - 95	4	20
2,4-Dichlorophenol	0.95	U	190	135		ug/L		71	48 - 92	4	20
2,4-Dimethylphenol	0.95	U	190	128		ug/L		68	44 - 92	1	20
2,4-Dinitrophenol	1.9	U T	190	55.0	T	ug/L		29	40 - 96	13	20
2-Chlorophenol	0.95	U	190	123		ug/L		65	45 - 94	2	20
2-Methylphenol	0.95	U	190	99.7		ug/L		53	33 - 95	3	20
2-Nitrophenol	1.4	U	190	145		ug/L		76	49 - 96	3	20
3 & 4 Methylphenol	1.9	U	190	98.7		ug/L		52	26 - 113	2	20
4,6-Dinitro-2-methylphenol	1.2	U	190	128		ug/L		67	55 - 109	0	20
4-Chloro-3-methylphenol	0.95	U	190	128		ug/L		68	40 - 99	2	20
4-Nitrophenol	1.9	U	190	46.1		ug/L		24	10 - 76	2	20
Pentachlorophenol	1.2	U	190	147		ug/L		78	49 - 92	5	20
Phenol	1.9	U	190	42.9		ug/L		23	10 - 70	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	*79*		*47 - 103*
2-Fluorobiphenyl (Surr)	*77*		*30 - 99*
2-Fluorophenol (Surr)	*37*		*10 - 74*
Nitrobenzene-d5 (Surr)	*79*		*31 - 105*
Phenol-d5 (Surr)	*23*		*10 - 50*
Terphenyl-d14 (Surr)	*63*		*68 - 116*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-189693/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191369 — **Prep Batch: 189693**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.7	U	10.0	3.7	ug/L		05/06/15 14:32	05/18/15 19:49	1
Arsenic	4.00	B	10.0	1.8	ug/L		05/06/15 14:32	05/18/15 19:49	1
Barium	2.1	U	50.0	2.1	ug/L		05/06/15 14:32	05/18/15 19:49	1
Beryllium	0.800	B	5.0	0.28	ug/L		05/06/15 14:32	05/18/15 19:49	1
Cadmium	2.90	B	5.0	0.34	ug/L		05/06/15 14:32	05/18/15 19:49	1
Calcium	54.2	U	1000	54.2	ug/L		05/06/15 14:32	05/18/15 19:49	1
Boron	22.10	B	50.0	7.2	ug/L		05/06/15 14:32	05/18/15 19:49	1
Chromium	3.4	U	10.0	3.4	ug/L		05/06/15 14:32	05/18/15 19:49	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 160-189693/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191369 — **Prep Batch: 189693**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	2.7	U	50.0	2.7	ug/L		05/06/15 14:32	05/18/15 19:49	1
Copper	2.1	U	25.0	2.1	ug/L		05/06/15 14:32	05/18/15 19:49	1
Iron	19.40	B	100	12.8	ug/L		05/06/15 14:32	05/18/15 19:49	1
Magnesium	50.5	U	1000	50.5	ug/L		05/06/15 14:32	05/18/15 19:49	1
Manganese	1.0	U	15.0	1.0	ug/L		05/06/15 14:32	05/18/15 19:49	1
Nickel	3.40	B	40.0	2.6	ug/L		05/06/15 14:32	05/18/15 19:49	1
Potassium	456	U	5000	456	ug/L		05/06/15 14:32	05/18/15 19:49	1
Silver	0.99	U	10.0	0.99	ug/L		05/06/15 14:32	05/18/15 19:49	1
Sodium	105	U	1000	105	ug/L		05/06/15 14:32	05/18/15 19:49	1
Strontium	0.800	B	5.0	0.24	ug/L		05/06/15 14:32	05/18/15 19:49	1
Vanadium	4.4	U	50.0	4.4	ug/L		05/06/15 14:32	05/18/15 19:49	1
Zinc	8.3	U	20.0	8.3	ug/L		05/06/15 14:32	05/18/15 19:49	1

Lab Sample ID: LCS 160-189693/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191369 — **Prep Batch: 189693**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	486.9		ug/L		97	80 - 120
Arsenic	1000	917.8		ug/L		92	80 - 120
Barium	1000	912.9		ug/L		91	80 - 120
Beryllium	1000	950.0		ug/L		95	80 - 120
Cadmium	1000	919.8		ug/L		92	80 - 120
Calcium	10000	9622		ug/L		96	80 - 120
Boron	2000	1776		ug/L		89	80 - 120
Chromium	1000	939.9		ug/L		94	80 - 120
Cobalt	1000	936.2		ug/L		94	80 - 120
Copper	1000	884.8		ug/L		88	80 - 120
Iron	10000	9369		ug/L		94	80 - 120
Magnesium	10000	8872		ug/L		89	80 - 120
Manganese	1000	918.4		ug/L		92	80 - 120
Nickel	1000	953.6		ug/L		95	80 - 120
Potassium	10000	8951		ug/L		90	80 - 120
Silver	200	182.7		ug/L		91	80 - 120
Sodium	10000	8841		ug/L		88	80 - 120
Strontium	1000	974.5		ug/L		97	80 - 120
Vanadium	1000	901.0		ug/L		90	80 - 120
Zinc	1000	947.4		ug/L		95	80 - 120

Lab Sample ID: 160-11405-12 MS — **Client Sample ID: B30M23**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191369 — **Prep Batch: 189693**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.7	U	500	492.2		ug/L		98	75 - 125
Arsenic	4.4	B C	1000	941.4		ug/L		94	75 - 125
Barium	29.9	B	1000	1007		ug/L		98	75 - 125
Beryllium	0.28	U	1000	984.8		ug/L		98	75 - 125
Cadmium	0.34	U	1000	935.4		ug/L		94	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-11405-12 MS — **Client Sample ID: B30M23**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191369 — **Prep Batch: 189693**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	34500		10000	43620		ug/L		91	75 - 125
Boron	7.2	U	2000	1887		ug/L		94	75 - 125
Chromium	7.3	B	1000	944.3		ug/L		94	75 - 125
Cobalt	2.7	U	1000	938.8		ug/L		94	75 - 125
Copper	2.1	U	1000	924.0		ug/L		92	75 - 125
Iron	12.8	U	10000	9729		ug/L		97	75 - 125
Magnesium	10700		10000	19350		ug/L		87	75 - 125
Manganese	1.0	U	1000	931.3		ug/L		93	75 - 125
Nickel	5.4	B C	1000	951.4		ug/L		95	75 - 125
Potassium	4450	B	10000	14150		ug/L		97	75 - 125
Silver	0.99	U	200	188.4		ug/L		94	75 - 125
Sodium	34400		10000	45370		ug/L		110	75 - 125
Strontium	266		1000	1300		ug/L		103	75 - 125
Vanadium	15.8	B	1000	947.7		ug/L		93	75 - 125
Zinc	8.3	U	1000	965.8		ug/L		97	75 - 125

Lab Sample ID: 160-11405-12 MSD — **Client Sample ID: B30M23**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191369 — **Prep Batch: 189693**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.7	U	500	493.7		ug/L		99	75 - 125	0	20
Arsenic	4.4	B C	1000	933.4		ug/L		93	75 - 125	1	20
Barium	29.9	B	1000	980.5		ug/L		95	75 - 125	3	20
Beryllium	0.28	U	1000	968.7		ug/L		97	75 - 125	2	20
Cadmium	0.34	U	1000	923.4		ug/L		92	75 - 125	1	20
Calcium	34500		10000	43550		ug/L		90	75 - 125	0	20
Boron	7.2	U	2000	1855		ug/L		93	75 - 125	2	20
Chromium	7.3	B	1000	931.4		ug/L		92	75 - 125	1	20
Cobalt	2.7	U	1000	928.0		ug/L		93	75 - 125	1	20
Copper	2.1	U	1000	915.2		ug/L		92	75 - 125	1	20
Iron	12.8	U	10000	9308		ug/L		93	75 - 125	4	20
Magnesium	10700		10000	19190		ug/L		85	75 - 125	1	20
Manganese	1.0	U	1000	912.9		ug/L		91	75 - 125	2	20
Nickel	5.4	B C	1000	939.8		ug/L		93	75 - 125	1	20
Potassium	4450	B	10000	13940		ug/L		95	75 - 125	1	20
Silver	0.99	U	200	188.1		ug/L		94	75 - 125	0	20
Sodium	34400		10000	45230		ug/L		108	75 - 125	0	20
Strontium	266		1000	1286		ug/L		102	75 - 125	1	20
Vanadium	15.8	B	1000	935.7		ug/L		92	75 - 125	1	20
Zinc	8.3	U	1000	954.5		ug/L		95	75 - 125	1	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 160-189695/1-A
Matrix: Water
Analysis Batch: 190419

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 189695

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	17.3	U	30.0	17.3	ug/L		05/06/15 14:36	05/11/15 22:57	2
Antimony	1.7	U	5.0	1.7	ug/L		05/06/15 14:36	05/11/15 22:57	2
Arsenic	1.2	U	10.0	1.2	ug/L		05/06/15 14:36	05/11/15 22:57	2
Barium	0.22	U	2.0	0.22	ug/L		05/06/15 14:36	05/11/15 22:57	2
Beryllium	0.35	U	0.50	0.35	ug/L		05/06/15 14:36	05/11/15 22:57	2
Cadmium	0.10	U	0.50	0.10	ug/L		05/06/15 14:36	05/11/15 22:57	2
Chromium	1.0	U	10.0	1.0	ug/L		05/06/15 14:36	05/11/15 22:57	2
Cobalt	0.22	U	2.0	0.22	ug/L		05/06/15 14:36	05/11/15 22:57	2
Copper	0.68	U	1.0	0.68	ug/L		05/06/15 14:36	05/11/15 22:57	2
Lead	0.17	U	3.0	0.17	ug/L		05/06/15 14:36	05/11/15 22:57	2
Manganese	0.88	U	2.0	0.88	ug/L		05/06/15 14:36	05/11/15 22:57	2
Molybdenum	1.0	U	5.0	1.0	ug/L		05/06/15 14:36	05/11/15 22:57	2
Nickel	0.80	U	5.0	0.80	ug/L		05/06/15 14:36	05/11/15 22:57	2
Selenium	1.6	U	5.0	1.6	ug/L		05/06/15 14:36	05/11/15 22:57	2
Silver	0.82	U	2.0	0.82	ug/L		05/06/15 14:36	05/11/15 22:57	2
Strontium	0.060	U	5.0	0.060	ug/L		05/06/15 14:36	05/11/15 22:57	2
Thallium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 22:57	2
Thorium	0.55	U	2.0	0.55	ug/L		05/06/15 14:36	05/11/15 22:57	2
Tin	1.1	U	2.0	1.1	ug/L		05/06/15 14:36	05/11/15 22:57	2
Uranium	0.23	U	1.0	0.23	ug/L		05/06/15 14:36	05/11/15 22:57	2
Zinc	9.3	U	10.0	9.3	ug/L		05/06/15 14:36	05/11/15 22:57	2

Lab Sample ID: LCS 160-189695/2-A
Matrix: Water
Analysis Batch: 190419

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 189695

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9232		ug/L		92	80 - 120
Antimony	500	491.6		ug/L		98	80 - 120
Arsenic	1000	936.2		ug/L		94	80 - 120
Barium	1000	988.1		ug/L		99	80 - 120
Beryllium	1000	965.6		ug/L		97	80 - 120
Cadmium	1000	995.0		ug/L		100	80 - 120
Chromium	1000	980.3		ug/L		98	80 - 120
Cobalt	1000	989.6		ug/L		99	80 - 120
Copper	1000	1014		ug/L		101	80 - 120
Lead	1000	941.6		ug/L		94	80 - 120
Manganese	1000	944.4		ug/L		94	80 - 120
Molybdenum	500	549.2		ug/L		110	80 - 120
Nickel	1000	944.4		ug/L		94	80 - 120
Selenium	500	472.6		ug/L		95	80 - 120
Silver	200	203.6		ug/L		102	80 - 120
Strontium	1000	980.6		ug/L		98	80 - 120
Thallium	200	203.9		ug/L		102	80 - 120
Thorium	1000	952.9		ug/L		95	80 - 120
Tin	1000	972.7		ug/L		97	80 - 120
Uranium	1000	944.7		ug/L		94	80 - 120
Zinc	1000	918.4		ug/L		92	80 - 120

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

Lab Sample ID: 160-11405-12 MS — **Client Sample ID: B30M23**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 190419 — **Prep Batch: 189695**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	17.3	U	10000	9547		ug/L		95	75 - 125
Antimony	1.7	U	500	500.4		ug/L		100	75 - 125
Arsenic	5.0	B	1000	962.2		ug/L		96	75 - 125
Barium	29.2		1000	1035		ug/L		101	75 - 125
Beryllium	0.35	U	1000	994.2		ug/L		99	75 - 125
Cadmium	0.10	U	1000	1027		ug/L		103	75 - 125
Chromium	3.9	B	1000	1018		ug/L		101	75 - 125
Cobalt	0.22	U	1000	979.4		ug/L		98	75 - 125
Copper	0.68	U	1000	1016		ug/L		102	75 - 125
Lead	0.17	U	1000	955.5		ug/L		96	75 - 125
Manganese	0.88	U	1000	952.7		ug/L		95	75 - 125
Molybdenum	7.4		500	550.1		ug/L		109	75 - 125
Nickel	1.5	B	1000	930.3		ug/L		93	75 - 125
Selenium	1.7	B	500	469.2		ug/L		94	75 - 125
Silver	0.82	U	200	203.9		ug/L		102	75 - 125
Strontium	252		1000	1232		ug/L		98	75 - 125
Thallium	0.55	U	200	204.9		ug/L		102	75 - 125
Thorium	0.55	U	1000	993.0		ug/L		99	75 - 125
Tin	1.1	B	1000	991.8		ug/L		99	75 - 125
Uranium	2.7		1000	985.5		ug/L		98	75 - 125
Zinc	9.3	U	1000	940.9		ug/L		94	75 - 125

Lab Sample ID: 160-11405-12 MSD — **Client Sample ID: B30M23**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 190419 — **Prep Batch: 189695**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	17.3	U	10000	9361		ug/L		94	75 - 125	2	20
Antimony	1.7	U	500	500.1		ug/L		100	75 - 125	0	20
Arsenic	5.0	B	1000	950.6		ug/L		95	75 - 125	1	20
Barium	29.2		1000	1011		ug/L		98	75 - 125	2	20
Beryllium	0.35	U	1000	979.8		ug/L		98	75 - 125	1	20
Cadmium	0.10	U	1000	994.1		ug/L		99	75 - 125	3	20
Chromium	3.9	B	1000	993.8		ug/L		99	75 - 125	2	20
Cobalt	0.22	U	1000	960.9		ug/L		96	75 - 125	2	20
Copper	0.68	U	1000	994.8		ug/L		99	75 - 125	2	20
Lead	0.17	U	1000	938.8		ug/L		94	75 - 125	2	20
Manganese	0.88	U	1000	935.3		ug/L		94	75 - 125	2	20
Molybdenum	7.4		500	545.0		ug/L		108	75 - 125	1	20
Nickel	1.5	B	1000	917.5		ug/L		92	75 - 125	1	20
Selenium	1.7	B	500	462.6		ug/L		92	75 - 125	1	20
Silver	0.82	U	200	201.6		ug/L		101	75 - 125	1	20
Strontium	252		1000	1215		ug/L		96	75 - 125	1	20
Thallium	0.55	U	200	203.4		ug/L		102	75 - 125	1	20
Thorium	0.55	U	1000	975.8		ug/L		98	75 - 125	2	20
Tin	1.1	B	1000	990.1		ug/L		99	75 - 125	0	20
Uranium	2.7		1000	969.3		ug/L		97	75 - 125	2	20
Zinc	9.3	U	1000	917.7		ug/L		92	75 - 125	2	20

QC Sample Results

Client: CH2M Hill Plateau Remediation Company
Project/Site: S,W,I,A ,X SAFS- GROUNDWATER

TestAmerica Job ID: 160-11385-1
SDG: SL1789

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 160-186888/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 186888

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	3.5	U	5.0	3.5	mg/L			04/20/15 10:09	1

Lab Sample ID: LCS 160-186888/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 186888

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	499.0		mg/L		100	90 - 110

Lab Sample ID: 160-11344-M-4 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 186888

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	464		461.0		mg/L		0.6	20

Method: 310.1 - Alkalinity

Lab Sample ID: MB 160-187786/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	0.54	U	5.0	0.54	mg/L			04/24/15 09:07	1
Bicarbonate Alkalinity	0.54	U	5.0	0.54	mg/L			04/24/15 09:07	1
Carbonate Alkalinity	0.54	U	5.0	0.54	mg/L			04/24/15 09:07	1
Hydroxide Alkalinity	0.54	U	5.0	0.54	mg/L			04/24/15 09:07	1

Lab Sample ID: HLCS 160-187786/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187786

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	400	383.0		mg/L		96	90 - 110
Bicarbonate Alkalinity	400	383.0		mg/L		96	90 - 110

Lab Sample ID: LCS 160-187786/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	192.0		mg/L		96	90 - 110
Bicarbonate Alkalinity	200	192.0		mg/L		96	90 - 110

Method: 310.1 - Alkalinity (Continued)

Lab Sample ID: 160-11384-E-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	121		100	216.0		mg/L		95	80 - 120
Bicarbonate Alkalinity	121		100	216.0		mg/L		95	80 - 120

Lab Sample ID: 160-11384-E-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	121		100	215.0		mg/L		94	80 - 120	0	20
Bicarbonate Alkalinity	121		100	215.0		mg/L		94	80 - 120	0	20

Lab Sample ID: 160-11325-B-3 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187786

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	98.0		97.00		mg/L		1	20
Bicarbonate Alkalinity	98.0		97.00		mg/L		1	20
Carbonate Alkalinity	0.54	U	0.54	U	mg/L		NC	20
Hydroxide Alkalinity	0.54	U	0.54	U	mg/L		NC	20

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 160-188726/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 188969 — **Prep Batch: 188726**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	2.9	U	5.0	2.9	ug/L		04/30/15 08:16	04/30/15 17:46	1

Lab Sample ID: HLCS 160-188726/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 188969 — **Prep Batch: 188726**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	400	407.7		ug/L		102	85 - 115

Lab Sample ID: LCS 160-188726/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 188969 — **Prep Batch: 188726**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	200	206.0		ug/L		103	85 - 115

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: 160-11405-13 MS — **Client Sample ID: B305D3**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 188969 — **Prep Batch: 188726**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	276		200	465.3		ug/L		95	66 - 120

Lab Sample ID: 160-11405-13 DU — **Client Sample ID: B305D3**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 188969 — **Prep Batch: 188726**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	276		266.7		ug/L		3	20

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

Lab Sample ID: MB 160-190441/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 190442 — **Prep Batch: 190441**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Halogens, Total Organic	1.8	U	5.0	1.8	ug/L		05/11/15 10:00	05/11/15 13:32	1

Lab Sample ID: LCS 160-190441/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 190442 — **Prep Batch: 190441**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Halogens, Total Organic	100	95.58		ug/L		96	90 - 116

Lab Sample ID: 160-11554-E-3-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 190442 — **Prep Batch: 190441**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Halogens, Total Organic	3.1	B M	100	101.2		ug/L		98	85 - 117

Lab Sample ID: 160-11554-E-3-B DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 190442 — **Prep Batch: 190441**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Halogens, Total Organic	3.1	B M	2.30	B M	ug/L		30	20

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 160-187774/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187787 — **Prep Batch: 187774**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	7.11	B	10.0	2.0	mg/L		04/24/15 08:15	04/24/15 09:24	1

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 160-187774/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187787 — **Prep Batch: 187774**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	50.0	48.44		mg/L		97	70 - 130

Lab Sample ID: LCS 160-187774/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187787 — **Prep Batch: 187774**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	50.0	47.11		mg/L		94	70 - 130

Lab Sample ID: LCS 160-187774/4-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187787 — **Prep Batch: 187774**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	50.0	52.44		mg/L		105	70 - 130

Lab Sample ID: LCS 160-187774/5-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187787 — **Prep Batch: 187774**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	50.0	52.44		mg/L		105	70 - 130

Lab Sample ID: 160-11405-8 MS — **Client Sample ID: B30H98**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187787 — **Prep Batch: 187774**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	2.0	U	50.0	52.44		mg/L		105	70 - 130

Lab Sample ID: 160-11405-8 DU — **Client Sample ID: B30H98**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187787 — **Prep Batch: 187774**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	2.0	U	2.0	U	mg/L		NC	20

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 160-187145/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187145

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.35	U	1.0	0.35	mg/L			04/20/15 19:34	1

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 160-187145/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187145

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon			10.0	10.15		mg/L		101	90 - 110		

Lab Sample ID: 160-11405-1 MS — **Client Sample ID: B30L11**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187145

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon	0.35	U	5.00	5.36		mg/L		107	76 - 120		

Lab Sample ID: 160-11407-A-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187145

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon	0.35	U	5.00	5.37		mg/L		107	76 - 120		

Lab Sample ID: 160-11407-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 187145

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Organic Carbon	0.35	U		0.35	U	mg/L				NC	20

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S,W,I,A ,X SAFS- GROUNDWATER

TestAmerica Job ID: 160-11385-1
SDG: SL1789

GC/MS VOA

Analysis Batch: 187781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11405-8	B30H98	Total/NA	Water	8260C	
160-11405-8 MS	B30H98	Total/NA	Water	8260C	
160-11405-8 MSD	B30H98	Total/NA	Water	8260C	
160-11405-9	B30M22	Total/NA	Water	8260C	
160-11405-12	B30M23	Total/NA	Water	8260C	
160-11405-14	B30HP1	Total/NA	Water	8260C	
LCS 160-187781/6	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-187781/7	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 160-187781/9	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 187737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11405-3	B30KF5	Total/NA	Water	3510C	
160-11405-3 MS	B30KF5	Total/NA	Water	3510C	
160-11405-3 MSD	B30KF5	Total/NA	Water	3510C	
LCS 160-187737/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 160-187737/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 188422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11405-3	B30KF5	Total/NA	Water	8270D	187737
160-11405-3 MS	B30KF5	Total/NA	Water	8270D	187737
160-11405-3 MSD	B30KF5	Total/NA	Water	8270D	187737
LCS 160-187737/2-A	Lab Control Sample	Total/NA	Water	8270D	187737
MB 160-187737/1-A	Method Blank	Total/NA	Water	8270D	187737

Metals

Prep Batch: 189693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11385-1	B30M67	Total/NA	Water	3010A	
160-11385-2	B30M69	Dissolved	Water	3010A	
160-11385-3	B30M64	Dissolved	Water	3010A	
160-11385-4	B30M59	Total/NA	Water	3010A	
160-11405-2	B30KF6	Dissolved	Water	3010A	
160-11405-3	B30KF5	Total/NA	Water	3010A	
160-11405-6	B313W3	Total/NA	Water	3010A	
160-11405-7	B306K0	Dissolved	Water	3010A	
160-11405-9	B30M22	Total/NA	Water	3010A	
160-11405-10	B30M26	Dissolved	Water	3010A	
160-11405-11	B30M27	Dissolved	Water	3010A	
160-11405-12	B30M23	Total/NA	Water	3010A	
160-11405-12 MS	B30M23	Total/NA	Water	3010A	
160-11405-12 MSD	B30M23	Total/NA	Water	3010A	
LCS 160-189693/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-189693/1-A	Method Blank	Total/NA	Water	3010A	

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S,W,I,A ,X SAFS- GROUNDWATER

TestAmerica Job ID: 160-11385-1
SDG: SL1789

Metals (Continued)

Prep Batch: 189695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11385-1	B30M67	Total/NA	Water	3010A	
160-11385-2	B30M69	Dissolved	Water	3010A	
160-11405-9	B30M22	Total/NA	Water	3010A	
160-11405-10	B30M26	Dissolved	Water	3010A	
160-11405-11	B30M27	Dissolved	Water	3010A	
160-11405-12	B30M23	Total/NA	Water	3010A	
160-11405-12 MS	B30M23	Total/NA	Water	3010A	
160-11405-12 MSD	B30M23	Total/NA	Water	3010A	
LCS 160-189695/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 160-189695/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 190419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11385-1	B30M67	Total/NA	Water	6020A	189695
160-11385-2	B30M69	Dissolved	Water	6020A	189695
160-11405-9	B30M22	Total/NA	Water	6020A	189695
160-11405-10	B30M26	Dissolved	Water	6020A	189695
160-11405-11	B30M27	Dissolved	Water	6020A	189695
160-11405-12	B30M23	Total/NA	Water	6020A	189695
160-11405-12 MS	B30M23	Total/NA	Water	6020A	189695
160-11405-12 MSD	B30M23	Total/NA	Water	6020A	189695
LCS 160-189695/2-A	Lab Control Sample	Total/NA	Water	6020A	189695
MB 160-189695/1-A	Method Blank	Total/NA	Water	6020A	189695

Analysis Batch: 191369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11385-1	B30M67	Total/NA	Water	6010C	189693
160-11385-2	B30M69	Dissolved	Water	6010C	189693
160-11385-3	B30M64	Dissolved	Water	6010C	189693
160-11385-4	B30M59	Total/NA	Water	6010C	189693
160-11405-2	B30KF6	Dissolved	Water	6010C	189693
160-11405-3	B30KF5	Total/NA	Water	6010C	189693
160-11405-6	B313W3	Total/NA	Water	6010C	189693
160-11405-7	B306K0	Dissolved	Water	6010C	189693
160-11405-9	B30M22	Total/NA	Water	6010C	189693
160-11405-10	B30M26	Dissolved	Water	6010C	189693
160-11405-11	B30M27	Dissolved	Water	6010C	189693
160-11405-12	B30M23	Total/NA	Water	6010C	189693
160-11405-12 MS	B30M23	Total/NA	Water	6010C	189693
160-11405-12 MSD	B30M23	Total/NA	Water	6010C	189693
LCS 160-189693/2-A	Lab Control Sample	Total/NA	Water	6010C	189693
MB 160-189693/1-A	Method Blank	Total/NA	Water	6010C	189693

Analysis Batch: 191709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11405-3	B30KF5	Total/NA	Water	6010C	189693

QC Association Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S,W,I,A ,X SAFS- GROUNDWATER

TestAmerica Job ID: 160-11385-1
SDG: SL1789

General Chemistry

Analysis Batch: 186888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11344-M-4 DU	Duplicate	Total/NA	Water	160.1	
160-11405-8	B30H98	Total/NA	Water	160.1	
LCS 160-186888/2	Lab Control Sample	Total/NA	Water	160.1	
MB 160-186888/1	Method Blank	Total/NA	Water	160.1	

Analysis Batch: 187145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11405-1	B30L11	Total/NA	Water	9060	
160-11405-1 MS	B30L11	Total/NA	Water	9060	
160-11405-3	B30KF5	Total/NA	Water	9060	
160-11405-4	B30L10	Total/NA	Water	9060	
160-11405-5	B30L09	Total/NA	Water	9060	
160-11405-8	B30H98	Total/NA	Water	9060	
160-11405-13	B305D3	Total/NA	Water	9060	
160-11407-A-1 DU	Duplicate	Total/NA	Water	9060	
160-11407-A-1 MS	Matrix Spike	Total/NA	Water	9060	
LCS 160-187145/5	Lab Control Sample	Total/NA	Water	9060	
MB 160-187145/4	Method Blank	Total/NA	Water	9060	

Prep Batch: 187774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11405-8	B30H98	Total/NA	Water	9030B	
160-11405-8 DU	B30H98	Total/NA	Water	9030B	
160-11405-8 MS	B30H98	Total/NA	Water	9030B	
LCS 160-187774/2-A	Lab Control Sample	Total/NA	Water	9030B	
LCS 160-187774/3-A	Lab Control Sample	Total/NA	Water	9030B	
LCS 160-187774/4-A	Lab Control Sample	Total/NA	Water	9030B	
LCS 160-187774/5-A	Lab Control Sample	Total/NA	Water	9030B	
MB 160-187774/1-A	Method Blank	Total/NA	Water	9030B	

Analysis Batch: 187786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11325-B-3 DU	Duplicate	Total/NA	Water	310.1	
160-11384-E-1 MS	Matrix Spike	Total/NA	Water	310.1	
160-11384-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	310.1	
160-11405-3	B30KF5	Total/NA	Water	310.1	
160-11405-8	B30H98	Total/NA	Water	310.1	
160-11405-13	B305D3	Total/NA	Water	310.1	
HLCS 160-187786/3	Lab Control Sample	Total/NA	Water	310.1	
LCS 160-187786/2	Lab Control Sample	Total/NA	Water	310.1	
MB 160-187786/1	Method Blank	Total/NA	Water	310.1	

Analysis Batch: 187787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11405-8	B30H98	Total/NA	Water	9034	187774
160-11405-8 DU	B30H98	Total/NA	Water	9034	187774
160-11405-8 MS	B30H98	Total/NA	Water	9034	187774
LCS 160-187774/2-A	Lab Control Sample	Total/NA	Water	9034	187774
LCS 160-187774/3-A	Lab Control Sample	Total/NA	Water	9034	187774
LCS 160-187774/4-A	Lab Control Sample	Total/NA	Water	9034	187774
LCS 160-187774/5-A	Lab Control Sample	Total/NA	Water	9034	187774

General Chemistry (Continued)

Analysis Batch: 187787 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 160-187774/1-A	Method Blank	Total/NA	Water	9034	187774

Prep Batch: 188726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11405-13	B305D3	Total/NA	Water	9010C	
160-11405-13 DU	B305D3	Total/NA	Water	9010C	
160-11405-13 MS	B305D3	Total/NA	Water	9010C	
HLCS 160-188726/3-A	Lab Control Sample	Total/NA	Water	9010C	
LCS 160-188726/2-A	Lab Control Sample	Total/NA	Water	9010C	
MB 160-188726/1-A	Method Blank	Total/NA	Water	9010C	

Analysis Batch: 188969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11405-13	B305D3	Total/NA	Water	9012B	188726
160-11405-13 DU	B305D3	Total/NA	Water	9012B	188726
160-11405-13 MS	B305D3	Total/NA	Water	9012B	188726
HLCS 160-188726/3-A	Lab Control Sample	Total/NA	Water	9012B	188726
LCS 160-188726/2-A	Lab Control Sample	Total/NA	Water	9012B	188726
MB 160-188726/1-A	Method Blank	Total/NA	Water	9012B	188726

Prep Batch: 190441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11405-1	B30L11	Total/NA	Water	Carbon Trap	
160-11405-3	B30KF5	Total/NA	Water	Carbon Trap	
160-11405-4	B30L10	Total/NA	Water	Carbon Trap	
160-11405-5	B30L09	Total/NA	Water	Carbon Trap	
160-11554-E-3-B DU	Duplicate	Total/NA	Water	Carbon Trap	
160-11554-E-3-C MS	Matrix Spike	Total/NA	Water	Carbon Trap	
LCS 160-190441/2-A	Lab Control Sample	Total/NA	Water	Carbon Trap	
MB 160-190441/1-A	Method Blank	Total/NA	Water	Carbon Trap	

Analysis Batch: 190442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-11405-1	B30L11	Total/NA	Water	9020B	190441
160-11405-3	B30KF5	Total/NA	Water	9020B	190441
160-11405-4	B30L10	Total/NA	Water	9020B	190441
160-11405-5	B30L09	Total/NA	Water	9020B	190441
160-11554-E-3-B DU	Duplicate	Total/NA	Water	9020B	190441
160-11554-E-3-C MS	Matrix Spike	Total/NA	Water	9020B	190441
LCS 160-190441/2-A	Lab Control Sample	Total/NA	Water	9020B	190441
MB 160-190441/1-A	Method Blank	Total/NA	Water	9020B	190441

Surrogate Summary

Client: CH2M Hill Plateau Remediation Company
Project/Site: S,W,I,A ,X SAFS- GROUNDWATER

TestAmerica Job ID: 160-11385-1
SDG: SL1789

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(75-129)	(81-130)	(81-124)	(87-128)
160-11405-8	B30H98	87	116	99	119
160-11405-8 MS	B30H98	99	100	106	102
160-11405-8 MSD	B30H98	96	103	108	106
160-11405-9	B30M22	95	118	103	120
160-11405-12	B30M23	102	117	109	116
160-11405-14	B30HP1	93	115	106	118
LCS 160-187781/6	Lab Control Sample	101	101	103	105
LCSD 160-187781/7	Lab Control Sample Dup	100	102	106	105
MB 160-187781/9	Method Blank	100	119	109	118

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(47-103)	(30-99)	(10-74)	(31-105)	(10-50)	(68-116)
160-11405-3	B30KF5	75	75	37	80	23	57
160-11405-3 MS	B30KF5	83	79	38	79	23	65
160-11405-3 MSD	B30KF5	79	77	37	79	23	63
LCS 160-187737/2-A	Lab Control Sample	83	82	41	84	26	77
MB 160-187737/1-A	Method Blank	71	71	39	76	25	69

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)