RESPONSE TO REGIONAL WATER QUALITY CONTROL BOARD DATA REQUEST, RECLAIMED WATER IMPOUNDMENTS SAMPLING

Cawelo Water District Ponds

Kern River Oil Field, Kern County, California

Prepared for:

Chevron U.S.A. Inc.
Kern River Oil Field
Kern County, California 93308

Prepared by:

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June 26, 2015

Project FR1416063A

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June 26, 2015
Project FR1416063A

This report was prepared by the staff of Amec Foster Wheeler Environment & Infrastructure, Inc., under the supervision of the Geologists whose seals and signatures appear hereon.

The findings, recommendations, specifications, or professional opinions presented in this report were prepared in accordance with generally accepted professional geologic practice and within the scope of the project. No other warranty, express or implied, is provided.

PROFESSIONAL GEOLOGIST
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RESPONSE TO REGIONAL WATER QUALITY DATA REQUEST, RECLAIMED WATER IMPOUNDMENT SAMPLING

Cawelo Water District Ponds
Kern River Oil Field, Kern County, California

1.0 INTRODUCTION

Chevron U.S.A. Inc. (Chevron) received a request from Mr. Josh Mahoney of the Central Valley Regional Water Quality Control Board (RWQCB) on June 22, 2015 requesting that Chevron provide the full suite of Volatile Organic Compounds (VOCs) results for United States Environmental Protection Agency (EPA) analytical Method 8260B for water samples previously collected related to the Cawelo impoundments. Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) has prepared this report to satisfy the RWQCB data request.

The Cawelo Water District ponds (Cawelo ponds) are located near the Kern River Oil Field (Figure 1). The produced water delivered to the Cawelo ponds is reclaimed and treated for agricultural irrigation. Five water samples were collected from locations shown on Figure 2 between April 21 and 22, 2015. The water samples were originally analyzed for VOC constituents (benzene, toluene, ethylbenzene, total xylenes, and acetone) by EPA Method 8260B by TestAmerica Laboratories, Inc. (TestAmerica).

2.0 EPA METHOD 8260B ANALYSIS

Amec Foster Wheeler contacted TestAmerica of Irvine, California to inquire if the full suite of EPA 8260B VOCs could be reported for the original water samples. TestAmerica indicated that the complete suite of EPA 8260B results could be reported for the five water samples (W039, W042, W043, W044, and W045) using the existing gas chromatograph mass spectrometer (GC/MS) data obtained from the original analytical testing. TestAmerica did not re-analyze any of these water samples to obtain the full suite of EPA 8260B results.

TestAmerica originally reported results from the 5 water samples for benzene, toluene, ethylbenzene, total xylenes, and acetone (as requested in the original chain of custody) after completing an analysis using a gas chromatograph mass spectrometer (GC/MS) calibrated to the full suite of EPA Method 8260B constituents. TestAmerica also indicated that their internal laboratory Quality Assurance and Quality Control (QA/QC) procedures for the 8260B analysis of these samples passed laboratory control limits. TestAmerica was able to report the full EPA 8260B VOC results using the GC/MS sample data because the GC/MS was calibrated to the

full list of EPA 8260B constituents and there were no QA/QC issues that affected the calibration.

3.0 ANALYTICAL RESULTS FOR EPA METHOD 8260B

The analytical results for VOCs analyzed using EPA Method 8260B are summarized in Table 1. Constituents not listed in the table were not detected. Although Methylene Chloride was also not detected in any samples, it was added to Table 1 for the convenience of the RWQCB because that result was previously and separately requested. The complete laboratory report is attached in Appendix A.

TABLE 1

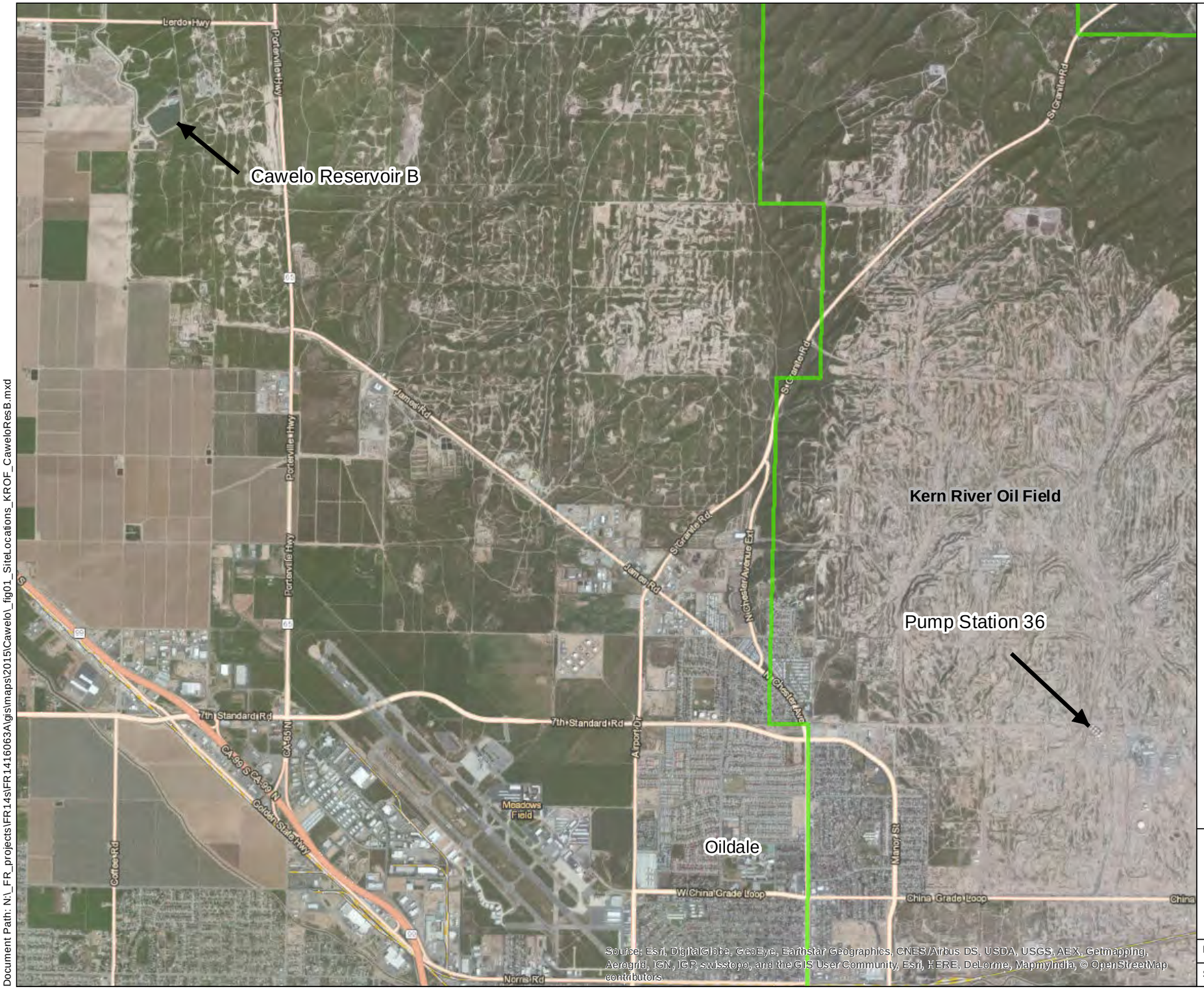
ANALYTICAL RESULTS SUMMARY - EPA 8260B VOLATILE ORGANIC COMPOUNDS

Cawelo Water District Ponds
Kern River Oil Field, Kern County, California

				VOCs[1] (ug/L)												
Well/Sample ID	**Lease Name**	**Sample ID**	**Date**	**Acetone**	**Benzene**	**2-Butanone (MEK)**	**Ethyl-benzene**	**Methylene Chloride**	**m,p-Xylene**	**Naphthalene**	**n-Propylbenzene**	**o-Xylene**	**Toluene**	**1,2,4-Trimethyl-benzene**	**1,3,5-Trimethyl-benzene**	**Total Xylenes**
Plant 36	Cawelo	W039	04/21/15	31	0.47 J	12	0.71	ND	2.6	ND	0.37 J	1.3	0.67	1.7	0.44 J	3.9
Polish Pond	Cawelo	W042	04/22/15	86	0.33 J	ND	0.39 J	ND	1.3	ND	ND	0.74	0.49 J	0.68	ND	2.0
Polish Pond	Cawelo	W043[2]	04/22/15	100	0.31 J	7.8	0.38 J	ND	1.2	0.41 J	ND	0.59	0.47 J	0.56	ND	1.8
Reservoir B	Cawelo	W044	04/22/15	150	ND	7.2	0.25 J	ND	0.75 J	ND	ND	0.43 J	0.39 J	0.40 J	ND	1.2
Reservoir B Outflow	Cawelo	W045	04/22/15	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
1. VOCs analyzed using EPA Method 8260B.
2. Duplicate sample of W042.

Abbreviations:
ND = less than the RL
EPA = U.S. Environmental Protection Agency
J = result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value
MDL = method detection limit
RL = reporting limit
ug/L = micrograms per liter
VOCs = volatile organic compounds
(MEK) = Methyl Ethyl Ketone



Explanation

Oil field administrative boundary

N

APPROXIMATE SCALE IN MILES

0 0.5 1

0 0.75 1.5

APPROXIMATE SCALE IN KILOMETERS

SITE LOCATION MAP OF
CAWELO RESERVOIR B AND
CHEVRON PUMP STATION 36,
Kern River Oil Field and
Cawelo Water District Ponds
Kern County, California

amec foster wheeler

Date: 6/9/2015	Project No.: FR1416063A	Figure
Submitted By: BAL	Drawn By: JFE	1

Document Path: N:_FR_projects\FR14s\FR1416063A\gis\maps\2015\Cawelo_fig01_SiteLocations_KROF_CaweloResB.mxd

Explanation

W042 — Sample location and sample ID

Note:
Inset shows the sample location from the Pump Station 36 discharge line going to Cawelo Reservoir B

N

APPROXIMATE SCALE IN FEET
0 100 200
0 25 50
APPROXIMATE SCALE IN METERS

SAMPLE LOCATION MAP OF
CAWELO RESERVOIR B
Cawelo Water District Ponds
Kern County, California

amec foster wheeler

Date: 6/25/2015	Project No.: FR1416063A	Figure 2
Submitted By: JFE	Drawn By: JFE	

N:_FR_projects\FR14s\FR1416063A\gis\maps\2015\Cawelo\RWQCB_Data_Request_Fig02_SampleLocations_CaweloReservoirB_w_PumpStation36.mxd

APPENDIX A

Laboratory Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-107774-1
Client Project/Site: Chevron Cawelo
Revision: 3

For:
AMEC Foster Wheeler E & I, Inc
1281 East Alluvial Avenue
Suite 101
Fresno, California 93720

Attn: Mr. Brad Loewen

Authorized for release by:
6/23/2015 12:59:06 PM

Patty Mata, Senior Project Manager
(949)261-1022
patty.mata@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107774-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-107774-1	W039	Water	04/21/15 16:15	04/22/15 09:35

Job ID: 440-107774-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-107774-1

Comments
Level 4 raw data package was requested on 6/5/15 for EPA methods 8260 and 8270.

This report was revised on 5/6/15 to correct the project name as requested.

This report was revised on 6/19/15 to add methylene chloride to the 8260 analytical.

This report was revised on 6/23/15 to include full 8260 VOC list as requested on 6/22/15.

Receipt
The sample was received on 4/22/2015 9:35 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5º C.

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

GC/MS Semi VOA
Method(s) 8270C SIM: The internal standard response was below the 50% minimum QC limit for the following sample: W039 (440-107774-1). The chromatography showed some matrix interference that could have adversely affected the recovery of the affected internal standard. All affected target analytes were flagged with an asterisk (*). If the matrix effect is isolated to the internal standards, then the affect on the associated target analyte results are potentially biased high. The affected analytes were ND in sample W039 (440-107774-1).

Method(s) 8270C SIM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 251224. The LCS was performed in duplicate to provide precision data for the batch.

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

HPLC/IC
Method(s) 300.0: Due to the relatively high concentration of sulfate in the batch QC source sample, the matrix spike / matrix spike duplicate (MS/MSD) for batch 250449 could not be evaluated for accuracy and precision and was not reported. The associated laboratory control sample (LCS) met acceptance criteria.

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

GC Semi VOA
Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 250669.The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

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

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

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

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

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

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107774-1

Client Sample ID: W039

Date Collected: 04/21/15 16:15
Date Received: 04/22/15 09:35

Lab Sample ID: 440-107774-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**31**		10	4.5	ug/L			04/27/15 09:51	1
Benzene	**0.47**	**J**	0.50	0.25	ug/L			04/27/15 09:51	1
Bromobenzene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Bromochloromethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Bromodichloromethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Bromoform	ND		1.0	0.40	ug/L			04/27/15 09:51	1
Bromomethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
2-Butanone (MEK)	**12**		5.0	2.5	ug/L			04/27/15 09:51	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Chlorobenzene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Chloroethane	ND		1.0	0.40	ug/L			04/27/15 09:51	1
Chloroform	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Chloromethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Dibromochloromethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			04/27/15 09:51	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Dibromomethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			04/27/15 09:51	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Ethanol	ND		150	75	ug/L			04/27/15 09:51	1
Ethylbenzene	**0.71**		0.50	0.25	ug/L			04/27/15 09:51	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			04/27/15 09:51	1
2-Hexanone	ND		5.0	2.5	ug/L			04/27/15 09:51	1
Isopropylbenzene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Methylene Chloride	ND		2.0	0.88	ug/L			04/27/15 09:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			04/27/15 09:51	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			04/27/15 09:51	1
m,p-Xylene	**2.6**		1.0	0.50	ug/L			04/27/15 09:51	1
Naphthalene	ND		1.0	0.40	ug/L			04/27/15 09:51	1
n-Butylbenzene	ND		1.0	0.40	ug/L			04/27/15 09:51	1
n-Propylbenzene	**0.37**	**J**	0.50	0.25	ug/L			04/27/15 09:51	1
o-Xylene	**1.3**		0.50	0.25	ug/L			04/27/15 09:51	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Styrene	ND		0.50	0.25	ug/L			04/27/15 09:51	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107774-1

Client Sample ID: W039

Date Collected: 04/21/15 16:15
Date Received: 04/22/15 09:35

Lab Sample ID: 440-107774-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			04/27/15 09:51	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			04/27/15 09:51	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Tetrachloroethene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Toluene	**0.67**		0.50	0.25	ug/L			04/27/15 09:51	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			04/27/15 09:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			04/27/15 09:51	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Trichloroethene	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,2,3-Trichloropropane	ND		0.50	0.25	ug/L			04/27/15 09:51	1
1,2,4-Trimethylbenzene	**1.7**		0.50	0.25	ug/L			04/27/15 09:51	1
1,3,5-Trimethylbenzene	**0.44**	**J**	0.50	0.25	ug/L			04/27/15 09:51	1
Vinyl chloride	ND		0.50	0.25	ug/L			04/27/15 09:51	1
Xylenes, Total	**3.9**		1.0	0.50	ug/L			04/27/15 09:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*04/27/15 09:51*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*04/27/15 09:51*	*1*
Toluene-d8 (Surr)	*111*		*80 - 128*		*04/27/15 09:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.63**		0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Acenaphthylene	ND		0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Anthracene	ND		0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Benzo[a]anthracene	ND		0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Benzo[a]pyrene	ND	*	0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Benzo[b]fluoranthene	ND	*	0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Benzo[g,h,i]perylene	ND	*	0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Benzo[k]fluoranthene	ND	*	0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Chrysene	ND		0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Dibenz(a,h)anthracene	ND	*	0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Fluoranthene	ND		0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Fluorene	**0.37**		0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Indeno[1,2,3-cd]pyrene	ND	*	0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Naphthalene	**0.11**	**J**	0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Phenanthrene	**0.38**		0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1
Pyrene	ND		0.20	0.098	ug/L		04/26/15 13:54	04/27/15 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*31 - 120*	*04/26/15 13:54*	*04/27/15 23:46*	*1*
Nitrobenzene-d5	*59*		*25 - 133*	*04/26/15 13:54*	*04/27/15 23:46*	*1*
Terphenyl-d14	*100*		*10 - 120*	*04/26/15 13:54*	*04/27/15 23:46*	*1*

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107774-1

Client Sample ID: W039

Date Collected: 04/21/15 16:15
Date Received: 04/22/15 09:35

Lab Sample ID: 440-107774-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C29-C40	0.12		0.048	0.024	mg/L		04/23/15 08:00	04/24/15 10:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*64*		*45 - 120*	*04/23/15 08:00*	*04/24/15 10:52*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.91		0.50	0.25	mg/L			04/22/15 18:39	1
Nitrate as NO3	ND		0.50	0.25	mg/L			04/22/15 18:39	1
Chloride	100		5.0	2.5	mg/L			04/22/15 18:57	10
Fluoride	0.38	J	0.50	0.25	mg/L			04/22/15 18:39	1
Sulfate	2.5		0.50	0.25	mg/L			04/22/15 18:39	1

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.78		0.050	0.010	mg/L		04/27/15 13:41	04/28/15 10:44	1
Calcium	28		0.10	0.050	mg/L		04/27/15 13:41	04/28/15 10:44	1
Iron	2.5		0.040	0.010	mg/L		04/27/15 13:41	04/28/15 10:44	1
Potassium	5.7		0.50	0.25	mg/L		04/27/15 13:41	04/28/15 10:44	1
Lithium	0.041	J	0.50	0.025	mg/L		04/27/15 13:41	04/28/15 10:44	1
Magnesium	5.2		0.020	0.010	mg/L		04/27/15 13:41	04/28/15 10:44	1
Manganese	0.089		0.020	0.010	mg/L		04/27/15 13:41	04/28/15 10:44	1
Sodium	130		0.50	0.25	mg/L		04/27/15 13:41	04/28/15 10:44	1
Strontium	0.42		0.020	0.010	mg/L		04/27/15 13:41	04/28/15 10:44	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	ND		1.0	0.50	ug/L		04/27/15 14:08	04/28/15 12:40	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0060	mg/L		04/27/15 11:40	04/28/15 12:56	1
Arsenic	0.011		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:56	1
Barium	0.085		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:56	1
Beryllium	ND		0.0020	0.0010	mg/L		04/27/15 11:40	04/28/15 12:56	1
Cadmium	ND		0.0050	0.0020	mg/L		04/27/15 11:40	04/28/15 12:56	1
Chromium	ND		0.0050	0.0025	mg/L		04/27/15 11:40	04/28/15 12:56	1
Cobalt	ND		0.010	0.0025	mg/L		04/27/15 11:40	04/28/15 12:56	1
Copper	ND		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:56	1
Lead	ND		0.0050	0.0025	mg/L		04/27/15 11:40	04/28/15 12:56	1
Molybdenum	ND		0.020	0.010	mg/L		04/27/15 11:40	04/28/15 12:56	1
Nickel	ND		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:56	1
Selenium	ND		0.010	0.0061	mg/L		04/27/15 11:40	04/28/15 12:56	1
Silver	ND		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:56	1
Thallium	0.0096	J	0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:56	1
Vanadium	ND		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:56	1
Zinc	ND		0.020	0.010	mg/L		04/27/15 11:40	04/28/15 12:56	1

Method: 6010B - Metals (ICP) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.15	J	0.20	0.12	mg/L			04/28/15 11:15	20

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107774-1

Client Sample ID: W039

Date Collected: 04/21/15 16:15
Date Received: 04/22/15 09:35

Lab Sample ID: 440-107774-1

Matrix: Water

Method: 6010B - Metals (ICP) - STLC Citrate (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.20	0.10	mg/L			04/28/15 11:15	20
Barium	**0.10**	**J**	0.20	0.10	mg/L			04/28/15 11:15	20
Beryllium	ND		0.040	0.020	mg/L			04/28/15 11:15	20
Cadmium	ND		0.10	0.040	mg/L			04/28/15 11:15	20
Chromium	ND		0.10	0.050	mg/L			04/28/15 11:15	20
Cobalt	ND		0.20	0.050	mg/L			04/28/15 11:15	20
Copper	ND		0.20	0.10	mg/L			04/28/15 11:15	20
Lead	ND		0.10	0.050	mg/L			04/28/15 11:15	20
Molybdenum	**0.35**	**J**	0.40	0.20	mg/L			04/28/15 11:15	20
Nickel	ND		0.20	0.10	mg/L			04/28/15 11:15	20
Selenium	**0.16**	**J**	0.20	0.12	mg/L			04/28/15 11:15	20
Silver	ND		0.20	0.10	mg/L			04/28/15 11:15	20
Thallium	ND		0.20	0.10	mg/L			04/28/15 11:15	20
Vanadium	ND		0.20	0.10	mg/L			04/28/15 11:15	20
Zinc	ND		0.40	0.20	mg/L			04/28/15 11:15	20

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/23/15 20:00	04/25/15 01:26	1

Method: 7470A - Mercury (CVAA) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020	0.0010	mg/L		04/27/15 17:39	04/28/15 17:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**230**		4.0	4.0	mg/L			04/23/15 06:34	1
Bicarbonate Alkalinity as CaCO3	**230**		4.0	4.0	mg/L			04/23/15 06:34	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/23/15 06:34	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/23/15 06:34	1
Total Dissolved Solids	**500**		10	5.0	mg/L			04/27/15 09:24	1

Method Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107774-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC) Low Level	SW846	TAL IRV
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
200.7 Rev 4.4	Metals (ICP)	EPA	TAL IRV
200.8	Metals (ICP/MS)	EPA	TAL IRV
6010B	Metals (ICP)	SW846	TAL IRV
7470A	Mercury (CVAA)	SW846	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV

Protocol References:

EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107774-1

Client Sample ID: W039

Date Collected: 04/21/15 16:15
Date Received: 04/22/15 09:35

Lab Sample ID: 440-107774-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	251276	04/27/15 09:51	AL	TAL IRV
Total/NA	Prep	3520C			1025 mL	1 mL	251224	04/26/15 13:54	AK	TAL IRV
Total/NA	Analysis	8270C SIM		1	1025 mL	1 mL	251421	04/27/15 23:46	AI	TAL IRV
Total/NA	Prep	3510C			1040 mL	1 mL	250669	04/23/15 08:00	AP	TAL IRV
Total/NA	Analysis	8015B		1	1040 mL	1 mL	250930	04/24/15 10:52	KW	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		250448	04/22/15 18:39	SP	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		250449	04/22/15 18:39	SP	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		250449	04/22/15 18:57	SP	TAL IRV
Dissolved	Prep	200.2			25 mL	25 mL	251379	04/27/15 13:41	APS	TAL IRV
Dissolved	Analysis	200.7 Rev 4.4		1	25 mL	25 mL	251583	04/28/15 10:44	EN	TAL IRV
Dissolved	Prep	200.2			25 mL	25 mL	251391	04/27/15 14:08	APS	TAL IRV
Dissolved	Analysis	200.8		1	25 mL	25 mL	251614	04/28/15 12:40	RC	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	251355	04/27/15 11:40	APS	TAL IRV
Dissolved	Analysis	6010B		1	25 mL	25 mL	251643	04/28/15 12:56	VS	TAL IRV
STLC Citrate	Leach	CA WET Citrate			100 g	100 mL	251242	04/26/15 23:13	CH	TAL IRV
STLC Citrate	Analysis	6010B		20			251585	04/28/15 11:15	VS	TAL IRV
Dissolved	Prep	7470A			20 mL	20 mL	250869	04/23/15 20:00	DB	TAL IRV
Dissolved	Analysis	7470A		1	20 mL	20 mL	251338	04/25/15 01:26	DB	TAL IRV
STLC Citrate	Leach	CA WET Citrate			100 g	100 mL	251242	04/26/15 23:13	CH	TAL IRV
STLC Citrate	Prep	7470A			2 mL	20 mL	251449	04/27/15 17:39	DB	TAL IRV
STLC Citrate	Analysis	7470A		1	2 mL	20 mL	251694	04/28/15 17:08	DB	TAL IRV
Total/NA	Analysis	SM 2320B		1			250661	04/23/15 06:34	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	251309	04/27/15 09:24	XL	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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

Lab Sample ID: MB 440-251276/3
Matrix: Water
Analysis Batch: 251276

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.5	ug/L			04/27/15 07:50	1
Benzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Bromobenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Bromochloromethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Bromodichloromethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Bromoform	ND		1.0	0.40	ug/L			04/27/15 07:50	1
Bromomethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			04/27/15 07:50	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Chlorobenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Chloroethane	ND		1.0	0.40	ug/L			04/27/15 07:50	1
Chloroform	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Chloromethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Dibromochloromethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			04/27/15 07:50	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Dibromomethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			04/27/15 07:50	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Ethanol	ND		150	75	ug/L			04/27/15 07:50	1
Ethylbenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			04/27/15 07:50	1
2-Hexanone	ND		5.0	2.5	ug/L			04/27/15 07:50	1
Isopropylbenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Methylene Chloride	ND		2.0	0.88	ug/L			04/27/15 07:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			04/27/15 07:50	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			04/27/15 07:50	1
m,p-Xylene	ND		1.0	0.50	ug/L			04/27/15 07:50	1
Naphthalene	ND		1.0	0.40	ug/L			04/27/15 07:50	1
n-Butylbenzene	ND		1.0	0.40	ug/L			04/27/15 07:50	1
n-Propylbenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
o-Xylene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1

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

Lab Sample ID: MB 440-251276/3
Matrix: Water
Analysis Batch: 251276

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			04/27/15 07:50	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			04/27/15 07:50	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Tetrachloroethene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Toluene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			04/27/15 07:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			04/27/15 07:50	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Trichloroethene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,2,3-Trichloropropane	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Vinyl chloride	ND		0.50	0.25	ug/L			04/27/15 07:50	1
Xylenes, Total	ND		1.0	0.50	ug/L			04/27/15 07:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*04/27/15 07:50*	*1*
Dibromofluoromethane (Surr)	*108*		*76 - 132*		*04/27/15 07:50*	*1*
Toluene-d8 (Surr)	*109*		*80 - 128*		*04/27/15 07:50*	*1*

Lab Sample ID: LCS 440-251276/4
Matrix: Water
Analysis Batch: 251276

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	25.1		ug/L		100	10 - 150
Benzene	25.0	23.6		ug/L		94	68 - 130
Bromobenzene	25.0	25.7		ug/L		103	70 - 130
Bromochloromethane	25.0	23.7		ug/L		95	70 - 130
Bromodichloromethane	25.0	24.6		ug/L		98	70 - 132
Bromoform	25.0	25.3		ug/L		101	60 - 148
Bromomethane	25.0	25.0		ug/L		100	64 - 139
2-Butanone (MEK)	25.0	27.6		ug/L		110	44 - 150
Carbon tetrachloride	25.0	25.8		ug/L		103	60 - 150
Chlorobenzene	25.0	23.5		ug/L		94	70 - 130
Chloroethane	25.0	25.7		ug/L		103	64 - 135
Chloroform	25.0	24.4		ug/L		98	70 - 130
Chloromethane	25.0	23.6		ug/L		95	47 - 140
2-Chlorotoluene	25.0	23.1		ug/L		93	70 - 130
4-Chlorotoluene	25.0	23.3		ug/L		93	70 - 130
cis-1,2-Dichloroethene	25.0	25.6		ug/L		102	70 - 133

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

Lab Sample ID: LCS 440-251276/4
Matrix: Water
Analysis Batch: 251276

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	25.2		ug/L		101	70 - 133
Dibromochloromethane	25.0	25.4		ug/L		101	69 - 145
1,2-Dibromo-3-Chloropropane	25.0	21.1		ug/L		84	52 - 140
1,2-Dibromoethane (EDB)	25.0	25.7		ug/L		103	70 - 130
Dibromomethane	25.0	25.8		ug/L		103	70 - 130
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130
1,2-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130
1,4-Dichlorobenzene	25.0	24.7		ug/L		99	70 - 130
Dichlorodifluoromethane	25.0	23.3		ug/L		93	29 - 150
1,1-Dichloroethane	25.0	24.1		ug/L		96	64 - 130
1,2-Dichloroethane	25.0	24.6		ug/L		99	57 - 138
1,1-Dichloroethene	25.0	25.7		ug/L		103	70 - 130
1,2-Dichloropropane	25.0	25.3		ug/L		101	67 - 130
2,2-Dichloropropane	25.0	23.0		ug/L		92	68 - 141
1,3-Dichloropropane	25.0	22.8		ug/L		91	70 - 130
1,1-Dichloropropene	25.0	26.9		ug/L		107	70 - 130
Ethanol	1250	1150		ug/L		92	50 - 149
Ethylbenzene	25.0	22.6		ug/L		90	70 - 130
Ethyl-t-butyl ether (ETBE)	25.0	26.5		ug/L		106	60 - 136
2-Hexanone	25.0	26.6		ug/L		107	10 - 150
Isopropylbenzene	25.0	23.5		ug/L		94	70 - 136
Isopropyl Ether (DIPE)	25.0	24.6		ug/L		98	58 - 139
Methylene Chloride	25.0	21.8		ug/L		87	52 - 130
4-Methyl-2-pentanone (MIBK)	25.0	27.7		ug/L		111	59 - 149
Methyl-t-Butyl Ether (MTBE)	25.0	25.2		ug/L		101	63 - 131
m,p-Xylene	25.0	24.4		ug/L		98	70 - 130
Naphthalene	25.0	20.1		ug/L		80	60 - 140
n-Butylbenzene	25.0	23.1		ug/L		92	65 - 150
n-Propylbenzene	25.0	22.9		ug/L		91	67 - 139
o-Xylene	25.0	23.6		ug/L		95	70 - 130
p-Isopropyltoluene	25.0	23.7		ug/L		95	70 - 132
sec-Butylbenzene	25.0	22.9		ug/L		92	70 - 138
Styrene	25.0	23.7		ug/L		95	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	26.5		ug/L		106	57 - 139
tert-Butyl alcohol (TBA)	250	259		ug/L		104	70 - 130
tert-Butylbenzene	25.0	23.3		ug/L		93	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.6		ug/L		95	63 - 130
1,1,1,2-Tetrachloroethane	25.0	25.0		ug/L		100	60 - 141
Tetrachloroethene	25.0	25.0		ug/L		100	70 - 130
Toluene	25.0	21.6		ug/L		87	70 - 130
trans-1,2-Dichloroethene	25.0	25.8		ug/L		103	70 - 130
trans-1,3-Dichloropropene	25.0	25.9		ug/L		103	70 - 132
1,2,4-Trichlorobenzene	25.0	24.1		ug/L		97	60 - 140
1,2,3-Trichlorobenzene	25.0	22.2		ug/L		89	60 - 140
1,1,1-Trichloroethane	25.0	24.9		ug/L		100	70 - 130
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	70 - 130
Trichloroethene	25.0	25.5		ug/L		102	70 - 130
Trichlorofluoromethane	25.0	26.1		ug/L		104	60 - 150

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

Lab Sample ID: LCS 440-251276/4
Matrix: Water
Analysis Batch: 251276

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	25.0	24.8		ug/L		99	63 - 130
1,2,4-Trimethylbenzene	25.0	23.1		ug/L		92	70 - 135
1,3,5-Trimethylbenzene	25.0	22.8		ug/L		91	70 - 136
Vinyl chloride	25.0	24.6		ug/L		98	59 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*76 - 132*
Toluene-d8 (Surr)	*105*		*80 - 128*

Lab Sample ID: 440-107825-A-3 MS
Matrix: Water
Analysis Batch: 251276

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
Acetone	ND		25.0	24.4		ug/L		97	10 - 150
Benzene	ND		25.0	23.0		ug/L		92	66 - 130
Bromobenzene	ND		25.0	24.8		ug/L		99	70 - 130
Bromochloromethane	ND		25.0	24.1		ug/L		96	70 - 130
Bromodichloromethane	ND		25.0	24.8		ug/L		99	70 - 138
Bromoform	ND		25.0	25.4		ug/L		102	59 - 150
Bromomethane	ND		25.0	24.3		ug/L		97	62 - 131
2-Butanone (MEK)	ND		25.0	27.4		ug/L		109	48 - 140
Carbon tetrachloride	ND		25.0	26.6		ug/L		106	60 - 150
Chlorobenzene	ND		25.0	22.9		ug/L		91	70 - 130
Chloroethane	ND		25.0	24.2		ug/L		97	68 - 130
Chloroform	ND		25.0	24.5		ug/L		98	70 - 130
Chloromethane	ND		25.0	22.5		ug/L		90	39 - 144
2-Chlorotoluene	ND		25.0	23.2		ug/L		93	70 - 130
4-Chlorotoluene	ND		25.0	22.5		ug/L		90	70 - 130
cis-1,2-Dichloroethene	ND		25.0	25.8		ug/L		103	70 - 130
cis-1,3-Dichloropropene	ND		25.0	24.5		ug/L		98	70 - 133
Dibromochloromethane	ND		25.0	25.0		ug/L		100	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	22.2		ug/L		89	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	25.0		ug/L		100	70 - 131
Dibromomethane	ND		25.0	26.3		ug/L		105	70 - 130
1,3-Dichlorobenzene	ND		25.0	24.0		ug/L		96	70 - 130
1,2-Dichlorobenzene	ND		25.0	24.3		ug/L		97	70 - 130
1,4-Dichlorobenzene	ND		25.0	24.2		ug/L		97	70 - 130
Dichlorodifluoromethane	ND		25.0	22.6		ug/L		90	25 - 142
1,1-Dichloroethane	ND		25.0	24.1		ug/L		97	65 - 130
1,2-Dichloroethane	ND		25.0	24.6		ug/L		98	56 - 146
1,1-Dichloroethene	ND		25.0	25.0		ug/L		100	70 - 130
1,2-Dichloropropane	ND		25.0	24.6		ug/L		98	69 - 130
2,2-Dichloropropane	ND		25.0	25.0		ug/L		100	69 - 138
1,3-Dichloropropane	ND		25.0	22.3		ug/L		89	70 - 130
1,1-Dichloropropene	ND		25.0	27.1		ug/L		108	64 - 130
Ethanol	ND		1250	1170		ug/L		94	54 - 150

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

Lab Sample ID: 440-107825-A-3 MS
Matrix: Water
Analysis Batch: 251276

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
Ethylbenzene	ND		25.0	22.2		ug/L		89	70 - 130
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.5		ug/L		106	70 - 130
2-Hexanone	ND		25.0	27.0		ug/L		108	10 - 150
Isopropylbenzene	ND		25.0	23.7		ug/L		95	70 - 132
Isopropyl Ether (DIPE)	ND		25.0	24.5		ug/L		98	64 - 138
Methylene Chloride	ND		25.0	20.9		ug/L		84	52 - 130
4-Methyl-2-pentanone (MIBK)	ND		25.0	27.9		ug/L		111	52 - 150
Methyl-t-Butyl Ether (MTBE)	ND		25.0	25.8		ug/L		103	70 - 130
m,p-Xylene	ND		25.0	24.3		ug/L		97	70 - 133
Naphthalene	ND		25.0	20.7		ug/L		83	60 - 140
n-Butylbenzene	ND		25.0	23.3		ug/L		93	61 - 149
n-Propylbenzene	ND		25.0	22.6		ug/L		91	66 - 135
o-Xylene	ND		25.0	23.2		ug/L		93	70 - 133
p-Isopropyltoluene	ND		25.0	23.6		ug/L		95	70 - 130
sec-Butylbenzene	ND		25.0	22.9		ug/L		92	67 - 134
Styrene	ND	F1 F2	25.0	10.8		ug/L		43	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	26.7		ug/L		107	68 - 133
tert-Butyl alcohol (TBA)	ND		250	257		ug/L		103	70 - 130
tert-Butylbenzene	ND		25.0	23.0		ug/L		92	70 - 130
1,1,2,2-Tetrachloroethane	ND		25.0	23.2		ug/L		93	63 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	24.6		ug/L		99	60 - 149
Tetrachloroethene	ND		25.0	25.0		ug/L		100	70 - 137
Toluene	ND		25.0	22.0		ug/L		88	70 - 130
trans-1,2-Dichloroethene	ND		25.0	26.1		ug/L		105	70 - 130
trans-1,3-Dichloropropene	ND		25.0	25.8		ug/L		103	70 - 138
1,2,4-Trichlorobenzene	ND		25.0	24.0		ug/L		96	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	22.1		ug/L		88	60 - 140
1,1,1-Trichloroethane	ND		25.0	25.6		ug/L		102	70 - 130
1,1,2-Trichloroethane	ND		25.0	24.4		ug/L		97	70 - 130
Trichloroethene	ND		25.0	25.6		ug/L		102	70 - 130
Trichlorofluoromethane	ND		25.0	27.5		ug/L		110	60 - 150
1,2,3-Trichloropropane	ND		25.0	24.1		ug/L		96	60 - 130
1,2,4-Trimethylbenzene	ND		25.0	22.7		ug/L		91	70 - 130
1,3,5-Trimethylbenzene	ND		25.0	22.7		ug/L		91	70 - 130
Vinyl chloride	ND		25.0	23.4		ug/L		94	50 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*111*		*76 - 132*
Toluene-d8 (Surr)	*106*		*80 - 128*

Lab Sample ID: 440-107825-A-3 MSD
Matrix: Water
Analysis Batch: 251276

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	21.3		ug/L		85	10 - 150	13	35
Benzene	ND		25.0	22.0		ug/L		88	66 - 130	5	20

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

Lab Sample ID: 440-107825-A-3 MSD
Matrix: Water
Analysis Batch: 251276

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	ND		25.0	23.6		ug/L		94	70 - 130	5	20
Bromochloromethane	ND		25.0	24.4		ug/L		97	70 - 130	1	25
Bromodichloromethane	ND		25.0	23.8		ug/L		95	70 - 138	4	20
Bromoform	ND		25.0	24.9		ug/L		100	59 - 150	2	25
Bromomethane	ND		25.0	23.0		ug/L		92	62 - 131	5	25
2-Butanone (MEK)	ND		25.0	25.7		ug/L		103	48 - 140	6	40
Carbon tetrachloride	ND		25.0	24.4		ug/L		98	60 - 150	8	25
Chlorobenzene	ND		25.0	22.4		ug/L		89	70 - 130	2	20
Chloroethane	ND		25.0	22.7		ug/L		91	68 - 130	6	25
Chloroform	ND		25.0	23.5		ug/L		94	70 - 130	4	20
Chloromethane	ND		25.0	21.1		ug/L		84	39 - 144	6	25
2-Chlorotoluene	ND		25.0	21.2		ug/L		85	70 - 130	9	20
4-Chlorotoluene	ND		25.0	21.4		ug/L		86	70 - 130	5	20
cis-1,2-Dichloroethene	ND		25.0	24.0		ug/L		96	70 - 130	7	20
cis-1,3-Dichloropropene	ND		25.0	23.4		ug/L		94	70 - 133	5	20
Dibromochloromethane	ND		25.0	24.2		ug/L		97	70 - 148	4	25
1,2-Dibromo-3-Chloropropane	ND		25.0	20.0		ug/L		80	48 - 140	10	30
1,2-Dibromoethane (EDB)	ND		25.0	24.5		ug/L		98	70 - 131	2	25
Dibromomethane	ND		25.0	24.9		ug/L		100	70 - 130	5	25
1,3-Dichlorobenzene	ND		25.0	22.9		ug/L		92	70 - 130	5	20
1,2-Dichlorobenzene	ND		25.0	23.3		ug/L		93	70 - 130	4	20
1,4-Dichlorobenzene	ND		25.0	22.7		ug/L		91	70 - 130	6	20
Dichlorodifluoromethane	ND		25.0	21.5		ug/L		86	25 - 142	5	30
1,1-Dichloroethane	ND		25.0	22.7		ug/L		91	65 - 130	6	20
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	56 - 146	3	20
1,1-Dichloroethene	ND		25.0	23.6		ug/L		94	70 - 130	6	20
1,2-Dichloropropane	ND		25.0	23.6		ug/L		94	69 - 130	4	20
2,2-Dichloropropane	ND		25.0	23.4		ug/L		94	69 - 138	6	25
1,3-Dichloropropane	ND		25.0	21.1		ug/L		84	70 - 130	6	25
1,1-Dichloropropene	ND		25.0	25.2		ug/L		101	64 - 130	7	20
Ethanol	ND		1250	1170		ug/L		93	54 - 150	0	30
Ethylbenzene	ND		25.0	20.9		ug/L		84	70 - 130	6	20
Ethyl-t-butyl ether (ETBE)	ND		25.0	25.2		ug/L		101	70 - 130	5	25
2-Hexanone	ND		25.0	25.4		ug/L		101	10 - 150	6	35
Isopropylbenzene	ND		25.0	22.0		ug/L		88	70 - 132	7	20
Isopropyl Ether (DIPE)	ND		25.0	23.4		ug/L		93	64 - 138	5	25
Methylene Chloride	ND		25.0	19.8		ug/L		79	52 - 130	6	20
4-Methyl-2-pentanone (MIBK)	ND		25.0	26.0		ug/L		104	52 - 150	7	35
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.7		ug/L		99	70 - 130	4	25
m,p-Xylene	ND		25.0	22.5		ug/L		90	70 - 133	8	25
Naphthalene	ND		25.0	19.6		ug/L		78	60 - 140	6	30
n-Butylbenzene	ND		25.0	21.7		ug/L		87	61 - 149	7	20
n-Propylbenzene	ND		25.0	20.8		ug/L		83	66 - 135	9	20
o-Xylene	ND		25.0	22.3		ug/L		89	70 - 133	4	20
p-Isopropyltoluene	ND		25.0	22.4		ug/L		90	70 - 130	5	20
sec-Butylbenzene	ND		25.0	21.1		ug/L		84	67 - 134	8	20
Styrene	ND	F1 F2	25.0	6.61	F1 F2	ug/L		26	29 - 150	48	35
Tert-amyl-methyl ether (TAME)	ND		25.0	25.7		ug/L		103	68 - 133	4	30

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

Lab Sample ID: 440-107825-A-3 MSD
Matrix: Water
Analysis Batch: 251276

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
tert-Butyl alcohol (TBA)	ND		250	250		ug/L		100	70 - 130	3	25
tert-Butylbenzene	ND		25.0	22.3		ug/L		89	70 - 130	3	20
1,1,2,2-Tetrachloroethane	ND		25.0	22.6		ug/L		90	63 - 130	3	30
1,1,1,2-Tetrachloroethane	ND		25.0	23.5		ug/L		94	60 - 149	5	20
Tetrachloroethene	ND		25.0	23.7		ug/L		95	70 - 137	6	20
Toluene	ND		25.0	20.1		ug/L		80	70 - 130	9	20
trans-1,2-Dichloroethene	ND		25.0	24.9		ug/L		100	70 - 130	5	20
trans-1,3-Dichloropropene	ND		25.0	24.8		ug/L		99	70 - 138	4	25
1,2,4-Trichlorobenzene	ND		25.0	22.3		ug/L		89	60 - 140	7	20
1,2,3-Trichlorobenzene	ND		25.0	20.8		ug/L		83	60 - 140	6	20
1,1,1-Trichloroethane	ND		25.0	24.0		ug/L		96	70 - 130	6	20
1,1,2-Trichloroethane	ND		25.0	23.5		ug/L		94	70 - 130	3	25
Trichloroethene	ND		25.0	23.8		ug/L		95	70 - 130	7	20
Trichlorofluoromethane	ND		25.0	25.3		ug/L		101	60 - 150	8	25
1,2,3-Trichloropropane	ND		25.0	23.0		ug/L		92	60 - 130	5	30
1,2,4-Trimethylbenzene	ND		25.0	21.6		ug/L		86	70 - 130	5	25
1,3,5-Trimethylbenzene	ND		25.0	21.6		ug/L		86	70 - 130	5	20
Vinyl chloride	ND		25.0	22.1		ug/L		88	50 - 137	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*76 - 132*
Toluene-d8 (Surr)	*102*		*80 - 128*

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

Lab Sample ID: MB 440-251224/1-A
Matrix: Water
Analysis Batch: 251421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 251224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Acenaphthylene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Anthracene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Benzo[a]anthracene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Benzo[a]pyrene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Benzo[b]fluoranthene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Benzo[g,h,i]perylene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Chrysene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Dibenz(a,h)anthracene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Fluoranthene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Fluorene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Naphthalene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Phenanthrene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Pyrene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1

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

Lab Sample ID: MB 440-251224/1-A
Matrix: Water
Analysis Batch: 251421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 251224

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	84		31 - 120	04/26/15 13:54	04/27/15 16:14	1
Nitrobenzene-d5	81		25 - 133	04/26/15 13:54	04/27/15 16:14	1
Terphenyl-d14	95		10 - 120	04/26/15 13:54	04/27/15 16:14	1

Lab Sample ID: LCS 440-251224/2-A
Matrix: Water
Analysis Batch: 251421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 251224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1.00	0.751		ug/L		75	47 - 103
Acenaphthylene	1.00	0.728		ug/L		73	45 - 102
Anthracene	1.00	0.806		ug/L		81	47 - 111
Benzo[a]anthracene	1.00	0.860		ug/L		86	56 - 110
Benzo[a]pyrene	1.00	0.814		ug/L		81	48 - 110
Benzo[b]fluoranthene	1.00	0.911		ug/L		91	53 - 116
Benzo[g,h,i]perylene	1.00	1.05		ug/L		105	44 - 130
Benzo[k]fluoranthene	1.00	0.898		ug/L		90	51 - 127
Chrysene	1.00	0.889		ug/L		89	52 - 118
Dibenz(a,h)anthracene	1.00	0.967		ug/L		97	44 - 125
Fluoranthene	1.00	0.926		ug/L		93	51 - 116
Fluorene	1.00	0.787		ug/L		79	50 - 106
Indeno[1,2,3-cd]pyrene	1.00	1.00		ug/L		100	41 - 127
Naphthalene	1.00	0.667		ug/L		67	40 - 100
Phenanthrene	1.00	0.841		ug/L		84	49 - 110
Pyrene	1.00	0.861		ug/L		86	41 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	71		31 - 120
Nitrobenzene-d5	67		25 - 133
Terphenyl-d14	82		10 - 120

Lab Sample ID: LCSD 440-251224/3-A
Matrix: Water
Analysis Batch: 251421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 251224

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	1.00	0.719		ug/L		72	47 - 103	4	35
Acenaphthylene	1.00	0.703		ug/L		70	45 - 102	4	35
Anthracene	1.00	0.766		ug/L		77	47 - 111	5	35
Benzo[a]anthracene	1.00	0.841		ug/L		84	56 - 110	2	35
Benzo[a]pyrene	1.00	0.799		ug/L		80	48 - 110	2	35
Benzo[b]fluoranthene	1.00	0.903		ug/L		90	53 - 116	1	35
Benzo[g,h,i]perylene	1.00	1.03		ug/L		103	44 - 130	3	35
Benzo[k]fluoranthene	1.00	0.889		ug/L		89	51 - 127	1	35
Chrysene	1.00	0.865		ug/L		86	52 - 118	3	35
Dibenz(a,h)anthracene	1.00	0.950		ug/L		95	44 - 125	2	35
Fluoranthene	1.00	0.851		ug/L		85	51 - 116	8	35
Fluorene	1.00	0.762		ug/L		76	50 - 106	3	35

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

Lab Sample ID: LCSD 440-251224/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 251421 — **Prep Batch: 251224**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Indeno[1,2,3-cd]pyrene	1.00	0.955		ug/L		95	41 - 127	5	35
Naphthalene	1.00	0.664		ug/L		66	40 - 100	0	35
Phenanthrene	1.00	0.806		ug/L		81	49 - 110	4	35
Pyrene	1.00	0.849		ug/L		85	41 - 115	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*74*		*31 - 120*
Nitrobenzene-d5	*66*		*25 - 133*
Terphenyl-d14	*84*		*10 - 120*

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

Lab Sample ID: MB 440-250669/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250929 — **Prep Batch: 250669**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C29-C40	ND		0.050	0.025	mg/L		04/23/15 08:00	04/24/15 07:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*78*		*45 - 120*	*04/23/15 08:00*	*04/24/15 07:33*	*1*

Lab Sample ID: LCS 440-250669/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250929 — **Prep Batch: 250669**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	1.00	0.777		mg/L		78	40 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*86*		*45 - 120*

Lab Sample ID: LCSD 440-250669/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250929 — **Prep Batch: 250669**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	1.00	0.797		mg/L		80	40 - 115	3	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*91*		*45 - 120*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-250448/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250448

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as NO3	ND		0.50	0.25	mg/L			04/22/15 11:19	1

Lab Sample ID: LCS 440-250448/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as NO3	5.00	4.78		mg/L		96	90 - 110

Lab Sample ID: 440-107701-H-6 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250448

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as NO3	17		50.0	52.2	F1	mg/L		71	80 - 120

Lab Sample ID: 440-107701-H-6 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250448

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as NO3	17		50.0	52.4	F1	mg/L		72	80 - 120	0	20

Lab Sample ID: MB 440-250449/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250449

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.50	0.25	mg/L			04/22/15 11:19	1
Chloride	ND		0.50	0.25	mg/L			04/22/15 11:19	1
Fluoride	ND		0.50	0.25	mg/L			04/22/15 11:19	1
Sulfate	ND		0.50	0.25	mg/L			04/22/15 11:19	1

Lab Sample ID: LCS 440-250449/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250449

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	5.00	4.59		mg/L		92	90 - 110
Chloride	5.00	4.86		mg/L		97	90 - 110
Fluoride	5.00	5.37		mg/L		107	90 - 110
Sulfate	5.00	4.60		mg/L		92	90 - 110

Lab Sample ID: 440-107701-H-6 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250449

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	ND		50.0	40.8		mg/L		82	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-107701-H-6 MS
Matrix: Water
Analysis Batch: 250449

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
Chloride	240		50.0	262	4	mg/L		40	80 - 120
Fluoride	ND		50.0	44.8		mg/L		90	80 - 120

Lab Sample ID: 440-107701-H-6 MSD
Matrix: Water
Analysis Batch: 250449

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromide	ND		50.0	40.9		mg/L		82	80 - 120	0	20
Chloride	240		50.0	262	4	mg/L		39	80 - 120	0	20
Fluoride	ND		50.0	44.9		mg/L		90	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 440-251379/1-A
Matrix: Water
Analysis Batch: 251583

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 251379

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050	0.010	mg/L		04/27/15 13:41	04/28/15 10:40	1
Calcium	ND		0.10	0.050	mg/L		04/27/15 13:41	04/28/15 10:40	1
Iron	ND		0.040	0.010	mg/L		04/27/15 13:41	04/28/15 10:40	1
Potassium	ND		0.50	0.25	mg/L		04/27/15 13:41	04/28/15 10:40	1
Lithium	ND		0.50	0.025	mg/L		04/27/15 13:41	04/28/15 10:40	1
Magnesium	ND		0.020	0.010	mg/L		04/27/15 13:41	04/28/15 10:40	1
Manganese	ND		0.020	0.010	mg/L		04/27/15 13:41	04/28/15 10:40	1
Sodium	ND		0.50	0.25	mg/L		04/27/15 13:41	04/28/15 10:40	1
Strontium	ND		0.020	0.010	mg/L		04/27/15 13:41	04/28/15 10:40	1

Lab Sample ID: LCS 440-251379/2-A
Matrix: Water
Analysis Batch: 251583

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 251379

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.500	0.506		mg/L		101	85 - 115
Calcium	2.50	2.47		mg/L		99	85 - 115
Iron	0.500	0.496		mg/L		99	85 - 115
Potassium	5.00	5.22		mg/L		104	85 - 115
Lithium	0.500	0.507		mg/L		101	85 - 115
Magnesium	2.50	2.49		mg/L		100	85 - 115
Manganese	0.500	0.515		mg/L		103	85 - 115
Sodium	5.00	5.15		mg/L		103	85 - 115
Strontium	0.500	0.513		mg/L		103	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 440-107774-1 MS — **Client Sample ID: W039**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251583 — **Prep Batch: 251379**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.78		0.500	1.26		mg/L		96	70 - 130
Calcium	28		2.50	28.8	4	mg/L		25	70 - 130
Iron	2.5		0.500	2.91	4	mg/L		76	70 - 130
Potassium	5.7		5.00	10.4		mg/L		94	70 - 130
Lithium	0.041	J	0.500	0.472	J	mg/L		86	70 - 130
Magnesium	5.2		2.50	7.40		mg/L		89	70 - 130
Manganese	0.089		0.500	0.576		mg/L		97	70 - 130
Sodium	130		5.00	125	4	mg/L		-47	70 - 130
Strontium	0.42		0.500	0.905		mg/L		97	70 - 130

Lab Sample ID: 440-107774-1 MSD — **Client Sample ID: W039**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251583 — **Prep Batch: 251379**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.78		0.500	1.30		mg/L		104	70 - 130	3	20
Calcium	28		2.50	28.9	4	mg/L		29	70 - 130	0	20
Iron	2.5		0.500	2.95	4	mg/L		86	70 - 130	2	20
Potassium	5.7		5.00	10.3		mg/L		93	70 - 130	1	20
Lithium	0.041	J	0.500	0.482	J	mg/L		88	70 - 130	2	20
Magnesium	5.2		2.50	7.67		mg/L		100	70 - 130	4	20
Manganese	0.089		0.500	0.590		mg/L		100	70 - 130	2	20
Sodium	130		5.00	125	4	mg/L		-45	70 - 130	0	20
Strontium	0.42		0.500	0.908		mg/L		98	70 - 130	0	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 440-251391/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 251614 — **Prep Batch: 251391**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	ND		1.0	0.50	ug/L		04/27/15 14:08	04/28/15 12:35	1

Lab Sample ID: LCS 440-251391/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 251614 — **Prep Batch: 251391**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Uranium	80.0	77.6		ug/L		97	85 - 115

Lab Sample ID: 440-107774-1 MS — **Client Sample ID: W039**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251614 — **Prep Batch: 251391**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Uranium	ND		80.0	75.5		ug/L		94	70 - 130

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 440-107774-1 MSD — **Client Sample ID: W039**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251614 — **Prep Batch: 251391**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Uranium	ND		80.0	75.2		ug/L		94	70 - 130	0	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-251355/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 251643 — **Prep Batch: 251355**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0060	mg/L		04/27/15 11:40	04/28/15 12:35	1
Arsenic	ND		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:35	1
Barium	ND		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:35	1
Beryllium	ND		0.0020	0.0010	mg/L		04/27/15 11:40	04/28/15 12:35	1
Cadmium	ND		0.0050	0.0020	mg/L		04/27/15 11:40	04/28/15 12:35	1
Chromium	ND		0.0050	0.0025	mg/L		04/27/15 11:40	04/28/15 12:35	1
Cobalt	ND		0.010	0.0025	mg/L		04/27/15 11:40	04/28/15 12:35	1
Copper	ND		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:35	1
Lead	ND		0.0050	0.0025	mg/L		04/27/15 11:40	04/28/15 12:35	1
Molybdenum	ND		0.020	0.010	mg/L		04/27/15 11:40	04/28/15 12:35	1
Nickel	ND		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:35	1
Selenium	ND		0.010	0.0061	mg/L		04/27/15 11:40	04/28/15 12:35	1
Silver	ND		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:35	1
Thallium	ND		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:35	1
Vanadium	ND		0.010	0.0050	mg/L		04/27/15 11:40	04/28/15 12:35	1
Zinc	ND		0.020	0.010	mg/L		04/27/15 11:40	04/28/15 12:35	1

Lab Sample ID: LCS 440-251355/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 251643 — **Prep Batch: 251355**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	1.03		mg/L		103	80 - 120
Arsenic	1.00	0.966		mg/L		97	80 - 120
Barium	1.00	0.989		mg/L		99	80 - 120
Beryllium	1.00	1.01		mg/L		101	80 - 120
Cadmium	1.00	0.953		mg/L		95	80 - 120
Chromium	1.00	0.975		mg/L		98	80 - 120
Cobalt	1.00	0.994		mg/L		99	80 - 120
Copper	1.00	1.02		mg/L		102	80 - 120
Lead	1.00	0.980		mg/L		98	80 - 120
Molybdenum	1.00	0.999		mg/L		100	80 - 120
Nickel	1.00	0.990		mg/L		99	80 - 120
Selenium	1.00	0.937		mg/L		94	80 - 120
Silver	0.500	0.503		mg/L		101	80 - 120
Thallium	1.00	0.960		mg/L		96	80 - 120
Vanadium	1.00	0.994		mg/L		99	80 - 120
Zinc	1.00	0.945		mg/L		95	80 - 120

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

Lab Sample ID: 440-107500-C-1-B MS ^2
Matrix: Water
Analysis Batch: 251643

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 251355

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		1.00	1.04		mg/L		104	75 - 125
Arsenic	ND		1.00	0.996		mg/L		100	75 - 125
Barium	0.027		1.00	0.969		mg/L		94	75 - 125
Beryllium	ND		1.00	0.958		mg/L		96	75 - 125
Cadmium	0.0072	J	1.00	0.899		mg/L		89	75 - 125
Chromium	ND		1.00	0.884		mg/L		88	75 - 125
Cobalt	0.69		1.00	1.61		mg/L		92	75 - 125
Copper	0.060		1.00	1.13		mg/L		107	75 - 125
Lead	0.0072	J	1.00	0.956		mg/L		95	75 - 125
Molybdenum	ND		1.00	0.966		mg/L		97	75 - 125
Nickel	1.6		1.00	2.61		mg/L		103	75 - 125
Selenium	0.017	J	1.00	0.950		mg/L		93	75 - 125
Silver	ND		0.500	0.516		mg/L		103	75 - 125
Thallium	0.022		1.00	0.908		mg/L		89	75 - 125
Vanadium	ND		1.00	0.963		mg/L		96	75 - 125
Zinc	0.21		1.00	1.15		mg/L		94	75 - 125

Lab Sample ID: 440-107500-C-1-C MSD ^2
Matrix: Water
Analysis Batch: 251643

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 251355

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		1.00	0.902		mg/L		90	75 - 125	14	20
Arsenic	ND		1.00	0.868		mg/L		87	75 - 125	14	20
Barium	0.027		1.00	0.867		mg/L		84	75 - 125	11	20
Beryllium	ND		1.00	0.857		mg/L		86	75 - 125	11	20
Cadmium	0.0072	J	1.00	0.811		mg/L		80	75 - 125	10	20
Chromium	ND		1.00	0.797		mg/L		80	75 - 125	10	20
Cobalt	0.69		1.00	1.44		mg/L		75	75 - 125	11	20
Copper	0.060		1.00	1.00		mg/L		94	75 - 125	12	20
Lead	0.0072	J	1.00	0.853		mg/L		85	75 - 125	11	20
Molybdenum	ND		1.00	0.870		mg/L		87	75 - 125	11	20
Nickel	1.6		1.00	2.34		mg/L		75	75 - 125	11	20
Selenium	0.017	J	1.00	0.848		mg/L		83	75 - 125	11	20
Silver	ND		0.500	0.462		mg/L		92	75 - 125	11	20
Thallium	0.022		1.00	0.816		mg/L		79	75 - 125	11	20
Vanadium	ND		1.00	0.865		mg/L		86	75 - 125	11	20
Zinc	0.21		1.00	1.03		mg/L		82	75 - 125	11	20

Lab Sample ID: MB 440-251242/1-A ^20
Matrix: Water
Analysis Batch: 251585

Client Sample ID: Method Blank
Prep Type: STLC Citrate

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.20	0.12	mg/L			04/28/15 11:10	20
Arsenic	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Barium	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Beryllium	ND		0.040	0.020	mg/L			04/28/15 11:10	20

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

Lab Sample ID: MB 440-251242/1-A ^20
Matrix: Water
Analysis Batch: 251585

Client Sample ID: Method Blank
Prep Type: STLC Citrate

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.10	0.040	mg/L			04/28/15 11:10	20
Chromium	ND		0.10	0.050	mg/L			04/28/15 11:10	20
Cobalt	ND		0.20	0.050	mg/L			04/28/15 11:10	20
Copper	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Lead	ND		0.10	0.050	mg/L			04/28/15 11:10	20
Molybdenum	ND		0.40	0.20	mg/L			04/28/15 11:10	20
Nickel	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Selenium	ND		0.20	0.12	mg/L			04/28/15 11:10	20
Silver	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Thallium	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Vanadium	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Zinc	ND		0.40	0.20	mg/L			04/28/15 11:10	20

Lab Sample ID: LCS 440-251242/2-A ^20
Matrix: Water
Analysis Batch: 251585

Client Sample ID: Lab Control Sample
Prep Type: STLC Citrate

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	20.0	19.7		mg/L		99	80 - 120
Arsenic	20.0	19.6		mg/L		98	80 - 120
Barium	20.0	19.4		mg/L		97	80 - 120
Beryllium	20.0	19.3		mg/L		97	80 - 120
Cadmium	20.0	19.3		mg/L		97	80 - 120
Chromium	20.0	18.1		mg/L		90	80 - 120
Cobalt	20.0	18.5		mg/L		92	80 - 120
Copper	20.0	19.9		mg/L		99	80 - 120
Lead	20.0	19.7		mg/L		99	80 - 120
Molybdenum	20.0	18.9		mg/L		94	80 - 120
Nickel	20.0	18.7		mg/L		94	80 - 120
Selenium	20.0	19.4		mg/L		97	80 - 120
Silver	10.0	9.52		mg/L		95	80 - 120
Thallium	20.0	19.5		mg/L		98	80 - 120
Vanadium	20.0	19.7		mg/L		98	80 - 120
Zinc	20.0	19.2		mg/L		96	80 - 120

Lab Sample ID: 440-107774-1 MS
Matrix: Water
Analysis Batch: 251585

Client Sample ID: W039
Prep Type: STLC Citrate

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.15	J	20.0	20.9		mg/L		104	75 - 125
Arsenic	ND		20.0	20.8		mg/L		104	75 - 125
Barium	0.10	J	20.0	20.7		mg/L		103	75 - 125
Beryllium	ND		20.0	20.5		mg/L		102	75 - 125
Cadmium	ND		20.0	20.6		mg/L		103	75 - 125
Chromium	ND		20.0	19.3		mg/L		96	75 - 125
Cobalt	ND		20.0	19.7		mg/L		98	75 - 125
Copper	ND		20.0	21.1		mg/L		106	75 - 125
Lead	ND		20.0	20.8		mg/L		104	75 - 125

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

Lab Sample ID: 440-107774-1 MS — **Client Sample ID: W039**
Matrix: Water — **Prep Type: STLC Citrate**
Analysis Batch: 251585

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	0.35	J	20.0	20.1		mg/L		99	75 - 125
Nickel	ND		20.0	19.9		mg/L		99	75 - 125
Selenium	0.16	J	20.0	20.5		mg/L		102	75 - 125
Silver	ND		10.0	9.73		mg/L		97	75 - 125
Thallium	ND		20.0	20.5		mg/L		103	75 - 125
Vanadium	ND		20.0	20.9		mg/L		104	75 - 125
Zinc	ND		20.0	20.4		mg/L		102	75 - 125

Lab Sample ID: 440-107774-1 MSD — **Client Sample ID: W039**
Matrix: Water — **Prep Type: STLC Citrate**
Analysis Batch: 251585

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.15	J	20.0	20.6		mg/L		102	75 - 125	1	20
Arsenic	ND		20.0	20.5		mg/L		102	75 - 125	2	20
Barium	0.10	J	20.0	20.2		mg/L		101	75 - 125	2	20
Beryllium	ND		20.0	20.5		mg/L		102	75 - 125	0	20
Cadmium	ND		20.0	20.2		mg/L		101	75 - 125	2	20
Chromium	ND		20.0	18.9		mg/L		95	75 - 125	2	20
Cobalt	ND		20.0	19.3		mg/L		97	75 - 125	2	20
Copper	ND		20.0	20.8		mg/L		104	75 - 125	2	20
Lead	ND		20.0	20.6		mg/L		103	75 - 125	1	20
Molybdenum	0.35	J	20.0	20.0		mg/L		98	75 - 125	0	20
Nickel	ND		20.0	19.5		mg/L		98	75 - 125	2	20
Selenium	0.16	J	20.0	20.3		mg/L		100	75 - 125	1	20
Silver	ND		10.0	9.54		mg/L		95	75 - 125	2	20
Thallium	ND		20.0	20.2		mg/L		101	75 - 125	2	20
Vanadium	ND		20.0	20.7		mg/L		103	75 - 125	1	20
Zinc	ND		20.0	20.0		mg/L		100	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 440-250869/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 251338 — **Prep Batch: 250869**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000114	J	0.00020	0.00010	mg/L		04/23/15 20:00	04/25/15 00:25	1

Lab Sample ID: LCS 440-250869/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 251338 — **Prep Batch: 250869**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00800	0.00852		mg/L		107	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 440-107813-P-9-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251338 — **Prep Batch: 250869**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00013	J B	0.00800	0.00858		mg/L		106	70 - 130

Lab Sample ID: 440-107813-P-9-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251338 — **Prep Batch: 250869**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00013	J B	0.00800	0.00871		mg/L		107	70 - 130	1	20

Lab Sample ID: MB 440-251242/1-B — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: STLC Citrate**
Analysis Batch: 251694 — **Prep Batch: 251449**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020	0.0010	mg/L		04/27/15 17:39	04/28/15 16:49	1

Lab Sample ID: LCS 440-251242/2-B — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: STLC Citrate**
Analysis Batch: 251694 — **Prep Batch: 251449**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0800	0.0866		mg/L		108	80 - 120

Lab Sample ID: 440-107892-E-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: STLC Citrate**
Analysis Batch: 251694 — **Prep Batch: 251449**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.0800	0.0857		mg/L		107	70 - 130

Lab Sample ID: 440-107892-E-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: STLC Citrate**
Analysis Batch: 251694 — **Prep Batch: 251449**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.0800	0.0864		mg/L		108	70 - 130	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-250661/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250661

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/23/15 05:23	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/23/15 05:23	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/23/15 05:23	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/23/15 05:23	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 440-250661/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250661

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity as CaCO3			85.4	86.4		mg/L		101	80 - 120		

Lab Sample ID: 440-107791-B-5 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250661

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Bicarbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Hydroxide Alkalinity as CaCO3	ND			ND		mg/L				NC	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-251309/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 251309

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			04/27/15 09:24	1

Lab Sample ID: LCS 440-251309/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 251309

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1000	1020		mg/L		102	90 - 110		

Lab Sample ID: 720-64325-C-6 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 251309

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1300			1300		mg/L				3	5

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107774-1

GC/MS VOA

Analysis Batch: 251276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Total/NA	Water	8260B	
440-107825-A-3 MS	Matrix Spike	Total/NA	Water	8260B	
440-107825-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-251276/4	Lab Control Sample	Total/NA	Water	8260B	
MB 440-251276/3	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 251224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Total/NA	Water	3520C	
LCS 440-251224/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-251224/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-251224/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 251421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Total/NA	Water	8270C SIM	251224
LCS 440-251224/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	251224
LCSD 440-251224/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	251224
MB 440-251224/1-A	Method Blank	Total/NA	Water	8270C SIM	251224

GC Semi VOA

Prep Batch: 250669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Total/NA	Water	3510C	
LCS 440-250669/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-250669/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 440-250669/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 250929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-250669/2-A	Lab Control Sample	Total/NA	Water	8015B	250669
LCSD 440-250669/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	250669
MB 440-250669/1-A	Method Blank	Total/NA	Water	8015B	250669

Analysis Batch: 250930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Total/NA	Water	8015B	250669

HPLC/IC

Analysis Batch: 250448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107701-H-6 MS	Matrix Spike	Total/NA	Water	300.0	
440-107701-H-6 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
440-107774-1	W039	Total/NA	Water	300.0	
LCS 440-250448/6	Lab Control Sample	Total/NA	Water	300.0	
MB 440-250448/4	Method Blank	Total/NA	Water	300.0	

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107774-1

Analysis Batch: 250449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107701-H-6 MS	Matrix Spike	Total/NA	Water	300.0	
440-107701-H-6 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
440-107774-1	W039	Total/NA	Water	300.0	
440-107774-1	W039	Total/NA	Water	300.0	
LCS 440-250449/6	Lab Control Sample	Total/NA	Water	300.0	
MB 440-250449/4	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 250869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Dissolved	Water	7470A	
440-107813-P-9-B MS	Matrix Spike	Dissolved	Water	7470A	
440-107813-P-9-C MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	
LCS 440-250869/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 440-250869/1-A	Method Blank	Total/NA	Water	7470A	

Leach Batch: 251242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	STLC Citrate	Water	CA WET Citrate	
440-107774-1 MS	W039	STLC Citrate	Water	CA WET Citrate	
440-107774-1 MSD	W039	STLC Citrate	Water	CA WET Citrate	
440-107892-E-1-C MS	Matrix Spike	STLC Citrate	Water	CA WET Citrate	
440-107892-E-1-D MSD	Matrix Spike Duplicate	STLC Citrate	Water	CA WET Citrate	
LCS 440-251242/2-A ^20	Lab Control Sample	STLC Citrate	Water	CA WET Citrate	
LCS 440-251242/2-B	Lab Control Sample	STLC Citrate	Water	CA WET Citrate	
MB 440-251242/1-A ^20	Method Blank	STLC Citrate	Water	CA WET Citrate	
MB 440-251242/1-B	Method Blank	STLC Citrate	Water	CA WET Citrate	

Analysis Batch: 251338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Dissolved	Water	7470A	250869
440-107813-P-9-B MS	Matrix Spike	Dissolved	Water	7470A	250869
440-107813-P-9-C MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	250869
LCS 440-250869/2-A	Lab Control Sample	Total/NA	Water	7470A	250869
MB 440-250869/1-A	Method Blank	Total/NA	Water	7470A	250869

Prep Batch: 251355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107500-C-1-B MS ^2	Matrix Spike	Dissolved	Water	3005A	
440-107500-C-1-C MSD ^2	Matrix Spike Duplicate	Dissolved	Water	3005A	
440-107774-1	W039	Dissolved	Water	3005A	
LCS 440-251355/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 440-251355/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 251379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Dissolved	Water	200.2	
440-107774-1 MS	W039	Dissolved	Water	200.2	
440-107774-1 MSD	W039	Dissolved	Water	200.2	
LCS 440-251379/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
MB 440-251379/1-A	Method Blank	Total Recoverable	Water	200.2	

Metals (Continued)

Prep Batch: 251391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Dissolved	Water	200.2	
440-107774-1 MS	W039	Dissolved	Water	200.2	
440-107774-1 MSD	W039	Dissolved	Water	200.2	
LCS 440-251391/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
MB 440-251391/1-A	Method Blank	Total Recoverable	Water	200.2	

Prep Batch: 251449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	STLC Citrate	Water	7470A	251242
440-107892-E-1-C MS	Matrix Spike	STLC Citrate	Water	7470A	251242
440-107892-E-1-D MSD	Matrix Spike Duplicate	STLC Citrate	Water	7470A	251242
LCS 440-251242/2-B	Lab Control Sample	STLC Citrate	Water	7470A	251242
MB 440-251242/1-B	Method Blank	STLC Citrate	Water	7470A	251242

Analysis Batch: 251583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Dissolved	Water	200.7 Rev 4.4	251379
440-107774-1 MS	W039	Dissolved	Water	200.7 Rev 4.4	251379
440-107774-1 MSD	W039	Dissolved	Water	200.7 Rev 4.4	251379
LCS 440-251379/2-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	251379
MB 440-251379/1-A	Method Blank	Total Recoverable	Water	200.7 Rev 4.4	251379

Analysis Batch: 251585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	STLC Citrate	Water	6010B	251242
440-107774-1 MS	W039	STLC Citrate	Water	6010B	251242
440-107774-1 MSD	W039	STLC Citrate	Water	6010B	251242
LCS 440-251242/2-A ^20	Lab Control Sample	STLC Citrate	Water	6010B	251242
MB 440-251242/1-A ^20	Method Blank	STLC Citrate	Water	6010B	251242

Analysis Batch: 251614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Dissolved	Water	200.8	251391
440-107774-1 MS	W039	Dissolved	Water	200.8	251391
440-107774-1 MSD	W039	Dissolved	Water	200.8	251391
LCS 440-251391/2-A	Lab Control Sample	Total Recoverable	Water	200.8	251391
MB 440-251391/1-A	Method Blank	Total Recoverable	Water	200.8	251391

Analysis Batch: 251643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107500-C-1-B MS ^2	Matrix Spike	Dissolved	Water	6010B	251355
440-107500-C-1-C MSD ^2	Matrix Spike Duplicate	Dissolved	Water	6010B	251355
440-107774-1	W039	Dissolved	Water	6010B	251355
LCS 440-251355/2-A	Lab Control Sample	Total Recoverable	Water	6010B	251355
MB 440-251355/1-A	Method Blank	Total Recoverable	Water	6010B	251355

Analysis Batch: 251694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	STLC Citrate	Water	7470A	251449
440-107892-E-1-C MS	Matrix Spike	STLC Citrate	Water	7470A	251449
440-107892-E-1-D MSD	Matrix Spike Duplicate	STLC Citrate	Water	7470A	251449

Metals (Continued)

Analysis Batch: 251694 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-251242/2-B	Lab Control Sample	STLC Citrate	Water	7470A	251449
MB 440-251242/1-B	Method Blank	STLC Citrate	Water	7470A	251449

General Chemistry

Analysis Batch: 250661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Total/NA	Water	SM 2320B	
440-107791-B-5 DU	Duplicate	Total/NA	Water	SM 2320B	
LCS 440-250661/2	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 440-250661/3	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 251309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-1	W039	Total/NA	Water	SM 2540C	
720-64325-C-6 DU	Duplicate	Total/NA	Water	SM 2540C	
LCS 440-251309/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 440-251309/1	Method Blank	Total/NA	Water	SM 2540C	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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)

Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107774-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-15
Arizona	State Program	9	AZ0671	10-13-15
California	LA Cty Sanitation Districts	9	10256	01-31-16 *
California	State Program	9	2706	06-30-16
Guam	State Program	9	Cert. No. 12.002r	01-23-16
Hawaii	State Program	9	N/A	01-29-16
Nevada	State Program	9	CA015312007A	07-31-15
New Mexico	State Program	6	N/A	01-29-15 *
Northern Mariana Islands	State Program	9	MP0002	01-29-15 *
Oregon	NELAP	10	4005	01-29-16
USDA	Federal		P330-09-00080	06-06-15

* Certification renewal pending - certification considered valid.

CHAIN-OF-CUSTODY RECORD

FRE 16810

PROJECT NAME: Canelo sampling

PROJECT NUMBER: FR1416063A

RESULTS TO: Gary Kramer

TURNAROUND TIME: 5-day

SAMPLE SHIPMENT METHOD: Fedex

LABORATORY NAME: Test America

LABORATORY ADDRESS: 17461 Derian Ave Suite 100

LABORATORY CONTACT: Patty Marta

LABORATORY PHONE NUMBER: 949-261-1022

CLIENT INFORMATION: Irvine CA 92614

DATE: 4/21/15

PAGE OF

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED Yes EDF YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

DATE	TIME	SAMPLE NUMBER	8260B Acetone BTEX	8270c PAH	8015B	300.0 Cl, Br, F	300 NO3	2540c TDS	8320B Alk	200.7, 200.8	6010B 7470A	6010B STLC, TCLP	Acetone	CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
4/21/15	4:15	W039	3	2	1					1 (Filtered)		1			W	200.7 200.8		Y		9	

440-107774 Chain of Custody

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	4/21 2015	4:35	SIGNATURE:	4/21/15	4:35
PRINTED NAME: Johnathan Ebenbach			PRINTED NAME: VUBANH		
COMPANY: Amec Fw			COMPANY: TAI 4.7/35 IR12		
SIGNATURE:			SIGNATURE:		
PRINTED NAME: Patty Thomas			PRINTED NAME:		
COMPANY:			COMPANY:		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS: Send results to gary.kramer@amec.com
Bottle for 200.7 and 200.8 have been sampled.
NO3 has only 48 hr hold so please analyze as quickly as possible (Trip Blank will be sent w/ Next Samples)

1281 East Alluvial Ave., Suite 101
Fresno, California 93720-2659
Tel 559.264.2535 Fax 559.264.7431

amec

Fed: 806166262581

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 440-107774-1

Login Number: 107774
List Number: 1
Creator: Jackson, Brent E

List Source: TestAmerica Irvine

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	
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.	N/A	
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	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-107892-1
TestAmerica Sample Delivery Group: FR1416063A
Client Project/Site: Chevron Cawelo
Revision: 2

For:
AMEC Foster Wheeler E & I, Inc
1281 E Alluvial Ave, Ste 101
Fresno, California 93720

Attn: Gary Kramer

Authorized for release by:
6/23/2015 1:02:44 PM

Patty Mata, Senior Project Manager
(949)261-1022
patty.mata@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Sample Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-107892-1	W042	Water	04/22/15 11:00	04/23/15 09:35
440-107892-2	W043	Water	04/22/15 11:35	04/23/15 09:35
440-107892-3	W044	Water	04/22/15 13:15	04/23/15 09:35
440-107892-4	W045	Water	04/22/15 14:10	04/23/15 09:35

Job ID: 440-107892-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-107892-1

Comments
Level 4 raw data package was requested for EPA methods 8260 and 8270 on 6/5/15.

This report was revised on 6/19/15 to add methylene chloride to the 8260 analytical.

This report was revised on 6/23/15 to include full 8260 VOC list as requested on 6/22/15.

Receipt
The samples were received on 4/23/2015 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.8º C, 3.2º C and 3.7º C.

Client was contacted about COC sampling times versus bottle label sampling times and client requested the lab use the bottle label times. The bottle label times are listed below:
W042 = 11:00
W043 = 11:35
W044 = 13:15
W045 = 14:10

GC/MS VOA
Method(s) 8260B: The following volatile samples were analyzed with significant headspace in the sample vial due to multiple runs performed: W043 (440-107892-2) and W044 (440-107892-3). Significant headspace is defined as a bubble greater than 6 mm in diameter.

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

GC/MS Semi VOA
Method(s) 8270C SIM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 251224. The laboratory control sample (LCS) was performed in duplicate to provide precision data for the batch.

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

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

GC Semi VOA
Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 250952. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

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

Metals
Method(s) 200.7 and 200.8: Methods require dissolved metals to be filtered immediately which is taken to mean within 15 minutes of sampling. The sample results have HF qualifiers to note that the lab was requested to filter the samples after receipt.

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

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

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

Job ID: 440-107892-1 (Continued)

Laboratory: TestAmerica Irvine (Continued)

VOA Prep

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

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W042

Date Collected: 04/22/15 11:00
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**86**		10	4.5	ug/L			04/28/15 04:41	1
Benzene	**0.33**	**J**	0.50	0.25	ug/L			04/28/15 04:41	1
Bromobenzene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Bromochloromethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Bromodichloromethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Bromoform	ND		1.0	0.40	ug/L			04/28/15 04:41	1
Bromomethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			04/28/15 04:41	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Chlorobenzene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Chloroethane	ND		1.0	0.40	ug/L			04/28/15 04:41	1
Chloroform	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Chloromethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Dibromochloromethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			04/28/15 04:41	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Dibromomethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			04/28/15 04:41	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Ethanol	ND		150	75	ug/L			04/28/15 04:41	1
Ethylbenzene	**0.39**	**J**	0.50	0.25	ug/L			04/28/15 04:41	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			04/28/15 04:41	1
2-Hexanone	ND		5.0	2.5	ug/L			04/28/15 04:41	1
Isopropylbenzene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Methylene Chloride	ND		2.0	0.88	ug/L			04/28/15 04:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			04/28/15 04:41	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			04/28/15 04:41	1
m,p-Xylene	**1.3**		1.0	0.50	ug/L			04/28/15 04:41	1
Naphthalene	ND		1.0	0.40	ug/L			04/28/15 04:41	1
n-Butylbenzene	ND		1.0	0.40	ug/L			04/28/15 04:41	1
n-Propylbenzene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
o-Xylene	**0.74**		0.50	0.25	ug/L			04/28/15 04:41	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Styrene	ND		0.50	0.25	ug/L			04/28/15 04:41	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W042

Date Collected: 04/22/15 11:00
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			04/28/15 04:41	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			04/28/15 04:41	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Tetrachloroethene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Toluene	**0.49**	**J**	0.50	0.25	ug/L			04/28/15 04:41	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			04/28/15 04:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			04/28/15 04:41	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Trichloroethene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,2,3-Trichloropropane	ND		0.50	0.25	ug/L			04/28/15 04:41	1
1,2,4-Trimethylbenzene	**0.68**		0.50	0.25	ug/L			04/28/15 04:41	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Vinyl chloride	ND		0.50	0.25	ug/L			04/28/15 04:41	1
Xylenes, Total	**2.0**		1.0	0.50	ug/L			04/28/15 04:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*04/28/15 04:41*	*1*
Dibromofluoromethane (Surr)	*106*		*76 - 132*		*04/28/15 04:41*	*1*
Toluene-d8 (Surr)	*102*		*80 - 128*		*04/28/15 04:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.53**		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Acenaphthylene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Anthracene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Benzo[a]anthracene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Benzo[a]pyrene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Benzo[b]fluoranthene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Benzo[g,h,i]perylene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Chrysene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Dibenz(a,h)anthracene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Fluoranthene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Fluorene	**0.29**		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Naphthalene	**0.11**	**J**	0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Phenanthrene	**0.27**		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1
Pyrene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*31 - 120*	*04/26/15 13:54*	*04/28/15 00:06*	*1*
Nitrobenzene-d5	*65*		*25 - 133*	*04/26/15 13:54*	*04/28/15 00:06*	*1*
Terphenyl-d14	*106*		*10 - 120*	*04/26/15 13:54*	*04/28/15 00:06*	*1*

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W042

Date Collected: 04/22/15 11:00
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C29-C40	0.19		0.048	0.024	mg/L		04/24/15 08:21	04/27/15 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*67*		*45 - 120*	*04/24/15 08:21*	*04/27/15 13:08*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.73		0.50	0.25	mg/L			04/23/15 18:22	1
Nitrate as NO3	ND		0.50	0.25	mg/L			04/23/15 18:22	1
Chloride	100		5.0	2.5	mg/L			04/23/15 18:37	10
Fluoride	0.91		0.50	0.25	mg/L			04/23/15 18:22	1
Sulfate	0.62		0.50	0.25	mg/L			04/23/15 18:22	1

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.68	HF	0.050	0.010	mg/L		04/29/15 07:45	04/29/15 14:04	1
Calcium	25	HF	0.10	0.050	mg/L		04/29/15 07:45	04/29/15 14:04	1
Iron	0.040	HF	0.040	0.010	mg/L		04/29/15 07:45	04/29/15 14:04	1
Lithium	0.042	J HF	0.50	0.025	mg/L		04/29/15 07:45	04/29/15 14:04	1
Magnesium	4.5	HF	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:04	1
Manganese	0.079	HF	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:04	1
Potassium	5.5	HF	0.50	0.25	mg/L		04/29/15 07:45	04/29/15 14:04	1
Sodium	110	HF	0.50	0.25	mg/L		04/29/15 07:45	04/29/15 14:04	1
Strontium	0.37	HF	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:04	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	ND	HF	1.0	0.50	ug/L		04/29/15 07:48	04/29/15 14:45	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.012	B	0.010	0.0060	mg/L		04/29/15 07:50	04/29/15 14:10	1
Arsenic	0.0065	J	0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:10	1
Barium	0.089		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:10	1
Beryllium	ND		0.0020	0.0010	mg/L		04/29/15 07:50	04/29/15 14:10	1
Cadmium	ND		0.0050	0.0020	mg/L		04/29/15 07:50	04/29/15 14:10	1
Chromium	ND		0.0050	0.0025	mg/L		04/29/15 07:50	04/29/15 14:10	1
Cobalt	ND		0.010	0.0025	mg/L		04/29/15 07:50	04/29/15 14:10	1
Copper	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:10	1
Lead	ND		0.0050	0.0025	mg/L		04/29/15 07:50	04/29/15 14:10	1
Molybdenum	0.012	J	0.020	0.010	mg/L		04/29/15 07:50	04/29/15 14:10	1
Nickel	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:10	1
Selenium	ND		0.010	0.0061	mg/L		04/29/15 07:50	04/29/15 14:10	1
Silver	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:10	1
Thallium	0.0061	J	0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:10	1
Vanadium	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:10	1
Zinc	ND		0.020	0.010	mg/L		04/29/15 07:50	04/29/15 14:10	1

Method: 6010B - Metals (ICP) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.20	0.12	mg/L			04/28/15 11:22	20

Client Sample ID: W042

Lab Sample ID: 440-107892-1

Date Collected: 04/22/15 11:00
Matrix: Water
Date Received: 04/23/15 09:35

Method: 6010B - Metals (ICP) - STLC Citrate (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.20	0.10	mg/L			04/28/15 11:22	20
Barium	**0.10**	**J**	0.20	0.10	mg/L			04/28/15 11:22	20
Beryllium	ND		0.040	0.020	mg/L			04/28/15 11:22	20
Cadmium	ND		0.10	0.040	mg/L			04/28/15 11:22	20
Chromium	ND		0.10	0.050	mg/L			04/28/15 11:22	20
Cobalt	ND		0.20	0.050	mg/L			04/28/15 11:22	20
Copper	ND		0.20	0.10	mg/L			04/28/15 11:22	20
Lead	ND		0.10	0.050	mg/L			04/28/15 11:22	20
Molybdenum	**0.40**		0.40	0.20	mg/L			04/28/15 11:22	20
Nickel	ND		0.20	0.10	mg/L			04/28/15 11:22	20
Selenium	**0.14**	**J**	0.20	0.12	mg/L			04/28/15 11:22	20
Silver	ND		0.20	0.10	mg/L			04/28/15 11:22	20
Thallium	ND		0.20	0.10	mg/L			04/28/15 11:22	20
Vanadium	ND		0.20	0.10	mg/L			04/28/15 11:22	20
Zinc	ND		0.40	0.20	mg/L			04/28/15 11:22	20

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/24/15 15:01	04/25/15 02:28	1

Method: 7470A - Mercury (CVAA) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020	0.0010	mg/L		04/27/15 17:39	04/28/15 16:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**230**		4.0	4.0	mg/L			04/24/15 06:37	1
Bicarbonate Alkalinity as CaCO3	**230**		4.0	4.0	mg/L			04/24/15 06:37	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 06:37	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 06:37	1
Total Dissolved Solids	**490**		10	5.0	mg/L			04/28/15 08:13	1

Client Sample ID: W043

Lab Sample ID: 440-107892-2

Date Collected: 04/22/15 11:35
Matrix: Water
Date Received: 04/23/15 09:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**100**		10	4.5	ug/L			04/28/15 10:11	1
Benzene	**0.31**	**J**	0.50	0.25	ug/L			04/28/15 10:11	1
Bromobenzene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Bromochloromethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Bromodichloromethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Bromoform	ND		1.0	0.40	ug/L			04/28/15 10:11	1
Bromomethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
2-Butanone (MEK)	**7.8**		5.0	2.5	ug/L			04/28/15 10:11	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Chlorobenzene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Chloroethane	ND		1.0	0.40	ug/L			04/28/15 10:11	1
Chloroform	ND		0.50	0.25	ug/L			04/28/15 10:11	1

Client Sample ID: W043

Date Collected: 04/22/15 11:35
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Dibromochloromethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			04/28/15 10:11	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Dibromomethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			04/28/15 10:11	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Ethanol	ND		150	75	ug/L			04/28/15 10:11	1
Ethylbenzene	**0.38**	**J**	0.50	0.25	ug/L			04/28/15 10:11	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			04/28/15 10:11	1
2-Hexanone	ND		5.0	2.5	ug/L			04/28/15 10:11	1
Isopropylbenzene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Methylene Chloride	ND		2.0	0.88	ug/L			04/28/15 10:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			04/28/15 10:11	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			04/28/15 10:11	1
m,p-Xylene	**1.2**		1.0	0.50	ug/L			04/28/15 10:11	1
Naphthalene	**0.41**	**J**	1.0	0.40	ug/L			04/28/15 10:11	1
n-Butylbenzene	ND		1.0	0.40	ug/L			04/28/15 10:11	1
n-Propylbenzene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
o-Xylene	**0.59**		0.50	0.25	ug/L			04/28/15 10:11	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Styrene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			04/28/15 10:11	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			04/28/15 10:11	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Tetrachloroethene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Toluene	**0.47**	**J**	0.50	0.25	ug/L			04/28/15 10:11	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			04/28/15 10:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			04/28/15 10:11	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W043

Date Collected: 04/22/15 11:35
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Trichloroethene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,2,3-Trichloropropane	ND		0.50	0.25	ug/L			04/28/15 10:11	1
1,2,4-Trimethylbenzene	**0.56**		0.50	0.25	ug/L			04/28/15 10:11	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Vinyl chloride	ND		0.50	0.25	ug/L			04/28/15 10:11	1
Xylenes, Total	**1.8**		1.0	0.50	ug/L			04/28/15 10:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*04/28/15 10:11*	*1*
Dibromofluoromethane (Surr)	*103*		*76 - 132*		*04/28/15 10:11*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*04/28/15 10:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.57**		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Acenaphthylene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Anthracene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Benzo[a]anthracene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Benzo[a]pyrene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Benzo[b]fluoranthene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Benzo[g,h,i]perylene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Chrysene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Dibenz(a,h)anthracene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Fluoranthene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Fluorene	**0.35**		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Naphthalene	**0.12**	**J**	0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Phenanthrene	**0.28**		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1
Pyrene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*31 - 120*	*04/26/15 13:54*	*04/28/15 00:27*	*1*
Nitrobenzene-d5	*63*		*25 - 133*	*04/26/15 13:54*	*04/28/15 00:27*	*1*
Terphenyl-d14	*107*		*10 - 120*	*04/26/15 13:54*	*04/28/15 00:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C29-C40	**0.097**		0.048	0.024	mg/L		04/24/15 08:21	04/27/15 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*78*		*45 - 120*	*04/24/15 08:21*	*04/27/15 13:28*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.83**		0.50	0.25	mg/L			04/23/15 18:51	1
Nitrate as NO3	ND		0.50	0.25	mg/L			04/23/15 18:51	1
Fluoride	**0.94**		0.50	0.25	mg/L			04/23/15 18:51	1
Sulfate	**0.54**		0.50	0.25	mg/L			04/23/15 18:51	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**110**	**F1**	5.0	2.5	mg/L			04/23/15 19:06	10

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.73**	**HF**	0.050	0.010	mg/L		04/29/15 07:45	04/29/15 14:11	1
Calcium	**27**	**HF**	0.10	0.050	mg/L		04/29/15 07:45	04/29/15 14:11	1
Iron	**0.061**	**HF**	0.040	0.010	mg/L		04/29/15 07:45	04/29/15 14:11	1
Lithium	**0.042**	**J HF**	0.50	0.025	mg/L		04/29/15 07:45	04/29/15 14:11	1
Magnesium	**4.6**	**HF**	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:11	1
Manganese	**0.085**	**HF**	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:11	1
Potassium	**5.9**	**HF**	0.50	0.25	mg/L		04/29/15 07:45	04/29/15 14:11	1
Sodium	**120**	**HF**	0.50	0.25	mg/L		04/29/15 07:45	04/29/15 14:11	1
Strontium	**0.41**	**HF**	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:11	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	ND	HF	1.0	0.50	ug/L		04/29/15 07:48	04/29/15 14:38	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.0075**	**J B**	0.010	0.0060	mg/L		04/29/15 07:50	04/29/15 15:48	1
Arsenic	**0.011**		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:13	1
Barium	**0.091**		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:13	1
Beryllium	ND		0.0020	0.0010	mg/L		04/29/15 07:50	04/29/15 14:13	1
Cadmium	ND		0.0050	0.0020	mg/L		04/29/15 07:50	04/29/15 14:13	1
Chromium	ND		0.0050	0.0025	mg/L		04/29/15 07:50	04/29/15 14:13	1
Cobalt	ND		0.010	0.0025	mg/L		04/29/15 07:50	04/29/15 14:13	1
Copper	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:13	1
Lead	ND		0.0050	0.0025	mg/L		04/29/15 07:50	04/29/15 14:13	1
Molybdenum	ND		0.020	0.010	mg/L		04/29/15 07:50	04/29/15 14:13	1
Nickel	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:13	1
Selenium	ND		0.010	0.0061	mg/L		04/29/15 07:50	04/29/15 14:13	1
Silver	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:13	1
Thallium	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:13	1
Vanadium	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:13	1
Zinc	ND		0.020	0.010	mg/L		04/29/15 07:50	04/29/15 14:13	1

Method: 6010B - Metals (ICP) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.20	0.12	mg/L			04/28/15 11:25	20
Arsenic	ND		0.20	0.10	mg/L			04/28/15 11:25	20
Barium	ND		0.20	0.10	mg/L			04/28/15 11:25	20
Beryllium	ND		0.040	0.020	mg/L			04/28/15 11:25	20
Cadmium	ND		0.10	0.040	mg/L			04/28/15 11:25	20
Chromium	ND		0.10	0.050	mg/L			04/28/15 11:25	20
Cobalt	ND		0.20	0.050	mg/L			04/28/15 11:25	20
Copper	ND		0.20	0.10	mg/L			04/28/15 11:25	20
Lead	ND		0.10	0.050	mg/L			04/28/15 11:25	20
Molybdenum	ND		0.40	0.20	mg/L			04/28/15 11:25	20
Nickel	ND		0.20	0.10	mg/L			04/28/15 11:25	20
Selenium	ND		0.20	0.12	mg/L			04/28/15 11:25	20
Silver	ND		0.20	0.10	mg/L			04/28/15 11:25	20
Thallium	ND		0.20	0.10	mg/L			04/28/15 11:25	20
Vanadium	ND		0.20	0.10	mg/L			04/28/15 11:25	20

Client Sample ID: W043

Lab Sample ID: 440-107892-2

Date Collected: 04/22/15 11:35
Matrix: Water
Date Received: 04/23/15 09:35

Method: 6010B - Metals (ICP) - STLC Citrate (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.40	0.20	mg/L			04/28/15 11:25	20

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/24/15 15:01	04/25/15 02:35	1

Method: 7470A - Mercury (CVAA) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020	0.0010	mg/L		04/27/15 17:39	04/28/15 17:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**210**		4.0	4.0	mg/L			04/24/15 06:44	1
Bicarbonate Alkalinity as CaCO3	**210**		4.0	4.0	mg/L			04/24/15 06:44	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 06:44	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 06:44	1
Total Dissolved Solids	**490**		10	5.0	mg/L			04/28/15 08:13	1

Client Sample ID: W044

Lab Sample ID: 440-107892-3

Date Collected: 04/22/15 13:15
Matrix: Water
Date Received: 04/23/15 09:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**150**		10	4.5	ug/L			04/28/15 10:41	1
Benzene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Bromobenzene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Bromochloromethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Bromodichloromethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Bromoform	ND		1.0	0.40	ug/L			04/28/15 10:41	1
Bromomethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
2-Butanone (MEK)	**7.2**		5.0	2.5	ug/L			04/28/15 10:41	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Chlorobenzene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Chloroethane	ND		1.0	0.40	ug/L			04/28/15 10:41	1
Chloroform	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Chloromethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Dibromochloromethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			04/28/15 10:41	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Dibromomethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W044

Date Collected: 04/22/15 13:15
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			04/28/15 10:41	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Ethanol	ND		150	75	ug/L			04/28/15 10:41	1
Ethylbenzene	**0.25**	**J**	0.50	0.25	ug/L			04/28/15 10:41	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			04/28/15 10:41	1
2-Hexanone	ND		5.0	2.5	ug/L			04/28/15 10:41	1
Isopropylbenzene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Methylene Chloride	ND		2.0	0.88	ug/L			04/28/15 10:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			04/28/15 10:41	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			04/28/15 10:41	1
m,p-Xylene	**0.75**	**J**	1.0	0.50	ug/L			04/28/15 10:41	1
Naphthalene	ND		1.0	0.40	ug/L			04/28/15 10:41	1
n-Butylbenzene	ND		1.0	0.40	ug/L			04/28/15 10:41	1
n-Propylbenzene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
o-Xylene	**0.43**	**J**	0.50	0.25	ug/L			04/28/15 10:41	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Styrene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			04/28/15 10:41	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			04/28/15 10:41	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Tetrachloroethene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Toluene	**0.39**	**J**	0.50	0.25	ug/L			04/28/15 10:41	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			04/28/15 10:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			04/28/15 10:41	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Trichloroethene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,2,3-Trichloropropane	ND		0.50	0.25	ug/L			04/28/15 10:41	1
1,2,4-Trimethylbenzene	**0.40**	**J**	0.50	0.25	ug/L			04/28/15 10:41	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Vinyl chloride	ND		0.50	0.25	ug/L			04/28/15 10:41	1
Xylenes, Total	**1.2**		1.0	0.50	ug/L			04/28/15 10:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*04/28/15 10:41*	*1*
Dibromofluoromethane (Surr)	*105*		*76 - 132*		*04/28/15 10:41*	*1*
Toluene-d8 (Surr)	*105*		*80 - 128*		*04/28/15 10:41*	*1*

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W044

Date Collected: 04/22/15 13:15
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.49**		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Acenaphthylene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Anthracene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Benzo[a]anthracene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Benzo[a]pyrene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Benzo[b]fluoranthene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Benzo[g,h,i]perylene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Chrysene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Dibenz(a,h)anthracene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Fluoranthene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Fluorene	**0.50**		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Naphthalene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Phenanthrene	**0.29**		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1
Pyrene	ND		0.19	0.097	ug/L		04/26/15 13:54	04/28/15 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*31 - 120*	*04/26/15 13:54*	*04/28/15 00:47*	*1*
Nitrobenzene-d5	*60*		*25 - 133*	*04/26/15 13:54*	*04/28/15 00:47*	*1*
Terphenyl-d14	*102*		*10 - 120*	*04/26/15 13:54*	*04/28/15 00:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C29-C40	**0.15**		0.048	0.024	mg/L		04/24/15 08:21	04/27/15 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*57*		*45 - 120*	*04/24/15 08:21*	*04/27/15 13:47*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**1.1**		0.50	0.25	mg/L			04/23/15 19:51	1
Nitrate as NO3	ND		0.50	0.25	mg/L			04/23/15 19:51	1
Chloride	**110**		5.0	2.5	mg/L			04/23/15 20:05	10
Fluoride	**0.91**		0.50	0.25	mg/L			04/23/15 19:51	1
Sulfate	**1.9**		0.50	0.25	mg/L			04/23/15 19:51	1

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.72**	**HF**	0.050	0.010	mg/L		04/29/15 07:45	04/29/15 14:13	1
Calcium	**25**	**HF**	0.10	0.050	mg/L		04/29/15 07:45	04/29/15 14:13	1
Iron	**2.1**	**HF**	0.040	0.010	mg/L		04/29/15 07:45	04/29/15 14:13	1
Lithium	**0.044**	**J HF**	0.50	0.025	mg/L		04/29/15 07:45	04/29/15 14:13	1
Magnesium	**4.6**	**HF**	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:13	1
Manganese	**0.084**	**HF**	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:13	1
Potassium	**5.5**	**HF**	0.50	0.25	mg/L		04/29/15 07:45	04/29/15 14:13	1
Sodium	**120**	**HF**	0.50	0.25	mg/L		04/29/15 07:45	04/29/15 14:13	1
Strontium	**0.39**	**HF**	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:13	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W044

Date Collected: 04/22/15 13:15
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-3

Matrix: Water

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	ND	HF	1.0	0.50	ug/L		04/29/15 07:48	04/29/15 14:47	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.013**	**B**	0.010	0.0060	mg/L		04/29/15 07:50	04/29/15 15:53	1
Arsenic	**0.014**		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:02	1
Barium	**0.094**		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:02	1
Beryllium	ND		0.0020	0.0010	mg/L		04/29/15 07:50	04/29/15 14:02	1
Cadmium	ND		0.0050	0.0020	mg/L		04/29/15 07:50	04/29/15 14:02	1
Chromium	ND		0.0050	0.0025	mg/L		04/29/15 07:50	04/29/15 14:02	1
Cobalt	ND		0.010	0.0025	mg/L		04/29/15 07:50	04/29/15 14:02	1
Copper	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:02	1
Lead	ND		0.0050	0.0025	mg/L		04/29/15 07:50	04/29/15 14:02	1
Molybdenum	ND		0.020	0.010	mg/L		04/29/15 07:50	04/29/15 14:02	1
Nickel	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:02	1
Selenium	ND		0.010	0.0061	mg/L		04/29/15 07:50	04/29/15 14:02	1
Silver	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:02	1
Thallium	**0.0091**	**J**	0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:02	1
Vanadium	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:02	1
Zinc	ND		0.020	0.010	mg/L		04/29/15 07:50	04/29/15 14:02	1

Method: 6010B - Metals (ICP) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.20	0.12	mg/L			04/28/15 11:27	20
Arsenic	ND		0.20	0.10	mg/L			04/28/15 11:27	20
Barium	**0.10**	**J**	0.20	0.10	mg/L			04/28/15 11:27	20
Beryllium	ND		0.040	0.020	mg/L			04/28/15 11:27	20
Cadmium	ND		0.10	0.040	mg/L			04/28/15 11:27	20
Chromium	ND		0.10	0.050	mg/L			04/28/15 11:27	20
Cobalt	ND		0.20	0.050	mg/L			04/28/15 11:27	20
Copper	ND		0.20	0.10	mg/L			04/28/15 11:27	20
Lead	ND		0.10	0.050	mg/L			04/28/15 11:27	20
Molybdenum	ND		0.40	0.20	mg/L			04/28/15 11:27	20
Nickel	ND		0.20	0.10	mg/L			04/28/15 11:27	20
Selenium	ND		0.20	0.12	mg/L			04/28/15 11:27	20
Silver	ND		0.20	0.10	mg/L			04/28/15 11:27	20
Thallium	ND		0.20	0.10	mg/L			04/28/15 11:27	20
Vanadium	ND		0.20	0.10	mg/L			04/28/15 11:27	20
Zinc	ND		0.40	0.20	mg/L			04/28/15 11:27	20

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/24/15 15:01	04/25/15 02:42	1

Method: 7470A - Mercury (CVAA) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020	0.0010	mg/L		04/27/15 17:39	04/28/15 17:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**210**		4.0	4.0	mg/L			04/24/15 06:54	1

Client Sample ID: W044

Lab Sample ID: 440-107892-3

Date Collected: 04/22/15 13:15
Matrix: Water
Date Received: 04/23/15 09:35

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	**210**		4.0	4.0	mg/L			04/24/15 06:54	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 06:54	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 06:54	1
Total Dissolved Solids	**500**		10	5.0	mg/L			04/28/15 08:13	1

Client Sample ID: W045

Lab Sample ID: 440-107892-4

Date Collected: 04/22/15 14:10
Matrix: Water
Date Received: 04/23/15 09:35

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**50**		10	4.5	ug/L			04/28/15 11:11	1
Benzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Bromobenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Bromochloromethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Bromodichloromethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Bromoform	ND		1.0	0.40	ug/L			04/28/15 11:11	1
Bromomethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			04/28/15 11:11	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Chlorobenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Chloroethane	ND		1.0	0.40	ug/L			04/28/15 11:11	1
Chloroform	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Chloromethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Dibromochloromethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			04/28/15 11:11	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Dibromomethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			04/28/15 11:11	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Ethanol	ND		150	75	ug/L			04/28/15 11:11	1
Ethylbenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			04/28/15 11:11	1
2-Hexanone	ND		5.0	2.5	ug/L			04/28/15 11:11	1
Isopropylbenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Methylene Chloride	ND		2.0	0.88	ug/L			04/28/15 11:11	1

Client Sample ID: W045

Date Collected: 04/22/15 14:10
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			04/28/15 11:11	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			04/28/15 11:11	1
m,p-Xylene	ND		1.0	0.50	ug/L			04/28/15 11:11	1
Naphthalene	ND		1.0	0.40	ug/L			04/28/15 11:11	1
n-Butylbenzene	ND		1.0	0.40	ug/L			04/28/15 11:11	1
n-Propylbenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
o-Xylene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Styrene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			04/28/15 11:11	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			04/28/15 11:11	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Tetrachloroethene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Toluene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			04/28/15 11:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			04/28/15 11:11	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Trichloroethene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,2,3-Trichloropropane	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Vinyl chloride	ND		0.50	0.25	ug/L			04/28/15 11:11	1
Xylenes, Total	ND		1.0	0.50	ug/L			04/28/15 11:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*04/28/15 11:11*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*04/28/15 11:11*	*1*
Toluene-d8 (Surr)	*106*		*80 - 128*		*04/28/15 11:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Acenaphthylene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Anthracene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Benzo[a]anthracene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Benzo[a]pyrene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Benzo[b]fluoranthene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Benzo[g,h,i]perylene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Chrysene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Dibenz(a,h)anthracene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Fluoranthene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Fluorene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W045

Date Collected: 04/22/15 14:10
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Naphthalene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Phenanthrene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1
Pyrene	ND		0.19	0.096	ug/L		04/26/15 13:54	04/28/15 01:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*31 - 120*	*04/26/15 13:54*	*04/28/15 01:08*	*1*
Nitrobenzene-d5	*54*		*25 - 133*	*04/26/15 13:54*	*04/28/15 01:08*	*1*
Terphenyl-d14	*110*		*10 - 120*	*04/26/15 13:54*	*04/28/15 01:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C29-C40	**0.080**		0.048	0.024	mg/L		04/24/15 08:21	04/27/15 14:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*78*		*45 - 120*	*04/24/15 08:21*	*04/27/15 14:07*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**0.79**		0.50	0.25	mg/L			04/23/15 20:20	1
Nitrate as NO3	ND		0.50	0.25	mg/L			04/23/15 20:20	1
Chloride	**98**		5.0	2.5	mg/L			04/23/15 20:35	10
Fluoride	**0.91**		0.50	0.25	mg/L			04/23/15 20:20	1
Sulfate	**6.4**		0.50	0.25	mg/L			04/23/15 20:20	1

Method: 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.71**	**HF**	0.050	0.010	mg/L		04/29/15 07:45	04/29/15 14:15	1
Calcium	**22**	**HF**	0.10	0.050	mg/L		04/29/15 07:45	04/29/15 14:15	1
Iron	**1.2**	**HF**	0.040	0.010	mg/L		04/29/15 07:45	04/29/15 14:15	1
Lithium	**0.045**	**J HF**	0.50	0.025	mg/L		04/29/15 07:45	04/29/15 14:15	1
Magnesium	**4.1**	**HF**	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:15	1
Manganese	**0.072**	**HF**	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:15	1
Potassium	**4.8**	**HF**	0.50	0.25	mg/L		04/29/15 07:45	04/29/15 14:15	1
Sodium	**120**	**HF**	0.50	0.25	mg/L		04/29/15 07:45	04/29/15 14:15	1
Strontium	**0.34**	**HF**	0.020	0.010	mg/L		04/29/15 07:45	04/29/15 14:15	1

Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	ND	HF	1.0	0.50	ug/L		04/29/15 07:48	04/29/15 14:50	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.011**	**B**	0.010	0.0060	mg/L		04/29/15 07:50	04/29/15 14:15	1
Arsenic	**0.011**		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:15	1
Barium	**0.081**		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:15	1
Beryllium	ND		0.0020	0.0010	mg/L		04/29/15 07:50	04/29/15 14:15	1
Cadmium	ND		0.0050	0.0020	mg/L		04/29/15 07:50	04/29/15 14:15	1
Chromium	ND		0.0050	0.0025	mg/L		04/29/15 07:50	04/29/15 14:15	1
Cobalt	ND		0.010	0.0025	mg/L		04/29/15 07:50	04/29/15 14:15	1
Copper	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:15	1

Client Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W045

Date Collected: 04/22/15 14:10
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0050	0.0025	mg/L		04/29/15 07:50	04/29/15 14:15	1
Molybdenum	ND		0.020	0.010	mg/L		04/29/15 07:50	04/29/15 14:15	1
Nickel	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:15	1
Selenium	ND		0.010	0.0061	mg/L		04/29/15 07:50	04/29/15 14:15	1
Silver	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:15	1
Thallium	**0.0085**	**J**	0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:15	1
Vanadium	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 14:15	1
Zinc	ND		0.020	0.010	mg/L		04/29/15 07:50	04/29/15 14:15	1

Method: 6010B - Metals (ICP) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.20	0.12	mg/L			04/28/15 11:30	20
Arsenic	ND		0.20	0.10	mg/L			04/28/15 11:30	20
Barium	ND		0.20	0.10	mg/L			04/28/15 11:30	20
Beryllium	ND		0.040	0.020	mg/L			04/28/15 11:30	20
Cadmium	ND		0.10	0.040	mg/L			04/28/15 11:30	20
Chromium	ND		0.10	0.050	mg/L			04/28/15 11:30	20
Cobalt	ND		0.20	0.050	mg/L			04/28/15 11:30	20
Copper	ND		0.20	0.10	mg/L			04/28/15 11:30	20
Lead	ND		0.10	0.050	mg/L			04/28/15 11:30	20
Molybdenum	ND		0.40	0.20	mg/L			04/28/15 11:30	20
Nickel	ND		0.20	0.10	mg/L			04/28/15 11:30	20
Selenium	ND		0.20	0.12	mg/L			04/28/15 11:30	20
Silver	ND		0.20	0.10	mg/L			04/28/15 11:30	20
Thallium	ND		0.20	0.10	mg/L			04/28/15 11:30	20
Vanadium	ND		0.20	0.10	mg/L			04/28/15 11:30	20
Zinc	ND		0.40	0.20	mg/L			04/28/15 11:30	20

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/24/15 15:01	04/25/15 02:45	1

Method: 7470A - Mercury (CVAA) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020	0.0010	mg/L		04/27/15 17:39	04/28/15 17:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	**220**		4.0	4.0	mg/L			04/24/15 07:01	1
Bicarbonate Alkalinity as CaCO3	**220**		4.0	4.0	mg/L			04/24/15 07:01	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 07:01	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 07:01	1
Total Dissolved Solids	**500**		10	5.0	mg/L			04/28/15 08:13	1

Method Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL IRV
8015B	Diesel Range Organics (DRO) (GC) Low Level	SW846	TAL IRV
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
200.7 Rev 4.4	Metals (ICP)	EPA	TAL IRV
200.8	Metals (ICP/MS)	EPA	TAL IRV
6010B	Metals (ICP)	SW846	TAL IRV
7470A	Mercury (CVAA)	SW846	TAL IRV
SM 2320B	Alkalinity	SM	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV

Protocol References:

EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Client Sample ID: W042
Date Collected: 04/22/15 11:00
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	251420	04/28/15 04:41	WK	TAL IRV
Total/NA	Prep	3520C			1030 mL	1 mL	251224	04/26/15 13:54	AK	TAL IRV
Total/NA	Analysis	8270C SIM		1	1030 mL	1 mL	251421	04/28/15 00:06	AI	TAL IRV
Total/NA	Prep	3510C			1040 mL	1 mL	250952	04/24/15 08:21	AP	TAL IRV
Total/NA	Analysis	8015B		1	1040 mL	1 mL	251257	04/27/15 13:08	KW	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		250684	04/23/15 18:22	NN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		250685	04/23/15 18:22	NN	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		250685	04/23/15 18:37	NN	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	200.2			25 mL	25 mL	251794	04/29/15 07:45	APS	TAL IRV
Dissolved	Analysis	200.7 Rev 4.4		1	25 mL	25 mL	251932	04/29/15 14:04	EN	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	200.2			25 mL	25 mL	251795	04/29/15 07:48	APS	TAL IRV
Dissolved	Analysis	200.8		1	25 mL	25 mL	251942	04/29/15 14:45	YS	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	251796	04/29/15 07:50	APS	TAL IRV
Dissolved	Analysis	6010B		1	25 mL	25 mL	251945	04/29/15 14:10	TK	TAL IRV
STLC Citrate	Leach	CA WET Citrate			100 g	100 mL	251242	04/26/15 23:13	CH	TAL IRV
STLC Citrate	Analysis	6010B		20			251585	04/28/15 11:22	VS	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	7470A			20 mL	20 mL	251070	04/24/15 15:01	DB	TAL IRV
Dissolved	Analysis	7470A		1	20 mL	20 mL	251338	04/25/15 02:28	DB	TAL IRV
STLC Citrate	Leach	CA WET Citrate			100 g	100 mL	251242	04/26/15 23:13	CH	TAL IRV
STLC Citrate	Prep	7470A			2 mL	20 mL	251449	04/27/15 17:39	DB	TAL IRV
STLC Citrate	Analysis	7470A		1	2 mL	20 mL	251694	04/28/15 16:53	DB	TAL IRV
Total/NA	Analysis	SM 2320B		1			250933	04/24/15 06:37	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	251526	04/28/15 08:13	XL	TAL IRV

Client Sample ID: W043
Date Collected: 04/22/15 11:35
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	251505	04/28/15 10:11	MM1	TAL IRV
Total/NA	Prep	3520C			1035 mL	1 mL	251224	04/26/15 13:54	AK	TAL IRV
Total/NA	Analysis	8270C SIM		1	1035 mL	1 mL	251421	04/28/15 00:27	AI	TAL IRV
Total/NA	Prep	3510C			1040 mL	1 mL	250952	04/24/15 08:21	AP	TAL IRV
Total/NA	Analysis	8015B		1	1040 mL	1 mL	251257	04/27/15 13:28	KW	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		250684	04/23/15 18:51	NN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		250685	04/23/15 18:51	NN	TAL IRV
Total/NA	Analysis	300.0	DL	10	5 mL		250684	04/23/15 19:06	NN	TAL IRV
Total/NA	Analysis	300.0	DL	10	5 mL		250685	04/23/15 19:06	NN	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W043

Date Collected: 04/22/15 11:35
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.2			25 mL	25 mL	251794	04/29/15 07:45	APS	TAL IRV
Dissolved	Analysis	200.7 Rev 4.4		1	25 mL	25 mL	251932	04/29/15 14:11	EN	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	200.2			25 mL	25 mL	251795	04/29/15 07:48	APS	TAL IRV
Dissolved	Analysis	200.8		1	25 mL	25 mL	251942	04/29/15 14:38	YS	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	251796	04/29/15 07:50	APS	TAL IRV
Dissolved	Analysis	6010B		1	25 mL	25 mL	251945	04/29/15 14:13	TK	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	251796	04/29/15 07:50	APS	TAL IRV
Dissolved	Analysis	6010B		1	25 mL	25 mL	251957	04/29/15 15:48	TK	TAL IRV
STLC Citrate	Leach	CA WET Citrate			100 g	100 mL	251242	04/26/15 23:13	CH	TAL IRV
STLC Citrate	Analysis	6010B		20			251585	04/28/15 11:25	VS	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	7470A			20 mL	20 mL	251070	04/24/15 15:01	DB	TAL IRV
Dissolved	Analysis	7470A		1	20 mL	20 mL	251338	04/25/15 02:35	DB	TAL IRV
STLC Citrate	Leach	CA WET Citrate			100 g	100 mL	251242	04/26/15 23:13	CH	TAL IRV
STLC Citrate	Prep	7470A			2 mL	20 mL	251449	04/27/15 17:39	DB	TAL IRV
STLC Citrate	Analysis	7470A		1	2 mL	20 mL	251694	04/28/15 17:01	DB	TAL IRV
Total/NA	Analysis	SM 2320B		1			250933	04/24/15 06:44	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	251526	04/28/15 08:13	XL	TAL IRV

Client Sample ID: W044

Date Collected: 04/22/15 13:15
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	251505	04/28/15 10:41	MM1	TAL IRV
Total/NA	Prep	3520C			1035 mL	1 mL	251224	04/26/15 13:54	AK	TAL IRV
Total/NA	Analysis	8270C SIM		1	1035 mL	1 mL	251421	04/28/15 00:47	AI	TAL IRV
Total/NA	Prep	3510C			1040 mL	1 mL	250952	04/24/15 08:21	AP	TAL IRV
Total/NA	Analysis	8015B		1	1040 mL	1 mL	251257	04/27/15 13:47	KW	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		250684	04/23/15 19:51	NN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		250685	04/23/15 19:51	NN	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		250685	04/23/15 20:05	NN	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	200.2			25 mL	25 mL	251794	04/29/15 07:45	APS	TAL IRV
Dissolved	Analysis	200.7 Rev 4.4		1	25 mL	25 mL	251932	04/29/15 14:13	EN	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	200.2			25 mL	25 mL	251795	04/29/15 07:48	APS	TAL IRV
Dissolved	Analysis	200.8		1	25 mL	25 mL	251942	04/29/15 14:47	YS	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	251796	04/29/15 07:50	APS	TAL IRV
Dissolved	Analysis	6010B		1	25 mL	25 mL	251945	04/29/15 14:02	TK	TAL IRV

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W044

Date Collected: 04/22/15 13:15
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	251796	04/29/15 07:50	APS	TAL IRV
Dissolved	Analysis	6010B		1	25 mL	25 mL	251957	04/29/15 15:53	TK	TAL IRV
STLC Citrate	Leach	CA WET Citrate			100 g	100 mL	251242	04/26/15 23:13	CH	TAL IRV
STLC Citrate	Analysis	6010B		20			251585	04/28/15 11:27	VS	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	7470A			20 mL	20 mL	251070	04/24/15 15:01	DB	TAL IRV
Dissolved	Analysis	7470A		1	20 mL	20 mL	251338	04/25/15 02:42	DB	TAL IRV
STLC Citrate	Leach	CA WET Citrate			100 g	100 mL	251242	04/26/15 23:13	CH	TAL IRV
STLC Citrate	Prep	7470A			2 mL	20 mL	251449	04/27/15 17:39	DB	TAL IRV
STLC Citrate	Analysis	7470A		1	2 mL	20 mL	251694	04/28/15 17:03	DB	TAL IRV
Total/NA	Analysis	SM 2320B		1			250933	04/24/15 06:54	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	251526	04/28/15 08:13	XL	TAL IRV

Client Sample ID: W045

Date Collected: 04/22/15 14:10
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	251505	04/28/15 11:11	MM1	TAL IRV
Total/NA	Prep	3520C			1045 mL	1 mL	251224	04/26/15 13:54	AK	TAL IRV
Total/NA	Analysis	8270C SIM		1	1045 mL	1 mL	251421	04/28/15 01:08	AI	TAL IRV
Total/NA	Prep	3510C			1040 mL	1 mL	250952	04/24/15 08:21	AP	TAL IRV
Total/NA	Analysis	8015B		1	1040 mL	1 mL	251257	04/27/15 14:07	KW	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		250684	04/23/15 20:20	NN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL		250685	04/23/15 20:20	NN	TAL IRV
Total/NA	Analysis	300.0		10	5 mL		250685	04/23/15 20:35	NN	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	200.2			25 mL	25 mL	251794	04/29/15 07:45	APS	TAL IRV
Dissolved	Analysis	200.7 Rev 4.4		1	25 mL	25 mL	251932	04/29/15 14:15	EN	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	200.2			25 mL	25 mL	251795	04/29/15 07:48	APS	TAL IRV
Dissolved	Analysis	200.8		1	25 mL	25 mL	251942	04/29/15 14:50	YS	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	3005A			25 mL	25 mL	251796	04/29/15 07:50	APS	TAL IRV
Dissolved	Analysis	6010B		1	25 mL	25 mL	251945	04/29/15 14:15	TK	TAL IRV
STLC Citrate	Leach	CA WET Citrate			100 g	100 mL	251242	04/26/15 23:13	CH	TAL IRV
STLC Citrate	Analysis	6010B		20			251585	04/28/15 11:30	VS	TAL IRV
Dissolved	Filtration	FILTRATION			250 mL	250 mL	250948	04/24/15 08:12	EN	TAL IRV
Dissolved	Prep	7470A			20 mL	20 mL	251070	04/24/15 15:01	DB	TAL IRV
Dissolved	Analysis	7470A		1	20 mL	20 mL	251338	04/25/15 02:45	DB	TAL IRV
STLC Citrate	Leach	CA WET Citrate			100 g	100 mL	251242	04/26/15 23:13	CH	TAL IRV
STLC Citrate	Prep	7470A			2 mL	20 mL	251449	04/27/15 17:39	DB	TAL IRV
STLC Citrate	Analysis	7470A		1	2 mL	20 mL	251694	04/28/15 17:06	DB	TAL IRV

Lab Chronicle

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Client Sample ID: W045

Date Collected: 04/22/15 14:10
Date Received: 04/23/15 09:35

Lab Sample ID: 440-107892-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1			250933	04/24/15 07:01	YZ	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	251526	04/28/15 08:13	XL	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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

Lab Sample ID: MB 440-251420/4
Matrix: Water
Analysis Batch: 251420

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.5	ug/L			04/27/15 18:55	1
Benzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Bromobenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Bromochloromethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Bromodichloromethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Bromoform	ND		1.0	0.40	ug/L			04/27/15 18:55	1
Bromomethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			04/27/15 18:55	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Chlorobenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Chloroethane	ND		1.0	0.40	ug/L			04/27/15 18:55	1
Chloroform	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Chloromethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Dibromochloromethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			04/27/15 18:55	1
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Dibromomethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			04/27/15 18:55	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Ethanol	ND		150	75	ug/L			04/27/15 18:55	1
Ethylbenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			04/27/15 18:55	1
2-Hexanone	ND		5.0	2.5	ug/L			04/27/15 18:55	1
Isopropylbenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Methylene Chloride	ND		2.0	0.88	ug/L			04/27/15 18:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			04/27/15 18:55	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			04/27/15 18:55	1
m,p-Xylene	ND		1.0	0.50	ug/L			04/27/15 18:55	1
Naphthalene	ND		1.0	0.40	ug/L			04/27/15 18:55	1
n-Butylbenzene	ND		1.0	0.40	ug/L			04/27/15 18:55	1
n-Propylbenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
o-Xylene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1

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

Lab Sample ID: MB 440-251420/4
Matrix: Water
Analysis Batch: 251420

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			04/27/15 18:55	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			04/27/15 18:55	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Tetrachloroethene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Toluene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			04/27/15 18:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			04/27/15 18:55	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Trichloroethene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,2,3-Trichloropropane	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Vinyl chloride	ND		0.50	0.25	ug/L			04/27/15 18:55	1
Xylenes, Total	ND		1.0	0.50	ug/L			04/27/15 18:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*04/27/15 18:55*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*04/27/15 18:55*	*1*
Toluene-d8 (Surr)	*102*		*80 - 128*		*04/27/15 18:55*	*1*

Lab Sample ID: LCS 440-251420/5
Matrix: Water
Analysis Batch: 251420

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	23.2		ug/L		93	10 - 150
Benzene	25.0	23.3		ug/L		93	68 - 130
Bromobenzene	25.0	23.5		ug/L		94	70 - 130
Bromochloromethane	25.0	25.1		ug/L		100	70 - 130
Bromodichloromethane	25.0	23.7		ug/L		95	70 - 132
Bromoform	25.0	21.5		ug/L		86	60 - 148
Bromomethane	25.0	22.3		ug/L		89	64 - 139
2-Butanone (MEK)	25.0	25.2		ug/L		101	44 - 150
Carbon tetrachloride	25.0	23.0		ug/L		92	60 - 150
Chlorobenzene	25.0	22.7		ug/L		91	70 - 130
Chloroethane	25.0	20.9		ug/L		83	64 - 135
Chloroform	25.0	24.1		ug/L		96	70 - 130
Chloromethane	25.0	20.9		ug/L		84	47 - 140
2-Chlorotoluene	25.0	22.9		ug/L		92	70 - 130
4-Chlorotoluene	25.0	23.4		ug/L		94	70 - 130
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	70 - 133

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

Lab Sample ID: LCS 440-251420/5
Matrix: Water
Analysis Batch: 251420

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	25.0	24.1		ug/L		97	70 - 133
Dibromochloromethane	25.0	23.0		ug/L		92	69 - 145
1,2-Dibromo-3-Chloropropane	25.0	20.3		ug/L		81	52 - 140
1,2-Dibromoethane (EDB)	25.0	22.5		ug/L		90	70 - 130
Dibromomethane	25.0	23.7		ug/L		95	70 - 130
1,3-Dichlorobenzene	25.0	23.4		ug/L		94	70 - 130
1,2-Dichlorobenzene	25.0	23.1		ug/L		92	70 - 130
1,4-Dichlorobenzene	25.0	23.1		ug/L		92	70 - 130
Dichlorodifluoromethane	25.0	15.7		ug/L		63	29 - 150
1,1-Dichloroethane	25.0	23.4		ug/L		94	64 - 130
1,2-Dichloroethane	25.0	25.4		ug/L		102	57 - 138
1,1-Dichloroethene	25.0	23.0		ug/L		92	70 - 130
1,2-Dichloropropane	25.0	24.5		ug/L		98	67 - 130
2,2-Dichloropropane	25.0	22.2		ug/L		89	68 - 141
1,3-Dichloropropane	25.0	22.2		ug/L		89	70 - 130
1,1-Dichloropropene	25.0	23.4		ug/L		94	70 - 130
Ethanol	1250	1320		ug/L		106	50 - 149
Ethylbenzene	25.0	22.2		ug/L		89	70 - 130
Ethyl-t-butyl ether (ETBE)	25.0	26.3		ug/L		105	60 - 136
2-Hexanone	25.0	23.8		ug/L		95	10 - 150
Isopropylbenzene	25.0	22.1		ug/L		88	70 - 136
Isopropyl Ether (DIPE)	25.0	26.8		ug/L		107	58 - 139
Methylene Chloride	25.0	24.1		ug/L		96	52 - 130
4-Methyl-2-pentanone (MIBK)	25.0	23.7		ug/L		95	59 - 149
Methyl-t-Butyl Ether (MTBE)	25.0	23.1		ug/L		92	63 - 131
m,p-Xylene	25.0	22.8		ug/L		91	70 - 130
Naphthalene	25.0	23.0		ug/L		92	60 - 140
n-Butylbenzene	25.0	22.7		ug/L		91	65 - 150
n-Propylbenzene	25.0	22.0		ug/L		88	67 - 139
o-Xylene	25.0	22.8		ug/L		91	70 - 130
p-Isopropyltoluene	25.0	22.6		ug/L		91	70 - 132
sec-Butylbenzene	25.0	22.0		ug/L		88	70 - 138
Styrene	25.0	24.1		ug/L		96	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	23.1		ug/L		92	57 - 139
tert-Butyl alcohol (TBA)	250	248		ug/L		99	70 - 130
tert-Butylbenzene	25.0	22.8		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	25.0	21.4		ug/L		85	63 - 130
1,1,1,2-Tetrachloroethane	25.0	23.4		ug/L		94	60 - 141
Tetrachloroethene	25.0	21.8		ug/L		87	70 - 130
Toluene	25.0	22.7		ug/L		91	70 - 130
trans-1,2-Dichloroethene	25.0	24.2		ug/L		97	70 - 130
trans-1,3-Dichloropropene	25.0	24.7		ug/L		99	70 - 132
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	60 - 140
1,2,3-Trichlorobenzene	25.0	24.3		ug/L		97	60 - 140
1,1,1-Trichloroethane	25.0	22.6		ug/L		90	70 - 130
1,1,2-Trichloroethane	25.0	22.4		ug/L		90	70 - 130
Trichloroethene	25.0	24.1		ug/L		96	70 - 130
Trichlorofluoromethane	25.0	21.1		ug/L		84	60 - 150

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

Lab Sample ID: LCS 440-251420/5
Matrix: Water
Analysis Batch: 251420

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	25.0	20.9		ug/L		84	63 - 130
1,2,4-Trimethylbenzene	25.0	23.3		ug/L		93	70 - 135
1,3,5-Trimethylbenzene	25.0	23.5		ug/L		94	70 - 136
Vinyl chloride	25.0	20.7		ug/L		83	59 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*76 - 132*
Toluene-d8 (Surr)	*98*		*80 - 128*

Lab Sample ID: 440-107813-A-3 MS
Matrix: Water
Analysis Batch: 251420

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
Acetone	ND		25.0	21.3		ug/L		85	10 - 150
Benzene	ND		25.0	23.0		ug/L		92	66 - 130
Bromobenzene	ND		25.0	22.6		ug/L		91	70 - 130
Bromochloromethane	ND		25.0	24.7		ug/L		99	70 - 130
Bromodichloromethane	ND		25.0	23.2		ug/L		93	70 - 138
Bromoform	ND		25.0	21.4		ug/L		86	59 - 150
Bromomethane	ND		25.0	22.3		ug/L		89	62 - 131
2-Butanone (MEK)	ND		25.0	21.6		ug/L		86	48 - 140
Carbon tetrachloride	ND		25.0	22.2		ug/L		89	60 - 150
Chlorobenzene	ND		25.0	22.7		ug/L		91	70 - 130
Chloroethane	ND		25.0	21.6		ug/L		86	68 - 130
Chloroform	ND		25.0	24.4		ug/L		98	70 - 130
Chloromethane	ND		25.0	20.6		ug/L		82	39 - 144
2-Chlorotoluene	ND		25.0	22.0		ug/L		88	70 - 130
4-Chlorotoluene	ND		25.0	22.8		ug/L		91	70 - 130
cis-1,2-Dichloroethene	ND		25.0	24.5		ug/L		98	70 - 130
cis-1,3-Dichloropropene	ND		25.0	24.3		ug/L		97	70 - 133
Dibromochloromethane	ND		25.0	23.2		ug/L		93	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	18.9		ug/L		76	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	22.0		ug/L		88	70 - 131
Dibromomethane	ND		25.0	23.4		ug/L		94	70 - 130
1,3-Dichlorobenzene	ND		25.0	23.1		ug/L		93	70 - 130
1,2-Dichlorobenzene	ND		25.0	23.0		ug/L		92	70 - 130
1,4-Dichlorobenzene	ND		25.0	22.9		ug/L		92	70 - 130
Dichlorodifluoromethane	ND		25.0	14.9		ug/L		60	25 - 142
1,1-Dichloroethane	ND		25.0	23.0		ug/L		92	65 - 130
1,2-Dichloroethane	ND		25.0	28.2		ug/L		113	56 - 146
1,1-Dichloroethene	1.5		25.0	23.2		ug/L		87	70 - 130
1,2-Dichloropropane	ND		25.0	24.8		ug/L		99	69 - 130
2,2-Dichloropropane	ND		25.0	22.1		ug/L		89	69 - 138
1,3-Dichloropropane	ND		25.0	22.4		ug/L		90	70 - 130
1,1-Dichloropropene	ND		25.0	23.0		ug/L		92	64 - 130
Ethanol	ND		1250	1220		ug/L		98	54 - 150

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

Lab Sample ID: 440-107813-A-3 MS
Matrix: Water
Analysis Batch: 251420

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
Ethylbenzene	ND		25.0	21.9		ug/L		88	70 - 130
Ethyl-t-butyl ether (ETBE)	ND		25.0	25.2		ug/L		101	70 - 130
2-Hexanone	ND		25.0	21.5		ug/L		86	10 - 150
Isopropylbenzene	ND		25.0	21.9		ug/L		88	70 - 132
Isopropyl Ether (DIPE)	ND		25.0	26.8		ug/L		107	64 - 138
Methylene Chloride	ND		25.0	23.7		ug/L		95	52 - 130
4-Methyl-2-pentanone (MIBK)	ND		25.0	23.6		ug/L		95	52 - 150
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.1		ug/L		92	70 - 130
m,p-Xylene	ND		25.0	22.8		ug/L		91	70 - 133
Naphthalene	ND		25.0	22.4		ug/L		90	60 - 140
n-Butylbenzene	ND		25.0	22.0		ug/L		88	61 - 149
n-Propylbenzene	ND		25.0	21.1		ug/L		84	66 - 135
o-Xylene	ND		25.0	22.9		ug/L		91	70 - 133
p-Isopropyltoluene	ND		25.0	21.9		ug/L		88	70 - 130
sec-Butylbenzene	ND		25.0	21.1		ug/L		84	67 - 134
Styrene	ND		25.0	23.6		ug/L		94	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	22.2		ug/L		89	68 - 133
tert-Butyl alcohol (TBA)	ND		250	259		ug/L		104	70 - 130
tert-Butylbenzene	ND		25.0	21.7		ug/L		87	70 - 130
1,1,2,2-Tetrachloroethane	ND		25.0	20.9		ug/L		83	63 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	23.4		ug/L		94	60 - 149
Tetrachloroethene	6.4		25.0	27.0		ug/L		83	70 - 137
Toluene	ND		25.0	22.6		ug/L		90	70 - 130
trans-1,2-Dichloroethene	ND		25.0	23.8		ug/L		95	70 - 130
trans-1,3-Dichloropropene	ND		25.0	25.1		ug/L		100	70 - 138
1,2,4-Trichlorobenzene	ND		25.0	24.9		ug/L		100	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	24.9		ug/L		100	60 - 140
1,1,1-Trichloroethane	ND		25.0	21.9		ug/L		88	70 - 130
1,1,2-Trichloroethane	ND		25.0	21.6		ug/L		87	70 - 130
Trichloroethene	2.9		25.0	25.7		ug/L		91	70 - 130
Trichlorofluoromethane	ND		25.0	20.8		ug/L		83	60 - 150
1,2,3-Trichloropropane	ND		25.0	20.3		ug/L		81	60 - 130
1,2,4-Trimethylbenzene	ND		25.0	22.7		ug/L		91	70 - 130
1,3,5-Trimethylbenzene	ND		25.0	22.5		ug/L		90	70 - 130
Vinyl chloride	ND		25.0	20.7		ug/L		83	50 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*76 - 132*
Toluene-d8 (Surr)	*96*		*80 - 128*

Lab Sample ID: 440-107813-A-3 MSD
Matrix: Water
Analysis Batch: 251420

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	19.9		ug/L		80	10 - 150	7	35
Benzene	ND		25.0	23.6		ug/L		95	66 - 130	3	20

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

Lab Sample ID: 440-107813-A-3 MSD
Matrix: Water
Analysis Batch: 251420

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	ND		25.0	22.8		ug/L		91	70 - 130	1	20
Bromochloromethane	ND		25.0	25.4		ug/L		101	70 - 130	3	25
Bromodichloromethane	ND		25.0	24.3		ug/L		97	70 - 138	4	20
Bromoform	ND		25.0	21.1		ug/L		84	59 - 150	1	25
Bromomethane	ND		25.0	22.7		ug/L		91	62 - 131	2	25
2-Butanone (MEK)	ND		25.0	20.5		ug/L		82	48 - 140	5	40
Carbon tetrachloride	ND		25.0	23.3		ug/L		93	60 - 150	5	25
Chlorobenzene	ND		25.0	22.7		ug/L		91	70 - 130	0	20
Chloroethane	ND		25.0	22.0		ug/L		88	68 - 130	2	25
Chloroform	ND		25.0	24.6		ug/L		98	70 - 130	1	20
Chloromethane	ND		25.0	21.2		ug/L		85	39 - 144	3	25
2-Chlorotoluene	ND		25.0	22.6		ug/L		90	70 - 130	3	20
4-Chlorotoluene	ND		25.0	23.5		ug/L		94	70 - 130	3	20
cis-1,2-Dichloroethene	ND		25.0	25.0		ug/L		100	70 - 130	2	20
cis-1,3-Dichloropropene	ND		25.0	24.0		ug/L		96	70 - 133	1	20
Dibromochloromethane	ND		25.0	23.1		ug/L		93	70 - 148	0	25
1,2-Dibromo-3-Chloropropane	ND		25.0	18.7		ug/L		75	48 - 140	1	30
1,2-Dibromoethane (EDB)	ND		25.0	21.9		ug/L		88	70 - 131	1	25
Dibromomethane	ND		25.0	23.5		ug/L		94	70 - 130	1	25
1,3-Dichlorobenzene	ND		25.0	23.9		ug/L		95	70 - 130	3	20
1,2-Dichlorobenzene	ND		25.0	23.3		ug/L		93	70 - 130	1	20
1,4-Dichlorobenzene	ND		25.0	23.6		ug/L		94	70 - 130	3	20
Dichlorodifluoromethane	ND		25.0	16.1		ug/L		64	25 - 142	8	30
1,1-Dichloroethane	ND		25.0	23.2		ug/L		93	65 - 130	1	20
1,2-Dichloroethane	ND		25.0	25.0		ug/L		100	56 - 146	12	20
1,1-Dichloroethene	1.5		25.0	24.9		ug/L		93	70 - 130	7	20
1,2-Dichloropropane	ND		25.0	25.1		ug/L		100	69 - 130	1	20
2,2-Dichloropropane	ND		25.0	22.6		ug/L		90	69 - 138	2	25
1,3-Dichloropropane	ND		25.0	22.4		ug/L		90	70 - 130	0	25
1,1-Dichloropropene	ND		25.0	24.5		ug/L		98	64 - 130	6	20
Ethanol	ND		1250	1220		ug/L		98	54 - 150	0	30
Ethylbenzene	ND		25.0	22.5		ug/L		90	70 - 130	3	20
Ethyl-t-butyl ether (ETBE)	ND		25.0	26.2		ug/L		105	70 - 130	4	25
2-Hexanone	ND		25.0	22.0		ug/L		88	10 - 150	3	35
Isopropylbenzene	ND		25.0	22.3		ug/L		89	70 - 132	2	20
Isopropyl Ether (DIPE)	ND		25.0	27.3		ug/L		109	64 - 138	2	25
Methylene Chloride	ND		25.0	23.6		ug/L		94	52 - 130	1	20
4-Methyl-2-pentanone (MIBK)	ND		25.0	23.2		ug/L		93	52 - 150	2	35
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.4		ug/L		94	70 - 130	1	25
m,p-Xylene	ND		25.0	23.2		ug/L		93	70 - 133	2	25
Naphthalene	ND		25.0	22.8		ug/L		91	60 - 140	2	30
n-Butylbenzene	ND		25.0	22.9		ug/L		91	61 - 149	4	20
n-Propylbenzene	ND		25.0	22.0		ug/L		88	66 - 135	4	20
o-Xylene	ND		25.0	23.1		ug/L		93	70 - 133	1	20
p-Isopropyltoluene	ND		25.0	22.7		ug/L		91	70 - 130	4	20
sec-Butylbenzene	ND		25.0	21.9		ug/L		88	67 - 134	4	20
Styrene	ND		25.0	23.9		ug/L		96	29 - 150	1	35
Tert-amyl-methyl ether (TAME)	ND		25.0	23.2		ug/L		93	68 - 133	5	30

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

Lab Sample ID: 440-107813-A-3 MSD
Matrix: Water
Analysis Batch: 251420

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
tert-Butyl alcohol (TBA)	ND		250	257		ug/L		103	70 - 130	1	25
tert-Butylbenzene	ND		25.0	22.5		ug/L		90	70 - 130	4	20
1,1,2,2-Tetrachloroethane	ND		25.0	20.9		ug/L		83	63 - 130	0	30
1,1,1,2-Tetrachloroethane	ND		25.0	23.7		ug/L		95	60 - 149	1	20
Tetrachloroethene	6.4		25.0	27.6		ug/L		85	70 - 137	2	20
Toluene	ND		25.0	23.0		ug/L		92	70 - 130	2	20
trans-1,2-Dichloroethene	ND		25.0	24.7		ug/L		99	70 - 130	4	20
trans-1,3-Dichloropropene	ND		25.0	24.9		ug/L		100	70 - 138	1	25
1,2,4-Trichlorobenzene	ND		25.0	25.4		ug/L		102	60 - 140	2	20
1,2,3-Trichlorobenzene	ND		25.0	24.7		ug/L		99	60 - 140	1	20
1,1,1-Trichloroethane	ND		25.0	22.9		ug/L		92	70 - 130	4	20
1,1,2-Trichloroethane	ND		25.0	22.3		ug/L		89	70 - 130	3	25
Trichloroethene	2.9		25.0	26.8		ug/L		96	70 - 130	4	20
Trichlorofluoromethane	ND		25.0	21.3		ug/L		85	60 - 150	2	25
1,2,3-Trichloropropane	ND		25.0	20.8		ug/L		83	60 - 130	3	30
1,2,4-Trimethylbenzene	ND		25.0	23.3		ug/L		93	70 - 130	2	25
1,3,5-Trimethylbenzene	ND		25.0	23.3		ug/L		93	70 - 130	4	20
Vinyl chloride	ND		25.0	21.2		ug/L		85	50 - 137	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*76 - 132*
Toluene-d8 (Surr)	*96*		*80 - 128*

Lab Sample ID: MB 440-251505/3
Matrix: Water
Analysis Batch: 251505

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.5	ug/L			04/28/15 07:38	1
Benzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Bromobenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Bromochloromethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Bromodichloromethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Bromoform	ND		1.0	0.40	ug/L			04/28/15 07:38	1
Bromomethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
2-Butanone (MEK)	ND		5.0	2.5	ug/L			04/28/15 07:38	1
Carbon tetrachloride	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Chlorobenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Chloroethane	ND		1.0	0.40	ug/L			04/28/15 07:38	1
Chloroform	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Chloromethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
2-Chlorotoluene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
4-Chlorotoluene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
cis-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
cis-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Dibromochloromethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			04/28/15 07:38	1

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

Lab Sample ID: MB 440-251505/3
Matrix: Water
Analysis Batch: 251505

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Dibromomethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,3-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,2-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,4-Dichlorobenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Dichlorodifluoromethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,1-Dichloroethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,2-Dichloroethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,1-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,2-Dichloropropane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
2,2-Dichloropropane	ND		1.0	0.40	ug/L			04/28/15 07:38	1
1,3-Dichloropropane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,1-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Ethanol	ND		150	75	ug/L			04/28/15 07:38	1
Ethylbenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Ethyl-t-butyl ether (ETBE)	ND		0.50	0.25	ug/L			04/28/15 07:38	1
2-Hexanone	ND		5.0	2.5	ug/L			04/28/15 07:38	1
Isopropylbenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Isopropyl Ether (DIPE)	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Methylene Chloride	ND		2.0	0.88	ug/L			04/28/15 07:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.5	ug/L			04/28/15 07:38	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50	0.25	ug/L			04/28/15 07:38	1
m,p-Xylene	ND		1.0	0.50	ug/L			04/28/15 07:38	1
Naphthalene	ND		1.0	0.40	ug/L			04/28/15 07:38	1
n-Butylbenzene	ND		1.0	0.40	ug/L			04/28/15 07:38	1
n-Propylbenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
o-Xylene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
p-Isopropyltoluene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
sec-Butylbenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Styrene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Tert-amyl-methyl ether (TAME)	ND		0.50	0.25	ug/L			04/28/15 07:38	1
tert-Butyl alcohol (TBA)	ND		10	5.0	ug/L			04/28/15 07:38	1
tert-Butylbenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Tetrachloroethene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Toluene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
trans-1,2-Dichloroethene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
trans-1,3-Dichloropropene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.40	ug/L			04/28/15 07:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.40	ug/L			04/28/15 07:38	1
1,1,1-Trichloroethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,1,2-Trichloroethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Trichloroethene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Trichlorofluoromethane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,2,3-Trichloropropane	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,2,4-Trimethylbenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1
1,3,5-Trimethylbenzene	ND		0.50	0.25	ug/L			04/28/15 07:38	1

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

Lab Sample ID: MB 440-251505/3
Matrix: Water
Analysis Batch: 251505

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.50	0.25	ug/L			04/28/15 07:38	1
Xylenes, Total	ND		1.0	0.50	ug/L			04/28/15 07:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*04/28/15 07:38*	*1*
Dibromofluoromethane (Surr)	*102*		*76 - 132*		*04/28/15 07:38*	*1*
Toluene-d8 (Surr)	*106*		*80 - 128*		*04/28/15 07:38*	*1*

Lab Sample ID: LCS 440-251505/4
Matrix: Water
Analysis Batch: 251505

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	26.7		ug/L		107	10 - 150
Benzene	25.0	23.1		ug/L		92	68 - 130
Bromobenzene	25.0	24.7		ug/L		99	70 - 130
Bromochloromethane	25.0	26.5		ug/L		106	70 - 130
Bromodichloromethane	25.0	22.3		ug/L		89	70 - 132
Bromoform	25.0	22.3		ug/L		89	60 - 148
Bromomethane	25.0	22.7		ug/L		91	64 - 139
2-Butanone (MEK)	25.0	25.6		ug/L		102	44 - 150
Carbon tetrachloride	25.0	23.9		ug/L		95	60 - 150
Chlorobenzene	25.0	22.1		ug/L		89	70 - 130
Chloroethane	25.0	23.3		ug/L		93	64 - 135
Chloroform	25.0	21.9		ug/L		87	70 - 130
Chloromethane	25.0	20.5		ug/L		82	47 - 140
2-Chlorotoluene	25.0	24.0		ug/L		96	70 - 130
4-Chlorotoluene	25.0	23.9		ug/L		96	70 - 130
cis-1,2-Dichloroethene	25.0	25.3		ug/L		101	70 - 133
cis-1,3-Dichloropropene	25.0	23.9		ug/L		95	70 - 133
Dibromochloromethane	25.0	23.0		ug/L		92	69 - 145
1,2-Dibromo-3-Chloropropane	25.0	20.6		ug/L		82	52 - 140
1,2-Dibromoethane (EDB)	25.0	24.0		ug/L		96	70 - 130
Dibromomethane	25.0	23.1		ug/L		92	70 - 130
1,3-Dichlorobenzene	25.0	24.0		ug/L		96	70 - 130
1,2-Dichlorobenzene	25.0	24.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	70 - 130
Dichlorodifluoromethane	25.0	17.8		ug/L		71	29 - 150
1,1-Dichloroethane	25.0	22.2		ug/L		89	64 - 130
1,2-Dichloroethane	25.0	21.5		ug/L		86	57 - 138
1,1-Dichloroethene	25.0	23.4		ug/L		94	70 - 130
1,2-Dichloropropane	25.0	22.8		ug/L		91	67 - 130
2,2-Dichloropropane	25.0	23.1		ug/L		92	68 - 141
1,3-Dichloropropane	25.0	22.0		ug/L		88	70 - 130
1,1-Dichloropropene	25.0	24.9		ug/L		100	70 - 130
Ethanol	1250	1330		ug/L		107	50 - 149
Ethylbenzene	25.0	23.4		ug/L		94	70 - 130
Ethyl-t-butyl ether (ETBE)	25.0	23.8		ug/L		95	60 - 136

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

Lab Sample ID: LCS 440-251505/4
Matrix: Water
Analysis Batch: 251505

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	25.0	27.2		ug/L		109	10 - 150
Isopropylbenzene	25.0	24.1		ug/L		96	70 - 136
Isopropyl Ether (DIPE)	25.0	23.2		ug/L		93	58 - 139
Methylene Chloride	25.0	21.9		ug/L		87	52 - 130
4-Methyl-2-pentanone (MIBK)	25.0	26.6		ug/L		106	59 - 149
Methyl-t-Butyl Ether (MTBE)	25.0	22.5		ug/L		90	63 - 131
m,p-Xylene	25.0	24.7		ug/L		99	70 - 130
Naphthalene	25.0	27.1		ug/L		108	60 - 140
n-Butylbenzene	25.0	23.5		ug/L		94	65 - 150
n-Propylbenzene	25.0	24.4		ug/L		97	67 - 139
o-Xylene	25.0	24.6		ug/L		98	70 - 130
p-Isopropyltoluene	25.0	24.1		ug/L		96	70 - 132
sec-Butylbenzene	25.0	23.9		ug/L		96	70 - 138
Styrene	25.0	23.6		ug/L		95	70 - 134
Tert-amyl-methyl ether (TAME)	25.0	24.6		ug/L		99	57 - 139
tert-Butyl alcohol (TBA)	250	239		ug/L		95	70 - 130
tert-Butylbenzene	25.0	25.3		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	25.0	21.8		ug/L		87	63 - 130
1,1,1,2-Tetrachloroethane	25.0	23.2		ug/L		93	60 - 141
Tetrachloroethene	25.0	23.7		ug/L		95	70 - 130
Toluene	25.0	24.0		ug/L		96	70 - 130
trans-1,2-Dichloroethene	25.0	25.4		ug/L		102	70 - 130
trans-1,3-Dichloropropene	25.0	23.2		ug/L		93	70 - 132
1,2,4-Trichlorobenzene	25.0	25.8		ug/L		103	60 - 140
1,2,3-Trichlorobenzene	25.0	25.0		ug/L		100	60 - 140
1,1,1-Trichloroethane	25.0	22.0		ug/L		88	70 - 130
1,1,2-Trichloroethane	25.0	22.4		ug/L		90	70 - 130
Trichloroethene	25.0	25.2		ug/L		101	70 - 130
Trichlorofluoromethane	25.0	21.7		ug/L		87	60 - 150
1,2,3-Trichloropropane	25.0	21.3		ug/L		85	63 - 130
1,2,4-Trimethylbenzene	25.0	23.1		ug/L		93	70 - 135
1,3,5-Trimethylbenzene	25.0	23.7		ug/L		95	70 - 136
Vinyl chloride	25.0	19.6		ug/L		79	59 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*76 - 132*
Toluene-d8 (Surr)	*103*		*80 - 128*

Lab Sample ID: 440-107928-B-1 MS
Matrix: Water
Analysis Batch: 251505

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
Acetone	ND		25.0	23.8		ug/L		95	10 - 150
Benzene	ND		25.0	21.5		ug/L		86	66 - 130
Bromobenzene	ND		25.0	23.2		ug/L		93	70 - 130
Bromochloromethane	ND		25.0	25.3		ug/L		101	70 - 130

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

Lab Sample ID: 440-107928-B-1 MS
Matrix: Water
Analysis Batch: 251505

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
Bromodichloromethane	ND		25.0	21.8		ug/L		87	70 - 138
Bromoform	ND		25.0	21.9		ug/L		88	59 - 150
Bromomethane	ND		25.0	21.9		ug/L		88	62 - 131
2-Butanone (MEK)	ND		25.0	25.0		ug/L		100	48 - 140
Carbon tetrachloride	ND		25.0	22.8		ug/L		91	60 - 150
Chlorobenzene	ND		25.0	21.1		ug/L		84	70 - 130
Chloroethane	ND		25.0	21.5		ug/L		86	68 - 130
Chloroform	ND		25.0	21.0		ug/L		84	70 - 130
Chloromethane	ND		25.0	18.6		ug/L		74	39 - 144
2-Chlorotoluene	ND		25.0	22.1		ug/L		88	70 - 130
4-Chlorotoluene	ND		25.0	22.4		ug/L		90	70 - 130
cis-1,2-Dichloroethene	ND		25.0	23.2		ug/L		93	70 - 130
cis-1,3-Dichloropropene	ND		25.0	22.6		ug/L		90	70 - 133
Dibromochloromethane	ND		25.0	22.5		ug/L		90	70 - 148
1,2-Dibromo-3-Chloropropane	ND		25.0	20.8		ug/L		83	48 - 140
1,2-Dibromoethane (EDB)	ND		25.0	22.8		ug/L		91	70 - 131
Dibromomethane	ND		25.0	22.5		ug/L		90	70 - 130
1,3-Dichlorobenzene	ND		25.0	22.8		ug/L		91	70 - 130
1,2-Dichlorobenzene	ND		25.0	23.0		ug/L		92	70 - 130
1,4-Dichlorobenzene	ND		25.0	22.2		ug/L		89	70 - 130
Dichlorodifluoromethane	ND		25.0	15.9		ug/L		64	25 - 142
1,1-Dichloroethane	ND		25.0	20.9		ug/L		84	65 - 130
1,2-Dichloroethane	ND		25.0	20.6		ug/L		83	56 - 146
1,1-Dichloroethene	ND		25.0	21.5		ug/L		86	70 - 130
1,2-Dichloropropane	ND		25.0	21.9		ug/L		88	69 - 130
2,2-Dichloropropane	ND		25.0	21.4		ug/L		86	69 - 138
1,3-Dichloropropane	ND		25.0	20.9		ug/L		83	70 - 130
1,1-Dichloropropene	ND		25.0	23.3		ug/L		93	64 - 130
Ethanol	ND		1250	1230		ug/L		99	54 - 150
Ethylbenzene	ND		25.0	22.3		ug/L		89	70 - 130
Ethyl-t-butyl ether (ETBE)	ND		25.0	22.7		ug/L		91	70 - 130
2-Hexanone	ND		25.0	24.0		ug/L		96	10 - 150
Isopropylbenzene	ND		25.0	22.8		ug/L		91	70 - 132
Isopropyl Ether (DIPE)	ND		25.0	22.2		ug/L		89	64 - 138
Methylene Chloride	ND		25.0	20.7		ug/L		83	52 - 130
4-Methyl-2-pentanone (MIBK)	ND		25.0	25.1		ug/L		100	52 - 150
Methyl-t-Butyl Ether (MTBE)	ND		25.0	21.9		ug/L		88	70 - 130
m,p-Xylene	ND		25.0	23.1		ug/L		92	70 - 133
Naphthalene	ND		25.0	25.8		ug/L		103	60 - 140
n-Butylbenzene	ND		25.0	22.0		ug/L		88	61 - 149
n-Propylbenzene	ND		25.0	23.0		ug/L		92	66 - 135
o-Xylene	ND		25.0	23.3		ug/L		93	70 - 133
p-Isopropyltoluene	ND		25.0	22.5		ug/L		90	70 - 130
sec-Butylbenzene	ND		25.0	22.2		ug/L		89	67 - 134
Styrene	ND		25.0	22.3		ug/L		89	29 - 150
Tert-amyl-methyl ether (TAME)	ND		25.0	23.4		ug/L		94	68 - 133
tert-Butyl alcohol (TBA)	ND		250	234		ug/L		94	70 - 130
tert-Butylbenzene	ND		25.0	23.5		ug/L		94	70 - 130

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

Lab Sample ID: 440-107928-B-1 MS
Matrix: Water
Analysis Batch: 251505

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
1,1,2,2-Tetrachloroethane	ND		25.0	20.7		ug/L		83	63 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	22.1		ug/L		88	60 - 149
Tetrachloroethene	ND		25.0	23.0		ug/L		92	70 - 137
Toluene	ND		25.0	22.7		ug/L		91	70 - 130
trans-1,2-Dichloroethene	ND		25.0	23.9		ug/L		96	70 - 130
trans-1,3-Dichloropropene	ND		25.0	21.9		ug/L		88	70 - 138
1,2,4-Trichlorobenzene	ND		25.0	24.1		ug/L		96	60 - 140
1,2,3-Trichlorobenzene	ND		25.0	24.1		ug/L		97	60 - 140
1,1,1-Trichloroethane	ND		25.0	21.0		ug/L		84	70 - 130
1,1,2-Trichloroethane	ND		25.0	21.0		ug/L		84	70 - 130
Trichloroethene	ND		25.0	23.9		ug/L		96	70 - 130
Trichlorofluoromethane	ND		25.0	20.7		ug/L		83	60 - 150
1,2,3-Trichloropropane	ND		25.0	20.5		ug/L		82	60 - 130
1,2,4-Trimethylbenzene	ND		25.0	21.7		ug/L		87	70 - 130
1,3,5-Trimethylbenzene	ND		25.0	21.9		ug/L		88	70 - 130
Vinyl chloride	ND		25.0	18.6		ug/L		75	50 - 137

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*76 - 132*
Toluene-d8 (Surr)	*103*		*80 - 128*

Lab Sample ID: 440-107928-B-1 MSD
Matrix: Water
Analysis Batch: 251505

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	25.5		ug/L		102	10 - 150	7	35
Benzene	ND		25.0	23.6		ug/L		95	66 - 130	9	20
Bromobenzene	ND		25.0	25.4		ug/L		102	70 - 130	9	20
Bromochloromethane	ND		25.0	28.1		ug/L		112	70 - 130	11	25
Bromodichloromethane	ND		25.0	23.2		ug/L		93	70 - 138	6	20
Bromoform	ND		25.0	22.5		ug/L		90	59 - 150	3	25
Bromomethane	ND		25.0	23.3		ug/L		93	62 - 131	6	25
2-Butanone (MEK)	ND		25.0	26.8		ug/L		107	48 - 140	7	40
Carbon tetrachloride	ND		25.0	24.7		ug/L		99	60 - 150	8	25
Chlorobenzene	ND		25.0	22.2		ug/L		89	70 - 130	5	20
Chloroethane	ND		25.0	23.2		ug/L		93	68 - 130	8	25
Chloroform	ND		25.0	23.0		ug/L		92	70 - 130	9	20
Chloromethane	ND		25.0	21.1		ug/L		84	39 - 144	12	25
2-Chlorotoluene	ND		25.0	23.8		ug/L		95	70 - 130	8	20
4-Chlorotoluene	ND		25.0	24.4		ug/L		97	70 - 130	8	20
cis-1,2-Dichloroethene	ND		25.0	26.3		ug/L		105	70 - 130	12	20
cis-1,3-Dichloropropene	ND		25.0	23.6		ug/L		94	70 - 133	4	20
Dibromochloromethane	ND		25.0	23.2		ug/L		93	70 - 148	3	25
1,2-Dibromo-3-Chloropropane	ND		25.0	21.9		ug/L		88	48 - 140	5	30
1,2-Dibromoethane (EDB)	ND		25.0	24.4		ug/L		98	70 - 131	7	25
Dibromomethane	ND		25.0	24.6		ug/L		98	70 - 130	9	25

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

Lab Sample ID: 440-107928-B-1 MSD
Matrix: Water
Analysis Batch: 251505

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	ND		25.0	24.5		ug/L		98	70 - 130	7	20
1,2-Dichlorobenzene	ND		25.0	25.1		ug/L		100	70 - 130	9	20
1,4-Dichlorobenzene	ND		25.0	23.5		ug/L		94	70 - 130	6	20
Dichlorodifluoromethane	ND		25.0	17.5		ug/L		70	25 - 142	9	30
1,1-Dichloroethane	ND		25.0	22.6		ug/L		90	65 - 130	8	20
1,2-Dichloroethane	ND		25.0	22.5		ug/L		90	56 - 146	8	20
1,1-Dichloroethene	ND		25.0	23.7		ug/L		95	70 - 130	10	20
1,2-Dichloropropane	ND		25.0	23.8		ug/L		95	69 - 130	8	20
2,2-Dichloropropane	ND		25.0	23.6		ug/L		94	69 - 138	10	25
1,3-Dichloropropane	ND		25.0	21.4		ug/L		86	70 - 130	3	25
1,1-Dichloropropene	ND		25.0	25.0		ug/L		100	64 - 130	7	20
Ethanol	ND		1250	1350		ug/L		108	54 - 150	9	30
Ethylbenzene	ND		25.0	23.1		ug/L		92	70 - 130	4	20
Ethyl-t-butyl ether (ETBE)	ND		25.0	24.8		ug/L		99	70 - 130	9	25
2-Hexanone	ND		25.0	25.4		ug/L		102	10 - 150	5	35
Isopropylbenzene	ND		25.0	23.8		ug/L		95	70 - 132	4	20
Isopropyl Ether (DIPE)	ND		25.0	24.9		ug/L		100	64 - 138	11	25
Methylene Chloride	ND		25.0	22.7		ug/L		91	52 - 130	9	20
4-Methyl-2-pentanone (MIBK)	ND		25.0	25.9		ug/L		104	52 - 150	3	35
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.3		ug/L		97	70 - 130	10	25
m,p-Xylene	ND		25.0	24.7		ug/L		99	70 - 133	6	25
Naphthalene	ND		25.0	28.1		ug/L		113	60 - 140	9	30
n-Butylbenzene	ND		25.0	23.9		ug/L		96	61 - 149	8	20
n-Propylbenzene	ND		25.0	24.9		ug/L		99	66 - 135	8	20
o-Xylene	ND		25.0	24.3		ug/L		97	70 - 133	4	20
p-Isopropyltoluene	ND		25.0	24.4		ug/L		98	70 - 130	8	20
sec-Butylbenzene	ND		25.0	24.3		ug/L		97	67 - 134	9	20
Styrene	ND		25.0	23.7		ug/L		95	29 - 150	6	35
Tert-amyl-methyl ether (TAME)	ND		25.0	25.9		ug/L		104	68 - 133	10	30
tert-Butyl alcohol (TBA)	ND		250	223		ug/L		89	70 - 130	5	25
tert-Butylbenzene	ND		25.0	25.7		ug/L		103	70 - 130	9	20
1,1,2,2-Tetrachloroethane	ND		25.0	22.6		ug/L		90	63 - 130	9	30
1,1,1,2-Tetrachloroethane	ND		25.0	22.9		ug/L		92	60 - 149	4	20
Tetrachloroethene	ND		25.0	23.9		ug/L		96	70 - 137	4	20
Toluene	ND		25.0	23.6		ug/L		94	70 - 130	4	20
trans-1,2-Dichloroethene	ND		25.0	26.0		ug/L		104	70 - 130	8	20
trans-1,3-Dichloropropene	ND		25.0	23.2		ug/L		93	70 - 138	5	25
1,2,4-Trichlorobenzene	ND		25.0	26.7		ug/L		107	60 - 140	10	20
1,2,3-Trichlorobenzene	ND		25.0	26.3		ug/L		105	60 - 140	8	20
1,1,1-Trichloroethane	ND		25.0	22.6		ug/L		90	70 - 130	7	20
1,1,2-Trichloroethane	ND		25.0	22.2		ug/L		89	70 - 130	6	25
Trichloroethene	ND		25.0	26.0		ug/L		104	70 - 130	9	20
Trichlorofluoromethane	ND		25.0	21.9		ug/L		88	60 - 150	6	25
1,2,3-Trichloropropane	ND		25.0	22.4		ug/L		90	60 - 130	9	30
1,2,4-Trimethylbenzene	ND		25.0	23.6		ug/L		94	70 - 130	8	25
1,3,5-Trimethylbenzene	ND		25.0	24.2		ug/L		97	70 - 130	10	20
Vinyl chloride	ND		25.0	20.0		ug/L		80	50 - 137	7	30

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

Lab Sample ID: 440-107928-B-1 MSD
Matrix: Water
Analysis Batch: 251505

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*76 - 132*
Toluene-d8 (Surr)	*99*		*80 - 128*

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

Lab Sample ID: MB 440-251224/1-A
Matrix: Water
Analysis Batch: 251421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 251224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Acenaphthylene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Anthracene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Benzo[a]anthracene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Benzo[a]pyrene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Benzo[b]fluoranthene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Benzo[g,h,i]perylene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Chrysene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Dibenz(a,h)anthracene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Fluoranthene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Fluorene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Naphthalene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Phenanthrene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1
Pyrene	ND		0.20	0.10	ug/L		04/26/15 13:54	04/27/15 16:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*84*		*31 - 120*	*04/26/15 13:54*	*04/27/15 16:14*	*1*
Nitrobenzene-d5	*81*		*25 - 133*	*04/26/15 13:54*	*04/27/15 16:14*	*1*
Terphenyl-d14	*95*		*10 - 120*	*04/26/15 13:54*	*04/27/15 16:14*	*1*

Lab Sample ID: LCS 440-251224/2-A
Matrix: Water
Analysis Batch: 251421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 251224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1.00	0.751		ug/L		75	47 - 103
Acenaphthylene	1.00	0.728		ug/L		73	45 - 102
Anthracene	1.00	0.806		ug/L		81	47 - 111
Benzo[a]anthracene	1.00	0.860		ug/L		86	56 - 110
Benzo[a]pyrene	1.00	0.814		ug/L		81	48 - 110
Benzo[b]fluoranthene	1.00	0.911		ug/L		91	53 - 116
Benzo[g,h,i]perylene	1.00	1.05		ug/L		105	44 - 130
Benzo[k]fluoranthene	1.00	0.898		ug/L		90	51 - 127
Chrysene	1.00	0.889		ug/L		89	52 - 118

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

Lab Sample ID: LCS 440-251224/2-A
Matrix: Water
Analysis Batch: 251421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 251224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	1.00	0.967		ug/L		97	44 - 125
Fluoranthene	1.00	0.926		ug/L		93	51 - 116
Fluorene	1.00	0.787		ug/L		79	50 - 106
Indeno[1,2,3-cd]pyrene	1.00	1.00		ug/L		100	41 - 127
Naphthalene	1.00	0.667		ug/L		67	40 - 100
Phenanthrene	1.00	0.841		ug/L		84	49 - 110
Pyrene	1.00	0.861		ug/L		86	41 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*71*		*31 - 120*
Nitrobenzene-d5	*67*		*25 - 133*
Terphenyl-d14	*82*		*10 - 120*

Lab Sample ID: LCSD 440-251224/3-A
Matrix: Water
Analysis Batch: 251421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 251224

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	1.00	0.719		ug/L		72	47 - 103	4	35
Acenaphthylene	1.00	0.703		ug/L		70	45 - 102	4	35
Anthracene	1.00	0.766		ug/L		77	47 - 111	5	35
Benzo[a]anthracene	1.00	0.841		ug/L		84	56 - 110	2	35
Benzo[a]pyrene	1.00	0.799		ug/L		80	48 - 110	2	35
Benzo[b]fluoranthene	1.00	0.903		ug/L		90	53 - 116	1	35
Benzo[g,h,i]perylene	1.00	1.03		ug/L		103	44 - 130	3	35
Benzo[k]fluoranthene	1.00	0.889		ug/L		89	51 - 127	1	35
Chrysene	1.00	0.865		ug/L		86	52 - 118	3	35
Dibenz(a,h)anthracene	1.00	0.950		ug/L		95	44 - 125	2	35
Fluoranthene	1.00	0.851		ug/L		85	51 - 116	8	35
Fluorene	1.00	0.762		ug/L		76	50 - 106	3	35
Indeno[1,2,3-cd]pyrene	1.00	0.955		ug/L		95	41 - 127	5	35
Naphthalene	1.00	0.664		ug/L		66	40 - 100	0	35
Phenanthrene	1.00	0.806		ug/L		81	49 - 110	4	35
Pyrene	1.00	0.849		ug/L		85	41 - 115	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*74*		*31 - 120*
Nitrobenzene-d5	*66*		*25 - 133*
Terphenyl-d14	*84*		*10 - 120*

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

Lab Sample ID: MB 440-250952/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 251256 — **Prep Batch: 250952**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C29-C40	ND		0.050	0.025	mg/L		04/24/15 08:21	04/27/15 08:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*81*		*45 - 120*	*04/24/15 08:21*	*04/27/15 08:54*	*1*

Lab Sample ID: LCS 440-250952/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 251257 — **Prep Batch: 250952**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C10-C28	1.00	0.866		mg/L		87	40 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*77*		*45 - 120*

Lab Sample ID: LCSD 440-250952/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 251257 — **Prep Batch: 250952**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C28	1.00	0.912		mg/L		91	40 - 115	5	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*84*		*45 - 120*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-250684/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250684

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as NO3	ND		0.50	0.25	mg/L			04/23/15 10:05	1

Lab Sample ID: LCS 440-250684/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250684

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as NO3	5.00	4.87		mg/L		97	90 - 110

Lab Sample ID: MB 440-250685/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250685

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.50	0.25	mg/L			04/23/15 10:05	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 440-250685/5 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250685

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	0.25	mg/L			04/23/15 10:05	1
Fluoride	ND		0.50	0.25	mg/L			04/23/15 10:05	1
Sulfate	ND		0.50	0.25	mg/L			04/23/15 10:05	1

Lab Sample ID: LCS 440-250685/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	5.00	4.99		mg/L		100	90 - 110
Chloride	5.00	4.79		mg/L		96	90 - 110
Fluoride	5.00	4.98		mg/L		100	90 - 110
Sulfate	5.00	4.60		mg/L		92	90 - 110

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 440-107892-2 MS — **Client Sample ID: W043**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250684

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as NO3 - DL	ND		50.0	40.5		mg/L		81	80 - 120

Lab Sample ID: 440-107892-2 MSD — **Client Sample ID: W043**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250684

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as NO3 - DL	ND		50.0	40.0		mg/L		80	80 - 120	1	20

Lab Sample ID: 440-107892-2 MS — **Client Sample ID: W043**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250685

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide - DL	ND		50.0	43.4		mg/L		87	80 - 120
Chloride - DL	110	F1	50.0	146	F1	mg/L		73	80 - 120
Fluoride - DL	3.0	J F1	50.0	43.2		mg/L		80	80 - 120
Sulfate - DL	ND	F1	50.0	40.2		mg/L		80	80 - 120

Lab Sample ID: 440-107892-2 MSD — **Client Sample ID: W043**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250685

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromide - DL	ND		50.0	42.7		mg/L		85	80 - 120	2	20
Chloride - DL	110	F1	50.0	145	F1	mg/L		69	80 - 120	1	20
Fluoride - DL	3.0	J F1	50.0	42.6	F1	mg/L		79	80 - 120	1	20
Sulfate - DL	ND	F1	50.0	38.8	F1	mg/L		78	80 - 120	4	20

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 440-250948/1-C
Matrix: Water
Analysis Batch: 251932

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 251794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050	0.010	mg/L		04/29/15 07:45	04/29/15 13:59	1
Calcium	ND		0.10	0.050	mg/L		04/29/15 07:45	04/29/15 13:59	1
Iron	ND		0.040	0.010	mg/L		04/29/15 07:45	04/29/15 13:59	1
Lithium	ND		0.50	0.025	mg/L		04/29/15 07:45	04/29/15 13:59	1
Magnesium	ND		0.020	0.010	mg/L		04/29/15 07:45	04/29/15 13:59	1
Manganese	ND		0.020	0.010	mg/L		04/29/15 07:45	04/29/15 13:59	1
Potassium	ND		0.50	0.25	mg/L		04/29/15 07:45	04/29/15 13:59	1
Sodium	ND		0.50	0.25	mg/L		04/29/15 07:45	04/29/15 13:59	1
Strontium	ND		0.020	0.010	mg/L		04/29/15 07:45	04/29/15 13:59	1

Lab Sample ID: LCS 440-250948/2-C
Matrix: Water
Analysis Batch: 251932

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 251794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.500	0.439		mg/L		88	85 - 115
Calcium	2.50	2.24		mg/L		90	85 - 115
Iron	0.500	0.450		mg/L		90	85 - 115
Lithium	0.500	0.485	J	mg/L		97	85 - 115
Magnesium	2.50	2.25		mg/L		90	85 - 115
Manganese	0.500	0.475		mg/L		95	85 - 115
Potassium	5.00	4.60		mg/L		92	85 - 115
Sodium	5.00	4.60		mg/L		92	85 - 115
Strontium	0.500	0.452		mg/L		90	85 - 115

Lab Sample ID: 440-107892-1 MS
Matrix: Water
Analysis Batch: 251932

Client Sample ID: W042
Prep Type: Dissolved
Prep Batch: 251794

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.68	HF	0.500	1.13		mg/L		90	70 - 130
Calcium	25	HF	2.50	26.2	4	mg/L		31	70 - 130
Iron	0.040	HF	0.500	0.477		mg/L		87	70 - 130
Lithium	0.042	J HF	0.500	0.456	J	mg/L		83	70 - 130
Magnesium	4.5	HF	2.50	6.70		mg/L		87	70 - 130
Manganese	0.079	HF	0.500	0.544		mg/L		93	70 - 130
Potassium	5.5	HF	5.00	9.75		mg/L		85	70 - 130
Sodium	110	HF	5.00	116	4	mg/L		45	70 - 130
Strontium	0.37	HF	0.500	0.812		mg/L		89	70 - 130

Lab Sample ID: 440-107892-1 MSD
Matrix: Water
Analysis Batch: 251932

Client Sample ID: W042
Prep Type: Dissolved
Prep Batch: 251794

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.68	HF	0.500	1.15		mg/L		94	70 - 130	2	20
Calcium	25	HF	2.50	26.9	4	mg/L		57	70 - 130	2	20
Iron	0.040	HF	0.500	0.487		mg/L		89	70 - 130	2	20
Lithium	0.042	J HF	0.500	0.463	J	mg/L		84	70 - 130	1	20

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 440-107892-1 MSD — **Client Sample ID: W042**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251932 — **Prep Batch: 251794**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Magnesium	4.5	HF	2.50	6.81		mg/L		91	70 - 130	2	20
Manganese	0.079	HF	0.500	0.551		mg/L		94	70 - 130	1	20
Potassium	5.5	HF	5.00	9.98		mg/L		90	70 - 130	2	20
Sodium	110	HF	5.00	119	4	mg/L		102	70 - 130	2	20
Strontium	0.37	HF	0.500	0.832		mg/L		93	70 - 130	2	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 440-250948/1-D — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251942 — **Prep Batch: 251795**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Uranium	ND		1.0	0.50	ug/L		04/29/15 07:48	04/29/15 14:33	1

Lab Sample ID: LCS 440-250948/2-D — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251942 — **Prep Batch: 251795**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Uranium	80.0	72.6		ug/L		91	85 - 115

Lab Sample ID: 440-107892-2 MS — **Client Sample ID: W043**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251942 — **Prep Batch: 251795**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Uranium	ND	HF	80.0	74.2		ug/L		93	70 - 130

Lab Sample ID: 440-107892-2 MSD — **Client Sample ID: W043**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251942 — **Prep Batch: 251795**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Uranium	ND	HF	80.0	73.1		ug/L		91	70 - 130	1	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-250948/1-E — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 251945 — **Prep Batch: 251796**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00679	J	0.010	0.0060	mg/L		04/29/15 07:50	04/29/15 13:57	1
Arsenic	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 13:57	1
Barium	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 13:57	1
Beryllium	ND		0.0020	0.0010	mg/L		04/29/15 07:50	04/29/15 13:57	1
Cadmium	ND		0.0050	0.0020	mg/L		04/29/15 07:50	04/29/15 13:57	1
Chromium	ND		0.0050	0.0025	mg/L		04/29/15 07:50	04/29/15 13:57	1

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

Lab Sample ID: MB 440-250948/1-E
Matrix: Water
Analysis Batch: 251945

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 251796

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.010	0.0025	mg/L		04/29/15 07:50	04/29/15 13:57	1
Copper	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 13:57	1
Lead	ND		0.0050	0.0025	mg/L		04/29/15 07:50	04/29/15 13:57	1
Molybdenum	ND		0.020	0.010	mg/L		04/29/15 07:50	04/29/15 13:57	1
Nickel	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 13:57	1
Selenium	ND		0.010	0.0061	mg/L		04/29/15 07:50	04/29/15 13:57	1
Silver	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 13:57	1
Thallium	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 13:57	1
Vanadium	ND		0.010	0.0050	mg/L		04/29/15 07:50	04/29/15 13:57	1
Zinc	ND		0.020	0.010	mg/L		04/29/15 07:50	04/29/15 13:57	1

Lab Sample ID: LCS 440-250948/2-E
Matrix: Water
Analysis Batch: 251945

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 251796

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	0.996		mg/L		100	80 - 120
Arsenic	1.00	0.924		mg/L		92	80 - 120
Barium	1.00	0.987		mg/L		99	80 - 120
Beryllium	1.00	0.984		mg/L		98	80 - 120
Cadmium	1.00	0.979		mg/L		98	80 - 120
Chromium	1.00	0.942		mg/L		94	80 - 120
Cobalt	1.00	0.949		mg/L		95	80 - 120
Copper	1.00	1.00		mg/L		100	80 - 120
Lead	1.00	0.993		mg/L		99	80 - 120
Molybdenum	1.00	0.956		mg/L		96	80 - 120
Nickel	1.00	0.948		mg/L		95	80 - 120
Selenium	1.00	0.921		mg/L		92	80 - 120
Silver	0.500	0.501		mg/L		100	80 - 120
Thallium	1.00	0.959		mg/L		96	80 - 120
Vanadium	1.00	0.984		mg/L		98	80 - 120
Zinc	1.00	0.949		mg/L		95	80 - 120

Lab Sample ID: 440-107892-3 MS
Matrix: Water
Analysis Batch: 251945

Client Sample ID: W044
Prep Type: Dissolved
Prep Batch: 251796

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0089	J B	1.00	1.06		mg/L		105	75 - 125
Arsenic	0.014		1.00	1.01		mg/L		100	75 - 125
Barium	0.094		1.00	1.14		mg/L		105	75 - 125
Beryllium	ND		1.00	1.07		mg/L		107	75 - 125
Cadmium	ND		1.00	1.04		mg/L		104	75 - 125
Chromium	ND		1.00	1.06		mg/L		106	75 - 125
Cobalt	ND		1.00	1.05		mg/L		105	75 - 125
Copper	ND		1.00	1.10		mg/L		110	75 - 125
Lead	ND		1.00	1.03		mg/L		103	75 - 125
Molybdenum	ND		1.00	1.06		mg/L		106	75 - 125
Nickel	ND		1.00	1.03		mg/L		103	75 - 125

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

Lab Sample ID: 440-107892-3 MS
Matrix: Water
Analysis Batch: 251945

Client Sample ID: W044
Prep Type: Dissolved
Prep Batch: 251796

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	ND		1.00	0.988		mg/L		99	75 - 125
Silver	ND		0.500	0.541		mg/L		108	75 - 125
Thallium	0.0091	J	1.00	1.00		mg/L		99	75 - 125
Vanadium	ND		1.00	1.05		mg/L		105	75 - 125
Zinc	ND		1.00	1.02		mg/L		102	75 - 125

Lab Sample ID: 440-107892-3 MSD
Matrix: Water
Analysis Batch: 251945

Client Sample ID: W044
Prep Type: Dissolved
Prep Batch: 251796

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.0089	J B	1.00	1.03		mg/L		102	75 - 125	3	20
Arsenic	0.014		1.00	0.985		mg/L		97	75 - 125	3	20
Barium	0.094		1.00	1.11		mg/L		102	75 - 125	3	20
Beryllium	ND		1.00	1.04		mg/L		104	75 - 125	2	20
Cadmium	ND		1.00	1.02		mg/L		102	75 - 125	2	20
Chromium	ND		1.00	1.04		mg/L		104	75 - 125	2	20
Cobalt	ND		1.00	1.02		mg/L		102	75 - 125	2	20
Copper	ND		1.00	1.06		mg/L		106	75 - 125	4	20
Lead	ND		1.00	1.01		mg/L		101	75 - 125	2	20
Molybdenum	ND		1.00	1.04		mg/L		104	75 - 125	2	20
Nickel	ND		1.00	1.01		mg/L		101	75 - 125	2	20
Selenium	ND		1.00	0.970		mg/L		97	75 - 125	2	20
Silver	ND		0.500	0.525		mg/L		105	75 - 125	3	20
Thallium	0.0091	J	1.00	0.983		mg/L		97	75 - 125	2	20
Vanadium	ND		1.00	1.02		mg/L		102	75 - 125	3	20
Zinc	ND		1.00	0.997		mg/L		100	75 - 125	3	20

Lab Sample ID: MB 440-251242/1-A ^20
Matrix: Water
Analysis Batch: 251585

Client Sample ID: Method Blank
Prep Type: STLC Citrate

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.20	0.12	mg/L			04/28/15 11:10	20
Arsenic	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Barium	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Beryllium	ND		0.040	0.020	mg/L			04/28/15 11:10	20
Cadmium	ND		0.10	0.040	mg/L			04/28/15 11:10	20
Chromium	ND		0.10	0.050	mg/L			04/28/15 11:10	20
Cobalt	ND		0.20	0.050	mg/L			04/28/15 11:10	20
Copper	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Lead	ND		0.10	0.050	mg/L			04/28/15 11:10	20
Molybdenum	ND		0.40	0.20	mg/L			04/28/15 11:10	20
Nickel	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Selenium	ND		0.20	0.12	mg/L			04/28/15 11:10	20
Silver	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Thallium	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Vanadium	ND		0.20	0.10	mg/L			04/28/15 11:10	20
Zinc	ND		0.40	0.20	mg/L			04/28/15 11:10	20

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Lab Sample ID: LCS 440-251242/2-A ^20
Matrix: Water
Analysis Batch: 251585

Client Sample ID: Lab Control Sample
Prep Type: STLC Citrate

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	20.0	19.7		mg/L		99	80 - 120
Arsenic	20.0	19.6		mg/L		98	80 - 120
Barium	20.0	19.4		mg/L		97	80 - 120
Beryllium	20.0	19.3		mg/L		97	80 - 120
Cadmium	20.0	19.3		mg/L		97	80 - 120
Chromium	20.0	18.1		mg/L		90	80 - 120
Cobalt	20.0	18.5		mg/L		92	80 - 120
Copper	20.0	19.9		mg/L		99	80 - 120
Lead	20.0	19.7		mg/L		99	80 - 120
Molybdenum	20.0	18.9		mg/L		94	80 - 120
Nickel	20.0	18.7		mg/L		94	80 - 120
Selenium	20.0	19.4		mg/L		97	80 - 120
Silver	10.0	9.52		mg/L		95	80 - 120
Thallium	20.0	19.5		mg/L		98	80 - 120
Vanadium	20.0	19.7		mg/L		98	80 - 120
Zinc	20.0	19.2		mg/L		96	80 - 120

Lab Sample ID: 440-107774-E-1-A MS ^20
Matrix: Water
Analysis Batch: 251585

Client Sample ID: Matrix Spike
Prep Type: STLC Citrate

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.15	J	20.0	20.9		mg/L		104	75 - 125
Arsenic	ND		20.0	20.8		mg/L		104	75 - 125
Barium	0.10	J	20.0	20.7		mg/L		103	75 - 125
Beryllium	ND		20.0	20.5		mg/L		102	75 - 125
Cadmium	ND		20.0	20.6		mg/L		103	75 - 125
Chromium	ND		20.0	19.3		mg/L		96	75 - 125
Cobalt	ND		20.0	19.7		mg/L		98	75 - 125
Copper	ND		20.0	21.1		mg/L		106	75 - 125
Lead	ND		20.0	20.8		mg/L		104	75 - 125
Molybdenum	0.35	J	20.0	20.1		mg/L		99	75 - 125
Nickel	ND		20.0	19.9		mg/L		99	75 - 125
Selenium	0.16	J	20.0	20.5		mg/L		102	75 - 125
Silver	ND		10.0	9.73		mg/L		97	75 - 125
Thallium	ND		20.0	20.5		mg/L		103	75 - 125
Vanadium	ND		20.0	20.9		mg/L		104	75 - 125
Zinc	ND		20.0	20.4		mg/L		102	75 - 125

Lab Sample ID: 440-107774-E-1-A MSD ^20
Matrix: Water
Analysis Batch: 251585

Client Sample ID: Matrix Spike Duplicate
Prep Type: STLC Citrate

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.15	J	20.0	20.6		mg/L		102	75 - 125	1	20
Arsenic	ND		20.0	20.5		mg/L		102	75 - 125	2	20
Barium	0.10	J	20.0	20.2		mg/L		101	75 - 125	2	20
Beryllium	ND		20.0	20.5		mg/L		102	75 - 125	0	20
Cadmium	ND		20.0	20.2		mg/L		101	75 - 125	2	20
Chromium	ND		20.0	18.9		mg/L		95	75 - 125	2	20
Cobalt	ND		20.0	19.3		mg/L		97	75 - 125	2	20

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

Lab Sample ID: 440-107774-E-1-A MSD ^20
Matrix: Water
Analysis Batch: 251585

Client Sample ID: Matrix Spike Duplicate
Prep Type: STLC Citrate

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	ND		20.0	20.8		mg/L		104	75 - 125	2	20
Lead	ND		20.0	20.6		mg/L		103	75 - 125	1	20
Molybdenum	0.35	J	20.0	20.0		mg/L		98	75 - 125	0	20
Nickel	ND		20.0	19.5		mg/L		98	75 - 125	2	20
Selenium	0.16	J	20.0	20.3		mg/L		100	75 - 125	1	20
Silver	ND		10.0	9.54		mg/L		95	75 - 125	2	20
Thallium	ND		20.0	20.2		mg/L		101	75 - 125	2	20
Vanadium	ND		20.0	20.7		mg/L		103	75 - 125	1	20
Zinc	ND		20.0	20.0		mg/L		100	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 440-250948/1-B
Matrix: Water
Analysis Batch: 251338

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 251070

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/24/15 15:01	04/25/15 02:23	1

Lab Sample ID: LCS 440-250948/2-B
Matrix: Water
Analysis Batch: 251338

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 251070

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00800	0.00877		mg/L		110	80 - 120

Lab Sample ID: 440-107892-1 MS
Matrix: Water
Analysis Batch: 251338

Client Sample ID: W042
Prep Type: Dissolved
Prep Batch: 251070

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00800	0.00863		mg/L		108	70 - 130

Lab Sample ID: 440-107892-1 MSD
Matrix: Water
Analysis Batch: 251338

Client Sample ID: W042
Prep Type: Dissolved
Prep Batch: 251070

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00800	0.00868		mg/L		108	70 - 130	1	20

Lab Sample ID: MB 440-251242/1-B
Matrix: Water
Analysis Batch: 251694

Client Sample ID: Method Blank
Prep Type: STLC Citrate
Prep Batch: 251449

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020	0.0010	mg/L		04/27/15 17:39	04/28/15 16:49	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 440-251242/2-B — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: STLC Citrate**
Analysis Batch: 251694 — **Prep Batch: 251449**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0800	0.0866		mg/L		108	80 - 120

Lab Sample ID: 440-107892-1 MS — **Client Sample ID: W042**
Matrix: Water — **Prep Type: STLC Citrate**
Analysis Batch: 251694 — **Prep Batch: 251449**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.0800	0.0857		mg/L		107	70 - 130

Lab Sample ID: 440-107892-1 MSD — **Client Sample ID: W042**
Matrix: Water — **Prep Type: STLC Citrate**
Analysis Batch: 251694 — **Prep Batch: 251449**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.0800	0.0864		mg/L		108	70 - 130	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 440-250933/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250933

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 05:52	1
Bicarbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 05:52	1
Carbonate Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 05:52	1
Hydroxide Alkalinity as CaCO3	ND		4.0	4.0	mg/L			04/24/15 05:52	1

Lab Sample ID: LCS 440-250933/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250933

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity as CaCO3	85.4	86.4		mg/L		101	80 - 120

Lab Sample ID: 440-107892-4 DU — **Client Sample ID: W045**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 250933

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity as CaCO3	220		220		mg/L		0.4	20
Bicarbonate Alkalinity as CaCO3	220		220		mg/L		0.4	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20
Hydroxide Alkalinity as CaCO3	ND		ND		mg/L		NC	20

QC Sample Results

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-251526/1
Matrix: Water
Analysis Batch: 251526

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	5.0	mg/L			04/28/15 08:13	1

Lab Sample ID: LCS 440-251526/2
Matrix: Water
Analysis Batch: 251526

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1000	1010		mg/L		101	90 - 110		

Lab Sample ID: 440-107892-1 DU
Matrix: Water
Analysis Batch: 251526

Client Sample ID: W042
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	490			483		mg/L				2	5

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

GC/MS VOA

Analysis Batch: 251420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107813-A-3 MS	Matrix Spike	Total/NA	Water	8260B	
440-107813-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-107892-1	W042	Total/NA	Water	8260B	
LCS 440-251420/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-251420/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 251505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-2	W043	Total/NA	Water	8260B	
440-107892-3	W044	Total/NA	Water	8260B	
440-107892-4	W045	Total/NA	Water	8260B	
440-107928-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-107928-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-251505/4	Lab Control Sample	Total/NA	Water	8260B	
MB 440-251505/3	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 251224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Total/NA	Water	3520C	
440-107892-2	W043	Total/NA	Water	3520C	
440-107892-3	W044	Total/NA	Water	3520C	
440-107892-4	W045	Total/NA	Water	3520C	
LCS 440-251224/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-251224/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-251224/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 251421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Total/NA	Water	8270C SIM	251224
440-107892-2	W043	Total/NA	Water	8270C SIM	251224
440-107892-3	W044	Total/NA	Water	8270C SIM	251224
440-107892-4	W045	Total/NA	Water	8270C SIM	251224
LCS 440-251224/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	251224
LCSD 440-251224/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	251224
MB 440-251224/1-A	Method Blank	Total/NA	Water	8270C SIM	251224

GC Semi VOA

Prep Batch: 250952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Total/NA	Water	3510C	
440-107892-2	W043	Total/NA	Water	3510C	
440-107892-3	W044	Total/NA	Water	3510C	
440-107892-4	W045	Total/NA	Water	3510C	
LCS 440-250952/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-250952/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 440-250952/1-A	Method Blank	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Analysis Batch: 251256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-250952/1-A	Method Blank	Total/NA	Water	8015B	250952

Analysis Batch: 251257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Total/NA	Water	8015B	250952
440-107892-2	W043	Total/NA	Water	8015B	250952
440-107892-3	W044	Total/NA	Water	8015B	250952
440-107892-4	W045	Total/NA	Water	8015B	250952
LCS 440-250952/2-A	Lab Control Sample	Total/NA	Water	8015B	250952
LCSD 440-250952/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	250952

HPLC/IC

Analysis Batch: 250684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Total/NA	Water	300.0	
440-107892-2	W043	Total/NA	Water	300.0	
440-107892-2 - DL	W043	Total/NA	Water	300.0	
440-107892-2 MS - DL	W043	Total/NA	Water	300.0	
440-107892-2 MSD - DL	W043	Total/NA	Water	300.0	
440-107892-3	W044	Total/NA	Water	300.0	
440-107892-4	W045	Total/NA	Water	300.0	
LCS 440-250684/2	Lab Control Sample	Total/NA	Water	300.0	
MB 440-250684/5	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 250685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Total/NA	Water	300.0	
440-107892-1	W042	Total/NA	Water	300.0	
440-107892-2	W043	Total/NA	Water	300.0	
440-107892-2 - DL	W043	Total/NA	Water	300.0	
440-107892-2 MS - DL	W043	Total/NA	Water	300.0	
440-107892-2 MSD - DL	W043	Total/NA	Water	300.0	
440-107892-3	W044	Total/NA	Water	300.0	
440-107892-3	W044	Total/NA	Water	300.0	
440-107892-4	W045	Total/NA	Water	300.0	
440-107892-4	W045	Total/NA	Water	300.0	
LCS 440-250685/2	Lab Control Sample	Total/NA	Water	300.0	
MB 440-250685/5	Method Blank	Total/NA	Water	300.0	

Metals

Filtration Batch: 250948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Dissolved	Water	FILTRATION	
440-107892-1 MS	W042	Dissolved	Water	FILTRATION	
440-107892-1 MSD	W042	Dissolved	Water	FILTRATION	
440-107892-2	W043	Dissolved	Water	FILTRATION	
440-107892-2 MS	W043	Dissolved	Water	FILTRATION	
440-107892-2 MSD	W043	Dissolved	Water	FILTRATION	

Metals (Continued)

Filtration Batch: 250948 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-3	W044	Dissolved	Water	FILTRATION	
440-107892-3 MS	W044	Dissolved	Water	FILTRATION	
440-107892-3 MSD	W044	Dissolved	Water	FILTRATION	
440-107892-4	W045	Dissolved	Water	FILTRATION	
LCS 440-250948/2-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCS 440-250948/2-C	Lab Control Sample	Dissolved	Water	FILTRATION	
LCS 440-250948/2-D	Lab Control Sample	Dissolved	Water	FILTRATION	
LCS 440-250948/2-E	Lab Control Sample	Dissolved	Water	FILTRATION	
MB 440-250948/1-B	Method Blank	Dissolved	Water	FILTRATION	
MB 440-250948/1-C	Method Blank	Dissolved	Water	FILTRATION	
MB 440-250948/1-D	Method Blank	Dissolved	Water	FILTRATION	
MB 440-250948/1-E	Method Blank	Dissolved	Water	FILTRATION	

Prep Batch: 251070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Dissolved	Water	7470A	250948
440-107892-1 MS	W042	Dissolved	Water	7470A	250948
440-107892-1 MSD	W042	Dissolved	Water	7470A	250948
440-107892-2	W043	Dissolved	Water	7470A	250948
440-107892-3	W044	Dissolved	Water	7470A	250948
440-107892-4	W045	Dissolved	Water	7470A	250948
LCS 440-250948/2-B	Lab Control Sample	Dissolved	Water	7470A	250948
MB 440-250948/1-B	Method Blank	Dissolved	Water	7470A	250948

Leach Batch: 251242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-E-1-A MS ^20	Matrix Spike	STLC Citrate	Water	CA WET Citrate	
440-107774-E-1-A MSD ^20	Matrix Spike Duplicate	STLC Citrate	Water	CA WET Citrate	
440-107892-1	W042	STLC Citrate	Water	CA WET Citrate	
440-107892-1 MS	W042	STLC Citrate	Water	CA WET Citrate	
440-107892-1 MSD	W042	STLC Citrate	Water	CA WET Citrate	
440-107892-2	W043	STLC Citrate	Water	CA WET Citrate	
440-107892-3	W044	STLC Citrate	Water	CA WET Citrate	
440-107892-4	W045	STLC Citrate	Water	CA WET Citrate	
LCS 440-251242/2-A ^20	Lab Control Sample	STLC Citrate	Water	CA WET Citrate	
LCS 440-251242/2-B	Lab Control Sample	STLC Citrate	Water	CA WET Citrate	
MB 440-251242/1-A ^20	Method Blank	STLC Citrate	Water	CA WET Citrate	
MB 440-251242/1-B	Method Blank	STLC Citrate	Water	CA WET Citrate	

Analysis Batch: 251338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Dissolved	Water	7470A	251070
440-107892-1 MS	W042	Dissolved	Water	7470A	251070
440-107892-1 MSD	W042	Dissolved	Water	7470A	251070
440-107892-2	W043	Dissolved	Water	7470A	251070
440-107892-3	W044	Dissolved	Water	7470A	251070
440-107892-4	W045	Dissolved	Water	7470A	251070
LCS 440-250948/2-B	Lab Control Sample	Dissolved	Water	7470A	251070
MB 440-250948/1-B	Method Blank	Dissolved	Water	7470A	251070

Metals (Continued)

Prep Batch: 251449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	STLC Citrate	Water	7470A	251242
440-107892-1 MS	W042	STLC Citrate	Water	7470A	251242
440-107892-1 MSD	W042	STLC Citrate	Water	7470A	251242
440-107892-2	W043	STLC Citrate	Water	7470A	251242
440-107892-3	W044	STLC Citrate	Water	7470A	251242
440-107892-4	W045	STLC Citrate	Water	7470A	251242
LCS 440-251242/2-B	Lab Control Sample	STLC Citrate	Water	7470A	251242
MB 440-251242/1-B	Method Blank	STLC Citrate	Water	7470A	251242

Analysis Batch: 251585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107774-E-1-A MS ^20	Matrix Spike	STLC Citrate	Water	6010B	251242
440-107774-E-1-A MSD ^20	Matrix Spike Duplicate	STLC Citrate	Water	6010B	251242
440-107892-1	W042	STLC Citrate	Water	6010B	251242
440-107892-2	W043	STLC Citrate	Water	6010B	251242
440-107892-3	W044	STLC Citrate	Water	6010B	251242
440-107892-4	W045	STLC Citrate	Water	6010B	251242
LCS 440-251242/2-A ^20	Lab Control Sample	STLC Citrate	Water	6010B	251242
MB 440-251242/1-A ^20	Method Blank	STLC Citrate	Water	6010B	251242

Analysis Batch: 251694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	STLC Citrate	Water	7470A	251449
440-107892-1 MS	W042	STLC Citrate	Water	7470A	251449
440-107892-1 MSD	W042	STLC Citrate	Water	7470A	251449
440-107892-2	W043	STLC Citrate	Water	7470A	251449
440-107892-3	W044	STLC Citrate	Water	7470A	251449
440-107892-4	W045	STLC Citrate	Water	7470A	251449
LCS 440-251242/2-B	Lab Control Sample	STLC Citrate	Water	7470A	251449
MB 440-251242/1-B	Method Blank	STLC Citrate	Water	7470A	251449

Prep Batch: 251794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Dissolved	Water	200.2	250948
440-107892-1 MS	W042	Dissolved	Water	200.2	250948
440-107892-1 MSD	W042	Dissolved	Water	200.2	250948
440-107892-2	W043	Dissolved	Water	200.2	250948
440-107892-3	W044	Dissolved	Water	200.2	250948
440-107892-4	W045	Dissolved	Water	200.2	250948
LCS 440-250948/2-C	Lab Control Sample	Dissolved	Water	200.2	250948
MB 440-250948/1-C	Method Blank	Dissolved	Water	200.2	250948

Prep Batch: 251795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Dissolved	Water	200.2	250948
440-107892-2	W043	Dissolved	Water	200.2	250948
440-107892-2 MS	W043	Dissolved	Water	200.2	250948
440-107892-2 MSD	W043	Dissolved	Water	200.2	250948
440-107892-3	W044	Dissolved	Water	200.2	250948
440-107892-4	W045	Dissolved	Water	200.2	250948
LCS 440-250948/2-D	Lab Control Sample	Dissolved	Water	200.2	250948

Metals (Continued)

Prep Batch: 251795 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-250948/1-D	Method Blank	Dissolved	Water	200.2	250948

Prep Batch: 251796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Dissolved	Water	3005A	250948
440-107892-2	W043	Dissolved	Water	3005A	250948
440-107892-3	W044	Dissolved	Water	3005A	250948
440-107892-3 MS	W044	Dissolved	Water	3005A	250948
440-107892-3 MSD	W044	Dissolved	Water	3005A	250948
440-107892-4	W045	Dissolved	Water	3005A	250948
LCS 440-250948/2-E	Lab Control Sample	Dissolved	Water	3005A	250948
MB 440-250948/1-E	Method Blank	Dissolved	Water	3005A	250948

Analysis Batch: 251932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Dissolved	Water	200.7 Rev 4.4	251794
440-107892-1 MS	W042	Dissolved	Water	200.7 Rev 4.4	251794
440-107892-1 MSD	W042	Dissolved	Water	200.7 Rev 4.4	251794
440-107892-2	W043	Dissolved	Water	200.7 Rev 4.4	251794
440-107892-3	W044	Dissolved	Water	200.7 Rev 4.4	251794
440-107892-4	W045	Dissolved	Water	200.7 Rev 4.4	251794
LCS 440-250948/2-C	Lab Control Sample	Dissolved	Water	200.7 Rev 4.4	251794
MB 440-250948/1-C	Method Blank	Dissolved	Water	200.7 Rev 4.4	251794

Analysis Batch: 251942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Dissolved	Water	200.8	251795
440-107892-2	W043	Dissolved	Water	200.8	251795
440-107892-2 MS	W043	Dissolved	Water	200.8	251795
440-107892-2 MSD	W043	Dissolved	Water	200.8	251795
440-107892-3	W044	Dissolved	Water	200.8	251795
440-107892-4	W045	Dissolved	Water	200.8	251795
LCS 440-250948/2-D	Lab Control Sample	Dissolved	Water	200.8	251795
MB 440-250948/1-D	Method Blank	Dissolved	Water	200.8	251795

Analysis Batch: 251945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Dissolved	Water	6010B	251796
440-107892-2	W043	Dissolved	Water	6010B	251796
440-107892-3	W044	Dissolved	Water	6010B	251796
440-107892-3 MS	W044	Dissolved	Water	6010B	251796
440-107892-3 MSD	W044	Dissolved	Water	6010B	251796
440-107892-4	W045	Dissolved	Water	6010B	251796
LCS 440-250948/2-E	Lab Control Sample	Dissolved	Water	6010B	251796
MB 440-250948/1-E	Method Blank	Dissolved	Water	6010B	251796

Analysis Batch: 251957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-2	W043	Dissolved	Water	6010B	251796
440-107892-3	W044	Dissolved	Water	6010B	251796

QC Association Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

General Chemistry

Analysis Batch: 250933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Total/NA	Water	SM 2320B	
440-107892-2	W043	Total/NA	Water	SM 2320B	
440-107892-3	W044	Total/NA	Water	SM 2320B	
440-107892-4	W045	Total/NA	Water	SM 2320B	
440-107892-4 DU	W045	Total/NA	Water	SM 2320B	
LCS 440-250933/2	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 440-250933/3	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 251526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-107892-1	W042	Total/NA	Water	SM 2540C	
440-107892-1 DU	W042	Total/NA	Water	SM 2540C	
440-107892-2	W043	Total/NA	Water	SM 2540C	
440-107892-3	W044	Total/NA	Water	SM 2540C	
440-107892-4	W045	Total/NA	Water	SM 2540C	
LCS 440-251526/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 440-251526/1	Method Blank	Total/NA	Water	SM 2540C	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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)

Certification Summary

Client: AMEC Foster Wheeler E & I, Inc
Project/Site: Chevron Cawelo

TestAmerica Job ID: 440-107892-1
SDG: FR1416063A

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-15
Arizona	State Program	9	AZ0671	10-13-15
California	LA Cty Sanitation Districts	9	10256	01-31-16 *
California	State Program	9	2706	06-30-16
Guam	State Program	9	Cert. No. 12.002r	01-23-16
Hawaii	State Program	9	N/A	01-29-16
Nevada	State Program	9	CA015312007A	07-31-15
New Mexico	State Program	6	N/A	01-29-15 *
Northern Mariana Islands	State Program	9	MP0002	01-29-15 *
Oregon	NELAP	10	4005	01-29-16
USDA	Federal		P330-09-00080	06-06-15

* Certification renewal pending - certification considered valid.

CHAIN-OF-CUSTODY RECORD

FRE 16812

PROJECT NAME: Sump Sampling @ KROF Foam Plant

DATE: 4/22/15

PAGE OF

PROJECT NUMBER: FK416063A

RESULTS TO: Gary Kramer

TURNAROUND TIME: 5-days

SAMPLE SHIPMENT METHOD: FedEx

LABORATORY NAME: Test America

LABORATORY ADDRESS: 17461 Derian Ave Suite 100 Irvine CA 92614

LABORATORY CONTACT: Patty Mata

LABORATORY PHONE NUMBER: (949) 261-1022

CLIENT INFORMATION:

REPORTING REQUIREMENTS:

GEOTRACKER REQUIRED EDF YES NO

SITE SPECIFIC GLOBAL ID NO.

SAMPLERS (SIGNATURE):

ANALYSES

DATE	TIME	SAMPLE NUMBER	8260B Acetone + BTEX	8270C PAH	8015B	300.0 Cl, SO4, Br, F / 300.0 NO3	2540C TDS	2320B Alk	200.7, 200.8	6010B, 7470A	6010B STLC metals				CONTAINER TYPE AND SIZE	Soil (S), Water (W), Vapor (V), or Other (O)	Filtered	Preservative Type	Cooled	MS/MSD	No. of Containers	ADDITIONAL COMMENTS
4/22/15	4:30	W042	3	2	1		1		1		1					W	N		Y		9	all 200.7 &
4/22/15	4:30	W043	3	2	1		1		1		1					W	N		Y		9	200.8 Samples
4/22/15	4:30	W044	3	2	1		1		1		1					W	N		Y		9	Need to
4/22/15	4:30	W045	3	2	1		1		1		1					W	N		Y		9	be filtered

440-107892 Chain of Custody

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
SIGNATURE:	4/22/2015		SIGNATURE:		
PRINTED NAME: Johnathan Eberhach			PRINTED NAME:		
COMPANY: Amec FW			COMPANY:		
SIGNATURE:			SIGNATURE:	4/23/15	9:35
PRINTED NAME: Kate Thomas			PRINTED NAME: Vu Banh		
COMPANY:			COMPANY: TAI		
SIGNATURE:			SIGNATURE:		
PRINTED NAME:			PRINTED NAME:		
COMPANY:			COMPANY:		

TOTAL NUMBER OF CONTAINERS:

SAMPLING COMMENTS: Send results to gary.kramer@amec.com
NO3 has 48 hr hold, analyze as soon as possible
200.7 and 200.8 Samples need to be filtered

1281 East Alluvial Ave., Suite 101
Fresno, California 93720-2659
Tel 559.264.2535 Fax 559.264.7431

amec

4.4/3.7 3.5/2.8 3.9/3.2 IR-72 Fed: 8061 ~~4343~~ 6626 2570

TestAmerica Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Mata, Patty	Carrier Tracking No(s):	COC No: 440-81827.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: patty.mata@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.				Job #: 440-107892-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/29/2015			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Chevron Kern River	Project #: 44011546			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9310/Filtration_Rad Standard Target List	9315_Ra226/Filtration_Rad Standard Target List	9320_Ra228/Filtration_Rad Standard Target List	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
W042 (440-107892-1)	4/22/15	16:30 Pacific		Water			X	X	X	1	Chevron 5 day Rush
W043 (440-107892-2)	4/22/15	16:30 Pacific		Water			X	X	X	1	Chevron 5 day Rush
W044 (440-107892-3)	4/22/15	16:30 Pacific		Water			X	X	X	1	Chevron 5 day Rush
W045 (440-107892-4)	4/22/15	16:30 Pacific		Water			X	X	X	1	Chevron 5 day Rush

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: AMEC Foster Wheeler E & I, Inc

Job Number: 440-107892-1
SDG Number: FR1416063A

Login Number: 107892
List Number: 1
Creator: Soderblom, Tim

List Source: TestAmerica Irvine

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	
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.	False	Refer to Job Narrative for details.
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.	N/A	
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	