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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-50017-1

Client Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

Revision: 1

For:

ARCADIS U.S. Inc

6723 Towpath Road

Syracuse, New York 13214-0066

Attn: Ms. Jo Ann Robertson

*Melissa Deyo*

Authorized for release by:

12/17/2013 3:11:00 PM

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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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## Definitions/Glossary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits

#### GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
F	MS/MSD Recovery and/or RPD exceeds the control limits

#### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS/MSD Recovery and/or RPD exceeds the control 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.
H	Sample was prepped or analyzed beyond the specified holding time

#### General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

### 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
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)

## Definitions/Glossary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

### Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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## Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

### Job ID: 480-50017-1

#### Laboratory: TestAmerica Buffalo

##### Narrative

##### Job Narrative 480-50017-1

##### Revision 1

This report was revised to correct the Mercury result for the following sample: FILL-COMP-2-111213 (480-50017-2).

##### Receipt

The samples were received on 11/13/2013 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3° C.

##### GC/MS VOA

Method 8260C: The following sample was analyzed using medium level techniques due to the abundance of non-target analytes: FILL-VOC-6-111213 (480-50017-8). Elevated reporting limits (RLs) are provided.

Method 8260C: The method blank for batch 153300 contained Methylene Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260C: The method blank for batch 153607 contained 1,2-Dichloroethane above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No other analytical or quality issues were noted.

##### GC/MS Semi VOA

Method 8270D: The following sample was diluted due to the nature of the sample matrix: FILL-COMP-1-111213 (480-50017-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

##### GC Semi VOA

Method 8081B: The following sample was diluted due to the nature of the sample matrix : FILL-COMP-1-111213 (480-50017-1). As such, surrogate recoveries are not reported\ and elevated reporting limits (RLs) are provided.

Method 8081B: The following sample and matrix spikes were diluted due to matrix effects: FILL-COMP-2-111213 (480-50017-2), (480-50017-2 MS) and (480-50017-2 MSD). Spike and Surrogate recoveries are not reported or not representative and elevated reporting limits (RLs) are provided.

Method 8081B: The method blank for preparation batch 153341 contained beta-BHC above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8151A: The laboratory control sample (LCS) for preparation batch 152934 recovered outside control limits. Since the results were biased high and the samples were non-detect for the affect analytes, the data has been qualified and reported.

Method 8151A: The matrix spike (MS) and matrix spike duplicate (MSD) surrogate recoveries associated with preparation batch 152934 were outside control limits. Matrix interference was suspected.

No other analytical or quality issues were noted.

##### Metals

Method 6010C: The method blank for preparation batch 152723 contained Manganese and Zinc above the method detection limits. These target analyte concentrations were less than the reporting limits (RLs); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 6010C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 152723 were outside control limits. Sample matrix was suspected. The associated laboratory control sample (LCS) met acceptance criteria; therefore, no corrective action was necessary.

## Case Narrative

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

### **Job ID: 480-50017-1 (Continued)**

#### **Laboratory: TestAmerica Buffalo (Continued)**

Method 7471B: The following sample was re-analyzed outside of analytical holding time for Mercury due to an un-expected initial result.:  
FILL-COMP-2-111213 (480-50017-2).

No other analytical or quality issues were noted.

#### **General Chemistry**

No analytical or quality issues were noted.

#### **Organic Prep**

Method 3550C: The following samples required a Florisil clean-up, via EPA method 3620C, to reduce matrix interferences in preparation for analysis by method 8081B : FILL-COMP-1-111213 (480-50017-1), FILL-COMP-2-111213 (480-50017-2), (480-50017-2 MS) and (480-50017-2 MSD).

No other analytical or quality issues were noted.

# Detection Summary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-COMP-1-111213**

**Lab Sample ID: 480-50017-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	54	J	900	23	ug/Kg	5	⊗	8270D	Total/NA
Benzo(a)pyrene	150	J	900	22	ug/Kg	5	⊗	8270D	Total/NA
Benzo(b)fluoranthene	200	J	900	17	ug/Kg	5	⊗	8270D	Total/NA
Benzo(g,h,i)perylene	100	J	900	11	ug/Kg	5	⊗	8270D	Total/NA
Benzo(k)fluoranthene	100	J	900	9.8	ug/Kg	5	⊗	8270D	Total/NA
Chrysene	190	J	900	8.9	ug/Kg	5	⊗	8270D	Total/NA
Fluoranthene	360	J	900	13	ug/Kg	5	⊗	8270D	Total/NA
Indeno(1,2,3-cd)pyrene	88	J	900	25	ug/Kg	5	⊗	8270D	Total/NA
Phenanthrene	260	J	900	19	ug/Kg	5	⊗	8270D	Total/NA
Pyrene	310	J	900	5.8	ug/Kg	5	⊗	8270D	Total/NA
4,4'-DDD	5.0	J	18	3.5	ug/Kg	10	⊗	8081B	Total/NA
4,4'-DDE	5.2	J	18	2.7	ug/Kg	10	⊗	8081B	Total/NA
4,4'-DDT	8.9	J	18	1.8	ug/Kg	10	⊗	8081B	Total/NA
Arsenic	3.7		2.3	0.46	mg/Kg	1	⊗	6010C	Total/NA
Barium	169		0.58	0.13	mg/Kg	1	⊗	6010C	Total/NA
Beryllium	0.94		0.23	0.032	mg/Kg	1	⊗	6010C	Total/NA
Cadmium	0.069	J	0.23	0.035	mg/Kg	1	⊗	6010C	Total/NA
Copper	41.4		1.2	0.24	mg/Kg	1	⊗	6010C	Total/NA
Lead	22.6		1.2	0.28	mg/Kg	1	⊗	6010C	Total/NA
Manganese	335	B	0.23	0.037	mg/Kg	1	⊗	6010C	Total/NA
Nickel	30.6		5.8	0.27	mg/Kg	1	⊗	6010C	Total/NA
Zinc	85.8	B	2.3	0.18	mg/Kg	1	⊗	6010C	Total/NA
Mercury	0.045		0.022	0.0088	mg/Kg	1	⊗	7471B	Total/NA
Chromium, trivalent	36.1		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

**Client Sample ID: FILL-COMP-2-111213**

**Lab Sample ID: 480-50017-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	35	J	180	4.7	ug/Kg	1	⊗	8270D	Total/NA
Benzo(a)anthracene	150	J	180	3.2	ug/Kg	1	⊗	8270D	Total/NA
Benzo(a)pyrene	150	J	180	4.4	ug/Kg	1	⊗	8270D	Total/NA
Benzo(b)fluoranthene	190		180	3.6	ug/Kg	1	⊗	8270D	Total/NA
Benzo(g,h,i)perylene	71	J	180	2.2	ug/Kg	1	⊗	8270D	Total/NA
Benzo(k)fluoranthene	85	J	180	2.0	ug/Kg	1	⊗	8270D	Total/NA
Chrysene	160	J	180	1.8	ug/Kg	1	⊗	8270D	Total/NA
Dibenz(a,h)anthracene	18	J	180	2.2	ug/Kg	1	⊗	8270D	Total/NA
Fluoranthene	290		180	2.7	ug/Kg	1	⊗	8270D	Total/NA
Indeno(1,2,3-cd)pyrene	64	J	180	5.1	ug/Kg	1	⊗	8270D	Total/NA
Phenanthrene	130	J	180	3.8	ug/Kg	1	⊗	8270D	Total/NA
Pyrene	230		180	1.2	ug/Kg	1	⊗	8270D	Total/NA
4,4'-DDT	8.9	J	18	1.8	ug/Kg	10	⊗	8081B	Total/NA
Endrin	3.9	J	18	2.5	ug/Kg	10	⊗	8081B	Total/NA
Arsenic	2.9		2.0	0.41	mg/Kg	1	⊗	6010C	Total/NA
Barium	157		0.51	0.11	mg/Kg	1	⊗	6010C	Total/NA
Beryllium	0.87		0.20	0.029	mg/Kg	1	⊗	6010C	Total/NA
Copper	44.1		1.0	0.22	mg/Kg	1	⊗	6010C	Total/NA
Lead	23.3		1.0	0.25	mg/Kg	1	⊗	6010C	Total/NA
Manganese	340	B	0.20	0.033	mg/Kg	1	⊗	6010C	Total/NA
Nickel	30.2		5.1	0.24	mg/Kg	1	⊗	6010C	Total/NA
Zinc	83.7	B	2.0	0.16	mg/Kg	1	⊗	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

### Client Sample ID: FILL-COMP-2-111213 (Continued)

### Lab Sample ID: 480-50017-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.055	H	0.021	0.0087	mg/Kg	1	⊗	7471B	Total/NA
Chromium, trivalent	36.9		1.5	0.63	mg/Kg	1		SM 3500 CR D	Total/NA

### Client Sample ID: FILL-VOC-1-111213

### Lab Sample ID: 480-50017-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.4	J B	4.8	0.24	ug/Kg	1	⊗	8260C	Total/NA
Tetrachloroethene	0.98	J	4.8	0.64	ug/Kg	1	⊗	8260C	Total/NA

### Client Sample ID: FILL-VOC-2-111213

### Lab Sample ID: 480-50017-4

No Detections.

### Client Sample ID: FILL-VOC-3-111213

### Lab Sample ID: 480-50017-5

No Detections.

### Client Sample ID: FILL-VOC-4-111213

### Lab Sample ID: 480-50017-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.5	J B	12	0.61	ug/Kg	1	⊗	8260C	Total/NA

### Client Sample ID: FILL-VOC-5-111213

### Lab Sample ID: 480-50017-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.2	J B	4.7	0.24	ug/Kg	1	⊗	8260C	Total/NA

### Client Sample ID: FILL-VOC-6-111213

### Lab Sample ID: 480-50017-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	120	B	53	10	ug/Kg	1	⊗	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-COMP-1-111213**

**Lab Sample ID: 480-50017-1**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	900	U	900	11	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
Acenaphthylene	900	U	900	7.3	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
<b>Anthracene</b>	<b>54</b>	<b>J</b>	900	23	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
Benzo(a)anthracene	900	U	900	15	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
<b>Benzo(a)pyrene</b>	<b>150</b>	<b>J</b>	900	22	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
<b>Benzo(b)fluoranthene</b>	<b>200</b>	<b>J</b>	900	17	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
<b>Benzo(g,h,i)perylene</b>	<b>100</b>	<b>J</b>	900	11	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
<b>Benzo(k)fluoranthene</b>	<b>100</b>	<b>J</b>	900	9.8	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
<b>Chrysene</b>	<b>190</b>	<b>J</b>	900	8.9	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
Dibenz(a,h)anthracene	900	U	900	11	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
Dibenzofuran	900	U	900	9.3	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
<b>Fluoranthene</b>	<b>360</b>	<b>J</b>	900	13	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
Fluorene	900	U	900	21	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
Hexachlorobenzene	900	U	900	44	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
<b>Indeno(1,2,3-cd)pyrene</b>	<b>88</b>	<b>J</b>	900	25	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
m-Cresol	1700	U	1700	50	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
Naphthalene	900	U	900	15	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
o-Cresol	900	U	900	27	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
p-Cresol	1700	U	1700	50	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
Pentachlorophenol	1700	U	1700	310	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
<b>Phenanthrene</b>	<b>260</b>	<b>J</b>	900	19	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
Phenol	900	U	900	94	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
<b>Pyrene</b>	<b>310</b>	<b>J</b>	900	5.8	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:16	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4,6-Tribromophenol	86		39 - 146				11/14/13 07:45	11/16/13 14:16	5
2-Fluorobiphenyl	80		37 - 120				11/14/13 07:45	11/16/13 14:16	5
2-Fluorophenol	78		18 - 120				11/14/13 07:45	11/16/13 14:16	5
Nitrobenzene-d5	74		34 - 132				11/14/13 07:45	11/16/13 14:16	5
Phenol-d5	67		11 - 120				11/14/13 07:45	11/16/13 14:16	5
p-Terphenyl-d14	96		65 - 153				11/14/13 07:45	11/16/13 14:16	5

## Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>4,4'-DDD</b>	<b>5.0</b>	<b>J</b>	18	3.5	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
<b>4,4'-DDE</b>	<b>5.2</b>	<b>J</b>	18	2.7	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
<b>4,4'-DDT</b>	<b>8.9</b>	<b>J</b>	18	1.8	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
Aldrin	18	U	18	4.4	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
alpha-BHC	18	U	18	3.2	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
alpha-Chlordane	18	U	18	8.9	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
beta-BHC	18	U	18	1.9	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
delta-BHC	18	U	18	2.4	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
Dieldrin	18	U	18	4.3	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
Endosulfan I	18	U	18	2.3	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
Endosulfan II	18	U	18	3.2	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
Endosulfan sulfate	18	U	18	3.3	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
Endrin	18	U	18	2.5	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
Heptachlor	18	U	18	2.8	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10
Lindane	18	U	18	2.2	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:31	10

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-COMP-1-111213**

**Lab Sample ID: 480-50017-1**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 92.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	32 - 136	11/19/13 09:51	11/20/13 13:31	10
Tetrachloro-m-xylene	0	X	30 - 124	11/19/13 09:51	11/20/13 13:31	10

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	230	U	230	45	ug/Kg	☀	11/14/13 09:57	11/15/13 19:11	1
PCB-1221	230	U	230	45	ug/Kg	☀	11/14/13 09:57	11/15/13 19:11	1
PCB-1232	230	U	230	45	ug/Kg	☀	11/14/13 09:57	11/15/13 19:11	1
PCB-1242	230	U	230	45	ug/Kg	☀	11/14/13 09:57	11/15/13 19:11	1
PCB-1248	230	U	230	45	ug/Kg	☀	11/14/13 09:57	11/15/13 19:11	1
PCB-1254	230	U	230	110	ug/Kg	☀	11/14/13 09:57	11/15/13 19:11	1
PCB-1260	230	U	230	110	ug/Kg	☀	11/14/13 09:57	11/15/13 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	112		47 - 176	11/14/13 09:57	11/15/13 19:11	1
Tetrachloro-m-xylene	162		46 - 175	11/14/13 09:57	11/15/13 19:11	1

## Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	18	U *	18	6.4	ug/Kg	☀	11/19/13 05:40	11/20/13 16:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	111		39 - 120				11/19/13 05:40	11/20/13 16:23	1

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.7		2.3	0.46	mg/Kg	☀	11/18/13 11:00	11/20/13 13:33	1
Barium	169		0.58	0.13	mg/Kg	☀	11/18/13 11:00	11/20/13 13:33	1
Beryllium	0.94		0.23	0.032	mg/Kg	☀	11/18/13 11:00	11/22/13 14:04	1
Cadmium	0.069 J		0.23	0.035	mg/Kg	☀	11/18/13 11:00	11/22/13 14:04	1
Copper	41.4		1.2	0.24	mg/Kg	☀	11/18/13 11:00	11/22/13 14:04	1
Lead	22.6		1.2	0.28	mg/Kg	☀	11/18/13 11:00	11/20/13 13:33	1
Manganese	335 B		0.23	0.037	mg/Kg	☀	11/18/13 11:00	11/20/13 13:33	1
Nickel	30.6		5.8	0.27	mg/Kg	☀	11/18/13 11:00	11/20/13 13:33	1
Selenium	4.6	U	4.6	0.46	mg/Kg	☀	11/18/13 11:00	11/20/13 13:33	1
Silver	0.58	U	0.58	0.23	mg/Kg	☀	11/18/13 11:00	11/20/13 13:33	1
Zinc	85.8 B		2.3	0.18	mg/Kg	☀	11/18/13 11:00	11/20/13 13:33	1

## Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.022	0.0088	mg/Kg	☀	11/18/13 08:10	11/18/13 16:40	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	0.86	U	0.86	0.29	mg/Kg	☀	11/18/13 08:47	11/19/13 11:25	1
Cyanide, Total	0.97	U	0.97	0.47	mg/Kg	☀	11/14/13 11:54	11/14/13 12:42	1
Chromium, trivalent	36.1		1.5	0.63	mg/Kg			11/25/13 17:22	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.4		0.10	0.10	%			11/13/13 21:14	1
Percent Solids	93		0.10	0.10	%			11/13/13 21:14	1

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-COMP-2-111213**

**Lab Sample ID: 480-50017-2**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	180	U	180	2.2	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
Acenaphthylene	180	U	180	1.5	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Anthracene</b>	<b>35</b>	<b>J</b>	180	4.7	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Benzo(a)anthracene</b>	<b>150</b>	<b>J</b>	180	3.2	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Benzo(a)pyrene</b>	<b>150</b>	<b>J</b>	180	4.4	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Benzo(b)fluoranthene</b>	<b>190</b>		180	3.6	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Benzo(g,h,i)perylene</b>	<b>71</b>	<b>J</b>	180	2.2	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Benzo(k)fluoranthene</b>	<b>85</b>	<b>J</b>	180	2.0	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Chrysene</b>	<b>160</b>	<b>J</b>	180	1.8	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Dibenz(a,h)anthracene</b>	<b>18</b>	<b>J</b>	180	2.2	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
Dibenzofuran	180	U	180	1.9	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Fluoranthene</b>	<b>290</b>		180	2.7	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
Fluorene	180	U	180	4.2	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
Hexachlorobenzene	180	U	180	9.1	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Indeno(1,2,3-cd)pyrene</b>	<b>64</b>	<b>J</b>	180	5.1	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
m-Cresol	360	U	360	10	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
Naphthalene	180	U	180	3.1	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
o-Cresol	180	U	180	5.6	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
p-Cresol	360	U	360	10	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
Pentachlorophenol	360	U	360	63	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Phenanthrene</b>	<b>130</b>	<b>J</b>	180	3.8	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
Phenol	180	U	180	19	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Pyrene</b>	<b>230</b>		180	1.2	ug/Kg	⊗	11/14/13 07:45	11/16/13 14:41	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4,6-Tribromophenol	105		39 - 146				11/14/13 07:45	11/16/13 14:41	1
2-Fluorobiphenyl	97		37 - 120				11/14/13 07:45	11/16/13 14:41	1
2-Fluorophenol	97		18 - 120				11/14/13 07:45	11/16/13 14:41	1
Nitrobenzene-d5	91		34 - 132				11/14/13 07:45	11/16/13 14:41	1
Phenol-d5	94		11 - 120				11/14/13 07:45	11/16/13 14:41	1
p-Terphenyl-d14	96		65 - 153				11/14/13 07:45	11/16/13 14:41	1

## Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	18	U	18	3.5	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
4,4'-DDE	18	U	18	2.7	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
<b>4,4'-DDT</b>	<b>8.9</b>	<b>J</b>	18	1.8	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
Aldrin	18	U	18	4.4	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
alpha-BHC	18	U	18	3.2	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
alpha-Chlordane	18	U	18	9.0	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
beta-BHC	18	U	18	1.9	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
delta-BHC	18	U	18	2.4	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
Dieldrin	18	U	18	4.3	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
Endosulfan I	18	U	18	2.3	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
Endosulfan II	18	U	18	3.2	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
Endosulfan sulfate	18	U	18	3.4	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
<b>Endrin</b>	<b>3.9</b>	<b>J</b>	18	2.5	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
Heptachlor	18	U	18	2.8	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10
Lindane	18	U	18	2.2	ug/Kg	⊗	11/19/13 09:51	11/20/13 13:14	10

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-COMP-2-111213**

**Lab Sample ID: 480-50017-2**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 91.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	32 - 136	11/19/13 09:51	11/20/13 13:14	10
Tetrachloro-m-xylene	0	X	30 - 124	11/19/13 09:51	11/20/13 13:14	10

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	250	U	250	48	ug/Kg	☀	11/14/13 09:57	11/15/13 19:26	1
PCB-1221	250	U	250	48	ug/Kg	☀	11/14/13 09:57	11/15/13 19:26	1
PCB-1232	250	U	250	48	ug/Kg	☀	11/14/13 09:57	11/15/13 19:26	1
PCB-1242	250	U	250	48	ug/Kg	☀	11/14/13 09:57	11/15/13 19:26	1
PCB-1248	250	U	250	48	ug/Kg	☀	11/14/13 09:57	11/15/13 19:26	1
PCB-1254	250	U	250	120	ug/Kg	☀	11/14/13 09:57	11/15/13 19:26	1
PCB-1260	250	U	250	120	ug/Kg	☀	11/14/13 09:57	11/15/13 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	86		47 - 176	11/14/13 09:57	11/15/13 19:26	1
Tetrachloro-m-xylene	130		46 - 175	11/14/13 09:57	11/15/13 19:26	1

## Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	18	U *	18	6.5	ug/Kg	☀	11/19/13 05:40	11/20/13 16:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	110		39 - 120				11/19/13 05:40	11/20/13 16:52	1

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.9		2.0	0.41	mg/Kg	☀	11/18/13 11:00	11/20/13 13:51	1
Barium	157		0.51	0.11	mg/Kg	☀	11/18/13 11:00	11/20/13 13:51	1
Beryllium	0.87		0.20	0.029	mg/Kg	☀	11/18/13 11:00	11/22/13 14:11	1
Cadmium	0.20	U	0.20	0.031	mg/Kg	☀	11/18/13 11:00	11/20/13 13:51	1
Copper	44.1		1.0	0.22	mg/Kg	☀	11/18/13 11:00	11/22/13 14:11	1
Lead	23.3		1.0	0.25	mg/Kg	☀	11/18/13 11:00	11/20/13 13:51	1
Manganese	340	B	0.20	0.033	mg/Kg	☀	11/18/13 11:00	11/20/13 13:51	1
Nickel	30.2		5.1	0.24	mg/Kg	☀	11/18/13 11:00	11/20/13 13:51	1
Selenium	4.1	U	4.1	0.41	mg/Kg	☀	11/18/13 11:00	11/20/13 13:51	1
Silver	0.51	U	0.51	0.20	mg/Kg	☀	11/18/13 11:00	11/22/13 14:11	1
Zinc	83.7	B	2.0	0.16	mg/Kg	☀	11/18/13 11:00	11/20/13 13:51	1

## Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055	H	0.021	0.0087	mg/Kg	☀	12/13/13 09:30	12/13/13 13:23	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent chromium	0.88	U	0.88	0.30	mg/Kg	☀	11/18/13 08:48	11/19/13 11:27	1
Cyanide, Total	1.1	U	1.1	0.51	mg/Kg	☀	11/14/13 11:54	11/14/13 12:41	1
Chromium, trivalent	36.9		1.5	0.63	mg/Kg			11/25/13 17:22	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.9		0.10	0.10	%			11/13/13 21:14	1
Percent Solids	91		0.10	0.10	%			11/13/13 21:14	1

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-VOC-1-111213**

**Lab Sample ID: 480-50017-3**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 92.2

## Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.8	U	4.8	0.35	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
1,1-Dichloroethane	4.8	U	4.8	0.58	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
1,1-Dichloroethene	4.8	U	4.8	0.59	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
1,2,4-Trimethylbenzene	4.8	U	4.8	0.92	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
1,2-Dichlorobenzene	4.8	U	4.8	0.37	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
<b>1,2-Dichloroethane</b>	<b>1.4</b>	<b>J B</b>	4.8	0.24	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
1,3,5-Trimethylbenzene	4.8	U	4.8	0.31	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
1,3-Dichlorobenzene	4.8	U	4.8	0.25	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
1,4-Dichlorobenzene	4.8	U	4.8	0.67	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
1,4-Dioxane	190	U	190	23	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Acetone	24	U	24	4.0	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Benzene	4.8	U	4.8	0.23	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Butylbenzene	4.8	U	4.8	0.42	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Carbon tetrachloride	4.8	U	4.8	0.46	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Chlorobenzene	4.8	U	4.8	0.63	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Chloroform	4.8	U	4.8	0.30	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
cis-1,2-Dichloroethene	4.8	U	4.8	0.61	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Ethylbenzene	4.8	U	4.8	0.33	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Isopropylbenzene	4.8	U	4.8	0.72	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Methyl Ethyl Ketone	24	U *	24	1.8	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Methyl tert-butyl ether	4.8	U	4.8	0.47	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Methylene Chloride	4.8	U	4.8	2.2	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Propylbenzene, n-	4.8	U	4.8	0.38	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
sec-Butylbenzene	4.8	U	4.8	0.42	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
tert-Butylbenzene	4.8	U	4.8	0.50	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
<b>Tetrachloroethene</b>	<b>0.98</b>	<b>J</b>	4.8	0.64	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Toluene	4.8	U	4.8	0.36	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
trans-1,2-Dichloroethene	4.8	U	4.8	0.49	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Trichloroethene	4.8	U	4.8	1.1	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Vinyl chloride	4.8	U	4.8	0.58	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
Xylenes, Total	9.6	U	9.6	0.81	ug/Kg	⊗	11/20/13 22:35	11/21/13 16:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	116		64 - 126				11/20/13 22:35	11/21/13 16:36	1
4-Bromofluorobenzene (Surr)	94		72 - 126				11/20/13 22:35	11/21/13 16:36	1
Toluene-d8 (Surr)	96		71 - 125				11/20/13 22:35	11/21/13 16:36	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10	0.10	%			11/13/13 21:14	1

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# Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-VOC-2-111213**

**Lab Sample ID: 480-50017-4**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 91.8

## Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.6	U	4.6	0.34	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
1,1-Dichloroethane	4.6	U	4.6	0.57	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
1,1-Dichloroethene	4.6	U	4.6	0.57	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
1,2,4-Trimethylbenzene	4.6	U	4.6	0.89	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
1,2-Dichlorobenzene	4.6	U	4.6	0.36	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
1,2-Dichloroethane	4.6	U	4.6	0.23	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
1,3,5-Trimethylbenzene	4.6	U	4.6	0.30	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
1,3-Dichlorobenzene	4.6	U	4.6	0.24	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
1,4-Dichlorobenzene	4.6	U	4.6	0.65	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
1,4-Dioxane	190	U	190	22	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Acetone	23	U	23	3.9	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Benzene	4.6	U	4.6	0.23	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Butylbenzene	4.6	U	4.6	0.40	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Carbon tetrachloride	4.6	U	4.6	0.45	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Chlorobenzene	4.6	U	4.6	0.61	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Chloroform	4.6	U	4.6	0.29	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
cis-1,2-Dichloroethene	4.6	U	4.6	0.59	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Ethylbenzene	4.6	U	4.6	0.32	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Isopropylbenzene	4.6	U	4.6	0.70	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Methyl Ethyl Ketone	23	U *	23	1.7	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Methyl tert-butyl ether	4.6	U	4.6	0.46	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Methylene Chloride	4.6	U	4.6	2.1	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Propylbenzene, n-	4.6	U	4.6	0.37	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
sec-Butylbenzene	4.6	U	4.6	0.40	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
tert-Butylbenzene	4.6	U	4.6	0.48	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Tetrachloroethene	4.6	U	4.6	0.62	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Toluene	4.6	U	4.6	0.35	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
trans-1,2-Dichloroethene	4.6	U	4.6	0.48	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Trichloroethene	4.6	U	4.6	1.0	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Vinyl chloride	4.6	U	4.6	0.57	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1
Xylenes, Total	9.3	U	9.3	0.78	ug/Kg	⊗	11/22/13 00:23	11/22/13 01:56	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		64 - 126	11/22/13 00:23	11/22/13 01:56	1
4-Bromofluorobenzene (Surr)	96		72 - 126	11/22/13 00:23	11/22/13 01:56	1
Toluene-d8 (Surr)	97		71 - 125	11/22/13 00:23	11/22/13 01:56	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10	0.10	%			11/13/13 21:14	1

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

**Client Sample ID: FILL-VOC-3-111213**

**Lab Sample ID: 480-50017-5**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 73.0

## Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	6.8	U	6.8	0.50	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
1,1-Dichloroethane	6.8	U	6.8	0.84	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
1,1-Dichloroethene	6.8	U	6.8	0.84	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
1,2,4-Trimethylbenzene	6.8	U	6.8	1.3	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
1,2-Dichlorobenzene	6.8	U	6.8	0.54	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
1,2-Dichloroethane	6.8	U	6.8	0.34	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
1,3,5-Trimethylbenzene	6.8	U	6.8	0.44	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
1,3-Dichlorobenzene	6.8	U	6.8	0.35	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
1,4-Dichlorobenzene	6.8	U	6.8	0.96	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
1,4-Dioxane	270	U	270	33	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Acetone	34	U	34	5.8	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Benzene	6.8	U	6.8	0.34	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Butylbenzene	6.8	U	6.8	0.60	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Carbon tetrachloride	6.8	U	6.8	0.66	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Chlorobenzene	6.8	U	6.8	0.90	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Chloroform	6.8	U	6.8	0.42	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
cis-1,2-Dichloroethene	6.8	U	6.8	0.88	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Ethylbenzene	6.8	U	6.8	0.47	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Isopropylbenzene	6.8	U	6.8	1.0	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Methyl Ethyl Ketone	34	U *	34	2.5	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Methyl tert-butyl ether	6.8	U	6.8	0.67	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Methylene Chloride	6.8	U	6.8	3.2	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Propylbenzene, n-	6.8	U	6.8	0.55	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
sec-Butylbenzene	6.8	U	6.8	0.60	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
tert-Butylbenzene	6.8	U	6.8	0.71	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Tetrachloroethene	6.8	U	6.8	0.92	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Toluene	6.8	U	6.8	0.52	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
trans-1,2-Dichloroethene	6.8	U	6.8	0.71	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Trichloroethene	6.8	U	6.8	1.5	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Vinyl chloride	6.8	U	6.8	0.84	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1
Xylenes, Total	14	U	14	1.2	ug/Kg	⊗	11/22/13 00:23	11/22/13 02:22	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		64 - 126	11/22/13 00:23	11/22/13 02:22	1
4-Bromofluorobenzene (Surr)	94		72 - 126	11/22/13 00:23	11/22/13 02:22	1
Toluene-d8 (Surr)	97		71 - 125	11/22/13 00:23	11/22/13 02:22	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	73		0.10	0.10	%		11/13/13 21:14		1

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-VOC-4-111213**

**Lab Sample ID: 480-50017-6**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 92.9

## Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	12	U	12	0.88	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
1,1-Dichloroethane	12	U	12	1.5	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
1,1-Dichloroethene	12	U	12	1.5	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
1,2,4-Trimethylbenzene	12	U	12	2.3	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
1,2-Dichlorobenzene	12	U	12	0.95	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
<b>1,2-Dichloroethane</b>	<b>3.5</b>	<b>J B</b>	12	0.61	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
1,3,5-Trimethylbenzene	12	U	12	0.78	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
1,3-Dichlorobenzene	12	U	12	0.63	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
1,4-Dichlorobenzene	12	U	12	1.7	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
1,4-Dioxane	490	U	490	59	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Acetone	61	U	61	10	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Benzene	12	U	12	0.60	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Butylbenzene	12	U	12	1.1	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Carbon tetrachloride	12	U	12	1.2	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Chlorobenzene	12	U	12	1.6	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Chloroform	12	U	12	0.75	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
cis-1,2-Dichloroethene	12	U	12	1.6	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Ethylbenzene	12	U	12	0.84	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Isopropylbenzene	12	U	12	1.8	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Methyl Ethyl Ketone	61	U *	61	4.5	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Methyl tert-butyl ether	12	U	12	1.2	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Methylene Chloride	12	U	12	5.6	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Propylbenzene, n-	12	U	12	0.97	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
sec-Butylbenzene	12	U	12	1.1	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
tert-Butylbenzene	12	U	12	1.3	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Tetrachloroethene	12	U	12	1.6	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Toluene	12	U	12	0.92	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
trans-1,2-Dichloroethene	12	U	12	1.3	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Trichloroethene	12	U	12	2.7	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Vinyl chloride	12	U	12	1.5	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1
Xylenes, Total	24	U	24	2.0	ug/Kg	⊗	11/20/13 22:35	11/21/13 17:53	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		64 - 126	11/20/13 22:35	11/21/13 17:53	1
4-Bromofluorobenzene (Surr)	93		72 - 126	11/20/13 22:35	11/21/13 17:53	1
Toluene-d8 (Surr)	95		71 - 125	11/20/13 22:35	11/21/13 17:53	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10	0.10	%			11/13/13 21:14	1

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-VOC-5-111213**

**Lab Sample ID: 480-50017-7**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 92.0

## Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.7	U	4.7	0.34	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
1,1-Dichloroethane	4.7	U	4.7	0.57	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
1,1-Dichloroethene	4.7	U	4.7	0.57	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
1,2,4-Trimethylbenzene	4.7	U	4.7	0.90	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
1,2-Dichlorobenzene	4.7	U	4.7	0.37	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
<b>1,2-Dichloroethane</b>	<b>1.2</b>	<b>J B</b>	4.7	0.24	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
1,3,5-Trimethylbenzene	4.7	U	4.7	0.30	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
1,3-Dichlorobenzene	4.7	U	4.7	0.24	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
1,4-Dichlorobenzene	4.7	U	4.7	0.66	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
1,4-Dioxane	190	U	190	23	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Acetone	23	U	23	4.0	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Benzene	4.7	U	4.7	0.23	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Butylbenzene	4.7	U	4.7	0.41	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Carbon tetrachloride	4.7	U	4.7	0.45	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Chlorobenzene	4.7	U	4.7	0.62	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Chloroform	4.7	U	4.7	0.29	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
cis-1,2-Dichloroethene	4.7	U	4.7	0.60	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Ethylbenzene	4.7	U	4.7	0.32	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Isopropylbenzene	4.7	U	4.7	0.71	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Methyl Ethyl Ketone	23	U *	23	1.7	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Methyl tert-butyl ether	4.7	U	4.7	0.46	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Methylene Chloride	4.7	U	4.7	2.2	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Propylbenzene, n-	4.7	U	4.7	0.38	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
sec-Butylbenzene	4.7	U	4.7	0.41	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
tert-Butylbenzene	4.7	U	4.7	0.49	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Tetrachloroethene	4.7	U	4.7	0.63	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Toluene	4.7	U	4.7	0.35	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
trans-1,2-Dichloroethene	4.7	U	4.7	0.48	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Trichloroethene	4.7	U	4.7	1.0	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Vinyl chloride	4.7	U	4.7	0.57	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1
Xylenes, Total	9.4	U	9.4	0.79	ug/Kg	⊗	11/20/13 22:35	11/21/13 18:19	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		64 - 126	11/20/13 22:35	11/21/13 18:19	1
4-Bromofluorobenzene (Surr)	90		72 - 126	11/20/13 22:35	11/21/13 18:19	1
Toluene-d8 (Surr)	93		71 - 125	11/20/13 22:35	11/21/13 18:19	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	92		0.10	0.10	%			11/13/13 21:14	1

TestAmerica Buffalo

# Client Sample Results

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-VOC-6-111213**

**Lab Sample ID: 480-50017-8**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 92.9

## Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	53	U	53	15	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
1,1-Dichloroethane	53	U	53	16	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
1,1-Dichloroethene	53	U	53	18	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
1,2,4-Trimethylbenzene	53	U	53	15	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
1,2-Dichlorobenzene	53	U	53	13	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
1,2-Dichloroethane	53	U	53	22	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
1,3,5-Trimethylbenzene	53	U	53	16	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
1,3-Dichlorobenzene	53	U	53	14	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
1,4-Dichlorobenzene	53	U	53	7.4	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
1,4-Dioxane	2100	U	2100	1200	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Acetone	260	U	260	220	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Benzene	53	U	53	2.5	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Butylbenzene	53	U	53	15	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Carbon tetrachloride	53	U	53	13	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Chlorobenzene	53	U	53	7.0	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Chloroform	53	U	53	36	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
cis-1,2-Dichloroethene	53	U	53	15	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Ethylbenzene	53	U	53	15	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Isopropylbenzene	53	U	53	7.9	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Methyl Ethyl Ketone	260	U	260	160	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Methyl tert-butyl ether	53	U	53	20	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
<b>Methylene Chloride</b>	<b>120</b>	<b>B</b>	53	10	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Propylbenzene, n-	53	U	53	14	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
sec-Butylbenzene	53	U	53	19	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
tert-Butylbenzene	53	U	53	15	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Tetrachloroethene	53	U	53	7.1	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Toluene	53	U	53	14	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
trans-1,2-Dichloroethene	53	U	53	12	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Trichloroethene	53	U	53	15	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Vinyl chloride	53	U	53	18	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1
Xylenes, Total	110	U	110	8.9	ug/Kg	⊗	11/20/13 10:55	11/20/13 17:38	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		53 - 146	11/20/13 10:55	11/20/13 17:38	1
4-Bromofluorobenzene (Surr)	100		49 - 148	11/20/13 10:55	11/20/13 17:38	1
Toluene-d8 (Surr)	106		50 - 149	11/20/13 10:55	11/20/13 17:38	1

## General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	93		0.10	0.10	%			11/13/13 21:14	1

TestAmerica Buffalo

## Surrogate Summary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (64-126)	BFB (72-126)	TOL (71-125)
480-50017-3	FILL-VOC-1-111213	116	94	96
480-50017-4	FILL-VOC-2-111213	110	96	97
480-50017-5	FILL-VOC-3-111213	106	94	97
480-50017-6	FILL-VOC-4-111213	115	93	95
480-50017-7	FILL-VOC-5-111213	115	90	93
LCS 480-153607/5	Lab Control Sample	110	98	95
LCS 480-153763/4	Lab Control Sample	102	99	98
MB 480-153607/6	Method Blank	108	94	95
MB 480-153763/5	Method Blank	102	95	99

#### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		12DCE (53-146)	BFB (49-148)	TOL (50-149)
480-50017-8	FILL-VOC-6-111213	102	100	106
LCS 480-153357/1-A	Lab Control Sample	105	106	105
MB 480-153357/2-A	Method Blank	104	103	106

#### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (39-146)	FBP (37-120)	2FP (18-120)	NBZ (34-132)	PHL (11-120)	TPH (65-153)
480-50017-1	FILL-COMP-1-111213	86	80	78	74	67	96
480-50017-2	FILL-COMP-2-111213	105	97	97	91	94	96
LCS 480-151936/2-A	Lab Control Sample	99	89	78	82	82	102
MB 480-151936/1-A	Method Blank	89	86	81	88	82	98

#### Surrogate Legend

TBP = 2,4,6-Tribromophenol

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol

NBZ = Nitrobenzene-d5

PHL = Phenol-d5

TPH = p-Terphenyl-d14

# Surrogate Summary

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

## Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (32-136)	TCX1 (30-124)
480-50017-1	FILL-COMP-1-111213	0 X	0 X
480-50017-2	FILL-COMP-2-111213	0 X	0 X
480-50017-2 MS	FILL-COMP-2-111213	0 X	0 X
480-50017-2 MSD	FILL-COMP-2-111213	0 X	0 X
LCS 480-153341/2-A	Lab Control Sample	117	73
MB 480-153341/1-A	Method Blank	111	72

### Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB2 (47-176)	TCX2 (46-175)
480-50017-1	FILL-COMP-1-111213	112	162
480-50017-2	FILL-COMP-2-111213	86	130
LCS 480-152018/2-A	Lab Control Sample	101	147
MB 480-152018/1-A	Method Blank	94	133

### Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

## Method: 8151A - Herbicides (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCPA1 (39-120)	
480-50017-1	FILL-COMP-1-111213	111	
480-50017-1 MS	FILL-COMP-1-111213	126 X	
480-50017-1 MSD	FILL-COMP-1-111213	125 X	
480-50017-2	FILL-COMP-2-111213	110	
LCS 480-152934/2-A	Lab Control Sample	123 X	
MB 480-152934/1-A	Method Blank	104	

### Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

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# QC Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-153357/2-A**

**Matrix: Solid**

**Analysis Batch: 153300**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 153357**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	50	U	50	14	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
1,1-Dichloroethane	50	U	50	15	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
1,1-Dichloroethene	50	U	50	17	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
1,2,4-Trimethylbenzene	50	U	50	14	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
1,2-Dichlorobenzene	50	U	50	13	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
1,2-Dichloroethane	50	U	50	20	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
1,3,5-Trimethylbenzene	50	U	50	15	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
1,3-Dichlorobenzene	50	U	50	13	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
1,4-Dichlorobenzene	50	U	50	7.0	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
1,4-Dioxane	2000	U	2000	1200	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Acetone	250	U	250	210	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Benzene	50	U	50	2.4	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Butylbenzene	50	U	50	15	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Carbon tetrachloride	50	U	50	13	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Chlorobenzene	50	U	50	6.6	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Chloroform	50	U	50	34	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
cis-1,2-Dichloroethene	50	U	50	14	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Ethylbenzene	50	U	50	15	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Isopropylbenzene	50	U	50	7.5	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Methyl Ethyl Ketone	250	U	250	150	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Methyl tert-butyl ether	50	U	50	19	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Methylene Chloride	9.97	J	50	9.9	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Propylbenzene, n-	50	U	50	13	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
sec-Butylbenzene	50	U	50	18	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
tert-Butylbenzene	50	U	50	14	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Tetrachloroethene	50	U	50	6.7	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Toluene	50	U	50	13	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
trans-1,2-Dichloroethene	50	U	50	12	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Trichloroethene	50	U	50	14	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Vinyl chloride	50	U	50	17	ug/Kg		11/20/13 10:55	11/20/13 11:42	1
Xylenes, Total	100	U	100	8.4	ug/Kg		11/20/13 10:55	11/20/13 11:42	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier					
1,2-Dichloroethane-d4 (Surr)	104		53 - 146		11/20/13 10:55	11/20/13 11:42	1
4-Bromofluorobenzene (Surr)	103		49 - 148		11/20/13 10:55	11/20/13 11:42	1
Toluene-d8 (Surr)	106		50 - 149		11/20/13 10:55	11/20/13 11:42	1

**Lab Sample ID: LCS 480-153357/1-A**

**Matrix: Solid**

**Analysis Batch: 153300**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 153357**

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
	Added	Result						
1,1-Dichloroethane	1250	1200	ug/Kg	96	82 - 138			
1,1-Dichloroethene	1250	1220	ug/Kg	98	54 - 144			
1,2,4-Trimethylbenzene	1250	1250	ug/Kg	100	78 - 134			
1,2-Dichlorobenzene	1250	1210	ug/Kg	97	80 - 132			
1,2-Dichloroethane	1250	1170	ug/Kg	94	78 - 129			
Benzene	1250	1210	ug/Kg	97	75 - 131			

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# QC Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

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

**Lab Sample ID: LCS 480-153357/1-A**

**Matrix: Solid**

**Analysis Batch: 153300**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 153357**

Analyte	Spike Added	LCS			Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier	LCS					
Chlorobenzene	1250	1230		ug/Kg		98	80 - 127		
cis-1,2-Dichloroethene	1250	1220		ug/Kg		98	79 - 128		
Ethylbenzene	1250	1240		ug/Kg		99	78 - 136		
Methyl tert-butyl ether	1250	1210		ug/Kg		97	67 - 137		
Tetrachloroethene	1250	1220		ug/Kg		98	72 - 141		
Toluene	1250	1210		ug/Kg		97	76 - 133		
trans-1,2-Dichloroethene	1250	1270		ug/Kg		101	81 - 147		
Trichloroethene	1250	1200		ug/Kg		96	77 - 130		

Surrogate	LCS		
	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		53 - 146
4-Bromofluorobenzene (Surr)	106		49 - 148
Toluene-d8 (Surr)	105		50 - 149

**Lab Sample ID: MB 480-153607/6**

**Matrix: Solid**

**Analysis Batch: 153607**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	5.0	U	5.0	0.36	ug/Kg			11/21/13 12:07	1
1,1-Dichloroethane	5.0	U	5.0	0.61	ug/Kg			11/21/13 12:07	1
1,1-Dichloroethene	5.0	U	5.0	0.61	ug/Kg			11/21/13 12:07	1
1,2,4-Trimethylbenzene	5.0	U	5.0	0.96	ug/Kg			11/21/13 12:07	1
1,2-Dichlorobenzene	5.0	U	5.0	0.39	ug/Kg			11/21/13 12:07	1
1,2-Dichloroethane	2.18	J	5.0	0.25	ug/Kg			11/21/13 12:07	1
1,3,5-Trimethylbenzene	5.0	U	5.0	0.32	ug/Kg			11/21/13 12:07	1
1,3-Dichlorobenzene	5.0	U	5.0	0.26	ug/Kg			11/21/13 12:07	1
1,4-Dichlorobenzene	5.0	U	5.0	0.70	ug/Kg			11/21/13 12:07	1
1,4-Dioxane	200	U	200	24	ug/Kg			11/21/13 12:07	1
Acetone	25	U	25	4.2	ug/Kg			11/21/13 12:07	1
Benzene	5.0	U	5.0	0.25	ug/Kg			11/21/13 12:07	1
Butylbenzene	5.0	U	5.0	0.44	ug/Kg			11/21/13 12:07	1
Carbon tetrachloride	5.0	U	5.0	0.48	ug/Kg			11/21/13 12:07	1
Chlorobenzene	5.0	U	5.0	0.66	ug/Kg			11/21/13 12:07	1
Chloroform	5.0	U	5.0	0.31	ug/Kg			11/21/13 12:07	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.64	ug/Kg			11/21/13 12:07	1
Ethylbenzene	5.0	U	5.0	0.35	ug/Kg			11/21/13 12:07	1
Isopropylbenzene	5.0	U	5.0	0.75	ug/Kg			11/21/13 12:07	1
Methyl Ethyl Ketone	25	U	25	1.8	ug/Kg			11/21/13 12:07	1
Methyl tert-butyl ether	5.0	U	5.0	0.49	ug/Kg			11/21/13 12:07	1
Methylene Chloride	5.0	U	5.0	2.3	ug/Kg			11/21/13 12:07	1
Propylbenzene, n-	5.0	U	5.0	0.40	ug/Kg			11/21/13 12:07	1
sec-Butylbenzene	5.0	U	5.0	0.44	ug/Kg			11/21/13 12:07	1
tert-Butylbenzene	5.0	U	5.0	0.52	ug/Kg			11/21/13 12:07	1
Tetrachloroethene	5.0	U	5.0	0.67	ug/Kg			11/21/13 12:07	1
Toluene	5.0	U	5.0	0.38	ug/Kg			11/21/13 12:07	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.52	ug/Kg			11/21/13 12:07	1
Trichloroethene	5.0	U	5.0	1.1	ug/Kg			11/21/13 12:07	1

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# QC Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

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

**Lab Sample ID: MB 480-153607/6**

**Matrix: Solid**

**Analysis Batch: 153607**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Vinyl chloride	5.0	U	5.0	0.61	ug/Kg			11/21/13 12:07	1
Xylenes, Total	10	U	10	0.84	ug/Kg			11/21/13 12:07	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	108		64 - 126		11/21/13 12:07	1
4-Bromofluorobenzene (Surr)	94		72 - 126		11/21/13 12:07	1
Toluene-d8 (Surr)	95		71 - 125		11/21/13 12:07	1

**Lab Sample ID: LCS 480-153607/5**

**Matrix: Solid**

**Analysis Batch: 153607**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
	Added	Result						
1,1-Dichloroethane	50.0	50.8	ug/Kg		102	73 - 126		
1,1-Dichloroethene	50.0	46.3	ug/Kg		93	59 - 125		
1,2,4-Trimethylbenzene	50.0	41.6	ug/Kg		83	74 - 120		
1,2-Dichlorobenzene	50.0	45.3	ug/Kg		91	75 - 120		
1,2-Dichloroethane	50.0	55.5	ug/Kg		111	77 - 122		
Benzene	50.0	49.2	ug/Kg		98	79 - 127		
Chlorobenzene	50.0	45.9	ug/Kg		92	76 - 124		
cis-1,2-Dichloroethene	50.0	50.6	ug/Kg		101	81 - 117		
Ethylbenzene	50.0	43.3	ug/Kg		87	80 - 120		
Methyl tert-butyl ether	50.0	49.8	ug/Kg		100	63 - 125		
Tetrachloroethene	50.0	49.0	ug/Kg		98	74 - 122		
Toluene	50.0	40.3	ug/Kg		81	74 - 128		
trans-1,2-Dichloroethene	50.0	48.6	ug/Kg		97	78 - 126		
Trichloroethene	50.0	50.3	ug/Kg		101	77 - 129		

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	110		64 - 126
4-Bromofluorobenzene (Surr)	98		72 - 126
Toluene-d8 (Surr)	95		71 - 125

**Lab Sample ID: MB 480-153763/5**

**Matrix: Solid**

**Analysis Batch: 153763**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	5.0	U	5.0	0.36	ug/Kg			11/22/13 00:09	1
1,1-Dichloroethane	5.0	U	5.0	0.61	ug/Kg			11/22/13 00:09	1
1,1-Dichloroethene	5.0	U	5.0	0.61	ug/Kg			11/22/13 00:09	1
1,2,4-Trimethylbenzene	5.0	U	5.0	0.96	ug/Kg			11/22/13 00:09	1
1,2-Dichlorobenzene	5.0	U	5.0	0.39	ug/Kg			11/22/13 00:09	1
1,2-Dichloroethane	5.0	U	5.0	0.25	ug/Kg			11/22/13 00:09	1
1,3,5-Trimethylbenzene	5.0	U	5.0	0.32	ug/Kg			11/22/13 00:09	1
1,3-Dichlorobenzene	5.0	U	5.0	0.26	ug/Kg			11/22/13 00:09	1
1,4-Dichlorobenzene	5.0	U	5.0	0.70	ug/Kg			11/22/13 00:09	1
1,4-Dioxane	200	U	200	24	ug/Kg			11/22/13 00:09	1

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# QC Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

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

**Lab Sample ID: MB 480-153763/5**

**Matrix: Solid**

**Analysis Batch: 153763**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	25	U	25	4.2	ug/Kg			11/22/13 00:09	1
Benzene	5.0	U	5.0	0.25	ug/Kg			11/22/13 00:09	1
Butylbenzene	5.0	U	5.0	0.44	ug/Kg			11/22/13 00:09	1
Carbon tetrachloride	5.0	U	5.0	0.48	ug/Kg			11/22/13 00:09	1
Chlorobenzene	5.0	U	5.0	0.66	ug/Kg			11/22/13 00:09	1
Chloroform	5.0	U	5.0	0.31	ug/Kg			11/22/13 00:09	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.64	ug/Kg			11/22/13 00:09	1
Ethylbenzene	5.0	U	5.0	0.35	ug/Kg			11/22/13 00:09	1
Isopropylbenzene	5.0	U	5.0	0.75	ug/Kg			11/22/13 00:09	1
Methyl Ethyl Ketone	25	U	25	1.8	ug/Kg			11/22/13 00:09	1
Methyl tert-butyl ether	5.0	U	5.0	0.49	ug/Kg			11/22/13 00:09	1
Methylene Chloride	5.0	U	5.0	2.3	ug/Kg			11/22/13 00:09	1
Propylbenzene, n-	5.0	U	5.0	0.40	ug/Kg			11/22/13 00:09	1
sec-Butylbenzene	5.0	U	5.0	0.44	ug/Kg			11/22/13 00:09	1
tert-Butylbenzene	5.0	U	5.0	0.52	ug/Kg			11/22/13 00:09	1
Tetrachloroethene	5.0	U	5.0	0.67	ug/Kg			11/22/13 00:09	1
Toluene	5.0	U	5.0	0.38	ug/Kg			11/22/13 00:09	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.52	ug/Kg			11/22/13 00:09	1
Trichloroethene	5.0	U	5.0	1.1	ug/Kg			11/22/13 00:09	1
Vinyl chloride	5.0	U	5.0	0.61	ug/Kg			11/22/13 00:09	1
Xylenes, Total	10	U	10	0.84	ug/Kg			11/22/13 00:09	1

**MB MB**

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	102		64 - 126		11/22/13 00:09	1
4-Bromofluorobenzene (Surr)	95		72 - 126		11/22/13 00:09	1
Toluene-d8 (Surr)	99		71 - 125		11/22/13 00:09	1

**Lab Sample ID: LCS 480-153763/4**

**Matrix: Solid**

**Analysis Batch: 153763**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike		LCS		Unit	D	%Rec	Limits	Prepared	Analyzed	Dil Fac
	Added	Result	Qualifier								
1,1-Dichloroethane	50.0	49.5		ug/Kg			99	73 - 126			
1,1-Dichloroethene	50.0	46.8		ug/Kg			94	59 - 125			
1,2,4-Trimethylbenzene	50.0	45.8		ug/Kg			92	74 - 120			
1,2-Dichlorobenzene	50.0	48.7		ug/Kg			97	75 - 120			
1,2-Dichloroethane	50.0	51.1		ug/Kg			102	77 - 122			
Benzene	50.0	48.3		ug/Kg			97	79 - 127			
Chlorobenzene	50.0	48.6		ug/Kg			97	76 - 124			
cis-1,2-Dichloroethene	50.0	49.4		ug/Kg			99	81 - 117			
Ethylbenzene	50.0	45.8		ug/Kg			92	80 - 120			
Methyl tert-butyl ether	50.0	46.7		ug/Kg			93	63 - 125			
Tetrachloroethene	50.0	52.0		ug/Kg			104	74 - 122			
Toluene	50.0	42.5		ug/Kg			85	74 - 128			
trans-1,2-Dichloroethene	50.0	48.0		ug/Kg			96	78 - 126			
Trichloroethene	50.0	49.1		ug/Kg			98	77 - 129			

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

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

**Lab Sample ID: LCS 480-153763/4**

**Matrix: Solid**

**Analysis Batch: 153763**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		64 - 126
4-Bromofluorobenzene (Surr)	99		72 - 126
Toluene-d8 (Surr)	98		71 - 125

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

**Lab Sample ID: MB 480-151936/1-A**

**Matrix: Solid**

**Analysis Batch: 152409**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 151936**

Analyte	MB	MB			D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL	MDL	Unit			
Acenaphthene	170	U	170	2.0	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Acenaphthylene	170	U	170	1.4	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Anthracene	170	U	170	4.3	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Benzo(a)anthracene	170	U	170	2.9	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Benzo(a)pyrene	170	U	170	4.0	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Benzo(b)fluoranthene	170	U	170	3.3	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Benzo(g,h,i)perylene	170	U	170	2.0	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Benzo(k)fluoranthene	170	U	170	1.8	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Chrysene	170	U	170	1.7	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Dibenz(a,h)anthracene	170	U	170	2.0	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Dibenzofuran	170	U	170	1.7	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Fluoranthene	170	U	170	2.4	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Fluorene	170	U	170	3.9	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Hexachlorobenzene	170	U	170	8.3	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Indeno(1,2,3-cd)pyrene	170	U	170	4.6	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
m-Cresol	330	U	330	9.3	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Naphthalene	170	U	170	2.8	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
o-Cresol	170	U	170	5.2	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
p-Cresol	330	U	330	9.3	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Pentachlorophenol	330	U	330	58	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Phenanthrene	170	U	170	3.5	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Phenol	170	U	170	18	ug/Kg	11/14/13 07:45	11/16/13 08:10	1
Pyrene	170	U	170	1.1	ug/Kg	11/14/13 07:45	11/16/13 08:10	1

Surrogate	MB	MB			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier	Limits				
2,4,6-Tribromophenol	89		39 - 146		11/14/13 07:45	11/16/13 08:10	1
2-Fluorobiphenyl	86		37 - 120		11/14/13 07:45	11/16/13 08:10	1
2-Fluorophenol	81		18 - 120		11/14/13 07:45	11/16/13 08:10	1
Nitrobenzene-d5	88		34 - 132		11/14/13 07:45	11/16/13 08:10	1
Phenol-d5	82		11 - 120		11/14/13 07:45	11/16/13 08:10	1
p-Terphenyl-d14	98		65 - 153		11/14/13 07:45	11/16/13 08:10	1

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

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

**Lab Sample ID: LCS 480-151936/2-A**

**Matrix: Solid**

**Analysis Batch: 152409**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 151936**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Acenaphthene	1660	1460		ug/Kg		88	53 - 120
Fluorene	1660	1540		ug/Kg		93	63 - 126
Pentachlorophenol	3330	2960		ug/Kg		89	33 - 136
Phenol	1660	1320		ug/Kg		79	36 - 120
Pyrene	1660	1550		ug/Kg		93	51 - 133

  

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	99		39 - 146
2-Fluorobiphenyl	89		37 - 120
2-Fluorophenol	78		18 - 120
Nitrobenzene-d5	82		34 - 132
Phenol-d5	82		11 - 120
p-Terphenyl-d14	102		65 - 153

## Method: 8081B - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 480-153341/1-A**

**Matrix: Solid**

**Analysis Batch: 153298**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 153341**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
4,4'-DDD	1.7	U	1.7	0.32	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
4,4'-DDE	1.7	U	1.7	0.25	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
4,4'-DDT	1.7	U	1.7	0.17	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
Aldrin	1.7	U	1.7	0.41	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
alpha-BHC	1.7	U	1.7	0.30	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
alpha-Chlordane	1.7	U	1.7	0.83	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
beta-BHC	0.252	J	1.7	0.18	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
delta-BHC	1.7	U	1.7	0.22	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
Dieldrin	1.7	U	1.7	0.40	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
Endosulfan I	1.7	U	1.7	0.21	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
Endosulfan II	1.7	U	1.7	0.30	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
Endosulfan sulfate	1.7	U	1.7	0.31	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
Endrin	1.7	U	1.7	0.23	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
Heptachlor	1.7	U	1.7	0.26	ug/Kg		11/19/13 09:51	11/20/13 12:04	1
Lindane	1.7	U	1.7	0.21	ug/Kg		11/19/13 09:51	11/20/13 12:04	1

  

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl	111		32 - 136			
Tetrachloro-m-xylene	72		30 - 124			

**Lab Sample ID: LCS 480-153341/2-A**

**Matrix: Solid**

**Analysis Batch: 153298**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 153341**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
4,4'-DDD	16.3	14.5		ug/Kg		89	52 - 138

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCS 480-153341/2-A**

**Matrix: Solid**

**Analysis Batch: 153298**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 153341**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
4,4'-DDE	16.3	14.1		ug/Kg		86	52 - 131
4,4'-DDT	16.3	15.3		ug/Kg		94	50 - 131
Aldrin	16.3	12.6		ug/Kg		77	35 - 120
alpha-BHC	16.3	12.5		ug/Kg		77	49 - 120
alpha-Chlordane	16.3	14.1		ug/Kg		86	40 - 133
beta-BHC	16.3	13.3		ug/Kg		82	52 - 127
delta-BHC	16.3	13.6		ug/Kg		83	45 - 123
Dieldrin	16.3	14.8		ug/Kg		91	50 - 131
Endosulfan I	16.3	14.2		ug/Kg		87	43 - 121
Endosulfan II	16.3	13.5		ug/Kg		83	48 - 134
Endosulfan sulfate	16.3	13.4		ug/Kg		82	46 - 144
Endrin	16.3	16.5		ug/Kg		101	46 - 134
Heptachlor	16.3	14.8		ug/Kg		91	51 - 121
Lindane	16.3	13.0		ug/Kg		80	50 - 120

Surrogate	LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	117		32 - 136
Tetrachloro-m-xylene	73		30 - 124

**Lab Sample ID: 480-50017-2 MS**

**Matrix: Solid**

**Analysis Batch: 153298**

**Client Sample ID: FILL-COMP-2-111213**

**Prep Type: Total/NA**

**Prep Batch: 153341**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
4,4'-DDD	18	U	18.0	15.6	J	ug/Kg	⊗	87	26 - 162
4,4'-DDE	18	U	18.0	16.2	J	ug/Kg	⊗	90	34 - 138
4,4'-DDT	8.9	J	18.0	20.4		ug/Kg	⊗	64	43 - 131
Aldrin	18	U	18.0	13.1	J	ug/Kg	⊗	73	37 - 125
alpha-BHC	18	U	18.0	16.5	J	ug/Kg	⊗	92	39 - 117
alpha-Chlordane	18	U	18.0	21.2		ug/Kg	⊗	118	29 - 141
beta-BHC	18	U	18.0	14.3	J	ug/Kg	⊗	79	36 - 139
delta-BHC	18	U	18.0	14.2	J	ug/Kg	⊗	79	23 - 132
Dieldrin	18	U	18.0	13.3	J	ug/Kg	⊗	74	38 - 135
Endosulfan I	18	U	18.0	11.7	J	ug/Kg	⊗	65	39 - 128
Endosulfan II	18	U	18.0	12.9	J	ug/Kg	⊗	72	24 - 134
Endosulfan sulfate	18	U	18.0	12.4	J	ug/Kg	⊗	69	19 - 137
Endrin	3.9	J	18.0	14.2	J	ug/Kg	⊗	57	41 - 147
Heptachlor	18	U	18.0	14.6	J	ug/Kg	⊗	82	42 - 128
Lindane	18	U	18.0	13.6	J	ug/Kg	⊗	76	50 - 120

  

Surrogate	MS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	0	X	32 - 136
Tetrachloro-m-xylene	0	X	30 - 124

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

## Method: 8081B - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 480-50017-2 MSD**

**Matrix: Solid**

**Analysis Batch: 153298**

**Client Sample ID: FILL-COMP-2-111213**

**Prep Type: Total/NA**

**Prep Batch: 153341**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
4,4'-DDD	18	U	18.2	15.4	J	ug/Kg	⊗	84	26 - 162	2	21	
4,4'-DDE	18	U	18.2	15.7	J	ug/Kg	⊗	86	34 - 138	3	18	
4,4'-DDT	8.9	J	18.2	20.1		ug/Kg	⊗	61	43 - 131	1	25	
Aldrin	18	U	18.2	13.2	J	ug/Kg	⊗	72	37 - 125	1	12	
alpha-BHC	18	U	18.2	28.9	F	ug/Kg	⊗	159	39 - 117	55	15	
alpha-Chlordane	18	U	18.2	23.4		ug/Kg	⊗	129	29 - 141	10	23	
beta-BHC	18	U	18.2	16.1	J	ug/Kg	⊗	89	36 - 139	12	19	
delta-BHC	18	U	18.2	14.5	J	ug/Kg	⊗	79	23 - 132	2	14	
Dieldrin	18	U	18.2	13.3	J	ug/Kg	⊗	73	38 - 135	0	12	
Endosulfan I	18	U	18.2	11.6	J	ug/Kg	⊗	64	39 - 128	1	18	
Endosulfan II	18	U	18.2	12.7	J	ug/Kg	⊗	70	24 - 134	2	26	
Endosulfan sulfate	18	U	18.2	12.7	J	ug/Kg	⊗	70	19 - 137	2	35	
Endrin	3.9	J	18.2	14.4	J	ug/Kg	⊗	57	41 - 147	1	20	
Heptachlor	18	U	18.2	17.6	J	ug/Kg	⊗	97	42 - 128	18	22	
Lindane	18	U	18.2	15.6	J F	ug/Kg	⊗	86	50 - 120	13	12	
<b>MSD MSD</b>												
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>								
DCB Decachlorobiphenyl	0	X		32 - 136								
Tetrachloro-m-xylene	0	X		30 - 124								

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 480-152018/1-A**

**Matrix: Solid**

**Analysis Batch: 152222**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 152018**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	220	U	220	43	ug/Kg		11/14/13 09:57	11/15/13 06:54	1
PCB-1221	220	U	220	43	ug/Kg		11/14/13 09:57	11/15/13 06:54	1
PCB-1232	220	U	220	43	ug/Kg		11/14/13 09:57	11/15/13 06:54	1
PCB-1242	220	U	220	43	ug/Kg		11/14/13 09:57	11/15/13 06:54	1
PCB-1248	220	U	220	43	ug/Kg		11/14/13 09:57	11/15/13 06:54	1
PCB-1254	220	U	220	100	ug/Kg		11/14/13 09:57	11/15/13 06:54	1
PCB-1260	220	U	220	100	ug/Kg		11/14/13 09:57	11/15/13 06:54	1
<b>MB MB</b>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>					
DCB Decachlorobiphenyl	94			47 - 176					
Tetrachloro-m-xylene	133			46 - 175					

**Lab Sample ID: LCS 480-152018/2-A**

**Matrix: Solid**

**Analysis Batch: 152222**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 152018**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
PCB-1016	2210	2830		ug/Kg		128	51 - 185
PCB-1260	2210	2780		ug/Kg		126	61 - 184

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID:** LCS 480-152018/2-A

**Matrix:** Solid

**Analysis Batch:** 152222

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 152018

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	101		47 - 176
Tetrachloro-m-xylene	147		46 - 175

## Method: 8151A - Herbicides (GC)

**Lab Sample ID:** MB 480-152934/1-A

**Client Sample ID:** Method Blank

**Matrix:** Solid

**Prep Type:** Total/NA

**Analysis Batch:** 153253

**Prep Batch:** 152934

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silvex (2,4,5-TP)	16	U	16	5.9	ug/Kg		11/19/13 05:40	11/20/13 13:54	1
<hr/>									
<hr/>									

  

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	104		39 - 120	11/19/13 05:40	11/20/13 13:54	1

**Lab Sample ID:** LCS 480-152934/2-A

**Client Sample ID:** Lab Control Sample

**Matrix:** Solid

**Prep Type:** Total/NA

**Analysis Batch:** 153253

**Prep Batch:** 152934

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Silvex (2,4,5-TP)	65.9	84.6	*	ug/Kg		128	49 - 120
<hr/>							
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Surrogate	MB %Recovery	MB Qualifier	Limits
2,4-Dichlorophenylacetic acid	123	X	39 - 120

**Lab Sample ID:** 480-50017-1 MS

**Client Sample ID:** FILL-COMP-1-111213

**Matrix:** Solid

**Prep Type:** Total/NA

**Analysis Batch:** 153253

**Prep Batch:** 152934

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Silvex (2,4,5-TP)	18	U *	71.1	74.3		ug/Kg	⊗	104	32 - 125
<hr/>									
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Surrogate	MS %Recovery	MS Qualifier	Limits
2,4-Dichlorophenylacetic acid	126	X	39 - 120

**Lab Sample ID:** 480-50017-1 MSD

**Client Sample ID:** FILL-COMP-1-111213

**Matrix:** Solid

**Prep Type:** Total/NA

**Analysis Batch:** 153253

**Prep Batch:** 152934

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
Silvex (2,4,5-TP)	18	U *	70.2	52.0		ug/Kg	⊗	74	35
<hr/>									
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Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	125	X	39 - 120

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

## Method: 6010C - Metals (ICP)

**Lab Sample ID: MB 480-152723/1-A**

**Matrix: Solid**

**Analysis Batch: 154228**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 152723**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	2.1	U	2.1	0.43	mg/Kg		11/18/13 11:00	11/22/13 13:59	1
Barium	0.53	U	0.53	0.12	mg/Kg		11/18/13 11:00	11/22/13 13:59	1
Beryllium	0.21	U	0.21	0.030	mg/Kg		11/18/13 11:00	11/22/13 13:59	1
Cadmium	0.21	U	0.21	0.032	mg/Kg		11/18/13 11:00	11/22/13 13:59	1
Copper	1.1	U	1.1	0.22	mg/Kg		11/18/13 11:00	11/22/13 13:59	1
Lead	1.1	U	1.1	0.26	mg/Kg		11/18/13 11:00	11/22/13 13:59	1
Manganese	0.0341	J	0.21	0.034	mg/Kg		11/18/13 11:00	11/22/13 13:59	1
Nickel	5.3	U	5.3	0.24	mg/Kg		11/18/13 11:00	11/22/13 13:59	1
Selenium	4.3	U	4.3	0.43	mg/Kg		11/18/13 11:00	11/22/13 13:59	1
Silver	0.53	U	0.53	0.21	mg/Kg		11/18/13 11:00	11/22/13 13:59	1
Zinc	0.315	J	2.1	0.16	mg/Kg		11/18/13 11:00	11/22/13 13:59	1

**Lab Sample ID: LCSSRM 480-152723/2-A**

**Matrix: Solid**

**Analysis Batch: 154228**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 152723**

Analyte	Spike Added	LCSSRM		Unit	D	%Rec.		Limits
		Result	Qualifier			%Rec.	Limits	
Arsenic	99.8	97.99		mg/Kg		98.2	69.3 - 130.	
Barium	310	301.1		mg/Kg		97.0	74.2 - 126.	
Beryllium	72.4	72.85		mg/Kg		100.6	73.9 - 126.	
Cadmium	182	171.3		mg/Kg		94.0	73.6 - 126.	
Copper	102	103.6		mg/Kg		101.4	74.3 - 126.	
Lead	115	114.0		mg/Kg		99.0	72.1 - 128.	
Manganese	324	302.7		mg/Kg		93.6	74.9 - 125.	
Nickel	153	156.6		mg/Kg		102.2	73.2 - 126.	
Selenium	150	149.5		mg/Kg		99.5	67.3 - 132.	
Silver	40.5	39.25		mg/Kg		97.0	65.8 - 133.	
Zinc	161	145.4		mg/Kg		90.2	68.3 - 131.	

**Lab Sample ID: 480-50017-1 MS**

**Matrix: Solid**

**Analysis Batch: 153643**

**Client Sample ID: FILL-COMP-1-111213**

**Prep Type: Total/NA**

**Prep Batch: 152723**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Arsenic	3.7		45.0	46.40		mg/Kg	⊗	95	75 - 125
Barium	169		45.0	196.7	F	mg/Kg	⊗	61	75 - 125
Lead	22.6		45.0	73.64		mg/Kg	⊗	113	75 - 125
Manganese	335	B	45.0	377.2	4	mg/Kg	⊗	94	75 - 125
Nickel	30.6		45.0	73.88		mg/Kg	⊗	96	75 - 125
Selenium	4.6	U	45.0	41.08		mg/Kg	⊗	91	75 - 125

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

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

**Lab Sample ID:** 480-50017-1 MS

**Matrix:** Solid

**Analysis Batch:** 153643

**Client Sample ID:** FILL-COMP-1-111213

**Prep Type:** Total/NA

**Prep Batch:** 152723

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Silver	0.58	U	11.2	10.69		mg/Kg	⊗	95	75 - 125
Zinc	85.8	B	45.0	119.6		mg/Kg	⊗	75	75 - 125

**Lab Sample ID:** 480-50017-1 MS

**Client Sample ID:** FILL-COMP-1-111213

**Prep Type:** Total/NA

**Prep Batch:** 152723

**Analysis Batch:** 154228

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Beryllium	0.94		45.0	45.19		mg/Kg	⊗	98	75 - 125
Cadmium	0.069	J	45.0	42.99		mg/Kg	⊗	95	75 - 125
Copper	41.4		45.0	97.34		mg/Kg	⊗	124	75 - 125

**Lab Sample ID:** 480-50017-1 MSD

**Client Sample ID:** FILL-COMP-1-111213

**Prep Type:** Total/NA

**Prep Batch:** 152723

**Analysis Batch:** 153643

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Arsenic	3.7		40.4	40.87		mg/Kg	⊗	92	75 - 125	13	20
Barium	169		40.4	177.7	4	mg/Kg	⊗	21	75 - 125	10	20
Lead	22.6		40.4	60.68		mg/Kg	⊗	94	75 - 125	19	20
Manganese	335	B	40.4	375.7	4	mg/Kg	⊗	101	75 - 125	0	20
Nickel	30.6		40.4	69.37		mg/Kg	⊗	96	75 - 125	6	20
Selenium	4.6	U	40.4	36.36		mg/Kg	⊗	90	75 - 125	12	20
Silver	0.58	U	10.1	9.62		mg/Kg	⊗	95	75 - 125	11	20
Zinc	85.8	B	40.4	115.5	F	mg/Kg	⊗	74	75 - 125	3	20

**Lab Sample ID:** 480-50017-1 MSD

**Client Sample ID:** FILL-COMP-1-111213

**Prep Type:** Total/NA

**Prep Batch:** 152723

**Analysis Batch:** 154228

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Beryllium	0.94		40.4	39.68		mg/Kg	⊗	96	75 - 125	13	20
Cadmium	0.069	J	40.4	37.96		mg/Kg	⊗	94	75 - 125	12	20
Copper	41.4		40.4	83.86		mg/Kg	⊗	105	75 - 125	15	20

## Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

**Lab Sample ID:** MB 480-157489/1-A

**Client Sample ID:** Method Blank

**Matrix:** Solid

**Prep Type:** Total/NA

**Analysis Batch:** 157555

**Prep Batch:** 157489

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.021	U	0.021	0.0083	mg/Kg		12/13/13 09:30	12/13/13 12:42	1

TestAmerica Buffalo

# QC Sample Results

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

## Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique) (Continued)

**Lab Sample ID: LCSSRM 480-157489/2-A**

**Matrix: Solid**

**Analysis Batch: 157555**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 157489**

Analyte	Spike	LCSSRM	LCSSRM	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Mercury	3.77	3.83		mg/Kg	101.7	50.9 - 149.	1

## Method: 7196A - Chromium, Hexavalent

**Lab Sample ID: MB 240-110269/9-A**

**Matrix: Solid**

**Analysis Batch: 110516**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 110269**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Hexavalent chromium	0.80	U	0.80	0.27	mg/Kg		11/18/13 08:47	11/19/13 00:00	1

**Lab Sample ID: LCSI 240-110269/11-A**

**Matrix: Solid**

**Analysis Batch: 110516**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 110269**

Analyte	Spike	LCSI	LCSI	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Hexavalent chromium	643	709.3		mg/Kg		110	75 - 125

**Lab Sample ID: LCSS 240-110269/10-A**

**Matrix: Solid**

**Analysis Batch: 110516**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 110269**

Analyte	Spike	LCSS	LCSS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Hexavalent chromium	20.0	18.27		mg/Kg		91	90 - 110

## Method: 9012B - Cyanide, Total andor Amenable

**Lab Sample ID: MB 480-152069/1-A**

**Matrix: Solid**

**Analysis Batch: 152082**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 152069**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cyanide, Total	0.89	U	0.89	0.43	mg/Kg		11/14/13 11:54	11/14/13 12:26	1

**Lab Sample ID: LCS 480-152069/2-A**

**Matrix: Solid**

**Analysis Batch: 152082**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 152069**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Cyanide, Total	60.7	25.70		mg/Kg		42	29 - 122

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

## GC/MS VOA

### Analysis Batch: 153300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-8	FILL-VOC-6-111213	Total/NA	Solid	8260C	153357
LCS 480-153357/1-A	Lab Control Sample	Total/NA	Solid	8260C	153357
MB 480-153357/2-A	Method Blank	Total/NA	Solid	8260C	153357

### Prep Batch: 153357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-8	FILL-VOC-6-111213	Total/NA	Solid	5035A	5
LCS 480-153357/1-A	Lab Control Sample	Total/NA	Solid	5035A	8
MB 480-153357/2-A	Method Blank	Total/NA	Solid	5035A	6

### Prep Batch: 153514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-3	FILL-VOC-1-111213	Total/NA	Solid	5035A	10
480-50017-6	FILL-VOC-4-111213	Total/NA	Solid	5035A	11
480-50017-7	FILL-VOC-5-111213	Total/NA	Solid	5035A	12

### Analysis Batch: 153607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-3	FILL-VOC-1-111213	Total/NA	Solid	8260C	13
480-50017-6	FILL-VOC-4-111213	Total/NA	Solid	8260C	13
480-50017-7	FILL-VOC-5-111213	Total/NA	Solid	8260C	14
LCS 480-153607/5	Lab Control Sample	Total/NA	Solid	8260C	15
MB 480-153607/6	Method Blank	Total/NA	Solid	8260C	15

### Analysis Batch: 153763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-4	FILL-VOC-2-111213	Total/NA	Solid	8260C	153779
480-50017-5	FILL-VOC-3-111213	Total/NA	Solid	8260C	153779
LCS 480-153763/4	Lab Control Sample	Total/NA	Solid	8260C	
MB 480-153763/5	Method Blank	Total/NA	Solid	8260C	

### Prep Batch: 153779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-4	FILL-VOC-2-111213	Total/NA	Solid	5035A	
480-50017-5	FILL-VOC-3-111213	Total/NA	Solid	5035A	

## GC/MS Semi VOA

### Prep Batch: 151936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	3550C	
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	3550C	
LCS 480-151936/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-151936/1-A	Method Blank	Total/NA	Solid	3550C	

### Analysis Batch: 152409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	8270D	151936
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	8270D	151936
LCS 480-151936/2-A	Lab Control Sample	Total/NA	Solid	8270D	151936

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 152409 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-151936/1-A	Method Blank	Total/NA	Solid	8270D	151936

## GC Semi VOA

### Prep Batch: 152018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	3550C	
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	3550C	
LCS 480-152018/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-152018/1-A	Method Blank	Total/NA	Solid	3550C	

### Analysis Batch: 152222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	8082A	152018
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	8082A	152018
LCS 480-152018/2-A	Lab Control Sample	Total/NA	Solid	8082A	152018
MB 480-152018/1-A	Method Blank	Total/NA	Solid	8082A	152018

### Prep Batch: 152934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	8151A	
480-50017-1 MS	FILL-COMP-1-111213	Total/NA	Solid	8151A	
480-50017-1 MSD	FILL-COMP-1-111213	Total/NA	Solid	8151A	
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	8151A	
LCS 480-152934/2-A	Lab Control Sample	Total/NA	Solid	8151A	
MB 480-152934/1-A	Method Blank	Total/NA	Solid	8151A	

### Analysis Batch: 153253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	8151A	152934
480-50017-1 MS	FILL-COMP-1-111213	Total/NA	Solid	8151A	152934
480-50017-1 MSD	FILL-COMP-1-111213	Total/NA	Solid	8151A	152934
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	8151A	152934
LCS 480-152934/2-A	Lab Control Sample	Total/NA	Solid	8151A	152934
MB 480-152934/1-A	Method Blank	Total/NA	Solid	8151A	152934

### Analysis Batch: 153298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	8081B	153341
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	8081B	153341
480-50017-2 MS	FILL-COMP-2-111213	Total/NA	Solid	8081B	153341
480-50017-2 MSD	FILL-COMP-2-111213	Total/NA	Solid	8081B	153341
LCS 480-153341/2-A	Lab Control Sample	Total/NA	Solid	8081B	153341
MB 480-153341/1-A	Method Blank	Total/NA	Solid	8081B	153341

### Prep Batch: 153341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	3550C	
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	3550C	
480-50017-2 MS	FILL-COMP-2-111213	Total/NA	Solid	3550C	

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

## GC Semi VOA (Continued)

### Prep Batch: 153341 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-2 MSD	FILL-COMP-2-111213	Total/NA	Solid	3550C	
LCS 480-153341/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-153341/1-A	Method Blank	Total/NA	Solid	3550C	

## Metals

### Prep Batch: 152530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	7471B	

### Prep Batch: 152723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	3050B	
480-50017-1 MS	FILL-COMP-1-111213	Total/NA	Solid	3050B	
480-50017-1 MSD	FILL-COMP-1-111213	Total/NA	Solid	3050B	
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	3050B	
LCSSRM 480-152723/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-152723/1-A	Method Blank	Total/NA	Solid	3050B	

### Analysis Batch: 152984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	7471B	152984

### Analysis Batch: 153643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	6010C	152723
480-50017-1 MS	FILL-COMP-1-111213	Total/NA	Solid	6010C	152723
480-50017-1 MSD	FILL-COMP-1-111213	Total/NA	Solid	6010C	152723
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	6010C	152723

### Analysis Batch: 154228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	6010C	152723
480-50017-1 MS	FILL-COMP-1-111213	Total/NA	Solid	6010C	152723
480-50017-1 MSD	FILL-COMP-1-111213	Total/NA	Solid	6010C	152723
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	6010C	152723
LCSSRM 480-152723/2-A	Lab Control Sample	Total/NA	Solid	6010C	152723
MB 480-152723/1-A	Method Blank	Total/NA	Solid	6010C	152723

### Prep Batch: 157489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	7471B	
LCSSRM 480-157489/2-A	Lab Control Sample	Total/NA	Solid	7471B	
MB 480-157489/1-A	Method Blank	Total/NA	Solid	7471B	

### Analysis Batch: 157555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	7471B	157489
LCSSRM 480-157489/2-A	Lab Control Sample	Total/NA	Solid	7471B	157489
MB 480-157489/1-A	Method Blank	Total/NA	Solid	7471B	157489

TestAmerica Buffalo

# QC Association Summary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

## General Chemistry

### Prep Batch: 110269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	3060A	
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	3060A	
LCSI 240-110269/11-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-110269/10-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-110269/9-A	Method Blank	Total/NA	Solid	3060A	

### Analysis Batch: 110269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	7196A	110269
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	7196A	110269
LCSI 240-110269/11-A	Lab Control Sample	Total/NA	Solid	7196A	110269
LCSS 240-110269/10-A	Lab Control Sample	Total/NA	Solid	7196A	110269
MB 240-110269/9-A	Method Blank	Total/NA	Solid	7196A	110269

### Analysis Batch: 151872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	Moisture	
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	Moisture	
480-50017-3	FILL-VOC-1-111213	Total/NA	Solid	Moisture	
480-50017-4	FILL-VOC-2-111213	Total/NA	Solid	Moisture	
480-50017-5	FILL-VOC-3-111213	Total/NA	Solid	Moisture	
480-50017-6	FILL-VOC-4-111213	Total/NA	Solid	Moisture	
480-50017-7	FILL-VOC-5-111213	Total/NA	Solid	Moisture	
480-50017-8	FILL-VOC-6-111213	Total/NA	Solid	Moisture	

### Prep Batch: 152069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	9012B	
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	9012B	
LCS 480-152069/2-A	Lab Control Sample	Total/NA	Solid	9012B	
MB 480-152069/1-A	Method Blank	Total/NA	Solid	9012B	

### Analysis Batch: 152069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	9012B	152069
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	9012B	152069
LCS 480-152069/2-A	Lab Control Sample	Total/NA	Solid	9012B	152069
MB 480-152069/1-A	Method Blank	Total/NA	Solid	9012B	152069

### Analysis Batch: 154338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50017-1	FILL-COMP-1-111213	Total/NA	Solid	SM 3500 CR D	
480-50017-2	FILL-COMP-2-111213	Total/NA	Solid	SM 3500 CR D	

## Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-COMP-1-111213**

**Lab Sample ID: 480-50017-1**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			151936	11/14/13 07:45	CAM	TAL BUF
Total/NA	Analysis	8270D		5	152409	11/16/13 14:16	ANM	TAL BUF
Total/NA	Prep	3550C			152018	11/14/13 09:57	CAM	TAL BUF
Total/NA	Analysis	8082A		1	152222	11/15/13 19:11	JMM	TAL BUF
Total/NA	Prep	8151A			152934	11/19/13 05:40	KEB	TAL BUF
Total/NA	Analysis	8151A		1	153253	11/20/13 16:23	DGB	TAL BUF
Total/NA	Prep	3550C			153341	11/19/13 09:51	KEB	TAL BUF
Total/NA	Analysis	8081B		10	153298	11/20/13 13:31	LMW	TAL BUF
Total/NA	Prep	7471B			152530	11/18/13 08:10	SS1	TAL BUF
Total/NA	Analysis	7471B		1	152984	11/18/13 16:40	SS1	TAL BUF
Total/NA	Prep	3050B			152723	11/18/13 11:00	NMD2	TAL BUF
Total/NA	Analysis	6010C		1	153643	11/20/13 13:33	LMH	TAL BUF
Total/NA	Prep	3050B			152723	11/18/13 11:00	NMD2	TAL BUF
Total/NA	Analysis	6010C		1	154228	11/22/13 14:04	LMH	TAL BUF
Total/NA	Prep	3060A			110269	11/18/13 08:47	KMG	TAL CAN
Total/NA	Analysis	7196A		1	110516	11/19/13 11:25	KMG	TAL CAN
Total/NA	Analysis	Moisture			151872	11/13/13 21:14	GTG	TAL BUF
Total/NA	Prep	9012B			152069	11/14/13 11:54	NCH	TAL BUF
Total/NA	Analysis	9012B		1	152082	11/14/13 12:42	KSW	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	154338	11/25/13 17:22	SW1	TAL BUF

**Client Sample ID: FILL-COMP-2-111213**

**Lab Sample ID: 480-50017-2**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			151936	11/14/13 07:45	CAM	TAL BUF
Total/NA	Analysis	8270D		1	152409	11/16/13 14:41	ANM	TAL BUF
Total/NA	Prep	3550C			152018	11/14/13 09:57	CAM	TAL BUF
Total/NA	Analysis	8082A		1	152222	11/15/13 19:26	JMM	TAL BUF
Total/NA	Prep	8151A			152934	11/19/13 05:40	KEB	TAL BUF
Total/NA	Analysis	8151A		1	153253	11/20/13 16:52	DGB	TAL BUF
Total/NA	Prep	3550C			153341	11/19/13 09:51	KEB	TAL BUF
Total/NA	Analysis	8081B		10	153298	11/20/13 13:14	LMW	TAL BUF
Total/NA	Prep	3050B			152723	11/18/13 11:00	NMD2	TAL BUF
Total/NA	Analysis	6010C		1	153643	11/20/13 13:51	LMH	TAL BUF
Total/NA	Prep	3050B			152723	11/18/13 11:00	NMD2	TAL BUF
Total/NA	Analysis	6010C		1	154228	11/22/13 14:11	LMH	TAL BUF
Total/NA	Prep	7471B			157489	12/13/13 09:30	SS1	TAL BUF
Total/NA	Analysis	7471B		1	157555	12/13/13 13:23	SS1	TAL BUF
Total/NA	Prep	3060A			110269	11/18/13 08:48	KMG	TAL CAN
Total/NA	Analysis	7196A		1	110516	11/19/13 11:27	KMG	TAL CAN
Total/NA	Analysis	Moisture		1	151872	11/13/13 21:14	GTG	TAL BUF

TestAmerica Buffalo

## Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

### Client Sample ID: FILL-COMP-2-111213

### Lab Sample ID: 480-50017-2

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 91.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9012B			152069	11/14/13 11:54	NCH	TAL BUF
Total/NA	Analysis	9012B		1	152082	11/14/13 12:41	KSW	TAL BUF
Total/NA	Analysis	SM 3500 CR D		1	154338	11/25/13 17:22	SW1	TAL BUF

### Client Sample ID: FILL-VOC-1-111213

### Lab Sample ID: 480-50017-3

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			153514	11/20/13 22:35	NMD1	TAL BUF
Total/NA	Analysis	8260C		1	153607	11/21/13 16:36	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	151872	11/13/13 21:14	GTG	TAL BUF

### Client Sample ID: FILL-VOC-2-111213

### Lab Sample ID: 480-50017-4

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			153779	11/22/13 00:23	CDC	TAL BUF
Total/NA	Analysis	8260C		1	153763	11/22/13 01:56	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	151872	11/13/13 21:14	GTG	TAL BUF

### Client Sample ID: FILL-VOC-3-111213

### Lab Sample ID: 480-50017-5

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 73.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			153779	11/22/13 00:23	CDC	TAL BUF
Total/NA	Analysis	8260C		1	153763	11/22/13 02:22	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	151872	11/13/13 21:14	GTG	TAL BUF

### Client Sample ID: FILL-VOC-4-111213

### Lab Sample ID: 480-50017-6

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			153514	11/20/13 22:35	NMD1	TAL BUF
Total/NA	Analysis	8260C		1	153607	11/21/13 17:53	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	151872	11/13/13 21:14	GTG	TAL BUF

TestAmerica Buffalo

## Lab Chronicle

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

**Client Sample ID: FILL-VOC-5-111213**

**Lab Sample ID: 480-50017-7**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			153514	11/20/13 22:35	NMD1	TAL BUF
Total/NA	Analysis	8260C		1	153607	11/21/13 18:19	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	151872	11/13/13 21:14	GTG	TAL BUF

**Client Sample ID: FILL-VOC-6-111213**

**Lab Sample ID: 480-50017-8**

Date Collected: 11/12/13 11:00

Matrix: Solid

Date Received: 11/13/13 09:00

Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			153357	11/20/13 10:55	NQN	TAL BUF
Total/NA	Analysis	8260C		1	153300	11/20/13 17:38	NMD1	TAL BUF
Total/NA	Analysis	Moisture		1	151872	11/13/13 21:14	GTG	TAL BUF

### Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TestAmerica Buffalo

## Certification Summary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

### Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13 *
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13 *
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13 *
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13 *
Wisconsin	State Program	5	998310390	08-31-14

### Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13 *
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14 *
Kentucky (UST)	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

## Certification Summary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

### Laboratory: TestAmerica Canton (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14 *
West Virginia DEP	State Program	3	210	12-31-13 *
Wisconsin	State Program	5	999518190	08-31-14

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

## Method Summary

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-50017-1

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8081B	Organochlorine Pesticides (GC)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
8151A	Herbicides (GC)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL CAN
9012B	Cyanide, Total andor Amenable	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 3500 CR D	Chromium, Trivalent	SM	TAL BUF

### Protocol References:

EPA = US Environmental Protection Agency

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 BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

## Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 -Oceanside, NY

TestAmerica Job ID: 480-50017-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-50017-1	FILL-COMP-1-111213	Solid	11/12/13 11:00	11/13/13 09:00
480-50017-2	FILL-COMP-2-111213	Solid	11/12/13 11:00	11/13/13 09:00
480-50017-3	FILL-VOC-1-111213	Solid	11/12/13 11:00	11/13/13 09:00
480-50017-4	FILL-VOC-2-111213	Solid	11/12/13 11:00	11/13/13 09:00
480-50017-5	FILL-VOC-3-111213	Solid	11/12/13 11:00	11/13/13 09:00
480-50017-6	FILL-VOC-4-111213	Solid	11/12/13 11:00	11/13/13 09:00
480-50017-7	FILL-VOC-5-111213	Solid	11/12/13 11:00	11/13/13 09:00
480-50017-8	FILL-VOC-6-111213	Solid	11/12/13 11:00	11/13/13 09:00

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TestAmerica Buffalo

**TestAmerica Buffalo**  
1119 Hazelwood Drive

Amherst, NY 14228-2298

Phone (716) 691-2600 Fax (716) 691-7991

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### **Chain of Custody Record**

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-50017-1

**Login Number: 50017**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Stau, Brandon M**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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 sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	