

April 12, 2016

# 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: 160-16483-1

TestAmerica Sample Delivery Group: SL2136  
Client Project/Site: X16-027

For:

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

Attn: Mr. Scot Fitzgerald



Authorized for release by:  
4/12/2016 3:41:56 PM

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

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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

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

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



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Chain of Custody . . . . .	7
Definitions/Glossary . . . . .	14
Method Summary . . . . .	15
Sample Summary . . . . .	16
Client Sample Results . . . . .	17
QC Sample Results . . . . .	18
QC Association Summary . . . . .	21
Surrogate Summary . . . . .	22

Case Narrative

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
SDG: SL2136

Job ID: 160-16483-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

CH2MHill Plateau Remediation Company  
P.O. Box 1600  
Richland, Washington 99352  
April 12, 2016  
Attention: Scot Fitzgerald

SDG : SL2136  
Number of Samples : 3 samples  
Sample Matrix : Water  
Data Deliverable : Summary  
Date SDG Closed : March 12, 2016

II. Introduction

On March 11 and 12, 3 samples were received by TestAmerica - St. Louis for chemical analysis. The samples were received within temperature criteria. See the COC and receipt checklists for documentation of any variations on receipt conditions and temperature. Upon receipt, samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

The following SAFs are associated with this SDG: X16-027

**Sample B34F09 was logged incorrectly upon receipt for WTPH Gasoline as opposed to WTPH Diesel. The error was not discovered until the time of reporting. Per SIR16-313, the GRO analysis will be cancelled and requested DRO analysis will not be reported as the sample is now well outside hold time.**

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

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

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

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

Per CHPRC direction, due to the short hold times for Nitrate, Nitrite and Phosphate by IC (48 hours) as well as pH analysis (24 hours), a



## Case Narrative

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
SDG: SL2136

### Job ID: 160-16483-1 (Continued)

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

SIR request is not needed when samples are run outside 1x hold but within 2x hold. A narrative comment will be included below if a sample is run outside the lab-specified hold time for waters.

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

#### IV. Definitions

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

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

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

- **B** - For inorganic analyses, the sample result is greater than the MDL but less than the RL.
- **B** - For organic analyses, Method Blank contamination. The Method Blank contains the target analyte 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.

#### TOC

#### Batch: 241338

Total Organic Carbon was detected in method blank MB 160-241338/21 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has 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".

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

#### DRO

#### Alkalinity

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.

**April 12, 2016**

**Case Narrative**

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
SDG: SL2136

---

**Job ID: 160-16483-1 (Continued)**

---

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

Reviewed and approved:

Jayna Awalt  
St. Louis Project Manager

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

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11

<b>SAMPLE ISSUE RESOLUTION</b>	<b>SIR NUM</b>	SIR16-313
	<b>REV NUM</b>	0
	<b>DATE INITIATED</b>	4/12/2016

**SAMPLE EVENT INFORMATION**

**SAF NUM(S)** X16-027  
**OPERABLE UNIT(S)**  
**PROJECT(S)** CERC16  
**SAMPLE EVENT TITLE(S)** CERC16  
**LABORATORY** TestAmerica St. Louis

**SAMPLING INFORMATION**

**NUMBER OF SAMPLES** 1  
**SAMPLE NUMBERS** B34F09  
**SAMPLE MATRIX** WATER  
**COLLECTION DATE** 3/10/2016 - 3/10/2016  
**SDG NUM** SL2136

**ISSUE BACKGROUND**

**CLASS** Laboratory Issue  
**TYPE** Incorrect Method Analysis Performed  
**DESCRIPTION** Sample was mistakenly logged for WTPH Gasoline when WTPH Diesel was requested. It was not caught until reporting when PM discovered error. Sample is now well outside hold time for Diesel.

**DISPOSITION**

**DESCRIPTION** TASL PROPOSES TO CANCEL THE ANALYSIS FOR THIS SAMPLE AND NARRATE OR REPORT THE GASOLINE RESULT IF IT MAY HOLD ANY QUALITATIVE VALUE.

**JUSTIFICATION** Final Disposition: Accept first proposal, Cancel the analysis and narrate.

SUBMITTED BY: Jayna Awalt DATE: 04/12/2016  
 ACCEPTED BY: Karen Waters-Husted DATE: 04/12/2016

### Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 160-16483-1

SDG Number: SL2136

**Login Number: 16483**

**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	1.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

83 lbs

<b>CH2M Hill Plateau Remediation Company</b> SL2136		C.O.C. # <b>X16-027-073</b> Page 1 of 1	
<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>			
Collector Scott King CHPRC	Contact/Requester Karen Waters-Husted	Telephone No. 509-376-4650	
SAF No. X16-027	Sampling Origin Hanford Site	Purchase Order/Charge Code 303064	
Project Title AQUIFER TUBES, MARCH 2016	Logbook No. HNF-N-50684/10	Ice Chest No. GWS-154	
Shipped To (Lab) TestAmerica St. Louis	Method of Shipment Commercial Carrier	Bill of Lading/Air Bill No. 775845142427	
Protocol CERCLA	Priority: 30 Days	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 N/A		Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample No. B34F09	Filter N	No/Type Container 1x250-mL aG	Sample Analysis COMMON
Date MAR 10 2016	Time 0844	Holding Time 28 Days	Preservative HCl or H2SO4 to pH <2/Cool <=6C
W	WTPH_DIESEL: COMMON	Holding Time 14/40 Days	Preservative HCl to pH <2/Cool <=6C

Relinquished By Scott King CHPRC	Date/Time MAR 10 2016 10 25	Sign [Signature]	Received By M.A. White CHPRC	Date/Time MAR 10 2016 10 25	Sign [Signature]
Relinquished By M.A. White CHPRC	Date/Time MAR 10 2016 1400	Sign [Signature]	Received By FEDEX	Date/Time [Blank]	Sign [Blank]
Relinquished By [Blank]	Date/Time [Blank]	Sign [Blank]	Received By Brian Lewis	Date/Time 3/11/16 1030	Sign [Signature]
Relinquished By [Blank]	Date/Time [Blank]	Sign [Blank]	Received By [Blank]	Date/Time [Blank]	Sign [Blank]

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



My Profile | Support | Locations | English | Search | Subm



Shipping | Tracking | Manage | Learn | FedEx Office®

Login

### FedEx® Tracking

775845142427

Ship date

Thu 3/10/2016

Actual delivery

Fri 3/11/2016 10:21 am

RICHLAND, WA US

**Delivered**

Signed for by: B DANIELS

EARTH CITY, MO US

#### Travel History

Date/Time	Activity	Location
- 3/11/2016 - Friday		
10:21 am	Delivered	EARTH CITY, MO
7:53 am	On FedEx vehicle for delivery	EARTH CITY, MO
7:46 am	At local FedEx facility	EARTH CITY, MO
6:33 am	At destination sort facility	BERKELEY, MO
5:54 am	Departed FedEx location	MEMPHIS, TN
1:05 am	Arrived at FedEx location	MEMPHIS, TN
- 3/10/2016 - Thursday		
5:01 pm	Left FedEx origin facility	PASCO, WA
3:22 pm	Picked up	PASCO, WA
1:53 pm	Shipment information sent to FedEx	

#### Shipment Facts

<b>Tracking number</b>	775845142427	<b>Service</b>	FedEx Priority Overnight
<b>Weight</b>	83 lbs / 37.65 kgs	<b>Delivered To</b>	Shipping/Receiving
<b>Total pieces</b>	1	<b>Total shipment weight</b>	83 lbs / 37.65 kgs
<b>Terms</b>	Recipient	<b>Shipper reference</b>	GWS-154
<b>Packaging</b>	Your Packaging	<b>Special handling section</b>	Deliver Weekday



Search | Subm

**Customer Focus**  
 New Customer Center  
 Small Business Center  
 Service Guide  
 Customer Support

**Company Information**  
 About FedEx  
 Careers  
 Investor Relations

**Featured Services**  
 FedEx Delivery Manager  
 FedEx SameDay  
 FedEx Home Delivery  
 Healthcare Solutions  
 Online Retail Solutions  
 Packaging Services  
 Ancillary Clearance Services

**Other Resources**  
 FedEx Compatible  
 Developer Resource Center  
 FedEx Ship Manager Software  
 FedEx Mobile

**Companies**  
 FedEx Express  
 FedEx Ground  
 FedEx Office  
 FedEx Freight  
 FedEx Custom Critical  
 FedEx Trade Networks  
 FedEx SupplyChain  
 FedEx TechConnect

Follow FedEx

United States - English

Login Sample Receipt Checklist

Client: CH2M Hill Plateau Remediation Company

Job Number: 160-16507-1  
SDG Number: SL2136

Login Number: 16507  
List Number: 1  
Creator: McKinney, Gerrod E

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	1.2°
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

<b>CH2MHill Plateau Remediation Company</b> SL2136		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>		C.O.C. # <b>X16-027-074</b> Page 1 of 1	
Collector Scott King CHPRC X16-027	Contact/Requester Karen Waters-Husted Hanford Site	Telephone No. 509-376-4650	Purchase Order/Charge Code 303064	Ice Chest No. 605-497	Bill of Lading/Air Bill No. 7058 5730 0029
Project Title AQUIFER TUBES, MARCH 2016	Logbook No. HNF-N-506 8410	Method of Shipment Commercial Carrier	Priority: <b>30 Days</b>	Offsite Property No. N/A	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Shipped To (Lab) TestAmerica St. Louis	SPECIAL INSTRUCTIONS N/A	Hold Time	Hold Time	Holding Time	Preservative
Protocol CERCLA	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	Sample Analysis	Sample Analysis	Holding Time	Preservative
Sample No. B34F21	Filter N	Date MAR 10 2016	No/Type Container 1x250-mL aG	Sample Analysis 9060_TOC: COMMON	Holding Time 28 Days
Sample No. B34F21	Filter N	Date MAR 10 2016	No/Type Container 3x1-L aG	Sample Analysis WTPH_DIESEL: COMMON	Holding Time 14/40 Days

Relinquished By Scott King CHPRC	Print 	Sign	Date/Time MAR 10 2016 1415	Received By SSU-1	Print L.D. Wall CHPRC	Sign	Date/Time MAR 10 2016 1415	Matrix * DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation A = Air
Relinquished By L.D. Wall CHPRC	Print SSU-1	Sign	Date/Time MAR 11 2016 1030	Received By L.D. Wall CHPRC	Print 	Sign	Date/Time MAR 11 2016 1030	Matrix * SE = Sediment SO = Solid SL = Sludge W = Water O = Oil
Relinquished By L.D. Wall CHPRC	Print FED EX	Sign	Date/Time MAR 11 2016 1400	Received By GERROD MCKENNEY	Print FEDEX	Sign	Date/Time MAR 11 2016 0845	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By GERROD MCKENNEY	Date/Time 03/21/16 0845	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time



<b>CH2M Hill Plateau Remediation Company</b>		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>		C.O.C.# <b>X16-027-075</b>	
SL2136		Page 1 of 1			
Collector	Scott King CHPRC	Contact/Requester	Karen Waters-Husted	Telephone No.	509-376-4650
SAF No.	X16-027	Sampling Origin	Hanford Site	Purchase Order/Charge Code	303064
Project Title	AQUIFER TUBES, MARCH 2016	Logbook No.	HNF-N-50684 / 10	Ice Chest No.	6005 497
Shipped To (Lab)	TestAmerica St. Louis	Method of Shipment	Commercial Carrier	Bill of Lading/Air Bill No.	7758 5730 0029
Protocol	CERCLA	Priority:	30 Days	Offsite Property No.	N/A
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b>					
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 438.1					
Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis
B34F25	N	MAR 10 2016	1118	1x500-mL G/P	310.1_ALKALINITY: GW 01
Received By			SSU-1	Print	Sign
Received By			L.D. Wall	CHPRC	Signature
Relinquished By			L.D. Wall	CHPRC	Signature
Relinquished By			L.D. Wall	CHPRC	Signature
Date/Time			MAR 10 2016	Date/Time	MAR 10 2016
Date/Time			MAR 11 2016 1030	Date/Time	MAR 11 2016 1030
Date/Time			MAR 11 2016 1400	Date/Time	MAR 11 2016 1400
Date/Time			MAR 11 2016 0845	Date/Time	MAR 11 2016 0845
Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By		
GERRON MCKENNEY C/MCS			Signature		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		
Date/Time			Date/Time		
MAR 10 2016			MAR 10 2016		
MAR 11 2016			MAR 11 2016		
MAR 11 2016			MAR 11 2016		



Shipping Tracking Manage Learn FedEx Office®

My Profile Support Locations English Search Subr

Login

FedEx® Tracking

775857300029

Ship date: Fri 3/11/2016 Actual delivery: Sat 3/12/2016 8:38 am
RICHLAND, WA US Delivered EARTH CITY, MO US
Signed for by: C MCKENNEY

Travel History

Table with columns: Date/Time, Activity, Location. Shows travel history for 3/12/2016 and 3/11/2016.

Shipment Facts

Table with shipment facts: Tracking number, Weight, Total pieces, Terms, Packaging, Service, Delivered To, Total shipment weight, Shipper reference, Special handling section.



Search Subr

Footer navigation area with links for Customer Focus, Featured Services, Companies, Follow FedEx, and Other Resources.

## Definitions/Glossary

Client: CH2M Hill Plateau Remediation Company  
 Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
 SDG: SL2136

### Qualifiers

#### GC Semi VOA

Qualifier	Qualifier Description
U	Analyzed for but not detected.

#### General Chemistry

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

### Glossary

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

## Method Summary

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
SDG: SL2136

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SL
310.1	Alkalinity	MCAWW	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



April 12, 2016

## Sample Summary

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
SDG: SL2136

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-16483-1	B34F09	Water	03/10/16 08:46	03/11/16 10:30
160-16507-1	B34F21	Water	03/10/16 10:47	03/12/16 08:45
160-16507-2	B34F25	Water	03/10/16 11:18	03/12/16 08:45

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

Client Sample Results

Client: CH2M Hill Plateau Remediation Company  
 Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
 SDG: SL2136

Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: B34F21  
 Date Collected: 03/10/16 10:47  
 Date Received: 03/12/16 08:45

Lab Sample ID: 160-16507-1  
 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.016	U	0.47	0.016	mg/L		03/17/16 10:57	03/29/16 18:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	78		47 - 136				03/17/16 10:57	03/29/16 18:25	1

General Chemistry

Client Sample ID: B34F09  
 Date Collected: 03/10/16 08:46  
 Date Received: 03/11/16 10:30

Lab Sample ID: 160-16483-1  
 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.72	U	1.0	0.72	mg/L			03/19/16 00:56	1

Client Sample ID: B34F21  
 Date Collected: 03/10/16 10:47  
 Date Received: 03/12/16 08:45

Lab Sample ID: 160-16507-1  
 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.72	U	1.0	0.72	mg/L			03/18/16 20:12	1

Client Sample ID: B34F25  
 Date Collected: 03/10/16 11:18  
 Date Received: 03/12/16 08:45

Lab Sample ID: 160-16507-2  
 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	86.0		5.0	0.54	mg/L			03/23/16 21:39	1
Bicarbonate Alkalinity	86.0		5.0	0.54	mg/L			03/23/16 21:39	1
Carbonate Alkalinity	0.54	U	5.0	0.54	mg/L			03/23/16 21:39	1
Hydroxide Alkalinity	0.54	U	5.0	0.54	mg/L			03/23/16 21:39	1

QC Sample Results

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
SDG: SL2136

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 160-240885/1-A  
Matrix: Water  
Analysis Batch: 242740

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 240885

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.017	U	0.50	0.017	mg/L		03/17/16 10:57	03/29/16 15:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	86		47 - 136				03/17/16 10:57	03/29/16 15:44	1

Lab Sample ID: LCS 160-240885/2-A  
Matrix: Water  
Analysis Batch: 242740

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 240885

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics [C10-C28]	2.50	1.09		mg/L		44	30 - 100
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-Terphenyl	51		47 - 136				

Lab Sample ID: 160-16507-1 MS  
Matrix: Water  
Analysis Batch: 242740

Client Sample ID: B34F21  
Prep Type: Total/NA  
Prep Batch: 240885

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics [C10-C28]	0.016	U	2.37	1.34		mg/L		57	28 - 115
Surrogate	MS %Recovery	MS Qualifier	Limits						
o-Terphenyl	76		47 - 136						

Lab Sample ID: 160-16507-1 MSD  
Matrix: Water  
Analysis Batch: 242740

Client Sample ID: B34F21  
Prep Type: Total/NA  
Prep Batch: 240885

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	0.016	U	2.36	1.39		mg/L		59	28 - 115	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl	78		47 - 136								

Method: 310.1 - Alkalinity

Lab Sample ID: MB 160-241848/1  
Matrix: Water  
Analysis Batch: 241848

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	0.54	U	5.0	0.54	mg/L			03/23/16 21:09	1
Bicarbonate Alkalinity	0.54	U	5.0	0.54	mg/L			03/23/16 21:09	1

TestAmerica St. Louis

QC Sample Results

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
SDG: SL2136

Method: 310.1 - Alkalinity (Continued)

Lab Sample ID: MB 160-241848/1  
Matrix: Water  
Analysis Batch: 241848

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity	0.54	U	5.0	0.54	mg/L			03/23/16 21:09	1
Hydroxide Alkalinity	0.54	U	5.0	0.54	mg/L			03/23/16 21:09	1

Lab Sample ID: HLCS 160-241848/3  
Matrix: Water  
Analysis Batch: 241848

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

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	400	370.0		mg/L		93	90 - 110
Bicarbonate Alkalinity	400	370.0		mg/L		93	90 - 110

Lab Sample ID: LCS 160-241848/2  
Matrix: Water  
Analysis Batch: 241848

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	182.0		mg/L		91	90 - 110
Bicarbonate Alkalinity	200	182.0		mg/L		91	90 - 110

Lab Sample ID: 160-16507-2 MS  
Matrix: Water  
Analysis Batch: 241848

Client Sample ID: B34F25  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	86.0		100	178.0		mg/L		92	80 - 120
Bicarbonate Alkalinity	86.0		100	178.0		mg/L		92	80 - 120

Lab Sample ID: 160-16507-2 DU  
Matrix: Water  
Analysis Batch: 241848

Client Sample ID: B34F25  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	86.0		88.00		mg/L		2	20
Bicarbonate Alkalinity	86.0		88.00		mg/L		2	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: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 160-241338/21  
Matrix: Water  
Analysis Batch: 241338

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.775	B	1.0	0.72	mg/L			03/18/16 19:38	1

QC Sample Results

Client: CH2M Hill Plateau Remediation Company  
 Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
 SDG: SL2136

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

Lab Sample ID: LCS 160-241338/22

Matrix: Water

Analysis Batch: 241338

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	9.97		mg/L		100	90 - 110

Lab Sample ID: 160-16483-1 MS

Matrix: Water

Analysis Batch: 241338

Client Sample ID: B34F09

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	0.72	U	5.00	5.78		mg/L		116	76 - 120

Lab Sample ID: 160-16509-B-1 MS

Matrix: Water

Analysis Batch: 241338

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	0.72	U	5.00	5.57		mg/L		111	76 - 120

Lab Sample ID: 160-16509-B-1 DU

Matrix: Water

Analysis Batch: 241338

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	0.72	U	0.72	U	mg/L		NC	20

QC Association Summary

Client: CH2M Hill Plateau Remediation Company  
 Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
 SDG: SL2136

GC Semi VOA

Prep Batch: 240885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-16507-1	B34F21	Total/NA	Water	3510C	
160-16507-1 MS	B34F21	Total/NA	Water	3510C	
160-16507-1 MSD	B34F21	Total/NA	Water	3510C	
LCS 160-240885/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 160-240885/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 242740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-16507-1	B34F21	Total/NA	Water	8015B	240885
160-16507-1 MS	B34F21	Total/NA	Water	8015B	240885
160-16507-1 MSD	B34F21	Total/NA	Water	8015B	240885
LCS 160-240885/2-A	Lab Control Sample	Total/NA	Water	8015B	240885
MB 160-240885/1-A	Method Blank	Total/NA	Water	8015B	240885

General Chemistry

Analysis Batch: 241338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-16483-1	B34F09	Total/NA	Water	9060	
160-16483-1 MS	B34F09	Total/NA	Water	9060	
160-16507-1	B34F21	Total/NA	Water	9060	
160-16509-B-1 DU	Duplicate	Total/NA	Water	9060	
160-16509-B-1 MS	Matrix Spike	Total/NA	Water	9060	
LCS 160-241338/22	Lab Control Sample	Total/NA	Water	9060	
MB 160-241338/21	Method Blank	Total/NA	Water	9060	

Analysis Batch: 241848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-16507-2	B34F25	Total/NA	Water	310.1	
160-16507-2 DU	B34F25	Total/NA	Water	310.1	
160-16507-2 MS	B34F25	Total/NA	Water	310.1	
HLCS 160-241848/3	Lab Control Sample	Total/NA	Water	310.1	
LCS 160-241848/2	Lab Control Sample	Total/NA	Water	310.1	
MB 160-241848/1	Method Blank	Total/NA	Water	310.1	

### Surrogate Summary

Client: CH2M Hill Plateau Remediation Company  
Project/Site: X16-027

TestAmerica Job ID: 160-16483-1  
SDG: SL2136

**Method: 8015B - Diesel Range Organics (DRO) (GC)**

**Matrix: Water**

**Prep Type: Total/NA**

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	OTPH1 (47-136)
160-16507-1	B34F21	78
160-16507-1 MS	B34F21	76
160-16507-1 MSD	B34F21	78
LCS 160-240885/2-A	Lab Control Sample	51
MB 160-240885/1-A	Method Blank	86

**Surrogate Legend**

OTPH = o-Terphenyl

